A newsletter published by the Raleigh Historic Districts Commission

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COMMUNITY CONVERSATION

The Greenest Building Is The One That Already Exists

Sustainability is making headlines; people are going green by recycling household waste, powering down to conserve electricity, utilizing public transportation, and installing energy efficient appliances. As we incorporate sustainable practices into our everyday lives, it is important to note that historic preservation is a key element in a sustainable lifestyle. Quite simply, the preservation of historic buildings and materials fosters a culture of reuse by maximizing the life

cycle of all resources.

When people consider the energy efficiency of their home, they typically think about their heating and cooling bills. These are obvious and quantifiable measurements. Less visible is the enormous amount of energy already invested in their historic home. A building's stored, or embodied, energy is estimated through a calculation of the energy used to create the building, which involves extracting raw materials, transporting the materials to a production site, creating a new product, transporting the product to its new site, and installing the product. The removal of the building's products or materials for replacement also expends energy through transportation and disposal, providing a substantial contribution to landfills.

Considering this stockpile of energy, it makes sense to avoid the expenditure of additional energy through new construction and instead weatherize the extant structure. Perhaps surprisingly, energy loss is not always solved through the replacement of historic materials. Energy hogs include poorly insulated attics, walls, and floors, as well as uncaulked gaps around win-

dows, doors, and electrical outlets. Taking small measures, such as closing fire-

place and bathroom fan dampers, bleeding radiators, changing furnace filters, installing insulated window treatments, and insulating ductwork can make an appreciable difference in your heating and cooling costs. A home energy audit is a surefire way to identify energy inefficiencies; an auditor performs a battery of tests and can offer suggestions for greening your historic home.

To learn more about home energy audits attend our June Community Conversation (details left) or visit our website at www.rhdc.org.

In sum, buying or rehabilitating an old building puts you ahead of the curve: you are taking advantage of energy and

a taking advantage of energy and materials already utilized. Please read on: this issue of *In the Districts* is dedicated to the topic of sustainability as it relates to historic preservation.

Community Conversation

From Energy Hog to Energy Star: Uncovering Your Historic Home's Hidden Energy Efficiency

> June 10th, 7:00 p.m. Wiley Elementary School 301 St. Mary's Street

Old is the New Green: May is National Historic Preservation Month



Oakwood Cemetery's hilltop Confederate section is a historic landscape familiar to Raleigh for well over a century.

WITHIN THE COMMISSION

Breaking New Ground: Preserving Historic Landscapes

Historic preservation is typically associated with the built environment. Lately, however, the commission has responded to an increasing interest in the preservation of historic landscapes, including sites with archaeological remains, gardens, and cemeteries.

In 2009 RHDC administered an archaeological survey of the historic Latta House & University property, the site of a university founded by the Rev. M.L. Latta, a freed-slave and teacher, to educate underprivileged and orphaned children in Raleigh's black community. Rev. Latta's impressive residence survived on the site until it was destroyed by fire in 2007. The Raleigh Department of Parks and Recreation is pursuing designation of the site as a Raleigh Historic Landmark (RHL).

Raleigh has several historic gardens on its roster of RHLs, including the Rose Garden at the Raleigh Little Theatre and the recently designated Truman & Annie Laurie Williams House & Gardens, which were designed by renowned landscape architect Charles Gillette in 1939.

There has also been interest lately in Raleigh's historic cemeteries. In the last two years City Cemetery and Mt. Hope Cemetery were both listed in the National Register of Historic Places. The Raleigh Department of Parks and Recreation, in cooperation with Raleigh City Cemeteries Preservation, recently submitted an application for the designation of O'Rorke Cemetery, the earliest vestige of the presence of Catholics in Raleigh, as a RHL.

T E C H



I have heard plenty of advice on repairing wood windows, but my old windows are metal. Can these be repaired and weatherproofed?

The restoration of steel casement windows is generally a simple process. The first step is to make a careful assessment of the condition of each window, from which you will develop a rehabilitation



work plan. The project will include removing rust and excess paint using either chemicals or by sanding. Straightening bowed metal may be necessary as well. Depending on the deterioration of the window,

IN THE WORKS

In March, RHDC, Preservation North Carolina, Sustainable Raleigh, and Home Performance NC Inc. cosponsored a contest to give away a free home energy audit. Contestants were asked to demonstrate their need for the audit, which will be filmed and presented in a video about the value of an energy audit in determining the energy efficiency of a historic home. The video will also discuss low-cost, do it yourself measures that property owners can take to improve the energy efficiency of their homes.

The video will debut as part of a Community Conversation, From Energy Hog to Energy Star: Uncovering Your Historic Home's Hidden Energy Efficiency. Please join us on June 10th at 7:00 p.m. at Wiley Elementary School, 301 St. Mary's Street. A panel of experts will be on hand to discuss various issues of sustainability as they relate to historic properties.

On the morning of June 12th, Preservation North Carolina and RHDC will host a Window Workshop which will include a hands-on lesson on how to repair historic wood windows. Visit PNC's website at www. presnc.org for more information.

Please stay tuned to our website, www.rhdc.org, for information on our fall Community Conversation, Celebrating Ordinary Architecture, and the January 2011 encore of A Property Owner's Guide to Historic Tax Credits.

cracked glass and deteriorating window glazing may need to be addressed. Cleaning and lubricating hinges will ensure a working window, and a good coat of paint will prevent the metal from rusting. Finally, caulking the masonry surrounding the window will prevent air leakage. For more information, consult the National Park Service's Preservation Brief 13 (available for download at www.nps.gov).



