

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 Blake & Knowles Steam Pump Company National Register District

other names/site number _____

2. Location

street & number 195, 199, 201 Binney St., 218 Fifth St., 265, 275 Third St. N/A not for publication

city or town Cambridge N/A vicinity

state Massachusetts code MA county Middlesex code 017 zip code 02141

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, 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.)

Judith B. McDonough
Signature of certifying official/Title Judith B. McDonough, Executive Director
Massachusetts Historical Commission, State Historic Preservation Officer

5/7/97
Date

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): _____

for
Signature of the Keeper

Date of Action

Edson H. Beall 6-13-97

Blake & Knowles Steam Pump Co. NR District
Name of Property

Middlesex County, MA
County and State

5. Classification

Ownership of Property

(Check as many boxes as apply)

☒ private
☐ public-local
☐ public-State
☐ public-Federal

Category of Property

(Check only one box)

☐ building(s)
☒ district
☐ site
☐ structure
☐ object

Number of Resources within Property

(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
6	0	buildings
0	0	sites
0	0	structures
0	0	objects
6	0	Total

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

0

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

7. Description

Architectural Classification

(Enter categories from instructions)

LATE VICTORIAN: Panel Brick

LATE 19TH AND EARLY 20TH CENTURY

AMERICAN MOVEMENTS

Materials

(Enter categories from instructions)

foundation STONE

walls BRICK, CONCRETE

roof ASPHALT

other

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet****Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**Section number 7 Page 1**7. DEDESCRIPTION**

The Blake & Knowles Steam Pump Company National Register District is an industrial complex that encompasses a one-block area within the historically industrial East Cambridge section of Cambridge. The district is bounded by Third, Rogers, Fifth, and Binney Streets and occupies an area of approximately 2.4 acres. It includes six buildings, two thirds of the remaining structures historically associated with the Blake & Knowles Steam Pump Company, which at its peak occupied over six acres in the adjoining blocks to the north, northwest, and south. (The remaining buildings, which are under separate ownership, no longer retain integrity.) The district's character is defined by the industrial design of its buildings, most particularly by the large size and bold scale of the major elements. The properties date from 1889 to 1918, the period during which Blake & Knowles sustained its most extraordinary growth. The district contains a total of six resources, all of which are contributing buildings. The properties are in fair condition, having experienced many minor alterations over the past fifty years.

The district consists of two contiguous structures that run the full east/west length of the block along Rogers Street, the district's northern edge, and three more that extend nearly as far along Binney Street, the district's southern edge. A smaller, free-standing structure, the Smith and Brass Foundry, anchors the district's southeast edge at the corner of Binney and Third Streets. Visually, the focal points of the block are the Office Headhouse along Third Street (Map #2) which features round-arched openings, deep corbels and a parapet roofline, and the long Binney Street elevation of the four and five story Machine Shops (Map #5, 6) and Erecting & Assembly Building (Map #4), highly visible as one approaches the district from Kendall Square to the south.

The district's topography is level, set within the context of a much larger area of flat land extending westward from the Charles River, which is four blocks east of the district. East Cambridge's accessibility to the river as well as to the late nineteenth century railyards along its edge made the area ideally suited for the extensive industrial growth of which this complex was a part. Rail lines came directly from Fifth Street into the #1 Machine Shop (Map #1) for transportation of raw materials and finished products.

The district's architectural distinction derives from the consistent massing, scale, and materials of its key components. The #1 Machine Shop and the Office Headhouse (Map #1, 2) are substantial brick structures dating from 1889-1897 and 1892, respectively. The Erecting & Assembling Building of 1903 (Map #4) employs similar scale, massing, materials, and fenestration in its design. Although much smaller in size due to the specific foundry needs of the company, the c.1890 Smith Shop & Brass Foundry (Map #3) has an intriguing roofline of hipped wings with three hipped monitors. The large scale concrete/brick faced designs of the Second and Third Machine Shops (Map #5, 6) reflect their later dates of 1917 and 1918, as do the large multi-lite steel sash which comprise a major portion of their exterior surfaces. They are noteworthy for their sheer size and scale, and for their use of the most current building technology during the World War I era.

(continued)

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet****Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**Section number 7 Page 2

The district is bounded by the four streets enclosing the block. The complex originally extended southward across Binney Street into the west portion of the next block where a large Engine and Boiler House and a Cylinder Shop stood. The area is now a mix of vacant land, parking lots, and recent one and two-story light industrial/office blocks. East of the district across Third Street, the former industrial zone has been similarly built up with recent one-story brick office/light industrial blocks.

North of Rogers Street are additional buildings historically associated with the Blake & Knowles plant, the Main Foundry and Core Shops #1 and #2. These three structures, although considerably altered, also survive from the 1890s. The block as a whole does not retain its integrity, however. The entire northern half's three buildings, the one-story Machine Foundry, a Brass Foundry, and Cleaning House have been replaced by a massive seven-story brick Telephone Company building and a large parking lot. Further west beyond Fifth Street, the entire next block of the complex has been replaced by another massive new structure, a four-story metal and concrete Telephone Company building. West of the district's Fifth Street boundary is an area of one and two-story light industrial buildings. Some are of c.1900 date, but none are historically associated with Blake & Knowles. (These abutting uses are indicated on the attached Sketch Map.)

The distinctive industrial character of the district is a contrast to the surrounding areas of newer, low-rise office and industrial uses and to the massive but blank and inactive elevations of the Telephone Company buildings. North of Rogers Street, the Main Foundry has been converted to an upscale office building and the Core Shops' facades have been heavily altered so as not to retain their integrity. The district boundary seeks to define and protect the only intact block of the entire Blake & Knowles complex.

The district's appearance during the time in which it achieved significance (1889-1946) was largely the same as it is today. The six buildings retain most of their design integrity, despite occasional infill and alteration of windows, the addition of a loading dock along Rogers Street, changes in roofing and siding materials, and even the complete replacement of windows in one building.

Plans are in progress for a private developer to acquire the entire block and to rehabilitate it in accordance with the Secretary of the Interior's "Historic Standards for Rehabilitation" under the Historic Tax Certification program.

The machine shops and related buildings are of typical industrial construction representative of the two periods in which they were built: 1889-1903 and 1917-1918. Although not innovative in design, they are a handsome assemblage of structures of compatible scale, materials, and massing. Their designs reflect a continuing interest in quality craftsmanship and general innovations in building technology while clearly emphasizing the simple lines and rhythmic fenestration patterns so distinctly characteristic of their industrial roots.

(continued)

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 7 Page 3**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

Descriptions of the district's properties are listed in chronological order. Numbers in parentheses refer to the attached Sketch Map, followed by Photograph Number. All properties are recorded in the Massachusetts Historical Commission's Inventory of Historic Assets of the Commonwealth as "Area C." Properties are named for their original function within the Blake & Knowles operation.

The largest building in the complex is also the district's earliest surviving structure, the #1 Machine Shop, (Map #1; Photograph #1). Its easterly portion dates from 1889, with the westerly sections added incrementally over the next eight years, all in a uniform design. It runs nearly the full length of the block between Third and Fifth Streets. Its sheer size, 400' in length by 165' wide, creates a massive presence. Originally designed as a full-height open space with a shorter, 20-foot wide gallery around its edges, the open space was infilled with two upper floors by the mid-1940s.

