



DATE: January 8, 2009

TO: Chair Orrico, Members of the Planning Commission

FROM: Liz Stead, Urban Design Planning Manager, DSD
Heidi Bedwell, Associate Planner, DSD

SUBJECT: Green Building

Recently, the Planning Commission asked about what steps the city is taking toward green building. The following is a summary of some of the efforts under way.

What is Green Building?

Green, or sustainable, building is the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition. The built environment has a vast impact on the natural environment, human health, and the economy and green building strategies can maximize both economic and environmental performance. Green construction methods can be integrated into buildings at any stage, from design and construction, to renovation and deconstruction. However, the most significant benefits can be obtained if the design and construction team takes an integrated approach from the earliest stages of a building project.

What's happening in the City of Bellevue?

In the city of Bellevue, in 2006, residential and commercial buildings accounted for 23 and 32 percent, respectively, of the energy consumed in the city. In other words, buildings alone consumed more than half of the energy used in the city, and resulted in approximately 980,000 metric tons of greenhouse gas (GHG) pollutants in one year. While "green buildings" can use significantly less energy, the city's current inventory of such efficient buildings is limited.

In 2008 City staff involved in the development review process formed a working group referred to as the "Green Building Team." The team has been focusing to date on developing an internal group knowledgeable about green building standards LEED and Built Green, and emerging sustainable development practices. LEED — Leadership in Energy and Environmental Design — is the national standard for creating high-performance, sustainable buildings. Built Green is an environmental building program of the Master Builders Association of King and Snohomish Counties, developed in partnership with King County, Snohomish County, and other government agencies in Washington State. These are the most common rating system used in the building industry.

The building community has expressed concerns about integrating green building solutions into their projects, and the added time it can take to obtain permits because permit review staff are not familiar with the new methods and materials. By creating a staff team that is familiar and comfortable with a variety of techniques the City will be better positioned to facilitate permit review and the construction of high performing, green buildings.

In addition to increasing expertise and awareness of green building development techniques, staff has been researching different approaches in the region and nation to incent and regulate the construction of green buildings. The Pacific Northwest has many examples of programs which have been put in place in the last 5 years to encourage the green and sustainable development practices. We are also exploring ways to learn from surrounding jurisdictions experiences in order to assess what makes sense to pursue in a green building program for Bellevue. King County in particular has created a GreenTools program which is designed to help all King County jurisdictions green their built environment while addressing critical environmental issues, such as global warming, critical habitat restoration and solid waste reduction. The program provides technical assistance, grants and hands-on training to help create green projects efficiently and effectively. The City has sponsored several events at City Hall which focused on green building and sustainability practices and we hope to further develop partnerships in region to advance the goals of green building.

The market is beginning to embrace green building and sustainable development and there are several examples projects in Bellevue. Of note are the following:

Bellevue Towers Downtown- The project is hoping to receive LEED Gold certification. LEED features include demolition and construction waste recycling; green roofs; energy-efficient systems; Building materials and paints with low or no off-gassing; High-quality, energy-efficient mechanical equipment.

Shirey Zero Energy Home- The project is a 1,700-square-foot, two-bedroom home that is designed to minimize energy use. The term “zero energy” doesn't mean a house uses no energy – it means the house combines on-site power generation with efficiency measures so that it meets its own energy requirements. In the case of the Zero Energy Idea House, the home's electrical needs will be met by rooftop solar panels, and the home's domestic hot water will also be heated by the sun.

Mercer Slough Environmental Education Center- The City recently completed the center's construction which boasts many innovative green building techniques including a green roof, pervious pavement, non-toxic interior finishes and recycled materials.

What's next?

The Green Building team is developing a work plan for the coming year which may include changes to the building code and other non-regulatory incentives. We'll also be taking a closer look at our permitting process and timelines to determine if these projects receive higher priority for review or modified fees. As well as creating a program which helps to facilitate the use of green building techniques in construction projects, we'll be exploring ways to provide technical assistance and advance planning in the development of green projects. And we'll continue to develop our internal expertise so that the development community and interested citizens have the necessary resources available to help address issues of green building and sustainability practices.

With the Planning Commission's primary review being the Comprehensive Plan and Land Use Code, a greening of the building code and many of these actions don't require Planning Commission review. However this isn't to say that we don't want the Commission to be informed of these actions. Quite the contrary. We appreciate your interest and support for many of these efforts. As staff develops additional work items, particularly those that do relate to the work of the commission, we will provide future presentations and more detailed information. In the meantime, if you have suggestions for topics which you would like the City to explore please feel free to pass those on to us or direct them to the Council's attention.