NPS Form 10-900
United States Department of the Interior
National Park Service

OMB No. 1024-0018

621

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Roslindale Substation
Other names/site number: Boston Elevated Railway Company Substation
Name of related multiple property listing:

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

2. Location

Street & number: 4228 Washington Street
City or town: Boston State: MA County: Suffolk
Not For Publication: ☐ Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ✓ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ✓ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___national ___statewide ✓local

Applicable National Register Criteria:

✓A ___B ✓C ___D

Brona Simon July 2, 2013

Signature of certifying official/Title: Brona Simon, SHPO, MHC **Date**

State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

4. National Park Service Certification

I hereby certify that this property is:

✓ entered in the National Register
___ determined eligible for the National Register
___ determined not eligible for the National Register
___ removed from the National Register
___ other (explain:) _____

for Edson H. Beall 8.27.13

Signature of the Keeper Date of Action

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	
1		buildings
		sites
		structures
		objects
1		Total

Number of contributing resources previously listed in the National Register n/a

6. Function or Use

Historic Functions
(Enter categories from instructions.)
TRANSPORTATION/rail-related
GOVERNMENT/public works

Current Functions
(Enter categories from instructions.)
Vacant

7. Description

Architectural Classification
(Enter categories from instructions.)
20th-Century Revival/Classical Revival

Roslindale Substation
Name of Property

Suffolk County, MA
County and State

Materials: (enter categories from instructions.)
Principal exterior materials of the property: Concrete, Brick, Cast Stone

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Roslindale Substation is located at 4228 Washington Street, at the corner of Washington Street and Cummins Highway in the Roslindale section of Boston. Facing Adams Park, it is in the heart of Roslindale Village. Directly across Cummins Highway is the three-story, brick, Roslindale Community Center, built in 1916, that houses an indoor basketball court, a preschool, and community rooms for continuing education. The Roslindale Medical Clinic and a number of single- and two-story retail and commercial storefronts line two sides of the triangular Adams Park. The Boston Public Library's Roslindale Branch is just a few doors down from the substation on Washington Street. Along with the substation and library, a newly erected, three-story, brick office and retail space building faces the south side of Adams Park (Photo 1). The Roslindale commuter rail stop is a block away, and a municipal parking lot is also located within a block.

The lot is 6,291 square feet and is bordered by Washington Street to the northwest, Cummins Highway to the northeast, the Higgins Funeral Home lot and building to the southwest, and the Higgins Funeral Home parking lot to the southeast.[1] The lot slopes from the front, Washington Street side, to the back, with the lower level of the building partially above grade at the front of the lot and mostly above grade at the rear of the lot. A concrete sidewalk runs along the front of the Washington Street and Cummins Highway elevations. The strip of land along the southwest side of the building is mainly a service area covered in asphalt with the rear, southeast strip of land also covered in asphalt and providing six parking spaces. There is no green space on the lot, with the exception of two street trees that puncture the sidewalk on the northeast side and one street tree on the northwest side of the building.

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[1] According to the City of Boston Assessors online map, the lot is not an exact rectangle, since it measures 51.7' x 98.28' x 58.4' x 106.2'. http://hubmaps1.cityofboston.gov/egis/Map.aspx?PropertyID=1904224000

Narrative Description

Exterior

The Roslindale Substation building is a steel-frame structure with nonload-bearing brick walls.[2] The building itself is approximately 50 feet wide by 80 feet long, with the shorter side being the front of the building facing on Washington Street. The structure sits on a concrete foundation.[3] Latticed steel trusses span the 50-foot-wide interior of the building, providing support for the roof composed of reinforced concrete slab and built-up tar and gravel. The roof is slightly pitched so water can drain into troughs on the east and west sides, which feed into interior piping that connects to the city storm water drainage system.[4]

The building is comprised of two levels, a twelve-foot-high lower level that is partially below grade due to the slope of the lot, and a 34-foot-high main level.[5] Red brick, laid in running/American bond with every sixth course of alternating headers and stretchers, envelops the entire building. All elevations also have a cast-stone base and a cast-stone watertable that express the division of the lower and main levels on the exterior of the building. Two bands of decorative brickwork run along all four exterior walls of the building. The first decorative band is comprised of a course of soldiers sandwiched between courses of rowlocks, and is found directly above the cast-stone watertable. The second band of decorative brick is found two thirds of the way up the building from the watertable. This second band is more intricate, with a series of three stretchers placed into a square and alternating with three soldiers placed into a square. This series is sandwiched between two raised courses of stretcher bricks. Finally, a cast-stone parapet caps the brickwork at the top of the building (Photo 4).

Northwest Elevation (Front, facing Washington Street)

The front elevation (Photo 2) is dominated by a large arch that encompasses an area that holds two very large copper-clad wooden doors, with an arched, steel-framed transom window above the doors. The window and doors have been boarded up with painted black plywood. The large copper doors still exist behind the boards, each measuring six-and-a-half feet wide by eighteen feet tall, and can be accessed from the interior of the building.[6] The doors were historically used to bring large power equipment into and out of the substation. The upper decorative brick course aligns with the top of the door/bottom of the transom window. The doors and arched transom are accentuated by recessed brick arches. Two contrasting glazed-brick quoins frame the arch. Centered below the arched opening and doors, two small (three feet tall by four feet wide) windows open into the lower level. These windows have also been boarded up. The parapet is stepped and forms a peak, much steeper than the actual roofline, and gives the illusion of a steeper roof. The peak of the parapet is capped with a decorative cast-stone block.

