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 How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If 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 entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name_ Oriental Mills

other names/site number_ L. P. Campbell & Company, American Silk Spinning Company, Union Paper Company

2. Location

street & number_ 10 Admiral Street

N/A, not for publication

city or town_ Providence

N/A, vicinity

state_ Rhode Island code_ RI county_ Providence code_ 007 zip code_ 02908

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this □ nomination □ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property □ meets □ does not meet the National Register Criteria. I recommend that this property be considered significant □ nationally □ statewide □ locally. (□ See continuation sheet for additional comments.)

________________________
Signature of certifying official/Title

________________________
Date

Rhode Island Historical Preservation & Heritage Commission
State or Federal agency and bureau

In my opinion, the property □ meets □ does not meet the National Register criteria. (□ See continuation sheet for additional Comments.)

________________________
Signature of certifying official/Title

________________________
Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

□ entered in the National Register

□ See continuation sheet.

□ determined eligible for the National Register

□ See continuation sheet.

□ determined not eligible for the National Register

□ removed from the National Register

□ other (explain):

________________________
Signature of the Keeper

________________________
Date of Action
### 5. Classification

**Ownership of Property**  
(Check as many boxes as apply)  
- X. private  
- public-local  
- public-State  
- public-Federal  

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

<table>
<thead>
<tr>
<th>Contributing</th>
<th>Noncontributing</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 building</td>
<td>3 sites</td>
</tr>
<tr>
<td></td>
<td>4 structures</td>
</tr>
<tr>
<td></td>
<td>3 objects</td>
</tr>
</tbody>
</table>

**Name of related multiple property listing**  
(Enter “N/A” if property is not part of a multiple property listing.)  

N/A

**Number of contributing resources previously listed in the National Register**  

N/A

### 6. Function or Use

**Historic Functions**  
(Enter categories from instructions)  

- INDUSTRY/PROCESSING/EXTRACTION  
  - Manufacturing facility

**Current Functions**  
(Enter categories from instructions)  

- INDUSTRY/PROCESSING/EXTRACTION:  
  - Manufacturing Facility  
  - COMMERCE/TRADE: Business

### 7. Description

**Architectural Classification**  
(Enter categories from instructions)  

- No Style

**Materials**  
(Enter categories from instructions)  

- foundation  
  - STONE: Granite

- walls  
  - BRICK

- roof  
  - SYNTHETICS: Rubber

- other  
  - CONCRETE

**Narrative Description**  
(Describe the historic and current condition of the property on one or more continuation sheets.)
8. Statement of Significance
Applicable National Register Criteria
(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing.)

X 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.

X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "X" in all the boxes that apply.)
Property is:

X A owned by religious institution or used for religious purposes.

B removed from its original location.

C a birthplace or grave.

D a cemetery.

E a reconstructed building, object, or structure.

F a commemorative property.

G less than 50 years of age or achieved significance within the past 50 years.

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

9. Major Bibliographical References
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)
Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey
- recorded by Historic American Engineering Record #

Primary location of additional data:
- State Historic Preservation Office
- Other State agency
- Federal agency
X Local government
- University
X Other
Name of repository: Providence City Archives, Providence Public Library, R.I. Historical Society, Slater Mill Library
10. Geographical Data

Acreage of Property 3.343 Acres

UTM References See continuation sheet.
(Place additional UTM references on a continuation sheet)

1. Zone 0299106 Easting 4634610 Northing
2. Zone Easting Northing
3. Zone Easting Northing
4. Zone Easting Northing

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Virginia H. Adams, Jenny R. Fields, and Mark G. Rayburn

organization PAI date June 2005

street & number 210 Lonsdale Avenue telephone (401) 728-8780

city or town Pawtucket state RI zip code 02860

Additional Documentation
Submit the following items with the completed form:

Continuation Sheets

Maps
A USGS map (7.5 or 15 minute series) indicating the property’s location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs
Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

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

name Union Industries, Inc.

street & number 10 Admiral Street telephone (401) 274-7000

city or town Providence state RI zip code 02908

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.
National Register of Historic Places
Continuation Sheet

Property name Oriental Mills, Providence, Providence County, Rhode Island

Section number 7

DESCRIPTION

The Oriental Mills complex is located at 10 Admiral Street in the Smith Hill neighborhood of Providence, Rhode Island. The mill complex is sited directly west of Route 146 and Oriental Street and is bounded to the north by Admiral Street and to the west by Whipple Street. The complex consists of connected elements that form four contributing buildings associated with the historical development of the property during its period of significance from ca. 1860–1955 and three non-contributing buildings. The connected elements of the buildings are here identified by their original numbering system. The complex occupies three contiguous parcels of land that encompass a total of 3.343 acres on Admiral and Whipple streets. The land slopes gently to the east from Whipple Street toward Oriental Street and Route 146. The complex is surrounded by a mix of residential, commercial, and industrial properties on Admiral and Whipple streets to the west and south, and an athletic field and transportation infrastructure to the north. The Mill is currently partially occupied by the Union Paper Company and several commercial tenants.

Vehicular access to the Mill consists of two curb cuts at the intersection of Admiral and Whipple streets, as well as via Oriental Street, which provides direct access to the Mill from the southeast. Historically, a railroad yard and roundhouse sat directly adjacent to the Mill to the east, with a spur line that ran through Building 2 to an open yard at the southwest of the Mill complex. While the tracks and roundhouse have been removed, evidence of the spur line is evident in the large, two-story, open bay trackway in the south end of Building 2.

