TECHNICAL REPORT

ARCHIVAL PHOTOGRAPHIC DOCUMENTATION
MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts

Virginia H. Adams
John J. Daly
Quinn R. Stuart

Submitted to:
AECOM
66 Long Wharf
Boston, MA 02110
and
Massachusetts Bay Transportation Authority
Ten Park Plaza
Boston, MA 02116

Submitted by:
PAL
210 Lonsdale Avenue
Pawtucket, Rhode Island 02860

PAL Report No. 2565.01 December 2011

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PHOTOGRAPHIC DOCUMENTATION
MBTA ORIENT HEIGHTS STATION

Location: Blue Line Subway
1000 Bennington Street
East Boston, Suffolk County, Massachusetts
USGS Boston North Quadrangle, 1987
Universal Transverse Mercator Coordinates: 19.0334933.4694685

Date (s) of Construction: 1952

Present Owner: Massachusetts Bay Transportation Authority

Present Occupant: Massachusetts Bay Transportation Authority

Present Use: Rapid Transit Passenger Station

Significance: The Massachusetts Bay Transportation Authority's (MBTA) Orient Heights Station is significant under Criteria C at the local level in the areas of architecture and design as the sole surviving representative example of Metropolitan Transit Authority (MTA) Mid-Twentieth Century Modern style architecture on the Blue Line and the MBTA system. Its design marked a shift from the traditional Classical Revival style previously used for the city's rapid transit stations to a Mid-Twentieth-Century Modern style influenced by the International Style precedents. The MTA Engineering and Maintenance Department prepared plans for the station under the supervision of designing engineer R.A. Fiske. It was built in 1952 in the Orient Heights section of Boston by the MTA. The station's construction was part of the East Boston Rapid Transit Extension of the Blue Line, one of the first efforts to expand the Boston transit system beyond Boston's urban core. Commuters began moving outside the limits of the existing rapid transit and trolley lines in the 1940s, creating a drop in ridership and a shift toward the automobile as the preferred mode of transportation. Between 1950 and 1954, the MTA attempted to increase ridership extending the Blue Line to Revere and Lynn and creating seven new stations (Appendix B: MHC Form B).

Project Information: The MBTA is planning a renovation of the Orient Heights Station on the Blue Line in East Boston, including removal of the existing building and replacement with a new station. The project is receiving assistance from the Federal Transit Authority (FTA) and therefore is a Federal undertaking that must meet the requirements of Section 106 of the National Historic Preservation Act of 1966. The FTA determined that the proposed undertaking would have an adverse effect on the Orient Heights Station and consulted with the Massachusetts Historical Commission / State Historic Preservation Officer (MA SHPO) to discuss the effects of the project on the historic property and develop mitigation measures. The MBTA and Boston Landmarks Commission (BLC) participated in consultation. This Massachusetts state-level archival photographic documentation of the Orient Heights Station was

completed as a mitigation measure under a Memorandum of Agreement among the FTA, MA SHPO, and MBTA in order to provide a permanent record of the appearance of the station.

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December, 2011

USGS Massachusetts, 1:25,000 Boston North Quadrangle (1987) showing location of MBTA Orient Heights Station.

Aerial photograph of East Boston showing location of MBTA Orient Heights Station.

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Photographer: John J. Daly
PAL
210 Lonsdale Avenue
Pawtucket, Rhode Island
Date: December 1, 2010 and December 20, 2011

Exterior:
1. General view of the MBTA Orient Heights Station, looking east from Bennington Street.
2. General view of station, looking west from northeast end of busway.
3. General view of station looking northeast from Saratoga Street.
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5. Northwest elevation of inbound platform, looking southwest.
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11. Detail of administrative wing entrance, northwest elevation, looking southeast.
12. Southeast pedestrian bridge elevation and architectural details, looking northwest.
13. Detail of signage, southeast elevation of outbound platform, looking west.

Interior:
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15. View toward outbound platform from inbound platform, looking southeast.
16. View toward outbound platform enclosures from inbound platform, looking southeast.
17. View toward pedestrian bridge and southeast staircase, looking west.
18. View toward pedestrian bridge and northwest staircase with Tower T in background, looking north.
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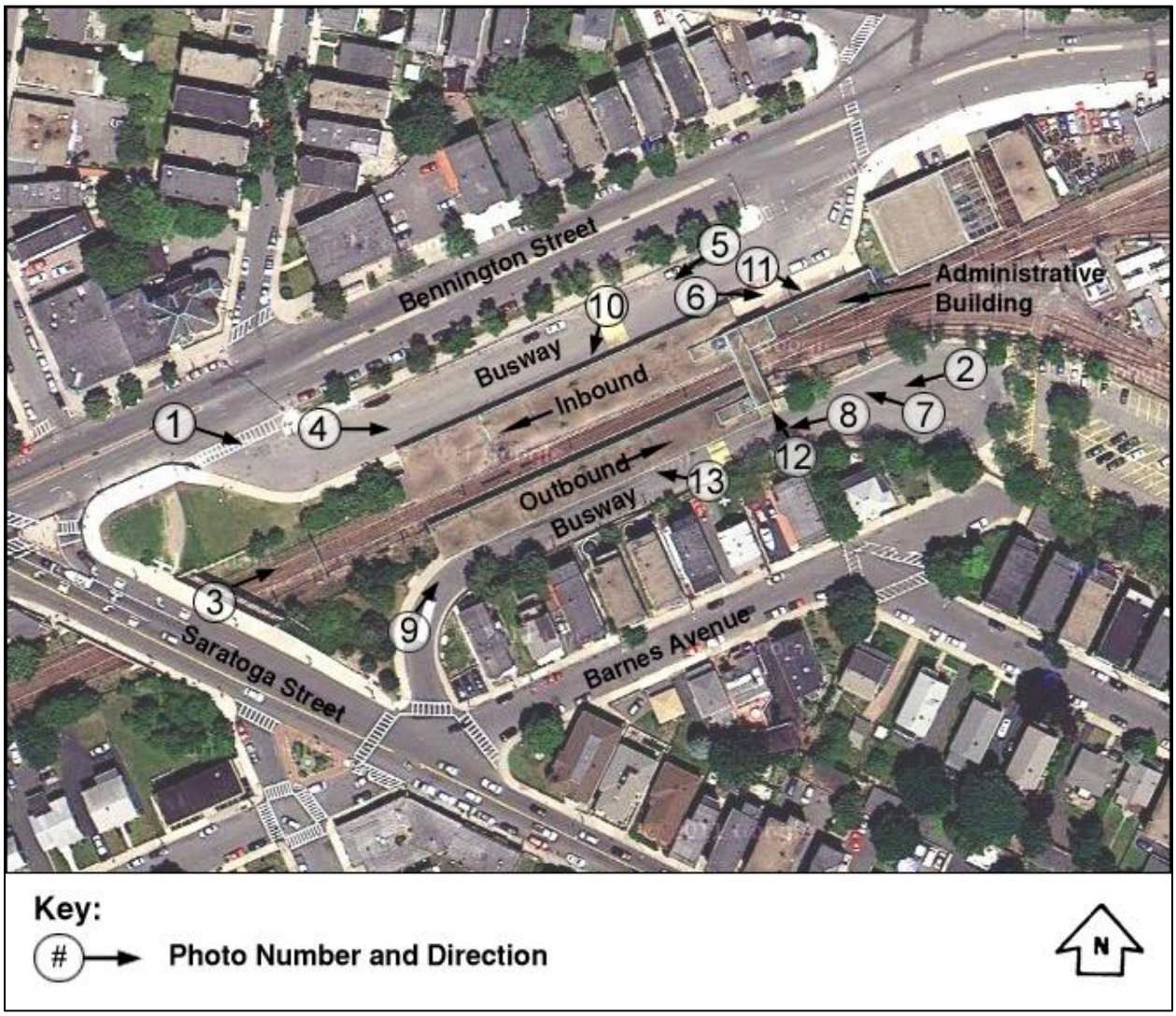
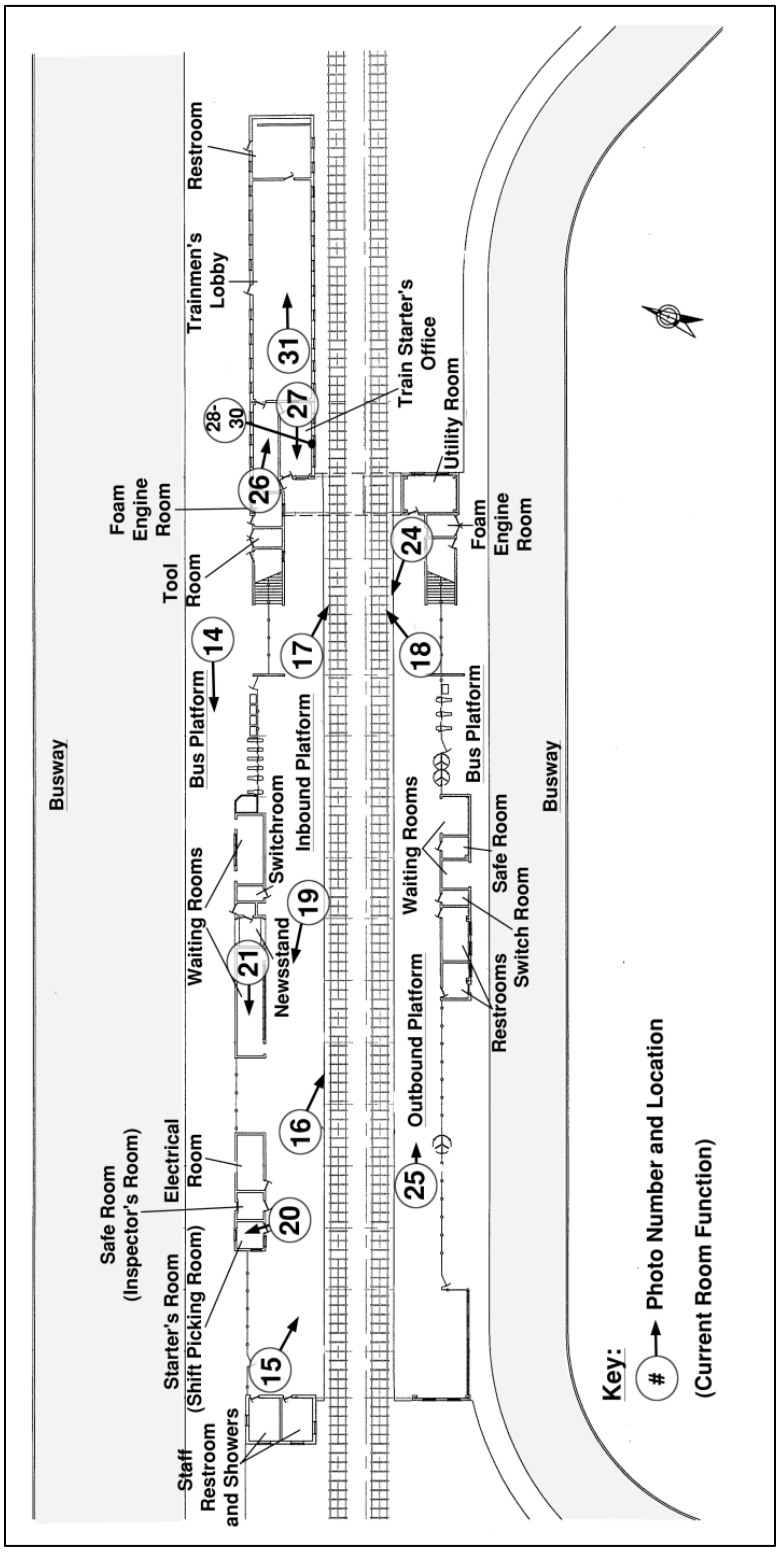
29. Detail, original train model board (Wonderland Station to Orient Heights), looking southeast.
30. Detail, original train model board (Orient Heights to Bowdoin), looking southeast.
31. Interior, Trainmen's Lobby, looking northeast.
32. Interior, Supervisor's Office, looking east (12/1/2010).

