One of the most important issues facing the world now is climate change and our responsibility to protect the environment, as much as possible, from further damage. In this issue, CPN reports on some aspects of the sustainable preservation movement. We begin on page 6 with excerpts from a speech by Richard Moe, president of the National Trust for Historic Preservation, on the role of preservation in promoting sustainability. Following that are descriptions of an energy analysis of the Trust’s own headquarters and of two historic buildings where green technology goes hand-in-hand with preservation. And in between are sidebars explaining LEED—a system for quantifying the “greenness” of building projects—and an update on measuring the energy embodied in historic structures. There will be more to come, but the headline really says it all.

—Christopher Wigren
From the Executive Director

Several events in the past month have helped us at the Trust to celebrate current friendships and revive some old ones.

On Sunday afternoon, June 1st, Board chairman Jeffry Muthersbaugh and his wife Maryan hosted a tea for former trustees, current trustees and Advisory Council members at their lovely house in Haddam. Jeff and Maryan own two antique houses, one in Bethel and one in Haddam. They have restored both, almost completely by themselves, and continue to look around for yet other houses to restore. The tea, on their terrace overlooking the Connecticut River, brought together our newest trustees with trustees who served in the 1990s. Swapping stories and hearing about the 21st century Trust while enjoying rich cakes and excellent tea added to the pleasure of just being in a beautiful spot on a Sunday afternoon.

Especially gratifying was former trustee Charles Lee’s news that the Greenwich Planning and Zoning Commission had recently denied a permit to allow a 26 bathroom, 27,000 square foot “home” to be built on bucolic Simmons Lane. Charles graciously thanked the Trust for the role we played in helping to defeat the application. The proposed building, by its size and lot coverage, would have completely overwhelmed the look and feel of a country lane, part of the historic landscape created by Zalmon Simmons in the 1920s.

Later that afternoon, more than 300 cultural heritage/preservation and humanities loyalists celebrated at Wesleyan University the 35th anniversary of the Connecticut Humanities Council. The Council, under the 30-year leadership of Bruce Fraser, is now the third largest statewide humanities organization in the country. To the Trust, the Council has been an invaluable partner and supporter—they granted us the first funds that allowed us to start our Historic Preservation Technical Assistance Granting program in 2003. Congratulations to Bruce and to the wonderful Humanities Council.

We welcomed new trustees officially at our board meeting on June 12, where they voted to add J. Barclay Collins to the distinguished members of the Advisory Council. Barclay is a former trustee and a generous donor to the Trust. He lives in the King-Hart house in Sharon, which was recently listed on the National Register of Historic Places and where he will host a “get to know the Trust” party in August. If any of you would like to do the same in your town, please give us a call.

Circuit Rider Gregory Farmer will spend a week this summer in Portland, Maine, at the National Trust’s very intensive program, Preservation Leadership Training. PLT, as it is known, is an on-the-ground, hard-core training program for fledging and veteran preservation professionals as well as community volunteers. The mix makes for a dynamic week of problem solving and learning. If you are interested in honing your skills and increasing your understanding of preservation “best practices” and law, do consider a week at PLT next year.

—Helen Higgins

Help keep us in touch...

As we move into the 21st century, the Internet has become a more convenient and essential means of communication. So that we can keep you abreast of the latest developments on the preservation front in Connecticut, the Trust is requesting that you send a simple email to email@ctrust.org from your preferred email address so that we may update your account. This is for our use only and will be shared with absolutely no one.

Upcoming Meetings of the Connecticut Historic Preservation Council

August 6, 2008, at 9:30 a.m.
September 3, 2008, at 9:30 a.m.

All meetings take place at the Commission on Culture and Tourism, 1 Constitution Plaza, Hartford

For more information call (860) 256-2800

The Connecticut Trust for Historic Preservation is a nonprofit statewide membership organization established by a special act of the State Legislature in 1975. Working with local preservation groups and individuals as well as with statewide organizations, it encourages, advocates and facilitates historic preservation throughout Connecticut.

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New Board Members

The Connecticut Trust welcomed eight new members to its Board of Trustees, as of May 1. The new Trustees bring a wealth of experience and knowledge to the Trust’s work, and they have already jumped right in.

**Scott Bates** (Stonington) currently works for the National Security Center for National Policy, a Washington think tank, and serves on the Stonington Borough Board of Burgesses. Scott previously worked on Capitol Hill and for Governor L. Douglas Wilder of Virginia, who appointed him Secretary of the Commonwealth. Scott holds a J.D. from the University of Virginia and a MSc in International Relations from the London School of Economics.

**Rebekah A. MacFarlane** (Hartford) is Senior Director of Business Development at Colt Gateway and also coordinates efforts for Coltsville to become a National Park, working with the National Park Service and Connecticut’s Congressional delegation. She serves on the boards of the Hartford Stage and Trust House and is the vice-chairman of the governor’s Small Business Advisory Council. Before coming to Colt, Rebekah worked as a producer at Martha Stewart Living Television and as a television news reporter.