The Mill’s configuration was the result of the growth of the complex starting with the Oriental Mills building (also known as Building 1, ca. 1860) at the north end of the property. Late-nineteenth- and early-twentieth-century growth and building orientation were constrained and dictated by factors including the orientation of Admiral and Whipple streets, the railroad yard and roundhouse to the east of the property, and the former Pomeroy Street located south of the complex connecting Whipple and Oriental streets. The interior of the Mill has been stripped of all historic machinery, physical plant and power generation equipment.

The Mill consists of several single- and multi-story, brick wood-framed, and steel frame construction industrial buildings with a variety of rectangular foundations that occupy a sprawling, loosely rectangular shaped footprint. These buildings are connected, in some cases by party walls, and in other cases, by formerly open narrow alleys and irregular spaces that were later framed and roofed over.

(continued)
Many of the buildings within the complex share a common and regular vocabulary of construction materials and architectural features established in the design of the buildings beginning about 1860, including shallow pitch and flat, built-up roofs; fire-resistive, wood frame interior construction; and brick walls with segmental arch windows common to mid- and late-nineteenth- and early-twentieth-century mill construction. The following individual building descriptions follow the growth of Oriental Mills in chronological order as determined by historical sources including atlases, fire insurance maps, and visual inspection.

Building 1 (ca. 1860)

Building 1 is the oldest building of the Mill, and was constructed by the Oriental Mills Manufacturing Company shortly after its founding in 1860. It is located on the northwest quadrant of the complex, at the intersection of Admiral and Whipple streets. It is a long, rectangular, three-story, loft-type building with a gable end eight bays wide on the Admiral Street facade and 30 bays along the Whipple Street facade. The main block of Building 1 is approximately 245 feet long (north-south) and 72 feet wide (east-west). There are two, four-story stair towers flanking the main block of the building to the east and west, and two, later, one-story production sheds constructed around the west stair tower.

Building 1 has a gable roof with the gable end facing Admiral Street. The pitch of the roof is shallower than most mid-19th century gable roofs. This may be a function of the building’s dimensions, which are wider than many of its contemporaries. The third floor interior was originally open to the roof members, but that structure is now obscured by acoustical ceiling tiles. The building has a wooden plank roof covered with modern rubber membrane sheathing material. A prominent exterior architectural component of Building 1 is the Italianate wooden fascia and soffit with large, defined brackets.

The walls of Building 1 are constructed of brick laid in common bond, with belt courses of header bricks between each floor. The building has segmental arch window lintels constructed of two rows of header bricks, brown sandstone window sills, and a foundation and water table constructed of quarry faced granite blocks.

The original windows likely featured an arched upper sash and have been replaced with rectangular, vinyl replacement windows with wood infill within the arch. The window openings of the first floor are taller than those of the upper floors. In the top floor of the gable wall of Building 1 there is a round window opening that has been boarded over. It displays the current
property owner's corporate logo. One bay on the Admiral Street elevation has been expanded to accommodate a steel and glass entry door and transom unit. A set of concrete entrance steps with a platform that also serves the attached wheelchair ramp has been constructed to provide access.

The interior structure of Building 1 is constructed of fire-resistant framing with floors of thick wood plank decking with a thinner wooden wearing surface nailed to it. The floor joists running east-west are heavy, chamfered timbers that tie into the exterior walls with iron plates. The interior spaces are divided into three longitudinal bays by two rows of round, wood posts. The interior of Building 1 has been converted for use as office space.

The stair towers of Building 1 are matching, with the exception of the flat roof on the east tower. Both towers originally had helm roofs, although the east tower now has a flat roof resulting from storm damage at an unknown date. The towers are four stories high, one bay deep, and one bay wide. The ground floor entrance on the west tower, along Whipple Street, has a door opening with a segmental arched wood transom flanked by matching, narrow arched windows. The raised entrance steps are constructed of bush-hammered granite. Each of the three upper stories features a single, round arched window set in a recessed, round arched bay. The fourth story of the towers is narrower than the lower three floors and has a corbelled belt course.

The stair towers contain paired staircases with a shared, central landing on each floor. At the ground level, a shallow entrance vestibule leads to an opening that formerly held two, interior, swinging doors (removed). The door hinges and a four-light, arched fanlight remain in place. The twin staircases feature turned balusters and newell posts with a decorative, wood sphere at the top. A simple pipe railing with ball joints is on the exterior walls, mounted directly into the exposed masonry. The partition walls on each level are constructed of vertical, 6-inch, tongue-and-groove, wood boards with a simple bead detail. The floors are constructed of maple, and the stair treads are covered in grooved rubber tread covers.

Building 1 has two high, one-story production sheds to the west of the main block with four bays on the Admiral Street elevation and 30 bays along the Whipple Street elevation, flanking the west stair tower to the north and south. The northern production shed is 89 feet long and 32 feet wide while the southern production shed is 136 feet long and 32 feet wide. The production sheds were constructed ca. 1916 and feature two sawtooth roof monitors running parallel to Whipple Street. The monitor windows have been covered over with modern rubber membrane roofing, but are visible from within the building. The production sheds are constructed of brick laid in

(continued)
common bond pattern, and segmental arched window lintels constructed of three rows of header bricks. The production sheds have foundations and water tables of quarry faced granite blocks identical to the main block. On the Admiral Street elevation, the northern production shed matches the design of Building 1, while on the Whipple Street elevation, facades of both sheds consist of defined brick piers with bullnose corners, and recessed bay walls with window openings. A steel, roll loading door and a loading bay that appears to have been filled in at a later date are located on this elevation.