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[2] Westbrook Spaulding, "Roslindale MBTA Substation Proposed Adaptive Reuse Structural Report" (June 9, 2011).
[3] "Power Generation and Distribution System of the Boston Elevated Railway," *Electric Railway Journal* 38 (1911): 1318.
[4] Historic Boston Incorporated and Roslindale Village Main Street, "Feasibility Study to Rehabilitate the Roslindale Substation" (October 2002), 7.
[5] Measurements come from Westbrook Spaulding, "Roslindale MBTA Substation Proposed Adaptive Reuse Structural Report" (June 9, 2011).
[6] Historic Boston Incorporated and Roslindale Village Main Street, "Feasibility Study to Rehabilitate the Roslindale Substation" (October 2002), 7.

Northeast Elevation (Cummins Highway Side)
Three large, 20-feet-tall by nine-feet-wide arched window openings dominate the northeast elevation (Photos 3, 4) of the building.[7] The arched portion of the window is framed with two rows of vertical stretchers and one row of vertical header bricks radiating from the arch. The lower portions of the windows are accented with a glazed-brick quoin pattern. The windows have been completely removed and replaced with brick. The upper decorative brick course cuts the windows at the spring line. Three pairs of smaller, segmental-arch windows (each three-and-one-half-feet tall by four-feet wide) sit below these three larger windows, opening into the lower level of the interior of the building. There are additionally two rectangular window openings near the front of the building. The smaller of the two windows (five-feet tall by three-and-one-half feet wide) sits above the upper decorative brick course and the larger (seven-and-one-half feet tall by four-and-one-half feet wide) between the two decorative brick courses. Similar to the three large arched windows, the two rectangular window penetrations on the upper level are accented by a contrasting glazed-brick quoin pattern running along the sides of the windows. The smaller window has a line of glazed brick running above the window and the lower, larger window has a decorative glazed-brick header. The sets of smaller windows and the rectangular windows have all been boarded up with painted black plywood. A large, weathered, painted mural covers a major portion of the wall and the bricked-in arched windows.

Southwest Elevation (Side)
The southwest elevation (Photo 5) mimics the opposite side (northeast) elevation with three large arched windows, twenty feet tall by nine feet wide. Near the front corner of the building is a metal entrance door (seven-and-one-half feet tall by four-and-one-half feet wide) that leads into the main level. Above this door, again mimicking the northeast elevation, is a smaller rectangular window (five feet tall by three-and-one-half feet wide). Like the other windows on the building, they are accented by a glazed-brick quoin pattern. The stairs that lead to the door are made of cast stone and red brick and face Washington Street. All of the windows on this elevation have been boarded up with painted black plywood. There are no windows into the lower level on this elevation.

Southeast Elevation (Rear)
The southeast elevation (Photo 6) has no façade penetrations. The decorative brick courses and cast-stone watertable continue on the rear elevation. Most of the lower level on the southeast elevation is above grade.

Interior

Lower level
The lower level can only be accessed by a set of interior steel stairs in the southeast corner of the building. The bottom of the stairs opens into a twelve-foot-high open space. This open space is punctuated by steel I-beam columns that once supported equipment above them on the main level. This open space runs from the front of the building to the rear. Apart from the open space at the bottom of the stairs, the basement is divided into a series of rooms that had specific functions when the building was in service as a substation. A small boiler room sits at the rear of the building. The battery room runs along

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[7] Measurements from Historic Boston Incorporated and Roslindale Village Main Street, "Feasibility Study to Rehabilitate the Roslindale Substation" (October 2002), 7. Bricked in 1970 according to Kathryn Cavanaugh and Jeffrey Gonyeau, "Roslindale (Boston) Elevated Railway Substation Draft National Register Nomination" (2006).

the front (northwest) wall. An air lock can be entered from the open space and leads into the air chamber that runs from the front of the building to the rear of the building.[8] The compartmented chamber runs along the southwest wall and features a trench that was used for cables. All of the rooms are accessed by copper doors. The floor throughout the lower level is concrete and the walls are brick.

Upper level

The upper level (Photo 8) is a large volume of space with 34-foot-high ceilings and concrete floors.[9] The ceiling shows the exposed latticed steel roof supports and a concrete-slab roof. The lower seven feet of the interior walls is covered with glazed brick. Above this, the walls are comprised of a buff-colored pressed brick. [10] A gantry crane (Photo 7) is located at the rear of the building, with the steel tracks for operation running the length of the building along the northeast and southwest sides. When fully operational, the gantry crane can move horizontally along the steel beam that spans the steel tracks. This steel beam, spanning the width of the building, is on large steel wheels that can run on the steel tracks that are installed the length of the building. The crane was used to move heavy machinery in and out of the substation through the large doors in the front of the building.