The brick exterior retains its original form as seen in the west elevation along Fifth Street: a central four-bay, three-story portion with gently sloped ridge roof which is flanked by three-bay wings of two-story height, each with a sloped roof. The west elevation features stepped pilasters flanking the central section. It retains its original window openings with granite sills at the two upper stories, although the second-story sash have been replaced by concrete infill and inappropriate new glazing. Ground-level openings consist of two later rectangular loading bays, one in each outer bay, and a door in the center bay, where evidence of the original large, arched opening is visible in the masonry repairs.

The long northerly elevation of the #1 Machine Shop has full-height pilasters between each bay, and a uniform pattern of two stories with segmental-arched window openings and granite sills at each level. Again, many of the openings have been infilled, altered into large loading bays (some later infilled with stucco), and the original sash have been replaced by a panel/single lite infill. A long one-story metal loading dock has been added midway along its length. At the third story, not visible from Rogers Street due to its setback, the north elevation has widely-spaced six-over-six light windows, and its wall surfaces are sheathed in asphalt siding.

The Office Headhouse (Map #2; Photograph #1) dates from the early 1890s. It adjoins the east end of the #1 Machine Shop and occupies most of the block facing eastward onto Third Street. As the company's office, it is designed in a more formal Panel Brick style to convey an image of importance. Two stories in height and faced in brick, its rectilinear form is accentuated by the four square-capped, full-height piers and by the granite-capped parapet with brickwork decoration which has a raised central five-bay section. Deep corbelled bands are set between the piers above the second story to organize the facade into two and four-bay groupings. Granite sills and coursing above the first story also enrich the design. In the center bay, a tall round-arched opening denotes the entry, above which a smaller round-arched window opening (now infilled in brick) echoes its form. The first floor window openings of the three north bays have been altered into loading doors, and all of the building's windows have been replaced by modern panels/single light glazing.

At the corner of Binney and Third Street stands the Smith Shop and Brass Foundry, (Map #3; Photographs #3, 4). With portions dating from 1890, it is the only surviving example of the many smaller buildings with related uses which once stood on portions of the original complex. It was

(continued)

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 4Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA

built as two separate structures, the westerly Smith Shop and the easterly Brass Foundry, and later combined (c1900) with the addition of the central portion. The south (facade) elevation now consists of a tall, one-story central hipped section with a monitor roof. It has a brick base and a non-contributing garage door framed by new brickwork in place of the original row of windows. The upper wall surface and monitor are of frame construction. To its west is a lower hipped roof wing with a similar monitor, also of frame construction above a brick base. To its east is the brick-faced Foundry wing, three bays wide and four bays deep, with a shallow gable end. A wood monitor was later added at its ridge. It has tall, segmental-arched window openings with granite sills and new single-lite glazing on both elevations. There is a matching flat-roofed, two-story brick ell of two-bay depth at its north (rear) end, also dating from the 1890s. Centered along the building's north (rear) elevation is a square chimney which rises well above the peak of the center monitor.

The district's southwest corner is defined by the large brick Erecting and Assembling Building of 1903 (Map #7; Photograph #s 2, 5). This square four-story building faces south onto Binney Street. It originally contained a full-height open space surrounded by 2nd, 3rd, and 4th story galleries, but the floors were later filled in at all three upper levels, probably in the early 1940s. The nine-bay Panel Brick style facade consists of a wider central three-bay portion with a shallow gable which rises one-half story above the main flat roof of the two outer sections. The window openings and brick spandrels are recessed slightly within the full-height, segmental-arched bays, creating a tight, narrow rhythm which accentuates the facade's verticality. The center ground-floor bay has a large roll-down steel door. Elsewhere, the segmental-arched window openings retain their granite sills, but the original wood sash have been replaced by new infill panels above paired and three-unit one-over-one metal sash.

The Second Machine Shop (Map #5; Photograph #s 6, 7) was completed in 1917, built on the site of several small frame structures and the complex's original engine and boiler plant which was demolished a year earlier. Its large rectangular mass is comprised of a four-story mass, 120' long by 65' deep, with a narrower one-story rear portion, also 120' long but only 37' deep and built at the same time. This wing abuts the #1 Machine Shop to its north and thus has no exterior wall surface.

This was the complex's first concrete building, and its design reflected the advantages of this relatively new building technology in its large, fully-glazed bays. It has a flat roof and is four stories high. The south elevation is six bays long, with an entrance in the easternmost bay. The facade consists of narrow vertical sections of painted concrete, with brick spandrels beneath the window openings. The east entrance bay is subdivided into two narrower bays, one with full-height sash and one with sash above a half-height brick spandrel. The original sash, partially in place, are multi-lite steel sash with operable pivot sections. Many have been replaced in the 1970s by a larger lite pattern, also in steel, and not incompatible with the facade's overall design.

Abutting this building's east end is the Third Machine Shop (Map #6; Photograph #s 6, 7) which was completed a year later in a nearly matching design of concrete vertical elements with brick spandrels. It is considerably larger: five stories high; 180' long by 66' deep; and with a

(continued)

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 5Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA

similarly-designed original rear one-story section of 180' by 37'. The nine-bay south elevation and matching three-bay east elevation are highly visible from the surrounding areas along Binney and Third Streets. The parapet includes shallow, stepped gables with diamond-shaped brickwork in the second outermost bays of the facade and in the center bay of the east elevation. The original multi-light steel sash have to a large extent been replaced by the larger-lite 1970s version.

The district contains no resources which are non-contributing, and later additions are minimal. A post-1944 corrugated steel addition on the east elevation of the Third Machine Shop (Map #6) is minimally visible from the surrounding streetscape. A long loading dock along the north elevation of the #1 Machine Shop detracts from the original design but is not out of character with the district's continued industrial use. The replacement of original windows with unsympathetic modern infill designs is an unfortunate reality in the past efforts to keep the buildings occupied in a combination office/industrial function. The overall impact of these changes is fairly small compared to the imposing mass and composition of the district which remain among its most impressive features.

Archaeological Description

While no prehistoric sites have been recorded in the district, it is possible that sites are present. Five sites have been recorded in the general area (within one mile) indicating sites are present in the region. In general, however, the potential for significant prehistoric survivals on the property is low. Locational characteristics for the district, particularly its distance of over 1,000 feet from wetlands indicate the area is not particularly favorable for most types of prehistoric sites. The existing industrial complex would also have impacted any prehistoric sites in the area which would vary from a general subsistence/settlement model (slope, drainage, distance to water).

The potential for historic period survivals is also low. The district remained agricultural land throughout the 18th and early 19th centuries. During the 18th century, wooden framed shops were built in the area. In the mid 19th century, however, any trace of these or earlier structures were likely destroyed by construction of the existing industrial complex which extends below the present ground surface and covers nearly the entire lot.

(end)

Blake & Knowles Steam Pump Co. NR District
Name of Property

Middlesex County, MA
County and State

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.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- ☐ **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 ITC project 11392MA
- ☐ previously listed in the National Register (1146)
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Areas of Significance

(Enter categories from instructions)

ARCHITECTURE

INDUSTRY

Period of Significance

1889-1946

Significant Dates

1889, 1892, 1903, 1916, 1917-1918, 1927, 1942

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Aberthaw Construction Co.

Flint Building Construction Co.