Building 3 (ca. 1860)

Building 3 abuts Building 1 on the southeast, with a gable end five bays wide facing Oriental Street. The building is approximately 42 feet long (north-south) and 50 feet wide (east-west). Building 3 is three stories in height with a full basement, and architecturally mirrors the style of Building 1. Building 3 is constructed of brick laid in common bond, with a high foundation constructed of quarry faced granite. The roof is a shallow pitched gable, covered with modern rubber membrane roofing. The roof overhang features a wooden fascia and soffit with projecting brackets that match those in Building 1. The windows of Building 3 feature segmental arched lintels constructed of two rows of header bricks and taller window openings on the first floor than the upper two floors. The window sills of the three stories are constructed of brown sandstone. The window openings in the full basement are rectangular, with granite sills and lintels.

Chimney (before 1900)

The brick chimney was constructed before 1900. It is located just south of Building 3, in a small alleyway between the Finished Goods Warehouse and Building 2. The chimney has a square footprint, and tapers vertically. The chimney is constructed of brick, and currently has three wireless telecommunications arrays mounted at the top. The Engine and Boiler house was located directly west of the chimney, where the Finished Goods Warehouse now stands. This building was constructed before 1913. Its date of demolition is unknown.

Building 2, the Spinning Mill (1912)

Building 2 is located southeast of Building 1 and abutting the south wall of Building 3. Building 2 is a three-story, brick, loft-type building with a raised basement. The building has 15 bays on the primary, Oriental Street, facade and is seven bays deep with approximate dimensions of 145

(continued)
feet long (north-south) by 79 feet wide (east-west). On the south end of the building, a two-bay-wide, two-story high opening was provided in both the east and west elevations to accommodate a rail spur that terminated in an open courtyard just to the west of Building 2.

The roof of Building 2 is nearly flat, with a gentle pitch for water runoff, and is sheathed in modern, rubber membrane materials. A later soffit (with faux rafter tails), fascia and gutter on the east and west elevations obscures portions of the segmental arch brick lintels. The north and south elevations retain the original roof parapet wall.

The building is constructed of brick in common bond. The two north bays of all four floors of the Oriental Street facade are windowless and form the east exterior wall of the stair tower, which is on the north end of Building 2.

The lower three floors of the building feature rectangular window openings with steel lintels. A pair of fixed, six-pane sash under paired, single-pane transoms is located in each window opening on the lower three floors, while the window openings of the fourth floor have segmental arch lintels with paired, two-light transoms. The existing windows are a mix of wood and steel. Most of the original first floor window sash has been replaced with modern, horizontal-sliding windows and brick infill. The window sills of the upper three stories are constructed of granite, while the original window openings of the first floor extended to the concrete foundation. All of the windows on the east facade have been replaced with wood sash with fixed, Plexiglas panes.

There are four, street-level entrance doors to Building 2. The primary entrance is at the stair tower on the north wall of the building. There are also steel entrance doors at the basement level of the east and west walls and within the trackway to the south end of the building. On the west wall of Building 2 is an iron fire escape with new steel railings that rises from the ground (basement) level to the third floor.

The interior of Building 2 is typical of early-twentieth-century loft mill buildings. Steel framing members carry the upper flooring structure, supported by brick piers at the walls with bullnose corners. Two parallel rows of cylindrical, wood posts are arranged in a north-south configuration running from floor level to the 12 steel floor beams with wood nailers above running east-west. The junctions of these wood posts and steel I beams are constructed of steel and bolted together with steel hardware. On the basement level, these wood posts rest on granite footers. The floors are maple with intermittent steel and wood filler plates. At the southwest
corner of the fourth floor, a double-leaf, wood door allows loading and unloading of finished and raw materials to the railcars below.

The interior of the Building 2 stair tower features a single staircase. The partition walls are 3-inch, wood planks with a simple bead detail, mounted vertically. Newell posts are simple, square posts with a pyramidal cap. The floors are maple, and the stair treads are covered with grooved rubber tread covers. The railings on both sides of the stairs are made of 1 5/8-inch iron pipe with ball joints, mounted directly to the partition and exposed masonry walls.

Building 9 (1917)

Building 9 is a two story, rectangular, loft-type mill building with its north facade slightly angled to front onto Admiral Street. The building is approximately 155 feet long by 136 feet wide and has seven bays on the north elevation and is 14 bays deep. Building 9 has a flat roof sheathed in modern membrane roofing materials, with a small parapet. The building is constructed of brick in common bond with granite block foundation and window sills. The first floor has rectangular window openings with steel lintels while the second floor windows have a segmental arch lintel of three rows of header bricks and a four-light glass transom. All of the window sash on the Admiral Street (north) elevation have been replaced with vinyl 12-over-12, replacement windows, while some original wood sash are visible on the south elevation. The transoms above the replacement windows are infilled with plywood. A prominent architectural feature is the corbelled brick cornice with denticulation just below the parapet wall.

Building 10 (1917, et seq.)

Building 10 is a high, one story brick building laid in common bond with a flat roof that provides a connection between Buildings 1 and 9. Building 10 has a built up modern membrane roof with aluminum flashing and an aluminum roll loading door on its east wall. Most of Building 10 is internal to the complex and cannot be viewed from the exterior.

