

**NEWTON PUBLIC BUILDINGS SURVEY
PHASE II – ANALYSIS OF HISTORICAL SIGNIFICANCE**

Building Analysis

Underwood Elementary School



Address: 19-21 Eldredge Street

Year of Construction: 1924

Level of Significance: Moderate

Contributing building in the Farlow & Kenrick Parks National Historic District.

Recommended Treatment Level: Rehabilitation

PART I - Analysis of Historical Significance

Building History

Public elementary school in the Tudor Revival style designed by Herbert W. Colby. A contributing structure within the Farlow and Kenrick Parks National Historic District.

The school was one of several school buildings constructed within Newton in the late 1920s through 1930s in response to the rapid population growth the city experienced beginning in the mid-1800s. After World War I, a period of time that saw limited public building construction, the need for new schools had become particularly acute. Eventually, fourteen new school buildings were constructed in Newton between 1921 and 1939 to meet this increased need.

The Underwood Elementary School was designed by Architect and Newton Highlands resident Herbert Warren Colby. Colby studied architecture at Harvard University's Lawrence Scientific School in 1898-99. Registered as a "Special Student", meaning not eligible for a degree, he was considered to be part of the Class of 1902. By 1900 he had an office at 170 Summer Street in Boston. His office moved at least twice: in 1908 the address was listed as 2A Beacon Street, Boston; by 1910 it was 46 Cornhill, Boston. Colby also designed the Stables and Garage on Elliot Street for the City of Newton and the Crystal Lake Bath House, constructed in 1926 and 1930 respectively.

Level of Significance

A well-designed building of high-quality materials. One of the older remaining public schools in Newton and a contributing structure within a National Historic District.

References

- Harvard Alumni Association. *Harvard University Directory: A Catalogue of Men now Living Who Have Been Enrolled as Students in the University*. Cambridge, MA: Harvard University, 1910.
- Massachusetts Historical Commission, "Form B NWT.2830—19-21 Eldredge Street" (1987).
- Massachusetts Institute of Technology. *The Architectural Annual of the Massachusetts Institute of Technology, 1900-1901*. Boston, MA: The Architectural Society, 1901.
- Nedeljkovic, Srdjan S. "Crystal Lake: A Brief History" (23, September, 2009)
<<http://www.crystallakeconservancy.org/crystal-lake-a-brief-history.html>> (visited 27, October 2011).
- Massachusetts Historical Commission, "Form B NWT.3606—225 Nevada St" (1987), 2.

PART I - Analysis of Historical Significance: Historic Images
Additional Information Sources for Future Research

Historic Images



Figure 1: Photo from 1925. (Credit: Historic Newton)

Part 2 – Description of Historically Significant Features

Exterior Visual Character

Setting

- Corner lot in Newton Corner. Vernon Street has been blocked off to traffic, allowing for clear pedestrian access to the adjacent playground.

Shape

- Three-story roughly L-shaped structure with a two-story auditorium/gymnasium wing to the northwest. The end of the building at the corner of Eldredge and Vernon streets has a projecting bowed section with windows.

Roof and Related Features

- Flat roof hidden behind a masonry parapet, which is crenelated above the entrances and the gymnasium wing.

Openings

- One of the most prominent significant features, the bays of tall, 9-over-9 wood windows, was replaced with aluminum 1-over-1 double-hung sashes below fixed spandrel panels, which correspond to the dropped ceilings inside. Each bay, typically 5 windows wide, has a brick soldier course lintel and a cast stone sill with a joint at each window edge.
- Basement level windows, originally 6-over-6 wood, were replaced with screened 1-over-1 aluminum sashes; There are typically 2 sets of 2 windows aligned with each bay of 5 above.
- The rear wing has arched windows at the lower level, south side that open into an assembly area. On the north side, there are three bays of tall window openings; the sash and frames are aluminum replacements with interior metal grates.
- The main entrance on Eldredge Street is set within a large pointed arched opening with a cast stone surround. Two secondary entrances are similar but somewhat simplified in detail.
- Most exterior doors have been replaced with pebbled aluminum doors, with vision panels or asymmetrical sidelights; the three pairs of wood paneled doors recessed in flush cast stone surrounds at the west end of the gymnasium appear to be original.

Projections:

- A rectangular projection marks the west secondary entrance.
- There is a bowed bay projection at the west elevation.
- Five brick buttresses with cast stone coping separate the tall windows of the rear wing.

Trim and Secondary Features:

- There is a cast stone water table between the basement and first story and a cast stone cornice above the second story.

Materials

- Brick with cast stone trim, including: coping, cornice, water table, foundation, sills, door surrounds. The wood windows have been replaced with aluminum. There is copper flashing at the gym parapet. Cast bronze doorstops are at each entrance.

Craft Details

- A cast stone main door surround and hood with pointed arched opening: decorative details, including shields and ribbons. Similar at north and west doors.
- A decorative cast stone school seal is set into the wall above the main door; a book seal is set above the west door. Smaller shield seals are above the piers at the arcade.
- Ornamental exterior sconces, appear to be cast iron.

Interior Visual Character

Individually Important Spaces

Corridors

- The glazed ceramic tile wainscot appears to be original.
- Above the tile, the walls are plaster with tight radius curved edges.