L. H. Gager Co.

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☒ Local government
- ☐ University
- ☐ Other

Name of repository:

Massachusetts Historical Commission

Cambridge Historical Commission

Blake & Knowles Steam Pump Co. NR District
Name of Property

Middlesex County, MA
County and State

10. Geographical Data

Acreage of Property 2.4 acres

UTM References

(Place additional UTM references on a continuation sheet)

1. 19 328400 4692320
Zone Easting Northing

2.
Zone Easting Northing

3.
Zone Easting Northing

4.
Zone Easting Northing

 See continuation sheet

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 Margo B. Webber, Preservation Consultant with Betsy Friedberg, National Register Director, MHC

organization Massachusetts Historical Commission date May 1997

street & number 220 Morrissey Boulevard telephone 617-727-8470

city or town Boston state MA zip code 02125

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 multiple

street & number _____ telephone _____

city or town _____ state _____ zip code _____

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.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA

Section number 8 Page 1

8. SIGNIFICANCE

The Blake & Knowles Steam Pump Company National Register District, Cambridge retains integrity of location, design, materials, workmanship, feeling, and association, and it fulfills Criteria A and C of the National Register on the local level.

Under Criterion A, the district is significant for its role in the industrial development of East Cambridge in the late nineteenth and early twentieth centuries. As one of numerous large industrial complexes in the area, the Blake & Knowles Steam Pump Company gained national recognition for the innovative pumps it designed and manufactured. Its pumps served a wide range of industries including ships, waterworks, textile mills, tanneries, mines, wells, engines, etc.; practically every aspect of the region's ongoing Industrial Revolution required some sort of pump. Acquired by the Worthington Pump and Machinery Corporation in 1916, the company nearly doubled in size during World War I as it adapted for U. S. Government wartime demand.

Under Criterion C, the district demonstrates the incremental growth historically characteristic of East Cambridge's industrial complexes as well as the architectural styles commonly used during its periods of construction, 1889-1903 and 1917-1918. The bold scale and immense size of the major machine shops' designs illustrate the tremendous production capabilities of the firm as well as the need for huge open spaces to house the cranes and heavy equipment for producing specialty industrial pumps. Although the district excludes the Main Foundry and two Core Shops which also survive but have been greatly altered, it nonetheless exhibits a strong sense of visual cohesion and architectural integrity. The district's period of significance extends from 1889 to 1946, encompassing the period from when its earliest remaining structure was built to include its ongoing role as one of the few remaining industrial blocks in this portion of East Cambridge.

Criterion A: Development of East Cambridge as an industrial district in the mid-to-late nineteenth century was in large part a direct result of the city's prior development patterns and priorities. Founded in 1630 as Newtowne, the capital of the Massachusetts Bay Colony, Cambridge was laid out in 1631. Its center was the present Harvard Square, along the north bank of the Charles River halfway along the path from Charlestown to Watertown. Outlying areas including some as far east as today's Cambridgeport area along the Charles were gradually set aside for grazing, wood lots and haying, due to their marshy meadow and swamp character. Cambridge retained the medieval system of arranging planting fields and common grazing lands around the town's outskirts but granting house lots only in the village center.

Consequently, East Cambridge remained primarily agricultural throughout the eighteenth century. In 1807, rights were granted for a toll bridge from Boston to Lechmere's Point, at the northeasterly edge of Cambridge. The Lechmere Point Corporation then had its 300 acres surveyed and a street pattern laid out. Land development was slow until 1813 when the Corporation shrewdly offered to donate land to Middlesex County if it would move its court house, jail and registry of deeds to East Cambridge. The offer was accepted, and by 1818 a community including a school and a church was well established at East Cambridge.

(continued)

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 8 Page 2**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

A large population of Irish immigrants began settling here in the 1830s. By 1841, the area's Irish residents numbered more than 1000, and a Roman Catholic church was started. The area was close to Boston's factories and waterfront area where cheap labor was in great demand, and many of its streets were being built up with small workers' cottages and frame tenements. Among these, a block of tenements known as "Conlan's Court" consisted of six two- and three-story tenements and stood directly east of Third Street, across from the Blake & Knowles plant.

Situated on the most direct route from Boston to Cambridge Common, it was not long before the area became too valuable for further residential use as small-scale industries began to locate here.

During the 1840s and 1850s, a series of small glass and soap factories were established in both the East Cambridge and Cambridgeport sections of the city while simultaneously commercial brickyards were established in the city's northwest section due its proximity to the glacial clay near Alewife Brook. After the Civil War, the early glass and soap factories were gradually replaced by massive industrial growth in the fields of woodworking, pump manufacture, rubber, sugar refining and candy manufacturing, printing, publishing, and gasworks.

This was due to major landfill activity in the area. Formerly an island surrounded by marsh and swamplands at high tide, major landfill of East Cambridge occurred to take advantage of its location close to Boston's new freight and shipping facilities. Relocation of the Boston & Maine's freight terminal from Boston to the East Cambridge shore increased the area's desirability. Also located here was the Boston & Albany freight terminal, whose tracks cut through the entire area's length, with spur lines directly into the many warehouses and factories. A spur track of the Grand Junction branch of the Boston & Albany Railroad ran down Rogers Street and eventually directly into the #1 Machine Shop from Fifth Street. The Boston & Albany line connected to Charlestown and East Boston's shipping terminals and to the Boston end of the New Haven Railroad's line, giving East Cambridge's industries full East Coast access.

The George F. Blake Manufacturing Company began construction of its East Cambridge plant in 1886, relocating here from Boston. The company's founder, George Fordyce Blake, was previously a brickmaker in nearby Medford. In 1862, he invented a pump that removed water from brickyard clay pits, greatly improving the brickmaking process. In 1864, Blake formed the George F. Blake Manufacturing Company to produce these pumps, establishing a shop on Province Street in Boston. The shop soon expanded to produce water meters, brick presses, and other brickmaking equipment of Blake's invention. By 1869, the shop was moved to Chardon Street, then in 1872 to an entire block at the corner of Causeway and Friend Streets in Boston's West End.

In 1879, Blake acquired manufacturing rights to the Knowles pump, invented by Lucius Knowles of Worcester. Knowles held the patent on a feed regulator valve and was manufacturing steam pumps in Warren, MA under the firm name of Knowles & Sibley. For the next eighteen years, the two manufacturers operated independently, although under the same financial management.

(continued)

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 8 Page 3**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

It was not until 1897 that the two inventors formally merged their businesses, which then became the Blake & Knowles Steam Pump Works. Within a few years, the company was designing and manufacturing a greater variety of pumping machinery than any other firm.

When it first relocated to East Cambridge in 1886, the entire operation consisted of three small wood-frame structures adjacent to the Foundry, a brick building located at the southwest corner of Third and Bent Streets. A railroad spur ran the full length of Rogers Street to Third Street.

By 1890, the complex had grown to almost two full blocks between Third and Fifth Streets. Due to the nature of the business, the Machine Shop and Main Foundry would always remain the key structures of the operation.

The #1 Machine Shop was built in stages between 1889 and 1897 to eventually create a 400-foot long, three-story space in which a traveling crane run on overhead tracks could lift upwards of fifteen tons. It was built by the Flint Building Construction Co. of Palmer, MA. The Main Foundry, c.1895, replaced the original foundry and is still extant in the block directly north of the district. It was also equipped with two electric traveling cranes, each with a 35-ton capacity. Its furnaces melted fifty tons of iron daily, considerably more than the average foundry of its day.

