


**CITY OF MANHATTAN BEACH  
DEPARTMENT OF COMMUNITY DEVELOPMENT**

**TO:** Planning Commission

**THROUGH:** Laurie B. Jester, Acting Director of Community Development

**FROM:** Esteban Danna, Assistant Planner   
Carol Jacobson, Building Official

**DATE:** August 25, 2010

**SUBJECT:** Consideration of Environmental Task Force Recommendations to Amend Title 10 Planning and Zoning of the Manhattan Beach Municipal Code and the City's Local Coastal Program for Comprehensive Sustainable Building Measures, as part of the City Council 2009-2010 Work Plan.

**RECOMMENDATION**

Staff recommends that the Planning Commission **ACCEPT A PRESENTATION** from the Sustainable "Green" Building Subcommittee, **HOLD A PUBLIC HEARING**, and **CONTINUE DISCUSSING** amendments to Title 10 Planning and Zoning of the Manhattan Beach Municipal Code (MBMC) and the City's Local Coastal Program (LCP) to incorporate a comprehensive set of Sustainable Building Measures as recommended by the Sustainable "Green" Building Subcommittee and the Environmental Task Force.

**BACKGROUND**

At its regular meeting of July 14, 2010, the Planning Commission held a public hearing and discussed upcoming amendments to Title 10 Planning and Zoning of the Manhattan Beach Municipal Code (MBMC) and the City's Local Coastal Program (LCP) as recommended by the Sustainable "Green" Building Subcommittee and the Environmental Task Force. The Planning Commission asked Staff to return with more information in order to continue the discussion. Many of the questions posed by the Planning Commission at that meeting are addressed in this report. The Sustainable "Green" Building Subcommittee will provide a presentation at the Planning Commission meeting to further address questions and provide a dialog for Planning Commission discussion. The role of the Planning Commission is to review the proposed amendments, provide comments, and provide a forum for public participation.

The Sustainable "Green" Building Subcommittee and the Environmental Task Force recommended sustainable measures in five different areas of construction that are typically used in green building rating systems. Of the subcommittee's five areas of recommendations, three require the amendment of Title 10 Planning and Zoning in the MBMC and the LCP as follows:

**1. Site Sustainability**

- a. Stormwater Retention Design-Low Impact Development and Best Management Practices
- b. Green Roofs and Decks

2. **Water Efficiency/Water Use Reduction**
  - a. Landscaping and Irrigation
  - b. Plumbing Fixtures
3. **Energy**
  - a. Renewable Energy

## **ENVIRONMENTAL DETERMINATION**

Pursuant to California Environmental Quality Act (CEQA) and the Manhattan Beach CEQA Guidelines, portions of the subject amendments are exempt in that they are covered by the general rule that CEQA [Section 15061 (3)] only applies to projects which have the potential for causing a significant effect on the environment, and since it can be seen with certainty that there is no possibility that the activity will have a significant effect on the environment, the activity is not subject to CEQA. Portions not covered by the aforementioned exemption are Categorical Exempt, Class 8, Section 15308 in the CEQA Guidelines.

## **DISCUSSION**

### **1. Site Sustainability Recommendations**

#### ***Stormwater Retention Design – Low Impact Development and Best Management Practices***

The goal of the proposed amendment is to design water runoff mitigation measures to achieve zero discharge for ¼” rainfall in a 24 hour period. This can be achieved through the measures detailed below. This measure will meet minimum State requirements for commercial development and exceed State requirements for residential development.