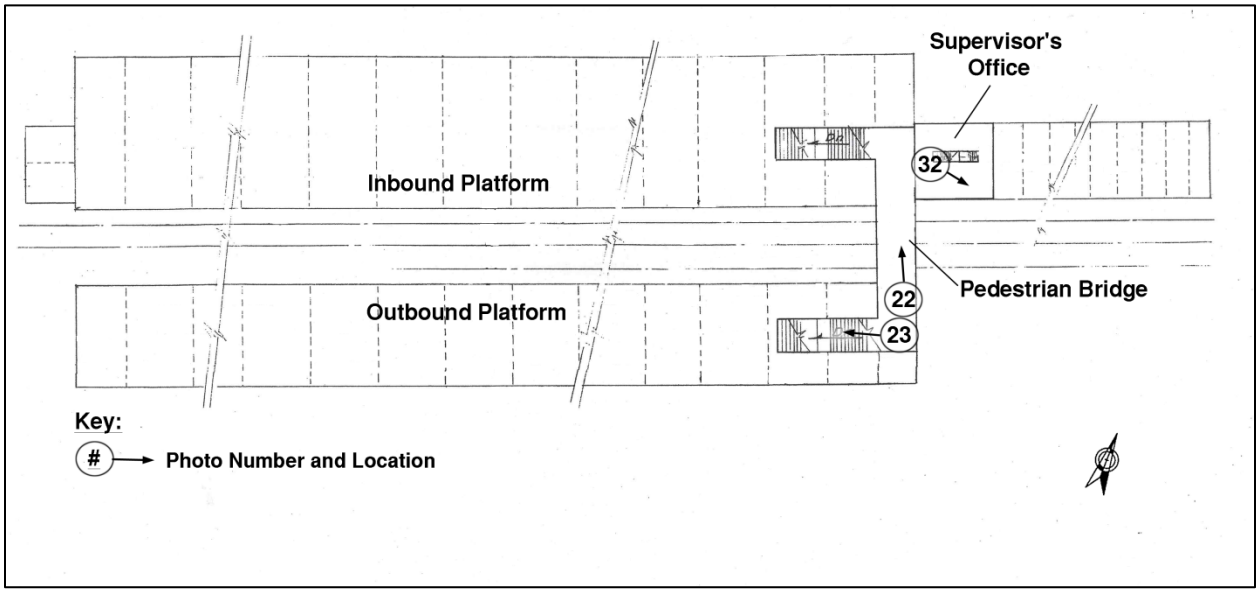
Key to photographs of the station exterior.



Key to photographs of the station platform and administrative wing.



Key to photographs of the pedestrian bridge and second story of Administrative wing.



APPENDIX A
PHOTOGRAPH REFERENCE SHEETS

MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
Photo 2

MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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GO BRUINS!
2012
2011

MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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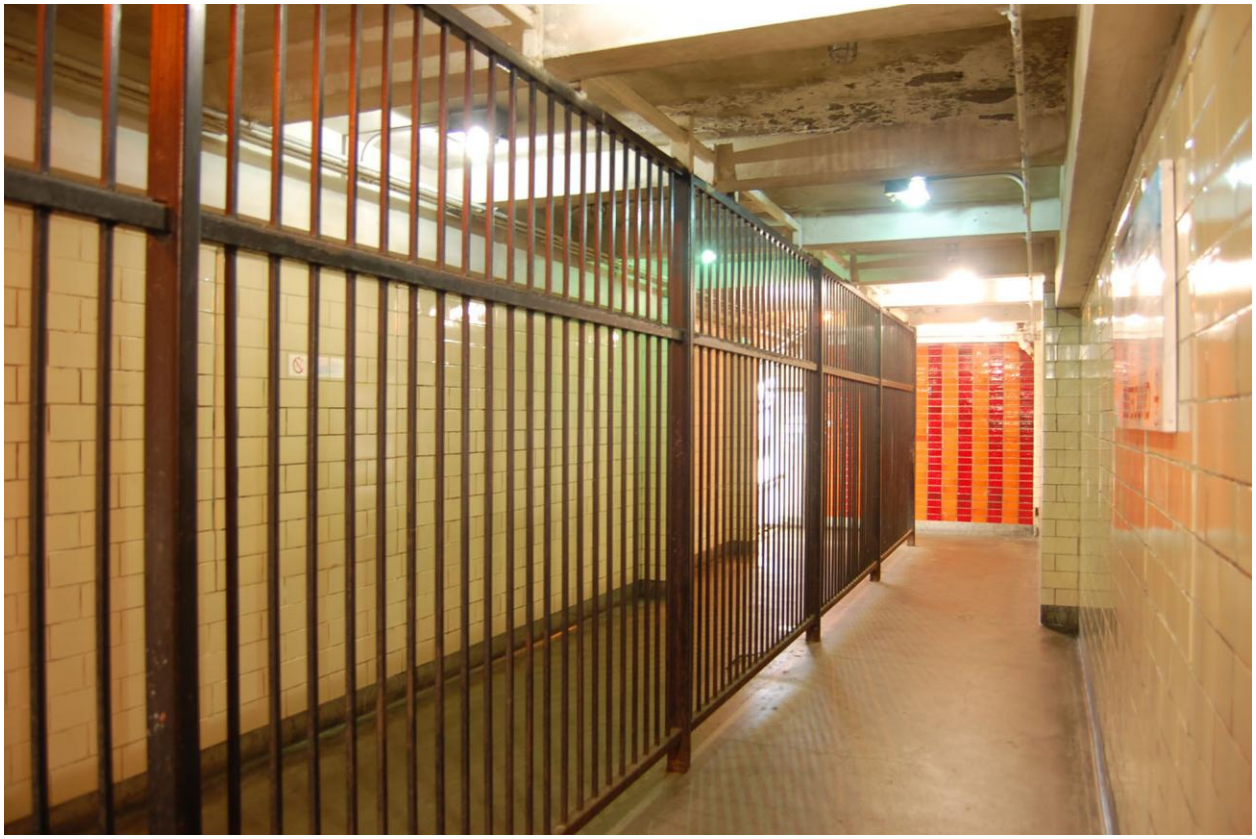
MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
Photo 22



MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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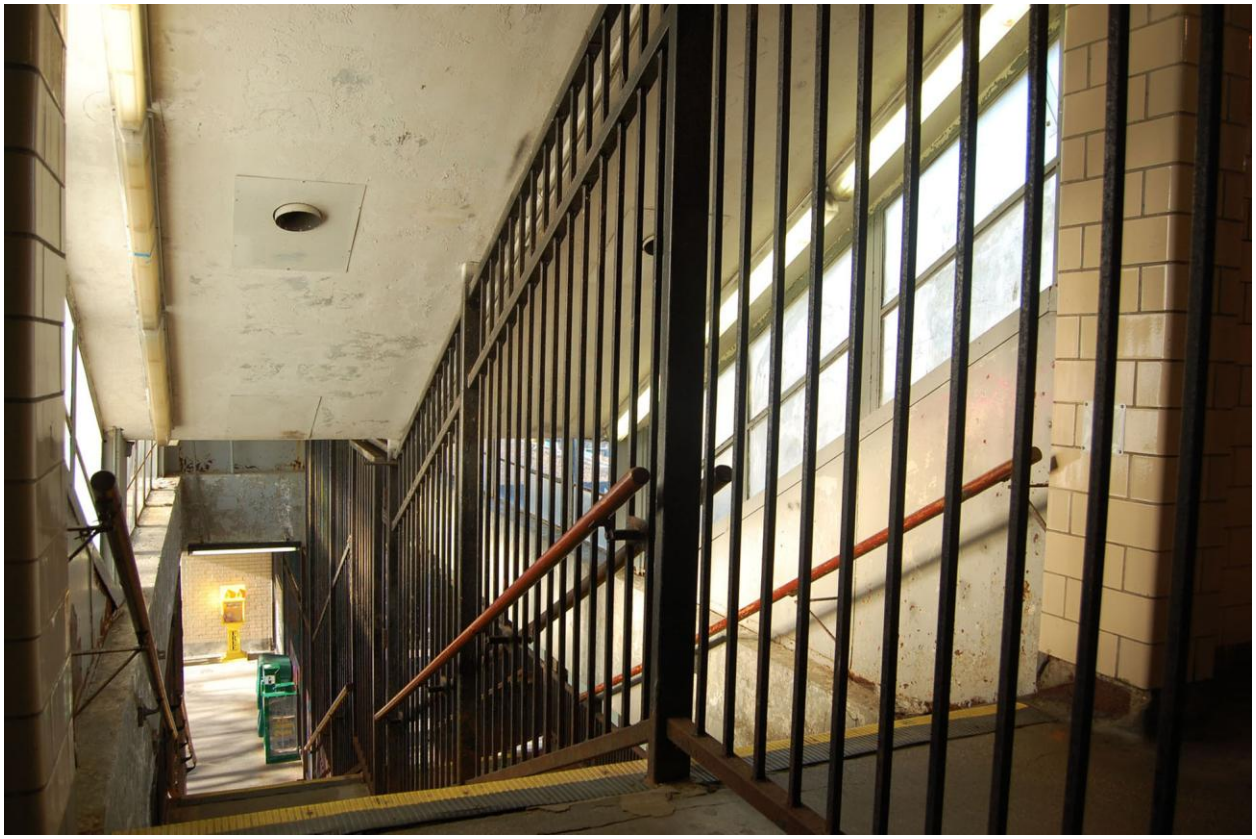

MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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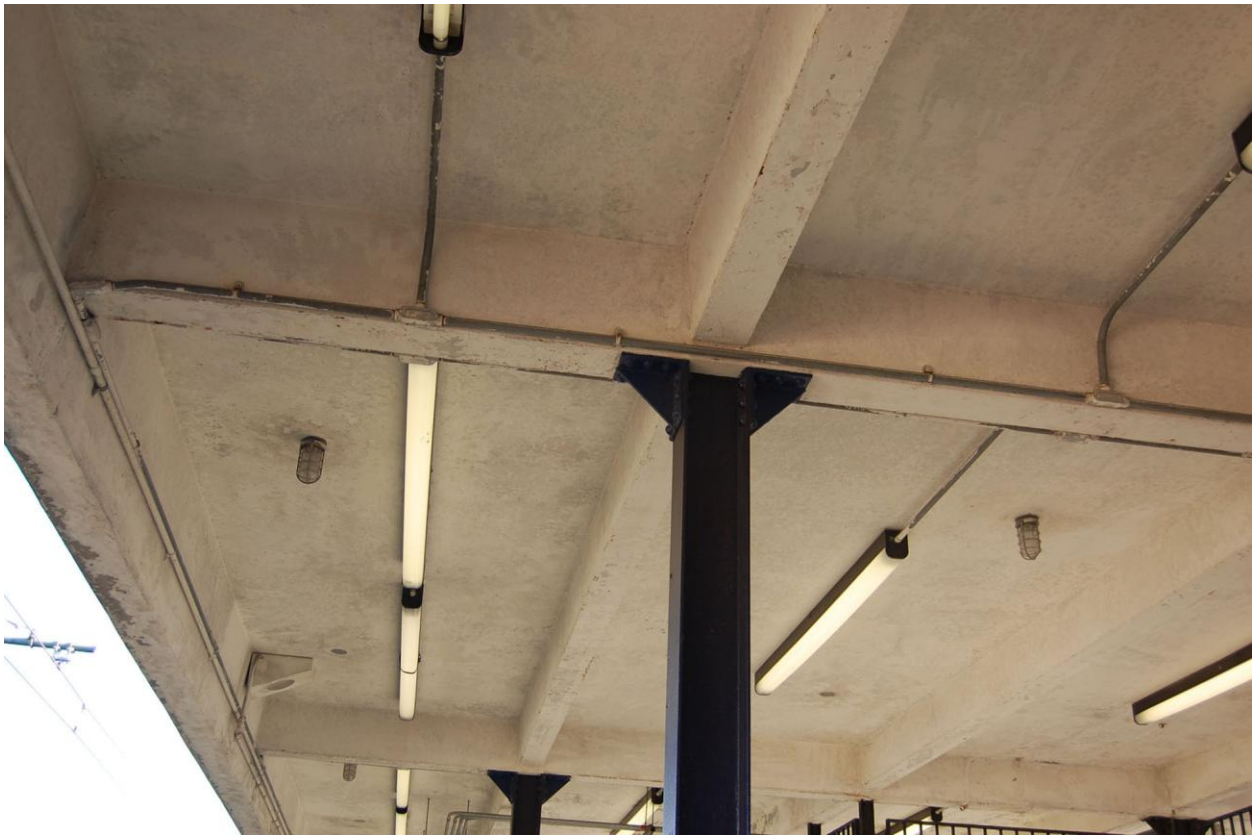
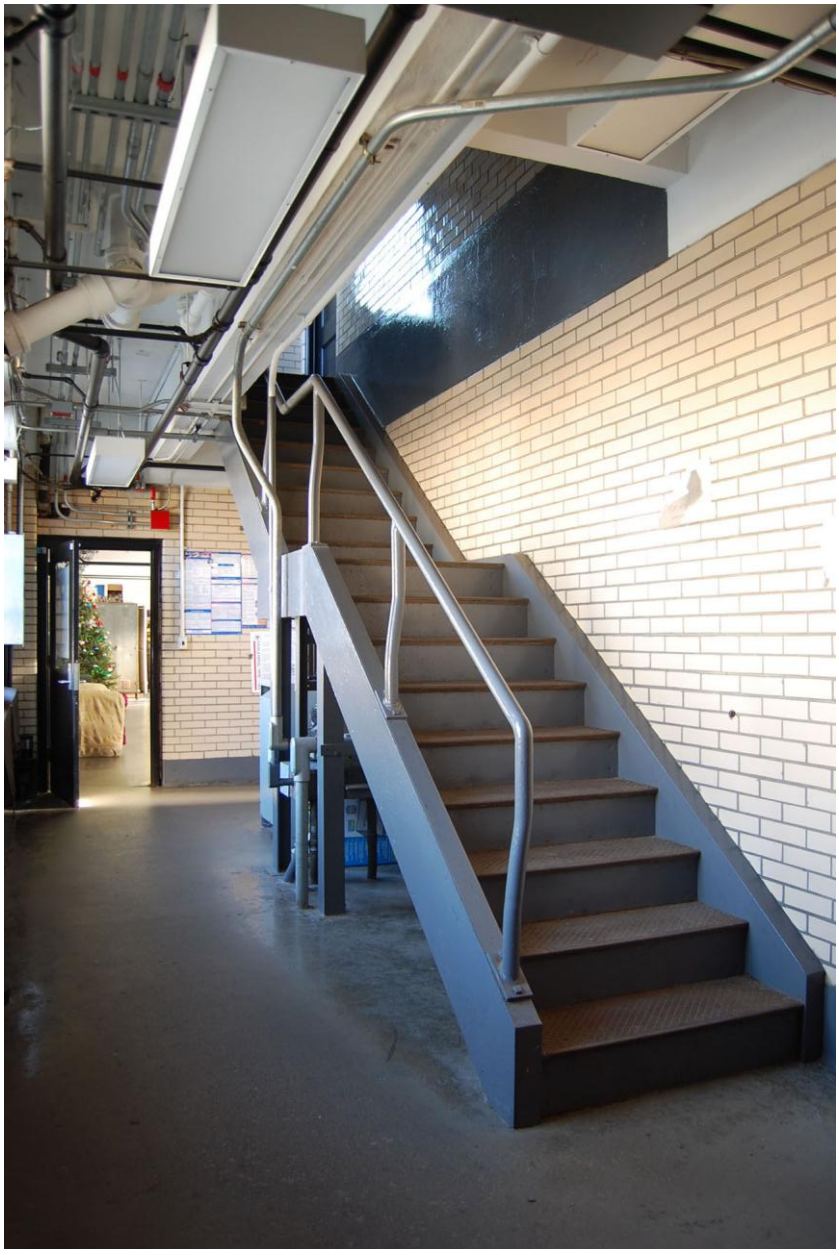
MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
Photo 25





MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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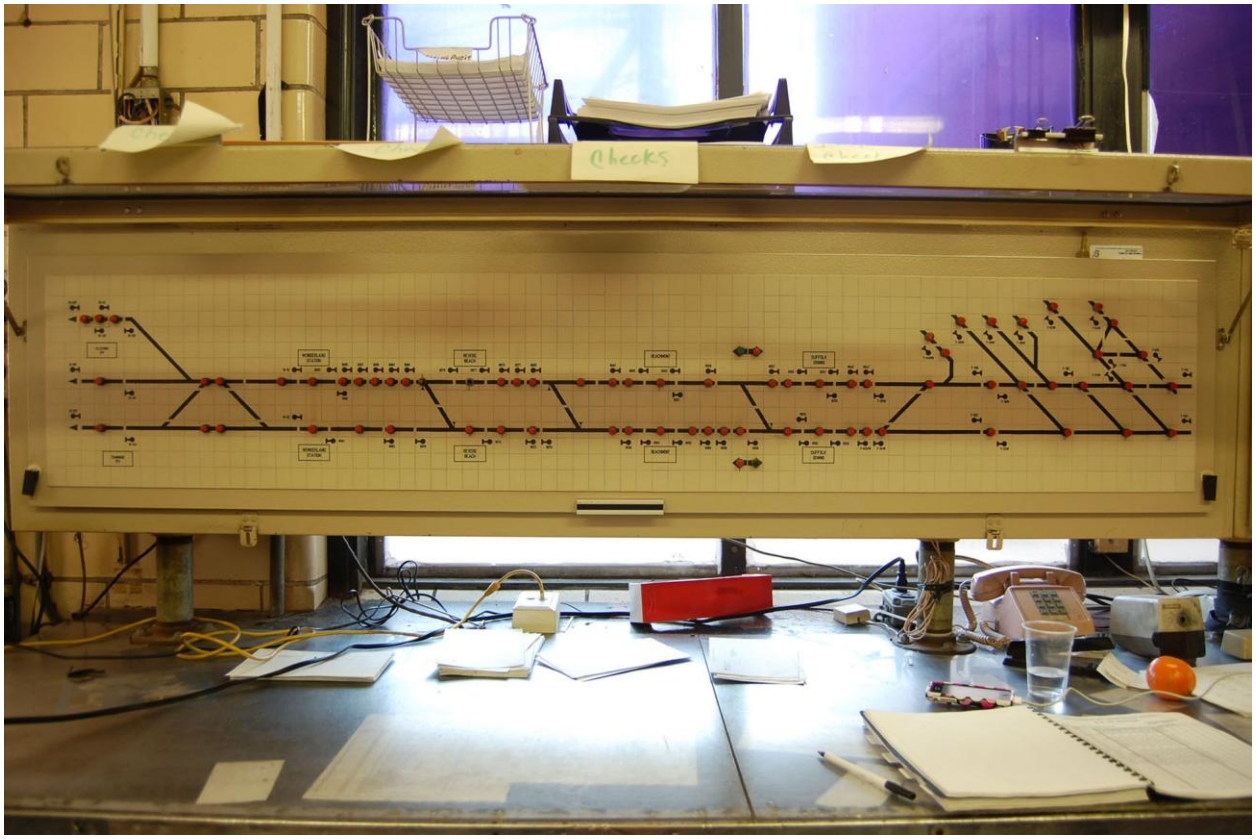
Checks

MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
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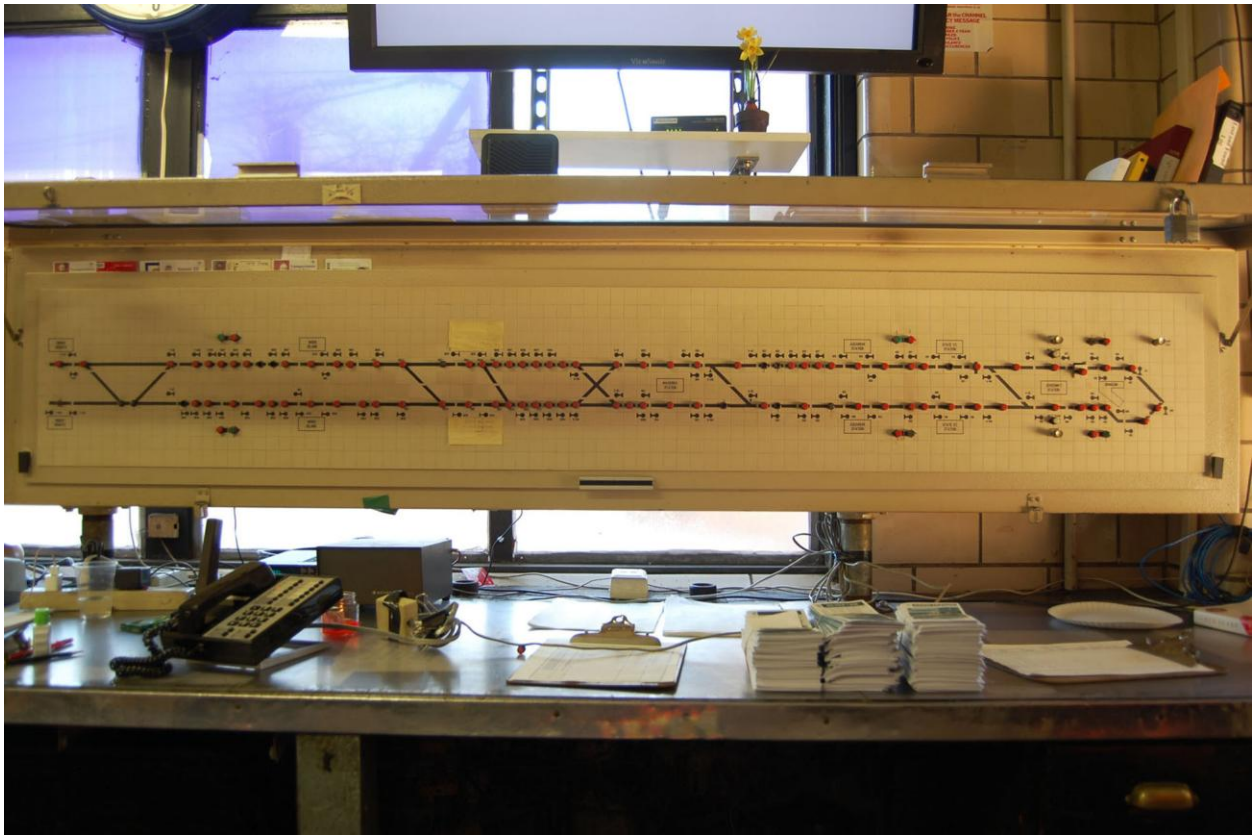
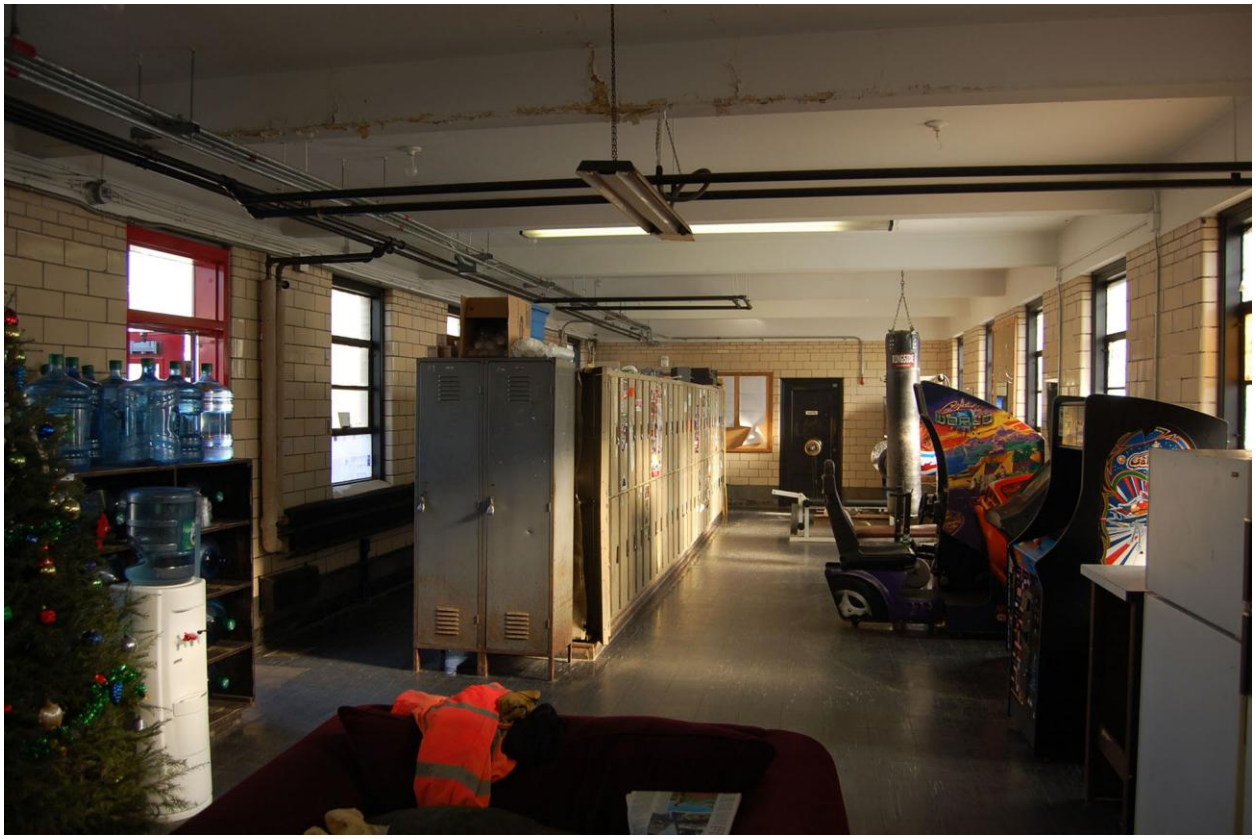




MBTA ORIENT HEIGHTS STATION
East Boston, Massachusetts
Photo 32

APPENDIX B
MHC FORM B – ORIENT HEIGHTS STATION

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
0101393000	Boston North		

Town East Boston

Place *(neighborhood or village)* Orient Heights

Address 1000 Bennington Street

Historic Name Orient Heights Station

Uses Present: Rapid Transit Passenger Station

Original: Rapid Transit Passenger Station

Date of Construction 1952

Source Cheney 2004

Style/Form Contemporary

Architect/Builder Metropolitan Transit Authority

Exterior Material

Foundation: Concrete slab

Wall/Trim: Glazed brick

Roof: Concrete slab/tar and gravel

Outbuildings/Secondary Structures
N/A

Major Alterations *(with dates)* N/A

Condition Fair

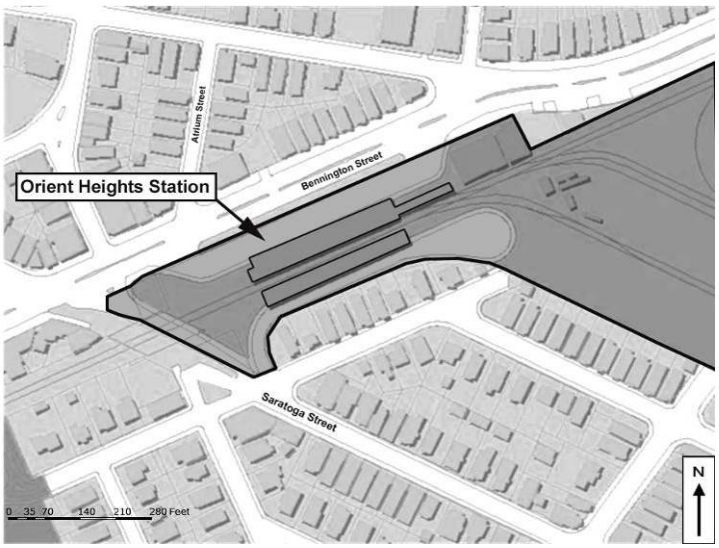
Moved _X_ **no** ___ **yes** **Date**

Acreage 26.6 acres

Setting Late nineteenth century urban residential and commercial district along Bennington Street.