The Foundry was designed by L. H. Gager, of Palmer, MA, and featured an unusual truss system of reinforced double wood trusses rising up within the clerestory to support the beam on which the crane moved.

As demand for the company's products grew, additional buildings were added to the complex. At first, many of these were small wooden sheds within the two blocks west of the Main Foundry as far as Sixth Street. The two surviving but heavily altered Core Shops north of the district along Third Street also date from c.1900-1905.

A separate engine and boiler plant was housed in a small building directly south of the #1 Machine Shop (later replaced by Machine Shops #2 and #3). Later expansion included the Erecting and Assembling Building of 1903 (Map #4), as well as a brick pattern shop, drafting building, brass foundry, cleaning house, another large machine foundry, and a large cylinder shop and engine and boiler house extending south of Binney Street to Munroe Street, and none of which now survives. Surrounded by other industrial operations including the E. P. Sanderson Iron & Steel Company and the Cambridge Gas Light Company's Gasholders, the complex had grown to six acres by 1905. See attached Appendix A: Historic Plan/Sketch Map.

By 1900, pumps made here ranged from a few hundred pounds weight to the highest grade of water-works pumping engines weighing over one million pounds. The company employed 96 draughtsmen and pattern-makers to design its products, and a total of 1000 employees for their manufacture. Pumps were designed to handle any fluid, semi-fluid, or liquor, acid or alkali, from the lightest pressure up to 25,000 pounds per square inch. Pumps for gas and vapor under vacuum or various degrees of compression, and adapted to be driven by steam, air, or water pressure, and later by gas engines and electric motors, were all among the company's capabilities.

(continued)

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

Section number 8 Page 4

Although operated independently, the Blake & Knowles plant became part of the International Steam Pump Company during the first decade of the twentieth century. In 1916, it was reorganized together with seven of the country's largest pump manufacturers as the Worthington Pump and Machinery Corporation. The Cambridge plant from then on was referred to as the "Blake & Knowles Works."

During the 1900-1916 period, the company became one of the nation's foremost pump manufacturers. Industrial historian Orra Stone wrote, "The output comprised a vast amount and variety of pumping and allied machinery, covering the requirements of almost every industrial activity and extending over a world-wide area."

Products at this time included pumps for marine use, waterworks, tanneries, soap works, cotton, woolen, paper and silk mills, for quarries, foundries, chemical works, mines, artesian wells, elevators, sewage facilities, fuel oil, air compressors, steam engines, etc. Practically every facet of modern industry required some sort of pump mechanism which the Blake & Knowles Works could provide.

During World War I, much of the plant was shifted to wartime needs for the U. S. Government, particularly for the Navy: pumps for destroyers, submarine chasers, mine sweepers, etc. The plant was nearly doubled in size with construction in 1917-1918 of two new reinforced-concrete machine shops, the Second and Third Machine Shops (Map # 5, 6), which greatly increased production capability and employment.

Industrial East Cambridge continued to expand and thrive into the 1920s. Within this steady economic growth climate, a 300 per cent gain in manufacturing occurred during the 1920-1930 period. The Blake & Knowles Works continued its military production. As of 1930, the firm outfitted more than 90 per cent of the United States Navy's vessels, with each ship requiring between 25 and 50 pumps of various types. Other key products introduced in the 1920s included the Worthington two-cycle solid-injection Diesel engine and the Worthington Locomotive feed water heater and pump, both of which were considered milestone inventions within their respective fields.

Blake & Knowles remained in operation at this site until 1927, when operations were combined and relocated to another Worthington plant in Holyoke, MA.

Subsequent years saw the various buildings in the complex sold off individually for various industrial uses. Beginning in 1929, the Smith Shop & Brass Foundry (Map #3) was leased to the Enterprise Manufacturing Company, a coppersmith. By the mid-1930s, the building was acquired by the Kendall Boiler & Tank Company, a boiler repair service, which still occupies the building. The Main Foundry became a Motor Freight Station and was used chiefly for warehousing, as was the #1 Machine Shop (Map #1) which in the 1950s was in part a regional distribution warehouse for Carling Beer.

(continued)

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 8 Page 5**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

In the year 1942, the two Binney Street Machine Shops (Map # 5, 6) were acquired by United Carr Fasteners. Carr Fastener Co. was founded in 1912 by Fred S. Carr of West Newbury, MA. It began as a maker of canvas fasteners for carriages, and later for upholstery and canvas work on automobiles, particularly the "Dot" fastener. The firm grew quickly, and in 1929 merged with U. S. Fastener of South Boston to become United Carr Fasteners. Relocated to nearby buildings at 31 Ames Street in East Cambridge at this time, the firm eventually acquired all three Machine Shops, the Office Headhouse, and the Erecting & Assembling Building, virtually the entire district with the exception of the Smith Shop & Brass Foundry.

During World War II, the plant was retooled for military aircraft products, including a cowl fastener known as the "Airloc" used on B29 bombers and the Boots self-locking nut. By 1945, 45 per cent of the Cambridge plant's output was for the airplane industry, and the Binney Street buildings were referred to as the "Aircraft Parts Division."

United Carr was acquired by TRW Corporation in 1969 but continued to occupy the buildings. The present occupant, American Engineered Components Inc., is a spin-off of TRW, continuing a combined industrial/office presence.

Criterion C: The complex demonstrates the incremental growth historically characteristic of local industry during East Cambridge's rapid rise to become the state's third largest industrial center. It aptly represents a range of utilitarian architectural styles commonly used during its construction periods, primarily 1889-1903 and 1917-1918. Most of the buildings are of great size and scale, built close together to readily integrate the many facets of the production process. The visual integrity of the block's mass and scale are fully intact, forming a distinctive industrial enclave within the broader character of the area.

The district's visual harmony is highlighted by the use of brick as the dominant building material on the buildings from the first period of development. The long brick elevation of the #1 Machine Shop (Map #1) reflects not only its incremental expansion but an effort to establish and maintain simple patterns and proportions. Similar strong vertical bay rhythms are echoed in the Office Headhouse (Map #2) and the Erecting and Assembly Building (Map #4).

The district's later phase of growth is demonstrated in its two large reinforced concrete structures, the 2nd and 3rd Machine Shops (Map # 5, 6). Although larger in scale, these structures evidence an interest and commitment to new technology to accommodate growing production capabilities.

The architectural significance of separate buildings within the district pertains to each one's role within the steam pump production process. Each building's siting and design reflect its originally intended use. The 1889 #1 Machine Shop (Map #1) was situated directly across Rogers Street from the Main Foundry. Its heavy-timber construction and central full-height space were specifically designed for a travel crane, with lighter machining functions supported by the outer gallery spaces. Direct rail access into the building's northwest corner expedited the transport of finished goods.

(continued)

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number 8 Page 6

**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

The Office Headhouse of 1892 (Map #2) was built as an extension of the #1 Machine Shop, giving the complex a more formal entrance facade along Third Street, yet also directly accessible to production from its rear (west) elevation. Designed in the Panel Brick style, it is the most ornamental design in the complex. The facade creates the image of a substantial and successful business through its use of square-capped, full-height piers and a stepped parapet. Other details such as brick corbel bands, granite sills and coursing, and round-arched window and entrance designs added to the symmetrical, stately design.