<b>1a.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single and Multi-family Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>
	<b>Measures</b>	<p>Parcels 7,500 square feet or less</p> <ul style="list-style-type: none"> <li>• Maximum of 20% non-permeable surfaces for required yards/setbacks, parkway (MBMC 7.32), &amp; encroachment areas (MBMC 7.36)</li> <li>• Run-off from non-permeable surfaces (e.g., roofs, parking) to be directed to permeable areas and/or approved retention features (grey water, captured rain storage, and other systems). Administrative flexibility is necessary for location approval of retention systems.</li> <li>• Option to show compliance by submitting design by licensed Civil Engineer or Landscape Architect per California Stormwater Quality Association's Best Management Practices Handbook &amp; US Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES)</li> </ul> <p>Parcels greater than 7,500 square feet</p> <ul style="list-style-type: none"> <li>• Design by licensed Civil Engineer or Landscape Architect per California Stormwater Quality Association's Best Management Practices Handbook &amp; EPA's NPDES</li> <li>• Run-off from non-permeable surfaces (e.g., roofs, parking) to be directed to permeable areas and/or approved retention features (grey water, captured rain storage, and other systems). Administrative flexibility is necessary for location approval of retention systems.</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Reduce runoff and discharge of pollutants</li> <li>• Meet or exceed municipal discharge requirements</li> </ul>

These revisions are shown (Exhibit A) in MBMC Sections 10.04.030, 10.12.030 (Property Development Standards Chart and Subsections E and R), 10.12.040 (Subsection B), 10.12.050 (Subsection F), 10.16.030 (Subsection C), 10.20.030 (Development Regulations Chart and Subsection K), 10.52.050 (Subsection B), 10.60.040 (Subsection J), and 10.60.140 (Subsection B). These revisions are also shown in Local Coastal Program Sections A.04.030, A.12.030, A.12.040, A.12.050, A.16.030, A.20.030, A.52.050, A.60.040, and A.60.140.

The Planning Commission requested more information on non-permeable soils, where they are located in the City, and what other cities are doing. The most common impermeable soil is clay soil. This type of soil is very dense, drains very slowly, and it is difficult for plant roots to thrive. In Manhattan Beach, the clay soil tends to be East of Sepulveda. There are not normally any actions taken by municipalities to change the clay

soil because it is just a part of the geology of the area. In order to increase drainage and improve the structure of the soil, homeowners can apply organic matter to the soil. This will create more space between the clay particles and will increase drainage and allow plants to thrive.

The Commission expressed interest in pursuing the uncovered permeable parking lot concept for commercial areas. The use of pervious concrete would be the simplest solution to this issue as it is highly effective at allowing water to pass through it, but still functions like normal concrete or pavement. As a result of the high-traffic conditions of commercial parking lots, gravel or turf block products such as Grasscrete is not optimal but acceptable in some cases.

For properties located in Commercial districts, Staff proposes to require a minimum of fifty percent (50%) of the parking area to be paved with pervious surfaces for new projects or projects that exceed fifty percent (50%) of the existing improvement. The areas designated for pervious parking should work in conjunction with a stormwater management system. These requirements are added to subsection B of the new Sustainable Development section of the proposed code amendment (10.60.140B).

***Green Decks and Roofs***

A green deck or roof is a surface that supports the growth of vegetation over a portion of its area generally for the purpose of water and/or energy conservation. Green roofs provide a means to decrease stormwater runoff into the public system as well as provide building insulation and improved aesthetics. While balancing height, views, and safety concerns, the recommendation to amend Title 10 Planning and Zoning provides administrative flexibility for green decks and roofs and is consistent with the 2009-2010 City Council Work Plan. This measure is not a State requirement.

<b>1b.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single and Multi-family Residential</li> <li>• Non-residential</li> <li>• Balcony/deck/ roof remodels</li> </ul>
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Treated as other decks and balconies for height and setbacks</li> <li>• Director may approve green roofs on top of roof level if it is not usable as a deck, and if safety, maintenance, slope, and access issues are mitigated</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Reduce stormwater runoff in public system</li> <li>• Filter pollution</li> <li>• Increase thermal and acoustical insulation</li> <li>• Decreased need for air conditioning and other energy consumption</li> </ul>

These revisions are shown (Exhibit A) in MBMC Sections 10.04.030, 10.12.030 (Subsection H), 10.52.050 (Subsection H), 10.60.040 (Subsections B, F, and J), 10.60.140 (Subsection C), and 10.68.020 (Subsection D and I). These revisions are also

shown in the Local Coastal Program Sections A.04.030, A.12.030, A.60.040, A.60.140, and A.68.020.