Condition

The Roslindale Substation has been vacant since 1971 and has seen minimal upkeep. The exterior masonry has a multitude of cracked mortar joints. Some sections have been caulked and/or pointed by the Massachusetts Bay Transportation Authority (MBTA) and Boston Redevelopment Authority (BRA) over the years.[11] Vertical cracks in the mortar joints have been identified at the corners of the building and cause great concern that water may be infiltrating the building along the roofline and rusting the steel frame in these corners, causing rust jacking. Rust jacking can cause the "displacement of building elements due to the expansion of iron and steel products as the metal rusts and becomes iron oxide."[12] It has been recommended by structural engineers that the brickwork in these corners be removed to determine the extent of water infiltration, and to confirm or deny weakening of the structural steel in these areas.[13] Organic growth has also been noted along the roofline, where a small sapling can be seen growing along the northeast corner.

Most of the windows and doors for the substation have been boarded up using painted black plywood. Viewed from the interior, these windows show that the metal frames have rusted beyond repair and many panes of glass have fallen in and shattered . In some instances, the complete steel frame has fallen out of the window. The large, front-elevation, copper-clad wooden doors have been boarded from the exterior. Upon interior inspection, the doors are inoperable as the door jambs and hinges have deteriorated and any movement may cause the doors to fall out of place due to their great weight. The frames and glass of the three large windows on the northeast elevation have been completely removed, and these window openings have been filled in with brick. Currently, the only way to access the building is through the entrance on the southwest side of the building. The original door at this location has had plywood attached to the exterior.

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[8] This room was identified as the air chamber or "blower alley" in Historic Boston Incorporated and Roslindale Village Main Street, "Feasibility Study to Rehabilitate The Roslindale Substation" (October 2002), 7.
[9] Westbrook Spaulding, "Roslindale MBTA Substation Proposed Adaptive Reuse Structural Report" (June 9, 2011).
[10] This information comes from the following sources: Historic Boston Incorporated and Roslindale Village Main Street, "Feasibility Study to Rehabilitate the Roslindale Substation" (October 2002), 8 and "Power Generation and Distribution System of the Boston Elevated Railway," *Electric Railway Journal* 38 (1911): 1318.
[11] Deed of Sale from Massachusetts Bay Transportation Authority (MBTA) to Boston Redevelopment Authority (BRA), June 7, 2007, Suffolk County, Massachusetts, Deed Book 41997, page 318. Suffolk County Registry of Deeds, Boston, Massachusetts.
[12] Ward Bucher, *Dictionary of Building Preservation* (New York: Wiley Interscience, 1996), 319.
[13] Structural engineers cited this as a major concern in both the 2002 "Feasibility Study to Rehabilitate the Roslindale Substation" and the 2011 "Roslindale MBTA Substation Proposed Adaptive Reuse Structural Report."

The lower level shows signs of water infiltration through the boarded windows along the northeast side of the building. After most rains, large puddles of standing water can be found on the concrete floor. Efflorescence can also be found in various areas on the exterior brick walls. The upper level also shows signs of water infiltration, as roof leaks appear during heavy rains. There are large openings in the concrete floor on the main level from large pieces of equipment were removed in the early 2000s. These floor penetrations are open to the lower level. There is also cracking of the glazed brick. The overall space is dirty but does not contain any contaminants.[14]

The building does have water and sewer hookups, but they have not been used since the building went out of service in the early 1970s. There are no heating, ventilation, or air conditioning equipment or plumbing fixtures present in the building. The lighting system is still intact, but it is unclear whether wiring still works.

Archaeological Description

While no Native American sites are currently known on the property of the substation, sites may have been present. There are two Native American archaeological sites located in the general area (within one mile). The nominated property is located in a topographical low area between the hills of the Arnold Arboretum to the north and the George Wright Golf Course to the south. Soils are relatively level within the property, and the surrounding area is highly developed by residential and commercial structures, with the exception of Adams Park, immediately across Washington Street from the parcel. The nearest source of fresh water is a small tributary stream of the Muddy River, which an 1874 map indicates was located near the intersection of Poplar and Washington streets, approximately 400 feet southwest of the Roslindale Substation. This stream has since been developed, and is no longer visible on the ground surface. Both Native American sites within one mile of the property are located within the Arnold Arboretum, 775 meters (2,500 feet) north of the parcel. Much of the property has been affected by the construction of the substation; however, the rear 20 feet of the property, now occupied by several paved parking spaces, has remained undeveloped since the substation's construction. Given the above information, a low potential exists for locating undisturbed ancient Native American resources on the property.

A moderate potential exists for locating historic archaeological resources on the Roslindale Substation property. An 1874 map indicates a structure on the property owned by Helen Davis. An 1890 map indicates the house was owned at that time by S. P. Weld. The Roslindale Substation was built in 1919. The footprint of the substation was greater than that of the house previously located within the parcel, and therefore no remains of the house are likely preserved. The undeveloped area at the rear of the substation may contain preserved archaeological resources relating to the use of these houses and possibly earlier domestic structures. These deposits may contain domestic refuse and related features (trash pits, privies, wells) from the property's former use as a house lot. Additionally, there are possible preserved resources in the rear of the property, relating to the early industry of railroad electrification.

(end)

[14] Environmental testing was conducted the Summer of 2011 by EndPoint LLC.

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.)