The Smith Shop & Brass Foundry (Map #3) is the district's smallest structure, indicative of the lesser volume of production in these two areas. Despite the small size, their functions were critical to the overall production process. The hipped roofs and clerestory monitors allowed a large degree of light and ventilation important to the foundry process.

The large, handsome design and prominent corner siting of the 1903 Erecting and Assembling Building (Map #4) reflect the company's continued success and growth towards the century's turn. The large, four-story square mass fronts onto Binney Street, where the south facade design illustrates careful attention to rhythmic patterns achieved with full-height recessed bays. Segmental-arched window openings and a raised center section also add to the facade's rhythm. The raised roofline also addresses the building's original function, a full-height central space to house an enormous crane, surrounded by second, third, and fourth-story galleries for erecting and assembling the various steam pump equipment.

The Second and Third Machine Shops (Map # 5, 6) of 1917 and 1918 offer large, impressive facades along Binney Street, a result of the need for additional machine shop space capable of handling the firm's ever-increasing production and floor-loading requirements. The multi-light steel sash windows in fully-glazed bays were the most up-to-date method for increasing light and ventilation to industrial spaces. The subtle exterior detailing of parapets, spandrels, and varied entrance bays were efforts to create modestly handsome as well as functional structures.

The district projects a strong image of its industrial history and architectural development, an increasingly important reminder of the area's industrial past since so much of the surrounding area's industrial character has been lost or heavily altered.

(end)

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number 9 Page 1

Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Atlas of the City of Cambridge, Philadelphia: G. M. Hopkins, 1886.

Atlas of the City of Cambridge, Philadelphia: G. W. Bromley, 1894, 1903, 1916.

Booth, Ann, "George F. Blake Foundry Report," Cambridge Historical Commission, December, 1982.

"Cambridge Tribune," Vol. XII, No. 47, 2/1/1890, pp.2-3; Vol. XIII, No. 30, 10/4/1890, p.7.

City Directories, City of Cambridge, 1895-1954.

"George F. Blake M'F'G Co's Foundry," Industrial Surveys, Baker Library, Harvard University, 1886, 1890, 1895.

Gilman, Arthur, The City and Its Industries 50 Years After Its Incorporation, Cambridge: Riverside Press, 1896.

Hall, C. Loring, The History of United-Carr, Lorain Printing Co, 1986.

Insurance Maps of Cambridge, MA, New York: Sanborn-Ferris, 1900, 1934.

Russell, Richard, Facilities Manager, TRW, Interview by Margo Webber, March, 1995.

Stone, Orra L., History of Massachusetts Industries, Boston: S. J. Clarke, 1930, Vol. I, pp. 773-774, 805-807.

"Worthington Pump & Machinery Corporation Insurance Map," Associated Mutual insurance Co., February, 1919.

"Worthington Pump & Machinery Corporation Insurance Map," Associated Mutual Insurance Co., February, 1919.

Zimmerman, Sally, "Blake & Knowles/Worthington Pump Company Summary," Cambridge Historical Commission, March, 1995.

(end)

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number 10 Page 1

**Blake and Knowles Steam
Pump Company Historic District
Cambridge, (Middlesex County) MA**

10. GEOGRAPHICAL DATA

Verbal Boundary Description:

Beginning at the northwest corner of the intersection of Third and Binney Streets, the boundary runs westward along the north side of Binney Street for one block, until reaching the east side of Fifth Street. Here, it turns northward along the east side of Fifth Street for one block's length, turning east along the south side of Rogers Street, and proceeding eastward until reaching the west side of Third Street. Here, it turns southward along the west side of Third Street for one block, until reaching the point of origin.

This boundary includes the three properties numbered 31, 33, and 34 on Cambridge Assessor's Map #28. See attached Cambridge Assessor's Map #28.

Verbal Boundary Justification:

This boundary definition encompasses the only remaining intact block of the Blake & Knowles Steam Pump Company, which historically occupied a four-block area in this vicinity. Both historically and architecturally, its properties reflect the development of the company in the late nineteenth and early twentieth centuries. Nearly the entire block is occupied by buildings, whose proximity to one another was critical to the type of heavy machinery manufacturing operation being conducted.

The boundary excludes three additional buildings historically associated with the company and located in the block just north of the district. These three structures, the Main Foundry and two core Shops, have been extensively altered in recent years. The Core Shops' facades retain minimal evidence of their original appearance; the Main Foundry has been converted to office use with incompatible alterations on three of the four major elevations. Further, the integrity of their historic setting within a block of closely-spaced storehouses and later brick buildings has been lost. Several open parking lots and a seven-story modern building at the northwest end of the block have destroyed the historic context of these buildings.

The district's western boundary along Fifth Street was historically the edge of the complex. A mix of smaller early-twentieth century and later office/industrial uses occupies the next westward block, with no bearing on the district's significance. To the south, Binney Street separates the district from an area of recent (1970s+) low-rise office and light industrial uses, and some open lots. This area is a buffer zone between old industrial East Cambridge and new office high-rise district of Kendall Square.

The eastern boundary along Third Street also separates the historic industrial complex from an area of new, one-story industrial and office uses. Although this area was historically an integral part of East Cambridge's industrial core, its original buildings have been replaced and it no longer retains any historic character.

(end)

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Blake and Knowles Steam Pump
Company Historic District
Cambridge, (Middlesex Co) MA

Section number _____ Page _____

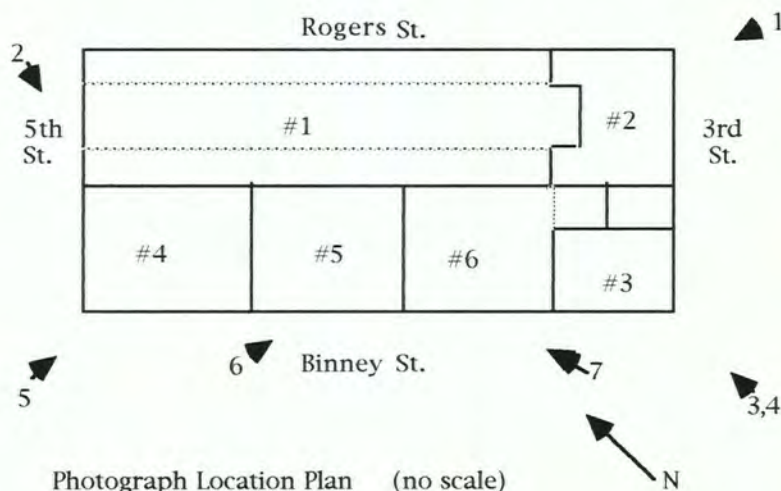
PHOTOGRAPHS

The following identification information applies to all photographs.

