

**WEEKLY INFORMATION PACKET
MEMORANDUM**

To: Mayor Ruzzin and Members of Council

From: Frank Bruno, City Manager
Stephanie Grainger, Deputy City Manager
Peter Pollock, Planning Director
Maureen Rait, Director of Public Works/Development and Support Services
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Date: February 16, 2006

RE: Information Item: Update on the city's Sustainable Building Initiatives

EXECUTIVE SUMMARY:

This memorandum provides an update on sustainable building initiatives. This effort includes three projects:

- Historic Preservation/Environmental Sustainability Integration Project,
- High Performance Commercial Buildings, and
- Residential Green Building – Green Points Program.

The Historic Preservation/ Environmental Sustainability Integration project will examine the relationship between the city's historic preservation and energy efficiency policies, standards and programs, with the primary purpose of identifying where they conflict and how those conflicts may be resolved.

The High Performance Commercial Buildings project is integrating current city commercial development codes, standards and regulations in order to demonstrate equivalency with U.S. Green Building Council's (USGBC) Leadership in Environment and Energy Design (LEED) criteria. An analysis comparing city codes, standards and regulations to the LEED criteria has been completed. Staff is evaluating consultant recommendations to increase the number of high performance commercial buildings.

The Residential Green Building - Green Points program helps homeowners find products and designs for building "green." It encourages the use of cost-effective and sustainable remodeling and building methods that conserve fossil fuels, water and other natural resources. The Green Points program also promotes recycling of construction materials and reducing solid waste. Program guidelines are currently being revised.

Historic Preservation/ Environmental Sustainability Integration

Background: In August 2004, Boulder City Council directed city staff to undertake this project in response to a controversy arising from the replacement of windows on a historically contributing house in the Mapleton Hill Historic District. Although literature review and project scoping was initiated, formal launch of the project was delayed due to limited staffing. State Historical Income Tax Credit funds were allocated by the Planning Department in December 2005 to retain an independent project manager to carry the project forward.

The project is being jointly sponsored by the Landmarks Board and the Environmental Advisory Board. The staff team includes members from Historic Preservation, Environmental Affairs and Building Permit Review. The purpose of the project is to identify common ground and conflicts between historic preservation and energy efficiency policies, program, guidelines and regulations, and to propose changes where needed.

Conflicts between energy efficiency and historic preservation may arise when the owner of a landmark building or a historically contributing building in a historic district proposes energy efficiency upgrades that affect the exterior of the building (such as new windows). These upgrades may be voluntary on the part of the owner or may be proposed to obtain Green Points, a certain number of which are required in order to obtain a building permit. Any exterior alteration to a protected historic building requires a Landmark Alteration Certificate, which requires compliance with the landmark alteration certificate criteria in the code. Because the criteria are relatively broad, the Landmarks Preservation Advisory Board has adopted design guidelines as administrative regulations to interpret the criteria. These guidelines, based on the Secretary of Interior's Standards for Historic Building Rehabilitation, discourage alterations that would damage the historic integrity of the building exterior.

The number of historic buildings in Boulder protected under the Historic Preservation ordinance and guidelines is approximately 1,200 (designated landmarks and buildings within historic districts). Historic Preservation staff estimates that the question of whether or not windows on a historic building can be replaced comes up (informally) once or twice a month. Formal alteration applications requesting approval for window replacement number approximately six per year. Although potential regulation/guideline conflicts have been identified regarding doors and solar collectors on historic buildings, questions or applications regarding these have not come up in recent staff memory. However, with the increased interest in alternative energy sources and the availability of utility and federal incentives, more property owners may desire to install solar electric and solar hot water systems.

Analysis: Staff anticipates that the Environmental Sustainability Integration project will result in revisions to the Historic Preservation General Design Guidelines and portions of Green Points Program Guidelines that can affect historic building exteriors. Separately from the project but concurrent with it, the Office of Environmental Affairs is carrying out a periodic revision of the entire Green Points Program. Staff will coordinate the two projects.

The Landmarks Preservation Advisory Board (LPAB) and Environmental Advisory Board (EAB) held a joint meeting on January 11, 2006, in which they discussed the purpose and scope of the project and a draft list of issues/conflicts. They will meet again in April to review options and consider a recommendation to City Council. This item will then be scheduled for City Council consideration and policy-level direction in late April. Specific changes to the Green Points Guidelines or other environmental programs or plans would be administered by the Office of Environmental Affairs and its board; changes to the Historic Preservation guidelines or program would be processed by the LPAB and Historic Preservation staff. Comprehensive Plan policy amendments would be included in the next Boulder Valley Comprehensive Plan update. The relatively short timeframe for the project reflects the need for a resolution to the window retention vs. replacement question, the timing of the Green Points Revisions Project, and the finite funding source for the project.

Public process will include an ongoing "virtual" public forum on the project Web page, in which members of the public can have their comments about the project posted on the Web. A public meeting will be held on March 13 for discussion and input on various options and their trade-offs. Stakeholders that have been identified in addition to the general public include: owners of historic properties, "green" builders and historic preservation advocates. Groups include: Boulder Green Building Guild, Historic Boulder Inc., PLAN- Boulder County, Architects and Planners of Boulder, Colorado Association of Home Builders local chapter, and American Institute of Architects local chapter. The topic of historic buildings and energy efficiency is being debated in other communities, so larger organizations like Colorado Preservation Inc. will be interested in the outcome of this project.

An ad hoc panel of experts in building energy efficiency and historic preservation has been assembled by staff to assist with the technical analysis. The panel will work with staff to establish a balanced and accurate set of baseline data on the issues and help identify possible solutions. The panel also will participate in the public forum, discussing the trade-offs among various options.