Raw Materials Warehouse (1976, non-contributing)

The Raw Materials Warehouse is connected to Building 9 to the north, Building 1 to the west, and Building 3 to the south. It is also just north of, but not connected to, Building 2. The building is a high, one-story, concrete block building with a flat, membrane roof. The Raw Materials warehouse was constructed in 1976, in the space formerly occupied by several earlier,
small buildings. The Raw Materials warehouse has a steel roll loading door on the southwest corner of the building that allows access from the parking areas and Oriental Street.

Finished Goods Warehouse, Press Room #1, Press Room #2 (1986, non-contributing)

These three buildings were built as a single construction effort during 1985–1986 and share common materials, design, and massing. The buildings are high, one-story, steel-framed warehouse structures on poured concrete slabs. Each building has footing and foundation walls of smooth poured and formed reinforced concrete, with beige, rusticated concrete lower slab walls with expansion joints, and upper walls of brown, vertical seam, steel panels. The walls have no windows, and feature flat membrane roofs that are covered in stone pebbles to facilitate drainage.

The Finished Goods Warehouse is located south of Building 1 and is bounded to the west by Whipple Street. It is rectangular in shape with a projecting ell containing four loading bays and a steel personnel entrance and steps, facing Oriental Street (east) from the south end of the warehouse. The east elevation of the Finished Goods Warehouse has a recessed steel fire door. There are no other windows or doors in this structure.

Press Room #1 is attached to Building 9, sharing a contiguous Admiral Street facade wall with Building 9. Press Room #1 is rectangular in plan, and has a lower concrete foundation and corrugated concrete walls than the Finished Goods Warehouse. The majority of the wall of the high, one-story building is constructed of corrugated metal. There are no penetrations, either window or doors, of any of the exterior walls of Press Room #1.

Press Room #2 is located just south of Press Room #1, and east of the 1976 Finished Goods Warehouse. Press Room #2 is identical in construction to Press Room #1, and is also rectangular in shape but projects further east than Press Room #1. There are two roll loading doors, one full length on the east wall, and the other terminating with a large rubber bumper several feet above ground level on the south wall. There is a steel exit door and steps at the southeast corner of the east wall.

Two exterior compounds for HVAC and electrical equipment, and solvent storage tanks are located just east of the two press rooms, one on an elevated platform and the other at ground level surrounded by a chain-link fence.

(continued)
Property name Oriental Mills, Providence, Providence County, Rhode Island

Section number 7

Mill Floor Plan
Not to scale
Property name: Oriental Mills, Providence, Providence County, Rhode Island

Section number: 7

Photographic Information

Photographer: Mark G. Rayburn
Date of Photographs: May 2005
Negative Location: PAL
210 Lonsdale Avenue
Pawtucket, RI 02860

(Note: These photographs were taken with a digital camera at high resolution and printed on Epson Premium Glossy paper using Epson UltraChrome pigmented inks per the National Park Service March 2005 Photo Policy Expansion list of Acceptable Ink and Paper Combinations for Digital Images).

Index to Photographs:

1. Looking southwest from the intersection of Charles and Admiral streets toward Oriental Mills.

2. Looking southeast toward Oriental Mills from adjacent public park on Admiral Street.


4. Oriental Mills Building 2, looking west from adjacent parking area.

5. View looking west from Oriental Street showing from left to right: Building 2 stair tower, Building 3, and 1976 Raw Materials Warehouse.

6. Looking south toward Oriental Mills Building 1 from Admiral Street at Route 146 off-ramp.

7. Looking southwest from Admiral Street at Route 146 off-ramp showing from left to right: 1986 Press Room 1, Oriental Mills Building 9, and Oriental Mills Building 10.

8. Interior view of the western stair tower of Oriental Mills Building 1, looking east.

(continued)


15. Interior view of Oriental Mills Building 1, 1st floor, looking west.

(continued)
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Property name: Oriental Mills, Providence, Providence County, Rhode Island

Section number: 7

Photo Key Map
Not to scale

(END)
SIGNIFICANCE

Summary

The Oriental Mills complex contains seven attached buildings associated with the construction and growth of multiple textile manufacturing companies, starting circa 1860. The mill dates from c. 1860, when Alfred A. Reed acquired the property to construct the Oriental Mills Manufacturing Company, a cotton works. The property possesses important historical associations with Rhode Island’s textile industries, particularly the silk and synthetics industries during the first half of the twentieth century. After purchasing the complex in 1908, the American Silk Spinning Company rapidly expanded it to accommodate increased demand for spun silk yarns. The company is an example of new silk businesses in Rhode Island that boomed during the decline of the cotton industry at the turn of the century. American Silk was also on the cutting edge of textile fiber research, sought out by the DuPont Company and the U.S. government during World War II to develop new uses for nylon through the blending of the fibers with other materials.

The mill also has significance significance as an intact collection of resources that reflect the distinctive characteristics of mid-nineteenth- to early-twentieth-century textile mill architecture and engineering, including a variety of industrial building types and methods of construction. Niles Bierregaard Schubarth, a notable Providence civil engineer, designed the two earliest buildings on the property. Although all of the machinery has been removed, the existing buildings retain a high degree of their architectural integrity.