**Kelvin Roldán** (Hartford) was born in Puerto Rico and raised in Hartford’s Stowe Village housing project. He is the youngest Hispanic ever elected to the House of Representatives. Previously he worked on Mayor Eddie A. Perez’s executive staff. Kelvin holds a BA from Middlebury College and is an MA candidate in public policy at Trinity College. He serves on the Board of Directors of the Hartford Youth Scholars Foundation, the Greater Hartford Arts Council, and the Wadsworth Atheneum.

**A. Robert Faesy, Jr., AIA** (Wilton) is the original founder of Faesy-Smith Architects. He specializes in single-family homes, cluster housing and pre-built modular houses, with special attention to historic preservation, energy conservation and the environment. His office has also been responsible for all the work at the three “campuses” of the Wilton Historical Society. Bob chaired the Wilton Historic District Commission for 30 years and has worked closely with the Ridgefield HDC. He graduated from the Yale School of Architecture.

**Richard N. Wies, AIA** (Branford) is a principal in Gregg Wies & Gardner Architects, LLC, based in New Haven. Prior to that, he worked for the architecture firms of Herbert S. Newman and Allan Greenberg, both also in New Haven. He holds a Master of Architecture degree from North Carolina State University and a Bachelor of Arts from Hampshire College. He is a past president of the Board of Directors of Schooner Sound Learning.

**Douglas J. Williams** (Thompson) is an attorney with Boland, St. Onge & Brouillard in Putnam, practicing in the areas of real estate, criminal law, and workers’ compensation. He holds a J.D. from Washington & Lee University and a B. A. from Trinity College. Doug is a member of the Windham County and Connecticut Bar Associations and has served the town of Thompson as Selectman, Treasurer, and First Selectman.

**Hiram Williams** (South Kent) is an investment banker with Vector Capital LLC. He holds degrees from Georgia Institute of Technology and Harvard University Graduate School of Business Administration. Hiram is active with the Weantinoge Heritage Land Trust and the Planned Development Alliance of Northwest Connecticut.
**Technical Assistance Grants**

The Connecticut Trust awarded $274,947 in Historic Preservation Technical Assistance Grants in April. Since 2003, the Trust has distributed $1.173 million through this program.

The grants are part of a comprehensive historic preservation technical assistance program of the Connecticut Trust for Historic Preservation, in collaboration with and with generous funding from the Connecticut General Assembly, the Connecticut Humanities Council, and the Commission on Culture and Tourism. The grants are intended to encourage and support community efforts in planning for the preservation, restoration, and rehabilitation of historic buildings and places.

**Town of Bozrah:** preservation plan for Maples Farm Park, $5,000.

**Barnum Museum Foundation, Bridgeport:** preservation and restoration plan, $25,000.

**St. Bridget’s Roman Catholic Church, Cornwall Bridge:** building assessment and designs for addition, $6,000.

**Town of Eastford:** historic structures report, Union Society of Phoenixville House, $2,000.

**Town of Easton:** cultural heritage survey, phase II, $9,625.

**Merwinsville Hotel Restoration, Inc., Gaylordsville:** preservation and restoration plan, $5,000.

**First Church of Christ, Congregational, Glastonbury:** feasibility study and restoration plan, Thomas Hale House, $12,500.

**Brainerd Memorial Library, Haddam:** drawings and specifications for the entryway, $6,500.

**P.L.A.C.E., Hamden:** preservation plan and design development drawings, Rectory Barn, $22,500.

**Hartford Preservation Alliance, Hartford:** State Register nomination, Connecticut Mutual Insurance Company building, $5,000.

**Harrington Literary Society, Middletown:** National Register nomination, Psi Upsilon house, Wesleyan University, $2,300.

**New Canaan Preservation Alliance, New Canaan:** strategic plan, $7,500.

**Elm City Parks Conservancy, New Haven:** Court Street landscape conservation and preservation plan, $11,800.

**Westville Village Renaissance Alliance, New Haven:** historic resources survey, $8,000.

**Columbus House, Inc., New Haven:** restoration drawings and specifications, Beard house, $22,500.


**Madison, CT**

A complete magical restoration of the 1722 David Field House, splendid history, 4 acres, additional acres available, old specimen trees, stonewalls, barn w/ stables, green building materials, 4 fireplaces, central air, a cook’s kitchen, 3 BR, 2.5 bath. 3 miles from Long Island Sound, 2 miles from I-95, 2 hours from NYC by train or car.

Please call Peter Gulick @ 203 996 6151 and/or visit gulickspradlin.com. $1,950,000 must be seen!
Our First Barns Grants!

The Connecticut Trust was proud to award its first round of planning grants for historic barns in June. These grants can be used for one or more of the following: conditions assessments, feasibility studies for adaptive re-use, or State or National Register nominations. The grants, which are funded by the Connecticut General Assembly, pay 75% of these costs, up to a maximum of $8,000 per barn. In this first round the Trust awarded almost $60,000 to 22 barn owners, including private citizens, non-profit organizations and municipalities.

