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CITY OF LONG BEACH

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PATRICK H. WEST
CITY MANAGER

October 21, 2008

HONORABLE MAYOR AND CITY COUNCIL
City of Long Beach
California

RECOMMENDATION:

Authorize the City Manager to work with Long Beach Development Services and the City Attorney's Office to prepare an ordinance enacting a Green Building Program for Private Development based on the *Green Building Program for Private Development – Draft Program Summary.* (Citywide)

DISCUSSION

The term "Green Building" refers to the emerging practice of designing, constructing and operating buildings to meet a higher standard of energy and resource efficiency while making them healthier and more comfortable for their occupants. The first example of this type of building in Long Beach is the Mark Twain Neighborhood Library, completed in August 2007. Built in adherence to the City's Green Building Policy for Municipal Buildings, which was adopted by City Council in 2003, the library used the LEED green building rating system.

Seeking to further expand the practice of green building to cover private development projects, in November 2006 the City Council approved a process to explore and develop a green building program for private development using a "Green Ribbon" Committee stakeholder approach. At the same time, the City Council also adopted an Interim Green Building Policy for Private Development that would require large development projects (50+ units for residential or 50,000+ sq. ft. for non-residential) to meet minimum green building standards by using the LEED green building rating system. At the time, Long Beach became one of the first large cities in the U.S. to make green building mandatory for large private projects. Soon after the City Council adopted the Interim Policy, the first project subject to it was submitted (the North Long Beach Target Store).

In April 2007, 24 Green Ribbon Committee members were convened from local architects, builders, contractors, designers and developers. The Santa Monica-based non-profit Global Green USA was retained to provide expert facilitation and technical assistance to the process. Global Green had previously worked with other cities such as Pasadena, West Hollywood and Irvine on the development of their green building programs. The *Green Ribbon Committee* went on to meet three times in 2007 to discuss and develop a draft green building program for Long Beach.

The attached *Green Building Program for Private Development – Draft Program Summary* is the final product of the combined efforts of the Green Ribbon Committee, Global Green and City staff. The *Draft Program Summary* was presented to the Planning Commission on February 7, 2008 and the Sustainable City Commission on April 24, 2008.

The Draft Green Building Program for Private Development is composed of four tiers:

- Tier 1 seeks to introduce mandatory green building techniques to all projects through selected code changes to the zoning and building codes.
- Tier 2 makes the Interim Green Building policy permanent by requiring large projects (50+ units for residential or 50,000+ sq. ft. for non-residential) to use the LEED green building rating system to achieve a minimum of LEED-certified in their building design. Though projects must demonstrate LEED-compliance, full, official certification is not required.
- Tier 3 allows for the use of alternative green building rating systems on a voluntary basis for those projects not subject to Tier 2.
- Tier 4 seeks to offer development incentives for those projects that voluntarily achieve a higher level of LEED than that which is required by Tier 2.

This letter was reviewed by Assistant City Attorney Mike Mais on May 13, 2008 and by Budget Management Officer Victoria Bell on May 12, 2008.

TIMING CONSIDERATIONS

This item is not time sensitive.

FISCAL IMPACT

The staff costs associated with the recommendation are currently budgeted in the Development Services Fund (SR 137).

SUGGESTED ACTION:

Approve Recommendation.

Respectfully submitted,

PATRICK H. WEST
CITY MANAGER

Attachment

CITY OF LONG BEACH

GREEN BUILDING PROGRAM FOR PRIVATE DEVELOPMENT

DRAFT PROGRAM SUMMARY

February 7, 2008

PREPARED BY

GLOBAL GREEN USA

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1. INTRODUCTION

As issues related to climate change, habitat loss, water quality and availability, and public health become increasing concerns at the local level, a growing number of cities are taking proactive steps to ensure a more sustainable future. The City of Long Beach is helping advance this movement by making environmentally conscious programmatic and policy decisions. One such effort is the establishment of a green building program.

The concept of resource conservation is not new to Long Beach, as it was identi ed as a focus for the City more than thirty years ago in the Conservation Element of the Long Beach General Plan. In the decades since the 1970s, sustainability has become a much more pressing issue in the minds of citizens and policy makers. A direct commitment to sustainability came in 2000 with the adoption of the 2010 Strategic Plan, wherein the environment was identi ed as one of ve key areas of concern for the City to address in the rst decade of the new millennium. Today, as Long Beach prepares to update its General Plan, new avenues of sustainability are being explored. To date, the City of Long Beach has committed to green building standards for municipal buildings, a construction and demolition recycling program, a bicycle master plan, and a Sustainable City Commission, among others.