- [ ] A. Owned by a religious institution or used for religious purposes
- [ ] B. Removed from its original location
- [ ] C. A birthplace or grave
- [ ] D. A cemetery
- [ ] E. A reconstructed building, object, or structure
- [ ] F. A commemorative property
- [ ] G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)
Architecture
Engineering
Transportation

Period of Significance
1911-1963

Significant Dates
1911 – construction

Significant Person
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder
Robert S. Peabody (architect)
Stone & Webster (engineers)

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Roslindale Substation was one of five alternating current to direct current electric converting substations to go online after completion of the alternating current-generating South Boston Power Station. The location of the substation in Roslindale reflects the growth and development of this area of the city at the turn of the century, as well as the development of the city's transportation system. The building was designed by architect Robert S. Peabody and Stone & Webster Engineers, who were also responsible for the construction. The design and decorative details illustrate the pride taken in Boston's cutting-edge electrical system for its expansive transit system, which was one of the first in the country. The building is not only an example of the work of Peabody, together with Stone & Webster, but also is a well-preserved example of their work in the Classical Revival style.

Construction of the building began in early 1911; it was completed and in service by November of 1911 (see Illustration 1). The building operated as a substation until 1971, when it was taken out of service. It has remained vacant since that time.

The substation and its counterparts played an important role in Boston's transit history. The building and larger electrical system were designed and constructed by internationally known architects and engineers. The Roslindale Substation retains integrity of location, design, setting, materials, workmanship, feeling, and association, and is individually eligible for listing in the National Register of Historic Places at the local level under Criteria A and C.

The area surrounding the Roslindale Substation, Roslindale Village, is potentially eligible for listing in the National Register as a district, as it is the commercial and community center of the neighborhood of Roslindale.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

The Roslindale Substation was a critical component in the reorganization of power generation for the Boston area's public transportation during the first decade of the 20th century. It was one of five substations to become operational after the completion of the South Boston Power Station in 1911, which marked the centralization of power generation and the shift towards alternating current power. The substations converted alternating-current electric power from the power station to direct-current electric power for streetcar use.

Boston had been utilizing various forms of public transportation for years prior to electrification, including horse drawn urban stage coaches and streetcars. The West End Street Railway first introduced electric streetcars to Boston in 1889.[15] The streetcars ran off direct-current electricity provided by eight power plants located throughout Boston and surrounding towns, strategically placed near the tracks that they served.[16] Thomas Edison's direct-current electricity had been the common form of electricity until

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[15] Sam Bass Warner Jr., *Streetcar Suburbs: The Process of Growth in Boston (1870-1900)* (Cambridge: Harvard University Press, 1978), 28.
[16] Architectural Preservation Associates, *MBTA Historic Properties Survey Narrative Report* (1984).

Nikola Tesla's introduction of alternating-current electricity in 1888. Tesla introduced alternating-current electricity, along with a system of generators, motors, and transformers.[17] There are many advantages to alternating current over direct-current electricity. Direct current begins to lose power once it is transmitted over a mile, while alternating current travels more efficiently at higher voltages. Alternating current can be increased or decreased to different voltages using transformers, and can be converted to direct current to service appliances and systems that operate using direct current.[18] George Westinghouse would later purchase the U.S. patents on these systems, making the Westinghouse name largely associated with alternating current power.

By 1897, the Boston Elevated Railway Company (BERy) was formed and had leased the complete West End Street Railway. The new company focused efforts on projects that would decongest the downtown traffic and continue expansion of service.[19] BERy had raised its electrical generating capacity between 1902 and 1910 by 70%; the company saw that public transit travel was continuing to increase, demanding even more electricity. Stone & Webster Engineers were contracted to study the power needs of the entire transit system in 1908.[20] The firm analyzed direct current and alternating-current options, looking at cost and electrical distribution. Stone & Webster recommended that BERy consolidate power generation with one alternating current-generating power station in South Boston, while underground cables would distribute the power to six new substations.[21]

Work started on the South Boston Power Station (extant) on January 26, 1911. By November of that year, the power plant, a 100,000-ton coal handling and storage plant, the electrical distribution system, and five of the six new substations were completed (Illustration 2). The South Boston Power Station's location on Boston Harbor allowed for easy delivery of coal, which powered the station's boilers, and centralized the power production. On November 14, 1911, the South Boston Power Station started to supply alternating current to the new substations via buried electrical lines, which then converted the power to direct current for trolley car use.[22]

By November 1911, the Roslindale Substation was up and running, along with four of the six new substations, located in Kendall Square, Cambridge (Main Street near Broadway, demolished); Arlington (5 Water Street); Coolidge Corner, Brookline (19 Webster Street); and East Boston (338 Eagle Street, demolished, Illustration 3). The Malden Substation (68 Middlesex Street, demolished after September 1979) was "not yet completed" in November 1911.[23] The 1909 prototype substation in Egleston Square, Roxbury (3025 Washington Street) was also part of the completed substation system.