Canton Advocates for Responsible Expansion, Canton: conditions assessment and feasibility study, Roaring Brook Nature Center barn, $2,662.00

Cheshire Land Trust, Cheshire: conditions assessment, Ives Farm barn, $1,500.00

Sunset Terrace barn, Collinsville: feasibility study and conditions assessment, $2,000.00

Historical Society of Easton: conditions assessment, Bradley-Hubbell barn, $1,500.00

Whiteman barn, Fairfield: conditions assessment, $1,500.00

Hill-Stead Museum, Farmington: conditions assessment and National Register amendment, $5,000.00

Farmington Land Trust: cow run-in barn, conditions assessment, $1,500.00

Town of Glastonbury: Old Cider Mill Barn, feasibility study and conditions assessment, $4,500.00

The Dudley Foundation, Guilford: Dudley Farm barns, conditions assessment, $1,500

Eli Whitney Museum, Hamden: Eli Whitney barn, feasibility study and conditions assessment, $4,500.00

Samuel Peck barn, Harwinton: conditions assessment, $675.00

Town of Killingworth: Parmelee Farm barn, conditions assessment and feasibility study, $4,500.00

Ledyard Ecclesiastical Society, Ledyard: conditions assessment, $1,500.00

Manchester Historical Society: Woodbridge Barn, feasibility study and conditions assessment, $4,500.00

Treat Farm dairy barn, Orange: feasibility study and conditions assessment, $3,225.00

Lacy barn, Roxbury: conditions assessment, $375.00

Medridge Tree Farm barn, Sandy Hook: conditions assessment, $1,500.00

Southbury Land Trust: Marie Ludorf barn, conditions assessment and feasibility study, $750.00

F.A.R.M., South Windsor: Podunk Farm barn, conditions assessment and feasibility study, $2,000.00

Friends of the Farm at Hilltop, Inc., Suffield: Hilltop Farm dairy barn, feasibility study, $3,000.00

Strong Farm barn, Vernon: conditions assessment, $4,500.00

Colbert barn, Woodbridge: conditions assessment and State or National Register nomination, $5,000.00

For more information about Barns Grants, visit www.cttrust.org.
Sustainable Stewardship: Historic Preservation’s Essential Role in Fighting Climate Change

by Richard Moe, President, National Trust for Historic Preservation

As growing numbers of people are worried about climate change, the degradation of the environment, and our relentless consumption of energy and irreplaceable natural resources, it is increasingly apparent that preservation has an essential role to play in any effort to deal with the environmental crisis that looms over us. Because it necessarily involves the conservation of energy and natural resources, historic preservation has always been the greenest of the building arts. Now it’s time to make sure everyone knows it.

It’s all about sustainability.

Up to now, our approach to life on this planet has been based on the assumption that “there’s plenty more where that came from.” With our environment in crisis, we have to face the fact that there may not be “plenty more” of anything—except trouble. In the face of that realization, we’re challenged to find a way of living that will ensure the longevity and health of our environmental, economic, and social resources.

Much of the debate on this subject usually focuses on the need to reduce auto emissions. But according to the EPA, transportation accounts for just 27% of America’s greenhouse gas emissions, while 48%—almost twice as much—is produced by the construction and operation of buildings. The message is clear: Any solution to climate change must address the need to reduce emissions by being smarter about how we use our buildings and wiser about land use.

I’m not so naïve as to believe that preservation represents the way out of this environmental crisis. But I do believe that historic preservation can be—and must be—a key component of any effort to promote sustainable development. Indeed, preservation is sustainability.

The connection between historic preservation and sustainability is not a new concept. It’s something that many people in the preservation community have believed and talked about for many years. They understand that preservation is “the ultimate recycling.” As long ago as 1980, the National Trust issued a Preservation Week poster that featured an old building in the shape of a gas can—a reminder that reusing an existing building, instead of demolishing it and replacing it with a new one, is one good way to conserve energy.

The challenge is to help people understand that preservation, by its very nature, is sustainability. The retention and reuse of older buildings is an effective tool for the responsible, sustainable stewardship of our environmental resources—including those that have already been expended. I’m talking about what’s called “embodied energy.”

Here’s the concept in a nutshell: Buildings are vast repositories of energy. It takes energy to manufacture or extract building materials, more energy to transport them to a construction site, still more energy to assemble them into a building. All of that energy is embodied in the finished structure—and if the structure is demolished and landfilled, the energy locked up in it is totally wasted. What’s more, the process of demolition itself uses more energy—and, of course, the construction of a new building in its place uses more yet.

It all comes down to this simple fact: We can’t build our way out of the global warming crisis. We have to conserve our way out. That means we have to make better, wiser use of what we’ve already built.

Still, too many people don’t yet understand that preservation must be an integral part of any effort to encourage environmental responsibility and sustainable development. Most recent efforts by the green community place heavy emphasis on new technologies rather than on tried-and-true preservation practices that focus on reusing existing buildings to reduce the environmental impacts associated with demolition and new construction.

This emphasis on new construction is completely wrong-headed. Here’s what we have to keep in mind: No matter how much green technology is employed in its design and construction, any new building represents a new impact on the environment. The bottom line is that the greenest building is one that already exists.