Next Steps: Over the next several months, staff will work with the public and an outside panel of experts to assemble and discuss information on energy efficiency and historic structures with a goal of presenting options for board and Council review that will address apparent discrepancies in the programs. The Environmental Advisory Board and Landmarks Preservation Advisory Board will consider recommendations from staff and forward a recommendation to City Council for direction, likely in late April.

Staff is proposing changes to the historic preservation code to address issues not related to the Environmental Sustainability Integration project (e.g., to improve the historic district designation process). The environmental project will only potentially affect changes to the design guidelines, not the preservation code itself. Therefore, the preservation code project will come forward to City Council as a separate item and prior to the Environmental Sustainability Integration project; first reading on the preservation code changes is scheduled for March 20. Additionally, staff will continue to process requests for individual or historic district designation that will be subject to

the currently adopted guidelines. If the guidelines change in the future as a result of this project, owners would then be subject to the revised guidelines.

High Performance Commercial Buildings

Background: The city adopted (2001) and amended (2002) the International Energy Conservation Code (IECC) for both Residential and Commercial construction, and adopted (2003) the International Building Code, aligning commercial, industrial and high density residential buildings much closer with environmental sustainability goals while maintaining the life-safety provisions of previous building and fire safety codes.

A grant from the Governor's Office of Energy Conservation and Management was awarded to the city to cover the cost of the initial evaluation of the city's commercial development regulations. A comprehensive review of current commercial development codes, standards and regulations has been conducted in order to determine the extent of equivalency with U.S. Green Building Council's (USGBC) Leadership in Energy and Design (LEED) criteria. This work was performed by two local companies who partnered on their proposal: ENSAR Group Inc., a green building consulting firm and Coburn Development, a design/build firm. Potential changes to commercial building and development codes and standards have been identified along with options involving education and incentives.

The costs and benefits of all options are being evaluated. To date, feedback from the Environmental Goal Committee and some community stakeholders has been obtained. Follow up with the Planning Board, Environmental Goal Committee and the full Council is being scheduled.

Analysis: In February 2005, a Commercial Development Codes and Standards Recommendations Report was submitted to city staff by the joint consulting firms of ENSAR Group and Coburn Development. The purpose of the review was to measure current city commercial development codes, standards and regulations against current LEED Standards. The primary question was to determine if current city of Boulder building and land use codes already included the necessary LEED credits to qualify commercial buildings constructed in Boulder as LEED certified. The report concludes that while Boulder's construction practices are well above the national curve concerning energy and design, the city codes fall short of the credits (points) necessary to qualify our buildings or codes as LEED certified.

Recommendations in the report include the potential implementation of the following:

- 1) minor amendments to city codes to bring the codes closer to meeting LEED standards,
- 2) incentives for property owners to encourage LEED certification in new construction,
- 3) development of a Green Building Fund that supports green building applications, education and outreach activities, and
- 4) extensive public input process for community stakeholders and development of educational toolkits regarding high performing buildings.

Because item one, minor amendments to city codes, would not achieve LEED standards and because of Council Environmental Goal Committee concerns about potentially adding more layers of regulations, potential code changes and incentives have both been considered further. At the suggestion of the Council Environmental Goal Committee, a Commercial Development Stakeholders group was convened in July and September 2005 to discuss potential code amendments and preferred incentives. The stakeholders group met twice and focused primarily on the incentives process rather than code amendments.

Next Steps: Next steps include updating the work program during the next month and identifying the tasks and resources needed to evaluate the consultants' list of recommendations and input received to date. The timeline for this work program will be revised to reflect available staff resources that have been impacted by employee turnover and authorized leave.

Residential Green Points Program

Background: The residential green building program, "Green Points," was initially adopted in 1996 and updated in 2001. The update included providing incentives for reducing construction and demolition waste, and promoting recycling and reuse. The Office of Environmental Affairs (OEA) promotes the use of cost-effective and sustainable remodeling and building methods that conserve fossil fuels, water and other natural resources. The program offers remodelers, do-it-yourselfers and homebuyers ideas, while allowing them flexibility to tailor their selections to specific designs or preferences. The Green Points Program applies to all new residential construction, additions and remodels larger than 500 square feet. This program is administered by Planning & Development Services (P&DS) in coordination with OEA and requires that applicants earn "points" by selecting green building measures in order to receive a building permit.

Analysis: Staff and consultants are working to update the residential Green Points program guidelines and Resource Conservation Code ordinance in coordination with the Land Use Code Simplification Project, Historic Preservation interests, the city-adopted International Energy Conservation Code (IECC), water conservation standards, best management practices, and new or advanced construction products and methods identified as meeting green building standards.

End users and staff have provided comments and suggestions for improvements to content and format of the code and program guidelines; potential conflicts between Historic Preservation and the adopted IECC were also identified. What's Working, Inc., a local green building consultant involved in the original development of this program, was retained to prepare a draft program guidelines booklet based on the suggested changes. The draft booklet was completed in December 2005. OEA and P&DS staff review is expected to be completed during February 2006.

Next steps: After staff comments are incorporated into the draft guidelines, public comment will be solicited for the revised draft guidelines and proposed code changes. The public input process will be coordinated with the Land Use Code Simplification Project and Historic Preservation public forums. Proposed changes to the guidelines and codes will be presented to

the Environmental Advisory Board, Landmarks Preservation Advisory Board, Planning Board and City Council for consideration. It is expected that this item will be scheduled for Planning Board and City Council review during the 3rd quarter 2006.

For more information about the Historic Preservation/Environmental Sustainability project, please contact Marie Zuzack at 303-441- 4497(zuzackm@bouldercolorado.gov). For information on the High Performance Commercial Buildings project or the Green Points Program updates, contact Sarah VanPelt at 303-441-1914 (vanpelts@bouldercolorado.gov).