Each of the substations was fitted with rotary power converters based on system demand and location of the station. The Roslindale Substation was fitted with two 1,000-kilowatt rotaries. The substations were built so the rotaries could be exchanged in response to changing electrical demands on the system. The

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[17] Tesla introduced the alternating-current system in a paper titled "A New System of Alternating Current Motors and Transformers," presented to the American Institute of Electrical Engineers in 1888.
[18] Architectural Preservation Associates, *MBTA Historic Properties Survey Narrative Report* (1984).
[19] Sam Bass Warner Jr., *Streetcar Suburbs: The Process of Growth in Boston (1870-1900)* (Cambridge: Harvard University Press, 1978), 27-28.
[20] Stone & Webster Engineering Corporation, *South Boston Power Station* (1912).
[21] Stone & Webster Engineering Corporation, *South Boston Power Station* (1912).
[22] Boston Elevated Railway Company, *Fifteenth Annual Report of the Directors of the Boston Elevated Railway* (Boston: Geo. H. Ellis, 1912).
[23] The *Electric Railway Journal* reported that the Malden substation was not yet open in its December 1911 article. Demolition date for the Malden Substation was taken from the Egleston Substation National Register Nomination (2010) which sites "MBTA DRAFT Capital Investment Program FY2009 – FY2014." Rachel Consolloy Nugent and Leslie Donovan, National Register of Historic Places, Egleston Substation, Boston, Suffolk County, Massachusetts, National Register #10001066, listed December 27, 2010.

substations were large buildings with large, open spaces to house the power-converting equipment. The buildings required large doors that allowed equipment to be transferred in and out, along with large windows to allow natural lighting and ventilation. The power station and substations were built of steel-frame construction covered with non-conductive materials such as brick, concrete, and stucco.[24]

It is likely that Roslindale was chosen as the location for the southernmost substation because the area had experienced a period of rapid suburbanization along with growth in its commercial district. At the turn of the century, Roslindale was replacing numerous wood-frame structures with larger brick and masonry buildings. Roslindale also had the advantage of being located along the main road between Boston and Dedham, which hosted a horse-drawn and later an electric trolley service. Roslindale made headlines in 1887 when the Bussey Bridge, part of the rail line to Needham, collapsed, killing 23 and injuring 115 people. The news of this disaster highlighted the pastoral landscape of Roslindale, and is said to have subsequently attracted people to move to the area.[25]

The Roslindale Substation was taken out of use in 1971, and has sat vacant since that time. Of the seven substations listed above, three have been demolished (Kendall Square, East Boston, and Malden), one is still in use as part of the MBTA system (Coolidge Corner), and two have been rehabilitated (Arlington and Egleston). The Arlington Substation has been divided into floors and is utilized as private office space. The Egleston Substation has also had its main volume converted into offices and a television studio, which is home to the Boston Neighborhood Network. After the rehabilitation of the Egleston Substation, the building was listed in the National Register of Historic Places on December 27, 2010. The Roslindale Substation is the only substation of the group that is vacant. With a majority of its original building material in place and no irreversible changes, the substation has kept its historical and architectural integrity. The building is in overall good condition and is prime for rehabilitation, which could potentially save its vast interior main level space.

Robert S. Peabody

The Classic Revival design of the Roslindale Substation and the other substations alludes to the pride the city and the Boston Elevated Railway Company felt in the new transit power system. A well-known architect and engineering team had been engaged to give these buildings a design commanding respect for this new system. The Stone & Webster publication of 1912 advertising its Boston transit accomplishments gives architectural credit to Robert S. Peabody for the South Boston Power Station and the associated substations. The publication goes on to state, "The architectural features of the [South Boston Power] station, planned by Robert S. Peabody, suggest the great power which it is planned to house…On the turbine-room front of the building are three high, arched windows set off by a square turret…broad pilasters, carrying a decorative pediment, flank the single arched window in the front of the boiler room…[the new substations] are similar in general design and equipment maintaining uniform architectural standards."[26]

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[24] Architectural Preservation Associates, *MBTA Historic Properties Survey Narrative Report* (1984).
[25] Historic Boston Incorporated, *Commercial Casebook: Roslindale Village, 2009-2011*, 2-3.
[26] Stone & Webster Engineering Corporation, *South Boston Power Station* (1912).

Robert S. Peabody was an 1866 Harvard graduate who went on to study architecture at l'Ecole Des Beaux-Arts in Paris between 1867 and 1870.[27] Upon his return to Boston in 1870, he joined Goddard Stearns to form the architectural firm of Peabody & Stearns.[28] The architectural firm had a national reputation for designing such buildings as Matthews Hall at Harvard University (1872), the Park Square Railroad Station in Boston (1876), the Massachusetts State Building and Machinery Hall at the Columbian Exposition in Chicago (1893), and the Tower on the Boston Custom House (1911-1914). Peabody was the President of the American Institute of Architects (AIA) from 1900-1902, and was the Chairman of the Boston Park Commission from 1909 until his death. Peabody had a very influential role in how Boston proceeded in municipal improvements, as he was appointed by the Mayor of Boston to serve on the Commission on Metropolitan Improvements, which was formed by an act of legislation on June 15, 1907. The report, delivered by the Commission in 1909, illustrates that Peabody was heavily involved in the recommendations given to the Governor of the Commonwealth and Mayor of Boston. This report offers recommendations on all aspects of public works and municipal development. His service on this committee no doubt influenced how he designed the power station and substations for the Boston Elevated Railway.