The Planning Commission expressed concerns on how a green roof would comply with the maximum allowed height limit. The growing medium for a green roof is relatively shallow (typically just a few inches) and therefore can only support plants with limited height, such as grasses and ground cover. A landscape plan would also be required for green roofs to ensure appropriate plant material. Staff had the opportunity to meet with vendors and discuss typical installation and potential green roof uses in Manhattan Beach, and their input has been incorporated into the proposed regulations.

**2. Water Efficiency/Water Use Reduction Recommendations**

The intent of the recommendation is to design irrigation to meet requirements for region 3 (which includes Manhattan Beach) per Water Use Classification of Landscape Species (WUCOLS). WUCOLS is a publication designed to assist in the design of more water efficient landscaping in California. This measure will meet minimum California Model Water Efficient Landscape Ordinance requirements for commercial development and exceed the requirements for residential development.

***Landscaping and Irrigation***

<b>2a.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single &amp; Multi-family Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Maximum of 20% of the landscaped area (private property, public parkways, &amp; encroachment areas) may be high water use, such as grass</li> <li>• Small lots of 7,500 square feet or less may use standardized water budget worksheet per WUCOLS or may provide licensed landscape architect design and calculations</li> <li>• Lots over 7,500 square feet must provide licensed landscape architect design and calculations</li> </ul> <p>Exceptions:</p> <ul style="list-style-type: none"> <li>• Director may allow administrative exemptions for hardship or special circumstances</li> <li>• Sites irrigated with non-potable water are exempt</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Estimated 20% reduction of water usage</li> <li>• Estimated 20% reduction of runoff discharge</li> <li>• Meet or exceed compliance with California Model Water Efficient Landscape Ordinance</li> </ul>

These revisions are shown (Exhibit A) in MBMC Sections 10.12.030 (Subsection O), 10.12.050 (Subsection K), 10.20.030 (Subsection G), 10.44.040 (Subsection K), and

10.60.070. These revisions are also shown in the Local Coastal Program Sections A.12.030, A.12.050, A.20.030, A.44.040, and A.60.070.

The Commission was interested in knowing what the State requirements are and how the City is meeting these requirements. The State of California requires that a water budget be developed for landscape irrigation that conforms to the local water efficient landscape ordinance or to the California Department of Water Resources Model Water Efficient Landscape Ordinance and where no local ordinance is applicable.

The State also requires a reduction in use of potable water. This includes water efficient landscape irrigation design that reduces the use of potable water by 50 percent beyond the initial requirements for plant installation and establishment. Calculations for the reduction shall be based on the developed water budget. Manhattan Beach proposes to meet these requirements by allowing only a maximum of 20% of the landscaped area to be high water use and by promoting systems such as grey water and other water recycling systems.

The Commission was also interested in knowing what the average water use per person is in Manhattan Beach compared to the average Los Angeles County resident. Per capita water consumption in Manhattan Beach is 98.67 gallons/day, which is 22% lower than the average per capita water consumption in Los Angeles County, which is 126.5 gallons/day.

***Plumbing Fixtures***

The Sustainable Building Subcommittee’s recommendation for plumbing fixtures mainly focuses on water efficient toilets and other water efficient fixtures that are addressed in the Title 9 Building Regulation amendment recommendations. However, Title 10 is amended as the recommendation addresses exterior decorative water features. Limiting fountain surface area is not a State requirement, but the Green Building Subcommittee felt limitations were appropriate as areas with large water surfaces have high water evaporation rates. Swimming pools would not be affected by the proposed regulations.

