

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

**Building Analysis**

**Bowen Elementary School**



Address: 280 Cypress Street  
Year of Construction: 1952

Level of Significance: Moderate

Recommended Treatment Level: Rehabilitation

## **PART I - Analysis of Historical Significance**

### *Building History*

Bowen Elementary School, constructed in 1952, was one of the earlier buildings constructed during Newton's third wave of large-scale school construction after World War II. The building is a two-story red brick building with limestone trim constructed in the Art Moderne style, one of only a few municipal buildings in Newton designed in this style.

At the end of World War II Newton's population increased rapidly. New subdivisions were constructed throughout the city and a great deal of additional development took place within older neighborhoods. To address the increased need for school facilities to serve the growing school age population Newton's school system underwent a period of rapid. In the 1950s and 1960s approximately fourteen new school buildings were constructed within the City, either to serve new areas or to replace older existing schools. Most of the schools constructed during this wave are still in service.

The Bowen school was designed by architect and Newton Highlands resident Louis Warren Ross. Ross studied at the University of Massachusetts, and at Harvard's Graduate School of Architecture from 1921-25. He worked for Edward T.P. Graham before opening his own practice in 1935. Ross is best known for his designs for over 30 buildings, including more than 20 dormitories, for the University of Massachusetts Amherst. From his office at 131 State Street in Boston, he also designed several Elementary, High School, and University buildings throughout the state. He served on the Construction Board of Appeals for the City of Newton. Most of Ross' work at UMass and other locations was in the Georgian Revival Style. However, he began to incorporate contemporary influences into his work in the 1950s, of which the Bowen school is an early example. The school building is detailed in a similar manner to some of his later works at UMass such as the Student Union (1956-7) and Wheeler dormitory building (1958).

### *Level of Significance*

The Bowen School is significant under National Register Criterion A for its association with the post-World War II expansion of the Newton Public School system. Along with the Williams School it is one of Newton's only examples of Art Moderne-inspired public architecture.

### *Bibliography*

1956 AIA Directory

Koyl, George S., ed. *American Architects Directory: First Edition*. New York: R. R. Bowker Company, 1955.

Massachusetts Historical Commission, "UMass Amherst Building Survey Reports: UMASS No. 131, 41 Campus Center Way". 2009.

United States Department of the Interior, National Park Service. "National Register of Historic Places Inventory – Nomination Form: Newton 20th Century Multiple Resource Area Amendment, Newton, MA". 1990.

Phase II: Analysis of Historically Significant City Buildings, Newton, Massachusetts  
Bowen Elementary School  
DRAFT 4/6/2012

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

*Historic Images*

## **Part 2 – Description of Historically Significant Features**

### **Exterior Visual Character**

#### *Setting*

- In a residential neighborhood, facing west towards Cypress Street. The playground is to the south; the parking lot is to the northeast.

#### *Shape*

- The low, horizontal two-story structure is roughly L-shaped.

#### *Roof and Related Features*

- The low-slope roof is hidden behind a parapet wall with either a copper fascia or cap.
- The brick chimney has cast stone coping.

#### *Openings*

- Wide, horizontal window openings, with steel lintels and flush limestone sills, typically contain 8 double-hung windows. Windows have been replaced with aluminum sashes and infill transom panels. Some have installed screens.
- The first floor windows adjacent to and the second floor windows above the main entry have limestone surrounds.
- The three windows above the main entrance have a more elaborate mullion pattern.
- The windows over the side entries are tall, emphasizing the vertical circulation (stairs) behind.
- Doors are pebbled aluminum replacements with vision panels and transoms above, typically within wood frames.
- At the main entry 3 doorways with transoms are set within a recessed entry: a pair of doors is flanked by two single doors. Each leaf has three square lights.

#### *Projections*

- Galvanized, flat seam metal-clad wood canopies with copper cap flashing and recessed light fixtures are cantilevered over the side entries.

#### *Trim and Secondary Features:*

- The limestone-faced main entry has two square piers shallow, stepped lintel detailing.
- The second floor above the main entry is framed with limestone.
- Flush limestone bands at the “water table” and above the second floor classroom windows wrap around the building.
- A shallow projected brick band outlines the northeast entry and north entry at rear wing.
- Aluminum grilles are set within the second floor limestone stringcourse.