Stone & Webster

Stone & Webster Engineers played an integral part in the new alternating-current power system and the expansion of Boston's public transit, from planning to the actual building and implementation of the new transit power system. Formed in 1889 as the Massachusetts Electrical Engineering Company by Charles A. Stone and Edwin S. Webster, the company expanded over many years to provide engineering, design, construction, and consulting services to build power plants, refineries, and infrastructure nationwide and overseas. Electrical engineering was a new field in the 1880s when Stone and Webster started their company. They quickly developed original testing systems for electrical equipment and landed their first major project to design and build a direct-current power plant with transmission lines in Maine. By 1910, "some 14 percent of the nation's total electrical generating capacity had been designed, engineered, and built by Stone & Webster."[29] During WWI, the firm designed and built military bases and facilities. Between the wars, Stone & Webster constructed power plants and transmission lines for the country's ever expanding power needs. They may be most famous for their efforts during World War II, when they designed and built Oak Ridge, Tennessee, the site for the Manhattan Project, where the U.S. government developed the atomic bomb. Postwar projects include building the nation's first nuclear power plant in Shippingport, Pennsylvania.[30]

Developmental history/additional historic context information (if appropriate)

In 2002, Roslindale Village Main Streets (RVMS) partnered with Historic Boston Incorporated (HBI) to conduct a Feasibility Study on the Roslindale Substation. This study identified various potential uses and layouts/build outs of the space. Four concepts were analyzed in this study: 1) restaurant and office space; 2) office space; 3) arts and entertainment/community space and office space; and 4) restaurant, office space, and dwelling units. All of these concepts were studied, but none were found financially feasible after taking into consideration the cost of the redevelopment and the potential end value of the building.

(continued)

[27] Wheaton Holden, "The Peabody Touch: Peabody and Stearns of Boston, 1870-1917," *Journal of the Society of Architectural Historians* 32, no. 2 (May 1973): 114-131.
[28] Wheaton Holden, "Robert Swain Peabody of Peabody and Stearns in Boston: The Early Years (1870 – 1886)" (PhD dissertation, Boston University, 1969).
[29] Funding Universe, "Stone & Webster, Inc.," http://www.fundinguniverse.com/company-histories/Stone-amp;-Webster-Inc-Company-History.html (accessed March 2012).
[30] Ibid.

In October 2010, RVMS and HBI received an Interim Designation from the Boston Redevelopment Authority (BRA), who currently owns the building, allowing these groups to explore potential uses for the building. In February 2012, the nonprofits proposed a phased rehabilitation of the building, using the main level as a catered events space and venue for a winter farmers' market. The BRA board granted a Tentative Designation to the partners to further explore these use options along with financing. As of April 2013, the Tentative Designation has been extended to February 2014. RVMS and HBI are now working with a potential developer, with whom they have also contracted to develop the adjoining parcels to the southwest and southeast of the substation parcel.

Archaeological Significance

Potential historic archaeological resources described above may contribute important social, cultural, and industrial information related to former house (s) and later substation use of the property. Stratified deposits and buried features in the area behind the substation may include datable deposits that can be associated, individually, with these two functions of the property. Potential structural remains of outbuildings related to previous or current structures may reveal information on the occupation, transportation, and daily lives of the early property owners and later industrial use during a period in which Roslindale experienced a transition from rural homes to a more urban landscape.

(end)

9. Major Bibliographical References

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(end)

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 # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

____ State Historic Preservation Office
____ Other State agency
____ Federal agency
____ Local government
____ University
____ Other
Name of repository: _____

Historic Resources Survey Number (if assigned): MHC # BOS. 10767

10. Geographical Data

Acreage of Property less than one acre

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

1. Latitude: 42.286181	Longitude: -71.128015	
2. Latitude:	Longitude:	
3. Latitude:	Longitude:	
4. Latitude:	Longitude:	

Or
UTM References
Datum (indicated on USGS map):

☐ NAD 1927 or ☐ NAD 1983

1. Zone: 19	Easting: 324550	Northing: 4683745
2. Zone:	Easting:	Northing:
3. Zone:	Easting:	Northing:
4. Zone:	Easting :	Northing:

Verbal Boundary Description (Describe the boundaries of the property.)
Boston Assessor's Department Parcel #1904224000.

Boundary Justification (Explain why the boundaries were selected.)
Boundaries based on lot lines.

11. Form Prepared By

name/title: Elizabeth Sherva, RVMS, with Betsy Friedberg, NR Director, MHC
organization: MA Historical Commission
street & number: 220 Morrissey Boulevard
city or town: Boston state: MA zip code: 02125
e-mail:
telephone: 617-727-8470
date: Junel 2013

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Roslindale Substation

City or Vicinity: Boston (Roslindale)

County: Suffolk State: MA

Photographer: Elizabeth Sherva, Beth Beighlie *

Date Photographed: 2012, 2011 *

Description of Photograph(s) and number, include description of view indicating direction of camera:

1. View of substation from Poplar Street, across Adams Park, facing southeast
2. Northwest (Washington St.) and northeast (Cummins Highway) elevations, facing southeast
3. Northeast (Cummins Highway) and southeast (rear) elevations, facing northwest
4. Northeast (Cummins Highway) elevation, arched window mural, lower level segmental arched window and rectangular windows, facing southwest
5. Southwest (side) elevation, facing east
6. Southeast (rear) elevation, facing northwest
7. Interior: gantry crane hook *
8. Interior, main level facing rear of building from southwest entrance *