Photograph

Topographic or Assessor's Map



Recorded by: John J. Daly
Organization: PAL
Date: November/December 2010

Follow Massachusetts Historical Commission Survey Manual instructions for completing this form.

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ARCHITECTURAL DESCRIPTION

The Massachusetts Bay Transportation Authority (MBTA) Orient Heights Station is a Mid-Twentieth-Century Modern Style, above-ground rapid transit stop on the Blue Line serving the Orient Heights neighborhood of East Boston. The buff brick, concrete, and steel station is situated parallel and to the southwest of the southwest-northeast running Bennington Street, a major urban thoroughfare. The station sits just to the northeast of that street's intersection with Saratoga Street (MA Route 145) (note: for descriptive purposes, west denotes the inbound direction of travel). Station measurements are taken from 1950-1951 plans for the station prepared by the Metropolitan Transit Authority (MTA) Subway Engineering Division and the DMJM Harris|AECOM *Orient Heights Station Existing Conditions Report* (DMJM Harris|AECOM 2006; MTA Subway Engineering Division 1950-1951).

Orient Heights Station is located on a 26.6-acre, MBTA-owned land parcel that encompasses several transit infrastructure resources. The station is located just south of the junction between the two-track main line right-of-way with the Orient Heights yard and shop throat tracks, which diverge to the east of the main line. The brick and steel shop is located about 1,000 feet (ft) east of the station. A brick signal tower, Tower T, which formerly controlled the interlocking at this junction, is located north of the station between the mainline and the yard tracks. Immediately north of the inbound platform is an MBTA electrical substation for the Blue Line.

The surrounding Orient Heights neighborhood is dominated by late 19th century residential triple-decker construction north and south of the station. A business area west of the station at the intersection of Bennington and Saratoga streets features a small cluster of late nineteenth century commercial properties. Both the residential and commercial properties are heavily altered and interspersed with modern commercial infill. Saratoga Street crosses the MBTA right-of-way on a late twentieth century steel beam deck bridge.

Orient Heights Station is composed of four major connected architectural elements: two pedestrian platforms, a pedestrian bridge, and an administrative building. These components are arranged with an outside platform configuration with inbound (north) and outbound (south) tracks flanked to the north and south by corresponding platforms. An enclosed pedestrian bridge spanning the two tracks connects the two platforms at their east ends. An administrative building is attached to the northbound platform, east of the pedestrian bridge. Asphalt-paved bus lanes with granite curbing are oriented parallel to and run the full length of both platforms, with the southern bus lane having a turning loop at its east end. A chain link fence separates the busway of the inbound platform from the Bennington Street sidewalk. Between the platforms, rolled steel I-beams are spaced at intervals down the centerline of the right-of-way to support the Blue Line's overhead catenary.

Each platform is made up of a row of 16 steel I-beam bents supporting a flat concrete slab roof and set on a concrete beam and slab foundation/station platform. Ceiling beams and stringers are encased in concrete and attached to the posts with riveted knee bracing. The knee bracing and I-beam posts are exposed and painted blue. Both platforms, including stairway areas, are 300 ft long, with posts typically spaced 20 ft on-center longitudinally. The north platform is 45 ft wide with a transverse post spacing of 27 ft on-center. The south platform is 31 ft wide with a post spacing of 17 ft on-center.

The platform roofs are clad with a plywood deck and tar and gravel surfacing. Three steel I beam posts, which formerly supported electric bus catenary, rise up approximately 6 ft from the north edge of the north platform. The roof slabs terminate at deep, overhanging, unpainted concrete cornices ornamented with horizontal grooves. These grooves are interrupted on the street elevations of both platforms by flat panel areas with "Orient Heights" spelled out in cast bronze lettering. The painted underside of the concrete roof forms the ceiling of the platform areas. The north platform terminates at its west end at a pair of brick-

enclosed restrooms, described below. The south platform terminates at its west end in a brick masonry wall whose pair of window openings is now filled in with brick masonry.

The inbound and outbound platforms have similar, but not identical, building programs and floor plans. Glazed buff brick enclosures with steel slab doors are located at the end of and beneath each platform canopy for passenger waiting, administrative, and service areas. Moving from west to east along the inbound platform, the first enclosure contains a women's and men's toilet, now used as a staff shower room and staff bathroom, respectively. The second enclosure contains a "starter's room" (office for dispatching personnel), electrical room, and safe room. The present room configuration for this enclosure does not match that of available historical plans, but there is no physical evidence that this enclosure was altered. The starter's room is now used as a "picking room" (for shift lotteries) and the safe room is now used as an inspector's office. The third and final enclosure contains an electrical room, train waiting room, and bus waiting room. The two passenger waiting areas are partially enclosed with an aluminum frame and panel system. A single brick enclosure is located at the approximate longitudinal midpoint of the outbound platform. This shelter contains men's and women's bathrooms, an electrical room, and an empty storage room (formerly a safe room). A bus waiting room identical to the waiting room of the inbound platform is located at the east end of the enclosure. Windows in the platform enclosures are built with steel sash and brick molds and concrete sills. There are two sash variants. Two-light, steel awning type units are set high on the enclosure walls. Larger fixed two-light sash are set lower on the building elevations. Some window units (approximately 20 percent), have been removed and replaced with air conditioning units and plywood infill. The interiors of the platform enclosures have minimal architectural treatments designed for easy maintenance and durability. Ceilings consist of the painted underside of the concrete slab roof. Walls are glazed buff brick matching those of the exterior. Floors are exposed concrete slab. Fluorescent fixtures provide lighting.

Fare collection areas and steel picket fencing are interspersed between the platform enclosures to control movement between the paid and unpaid circulation areas. The inbound fare collection area, formerly located at the approximate midpoint of the platform, is now located at the east end of the platform, adjacent to the pedestrian bridge stairs. New Charlie Card turnstiles and kiosks have replaced older token-operated turnstiles on both platforms.

The pedestrian bridge is 13 ft wide and has a 26.5 ft span between load-carrying columns on the platforms. This structure is supported by a steel girder framework encased in concrete. It has a flat roof with shallow concrete parapets flashed with copper and glazed buff brick walls. Window openings on all four elevations of the bridge have been filled with brick masonry. Where the bridge stairwells extend above the platform roofs, walls are made up of non-load bearing steel lattice frame and panel systems with running bands of fixed rectangular sash. The interior of the bridge has an exposed painted concrete slab ceiling, glazed buff tile walls, and a concrete slab floor with integral baseboards. The stairwell has steel treads and risers with composite wearing surfaces on the treads and turned wood handrails. A full-height steel picket fence segregates the bridge and stairwell interior into circulation routes for paid and unpaid pedestrians. The area below the stairwell is enclosed in brick masonry and used for storage.

An administration wing is attached to the east end of the inbound platform. This two-story building measures 118 ft long and 21 ft wide in plan. It is a two-by-fourteen bay brick structure with a steel and concrete frame and slab foundation similar in construction and detailing to the platforms and bridge. The flat roof is covered in rubber membrane and has a low parapet capped with copper flashing. Walls are constructed of glazed buff brick with an exposed concrete water table. The regularly-spaced fenestration consists of steel sash set in narrow steel brickmolds. Second floor windows combine a two-light awning sash above a fixed lower light. First floor windows are similar, but have an additional fixed single-light sash above the operable unit. Two entrances are located on the building's north elevation. The western entry is fitted with a steel slab door with a single light and is set in a narrow steel channel surround with a single fixed transom window. The eastern entry is blocked with brick masonry, excepting the transom.

The interior of the administration wing is divided into a train starter's (similar to a dispatcher) office, trainman's lobby, and bathrooms on the first floor and two offices on the second floor. These areas are designed with painted concrete ceilings, buff glazed tile walls, and linoleum tile floors. The train starter's room retains a now inoperable electronic train model board for the

Blue Line route, as well as new digital train model board. The trainman's lobby contains recreation amenities, a kitchen, and lockers.

Orient Heights retains its integrity as a minimalist, Mid-Twentieth-Century Modern Style Metropolitan Transit Authority/MBTA rapid transit station. The principle structures, configuration and function of elements, and materials remain largely intact. Alterations to the facility include the addition of the MBTA color-coded signage; the relocation of the inbound fare collection area; and the infill of the bridge windows, windows at the ends of the platforms, about 20 percent of windows in the platform enclosures, and one door on the administrative wing. The train starter's model board, although no longer active, is still present and has been supplemented with new digital equipment in the same office. Polychrome tiles typical of ca. 1970-1980 MBTA modernization programs have been added to the end walls of the platforms and the bridge.

The station is in fair condition. Cracks at various locations in the brick masonry indicate that some structural settlement has occurred. The platform roofs are cracked and spalled in places. Several platform columns bases appear to be suffering from corrosion damage; others have been replaced in kind with new I beams. The cantilevered trackside edges of the platforms have spalled in places and are supported by temporary wood shoring.