In late 2006, the City of Long Beach also adopted an interim policy for greening private development. Then, in the spring of 2007, the Long Beach Department of Planning and Building commissioned Global Green USA to help develop that program more fully. Working in partnership with City staff, Global Green researched City codes and procedures, then formed and gathered input from a Green Ribbon Committee a diverse group of community members convened for the express purpose of helping shape the draft program. Using input from the aforementioned sources, Global Green designed the proposed City of Long Beach Green Building Program for Private Development to accomplish the following goals:

1. Establish new and clarify existing basic green building requirements for all new private development in the City;
2. Require that large projects incorporate comprehensive green practices into their construction and operation;
3. Encourage the voluntary incorporation of green practices into a wide variety of projects; and,
4. Reward projects that employ aggressive green building practices beyond current requirements.

Implementing these goals will require adapting the City of Long Beach municipal code, collaborating with municipal utility programs, educating City employees, and motivating and informing the general public.

2. A FOUR-TIERED SYSTEM

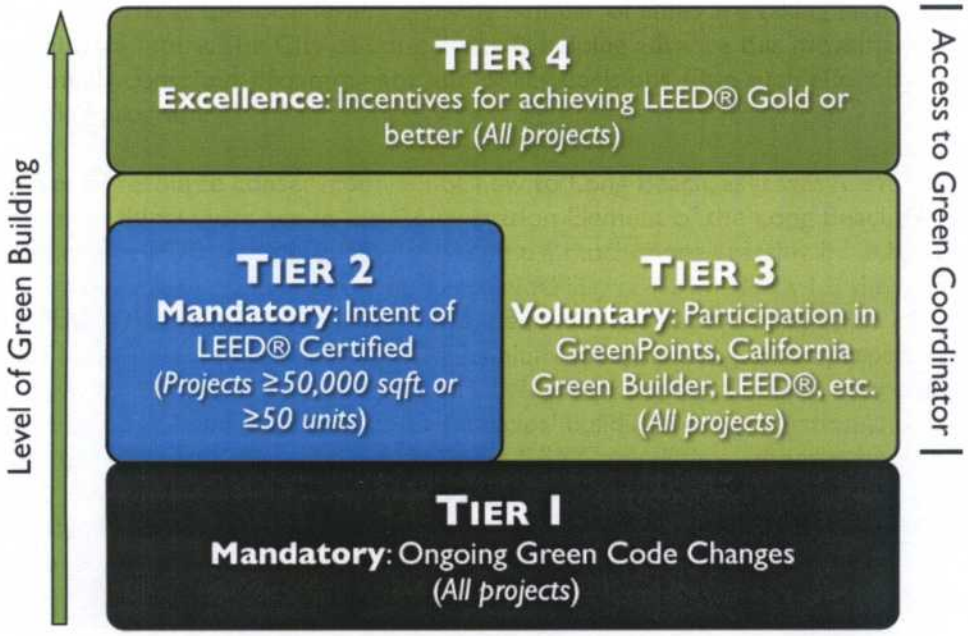

Table 1: Proposed Program Structure

The proposed Green Building Program for Private Development is divided into four tiers. The first tier establishes green standards for all new construction. The second tier establishes more comprehensive requirements for large projects. The third and fourth tiers are both voluntary, and are designed to assist and reward projects at levels dependent upon on the degree of sustainability achieved.

TIER 1: MANDATORY GREENING

TIER 1 modi es current building codes to incorporate certain basic, affordable and easily attainable green building standards into all new projects in the City of Long Beach. The end goal of this tier is to bring all new construction up to ***basic standards of green building***. As these changes are regulatory in nature, implementation would require amendments to the municipal code.

This tier rst recognizes existing codes that contribute to green building standards, some of the more notable items include:

Green Building Policy for Municipal Buildings
Interim Green Building Policy for Private Development
Construction and Demolition Recycling Program
Transportation Demand and Trip Reduction Measures
Sustainable City Commission

As the primary goal of this tier is to increase the number of sustainable practices incorporated into new development, this draft program proposes the following code changes for all new and major projects. Suggestions are broken down into the categories of green building as de ned by the United States Green Building Council s (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System for New Construction.