Illustrations

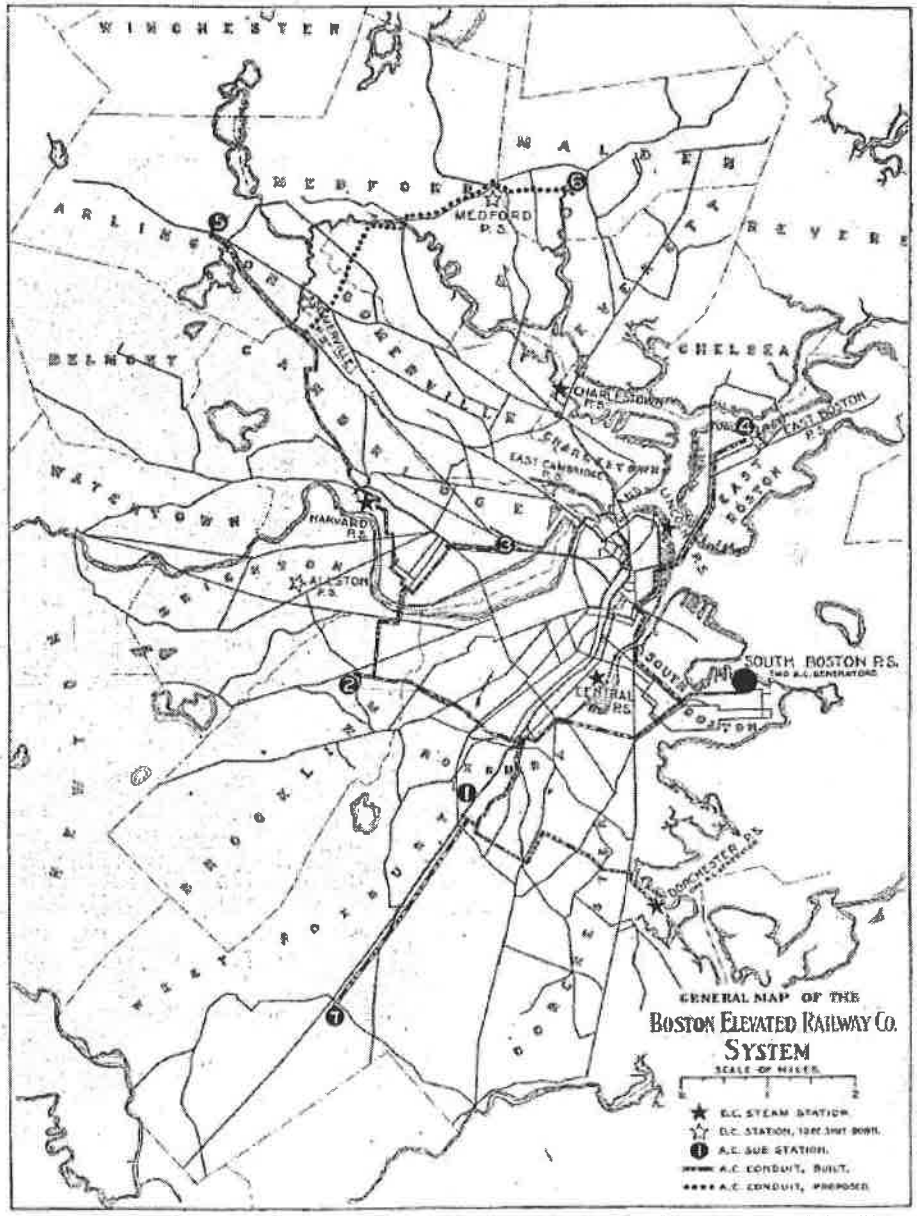
1. Roslindale substation photo, ca. 1915
2. *Electric Railway Journal*, December, 1911, map of new power system
3. Stone & Webster promotional publication, ca. 1911, Images of the New Substations

Illustrations

Illustration 1

Roslindale Substation
Boston, Suffolk, MA
Photographer Unknown
Date Uncertain, thought to be around 1911

1314 ELECTRIC RAILWAY JOURNAL. [Vol. XXXVIII, No. 27.



Boston Elevated Power—Map of System, Showing Power Stations, Substations, High-Tension Transmission Lines and Trolley Distribution

Illustration 2

Roslindale Substation
Boston, Suffolk, MA
Electric Railway Journal, December 1911
Map of New Power System and Placement of Substations

