

2011 NOMINATION FORM

Ida Lee Willis Memorial Foundation Historic Preservation Awards Program

NOMINATIONS must be postmarked or received in the Kentucky Heritage Council office by Monday, April 11. Entries may also be submitted via email to kyheritage@ky.gov or by fax at 502-564-5820. For each entry, submit a completed nomination form, narrative description and supporting documentation to:

Kentucky Heritage Council / State Historic Preservation Office
300 Washington Street
Frankfort, KY 40601
ATTN: Ida Lee Willis Awards

1. Nominee

Name Louisville Water Company Pump Station 1 - Exterior Restoration

Title / Organization Louisville Water Company

Address 3005 River Road

City Louisville State KY Zip 40207

Phone 502-582-2500 Email seggers@knbarch.com,
cbowling@knbarch.com

2. Award

(check one)

Memorial Award Preservation Project Award Service to Preservation Award

3. Description

Include a brief narrative description of the project(s) the nominee has accomplished. Relate this description to the criteria for the appropriate award.

4. Supporting Documentation

Attach or enclose any photographs, articles, publications or letters of support for the nominee that would assist in the determining the impact of his/her contribution. Before and after photographs should be included for a Preservation Project Award. When submitting by mail, materials may also be submitted on a CD/DVD attached to the nomination form. When submitting via email, please submit all files in one email in PDF format; do not send multiple files. For questions, contact Diane Comer at 502-564-7005, ext. 120, or diane.comer@ky.gov.

5. Submitter of Nomination

Name Chris Bowling, AIA, LEED AP BD+C, NCARB

Title / Organization K. Norman Berry Associates Architects PLLC

Address 611 W Main Street

City Louisville State KY Zip 40202

Phone 502-582-2500 Email cbowling@knbarch.com

April 11, 2011

Kentucky Heritage Council/State Historic Preservation Office
300 Washington Street
Frankfort, KY 40601
ATTN: Ida Lee Willis Awards

Dear Sirs:

This narrative is to consider The Louisville Water Company Pump Station 1 for the 2011 Ida Lee Willis Memorial Foundation Historic Preservation Awards Program for the Preservation Project Award.

Project History

The Louisville Water Company Pump Station 1, National Register Number 71000348, was constructed in 1858-60. It was constructed in the Greek Revival Architectural Style with the engine room as the center temple form flanked symmetrically on the east and west by smaller structures accented with similar details. Accompanying the Pump Station is a 169 foot tall stand pipe which was previously restored.

Project Scope and Existing Conditions

The project consisted of a full exterior renovation of the existing Pump Station, not including the stand pipe. The existing structure consisted of the following materials: multi wythe painted clay brick masonry; cast iron pediments, pilasters, sills, column bases, and brackets; painted wood eaves, pediments, trim, doors and frames, and windows; terra cotta modillions, egg and dart band, and column capital components; limestone foundation; slate roof; paint grip galvanized gutters and down spouts.

The deterioration of the Pump Station consisted of several failing items such as: rusting and deterioration of the paint grip galvanized gutters, valleys, and downspouts which allowed water to enter the building causing wood to rot and deteriorate; multi layers of paint on the masonry prevented the masonry to breath causing rising damp around the perimeter of the building that caused paint to scale and flake both on the exterior and interior; the face brick had caulked mortar joints and several brick were spalling; terra cotta decorative pieces were broken, missing, or previously replaced with plaster replicas which were severely deteriorated; the cast iron had begun to rust through the paint and several areas had failures resulting in cracks; the window glazing putty was deteriorating; the replaced window panes from the 1970's were fogging due to failing seals; in several places the wood on the doors and windows was rotted and needed replacement; the door hardware was broken or beyond repair; the hand and guard rails were rusting and failing in several areas; the slate roof had broken or missing shingles throughout; the limestone base was spalling.