<b>2b.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single &amp; Multi-family Residential</li> <li>• Non-residential</li> </ul>
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Residential and Non-residential fountains, ponds max 25 square-foot footprint with water recirculation system unless using non-potable water; no fountain overspray</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Estimated 20% reduction water usage</li> <li>• Meet or exceed City Water Conservation Ordinance and California Green Building Standards</li> </ul>

These revisions are shown (Exhibit A) in Sections 10.52.050 (Subsection K) and 10.60.140 (Subsection D). These revisions are also shown in the Local Coastal Program Sections A.52.050 and A.60.140.

Staff discussed the use of non-potable water in decorative water features with representatives from West Basin Municipal Water District and Los Angeles County Public Health Department. They concluded that the use of reclaimed water may be acceptable pending review and treatment.

**3. Energy Recommendations**

***Renewable Energy***

The renewable energy recommendations revise Title 10 of the Manhattan Beach Municipal Code to allow administrative approval of solar energy systems not exceeding a maximum of 12” over the maximum allowed height limit in order to meet State regulations. Renewable energy recommendations also discuss wind energy systems. Because there are many concerns regarding the viability of current technology as well as height, view, location, and noise concerns, the Subcommittee recommends that wind turbines be considered through the public noticing process. These measures are not State requirements.

<b>3a.</b>	<b>Application</b>	All new applications for renewable energy production
	<b>Measures</b>	Solar energy systems <ul style="list-style-type: none"> <li>• Continue to waive fees</li> <li>• Allow 12” over height if needed to meet Solar Rights Act</li> <li>• Director may exempt height restrictions where fire-life safety, and access issues are mitigated</li> </ul> Wind turbines <ul style="list-style-type: none"> <li>• Allowed within building footprint</li> <li>• Public hearing for other locations</li> </ul>
	<b>Purpose/ Benefit</b>	Encourage or facilitate renewable energy

These revisions are shown (Exhibit A) in Sections 10.04.030, 10.60.060, and 10.60.140 (Subsections E and F). These revisions are also shown in the Local Coastal Program Sections A.04.030, A.60.060, and A.60.140.

The Planning Commission raised several questions regarding the proposed renewable energy measures. Specifically, the Commission had concerns with visual pollution and view impacts as a result of the installation of photovoltaic panels and Small Wind Energy Systems (SWES). There are several companies that produce alternative and visually appealing designs to photovoltaic panels and small wind energy systems that can be integrated into the architecture.

The Commission was interested in learning how other jurisdictions approach photovoltaic panel heights. Neither Redondo Beach nor El Segundo regulate solar panel heights. Santa Monica will allow solar panels to extend up to five feet above the height limit. Proposed solar panels can go to an architecture review board for approval if additional height is requested.

The Commission was also interested in learning how other jurisdictions approach SWES noise concerns. Most wind turbines that would be used in an urban setting are smaller and create much less noise than commercial scale turbines. Many residential wind turbines are Vertical Axis Wind Turbines (VAWT). These produce very little noise, ranging from being totally silent to producing up to 20 decibels. The Cities of San Diego and Santa Monica do not have a noise limit specifically for wind turbines. If a neighbor files a noise complaint as a result of a wind turbine it is enforced similarly to any other noise complaint regardless of the source.

Additionally, in the interest of encouraging energy conservation and alternative energy solutions, Staff proposes to allow alternative-fuel vehicle recharging stations to project into the required parking clearance for enclosed garages up to five feet, as long as a 4.5-foot vertical clearance is maintained. These dimensions are the current allowed parking clearance projections of non-structural storage as detailed in Section 10.64.100 (C).

## **CONCLUSION**

Staff recommends that the Planning Commission accept the Sustainable “Green” Building Subcommittee presentation, hold a public hearing, and continue discussing amendments to Title 10 Planning and Zoning of the Manhattan Beach Municipal Code (MBMC) and the City’s Local Coastal Program (LCP) to incorporate a comprehensive set of Sustainable Building Measures as recommended by the Sustainable “Green” Building Subcommittee and the Environmental Task Force. The purpose of the Planning Commission meeting is to review the proposed amendments, provide comments, and provide a forum for public participation. When the Planning Commission adopts a resolution, the recommendations will be forwarded to the City Council for final action.