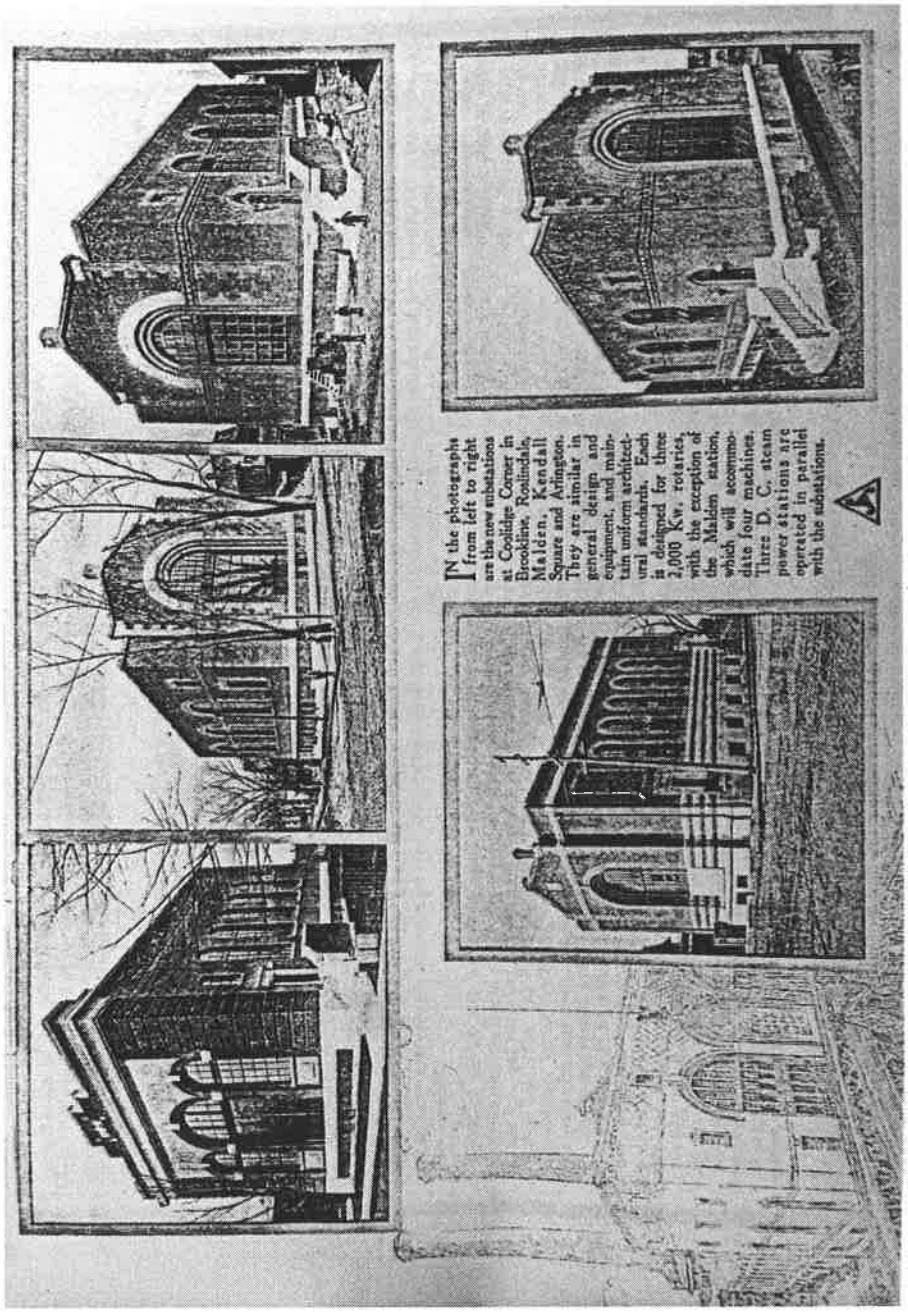


Illustration 3

Roslindale Substation
Boston, Suffolk, MA
Stone and Webster Promotional publication, 1912
Images of the new substations
(Clockwise: Coolidge Corner, Brookline, Roslindale, Malden, Arlington, Kendall Square, Cambridge)

Roslindale Substation

Property Information

Parcel ID	1904224000
Owner	BOSTON REDEVELOPMENT AUTH
Address	4228 WASHINGTON ST
Property Type	0985
Building Value	$465,900.00
Land Value	$173,100.00
Total Value	$639,000.00
Lot Size	6291 sq ft
Land Use	Exempt

City of Boston MAPS

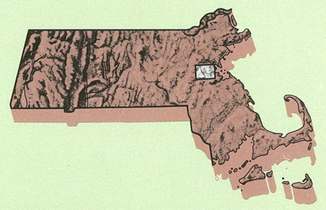
MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

ROSLINDALE SUBSTATION
BOSTON (SUFFOLK) MA

42071-C1-TM-025

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

X30089

U.S. GEOLOGICAL SURVEY

1987

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 (1982) and 13272 (1982). This information is not intended for navigational purposes
Projection and 1000-meter grid: Universal Transverse Mercator, zone 19
10,000-foot grid ticks based on Massachusetts coordinate system, mainland zone
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 inholdings 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 SHOWN TO THE NEAREST 0.1 METER
SPOT ELEVATIONS SHOWN TO THE NEAREST 0.5 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 2.9 METERS

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE	
Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.2808

To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM

16° 264 MILS — 1°26' 25 MILS

UTM grid convergence (GN) and 1987 magnetic declination (MN) at center of map
Diagram is approximate

ADJOINING MAPS

1	2	3
4		5
6	7	8

1 Maynard
2 Boston North
3 Lynn
4 Framingham
5 Hull
6 Medfield
7 Norwood
8 Weymouth

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

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; found section corner
  - U. S. public lands survey: range, township; section
  - Range, township; section line: location approximate
- Fence or field line
- Power transmission line, located tower
- Dam; dam with lock
- Cemetery; grave
- Campground; picnic area; U. S. location monument
- Windmill; water well; spring
- Mine shaft; prospect; adit or cave
- Control: horizontal station; vertical station; spot elevation
- Contours: index; intermediate; supplementary; depression
- Distorted surface: strip mine, lava; sand
- Soundings; 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

BOSTON SOUTH, MASSACHUSETTS
42071-C1-TM-025
1987


This Place
Matters