A. Sustainable Sites: Possible Amendments Related to Site Development

1. **Alternative Transportation: Bicycle Storage and Parking Capacity**
   a. Require residential projects to provide on-site bicycle parking spaces, such as one space for every four units
   b. Require non-residential projects to provide secure bicycle racks and/or storage, along with shower and changing facilities, based on project size and number of employees
   c. Require non-residential projects to size parking capacity to not exceed minimum local zoning requirements
   d. Require non-residential projects to provide preferred parking for carpools or vanpools
2. **Stormwater Design: Quantity and Quality**
   a. Review current stormwater quantity and quality requirements for all project types and identify opportunities to increase standards. Goals should include:
      i. Keeping post-development discharge rates from exceeding pre-development peak discharge rates and quantity; and,
      ii. Reducing or eliminating water pollution by reducing impervious cover, increasing site in ltration, eliminating sources of contaminants and removing pollutants from stormwater runoff.

3. **Heat Island Effect**
    a. Require all new projects to help minimize the heat island effect by incorporating various methods such as:
        i. Installing roo ng materials with a high Solar Re ectance Index
        ii. Utilizing any combination of the following strategies on the site hardscapes (including roads, sidewalks, courtyards and parking lots):
            Shading of surfaces
            Use of highly re ective paving materials
            Use of an open grid pavement system
        iii. Placing parking spaces or some percentage thereof under cover (under ground, under deck, under roof, or under a building) and require any roof used to shade or cover parking to be highly re ective

4. **Light Pollution Reduction**
    a. Create outdoor lighting height and intensity requirements designed to maximize energy ef ciency and minimize light pollution. Additional elements to consider include: light direction, shielding and timers.

B. Water Efficiency: Possible Amendments to Facilitate Water Conservation

1. **Water Ef cient Landscaping**
    a. Implement landscape water conservation standards with the aim of limiting water used for irrigation. Sample conservation methods include:
        i. Limiting the total percentage of landscape area planted with turf/grass
        ii. Utilizing water use calculations
        iii. Adopting daytime watering restrictions
        iv. Installing moisture-sensing device requirements
        v. Maximizing the total percentage of landscape area planted with drought tolerant species
        vi. Installing high ef ciency sprinkler nozzle requirements
        vii. Using captured rainwater for irrigation or other purposes
        viii. Using reclaimed wastewater when available

2. **Indoor Water Use Reduction**
    a. Implement standards with the goal of reducing indoor water consumption (using Federal Energy Policy Act of 1992 xture performance requirements as the baseline). Example strategies include establishing ow rate requirements lower than federal standards for lavatory faucets, kitchen faucets, shower heads, toilets and urinals.

C. Energy and Atmosphere: Possible Amendments to Decrease Energy Use

1. **Energy Performance**
    a. There are many opportunities to reduce home energy consumption. The City may want to consider requiring:
        i. Energy Star quali ed products be used if appliances are provided by the project developers
        ii. Energy ef cient lighting be installed when not otherwise required by building/ energy codes
        iii. New projects utilizing the performance method of testing for California s Title 24 requirements exceed those standards by 5% - 10%

2. **Fundamental Refrigerant Management**
    a. Prohibit use of HCFC-based refrigerants (which contribute to ozone depletion and global warming) in new base building heating and cooling systems, when feasible (based on product availability)
3. **On-Site Renewable Energy**
    a. Require all new building roof designs to account for future solar photovoltaic system installation (with a conduit from the roof to the electrical room/electrical panels installed at the time of construction)

D. Materials and Resources: Possible Amendments to Encourage Recycling

1. **Storage and Collection of Recyclables**
    a. Require all new projects to provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling (i.e., paper, corrugated cardboard, glass, plastics, and metals)
    b. Require all new multifamily project living units to include a space for the storage of solid waste along with additional space recyclable material

E. Indoor Environmental Quality: Possible Amendments to Improve Indoor Air Quality

1. **Low-Emitting Materials**
    a. Establish limits on volatile organic compound (VOC) content allowable for various indoor applications, such as:
        Paints and coatings
        Aerosol adhesives
    b. Require all carpet installed in building interiors to meet the testing and product requirements of the Carpet and Rug Institute s Green Label Plus program
2. **Contaminant Control**
    a. Require all HVAC ducts be sealed during construction
    b. Require permanent entryway systems designed to capture dirt and particulates from entering buildings at main entrances (e.g., grates, grilles, etc.)