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Project Approach

The approach of the restoration was to follow the Preservation Briefs from the National Park Service as closely as possible and use the existing historic drawings as reference for the original materials. The exterior renovation of the building consisted of the following:

- Removing all the paint from the masonry to analyze the mortar joints and brick and paint it with a breathable coating to allow the masonry to breathe.
- The damaged eaves and built-in gutters were disassembled, rotted wood was replaced, the eaves and built-in gutters were reconstructed, and items were painted.
- The slate roof and paint grip galvanized metal was removed, roof substrate was repaired, new Buckingham slate was installed, and all metal was replaced with lead coated copper. This work was performed by Patrick D. Murphy Co., Inc. Architects.
- The terra cotta elements were all documented, broken pieces were either repaired in place or replaced with replicated elements in terra cotta. Missing terra cotta elements were recreated in terra cotta and installed.
- The cast iron was repaired in place and painted.
- The wood doors and windows were all removed, refurbished, reinstalled, and painted. All the door hardware was replaced with the exception of some historic pulls. Window panes which were replaced in the 1970's that were failing were replaced with new insulated panes. Historic single pane glass which was broken was replaced with historic single pane glass.
- Two-thirds of the paint on the wood trim and eaves was removed, the wood repaired or replaced, the surfaces prepped and primed, and the wood was painted.
- The hand and guard rails were all removed and replaced with identically detailed aluminum railings of the same color which meets current ADA Guidelines.
- The limestone base was cleaned and a consolidant applied to strengthen the stone and protect it.
- The face brick mortar joints were 80% re-pointed and the face brick which were failing were replaced. Some interior plaster due to rising damp was repaired and painted as well as some re-pointing of exposed masonry.
- Replication of the north door pediments and pilasters were created out of gypsum fiberglass reinforced concrete matching the original drawings in scale, detail, and finish.

In addition to the exterior restoration additional beautification and maintenance items were included. The south area between the stand pipe tower and the Pump Station had a previous terrace. Improvements to this area include installing a concrete slab with decorative complementary paving that extends to the entry drive. The existing entry drive and parking lot received a new topping, improved drainage, and curbs. Several manholes which access water pipes were raised and replaced. The northern lawn between the Ohio River and the Pump Station was improved with a new terrace with matching paving to the southern terrace, accent lighting, landscaping, and screens to shield the HVAC equipment.

K. Norman Berry Associates Architects PLLC

The project is 95% complete to date and is scheduled to be complete by the end of April 2011. The desires of the Louisville Water Company were to restore a Louisville icon using methods and materials which would minimize maintenance, stay true to the historic nature of the building, improve the look, and extend the life of the building.

Sincerely,

K. NORMAN BERRY ASSOCIATES ARCHITECTS PLLC

A handwritten signature in black ink, appearing to read "Chris Bowling". The signature is stylized and includes a small "on" written below the main name.