- Exhibits:
- A. Draft Planning Commission Code Amendments
  - B. Staff Report, dated July 14, 2010
  - C. Planning Commission Minutes, dated July 14, 2010
  - D. Public Notice



**10.04.030 and A.04.030—Definitions**

Grey Water Devices: A system designed to collect greywater and transport it out of the structure which may include tanks, valves, filters, pumps, or other appurtenances along with piping.

Permeable Surface: an uncovered finish grade surface such as a driveway, walkway, or patio constructed with pervious materials allowing stormwater to directly infiltrate the underlying soils and contained so neither sediment nor the water discharges off the site.

Pools, Swimming and Hot Tubs: Water-filled enclosures having a depth of eighteen inches (18") or more used for swimming or recreation (See "Fountains, Ponds, and Decorative Water Features" definition).

Roof/Deck, Green: A roof or deck/balcony surface that is partially or totally planted with vegetation that is over a waterproof membrane generally for the purpose of water or energy conservation.

Solar Energy System: A combination of solar collector(s) and ancillary solar equipment used to generate electricity or heat water primarily for consumption on the property where the system is located, or where multiple consumers or exceptional circumstances exist, on an adjoining property.

Stormwater Retention/Detention Feature: a device or system of improvements that capture and subsequently release stormwater runoff from a site at a slower rate than it is collected, while holding the runoff in temporary storage.

Water Features, Decorative: an ornamental/decorative water feature or structure such as fountains and ponds generally having a depth of eighteen inches (18") or less not designed or intended for swimming or recreation (See "Swimming Pools and Hot Tubs" definition).

Wind Energy System, A small (SWES): Wind energy system, generally consisting of a wind turbine, tower and ancillary equipment, that is used primarily to reduce consumption of utility power on the site.



**10.12.030 and A.12.030—Property development regulations:**  
**PROPERTY DEVELOPMENT STANDARDS FOR AREA DISTRICTS I AND II**

	Area District I			Area District II			Additional Regulations
	RS	RM	RH	RS	RM	RH	
Lot Dimensions							
Area (sq. ft.)							(A)(B)(C)(K)
Minimum	7,500	7,500	7,500	4,600	4,600	4,600	
Maximum	15,000	15,000	15,000	10,800	10,800	10,800	
Width (ft.)							
Minimum	50	50	50	40	40	40	
Minimum Setbacks							
Front (ft.)	20	20	20	20	20	20	(A)(B)(D)(E)(T)
Side (percentage-ft.)	10%-3 min.	10%-3;10	10%-3;10	10%-3 min.	10%-3;10	10%-3;10	(D)(E)(F)
Corner Side (percentage-ft.)	10%-3;5	10%-3;5	10%-3;5	10%-3;5	10%-3;5	10%-3;5	(D)(E)(T)
Rear (ft.)	12 min	12 min	12 min	12 min	12 min	12 min	(D)(E)(F)(G)
Maximum Height of Structures (ft.)	26	26	30	26	26	30	(H)(P)
Maximum Buildable Floor Area							(I)
Lot Area (Sq. Ft.)							
7,500 or less		1.0	1.2		1.0	1.2	
More than 7,500		2250 +0.7	2250 +0.9		2250 +0.7	2250 +0.9	
4,800 or less	0.7			0.7			
More than 4,800	240 +0.65			240 +0.65			
Minimum Lot Area per Dwelling Unit (sq. ft.)	7,500	3,750	1,000	4,600	2,300	1,000	(A)