It’s often alleged that historic buildings are energy hogs—but in fact, data from the U.S. Energy Information Agency suggests...
that buildings constructed before 1920 are actually more energy-efficient than buildings built at any time afterwards—except for those built after 2000. It’s not hard to figure out why. Many historic buildings have thick, solid walls, resulting in greater thermal mass and reducing the amount of energy needed for heating and cooling. Buildings designed before the widespread use of electricity feature transoms, high ceilings, and large windows for natural light and ventilation, as well as shaded porches and other features to reduce solar gain. Architects and builders paid close attention to siting and landscaping as tools for maximizing sun exposure during the winter months and minimizing it during warmer months.

Unlike their more recent counterparts that celebrate the concept of planned obsolescence, most historic and many other older buildings were built to last. Their durability gives them almost unlimited “renewability”—a fact that underscores the folly of wasting them instead of recognizing them as valuable, sustainable assets.

I’m not suggesting that all historic buildings are perfect models of efficient energy use—but, contrary to what many people believe, older buildings can “go green.” The marketplace now offers a wide range of products that can help make older buildings even more energy-efficient without compromising the historic character that makes them unique and appealing. And there’s a large and growing number of rehab/reuse projects that offer good models of sustainable design and construction.

More recent buildings—especially those constructed between the 1950s and 1980s—pose a greater challenge. Many of them were constructed at a time when fossil fuels were plentiful and inexpensive, so there was little regard for energy efficiency.

Today, these buildings make up more than half of our nonresidential building stock. Because of their sheer numbers, demolishing and replacing them isn’t a viable option. We must find ways to rehabilitate these buildings and lighten their environmental footprint while still protecting their architectural significance. This is a challenge that preservationists and green-building advocates must face together in the coming years.

I believe that climate change is the defining issue of our time. What’s at stake is nothing less than life as we know it on this planet. The fact that the threat is not immediate does not mean that it’s not urgent. The experts tell us we have no time to lose. The debate is over, the facts are in, and it’s time to act.

One of the first and most important things that must happen is a thoroughgoing revision of current government policies that foster unsustainable development.

For decades, national, state and local policies have facilitated—even encouraged—the development of new suburbs while leaving existing communities behind. As a result, an ongoing epidemic of sprawl ravages the countryside, devouring open space, consuming resources and demanding new infrastructure. Meanwhile, in the cities, disinvestment has left viable housing stock abandoned and schools slated for closing in areas where infrastructure is already in place, already paid for.

It makes no sense for us to recycle newsprint and bottles and aluminum cans while we’re throwing away entire buildings, or even entire neighborhoods. This pattern of development is fiscally irresponsible, environmentally disastrous, and ultimately unsustainable. To replace it, we need federal policy that directs growth to existing communities.

We also need incentives to encourage reuse and energy upgrades in older buildings. Over the past ten years alone, historic tax-credit incentives have sparked the rehab of more than 217 million square feet of commercial and residential space. We must insure the continued availability of these tax credits, and expand their use in older buildings that are not necessarily historic but still re-usable. Equally important, we must provide similar incentives that will help private homeowners use green technology in maintaining and renovating their homes.

Finally, we need to improve green-building rating systems to ensure that they recognize the importance of building reuse. Under the current Leadership in Energy and Environmental Design (LEED) standards developed by the U. S. Green Building Council, for example, a new building can be certified “green” even if it’s constructed outside densely populated areas; this kind of development amounts to “green sprawl,” which is contrary to every principle of sustainability. Also, under the current LEED rating system, reusing 75% of an existing building core and shell is assigned the same value as merely using environmentally-friendly carpet.

How Much Energy Is There in Historic Buildings?

As Richard Moe explains, “embodied energy” refers to the concept that buildings represent—embody—the energy needed to manufacture or extract building materials, to transport them to a construction site, and to assemble them into a building. If the building is demolished and its materials dumped in a landfill, the energy that they embody is seen as going into the landfill as well.

In the full version of his speech, Moe cites statistics about the amount of energy embodied in historic buildings and the amount of time that it would take for a new building to make up the difference by its more efficient operation. Among other things, he says, “Recent research indicates that even if 40% of the materials are recycled, it takes approximately 65 years for a green, energy-efficient new office building to recover the energy lost in demolishing an existing building.”

A number of preservationists and environmentalists have questioned these figures. They believe that the catch-up time is much shorter—although the concept of conserving embodied energy remains important to saving resources. As the discussion continues, the National Trust hopes to host a symposium of experts to try to get a more accurate sense of the energy embodied in buildings.

continued on page 15
Energy at the Whitney Boarding House: What We Learned

How can historic buildings be modified to improve their energy performance? The Connecticut Trust decided to use its own headquarters as a test case. In 1989 the Trust restored the building, originally constructed in 1827, with the aim of demonstrating good preservation practice. Energy efficiency was not a primary goal, although reasonable care was taken to provide thorough weather stripping on the windows and insulate the heating ducts.

As a result, the Boarding House, like many old Connecticut buildings, has no storm windows and not much insulation. Most noticeable is the cold air that comes up from the cellar through the gaps in the floor.