Photographed by: Margo B. Webber
Date taken: July, 1995, except March, 1995 for Photo #6
Original negative at: 136 Ridge Avenue, Newton, MA 02159

Descriptions of individual views are as follows:

- Photo #1: View looking southwest from Third Street towards east and north elevations of Office Headhouse and north elevation of #1 Machine Shop (Map # 2,1)
- Photo #2: Looking southeast from Rogers Street towards west elevations of #1 Machine Shop and Erecting and Assembling Building (Map #1,4)
- Photo #3: Looking northwest from Binney Street towards south and east elevations of Smith Shop and Brass Foundry, with Office Headhouse at right (Map #3, 2)
- Photo #4: Close-up view looking northwest towards south elevation of Smith Shop and Brass Foundry (Map #3)
- Photo #5: View looking northeast towards south and west elevations of Erecting and Assembling Building (Map #4)
- Photo #6: View looking northeast towards south facades of (L to R) 2nd and 3rd Machine Shops (Map #5,6)
- Photo #7: Looking northwest towards south elevation of 3rd Machine Shop (Map #6)



**BLAKE & KNOWLES STEAM PUMP COMPANY NATIONAL REGISTER DISTRICT
CAMBRIDGE, (MIDDLESEX COUNTY) MA
DISTRICT DATA SHEET**

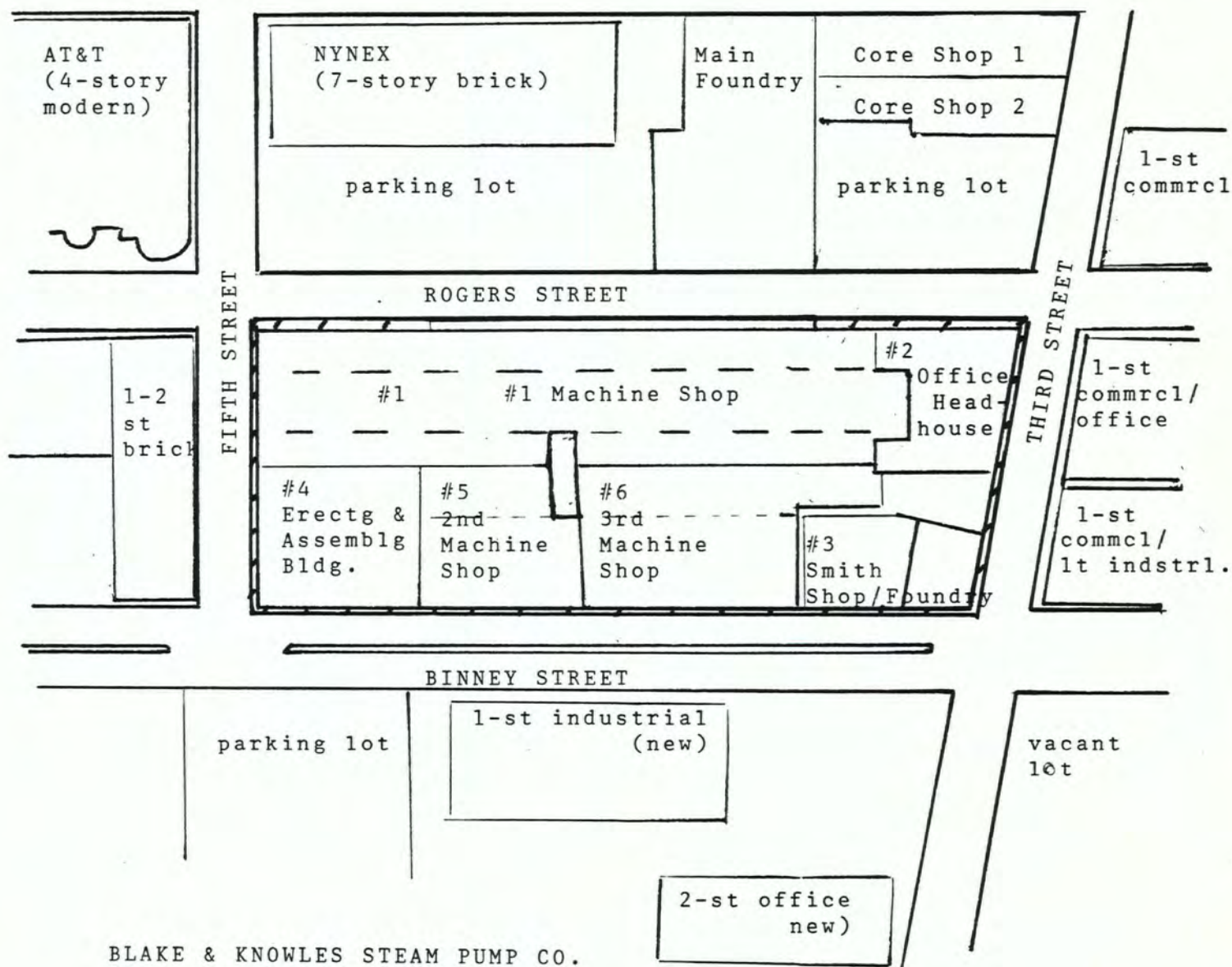
MAP#	MHC#	HISTORIC NAME	STREET ADDRESS	DATE	STYLE	RESOURCE	STATUS
1	Area C	#1 Machine Shop	265 Third St./218 Fifth St.	1889-1897	Industrial/Masonry Bearing Walls	B	C
2	Area C	Office Headhouse	265 Third St.	1892	Industrial/Panel Brick	B	C
3	Area C	Smith Shop & Brass Foundry	275 Third St.	c. 1890, w/1897 addition	Industrial/Masonry Bearing Walls & Frame Construction	B	C
4	Area C	Erecting & Assembling Building	201 Binney St.	1903	Industrial/Panel Brick	B	C
5	Area C	Second Machine Shop	195 Binney St.	1917	Industrial/Reinforced	B	C
6	Area C	Third Machine Shop	199 Binney St.	1918	Industrial/Reinforced Concrete	B	C

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SKETCH MAP



BLAKE & KNOWLES STEAM PUMP CO.
NATIONAL REGISTER DISTRICT
Cambridge, (Middlesex Co) MA

SKETCH MAP
(no scale)