PROPERTY DEVELOPMENT STANDARDS FOR AREA DISTRICTS III AND IV

	Area District III			Area District IV	Additional Regulations
	RS	RM	RH	RH	
Minimum Lot Dimensions					
Area (sq. ft.)	2,700	2,700	2,700	2,700	(A)(B)(C)(J)
Width (ft.)	30	30	30	30	
Minimum Setbacks					
Front (ft.)	5	5	5	5	(A)(B)(D)(E)(G)
Side (percentage-ft.)	10%- 3 min.	10%- 3;10	10%- 3;10	10%-3;10	(D)(E)(F)
Corner Side (ft.)	1	1	1	1	(D)(E)
Rear (ft.)	5 or 10	5	5	5	(D)(E)(F)(G)
Maximum Height of Structures (ft.)	30	30	30	30	(H)(P)
Maximum Buildable Floor Area					
Lot Area (Sq. Ft.)	1.6	1.6	1.7	1.7	(I)
Minimum Lot Area per Dwelling Unit (sq. ft.)	1,700	1,350	850	850	(J)(A)

**E. Setbacks:**

All required yards shall provide permeable surfaces as required in Sections 7.32, 7.36 and 10.60.140B.

**E.1. Side Setbacks.** Ten percent (10%) of lot width but not less than three feet (3'). In the RM and RH Zones side setbacks need not exceed ten feet (10'), and on corner sides setbacks need not exceed five feet (5').

**(+)Exceptions—Side Setbacks.** Existing lots in the RM and RH Zones currently developed as multifamily and greater than fifty feet (50') in width need not provide side setbacks greater than five feet (5') when developed with three (3) or more dwelling units.

**2. Reverse Corner Side Setback.** Reverse corner lots in Area Districts I and II shall have the following side yards:

- (a) On the lot side line which adjoins another lot the side yard shall be determined in the same manner as for an interior lot.
- (b) On the street side line, the width of the required side setback shall be the same as for the interior side setback on the lot except that the size and shape of such required side setback nearest the lot rear line shall be increased to include all of that portion, if any, of a triangle formed in the following manner:

- (i) On the common lot line of the reverse corner lot and the key lot, a point shall be established where the rear line of the required front yard on the key lot intersects such common lot line;
- (ii) On the street side line of the reverse corner lot, a point shall be established distant from the common street corner of the key lot and the reverse corner lot equal to the depth of the required front yard on the key lot;
- (iii) The third side of the triangle shall be a straight line connecting points (i) and (ii) of this section. If an alley intervenes between the key lot and the reverse corner lot, the width of the alley shall be included in determining the length of the line on the street side line of the reverse corner lot.

**3. Rear Setback:**

- (a) In Area Districts I and II, the rear setback (RS) shall be determined as follows:  
 $RS = 0.3 \times (\text{lot depth in feet}) - 20$ ; provided that the minimum setback is twelve feet (12').
- (b) In Area District III, RS District, non-alley lots abutting residential at the rear with two thousand seven hundred (2,700) square feet or more in lot area, the rear setback shall be ten (10') feet.

**H. Maximum Height of Structures.** See Section 10.60.050, Measurement of height, and Section 10.60.060, Exceptions to height limits. The maximum number of stories permitted shall be three (3) where the height limit is thirty feet (30') and two (2) where the height limit is twenty-six feet (26'). A floor level may be divided between portions qualifying as a story and portions qualifying as a basement. Any portion of a floor level qualifying as a story shall be considered to have a minimum dimension of twenty feet (20') measured perpendicular from the outside face(s) of the exterior building wall(s) which defines that area as a story. (See Graphic Illustration under "Basement" definition—Section 10.04.030).

A deck or balcony may be located directly above a second story where the height limit is twenty-six feet (26') or the third story where the height limit is thirty feet (30'), if the following criteria is met. Such decks shall be located adjacent to an interior living space and shall provide additional setbacks as follows; in all Area Districts the interior side setback shall be three (3) times the minimum side setback; In Area Districts I and II the rear setback shall be two (2) times the minimum rear yard setback and in Area Districts III and IV the rear setback shall be fifteen (15) feet. The surface elevation of any deck or balcony shall be no higher than nine feet (9') below the height limit.