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GUIDE LINES

Design Guidelines Update

RHDC recently applied for a grant from the State Historic Preservation Office (SHPO) to update and refine the *Design Guidelines for Raleigh Historic Districts*. The *Guidelines* provide property owners with guidance in planning projects sympathetic to the special character of each of Raleigh's historic districts. For the COA Committee and staff, they offer a basis for evaluating proposed changes. In the process, they serve as a valuable tool in RHDC's efforts to preserve, protect, and promote Raleigh's historic resources.

While the current set of *Guidelines* (adopted in 2001) has served the districts well, RHDC has identified several key historic preservation issues where the *Guidelines* do not provide clear direction: archaeological sites; cemeteries; post-World War II and Modern

(1945-65) architecture; infill downtown commercial architecture; sustainability; and new alternative or substitute materials.

The Raleigh Department of Parks and Recreation, as steward to a variety of historic properties and Raleigh Historic Landmarks, will be partnering with RHDC to develop the guidelines for cemeteries and archaeological sites. The *Guidelines* update will support the stewardship of these city-owned archaeological and cemetery sites by outlining current best-practice principles for use in their protection and maintenance.

The *Guidelines* update will be a public process that includes community meetings and online access to draft documents. The project is estimated to begin in August 2010. More information will be available at www.rhdc.org; beginning in August, RHDC will be accepting comments and answering questions through email at guidelines@rhdc.org. ■

CASE IN POINT

Windows

A good example of a commonlyreplaced historic feature is the window. A character-defining element of historic structures, the original window was often tailor-made for its building. You may notice the dimensional quality of true divided lights or the sparkle of wavy glass in certain light. While replacing the windows would be a quick, albeit costly fix, the good news is that there are low-cost, do-it-yourself methods for retrofitting original windows for energy efficiency. Caulking around exterior window openings and interior window trim prevents drafts. Adding weather stripping to the window sashes also prevents air leakage. Finally, the addition of a storm window can make the window as or more energy efficient than a



new window, as the space between the panes of glass and the storm window provide an extra barrier. For more information, please visit our website at www.rhdc.org.

SURPRISING STATISTICS

According to the National Trust for Historic Preservation (www.preservationnation.org):

- Approximately 30% of heat is lost through walls, ceilings, and floors.
- 30% of the time, a replacement window will be replaced within 10 years.
- The typical replacement window lasts about 20 years, compared with the life cycle of a historic window of up to 100 years.
- Replacement windows can save about \$50 a month on heating and cooling bills for an average household. \$50 a month can also be achieved through do-it-yourself techniques, without the capital outlay of \$500-1,000 per replacement window.
- It may take upwards of 40 years to recoup the expenditure of replacement windows.
- "Maintenance-free windows" often have a hidden cost. While single-unit non-wood replacement windows may be easier to clean, the entire unit must be replaced if individual parts fail.
- ¼ of American municipal waste is construction debris.

Other sources report:

- New Science magazine reports that the Empire State Building retrofit will save 105,000 tons of CO2 over the next 15 years.
- Home Energy Magazine reports that retrofitted windows and replacement windows have similar energy savings.
- The Brookings Institution estimates that about 1/3 of the U.S. building stock will be taken down and replaced by 2030.
- The Department of Energy's Home Energy website www.hes.lbl.gov provides an online DIY energy audit.



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COA TALLY

BROADER Δ

Old house owners often hear about federal and state income tax credits available for the rehabilitation of historic buildings. Perhaps less widely known is that homeowners may qualify for federal energy-efficiency tax credits if they take measures to "green" their historic house. The most common misconception is that federal economic stimulus funds for energy efficient home improvements are only applicable to replacement materials. New windows are frequently advertised, but it is important to note that storm windows and doors do qualify for the tax credits and in combination with the old window or door may be more energy efficient than replacement windows. The energy efficiency tax credit program provides a credit for 30% of eligible energy-efficient activities related to your primary residence, generally up to the cap of \$1,500. Methods include the installation of storm windows and doors, weather stripping and caulking, HVAC systems, and water heaters. For information on the program and gualifying improvements, visit www. energystar.gov.

RHDC MEETINGS

RHDC Business meetings: 6/21, 7/19, 8/16. 6:00 PM, Rm. 305, Avery C. Upchurch Gov't. Complex

Certificate of Appropriateness Comm.:

(Application deadline & meeting date) 5/21 for 6/7, 6/21 for 7/6, 7/19 for 8/2, 8/23 for 9/7. 4:00 PM, Rm. 305, Avery C. Upchurch Gov't. Complex

Community Awareness Committee: 6/1, 7/12, 8/3, 9/13 4:00 PM, Rm. 213, One Exchange Plaza

Research Committee: 6/3, 7/1, 8/5, 9/2. 7:30 AM, Rm. 213, One Exchange Plaza

Community Conversations: 6/10; 10/11; 1/24/11

Commission Members

Curtis Kasefang (Chair), Jane Forde (Vice-Chair), Marni Vinton (Sec'y./Treas.), Fred Belledin, John Branch, Matthew Brown, Jannette Coleridge-Taylor, Stephen Cruse, Nick Fountain, Esther Hall, Robert Runyans, Barbara Wishy

Major work (comm. review):	Jan, 'In	Feb. '10	Mar. 10	40r. 70
Approved as submitted			1	2
Approved w/ conditions	4	1	6	2
Approved in part/ denied in part				
Denied				
Deferred				
Minor work (staff approved):	6	7	6	10

CONTACTS

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Staff support for the RHDC is provided by the Raleigh Department of City Planning, www. raleighnc.gov.

The mission of the RHDC is to serve as City Council's official historic preservation advisory body to identify, preserve, protect, and promote Raleigh's historic resources.