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

## **Building Analysis**

## **Crystal Lake Bath House**



Address: 44 Rogers Street Year of Construction: 1930

Level of Significance: Moderate

Eligible for individual listing on the National Register of Historic Places

Recommended Treatment Level: Rehabilitation

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

## **Building History**

The late 19th century witnessed a movement across New England to preserve forests, meadows, mountains and fens. The Appalachian Mountain Club, the Massachusetts Audubon Society and the Trustee of Reservations were all organized during this time period. Locally, there were a number of village improvement associations that formed throughout Newton. Through the efforts of these organizations and the gifts of property of private citizens, many playgrounds and small parks were created throughout Newton by the beginning of the 20th century.

As part of this movement, the Metropolitan Park Commission was created in 1892 by Massachusetts to establish parks, especially along rivers in and around Boston. Hemlock Gorge in Newton Upper Falls was the first land acquired by the MPC in 1893; two parcels of land on the Crystal Lake shorefront followed only a year later. The southern parcel was developed in the 1920s for swimming and ice skating.

Previously known as Wiswall's Pond and Baptist Pond, Crystal Lake acquired its present name in the early 1800s for marketing purposes when ice harvesting was a big business here. With the advent of electric household refrigeration in the early 20th century, the ice harvesting business died out and the lake became a recreational venue. Ice skating became very popular; there were over 80,000 skaters in 1930 alone. 1956 Olympic gold medalist Tenley Albright practiced here as well.

The Crystal Lake Bath House, designed in a Spanish eclectic style by architect and Newton Highlands resident Herbert Warren Colby, was constructed in 1930. A long, rectangular rear extension was added in the 1970s. The building has served an important function for the City of Newton since construction, providing access to Crystal Lake to the public.

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 Underwood Elementary School in 1924 and the Stables and Garage on Elliot Street for the City of Newton, which was constructed in 1926.

### Level of Significance

The Crystal Lake Bath House has been an important part of community life in Newton since construction. The building's Spanish eclectic design is also unique for public buildings within the city. Eligible for the National Register as an individual building under Criteria A and Criteria C.

## Bibliography

Carter, Allison. "The Lake of Many Names." Newton Patch. December 22, 2010. http://newton.patch.com/articles/the-lake-of-many-names (accessed December 15, 2011).

Friends of Crystal Lake. "Crystal Lake History." <a href="http://www.friendsofcrystallake.org/crystal-lake-history">http://www.friendsofcrystallake.org/crystal-lake-history</a> (accessed August 25, 2011).

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.

Husher, Jean M. "20th Century Brings Success Preserving Public Open Spaces". Newton Tab. February 10, 2000. http://www.newtonconservators.org/husher.htm (accessed November 28, 2011).

Massachusetts Historical Commission, "Form B NWT.2900—44 Rogers Street". 1997, 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" (last modified September 23, 2009)

<a href="http://www.crystallakeconservancy.org/crystal-lake-a-brief-history.html">http://www.crystallakeconservancy.org/crystal-lake-a-brief-history.html</a> (accessed October 27, 2011).

## PART I - Analysis of Historical Significance: Historic Images



Figure 1: postcard from the 1940s. (Credit: Misspreservation.com)



Figure 2: postcard detail. Note the ramps at the north and south porch bays.

## Part 2 - Description of Historically Significant Features

### **Exterior Visual Character**

#### Setting

• Facing east towards Crystal Lake. The MBTA Green Line tracks are directly adjacent to the south edge of the property; this is otherwise a residential neighborhood.

## Shape

- Two and a half story rectangular main building adjacent to the lake connected to a long, narrow rectangular one-story rear extension. The second story of the main building is level with the first story of the extension, due to the downward slope of the land to the lake. A stair tower is located at the north side of the rear extension.
- The 14 bays of the rear extension typically consist of a single window or door opening, and are separated by simple buttresses. Leaders are centered periodically on the buttresses.

## Roof and Related Features

- The main building has a hipped roof at the upper level and overhanging eaves that form an arcaded porch below at three sides of the building. Both are clad with asphalt shingles, with aluminum gutters, leaders, and parapet flashing.
- A portion of the rear extension's flat roof supports a fenced-in roof deck. A stepped parapet at the west elevation and sloped, translucent skylights project above the roofline.
- The stair tower is roofed with translucent panels pitched to the north.
- The cementitious porch ceiling panels span between steel joists.

