

To: SHPC  
From: Kristi Chase, Preservation Planner and  
Brandon Wilson, Executive Director,  
RE: Staff Recommendations 8/16/11

**HPC 11.62 – 396-398 Broadway, 1874 Second Empire Double Houses**

6/30/11

Applicant: James W. Rogers, Contractor for Edward Harvie, President of the 396-398 Broadway Condominium Association, Owners

Historic and Architectural

Significance

See attached survey form.

Existing Conditions

This is the center building in a grouping of three similar Second Empire double houses constructed by Cutler Downer. For several years, the owners have been trying to find the source of a leak that has damaged the wall and ceiling on the second floor.



Proposed Work and Recommendations

The Applicant seeks a **Certificate of Non-Applicability (C/NA)** and a **Certificate of Appropriate (C/A)** for the following:

1. Remove approximately 100 SF of roofing system on flat roof (C/NA);
2. Repair sheathing as necessary (C/NA);
3. Install EPDM and flashing as necessary (C/NA);
4. Remove and replace any abutting rotted or damaged wood behind the dormer consoles (C/NA);
5. Re-install decorative consoles with new flashing (C/NA).

Section 10 of the Historic District Ordinance states that "Nothing in this ordinance shall be construed to prevent the ordinary maintenance, repair or replacement of any exterior feature within the historic district that does not involve a change in design, material, color or the outward appearance thereof..." Therefore, a **Certificate of Non Applicability** will be issued for the above repairs.

6. Remove existing 2/2 double-hung window on 3<sup>rd</sup> floor east side rear dormer (C/A);
7. Install Pella™ Pro-line insulated 2/2 double-hung window within rough opening (C/A).

However, the owner of the 3<sup>rd</sup> floor unit would like to replace his window while all the other repairs are taking place to render the building weather-tight. No information was received about the condition of the window to be replaced. After repeated requests for documentation, photos were taken of the dormer exterior, see attached. These photos of the bottom sash show that the window needs new putty but not other major damage. They do however, show places where water could enter in the areas around the dormer and where the window casing meet the roof

indicating that flashing and metal pans need to be installed. It can be inferred from an e-mail dated August 9, 2011 by the condo owner that his concern is conserving energy.

Initially a vinyl window was proposed but after Staff noted that the Commission would be highly unlikely to grant a Certificate of Appropriateness for this change, Pella™ Pro-line insulated 2/2 double-hung window was suggested instead.

While this window is visible obliquely and from a distance, it is one of 42 windows visible from the street on one of three identical buildings. Staff believes that altering only a single window within the larger context of all the windows on the building and the adjacent buildings would not meet the general *HPC Guidelines*.

## I. GENERAL APPROACH

The primary purpose of Somerville's Preservation Ordinance is to *encourage preservation and high design standards in Somerville's Historic Districts, in order to safeguard the City's architectural heritage*. The following guidelines have been developed to ensure that rehabilitation efforts, alterations, and new construction all *respect the design fabric of the districts and do not adversely effect their present architectural integrity*.

- A. The design approach to each property should begin with the premise that the features of historic and architectural significance described in the Study Committee report must be preserved. In general, this tends to *minimize the exterior alterations* that will be allowed.
- B. Changes and additions to the property and its environment that have taken place over the course of time are evidence of the history of the property and the neighborhood. These changes to the property may have developed significance in their own right, and this significance should be recognized and respected (LATER IMPORTANT FEATURES will be the term used hereafter to convey this concept).
- C. *Whenever possible, deteriorated material or architectural features should be repaired rather than replaced or removed.*
- D. *When replacement of architectural features is necessary, it should be based on physical or documentary evidence of the original or later important features.*
- E. *Whenever possible, new materials should match the material being replaced with respect to their physical properties, design, color, texture and other visual qualities.* The use of imitation replacement materials is discouraged.
- F. The Commission will give *design review priority to those portions of the property which are visible from public ways* or those portions which it can be reasonably inferred may be visible in the future.

