

## **Director's Report and Recommendation LIVING BUILDING AMENDMENTS**

### **I. Introduction**

The Department of Planning and Development (DPD) is proposing amendments to the City's Living Building Pilot Program to better facilitate the development of buildings that would strive to meet the Living Building Challenge, a program administered by the International Living Future Institute (ILFI) for buildings meeting the highest level of sustainable design. The ordinance implementing the Pilot Program became effective January 2010.

The current regulations authorize an applicant to participate in the Living Building Pilot Program, if the proposed development meets minimum sustainability requirements per the Living Building Pilot Program. Various design departures under the City's design review procedures are allowed for Living Building Pilot projects to facilitate the objective of meeting the minimum sustainability requirements. While the goal of the program is to encourage buildings that meet the Living Building Challenge, the Living Building Pilot Program recognizes that the Living Building Challenge is a difficult standard to meet and that some flexibility is required in setting standards. The City recognizes that some standards may not currently be achievable due to requirements beyond the City's and the applicant's control, such as state requirements; therefore, the current program requires, at a minimum, that a participating project must meet at least 60% of the Living Building Challenge pre-requisites and all of the following alternative minimum standards:

- energy usage, including all electricity, heating, and cooling requirements and subtracting energy generated on site, must be 25% or less of the average energy usage for a comparable building not in the Living Building Pilot Program;
- water usage, subtracting harvested rainwater use, must be 25% or less than the average water usage for a comparable building not in the Living Building Pilot Program; and
- 50% of stormwater must be captured and used on site.

In the event a building does not meet the minimum performance goals of the Pilot Program, the owner would be subject to a maximum penalty of 5% of the construction value and a minimum penalty of 1% of construction value, based on the extent of compliance with standards.

The Pilot Program created by the current regulations has a life of three years, with a maximum of 12 projects allowed to be built. At this point, more than half way through the effective period of the Pilot Program, only one project has participated in the program and been approved for construction. The current economic climate and its effect on the real estate market has likely had an impact; however, additional flexibility could help encourage more developers to test the Living Building Challenge concept, which is designed to achieve an advanced level of sustainability, and would help inform the City on the regulatory changes that may be necessary to develop such buildings.

## II. Proposal

The proposed amendments have undergone substantial review by DPD staff and various changes have been made in response to public comment since the initial public notice was provided in September 2011. In the most recent draft legislation prepared for public notice on April 9, 2012, the proposal would modify the design review process already in place under Land Use Code Section 23.40.060 for Living Building projects in the Pilot Program. It would allow two additional departures from the regular code standards through design review under subsection 23.41.012.D.2. The first would allow an increase in maximum building height of up to 20 feet above the zone height limit, and the second would exempt ground floor retail space from maximum floor area ratio (FAR) limits. These two new departures would apply only to sites in Industrial Commercial (IC) zones within a designated urban village or urban center that have a zone height limit of 45 feet or less. Further, the proposal would extend the life of the Living Building Pilot Program from its current three-year term, set to expire in early 2013, to December 31, 2015.

*Since the April 9 public notice of the City Council's public hearing, which will be held on July 9, additional changes to the legislation are anticipated. The changes are in response to suggestions from neighbors of properties that may be affected by the legislation, as well as comments by staff of the International Living Future Institute (ILFI) concerning the process for certification as a Living Building under the Living Building Challenge. The additional changes would retain the original proposed amendments to the design departures for Living Buildings and make changes to the procedure for qualification under the Pilot Program, summarized as follows:*

- *Allow the increase in maximum building height of up to 20 feet above the zone height limit, provided that the gross floor area of each floor above 45 feet is limited to 66 percent of the lot area on which the structure is located.*
- *Clarify that review of information demonstrating compliance with minimum standards of the Living Building Pilot Program, set forth in subsection 23.40.060.E.1, shall be done in consultation with ILFI, according to procedures and requirements to be set forth in a Director's Rule to be drafted and administered by DPD.*
- *Add a process suggested by ILFI for "petal certification" as a Living Building by meeting three of seven performance areas, or "petals," of the Living Building Challenge as an alternative to meeting the entire Living Building Challenge.*

## III. Background and Analysis

The Living Building Challenge is a green building rating system created by the International Living Future Institute to recognize buildings meeting the highest level of sustainability. As noted above, this is an evolving program. The current version 2.1 of the Living Building Challenge requires buildings to meet 20 prerequisites within seven performance areas, or Petals: Site, Water, Energy, Health, Materials, Equity, and Beauty. In general, these prerequisites require buildings to be built on non-environmentally sensitive sites, use recycled materials,

generate as much or more energy as they use through sustainable sources, capture as much rainwater as they use, treat wastewater on site, and meet a number of standards for other elements.

In order to meet the stringent performance standards of the Living Building Challenge, buildings generally rely upon innovative building design techniques and features including natural daylighting and ventilation, use of passive and active solar energy systems, rainwater capture and use, wastewater treatment and reuse, and ultra-efficient heating, ventilation and air conditioning (HVAC) systems. These systems can substantially increase design complexity and necessitate early integrated design processes to ensure that all systems are compatible and work in an efficient manner, and that each performance goal can be met. These innovative systems may also necessitate alternative building massing, non-traditional exterior and roof top features, or other elements that were not envisioned when existing codes were adopted. Existing codes were designed to provide minimum standards rather than the flexibility to consider radically different building strategies. Additionally, projects may meet the Living Building Challenge through incorporation of uncommon urban accessory uses such as agricultural uses that use treated waste water.