## **Openings**

- Windows are typically set in flush openings with simple, rectangular sills with upturned ends
  in the same stucco finish as the rest of the building. They are typically protected with
  painted metal grates.
- Windows are inset into the main level of the main building below the porch roof.
  - o 6-over-6 wood double-hung, with multiple layers of metal grates and mesh. (one lower sash has been replaced with single pane)
  - Multiple aluminum panes, two of which are operable, are set within a single large masonry opening.
- Three-paned windows with metal grates overlook the porch roof of the main building.
- The rear extension has rectangular 4-paned operable windows set high in the wall. Some have since been replaced with plywood panels, louvers, or translucent panels.
- Two rolling garage doors at the lower level of the main building face the lake. Double doors are present at the side and back of the rear extension facing the parking lot.

## **Projections:**

- An enclosed stair tower on the north elevation leads to a roof deck.
- There is a brick chimney at the west side of the hipped roof.

## Trim and Secondary Features:

 Previous metal railings spanning between the arcade piers have been replaced by chain link fencing attached to standard floor-mounted pipe railing.

## Materials

Painted stucco on terra cotta block. CMU upper level of stair tower, concrete floors.

### Craft Details

The openings at the arcaded porch are stepped rather than arched.

### **Interior Visual Character**

Individually Important Spaces

Rear Extension, West End

- The long, rectangular rear extension is squeezed in the middle by ancillary spaces into a corridor; it opens up at the east and west ends into larger spaces.
- A large, sliding wall panel on a metal ceiling track separates the east and west ends. When open it slides into the adjacent fire panel room.
- The painted cementitious ceiling panels spanning between steel joists are hidden by dropped, wood fiber acoustical tiles with integral light panels.
- Two translucent skylights, pitched to the east, pop up above the roofline; a third skylight
  opening has been filled in with plywood and modified to serve as the air intake for the
  exposed metal ductwork.
- The terra cotta exterior walls, stack bond CMU interior partition walls and concrete floors are all painted.
- A row of lally columns on blocks supports the center of the span of each bay.
- There are many doors types, including hollow metal, hollow wood, and pebbled aluminum.
- There is a built-in information desk at the north side.
- A water fountain, currently under repair, is set in an integral recess in the partition wall.

## Rear Extension, East End

- The ceiling, wall and floor conditions of the Rear Extension, West End extend into this space; see above.
- A fieldstone rubble fireplace with two niches for wood storage and a quarry tile hearth is centered on the east wall.
- Wood paneling lines the remainder of the east wall and extends along the north and south walls. Bright orange accordion doors span between the fireplace and the paneled walls.
- A built-in wood counter with shelves on the back side occupies the southeast corner of the space. It has a wood plank surface over plywood construction.

## Main Building

- The interior room of the main building is surrounded by porch on three sides, with a fireplace wall to the west.
- Linear fluorescent light fixtures are suspended from the wood fiber acoustical tile ceiling.
- The floors are painted concrete.
- The walls are clad in wood paneling, with a decorative pattern above the mantel.
- A rubble stone surface on the lower half of the fireplace wall is set below a simple wood trim mantel.
- A partial height partition at center of the room blocks the east half from view.

## Related Spaces

#### Stair Well

- The translucent ceiling is supported on steel angles.
- The painted terra cotta block wall at lower level transitions to painted stack-bond CMU (single wythe) at the upper level. In two locations two CMUs have been removed for ventilation; wire joint reinforcement at the bed joint is exposed.
- The painted metal pan stair has concrete treads.

### Garage

• The exterior walls are exposed terra cotta block; non-original partition walls are gypsum wallboard on light-gauge metal framing. The ceiling and floor are exposed concrete.

## Part 2 - Images









Figure 3 (top): view of the Bath House from the west.

Figure 4 (left center): the interior of the main building has been finished with a stone fireplace and wood wall surfaces

Figure 5 (left bottom): view of the rear extension interior, looking west. The ceiling track for the sliding wall panel is in the foreground.

Figure 6 (right): the porch provides a shaded exterior space with views of the lake

### Part 3 - Treatment Recommendations

### **Preservation Treatment Level**

The Crystal Lake Bath House retains most of its original design features and materials, but also exhibits alterations over the years in keeping with its purpose. To allow the Bath House to remain a valuable resource for the City of Newton 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 level assumes that more repair and replacement of historic material will be required than is called for in a more preservation-based approach. The emphasis is placed on protecting and maintaining historic building material and significant features while providing an efficient contemporary use of the building.