*or those for windows and doors which state that one should:*

- 1. *Retain original and later important door and window openings where they exist. Do not enlarge or reduce door and window openings for the purpose of fitting stock window sash or doors, or air conditioners.*
- 2. *Whenever possible, repair and retain original or later important window elements such as sash, lintels, sill, architraves, glass, shutters and other decorative elements*

*and hardware. When replacement of materials or elements is necessary, it should be based on physical or documentary evidence. If aluminum windows must be installed, select a baked finish that matches as closely as possible the color of the existing trim. Investigate weather-stripping and storm windows with a baked enamel finish as an alternative to the replacement of historic sash.*

The Commission is revising its circa 1985 guidelines to reflect more recent concerns. Sustainability issues will be addressed then. In the meantime, the Secretary of the Interior's Standards will be used. Given that the Unit Owner has indicated his concern is with energy loss, Staff reviewed the New Secretary of the Interior Standards for Sustainability

WINDOWS	
RECOMMENDED	NOT RECOMMENDED
Maintaining windows on a regular basis to ensure that they function properly and are completely operable.	Neglecting to maintain historic windows and allowing them to deteriorate beyond repair with the result that they must be replaced.
Retaining and repairing historic windows when deteriorated.	Removing repairable historic windows and replacing them with new windows for perceived improvement in energy performance.
Weather stripping and caulking historic windows, when appropriate, to make them weather tight.	
Installing interior or exterior storm windows or panels that are compatible with existing historic windows.	Replacing repairable historic windows with new insulated windows.
Installing compatible and energy-efficient replacement windows that match the appearance, size, design, proportion and profile of the existing historic windows and that are also durable, repairable and recyclable, when existing windows are too deteriorated to repair.	Installing incompatible or inefficient replacement window units that are not durable, recyclable or repairable when existing windows are deteriorated beyond repair or missing.
Replacing missing windows with new, energy-efficient windows that are appropriate to the style of historic building and that are also durable, repairable and recyclable.	
Retrofitting historic windows with high-performance glazing or clear film, when possible, and only if the historic character can be maintained.	

Staff also reviewed the Stretch Code, which notes that Historic buildings are exempt, see below.

**101.4.2 Historic buildings.** Any building or structure that is listed in the State or National Register of Historic Places; designated as a historic property under local or state designation law or survey; certified as a contributing resource with a National Register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the National or State Registers of Historic Places either individually or as a contributing building to a historic district by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, are exempt from this appendix.

It should be noted that repair and maintenance are first on the list of recommendations, while neglect and then the replacement of historic windows are the first of the actions not recommended.

To quote from e-mails sent to the Condominium association, “The stance of the preservation community is that a properly installed traditional wood window with a good quality storm is as energy efficient as any other replacement window. Old windows were constructed of hardwood and are made to be repaired, whether it be the replacement of a broken pane of glass or one of the sash components. The frames are mortised not stapled. Storms protect the windows and seal them against water damage and air infiltration.

“Modern insulated glass windows are 'maintenance free' which is a euphemism for if it breaks you have to replace it. These windows last between 10 and 15 years, not a century. It can take up to 35 years for the amount of money spent on a replacement window to equal the cost of fuel savings. More heat is lost through roofs and walls than through windows. More energy is used to produce aluminum and vinyl than to grow wood. Vinyl is a carcinogen and does not break down in a landfill. The list of reasons to retain and repair old windows is long.

In this case, the Staff does not believe that the replacement of a single window with a replacement window is the best way to make the building more energy efficient. Weatherization of the building using proper insulation with vapor barriers in the side walls and roof, tightening and maintaining the historic windows, caulking of the window frames, and new properly fitted storm windows would be a long-term solution.

“The Condo Association received a list of people who repair, make, or supply windows, these include Pella which have on rare occasions been approved by the Commission and do need to be reviewed in each case. The most common replacement window that does not require review by the Commission is the single pane Brosco Boston Layout which unfortunately is not constructed with the same quality of wood and workmanship as the historic windows. The Staff understands that they also make insulated glass ones which also need to be reviewed by the Commission.” The Staff recently received the name of a company, <http://www.bi-glass.com/bi-glass-specialists.php> that will retrofit historic window sash with double glazing in order to preserve the historic fabric.

“The Commission has occasionally reviewed and approved insulated glass windows with the following qualifications:

1. The windows are not on the main façade;
2. No Low E coating is preferred because it is reflective in an entirely different manner from older windows. ...
3. The sash and panes of glass should have the same measurements as the existing windows. If a mullion or muntin is used, it should have the same profile as the existing and have a spacer between the panes to draw the eye.”

While the proposed window meets the location qualification, no documentation has been received demonstrating that the proposed window has the same measurements as the existing window. The window comes in a variety of colors had has Low-E coatings. It is likely that it would also be the only window without storms.

The Staff does **not recommend** granting a **Certificate of Appropriateness** because it does not meet the Commission’s Guidelines as noted above, it does not meet the Secretary of the Interior’s Standards of recommended actions on a historic property, and would adversely affect the historic character of the Cutler Downer Second Empire Double Houses on Winter Hill.