Facing rising energy costs and concerns about wasting resources, the Trust commissioned an energy audit of the building last winter. Bill Hoffner of Hoffner Conservation, an energy consultation firm based in Norwich, performed the audit in March. In May, he described the results at a House Talk. Joining him, New Haven architect Jay Warren Bright discussed energy saving from a preservation angle.

For his test, Hoffner first investigated the building by eye, pointing out obvious places where we waste energy (such as those floor boards). Then he set up a big exhaust fan in a door. With an infrared viewer Hoffner could see where cold air was working its way indoors. He stressed the importance of sealing gaps, explaining that it’s moving air that makes us feel cold, and that insulation doesn’t stop drafts.

Hoffner gave the Trust a written report that outlined recommendations and estimated energy savings. Among the recommendations:

• block the gaps in the floor and add insulation to the cellar ceiling to keep heat in the first floor (Hoffner suggested spray-in foam, but foam can’t be removed easily, making it less desirable for historic buildings)
• seal gaps around pipes and wiring, which draw warm air out of the building
• add additional blown-in cellulose insulation to the attic, with fiberglass batting as a dam to hold it in place
• consider adding storm windows
• caulk around door and window trim, baseboards, and anywhere else there is a gap that can let air in
• insulate the doors leading to the cellar and attic
• add weather stripping to doors and where the window sash meet
• swap incandescent light bulbs for more efficient compact fluorescent ones
• investigate more efficient HVAC systems and water heaters

Jay Bright started with a general discussion of ways to save energy, such as eating more vegetables (which require less energy to produce than meat), walking to work, wearing sweaters, shutting off unneeded rooms in winter, planting trees for summer shade—even taking in lodgers to fill big houses. His point was that energy efficiency is more than a question of home improvement projects or products, but a broader change in the way we live.

Bright also pointed out that any building is a coordinated system of components—structure, cladding, finishes, windows and doors, HVAC, plumbing, roof, foundation—any one of which interacts with and affects the performance of the others. For instance, if you add insulation to a stuccoed wall, the wall will no longer be warmed by heat escaping from the house, and it will be more vulnerable to cracking as it reacts to outdoor temperature changes. Sometimes, features that seem wasteful can in fact serve a useful purpose. Bright cited a house of the 1840s that has siding of overlapping square boards rather than tapered clapboards. Gaps between the boards cause lots of air leakage, but theycontinued on page 9

“I look forward to an America which will not be afraid of grace and beauty, which will protect the beauty of our natural environment, which will preserve the great old American houses and squares and parks of our national past, and which will build handsome and balanced cities for our future.”

John F. Kennedy - October 26, 1963

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also allow moisture in the wall cavity to evaporate. Sealing the gaps could trap moisture in and cause rot.

Bright also warned against using new products that have not been tested to see how they perform over time. New replacement windows, for instance, generally carry a guarantee of twenty years for the glass and only ten years for the parts. With periodic maintenance, traditional wooden windows can last 100 years or more. With the addition of well-designed storms, which is greener?

Windows were a major topic. Both Bright and Hoffner recommended V-seal plastic weather stripping and removable rope caulk can be used to block drafts in the winter and can be removed in the summer to open the windows. Exterior storm windows not only provide insulation, they also protect the primary sash from weathering, which means less frequent repainting and repainting.

A less expensive alternative to storms is plastic sheeting installed with double-sided tape and tightened by heating with a hair dryer. Bright said that a narrow air space, not more than ¾ inch, actually provides better insulation than a wide space. He recommended installing the plastic on the individual sash and then using rope caulk to block drafts around the edges and at the meeting rails.

Fireplaces and chimneys can pull heated or cooled air out of a house. The first thing is to close the damper. If there is none, or if it doesn’t work, a plastic trash bag filled with fiberglass insulation can be stuffed up the chimney (hang something down the chimney to remind you to remove the bag before starting a fire!). In addition, caulk where the wood trim meets the often uneven masonry of the fireplace. Special caulk for high-temperature areas is available.

The final area of major concern was the attic. If it is not used as a living space, it’s best to insulate the floor. A consistent layer of loose insulation six inches thick is generally enough. Also seal any gaps around chimneys or vent pipes, which can draw heated air up from below.

Hoffner and Bright suggested that some common strategies are actually less helpful. Insulating the Boarding House’s walls would be difficult: either the exterior clapboards or the interior plaster—both historic—would have to be removed to install batting, while blown-in insulation tends to settle. In any case, the greatest energy loss is through the attic and roof, so it would make more sense to concentrate there. Storm doors also don’t add much protection relative to their cost; better to be sure that the exterior doors have good weather stripping to block drafts.

The Trust is working now to put some of these results into practice. For the summer, we’ve set the thermostats higher than in past years and we’re keeping blinds and shades closed on sunny days. The Building Committee is starting to look into bigger projects such as the floors and caulking. We’ll continue to report on what we accomplish.
Green Technology Fuels Rehab

Once threatened with demolition, the Capitol Building at 410 Asylum Street in Hartford will become Connecticut’s first LEED-certified multi-family residential building (see “What is LEED,” below). The National Register-listed building is being renovated by Common Ground Community, a nonprofit developer of affordable housing (see CPN September/October 2007).