Industrial Development West of the Moshassuck River

The north end of Providence was used for farming throughout the eighteenth century. By 1835 there were fewer than 25 buildings, including a small cotton mill on Wanskuck Pond, in the area (Woodward and Sanderson 1986:26). As the downtown became more crowded and cotton-manufacturing companies grew larger in the 1850s, the undeveloped space along the West River became more appealing to industrial entrepreneurs. The 1847 construction of the Providence and Worcester Railroad line, which extended northeast from the cove and intersected the West River, enabled industries to locate in the area. Owners of farm properties and country estates soon sold off large parcels of land, which were platted and subdivided.
In 1849, George Corliss designed and built a new Corliss Steam Engine plant at Charles and West River streets to accommodate increased production (Fink 1981:59). Based on an 1854 map of Providence, the Corliss plant was the first large manufacturing company to locate in the West River area and may have contributed to its appeal (Cushing 1854). In the early 1860s, other companies built new complexes near the Corliss Steam Engine works, including the Oriental Mills Manufacturing Company circa 1860. The Providence Tool Company located its second complex on West River Street adjacent to the Corliss Works. Silver Spring Bleaching and Dyeing Works bought some former bleachery buildings on the west side of Charles Street across the railroad tracks from the Corliss works in 1864. By 1870, they had doubled the size of the complex by expanding it to the east side of Charles Street (Beers 1870).

The Wanskuck Company also contributed to the development of the central section of the West River, northwest of the Corliss section. In 1862, the company built a woolen mill on nearby Wanskuck Pond. The mill, and 25 workers’ houses, helped encourage further industrial and residential expansion into Providence’s north end. As more immigrants moved into the area to work in the factories, one- to two-family residential developments spread. The city extended trolley service to Branch Avenue in 1895 and Charles Street, Douglas Avenue, and Silver Spring Street in 1908, which connected north end residents to downtown Providence (Woodward and Sanderson 1986:27).

Initial Development of the Oriental Mills

In 1860, Alfred Augustus Reed bought a portion of the George H. Harris Plat at Whipple Street between Hawes (now Admiral) and Oregon streets. The land tract was previously a low, swampy area called Greenland Vale and the residential lots surrounding the Oriental Mills property were not yet laid out (Cushing 1854).

Prosperous from East India trade, Reed constructed a small cotton works on the site circa 1860 and formed the Oriental Mills Manufacturing Company. The Oriental Mills spun and wove cotton to make cloth and produced print cloths and cambric. Encouraged by his business partner, Edward Darley Boit (also a painter), Reed purchased several mills in Warwick, as well (Leveillee and Mair 2002:9). Reed redeveloped the mills and formed the Oriental Print works, which specialized in dyeing and printing cotton cloth. An 1865 Oriental Mills Manufacturing Company report noted that the Warwick mills were a “fortunate purchase” and that erecting (continued)
higher power printing machines there (partially supplied by print cloth made at the Admiral Street mill) would allow the company to produce goods more quickly (Oriental Mills 1865).

Edward D. Boit served as treasurer of the company through the 1860s. In the 1880s, Alfred Reed Jr. filled the position of treasurer and later became president of the company. After more than 30 years of cotton manufacturing, the Oriental Mills Manufacturing Company suffered financial failure caused by the Panic of 1893 and went out of business (Fink 1981:20).

J.P. Campbell & Company

J.P. Campbell formed J.P. Campbell & Company at the Oriental Mills after purchasing the property in 1893. Campbell & Company produced cotton goods and woolens, specifically fine-shirting and sheeting (Fink 1981:28). The financial success of Campbell’s other manufacturing and business enterprises enabled him to purchase the Oriental Mills during the Panic while other textile manufacturers were not as profitable. He established the Campbell Mills (Westminster Street, Providence) in 1876 to produce fancy woolens, operated the Belleville Manufacturing Company (Wickford, RI), a cashmere manufacturer, and served as president of Cranston Print Works (Consolidated Illustrating Co. 1896:112). Campbell also served as the director of the Industrial Trust Company, What Cheer Mutual Insurance Company, and Second National Bank (Consolidated Illustrating Co. 1896:113). In the December 1898 Providence Board of Trade Journal, J.P. Campbell is listed as having sold the Riverside Cotton Mill in Rumford to F.C. Sayles, indicating that Campbell bought and sold manufacturing companies on multiple occasions (Bayles 1891:692–694; Board of Trade Journal 1898).

J.P. Campbell replaced the existing machinery at the Oriental Mills to bring it up to date, but did not change the existing mill complex except for the addition of hose houses and a couple of frame outbuildings (Hopkins 1882; Sanborn 1900). The Oriental Mills/J.P. Campbell & Company complex consisted of the main loft building with an attached boiler house and two other attached buildings, connected by bridges. A one-story, brick office building, located immediately west of the boiler house, faced Whipple Street. A two-story, brick storehouse, one-story waste house, frame outhouses, and coal pile were located toward the back (southern) end of the lot. By 1900, Pomeroy Street was cut through to Oriental Street, and Fessenden Street (previously Ashburton) stopped at Whipple Street because the New York, New Haven, and Hartford Railroad built a storage yard and roundhouse along Oriental Street across from the Oriental Mills. This storage yard filled in the empty two blocks between Oriental Street and the

(continued)
former Providence & Worcester railroad line, conveniently positioning the Oriental Mills for direct railroad access. The western side of the Oriental Mills, primarily Whipple and Fillmore streets, filled in with residences where many Campbell & Company employees lived (Woodward and Sanderson 1986:132).