Chris Bowling, AIA, LEED AP BD+C, NCARB
Project Architect

BEFORE
SOUTH FACADE



BEFORE
SOUTH FACADE



BEFORE
EAST FACADE



BEFORE
NORTH FACADE



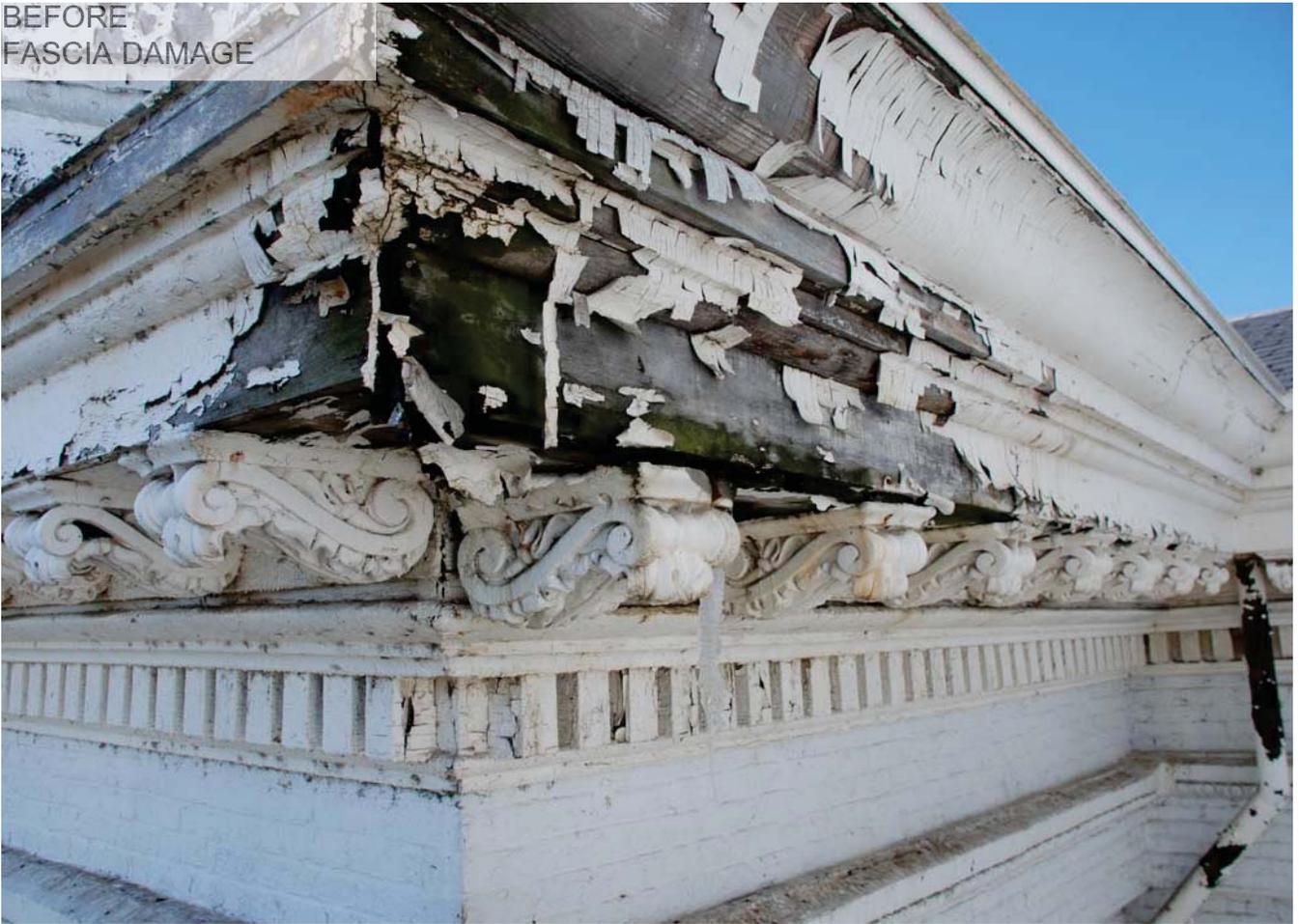
BEFORE
PEDIMENT DAMAGE



BEFORE
FASCIA DAMAGE



BEFORE
FASCIA DAMAGE



BEFORE
MODILLION DAMAGE



BEFORE
CAPITAL CONDITION



BEFORE
CAST IRON DAMAGE



AFTER
SOUTH FACADE



AFTER
SOUTH FACADE



AFTER
EAST/NORTH FACADE



AFTER
NORTH FACADE



AFTER
NORTH FACADE
NEW GFRC
PEDIMENT/
PILASTER



AFTER
TYPICAL
RESTORED CAST
IRON PEDIMENT,
PILASTERS, AND
BRACKETS



AFTER
RESTORED
TERRA COTTA
BRACKETS



AFTER
SOUTH FACADE



AFTER
SOUTH FACADE



Summation

The project is 95% complete and scheduled to be complete by the end of April 2011. There are several noticeable incomplete items in the “After” photos which are slated to be complete by the end of April these are:

- Noticeable in the photos are several areas on the brick where efflorescence and flashing is occurring on the face brick which has caused the breathable paint to fail. These areas are currently being treated and will have a final coating applied by the end of April.
- Due to the long lead time for the terra cotta and weather restrictions some of the terra cotta does not have a finish coat. The final painting will be complete this week.
- Due to upper level work with lifts the landscaping has not been installed and is slated to be installed by the end of April.
- Some areas need caulking and that will be complete at the end of April.
- The northern terrace will have seed and straw which will occur at the end of April.
- A final cleaning is scheduled at the end of April.