The renovation will employ the following environmentally-conscious features, part of Common Ground’s new initiative to incorporate green design into all its projects:

• a “green” roof with a mix of plants to insulate the building and reduce water runoff,
• high-performance windows,
• efficient lighting systems,
• low-emission interior finishes,
• low-flow water fixtures,
• Energy Star appliances,
• recycling chutes on every floor,
• a bicycle storage room,
• reuse of existing architectural features to provide ample natural light and ventilation,
• energy efficient HVAC system, and
• easy access to public transit.

This list does not include the reuse of the building itself, an act of recycling that will return this historic resource to active use and save tons of materials from going to the landfill.

Common Ground began work in June and expects completion in the summer of 2009.

For more information, visit www.commonground.org.

What Is LEED?

LEED, which stands for “Leadership in Energy and Environmental Design,” is a system of quantifying and recognizing sustainability in architecture. Introduced in 2000, LEED is operated and managed by the U.S. Green Building Council, a private, nonprofit organization.

The USGBC certifies building projects for the degree to which they employ sustainable design, via rating systems which quantify sustainable elements in a project in six major areas: sustainable site development, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process. According to their score, projects are rated as LEED Certified, LEED Silver, LEED Gold, or LEED Platinum.

In addition to the new construction (which includes major renovations), there are separate rating systems for commercial interiors, retail, schools, healthcare facilities, and neighborhood development. Finally, LEED for Existing Buildings rates lesser renovations and ongoing operations and maintenance.

Preservationists have criticized LEED for concentrating too much on new construction and not adequately recognizing the benefits of reusing existing buildings over new construction in its point structure. The USGBC has begun to address these criticisms in revised criteria, called LEED 2009, currently in a public comment period. Among the changes is an increase in the possible points for retaining and reusing at least 75 percent of a building’s existing walls, floors and roof during renovation. Additional points can be earned by retaining even more. In addition, possible points for building density and access to public transportation are also increased, which favors downtown sites.

No matter how the LEED ratings are revised, it’s important to remember that they represent an attempt to quantify sustainability, a much broader concept that really can’t be boiled down to simple numbers. More than just energy efficiency, sustainability also involves economic decisions and social structures. For preservationists, the question, as writer Kim O’Connell put it in Traditional Building, “…the question remains whether the value of an historic building—or any building, really—can be divorced from an understanding of how it contributes [to] or detracts from the society at large. Historic buildings embody energy, yes, but they also embody the hopes and ideals of the communities that produced them.”

For more information visit www.usgbc.org. Kim O’Connell’s article can be found at www.preservationnation.org/issues/sustainability/additional-resources/Trad_Bldg_June_2007.pdf.

The Connecticut Trust has joined the United States Green Building Council and hopes top have at least one staff member pass the registration exam.

Renovation of 410 Asylum Street in Hartford will incorporate many environmentally-conscious features.
Architects Practice Green Preservation

Centerbrook Architects and Planners, a well known Connecticut architectural firm, has been interested in sustainable design since the 1970s. One of its earliest projects was Connecticut’s first solar-powered building, the Norwich National Guard Armory, completed in 1977.

The firm occupies a former factory built in 1894 in the Centerbrook section of Essex. Around the offices, old photographs and pieces of machinery serve as reminders of the site’s history. In addition to being an example of adaptive use, the building serves as a laboratory for green architecture, a place to test sustainable technologies and demonstrate them to clients and the public.

According to Centerbrook’s website, the firm uses clean energy to generate approximately 30 percent of its annual electrical needs. Part of this comes from the Falls River, which has powered industrial activities since the 17th century. In 1982 Centerbrook installed a new hydropower turbine which generates 11 percent of the annual electrical needs. The other 19 percent comes from the sun, using solar photovoltaic panels (PV) installed on two rooftops in 2006, with the support of the Connecticut Clean Energy Fund and Federal Tax Credits.

In 2005 Centerbrook installed a green roof over a portion of its office. It helps control heating and cooling costs and reduces air pollution and storm water runoff. The roof also serves as an on-site experiment into the suitability of a variety of plants for use as roofing material.

Working with an old factory has its advantages, says Ted Tolis, an architect with the firm. “Because it was a mill building, it’s flexible, it can handle evolution. It was easy to run lines for the PV system from the roof to the mechanical spaces.”

For more information, visit www.centerbrook.com.

Wonderful Norwich Architecture for Sale

“Teel House, Sign of General Washington”

This Norwich landmark, built in 1789 as a hotel, later became an early 19th Century boarding school, then a Parsonage, then a Headmaster’s house, and is now a private residence. Its most remarkable feature is the 20’X40’ third floor assembly hall / ballroom. Please see www.TeelHouse.com for more pictures and more information. $475,000.

The General Jabez Huntington House

Only for those who love pure 18th Century architecture. Begun in 1691, and added on to in 1705, 1715, and 1745 the house is remarkably intact: raised paneling, 8 fireplaces, original clapboards, etc. In the Norwichtown Historic District on 4.6 acres, with pond and new barn. Great history (particularly related to the Revolutionary War). Please see www.jabezhuntington.com for more pictures and information. $690,000.