In 1901, J.P. Campbell & Company employed 250 workers, produced 1,500 pieces of white goods per week, and operated 20,000 spindles, 500 looms, 65 carding machines, and three pickers (Board of Trade Journal, June 1897:61; Fink 1981:20; Kulik and Bonham 1978:173). The mills ran successfully under Campbell until the 1903 recession, but the company eventually collapsed during the Panic of 1907, only 14 years after the Oriental Mills Manufacturing Company suffered the same fate (Fink 1981:28, 46).

The Steam-Powered Cotton Industry in Providence

The 1820s advent of the stationary steam engine sparked a period of industrial expansion by freeing manufacturing works from the need to locate at a source of waterpower. Samuel Slater opened the first steam-powered cotton mill in Providence in 1827 and in the 1830s, other cotton manufacturers followed suit. The number of Providence cotton mills grew from four to thirty between 1832 and 1840, defining Providence as a center of cotton production for the first time. Prior to 1840, cotton production was centered in the Blackstone and Pawtuxet Valleys (Kulik and Bonham 1978:12). During the 1830s, the cotton industry grew stronger as mill owners gained more control over workers and therefore lessened the threat of strikes through the standardization of jobs, wages, and labor contracts (Kulik and Bonham 1978:9). As the cotton industry advanced further in the late 1840s, cotton manufacturers became more specialized, resulting in an increased number of finishing works separate from spinning works.

The Panic of 1857 bankrupted some cotton companies and resulted in a shift in company organization from joint ownership to corporate; the Oriental Mills Manufacturing Company’s structure included a Board of Directors and long list of stakeholders (Fink 1981:12). After the Civil War, production trends shifted again and cotton manufacturing companies began to consolidate the multiple stages of production under one company to ensure the continuous flow of materials through the process, resulting in faster, more profitable production (Carroll 1932:863). Therefore, the number of post-bellum cotton factories in Rhode Island decreased, but the number of employees and production output increased.

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The Rhode Island cotton industry peaked from the 1880s through 1900, but decreased quickly after the turn of the twentieth century. Competition from southern cotton manufacturers, strict labor laws, worker strikes, and changes in women’s fashion (in favor of materials other than cotton) forced cotton companies to produce other textiles and caused many of them to close (Carroll 1932:863). An account of Rhode Island industry written in 1932 explains that Rhode Island cotton manufacturers in business after 1900 found “new lines to replace those which have been abandoned because of changing circumstances” (Carroll 1932:865).

The American Silk Spinning Company: Early Years

Edgar J. Lowenstein purchased the mill, machine shop, powerhouse, engine plant, office building, and land from J.P Campbell & Company’s holdings at Oriental Mills at auction on April 21, 1908 (Board of Trade Journal April 1908:166). The equipment inside the building was auctioned off separately and Dennis Wholey, owner of the lot adjoining the Oriental Mills to the south, bought the storehouse and land south of it (Pomeroy Street subsequently closed and became part of Wholey’s lot). Lowenstein, who was involved in the Boston silk trade, capitalized on the early-twentieth-century silk production boom by establishing the American Silk Spinning Company at the Oriental Mills. In July 1909, Lowenstein equipped the mills with machinery and mechanical equipment from Europe (Board of Trade Journal April 1910:151). By 1910, American Silk doubled its production of spun silk yarn in response to increased demand (Board of Trade Journal January 1910:24). In 1911, American Silk began operating the factory at night to increase its output (Board of Trade Journal June 1911:266).

Almost as soon as the American Silk Spinning Company began production at the Oriental Mills complex, they began rapidly expanding it with multiple additions, which filled in the majority of the lot (Factory Mutual Fire Insurance Company 1917; Sanborn Map Company 1900, 1921). In 1910, the company started “contemplating the immediate erection of a large addition to its mill, to be equipped with the best yarn machinery obtainable” (Board of Trade Journal January 1910:273). American Silk hired engineer Charles R. Makepeace to design a new four-story loft building for silk spinning at the southeast corner of the lot in July 1912. The Cruise and Smiley Construction Company (of Pawtucket) was hired in August (Board of Trade Journal July 1912:258; August 1912:312). The building house a tunnel that covered a railroad spur, connecting the mill complex to the New York, New Haven, and Hartford Railroad. It contained included carding, combing and filling in the basement, dressing on the first floor, spinning on the second, and finishing on the third.

(continued)
Additional dye houses were constructed on either side of the former repair shop in 1913 and 1915. A new building was also constructed between the office and the powerhouse in 1913, connecting the buildings. Construction continued in 1916 with the addition of two, 32-foot-wide, one-story storage sheds along the west side of the main building (facing Whipple Street). The final American Silk Spinning Company additions, completed in 1917, included a carding and dressing mill (Building 9) with two fan rooms (now part of Building 10) located at the northeast corner of the lot. American Silk used the main building (Building 1) for multiple stages of silk production: silk storage and dampening in the basement, preparation and fly frames on the first floor, spinning on the second, and doubling and twisting, spinning, storage of silk bales, cutting, lapping, and picking on the third (Factory Mutual 1917).

The Silk Industry

As the cotton industry declined, the silk industry increased. Between 1904 and 1914, the number of silk mills in the United States doubled (Posselt 1914:188). Although silk manufacturing existed prior to 1900, there were only a handful of silk producing establishments in Rhode Island. In 1903, six silk manufacturers were listed in the Providence Trade Journal: Braid & Simmons, Westminster Silk, and Wilkens Silk in Providence, Alpine Textile Company in Pawtucket, Westerly Silk Mill Company in Westerly, and Reiling, Davide, and Schoen in Valley Falls (Board of Trade Journal January 1903:43). By 1930, thirty Rhode Island silk factories employed 8,800 people and operated 14,000 looms (Carroll 1932:868).