#### *Materials*

- The common bond red brick has a glossy finish or coating.
- The trim is limestone.
- The concrete foundation is low, and generally not visible.

#### *Craft Details*

- The massing is well-balanced, but not symmetrical, including the offset location of the flagpole. The design is crisp and streamlined, with minimal details.
- There is a slight overhang at the 2<sup>nd</sup> floor above the main entry.
- Individually mounted letters, in a font appropriate to the building style, spell “BOWEN SCHOOL” above the main entry.

## **Interior Visual Character**

### *Individually Important Spaces*

#### Auditorium

- The ceiling has affixed acoustic tiles and long, linear fluorescent fixtures.
- The floor slopes down to the stage with its wide, profiled proscenium and full width stairs.
- The walls have wainscot with horizontal reveals and shaded windows on the north side.
- The bent plywood folding theater seating in metal frames appear to be original.
- A pair of plywood doors with raised plywood panels is flanked by two similar, single doors.

#### Front Entry Vestibule

- The plaster ceiling has a single, shallow coffer.
- The plaster walls have fluted pilasters and wainscot with horizontal reveals.
- The floor is slate.
- The exterior doors are directly across from the interior plywood doors with raised plywood panels: the center pair of 6-panel/4-light doors with an 18-pane transom is flanked by two single 9-panel/6-light doors with a 12-pane transom each.

#### Main Lobby

- The original ceiling is hidden by non-original suspended acoustic tile ceiling.
- The flooring is linoleum or vinyl tile, set in a checkerboard pattern of multiple colors.
- Fluted pilasters articulate the walls at the corners, between the entry vestibule doors, and at the auditorium doorway; this doorway also has wainscot with horizontal reveals.
- The glazed wall to each corridor consists of a pair of plywood veneer doors with vision lights, flanked by 3-pane sidelights in thick, metal frames.

### *Related Spaces*

#### Corridors

- Linear fluorescent fixtures are suspended from the acoustic tile ceiling.
- The plaster walls have a tall wainscot of large, running bond, glazed ceramic tile and recessed lockers.
- The floor is covered with commercial carpeting.
- Plywood veneer doors are typically in metal frames; doors to classrooms have vision panes.
- The glazed walls between corridors are similar to those to the main lobby, with transoms.
- The glazed wall to the rear entry vestibule has smaller, 9-pane sidelights in narrower frames.

#### Stair Halls

- The ceramic tiles at the full wall height match those in the corridors. The floors are vinyl tile.
- The metal pan stairs with cementitious treads have wood handrails and a balustrade of horizontal/sloping flat metal elements with occasional vertical balusters and a metal newel.
- A pair of plywood veneer doors with vision panes fill one half of the corridor glazed wall; a 12-pane sidelight and opaque lower panel fill the other. A 5-pane transom is above each half.

#### Classrooms

- The plaster ceilings have suspended linear fluorescent fixtures and ceiling fans.
- Some of the plaster walls are lined with affixed acoustic panels.

#### Gymnasium

- Glazed ceramic tiles clad the full height of the tall walls, with a band of windows at the top.
- The floor is wood; the ceiling is acoustic tile.
- The exit signs appear to be original.

**Part 2 – Images**



Figure 1 (top): main entrance

Figure 2 (center left): typical side entrance

Figure 3 (center right): paneled doors with multi-pane transoms leading from main vestibule to lobby

Figure 4 (bottom): auditorium



### **Part 3 – Treatment Recommendations**

#### **Preservation Treatment Level**

Bowen 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)

- Repair and reattach loose and missing leaders.
- The roof was not accessible for this survey. Spalling and efflorescence at the top limestone band and cracks in the east parapet indicate there may be, or have been, some leaks. Inspect the roof and repair as required.
- Repair and restore the northeast entry canopy. Straighten bent cladding, or reclad as necessary. Remove rust. Repair the scuppers to prevent further water damage below. Restore or replace in kind the rusted, flush light fixture with missing glass. If possible, coordinate with the restoration of the other entry canopies.