HISTORICAL NARRATIVE

Orient Heights Station opened January 5, 1952 as part of the Metropolitan Transit Authority's (MTA) East Boston Rapid Transit Extension (a/k/a Revere Extension Project, East Boston Tunnel Extension) of the Blue Line, which was then referred to as the East Boston Tunnel. The extension was one of the first efforts to extend the Boston transit system beyond Boston's urban core, following the exodus of commuters to more distant ring communities and competing directly with the automobile for commuter traffic. Built at a time of fiscal limitation, the station's Mid-Twentieth-Century Modern Style architecture appears to be a merging of then-widespread International Style influences, on the one hand, with the MTA's needs for frugality, durability, and simplicity for a public facility, on the other.

Origins of the Blue Line

The origins of the Blue Line date to 1891, when the Massachusetts General Court (MGC) appointed a Rapid Transit Commission to study transportation solutions for Boston. The Commission made recommendations establishing key portions of the current transit network, including the East Boston Tunnel – a street car tunnel between Boston and East Boston. Subsequent legislation established the Boston Transit Commission (BTC), a City of Boston entity, to construct the East Boston Tunnel and the Tremont Street Subway and created the Boston Elevated Railway (BERy) to operate trains in the BTC's infrastructure under lease agreement. The BTC completed construction of the East Boston Tunnel in 1904 under the direction of Howard Carson, Chief Engineer. The structure was a significant achievement in the history of tunneling nationally, both for its size and method of construction. Stations included Court Street (now closed and partially demolished), Atlantic Avenue, and Devonshire Street (now State). Only a short distance inland in East Boston, cars ran to the surface via an incline at Maverick Station, the original terminus (APA 1984:Form No:BL-BO102; BTC 1904:56; Cudahy 1972:32).

The East Boston Tunnel Extension project, completed in 1916, added 2,600 ft of new tunnel passing beneath the Tremont Street Subway and leading to Bowdoin Square on Cambridge Street in Boston. New stations for this extension included Scollay Square Under and Bowdoin Station. The 1904 Court Street Station was permanently closed in 1914 during this project (APA 1984:31; BTC 1915:45; Clarke and Cummings 1997:39; Stott 1984:42).

Between 1910 and 1920, ridership increased on the line at an unanticipated rate, prompting the BTC to reconfigure the East Boston Tunnel for increased capacity. Overhead catenary was removed from the tunnel in 1924 and replaced with third rail power and new, larger rapid transit cars superseded street cars. The tunnel incline and surface station at Maverick were replaced with an underground transfer station, Maverick Square Terminal, where patrons could move between street cars and the new rapid transit cars (APA 1984:32; Belcher 2007:271; Stott 1984:42).

The East Boston Rapid Transit Extension

After increased ridership during the Depression, in the 1940s the BERy and BTC found itself facing ever-dropping patronage and increased deficits as demographic trends pushed Boston commuters' homes outside of the territory of the rapid transit and trolley systems, and automobiles became the preferred commuter transportation mode. The Metropolitan Transit Recess Commission, a study committee established in 1943, noted that commuters had "moved beyond the area served by the present limited rapid transit facilities and before the war the movement had become so pronounced as to cause an ever-diminishing volume of revenue passengers. Because all but minor extension to the rapid transit system had been made in the era from 1895 to 1920, the rapid transit system left these new areas of population concentration unserved" (Metropolitan Transit Recess Commission 1945, quoted in Deem 1953:24). The solution, as recommended in the commission's April 1945 report, was to extend rapid transit out to these new commuter populations. These recommendations included the extension of East Boston service to Revere and Lynn via the right-of-way of the Boston, Revere Beach & Lynn Railroad (Metropolitan Transit Recess Commission 1945).

The Recess Commission's recommendation was not new. The Boston, Revere Beach & Lynn Railroad was a narrow gauge line that had ceased operations in 1940. The BERy had purchased the railroad's right-of-way north of Day Square in East Boston that same year with the intent of converting it to high-speed trolley operation – a plan halted by World War II. Prior to this purchase, the extension of the East Boston Tunnel along this right-of-way had been proposed repeatedly by transportation planners and advocated by residents of Revere, Chelsea, and East Boston. The Massachusetts Public Service Commission made such a proposal in its 1916 report, and the Metropolitan District Commission echoed the idea in 1932 (APA 1984:32).

In July, 1945, the MGC took up the Recess Commission's recommendations for East Boston and authorized the Transit Department of the City of Boston to construct the East Boston Rapid Transit Extension to a point at or near Day Square. The MGC subsequently amended this legislation in 1946, authorizing the further continuance of the route to Orient Heights and stipulating that the Transit Department construct "at or near Orient Heights, suitable stations and busways for the convenient interchange of passengers to and from…the areas adjacent to and beyond Day Square and Orient Heights" (General Court of Massachusetts 1945, Chapter 692:846-858, 1946, Chapter 494:505-509; MTA Board of Trustees 1948:21).

The MGC's enabling legislation for the extension arrived concurrently with a BERy financial crisis; resulting in some confusion on the part of historians as to the agencies actually responsible for constructing the extension between Maverick Station and Revere. After years of grappling with falling ridership and structural deficits resulting from fare and lease agreements, the BERy faced possible bankruptcy. To solve this complex issue, the MGC created the MTA in 1947 and empowered the agency to purchase the BERy's assets, including the narrow gauge rail line and operating rights in the BTC's tunnel infrastructure. Additional legislation in 1949 incorporated the BTC infrastructure into the MTA as well, thus uniting ownership of all of the future Blue Line under one entity (Deem 1953:17- 21, 33-36).

In the meantime, the Boston Transit Department followed the mandate of the MGC's 1945 and 1946 legislation, which assigned to that organization the responsibility for construction of the entire East Boston Rapid Transit Extension, including track, signals, shops, and stations. This work had begun in 1948. In its first annual report for the year 1947, the MTA expected that the extension to Orient Heights would be completed by the Boston Transit Department by 1950, and had begun on its own to plan the extension from that point to Revere. As a result of materials shortages and resistance to land-takings along the route, the anticipated 1950 completion date was not met, and the MTA had assumed construction of the line by 1950, when construction of Orient Heights Station was underway (General Court of Massachusetts, 1945, Chapter 692:847; MTA Board of Trustees 1948:21, 1951:9; MTA Subway Engineering Division 1950-51).

The East Boston Rapid Transit Extension was completed between Maverick and Orient Heights in January 1952 with new stations at [Logan] Airport, Day Square (now Wood Island Park) and Orient Heights. The cost of this portion of the extension was $12,022,216. In 1954, the line reached its permanent terminus at Revere, with intermediate stations opening at Suffolk Downs, Beachmont, Revere Beach, and Wonderland. The portion of the line from a point just south of Orient Heights and continuing to Wonderland is all constructed on the former Boston, Revere Beach & Lynn right-of-way. The Revere Extension

Continuation sheet 4

was and remains noteworthy for its dual system of current collection, which transitions from third rail in the East Boston Tunnel to catenary beyond Maverick Station. The Revere Extension is also thought by some to be the first instance in the United States where a rapid transit system provided service to a major airport (APA 1984:32; Belcher 2007:271; Buckley 1952; Cudahy 1972:51; Stott 1984:42).

Orient Heights Station

There is little historical material specific to the construction of Orient Heights Station in MTA reports or other official documents. The facility takes its name from the Boston, Revere Beach & Lynn Railroad's Orient Heights Station at the same location, which was known as Winthrop Junction until 1892. This busy node on the former railroad line featured car maintenance shops, the station, and a junction with the railroad's Winthrop Loop – the last of these controlled by a signal tower. The old Orient Heights Station was located immediately to the north of the Saratoga Street Bridge on the west side of the railroad right-of-way, just south of the current station's inbound platform. After the Boston, Revere Beach & Lynn Railroad closed in 1940, these facilities were torn down, the tracks removed, and the location lay vacant until the beginning of Boston Transit Department/MTA construction in 1950 (Cheney 2004:64-65).

Plans for the station proper were prepared under the supervision of R.A. Fiske, Designing Engineer in the MTA Engineering and Maintenance Department, Subway Engineering Division (Metropolitan Transit Authority Subway Engineering Division 1950-51). MTA employees began site preparation and construction of the station began in 1950. Residential triple-deckers and light manufacturing properties along the south side of Bennington Street were demolished to make room for the new station, whose steel and concrete framework was completed in 1951. Orient Heights Station was officially opened in January 5, 1952 (Cheney 2004:70-71).

Station Architecture and Design

No historical records have been located that document the design intent of R.A. Fiske and the Engineering Division. Orient Heights Station's Mid-Twentieth-Century Modern architectural treatment and a subtle influence of International Style design are evident in the use of unbroken expanses of light-colored brick masonry, exposed and unornamented steel and concrete surfaces, and the sign lettering font. The deep overhanging platform cornice with its horizontal banding exaggerates the overall horizontal composition of the facility, a hallmark of post-war modernist design. In keeping with the preference of modern architecture adherents for honesty in building materials and design (and to satisfy cost-conscious MTA accountants and legislators), the building utilizes efficient, durable building materials and technology such as steel framing, brick masonry, and concrete slabs. The station's aesthetic relies on the exposition of these elements, rather than ornament, for artistic effect. This design approach is typical of much institutional and civic architecture completed in the decades immediately following World War II.