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)

- The roof was not accessible for survey. Water damage on the interior and exterior indicate the presence of leaks in many locations, especially at the stair tower. Inspect the roof and repair as required. The roof condition appears to be the source of the majority of the problems on the interior.
- Locate and mitigate the source of water damage:
  - o at the southwest corner of the westernmost bay
  - o at the northeast and southwest corners of the porch ceiling
  - o at the stair tower; the full tower roof runoff hits the shaded, north side with minimal drip edge.
- Review the rainwater management strategy to ensure water drains away from building.
- Replace bent segments of leaders.
- Redirect the leader at the southeast corner to empty away from the building and ramp; it currently empties directly onto the accessibility ramp.

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

- Repair the large holes in the stucco and terra cotta at each pier where previous railings were removed. (typical)
- The porch roof appears to be sagging at the northwest corner. Investigate its structural soundness and repair as necessary.
- Repair or replace deteriorated wood elements, including wood eaves and the bottoms of garage door frames. Paint all wood elements, including door frames.
- Remove rust and repaint all ferrous elements, including: steel joists at porch roof; exterior conduit; base of current, non-original pipe rails at chain link fence railings.
- Repair cracks and missing chunks of concrete in the porch floor, including at the drip edge.
- Thoroughly survey windows. Repair as necessary.
- Investigate the horizontal cracks along the bed joints of the single-wythe stair well parapets.
   Reinforce if necessary; inspect for the possibility of rust jacking at the wire joint reinforcement.
- Reattach loose metal grates over windows. Provide new grates where missing.
- Replace the flashing at the various roof intersections with clean, properly-designed flashing.
- Repair the cementitious porch ceiling, after the source of water damage has been remediated; see above. Deterioration includes rusting joists and rebar; peeling paint; failed previous patch of plaster on metal lath.

• Non-breathable paint is exacerbating the moisture problems on this building. Carefully remove existing paint, and repaint using breathable, mineral paints. If possible, coordinate with paint analysis, below.

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

- Patch missing or poorly patched areas of stucco to match existing adjacent stucco.
- Clean the building exterior, including:
  - o water staining: at piers; below outdoor shower;
  - biological growth: below leaders, at ramp; below outdoor shower; along bottom of most of building perimeter (possibly rising damp); severe at various locations along the north elevation
- Conduct paint analysis to determine the original exterior paint colors, or if it was painted at all. Repaint with historic colors, using breathable, mineral paints.
  - -paint peeling at south elevation
  - -mismatched paint in various locations
- Remove the paint from the chimney.
- The small window between the garage doors has been infilled with a small ventilation louver. Evaluate needs. Reinstall the window, or if necessary, install a louver compatible with the size of the masonry opening.
- Investigate the west parapet for evidence of the original coping.

## Maintenance (Timeframe: Ongoing)

- Continue regular maintenance of character-defining features.
- Maintain all gutters, leaders and drains to keep clog-free.

## **Interior Recommendations**

Critical/Urgent (Timeframe: As soon as possible)

- Determine and repair the cause of water infiltration; coordinate with critical exterior recommendations, above. Includes:
  - o At the stair well interior
  - At the stair well wall exteriors, located in the rear extension east end and fire panel room
  - At the plywood skylight infill

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

- Repair the damage in the stair tower, after mitigating the sources of the water damage. Includes:
  - Inspect the structural soundness of the rusted steel joists and the top concrete stair landing, and the CMU walls. Repair as necessary.
  - O Clean the severe biological growth and salt deposits.
  - o Repaint.
- The dropped acoustical tile ceilings obscure the actual ceiling and condition. Inspect, particularly where water damage is visible. Repair as necessary. Includes:
  - At the southwest room and fire panel room: repair cementitious panels. Inspect the structural integrity of the rusted steel joists. Repair or replace as necessary.
  - O At the stair tower wall within the rear extension, east end.
  - Provide appropriate forms of adequate passive ventilation, such as operable windows or louvers, to ventilate without allowing water into the space or the wall assemblies.
- Replace damaged wood fiber acoustic panels, scrape and repaint walls, clean and repaint water-stained floors.

- Remove rust and repaint all ferrous elements, including steel joists, stairs, handrails, door jambs.
- Repair or replace in kind the water-damaged painted plaster-on-lath ceiling surface of the stair tower doorway.
- Repair as required the plywood skylight infill.
- Determine and repair the cause of missing paint in various locations on the concrete floor where it is unlikely be just from general wear, including at corner behind information desk. Repaint the floor.
- Replace loose and missing vinyl tiles and peeling vinyl baseboard, including in bathrooms.

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

- Clean the soot staining on the stone fireplace surround directly above fireplace
- Clean the smudged wall paint off the wood panel walls.
- Repaint the interior walls.
- Refinish the wood counter in rear extension, east end.

## Maintenance (Timeframe: Ongoing)

• Continue regular maintenance of character-defining features.