In order to accommodate new design process challenges and alternative building designs, the Living Building Pilot Program expanded the departures allowed through design review. The proposed amendments are limited to a modest further expansion of these Code departures, as well as clarifying the process for certification as a Living Building and specifying that, as DPD reviews proposed building projects for compliance with the Living Building Pilot Program, it will consult with the International Living Future Institute to ensure that compliance meets the most current standards for the Living Building Challenge or appropriate alternatives to those standards.

The proposal builds additional flexibility into the process of qualifying for the Living Building Pilot Program by allowing three pathways to qualify. Two of the pathways involve certification as a Living Building by ILFI, while the third is a “high performance minimum” pathway to qualification under the Pilot Program, but without certification as a Living Building. The certification as a Living Building would be achieved by either meeting the entire Living Building Challenge, as in the existing Code provisions, or by attaining certification as a Petal Recognition Project, in which at least three of the seven performance areas for the Living Building Challenge are met. The existing process for meeting at least 60 percent of the Living Building Challenge and a set of alternative standards remains as the third option for qualifying under the Pilot Program. Specific process and requirements for consultation with ILFI as to standards for achieving Living Building certification will be set forth by Director’s Rule. The standards set by the International Living Future Institute for Living Buildings are continuously evolving as the technology of “green buildings” evolves. Consultation with the International Living Future Institute and updating of processes and requirements by Director’s Rule will help ensure that structures of appropriate design qualify under the Living Building Pilot Program.

### ***Project Enrollment***

In order to participate in the Living Building Pilot Program, an applicant must submit a plan demonstrating how their proposal would meet each of the prerequisites of the Living Building Challenge. Enrollment is limited to a total of 12 qualifying projects over a period that is currently three years from the effective date of the original legislation in 2009 but is proposed to be extended to December 31, 2015. Projects must be eligible for design review to participate in the Pilot Program; this excludes single-family houses and most projects in industrial zones, except in IC zones that are also within an urban village or urban center. Projects located in the shoreline district are also excluded.

Since the Living Building Pilot Program became effective in January 2010, one project has been approved (the Bullitt Center at 15<sup>th</sup> Avenue E and E Madison Street, 1501 E Madison Street, DPD Project No. 3011010). A second project is proposed at 1720 12<sup>th</sup> Avenue (Capitol Hill cohousing project, DPD Project No. 3013374) under the existing Code standards. The proposed amendments would allow participation by a third project proposed at 3400 Stone Way North. Extension of the enrollment period until December 31, 2015 is intended to encourage additional proposals for living buildings.

### ***Design Review***

All projects participating in the Living Building Pilot Program are subject to design review and are required to go before the Design Review Board (DRB), rather than qualify for administrative design review or streamlined design review.

### ***Proposed Design Departures***

In addition to the criteria governing departures from development standards for all projects subject to design review, additional departures are allowed for living building projects if an applicant demonstrates that such departures would better meet the goals of the Living Building Challenge and adopted design guidelines. In recommending any departure from development standards, the DRB must consider the extent to which the anticipated environmental performance of the building would be substantially compromised without the departures.

In addition to the Land Use Code departures currently allowed through design review plus the additional departures currently allowed for living buildings, the proposal would allow departure from two additional standards as follows:

- allow up to 20 feet above the zoned height limit for IC zones with a height limit of 45 feet or less that are within urban villages or urban centers, provided that the gross floor area of each floor above 45 feet is limited to 66 percent of the lot area on which the structure is located.
- exempt certain ground floor retail space from FAR limits in IC zones with a height limit of 45 feet or less and within urban villages or urban centers.

The proposed height increase is intended to promote the inclusion of taller street-level stories to encourage and accommodate retail uses that might otherwise be excluded from building programming, and to encourage appropriate daylighting of interior floor spaces. Street-level

retail spaces should be taller than other building stories in order to create an environment conducive to retail activities. In addition, buildings with a floor dimension greater than 100 feet require greater floor-to-floor height for appropriate daylighting of interior floor spaces, an important component of a living building. For sites with deep floor plates, additional height per floor may be necessary to ensure adequate daylight introduction into the interior. The proposed amendment will provide the flexibility necessary to accommodate these daylighting needs, which is key to meeting building energy efficiency requirements. The limitation of floor area above the 45-foot height limit of the zone is proposed to address citizen concerns regarding bulk and scale impact of the additional height allowed by this departure process..

The exemption of ground floor space for retail uses, eating and drinking establishments, or entertainment uses will further one important goal of the Living Building Pilot Program, to provide incentives for the development of living buildings that do not otherwise need subsidies from government grants or foundations. Developers may avoid retail uses, since in a neighborhood context they may provide less attractive returns than offices or other non-residential uses.

The Director of DPD would remain the decision-maker for any departures. As is the case for all projects in the Living Building Pilot Program, the Director would not be governed by the provisions that limit the Director's ability to modify or amend the recommendations of the Design Review Board.

#### **IV. Recommendation**

The proposed Living Building Pilot Program is intended to promote the public interest by encouraging the development of innovative "living" buildings that can reduce environmental impacts, test new technologies, and serve as a model for development throughout the region and country. The proposed amendments will supplement the City's original Living Building Pilot Program by allowing better development of projects on a limited number of additional sites within IC 45 zones where Living Building Pilot Projects are already allowed. Extending the enrollment period may also promote additional living building projects with potential benefit to the City's building stock and to the environment. The potential for development of additional living buildings will address growing environmental concerns and encourage new buildings in Seattle to meet the highest sustainable standards. DPD recommends approval of the amendments to Living Building Pilot Program.