For more information, visit www.centerbrook.com.

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**Shelton.** McCallum Enterprises, owner of the Ousatonic Dam and its related waterworks, is negotiating to sell part of a power canal to the city of Shelton.

The dam was built between 1867 and 1870 to harness waterpower from the Housatonic River. It sparked industrial expansion that produced the city of Shelton, where a mile of factories quickly sprang up (see CPN January/February 2002). Today, several of the factories are being converted to new uses. Even though portions of the canal have already been filled, the remaining sections constitute an important historic element in the district, as well as an attractive amenity for the new development.

At question is the section of the canal between the dam and the first factories. Approximately one-quarter mile long, this area overlooks the dam and river. McCallum wants to sell this property to cover the $2 million cost of a fish ladder that the company is required to build under the terms of its hydroelectric license, allowing migratory fish to swim upstream.

McCallum’s owner told the Connecticut Post that the company would prefer that the city buy the 2.5-acre parcel, but if the city is not willing, the land must be sold for development. To make development feasible, the company applied to the Army Corps of Engineers for a permit to fill this portion of the canal, the longest remaining open section.

The application drew opposition from conservation and preservation groups. The Connecticut State Historic Preservation Office commented that, in its opinion, the dam and canals “are eligible for the National Register of Historic Places. The State Historic Preservation Office believes that proposed actions would constitute an adverse effect upon this significant industrial resource.” The Connecticut Trust sent a letter urging the Corps to deny the application, citing the construction of the dam and canals as “a great feat of both engineering and economic development, a notable episode in the industrial expansion of 19th-century Connecticut.”

In June, McCallum withdrew the application pending negotiations with the city.

*For more information, visit http://sheltonopenspace.googlepages.com/sheltoncanal*

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**Clinton.** The Adam Stanton house has been rescued, at least for the moment. Begun in 1789, the house remained in the family until 1916, when Lewis Stanton, Adam’s grandson, died and left the property to be a museum, with a trust to supply funding. Unchanged since Lewis’ death, the house is not only a treasure trove of Americana, but also a vivid testament to early 20th-century visions of Colonial life.

In recent years, maintenance and operation problems piled up. Lead pipes rendered water undrinkable, the heating system was failing, and asbestos needed to be abated. The endowment could no longer meet these needs, and the terms of Lewis’ trust do not allow the museum to charge admission. It looked as though the bank might close the museum and sell the property and its contents.

This year, however, Clinton officials, local businesses, and residents stepped up to help. The Connecticut Water Company, working with the town’s public works department, replaced the pipes. Southern Connecticut Gas, also working with public works, agreed to run gas lines to the house and install a new furnace. Now the town is helping the museum find the best possible price on asbestos abatement. A friends group has been formed to raise funds for operation and additional repair work. With their assistance, the Stanton house museum may remain open for another century.

The Stanton house is located at 63 East Main Street in Clinton. Visit www.stantonhousect.com.
Comstock Ferre barn, Wethersfield (2007). Developer Thomas Coccomo has filed a new application with the town’s Historic District Commission for a mixed-use development in the center of the Wethersfield historic district.

The commission approved the project, which involves demolishing a barn associated with Comstock, Ferre & Company, in 2007, but a group of residents appealed. In May a state Superior Court judge overturned the approval on the grounds that the Commission’s legal notices did not mention the demolition of existing historic barn.

Last year, the Trust and Trustee William Crosskey, of Crosskey Architects, created schematic plans showing how the barn could be reused as part of the new development. However, Coccomo’s new application reportedly still calls for demolishing the structure. The Trust continues to urge the developer and the town to agree on a plan incorporating the barn.

The question goes beyond the Comstock Ferre barn to the larger issue of what, if any, new development is appropriate in Old Wethersfield. In a town whose tax base is predominantly residential, pressure for new development is high, and the historic district is seen by many as an important resource to fuel growth by attracting tourists and shoppers. On the other hand, many feel that the district’s residential nature is a crucial element of its character, which would be irreparably harmed by Coccomo’s development.

The renewed proposal is scheduled to come before the commission on June 24. ☞

Awards Credits
The report on the Connecticut Preservation Awards in the May/June issue of CPN neglected to mention the teams involved in the projects that received Built Environment awards. Here are the names, as supplied by the nominators of each project.

Raymond Library Reference Room, East Hartford
Town of East Hartford, owner
Capitol Studio Architects, LLC, architect
Theurkoff & Co., interior design
M/E Design Associates, engineers
Scope Construction Company, builder

St. Michael’s School, Hartford
Community Renewal Team, Inc., owner
Paul B. Bailey Architect LLC, architect
David Ransom, architectural historian
Enterprise Builders, Inc., builder

Sage-Allen building, Hartford
Marc Levine & Phil Schönberger, 18 Temple Street LLC, owners
Roth & Moore Architects, architect
Bartlett, Brainard & Eacott, construction manager
Kirsten Floyd Interior Design, interiors

MADISON, CT
Unique opportunity to be directly on the 14th fairway of the Madison Country Club, this 1770 Saltbox known as the Jonathan Wilcox House is in need of major renovation. Less than 1 mile to the village green & town center plus a short walk to farmer’s market, recreational ball fields, & town beach, this home also has winter waterviews of Long Island Sound! Reduced to $649,900.