The design of the rapid transit stations on the East Boston Extension, completed almost 30 years after the last station (Maverick) previously built on the line, presented a marked break from classically-inspired architecture of other stations previously built on the Blue Line and elsewhere, which utilized Beaux Arts or Classical Revival style treatments for headhouses. Below-ground, these stations and those of the Rapid Transit Extension had more in common. Subway platform and circulation areas were purpose-built, engineered facilities whose massing and profiles were determined by structural requirements and construction methods. However, even the broad expanses of steel reinforced concrete in these areas received some minimal ornament that surpassed that of the post-war rapid transit stops, whose designers, it may be assumed, consciously eschewed such treatments. The stations of the original East Boston Tunnel were consistent in décor with those of the Tremont Street Subway and consisted of glazed white tiles on walls and ceilings and cast stone platforms. Similarly, the East Boston Tunnel Extension Station finishes included plaster ceilings and upper wall, with lower walls of white terrazzo accented with bands of colored tile on the walls. Similar treatments carried over to other rapid transit lines (Orange and Red lines) in the system (APA 1984:31, Form No:BL-BO102; BTC 1904:56, 1915:45; Cudahy 1972:32; Clarke and Cummings 1997:39; Stott 1984:42).

The East Boston Extension's stations Mid-Twentieth-Century Modern approach was not replicated in contemporaneous MTA projects, either. The Green Line's Riverside Expansion (a/k/a Highland Branch) was completed in 1959, five years after the East Boston Rapid Transit Extension. New stations built on this line were designed as slightly modernized versions of traditional vernacular trolley stops, befitting the suburban operating environment. These facilities were executed in wood with cross-gabled roofs and partially open trackside elevations. The line's Riverside Terminus shelter was a simple brick shelter with a hipped roof (APA 1984:50; Cudahy 1972:52; www.nycsubway.org 2005).

The Airport, Wood Island Park (a/k/a Day Square), and Orient Heights stations all featured architecturally similar treatments, albeit in different configurations and footprints to accommodate local conditions and intermodal transportation considerations. Photographs indicate that Airport Station, with increased public visibility and higher expectations for passenger traffic, received an elevated level of detail. This included a somewhat retardataire, Moderne-influenced entry surround and pilasters, as well as false arches added to the underside of the pedestrian bridge between the two station platforms. Day Square had a two-level design for intermodal transfers (discussed below). Additional stations between Orient Heights and the line's terminus at Revere Beach were built in a similar, Mid-Twentieth-Century Modern Style, but in red brick instead of beige (Cheney 2004:87, 89, 90).

Amenities for intermodal transport were an important consideration for East Boston Rapid Transit Extension stations, including Orient Heights. Busways and parking lots were essential to capturing the commuter traffic desired by the MTA. The first station in the MBTA network with an integrated busway was Field's Corner on the Red Line, completed in 1927. The busways at Orient Heights occupy a prominent and large portion of the station site; and Orient's platforms are extended to the north and south to shelter bus waiting areas. An entire upper level at Day Square (now demolished) was dedicated to busways and related waiting areas. Large commuter parking areas, the source of much of the contested demolition, were built at many of the stations. Orient Heights was built with parking for 350 vehicles (APA 1984:24; Cheney 2004; MTA Board of Trustees 1951:9).

Station Renovations

Blue Line stations have been modernized, expanded, and renamed in the course of several different campaigns. Orient Heights alone remains as the last station on the MBTA Blue Line that retains its design intact. In 1924, platforms at stations were raised and sometimes lengthened to accommodate the new rapid transit cars. The MTA was reorganized as the MBTA by the MGC in 1964. The MBTA established its current system of subway and commuter rail color coding in 1965 and began a system-wide modernization and station renaming program beginning in 1967. The Blue Line obtained its current route name at this time. Devonshire Station was renamed State and Atlantic Station was renamed Aquarium in 1967. Both Bowdoin and Aquarium were modernized in 1967–1968 (APA 1984:9-10, Form BL-BO1-2; Belcher 2007:304–306; Clarke and Cummings 1997:47; Cudahy 1972:55; MBTA n.d.).

The implementation of six-car trains on the Blue Line has required further station work between ca. 2006 and 2008. All of the stations on the East Boston Rapid Transit Extension have been partially or completely razed and rebuilt and their station platforms lengthened. Aquarium and State have also been fully rehabilitated (Belcher 2007:307; Howe 2008; Kyle Davis, DMJM Harris|AECOM, Personal Communication December 8, 2010).

BIBLIOGRAPHY and/or REFERENCES

Architectural Preservation Associates (APA)
1984 *Massachusetts Bay Transportation Authority Historic Properties Survey, Narrative Report.* Architectural Preservation Associates, Cambridge, MA. On file, Massachusetts Bay Transportation Authority, Boston, MA.

Belcher, Jonathan
2007 *Changes to Transit Service in the MBTA District, 1964-2007.* Retrieved July 13, 2007 from the New England Transportation Site: http://members.aol.com/eddanamta/busfiles/contents.html.

Boston Transit Commission (BTC)
1904 *Tenth Annual Report of the Boston Transit Commission.* E.W. Doyle, Boston, MA.

1915 *Twenty-First Annual Report of the Boston Transit Commission.* E.W. Doyle, Boston, MA.

Buckley, Thomas J.
1952 *Report on the Examination of the Accounts of the Metropolitan Transit Authority From January 1, 1951 to December 21, 1951*. Commonwealth of Massachusetts, Department of the Auditor, Boston, MA.

Cheney, Frank
2004 *Boston's Blue Line*. Arcadia Publishing, Portsmouth, NH.

Clarke, Bradley H., and O.R. Cummings
1997 *Tremont Street Subway, A Century of Public Service*. Boston Street Railway Association, Inc., Boston, MA.

Cudahy, Brian J.
1972 *Change at Park Street Under: The Story of Boston's Subways.* The Stephen Greene Press, Brattleboro, VT.

Deem, Warren H.
1953 *The Problem of Boston's Metropolitan Transit Authority*. Publication No. 20. Bureau for Research in Municipal Government, Harvard University Graduate School of Public Administration, Cambridge, MA.

DMJM Harris|AECOM
2004 *Massachusetts Bay Transportation Authority Orient Heights Station Existing Conditions Report*. July 31, 2006. DMJM Harris|AECOM, Boston, MA.

General Court of Massachusetts
1945 *Acts and Resolves Passed by the General Court of Massachusetts at a Special Session 1944 and Acts and Resolves Passed by the General Court of Massachusetts in the Year 1945*. Secretary of the Commonwealth, Wright & Potter Printing Company, Boston, MA.

1946 *Acts and Resolves Passed by the General Court of Massachusetts in the Year 1946.* Secretary of the Commonwealth, Wright & Potter Printing Company, Boston, MA.

Howe, Peter J.
2008 Blue Line Upgrades Just the Ticket, Riders Say. *The Boston Globe,* 21 February 2008.

Massachusetts Bay Transportation Authority (MBTA)
n.d. *The Chronicle of the Boston Transit System.* Electronic document, retrieved February 12, 2007 from: http://www.mbta.com/about_the_mbta/history/.

Metropolitan Transit Authority (MTA) Board of Trustees

1948 *The First Annual Report of the Board of Public Trustees of the Metropolitan Transit Authority, Year Ended December 31, 1947.* Metropolitan Transit Authority, Boston, MA.

1951 *Fourth Annual Report of the Board of Public Trustees of the Metropolitan Transit Authority.* Metropolitan Transit Authority, Boston, MA.

Metropolitan Transit Authority (MTA) Subway Engineering Division

1950-1951 *East Boston Tunnel Extension – Orient Heights Station.* Plan Nos. 18744 – 18799. Metropolitan Transit Authority, Engineering and Maintenance Department, Subway Engineering Division. On file, MBTA, Boston, MA.

Metropolitan Transit Recess Commission

1945 *Air View: Present Rapid transit System-Boston Elevated railway and Proposed Extensions of rapid Transit into Suburban Boston.* Metropolitan Transit Recess Commission, Boston, MA.

PAL

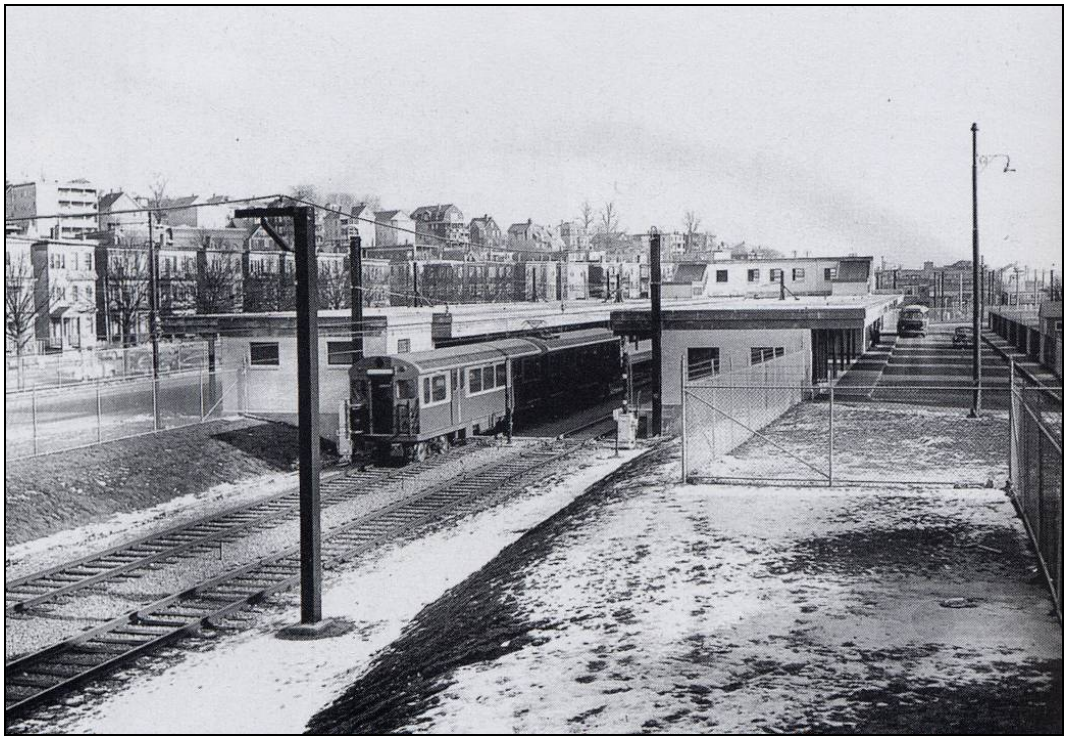
2007 Downtown Crossing and State Street Stations, MBTA Redundant Elevators Project Technical Memorandum. PAL Report No. 1946, Pawtucket, RI. Submitted to S E A Consultants Inc. and the MBTA, Boston, MA.