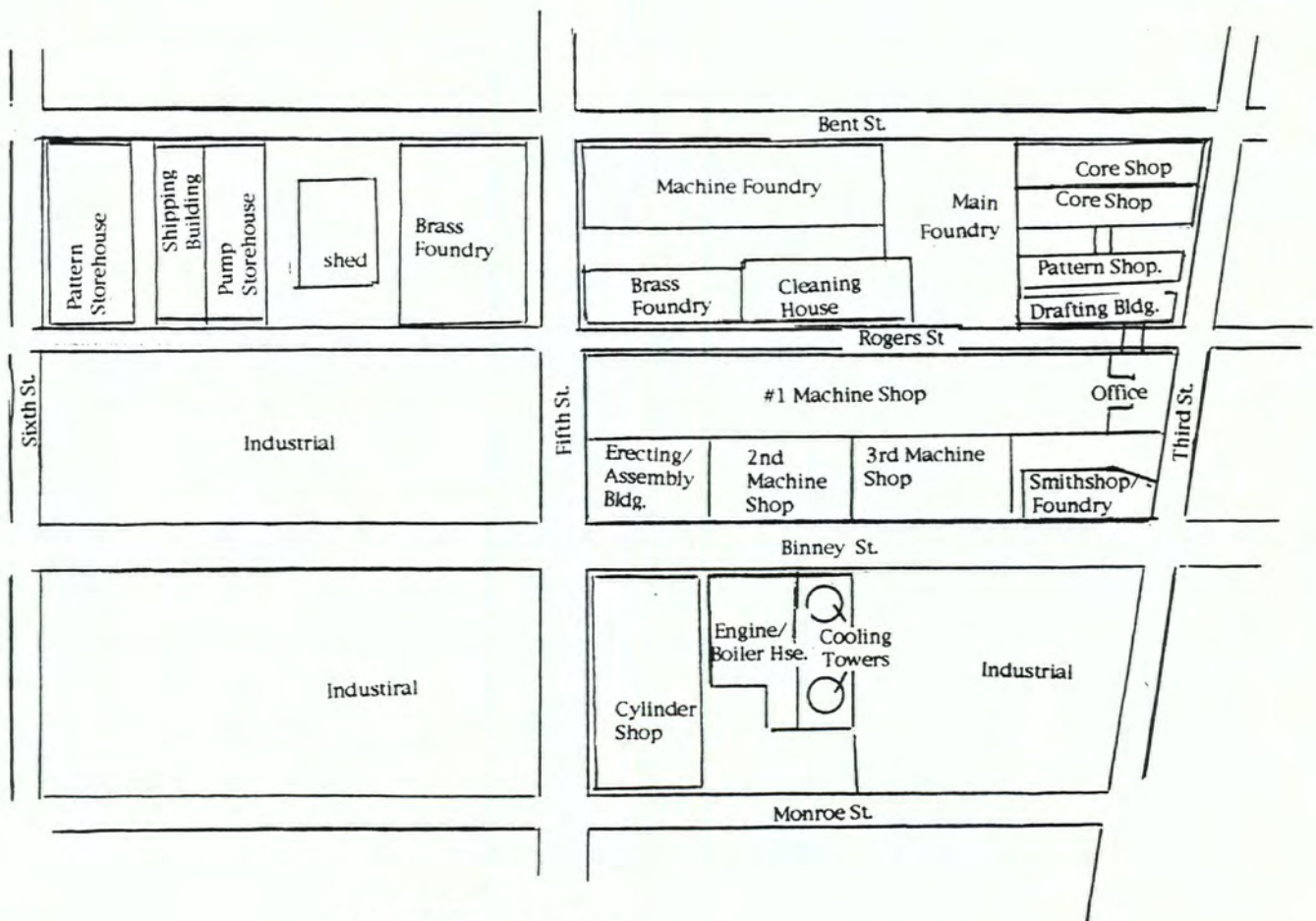
 District Boundary

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number _____ Page _____

APPENDIX A: HISTORIC PLAN

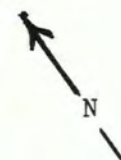


HISTORIC PLAN

Blake & Knowles Steam Pump Co.

(based on 1919 plan of the Associated
Mutual Insurance Co.)

no scale



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Blake and Knowles Steam Pump Company National Register District

MULTIPLE
NAME:

STATE & COUNTY: MASSACHUSETTS, Middlesex

DATE RECEIVED: 5/16/97 DATE OF PENDING LIST: 5/28/97
DATE OF 16TH DAY: 6/13/97 DATE OF 45TH DAY: 6/30/97
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 97000561

NOMINATOR: STATE

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

☒ ACCEPT ☐ RETURN ☐ REJECT 6-13-97 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered
National Register

RECOM./CRITERIA _____

REVIEWER _____ DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N



Office Headhouse and #1 Machine Shop
Blake & Knowles Steam Pump Co. Historic District
Cambridge (Middlesex Co) MA

Photo #1 of 7



#1 Machine Shop, Erecting & Assembling Building
Blake & Knowles Steam Pump Co. Historic District
Cambridge (Middlesex Co) MA

Photo #2 of 7



Smith Shop and Brass Foundry

Blake & Knowles Steam Pump Co. Historic District

Cambridge (Middlesex Co) MA

Photo #3 of 7



Smith Shop and Brass Foundry

Blake & Knowles Steam Pump Co. Historic District

Cambridge (Middlesex Co) MA

Photo #4 of 7



Erecting and Assembling Building

Blake & Knowles Steam Pump Co. Historic District

Cambridge (Middlesex Co) MA

Photo #5 of 7



2nd and 3rd Machine Shops

Blake & Knowles Steam Pump Co. Historic District

Cambridge (Middlesex Co) MA

Photo # 6 of 7

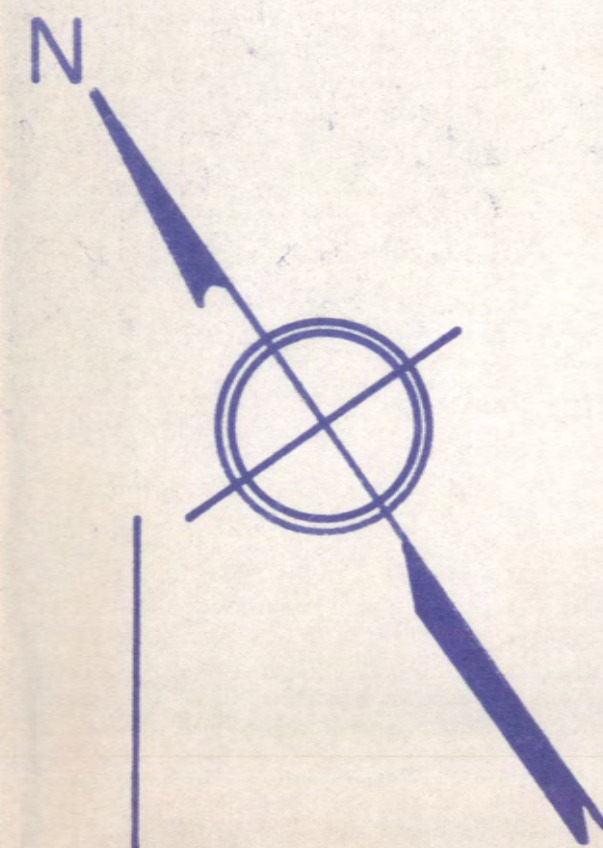


3rd Machine Shop

Blake & Knowles Steam Pump Co. Historic District

Cambridge (Middlesex Co) MA

Photo #7 of 7



28

27

ROGER ST.

FIFTH ST.

ST.

16

BINNEY

ST.

BLAKE & KNOWLES STEAM PUMP CO. HISTORIC DISTRICT
CAMBRIDGE (MIDDLESEX CO) MA
CAMBRIDGE ASSESSOR'S MAP #26
1" = 40'