Todd Gould. William Pitt Sotheby’s International Realty. 203-738-0237
Grants, cont’d from page 4

Norwalk Museum and City of Norwalk: preservation plan, city-owned historic properties, $25,000.
Slater Memorial Museum, Norwich: conditions assessment and restoration plan for iron gates, $2,750.

Hotchkiss Library of Sharon, Sharon: restoration and expansion plans and specifications, $13,500.

Town of Simsbury and Simsbury Main Street Partnership: conditions assessment and renovation plan, Eno Memorial Hall, $8,750.

Pomperaug River Watershed Coalition, Southbury: Pomperaug Plantation History Project (survey of historic industrial sites), $9,438.

Stanton-Davis Homestead Museum, Stonington: conditions assessment and historic structures report, $9,000.

Trinity Episcopal Church, Torrington: restoration drawings and specifications for clock tower, $22,500.


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Sustainable Stewardship, cont’d from page 7

The National Trust and others are working with the U.S. Green Building Council—at their invitation—to improve these and other points. It will take time, but I hope that we’ll eventually arrive at a revised LEED rating system that accurately reflects the environmental benefits of “smart” locations and building reuse.

These public-policy steps are critically important, but we shouldn’t wait for government to act. That’s why the National Trust has launched its own Sustainability Initiative, which will gather reliable data on the comparative energy costs of rehab vs. building new. We’ll also undertake a major outreach effort to inform everyone—especially architects, developers, property owners and policy makers—about the benefits of preserving and reusing older buildings. And we’ll make our website a “best practices” resource for how to reduce energy consumption and use green technology in the rehab of older structures.

Over the years, as the focus of our work has evolved, we’ve demonstrated that preservation is good for the pocketbook as well as the soul. Now, in the face of unprecedented climate change, we’re prepared to demonstrate that preservation is an essential tool for sustaining the environmental viability of the planet as well as the quality of life for ourselves and our children.

This article was excerpted from a speech made at the National Building Museum in Washington, D.C., on December 13, 2007, when Moe received the museum’s Vincent Scully Prize. It is reprinted here with the kind permission of the National Trust for Historic Preservation. The full text can be found at www.preservationnation.org/about-us/press-room/speeches/sustainable-stewardship-scully.html.
John Leeke's
Historic HomeWorks™

Bake Oven Door
My husband and I are restoring a c.1826 Early Classic Revival house. None of the original fireplaces were in the home when we bought it. We are currently building three Rumford fireplaces to replace the originals. The fireplace in the dining room will be a cooking fireplace with a bread oven. My problem is that I can not find an example of what a bread oven door looks like. I have asked several antique dealers that specialize in fireplace equipment and they do not know either.

—Stacie Brown, Madison, Ohio

By "bread oven" I suspect you mean a masonry oven with a round or oval floor plan and a dome-shaped ceiling. By the 19th century these were usually built opening out into the room with their own flue above and right behind the opening. Your house may have had an earlier-style oven that opened into the jamb or back of the fireplace and had no separate flue. These were more common in the 17th and 18th centuries, but sometimes are found in later years especially in areas of first settlement. To determine which your house may have had you should do some local and regional research. Look for a house nearest to yours in location, style and date of construction that still has its original chimneys and fireplaces. Call your state's historic preservation office for help in locating such houses. Many of these earlier ovens had a separate door that was not hinged to the masonry. It was simply a flat piece of sheet iron or even a wood board in the shape of the opening. A simple bracket ran from the outside of the middle of the door down to the oven hearth to help it stand upright. If the oven had its own flue, a fire was built in the back of oven and the door left off, or set in the outer opening so the heat and smoke of the fire could escape up the flue. When the oven was fully heated the remaining coals and ashes were shoveled into the fireplace, or an ash bin beneath the oven, the bread placed in the oven and the door shifted in to the inner opening, holding heat in the oven and preventing it from rising up the flue.

—Stacie Brown, Madison, Ohio

Pocket Door Hardware
I am restoring a pair of pocket doors in my Victorian house. These were removed from inside the walls and put on hinges, making them the world's largest swinging doors. The tracks inside the walls appear to be in good condition but I need to find a source for the hardware, rollers, etc. that I need to complete the job. Do you know of a source for pocket door hardware?

—Kelly

Pocket door hardware systems are made up of matching tracks and sets of rollers or “trucks.” A large number of different systems with varying details were manufactured. You will have difficulty finding roller trucks that will work with your rails. It may be easier to replace the entire system. The following company sells complete modern pocket door hardware systems:

Johnson Hardware
PO Box 1126, Elkhart, IN 46515
(800) 837-5664
johnsonhardware.com

John Leeke is a preservation consultant who helps homeowners, contractors and architects understand and maintain their historic buildings. You can contact him at 26 Higgins St., Portland, Maine, 04103; or by E-mail: johnleeke@HistoricHomeWorks.com; or log onto his website at: www.HistoricHomeWorks.com

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