The American Silk Spinning Company: Later Years

In the 1930s and 1940s, the American Silk Spinning Company began experimenting with the blending of different textile fibers to invent new yarns. By 1928, the company began producing synthetics in addition to silk fabrics (Providence Journal 1946: 8–9). This adaptation of products placed the company at the forefront of the textile industry and ensured its success in the mid-1900s. Through its research and development program, the company developed and patented a pure (100 percent) silk yarn in 1931 and discovered a way to blend multicolored silk in the 1940s. According to a 1946 article in the Providence Journal, this yarn “was used by an extremely wide section of the textile industry and remained a highly popular product for a whole decade” (Providence Journal 1946:8–9).
While American Silk was already experimenting with rayon, wool, cashmere, and silk, its most notable achievements occurred during World War II, when the company was asked to help research nylon, a newly invented fiber. In 1938, the DuPont Company, the primary American nylon manufacturer, enlisted American Silk to find ways to use nylon fibers wasted during the production of nylon (Providence Journal 1946:8–9). In partnership with the U.S. government, American Silk developed nylon tropical jungle boot tops for the military to replace canvas boots (inadequate because the canvas was eaten by tropical ants). After realizing that the nylon supplied by DuPont was insufficient for production needs, American Silk found a way to reuse nylon tow rope by breaking it apart and re-spinning it into new fiber. American Silk also recycled discarded silk stockings and manufactured nylon-wool blended socks, sweaters, and underwear (Providence Journal 1946:8–9).

The Top Company of Boston purchased the American Silk Spinning Company in 1959 and continued to run it until 1962 when it consolidated some of the silk spinning operations (Providence Evening Bulletin January 1962). In February 1962, the Top Company sold the mill complex to the Union Paper and Union Transbag Companies, owned by Alan and Melvin Frank. The former mills are currently used for plastic printing and office space.

The Advent of Early Synthetics: Rayon and Nylon

Synthetic textiles first reached the United States in 1910, when the American Viscose Company began producing rayon—a new artificial silk fiber invented in France. After World War I, a European branch of the DuPont Company bought the first factory to produce rayon, located in France, and continued rayon manufacturing there (Avram 1927:5). DuPont formed the DuPont Fibersilk Company (later renamed the DuPont Rayon Company) in 1920 (Avram 1927:118). Rayon production in the United States boomed after the 1927 invention of a crepe twist in rayon yarn that made rayon usable for dress fabrics. This invention caused a shift in the textile industry—many companies producing all-silk goods started manufacturing all-rayon goods instead (Copeland and Turner 1935:18). In Providence, the first two companies to manufacture rayon were the American Silk Spinning Company and the Franklin Rayon Corporation (renamed Atlantic Rayon) in 1928 (Adams et al. 2002:4; Fink 1981:30).

Nylon was first created at the DuPont Company in 1931 and improved by a German company in 1938, at which point the DuPont Company began producing it commercially. Women’s nylon stockings were introduced to the public in 1939. During World War II, nylon production was
reserved for military use only. Textiles made from fibers blended with nylon or rayon soon replaced many fabrics previously made primarily of cotton, wool, and silk alone.

Architectural/Engineering Significance

The Oriental Mills complex is representative of mid-, and late nineteenth and early twentieth century textile mill construction, strategically located near a railroad line in an expanding section of Providence, with the space available to accommodate larger industrial complexes. The Oriental Mills exemplify changes in architectural/engineering patterns, building type, and site growth patterns typical between the 1860s and the turn of the century.

The buildings at the Oriental Mills express engineering elements popular in the mid-nineteenth century as well as the more standardized design of the early twentieth century. The use of brick, and segmental arch windows and doors on all of the buildings, are typical late-nineteenth-century improvements to mill construction. The segmental arch windows allowed for larger window openings than flat windows because the arch has more load-bearing capacity. Also noteworthy is the wide scale and shallow pitched roof of Building 1 that was uncommon in the mid-nineteenth century. In Providence, brick was more cost effective and allowed more flexible design (Fink 1981:37). The twin exterior stair towers on Building 1 and decorative elements such as the bracketed cornices on Buildings 1, 1A & B, 2, 3, and 9 are compatible with the late-nineteenth-century practice of incorporating more architectural detail into industrial design (Fink 1981:37). The stair towers on Building 1 are additionally notable because they were designed with helm roofs (the helm roof on the eastern tower blew off in a storm, leaving only the west with this design). This style of stair tower roof is rare in the Providence area and is only locally exemplified in one other mill building—the 1849 Valley Falls Mill in Valley Falls, Rhode Island (Fink 1981:38; Kennedy 1978:13).

There are also a few slight references to the American Round Arch style popular for mill buildings beginning in the 1840s. This style was based on the Rundbogenstein, a synthesis of classical and medieval architectural forms and details. The brick belt courses on Buildings 1, 2, 3, and 9, and the round-arch windows of the stair towers on Building 1, are examples of such references. The aforementioned large segmental arch windows, flat roof (Buildings 2 and 9), and pier and spandrel construction (Building 2) are representative of the more standardized mill construction of the early twentieth century.