TIER 2: MANDATORY GREENING OF LARGE PROJECTS

TIER 2 acts primarily as an extension of TIER 1 and is designed to impact large projects by establishing ***size and unit thresholds for comprehensive mandatory greening*** of new development. Projects meeting those thresholds would be required to either:

1) Register with the USGBC with the intent of achieving a minimum level of LEED certification, or,
2) Provide third-party veri cation that the project meets the equivalent minimum requirements of LEED Certi ed in the nal building design.

This tier, already in place in the form of the Interim Green Building Policy for Private Development, is designed to ensure that projects that will have a considerable impact on the community meet higher standards of sustainability. Thresholds established in existing policy and recommended for this tier are:

≥ 50 units, and/or
≥ 50,000 sqft.

Projects at or above this tier could access a City-managed **Green Building Coordinator**, whose duty would be to provide assistance to help move select projects more smoothly through the planning and permitting process.

The thresholds established in this tier could be lowered on a prede ned schedule (e.g., ≥25 units and/or ≥25,000 sqft. in 2009, and/or the LEED level adjusted to LEED Silver in 2011). Additional threshold levels could also be added, such as applying the requirements to reuse/major rehabilitation projects valued at equal to or greater than 50% of the existing building.

Note: *As participation in this tier is designed to be mandatory and based on established thresholds, developers with projects that do not meet the TIER 2 thresholds but wish to access the Green Building Coordinator have the option of voluntarily meeting the requirements set forth in TIER 3.*

TIER 3: VOLUNTARY GREENING

TIER 3 applies to projects that voluntarily incorporate a certain level of sustainability as de ned by an established and City-approved rating system or program. The purpose of this tier is to motivate builders not mandated by thresholds established in TIER 2 to go beyond the green requirements established in TIER 1 by offering additional support on projects that meet green standards as de ned by the City. Like all projects at or above TIER 2, projects meeting the requirements of this tier would be eligible for access to the City s ***Green Building Coordinator***, but documentation indicating a good faith commitment to a City-approved green building program would be required.

Programs the City may elect to reference include:

Build it Green s GreenPoint Rated program
The USGBC s LEED program
The Green Building Initiative s Green Globes program
The Building Industry Institute s California Green Builder program

TIER 4: INCENTIVES FOR EXCELLENCE

TIER 4 is designed to reward projects that display an exemplary commitment to green building by achieving LEED Gold certi cation or better. This would be achieved by offering development ***Incentive Options*** from a list pre-approved by the City. Additionally, projects at this level would be granted ***Priority Processing***. Priority Processing would bring projects to the top of the pile among those moving through the plan check process. These incentive options would be granted in addition to access to the City s ***Green Building Coordinator***.

The incentive options chosen by the City could take many forms, including:

Decreased Parking Requirements
Decreased Setback Requirements
Increased Building Height Allowances
Increased Density / FAR Allowances
Decreased Public/Private Open Space Allowances

The City may choose to administer the incentives on a, 1) project-by-project basis at the discretion of the Department of Planning and Building, or 2) through a more formalized green building overlay zone, which would specify incentive options available to particular project types meeting the requirements of this tier, depending on project location.

3. ADMINISTRATION

Administration of this program would require oversight of the following elements:

Project design support
LEED-based review
Outreach and education
Marketing materials creation/distribution
Web site creation/maintenance
Green Team coordination

These duties could be handled by the City-employed Green Building Coordinator, an outside consultant, or a combination of the two. The person charged with this role s commitment to the **Green Team** would consist of bringing together representatives from all departments tied to development on the topic of green building. The team would meet initially for general education on green building, a full brie ng on the structure and function of the Long Beach Green Building Programs, and a discussion on how to streamline the process of permitting green projects. Thereafter, the team would meet quarterly to ensure smooth operation of the Green Building Program for Private Development and that suf cient inter-departmental communication is maintained.