First Priority (Timeframe: 1-3 years)

- Determine cause of structural cracks, remediate if still active, and repair. Includes:
  - crack in the center of the limestone lintel: window above the northwest door
  - crack at the end of the limestone lintel: window south of the main entry
  - step cracking at the window corners, severe in some instances
  - cracked limestone window sill: north elevation
  - horizontal crack along the bed joint at the second floor framing level: north end of the west elevation
  - cracking at the north face of the rear addition
- Survey condition of all steel lintels. Replace severely rusted lintels. Reset and repoint displaced bricks where rust jacking has occurred and where removed to replace lintels. Repaint all lintels.
- Remove rust and repaint all ferrous elements, including pipe rails and tube section columns at south addition.
- Repair and restore the entry canopies, currently with varying extent of rust and bent cladding. Straighten, or reclad canopies as necessary. Restore or replace in kind the flush light fixtures. If possible, coordinate with restoration of northeast canopy, above.
- Replace in kind the missing wide vertical mullions at second floor west window.
- 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.
- Remove the non-original ferrous fasteners at lettering above main entry. Seal the holes remaining.
- Remove extraneous ferrous elements from building exterior. Patch as required.
- Repair, resecure, or replace deteriorated wood elements as necessary, including water-damaged bottoms of door frames. Paint all wood elements.

- Properly prepare and repoint cracked, chipped, spalled, and missing mortar joints, including at window sills, at joints inappropriately filled with sealant or inappropriately hard mortar, and where water damaged below the northeast entry canopy.
- Repair and repaint the peeling exterior ceiling surfaces of the south addition.
- Repair cracks in limestone, including near the flagpole. Replace poor limestone patches with Dutchman repairs, including at entry frame.

#### Second Priority (Timeframe: 3-5 years)

- Replace cracked, broken, spalled, and missing bricks, in various locations. Includes: northeast and southwest corner; under northeast entry hood; at the chimney.
- Conduct a thorough survey of the window condition, including sash, frame, lintel and hardware. Initial exterior inspection indicates there may be some water infiltration into the vertical mullions, but are otherwise generally in good condition. Evaluate in conjunction with daylighting, ventilation and energy efficiency strategies (beyond the scope of this survey), to prioritize the timing of replacement. At the time of the next replacement, replace with operable windows matching in appearance to the original windows.
- Clean the building exterior, including:
  - Biological staining: north elevation; window sills; below the entry canopy scuppers
  - Water staining: at the limestone cornice band; at the limestone front entry, below the entry canopy scuppers
  - Copper staining: south of the main entry; at the northwest door; at the window lintel above the northwest door
  - Efflorescence: at limestone belt courses; below the northeast entry hood (address the cause first); scattered
  - General staining: front entry; chimney
  - Rust staining: at the lettering above the main entry

#### Maintenance (Timeframe: Ongoing)

- Continue regular maintenance of character-defining features.
- Maintain all gutters, leaders and drains to keep clog-free.
- Monitor spalling limestone bands for further damage.

### **Interior Recommendations**

#### Critical/Urgent (Timeframe: As soon as possible)

- Investigate all water damaged locations, and repair all active leaks. Includes:
  - peeling paint in the first floor north corridor
  - peeling paint and plaster on the east stair well ceiling

#### First Priority (Timeframe: 1-3 years)

- Replace in kind the missing acoustic ceiling tiles in the auditorium.
- Sensitively design any code-required stair railing alterations to avoid negative impacts to the original design intent.
- Original floor tiles in many spaces may be vinyl asbestos. Most have been covered and encapsulated or replaced. Some are worn, including in the stair halls. Test floor tiles for asbestos. If positive, abate or encapsulate.

#### Second Priority (Timeframe: 3-5 years)

- Investigate above the acoustic tile ceiling in the main lobby. The pilasters appear as though they may not be fully visible at the top. If possible, restore main lobby ceiling to full height.
- Repaint the stair treads and metal stair elements. Refinish the wood handrails.
- Refinish the wood doors. Prioritize the doors that have the most wear, such as at the front entry vestibule.



Phase II: Analysis of Historically Significant City Buildings, Newton, Massachusetts  
Bowen Elementary School  
DRAFT 4/6/2012

- Repair water-damaged surfaces, after leaks have been mitigated. See above.
- Repaint all painted surfaces.
- Pipes run through interior transoms in some locations. Investigate options for relocating pipe runs. Restore transoms.

Maintenance (Timeframe: Ongoing)

- Continue regular maintenance of character-defining features.