Stott, Peter

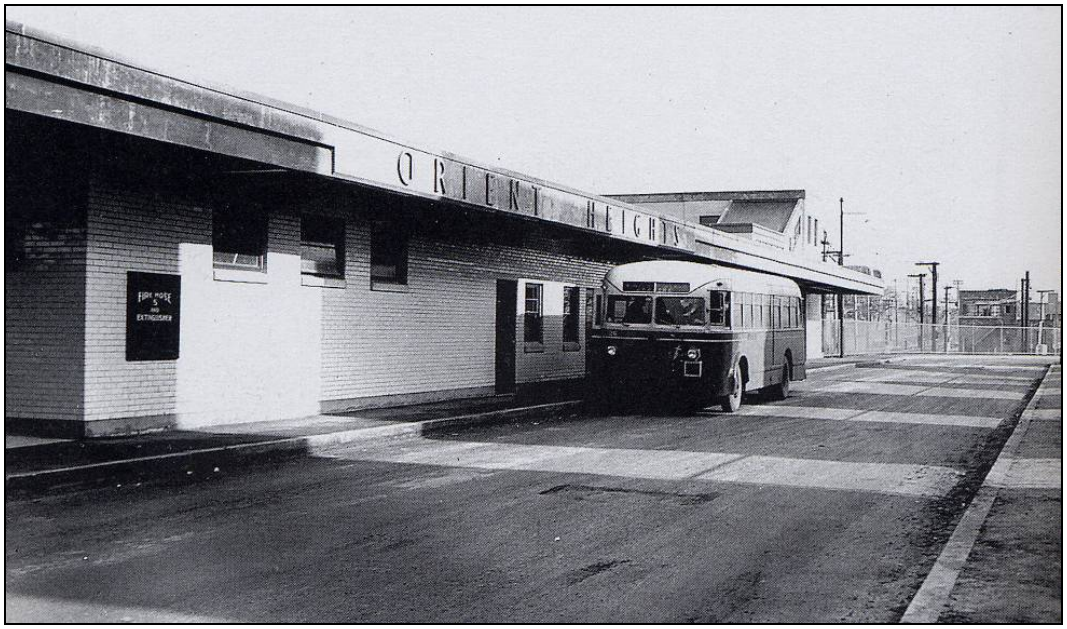
1984 *A Guide to the Industrial Archaeology of Boston Proper.* The MIT Press, Cambridge, MA.

www.nycsubway.org

2005 MBTA Green Line (Branches). Electronic document, retrieved December 10, 2010 from: http://world.nycsubway.org/us/boston/green-branches.html#d. Www.nycsubway.org.



Orient Heights Station in 1952, looking east (Cudahy 1954:92).



Orient Heights Station outbound platform and bus station in 1952, looking east (Cudahy 1954:92).

PHOTOGRAPHS

Photograph 1. Orient Heights Station, looking southwest from Bennington Street.

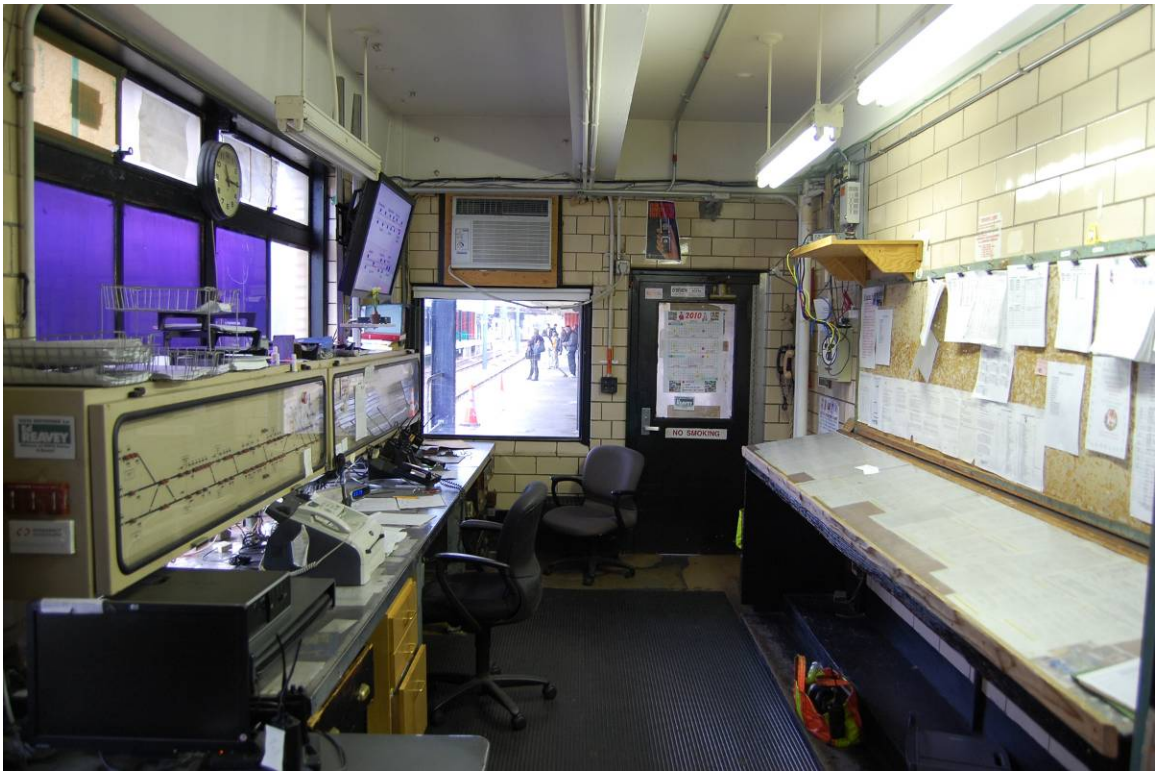
Photograph 2. Orient Heights outbound platform and busway, looking east.

Photograph 3.
Orient Heights inbound platform and busway, looking east.

Photograph 4.
Detail of Orient Heights inbound platform.

Photograph 5.
Orient Heights administrative wing attached to inbound platform.

Photograph 6.
Orient Heights station, looking west from outbound platform.



Photograph 7.
Orient Heights train starter's office and model boards.

Photograph 8.
Orient Heights trainman's lobby.

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Community	**Property Address**
EAST BOSTON	1000 BENNINGTON STREET

Area(s) Form No.

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☐ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by John J. Daly and Virginia H. Adams, PAL, Pawtucket, RI, December 2010

The criteria that are checked in the above sections must be justified here.

The Massachusetts Bay Transportation Authority's (MBTA) Orient Heights Station on the Blue Line is a Mid-Twentieth-Century Modern Style rapid transit stop designed and constructed in 1950-1952 by the Metropolitan Transit Authority (MTA). The station was one of seven such facilities built as part of the East Boston Rapid Transit Extension, completed in 1954, that extended passenger service from Maverick Station in East Boston to Revere. The extension was one of the first attempts by the MTA or predecessor organizations to capture commuter traffic from what were then outer suburbs in era of the automobile.

The station is significant under Criterion C at the local level in the areas of architecture and design as the sole surviving representative example of MTA Mid-Twentieth-Century Modern Style architecture on the Blue Line and the MBTA system. The station embodies the distinctive characteristics of MTA-designed rapid construction in the post-war period, particularly in its use of unornamented industrial materials (steel and concrete) for aesthetic effect and configuration for intermodal commuter transportation. Contemporaneous service expansions on other MTA lines of the period utilized traditional vernacular trolley shelters at station locations. The MBTA has recently rehabilitated or reconstructed all of the stations on the Blue Line except Orient Heights, which is the last of the MTA-designed stations to retain its architectural integrity.

The East Boston Rapid Transit Extension was an early and important expansion of rail passenger service to Boston's outer suburbs and is therefore significant in the context of the development of the development of the Boston metropolitan district's transportation network. However, the station does not rise to the level of individual significance under Criterion A in the area of transportation, and the East Boston Rapid Transit Extension does not retain sufficient integrity to merit evaluation as a potential district.

APPENDIX C
MHC PHOTO SUBMISSION FORM AND PHOTO LOG

Massachusetts Historical Commission Photo Submission Form

Please submit one form for each group of digital images

About your digital files:

Camera Used (make, model): Nikon D40

Resolution of original image capture (camera setting including resolution and file format):

Pixel Dimensions: 17.3M, 3,008 pixels x 2,000 pixels; Document Size: 41" x 27" jpeg; Resolution: 72 pixels per inch

File name(s) (attach additional sheets if necessary) check here ☒ to refer to attached photo log:

About your prints:

Printer make and model: Epson Stylus Photo Printer R800

Paper: brand & type (i.e., Epson Premium Glossy Photo)

Epson Borderless Premium Glossy Photo Paper

Ink: Epson Ultrachrome Pigmented Inks

Signature: (By signing below you agree that the information provided here is true and accurate.)

Signature: _____ Date: 1/8/2012

PHOTOGRAPH LOG

Orient Heights Station Photographs

Location: Blue Line Subway
MBTA Orient Heights Station
1000 Bennington Street
Boston, Suffolk County, Massachusetts

Photographer: John J. Daly
PAL
210 Lonsdale Avenue
Pawtucket, Rhode Island

Date: December 1, 2010 and December 20, 2011

MA_Boston_(Suffolk County)_OrientHeightsStation1.jpg
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