THIRD

15

SIXTH

30

MUNROE

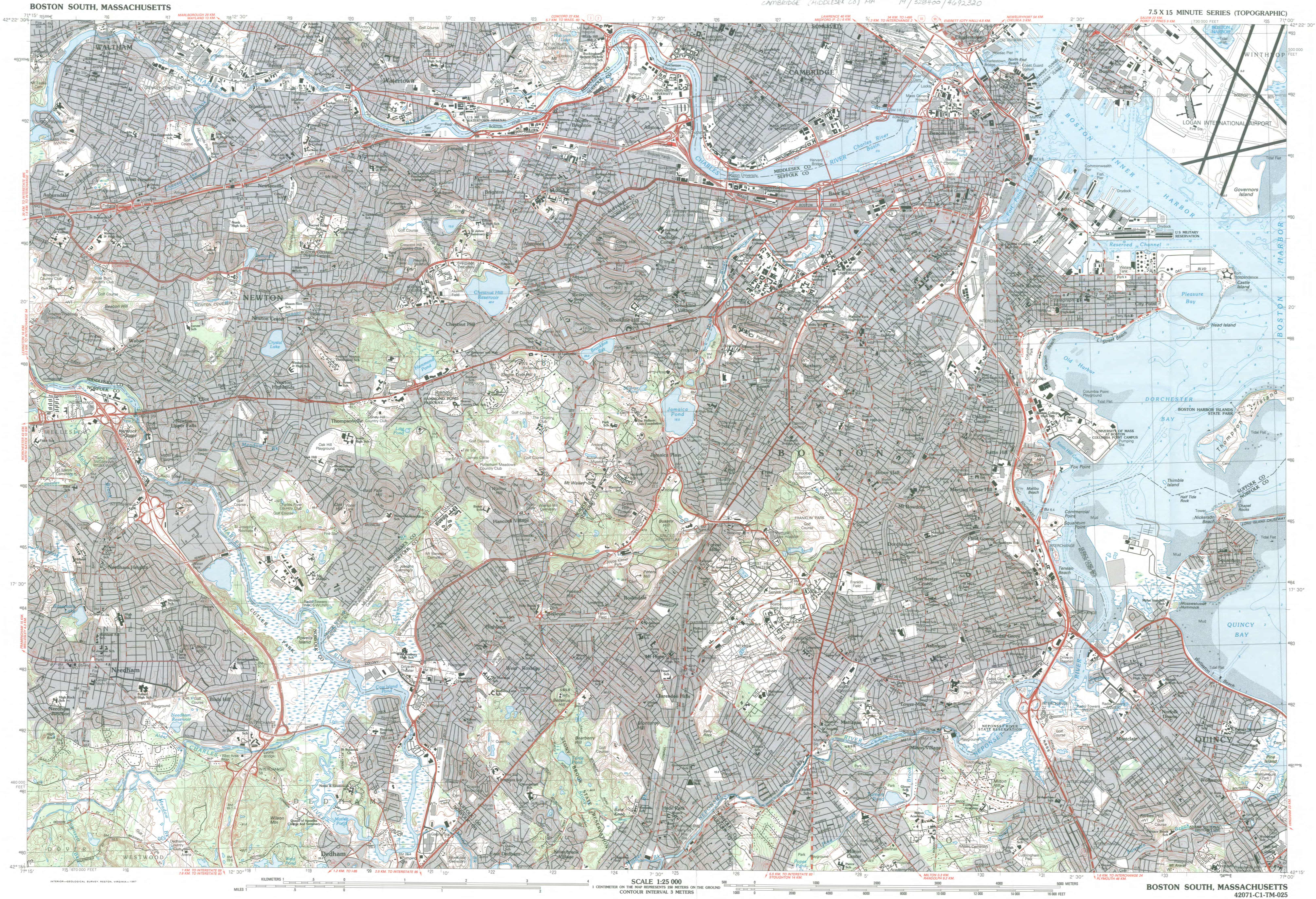
ST.

29

CITY OF CAMBRIDGE

SCALE: 1" = 40' OCTOBER-1978
DIMENSIONS FROM DEED, LAND COURT
OR LAYOUT PLANS ARE IN BRACKETS ().
LAND COURT MARKED L.C. ALL OTHER
DIMENSIONS ARE MEASURED.
DRAWN BY: R.S. & AL THOMPSON

28



Boston South MASSACHUSETTS

1:25 000-scale metric
topographic map



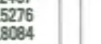
7.5 X 15 MINUTE QUADRANGLE
SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



Produced by the United States Geological Survey in cooperation with Massachusetts Department of Public Works. Control by USGS, NOS/NOAA, and Commonwealth of Massachusetts agencies. Compiled by photogrammetric methods from aerial photographs taken 1978. Field checked 1979. Map edited 1987. Supersedes Newton and Boston South 1:25,000-scale maps dated 1970. Selected hydrographic data compiled from NOS charts 13270 (1962) and 13272 (1963). This information is not intended for navigational purposes. Projection and 1000-meter grid: Universal Transverse Mercator, zone 18. 10,000-foot grid ticks based on Massachusetts coordinate system, modified after 1927 North American Datum. To place on the predicted North American Datum 1983, move the projection lines 6 meters south and 42 meters west as shown by dashed corner ticks. There may be private individuals within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 3 METERS. NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONTROL ELEVATIONS KNOWN TO THE NEAREST 0.1 METER. OTHER ELEVATIONS KNOWN TO THE NEAREST 0.1 METER. DEPTH CURVES AND SOUNDINGS IN METERS. DATUM IS MEAN LOW WATER. THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE. SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER. THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.5 METERS. THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet			1	2	3
1	3.2808			4	5	6
2	6.5617					
3	9.8425					
4	13.1234					
5	16.4042					
6	19.6850					
7	22.9659					
8	26.2467					
9	29.5275					
10	32.8084					
To convert meters to feet multiply by 3.2808				1	Maynard	
To convert feet to meters multiply by 0.3048				2	Best North	
				3	Lynn	
				4	Frammingham	
				5	Hull	
				6	Medfield	
				7	Needwood	
				8	Weymouth	



Topographic Map Symbols

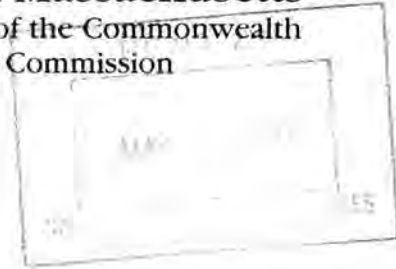
- Primary highway, hard surface
- Secondary highway, hard surface
- Light-duty road, hard or improved surface
- Unimproved road, trail
- Route marker: Interstate; U. S. State
- Railroad: standard gage; narrow gage
- Bridge: drawbridge
- Footbridge; overpass; underpass
- Built-up area: only selected landmark buildings shown
- House; barn; church; school; large structure
- Boundary: National, with monument; State; County, parish; Civil township, precinct, district; Incorporated city, village, town; National or State reservation; small park
- Land grant with monument: forest, section corner
- U. S. public lands survey: range, township, section
- Range, township; section line: location approximate
- Fence or field line
- Power transmission line, heated tower
- Dam: dam with lock
- Cemetery; grave
- Campground; picnic area; U. S. location monument
- Windmill; water wheel; windmill
- Mine shaft; prospect; adit or cave
- Control: horizontal station; vertical station; spot elevation
- Contours: index, intermediate; supplementary; depression
- Distorted surface: strip mine, lava, sand
- Sounding: depth curve
- Perennial lake and stream; intermittent lake and stream
- Rapids, large and small; falls, large and small
- Submerged marsh; marsh swamp
- Land subject to controlled inundation; woodland
- Scrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request.
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092



The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission



May 7, 1997

Ms. Carol Shull
National Register of Historic Places
Department of the Interior
National Park Service
P. O. Box 37127
Washington, D. C. 20013-7127

Dear Ms. Shull:

Enclosed please find the following nomination form:

Blake & Knowles Steam Pump Company National Register District, 195, 199, 201
Binney Street; 218 Fifth Street; 265, 275 Third Street, Cambridge (Middlesex County),
MA

The nomination has been voted eligible by the State Review Board and has been signed by the State Historic Preservation Officer. The owners of the property within the district were notified of pending State Review Board consideration 30 to 75 days before the meeting and were afforded the opportunity to comment.

Sincerely,

A handwritten signature in cursive script, reading "Betsy Friedberg".

Betsy Friedberg
National Register Director
Massachusetts Historical Commission

cc: Thompson Real Estate Development Co.
William B. King, Cambridge Historical Commission
Mayor Sheila T. Russell, City of Cambridge
Joel Alstein, FAR Group
Margo B. Webber, Preservation Consultant

Enclosure