(continued)
The New England textile mill is a specific form, distinctive in its origins and structural development, however the Oriental Mills complex also contains examples of two period building types—the loft and the production shed. Buildings 1 (circa 1860), 2 (1913), and 9 (1917) are examples of the “industrial loft,” a specialized, yet adaptable type of building consisting of two or more stories in a rectangular configuration. This shape was developed in the nineteenth century to satisfy the combined needs for interior light and linear power transmission via lineshafting. Useable floor space was often maximized by concentrating vertical circulation in exterior towers. Large loft buildings were sometimes built first to accommodate all processes, and then later adapted for more specialized uses or even for offices. When built as machine shops, heavier machinery was concentrated on the ground floor, with lighter equipment housed on the floor above. These buildings often employed fire resistive, or “slow-burning” construction, with heavy, brick, self-supporting outer walls with narrow piers and wide window spandrels, and internal firebreak walls. The interior framing system, which supported the floor load, consisted of widely spaced, heavy timber (or sometimes cast iron) posts, timber or steel beams, and thick, multi-layer plank floors, providing limited surfaces for fire to take hold. Earlier examples were built with gable roofs, like Building 1. Later lofts, like Buildings 2 and 9, were designed with flat roofs because of fire insurance regulations (Bradley 1999:25, 29–34, 93, 117–121, 126–129, 155; Brooks 1906:50, 54–68).

Building 1A & B is an example of a type of single-story production shed, or “weave shed” as it was known in textile mills. This building type, with its distinctive, multiple monitor sawtooth profile roof, was known as the “British weave shed roof.” This form began to appear in the U.S. in the 1880s, but did not come into general use in New England until after 1900. This type of building evolved because of several factors. The interior structure of the older, vertical mill buildings could not withstand the vibration of the increasingly large looms being introduced at the time, and the advent of direct electrical drive using individual motors allowed for more flexible arrangement of machinery. The weave shed employed a 30-60-90-degree triangle monitor roof profile, glazed on the short north side to allow interior diffusion of indirect natural light over a wide enclosed space. The new building form allowed vibration free, rationally arranged, well lit production space, which enabled precision operation and increased output per machine (Bradley 1999:192–193; Cole 1926:95, 98; Kulik and Bonham 1978:22).

As the Oriental Mills complex was transformed from a cotton manufacturer to a larger silk mill complex, the relatively small size of the lot limited development options. The growth patterns of the site are representative of an accretionary, constricted urban site growth plan containing (continued)
consolidated production processes (Bradley 1999:66–68, 74–76). Rather than expand from the original cotton loft (Building 1) and connected ancillary buildings (such as Building 3) over additional lots, the complex expanded inward, by building additional facilities wherever they fit. At Oriental Mills, the two larger loft additions (Buildings 2 and 9) could only fit into the empty spaces at the southwest and northwest corners of the lot. Smaller operations, such as the storage shed (Building 1A & B) were squeezed between the road and front facade of the building. The dyehouses (replaced by the 1975 warehouse) utilized previous courtyard space.

*Niles Bierragaard Schubarth*

Notable Providence civil engineer Niles Bierragaard Schubarth designed the original circa 1860 Oriental Mills complex, including Buildings 1 and 3. Schubarth emigrated from Norway in 1840 and started out as a draftsman, working for the engineering firm that enlarged the Erie Canal. In partnership with Steven Atwater (from 1844–1850), he made improvements to the North Burial Ground, designed Swan Point Cemetery, and designed the Cove Park basin and promenade, all in Providence (Jordy and Monkhouse 1982). Schubarth partnered with William S. Haines from 1850 to 1855, then worked alone for the majority of his later career. While he specialized in street and cemetery layout, he also designed some churches and a handful of mills.

(continued)
National Register of Historic Places
Continuation Sheet

Property name: Oriental Mills, Providence, Providence County, Rhode Island

Section number: 8

1900 Sanborn Map
Not to scale
National Register of Historic Places
Continuation Sheet

Property name: Oriental Mills, Providence, Providence County, Rhode Island

Section number: 8

1921 Sanborn Map
Not to scale

(continued)
Property name: Oriental Mills, Providence, Providence County, Rhode Island
Section number: 8

1917 Factory Mutual Fire Insurance Drawing (view from southeast)
Not to scale
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Continuation Sheet

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Property name: Oriental Mills, Providence, Providence County, Rhode Island

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(continued)
United States Department of the Interior
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National Register of Historic Places
Continuation Sheet

Property name  Oriental Mills, Providence, Providence County, Rhode Island

Section number  9

Sanborn Map Company
1900  Map of Providence, RI. Sanborn Map Company, New York, NY.

Sanborn Map Company
1921  Map of Providence, RI. Sanborn Map Company, New York, NY.

Sanborn Map Company

Sanborn Map Company
GEOGRAPHICAL DATA

Boundary Description:

The property boundaries encompass three contiguous parcels on Plat Map 68, Lot 324 encompassing .505 acres; Lot 776 encompassing 1.975 acres; and Lot 779 encompassing .863 acres within Providence, Rhode Island for a total land area of 3.343 acres as shown on the attached tax assessors map.

Boundary Justification

The boundaries include the full extent of contiguous historic and structural resources associated with the manufacturing and commercial activity on the property during its period of significance. The boundaries exclude five open parcels of land that do not now, and have not historically, contained buildings. The boundaries follow legally recorded property lines and roads.
Property name: Oriental Mills, Providence, Providence County, Rhode Island

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City of Providence Assessor’s Map Number 68
Not to scale