Auditorium (repurposed as Gymnasium and Library expansion)

- The proscenium and projecting stage are still visible; library extension built out to edge of stage
- The tall windows (replaced)
- Arched doorways around the room, both closed in and functional, echo the arcade along the southern exterior wall.
- The second floor addition above the first floor arcade projects awkwardly into the auditorium/gymnasium space.

Related Spaces

Stairwells

- The steel pan stairs have spare ornamentation on the stringers.
- The arched exterior doorways and tall windows at the upper level are visible.

Other Significant Interior Features

Part 2 – Images



Figure 2: the front entrance on the east elevation (shown), is mirrored with slightly less elaborate secondary entrances to the west and north. Note the crenelated parapet, the cast stone school seal, the elaborate cast stone door surround, and the large windows



Figure 3: the gymnasium wing is characterized by the tall windows between buttresses; the three cast stone arched doorways on the west façade (not shown) and the round arched arcade to the south, seen below.



Figure 4: the general rhythm of the building facades is characterized by the large banks of windows seen here in the foreground. The replacement windows drastically affected the character of the building; compare with the historic photo in Figure 1.

Part 3 – Treatment Recommendations

Preservation Treatment Level

Underwood Elementary School is still in use as part of the Newton school system, and as an active school has ever changing programming needs. To enable the school to continue to serve its primary educational function it is recommended that future work be performed according to the "Rehabilitation" Level of treatment outlined in the U.S. Secretary of the Interior's *Standards for the Treatment of Historic Properties*. The Rehabilitation treatment allows for the building to be altered or added to through the construction of additions to support new uses while preserving those portions or features which convey the building's historic character.

The following bulleted list contains an analysis of existing conditions and recommended treatments for the significant features catalogued in Part 2 of this report.

Exterior Recommendations

Critical/Urgent (Timeframe: As soon as possible)

First Priority (Timeframe: 1-3 years)

- Roof was not accessible for survey, although no indications of damage were visible. Survey roof condition and repair as necessary.
- Structural cracks. Determine cause, remediate if still active, and repair.
 - at north side of east bay projection: brick and cast stone water table
 - cracked and spalling cast stone below basement window at east façade. Investigate the window installation further for possible cause of damage.
 - at corners of west bay projection
- Replace broken bricks at southwest corner; at northwest corner of west door projection
- Staining is pronounced at joints at underside of cornice. Repoint, and install weathercaps at sky-facing joints.
- Severe efflorescence is present below each vertical mullion of aluminum windows. This is typical at all Newton schools with aluminum replacement windows, and appears indicative of water infiltration. Inspect all windows, including sealant joints, and repair as necessary.
- Repair the concrete exterior stair to the basement at the east wing; signs of water damage include efflorescence and cracking.
- Repair cast stone water table, particularly where broken components are letting water in for further damage. Includes Dutchman repairs.
- Remove rust and repaint all ferrous elements, including the pipe rail at the exterior basement stairs.

Second Priority (Timeframe: 3-5 years)

- Replace poorly matched repointing, including:
 - parapet
 - north side of bay projection
 - below gymnasium windows- appears to have had vent grilles removed
 - addition above the arcade at the gymnasium. Mortar itself seems to match well, but the spacing may be a bit wide, causing the mismatch.
- Remove extraneous ferrous elements from building exterior. Patch as required.
- Replace the missing globes at light sconces at west entry.
- Repair or replace in kind the broken bronze door stops at the west entry.
- Non-original grilles below some windows. Some are in poor condition; some have deteriorated brick and mortar above. Coordinate with HVAC strategy (beyond the scope of this survey) and replacement of windows with operable windows to match original. If

grilles are still necessary, repair as required. If not, tooth in brick infill to match existing adjacent brickwork.

- Conduct thorough survey of window condition, including sash, frame, lintel and hardware. Initial exterior inspection indicates failing sealant at the lintels and water infiltration into the vertical mullions, but the windows are otherwise generally in good condition. Evaluate in conjunction with daylighting, ventilation and energy efficiency strategies (beyond the scope of this survey), to prioritize timing of replacement. At the time of next replacement, replace with operable windows matching in appearance to the original windows.
- Repaint front door frame, currently bright purple.
- Review locations of exposed piping and conduit, particularly at the west elevation.
- Repair vents and openings where damaged. Replace inappropriate vents at east façade. Reset displaced brick, and repoint at poor mortar patches and pipe penetrations.
- Clean the building exterior, including, but not limited to:
 - severe efflorescence at each window sill joint
 - staining and biological growth at cast stone water table and door surrounds
 - staining at east and south walls and at bronze door stops
 - vines at east elevation
 - general exterior cleaning – including school seal; graffiti on walls
 - rust staining- below ferrous pipe railing

Maintenance (Timeframe: Ongoing)

- The character-defining features are otherwise in generally good condition. Continue regular maintenance.

Interior Recommendations

Critical/Urgent (Timeframe: As soon as possible)

First Priority (Timeframe: 1-3 years)

Second Priority (Timeframe: 3-5 years)

- Remove dropped ceilings. Coordinate with review of building systems strategy (not in the scope of this survey) and the replacement of the windows. If full removal is not feasible, consider a set-back from exterior walls to allow for full advantage of natural ventilation and daylighting.

Maintenance (Timeframe: Ongoing)

- Continue regular maintenance of character-defining features.