A green roof or deck may be located only where decks and balconies are allowed. Green roofs that are designed in a manner that prohibits usability may be approved administratively by the Director of Community Development if safety, maintenance, slope, and access issues are mitigated (See "Roof, Green or Deck" Sections 10.04.030 and 10.60.140C).

Whenever new construction or alterations and additions to existing structures involves grading or scraping, a survey acceptable to the Director of Community Development is required as a condition of issuance of a demolition or building permit (see Section 10.80.010). The Director shall require that survey markers be set.

The Community Development Director shall determine compliance with this subsection by reviewing two (2) vertical cross-sections through the property (front-to

back and side-to-side) that show the relationship of each level in a new structure and new levels added to an existing structure to both existing and finished grade on the property and adjacent land within five feet (5') of the property line.

- O. **Required Landscaping Adjoining Streets.** At least twenty percent (20%) of all visible portions of a required front or corner side yard adjoining a street shall be a planting area. For additional site landscaping requirements, see Section 10.60.070-Landscaping, Irrigation and Hydroseeding. Conformance with standards specified in Section 10.60.070 may result in landscaping that exceeds the minimum requirements of this section.

R. **Building Separation.**

1. The minimum distance between buildings (building separation yard) containing one (1) or more dwelling units on a site shall be ten feet (10'). For permitted projections within said building separation yards, see Section 10.60.040, Building projections into yards.
2. All required yards shall provide permeable surfaces as required in Section 10.60.140B.

**10.12.040—RPD district development regulations.**

B. **Development Standards.**

5. **Minimum Building Setbacks for Single-Family Dwellings and Accessory Structures.** All required yards shall provide permeable surfaces as required in Sections 7.32, 7.36, and 10.60.140B.
6. **Minimum Building Setbacks for Attached or Cluster Multifamily Dwellings:** All required yards shall provide permeable surfaces as required in Sections 7.32, 7.36, and 10.60.140B.

**10.12.050—RSC district development regulations.**

- F. **Minimum Yards and Building Setbacks.** Minimum yards and setbacks shall not be less than those required in the RH district for the area district in which the development is proposed. All required yards shall provide permeable surfaces as required in Sections 7.32, 7.36, and 10.60.140B.

K. **Landscaping.**

9. For additional site landscaping requirements, see Section 10.60.070, Landscaping, Irrigation and Hydroseeding. Conformance with standards specified in Section 10.60.070 may result in landscaping that exceeds the minimum requirements of this section.

**10.16.030 and A.16.030—CL, CC, CG, CD, and CNE districts: development regulations.**

- C. See Section 10.60.040, Building projections into yards and required open space. Double-frontage lots shall provide front yards on each frontage. All required yards shall provide permeable surfaces as required in Sections 7.32, 7.36, and 10.60.140B.

**10.20.030—IP district: development regulations.**  
**IP DISTRICT: DEVELOPMENT REGULATIONS**

	IP	Additional Regulations
Minimum Lot Area (sq. ft.)	40,000	(A)(B)
Minimum Lot Width (ft.)	150	(A)(B)
Minimum Setbacks		(A)(C)(D)(K)
Front (ft.)	25	
Side (ft.)	15	
Corner Side (ft.)	20	
Rear (ft.)	15	
Maximum Height of Structures (ft.)	99	(E)(F)
Maximum Floor Area Factor (FAF)	1.0	
Minimum Site Landscaping	10%	(G)(H)
Fences and Walls		(I)(J)
Off-Street Parking and Loading	See Chapter 10.64.	
Outdoor Facilities	See Section 10.60.080.	(J)
Screening of Mechanical Equipment	See Section 10.60.090.	(J)
Refuse Storage Area	See Section 10.60.100.	
Underground Utilities Performance Standards	See Section 10.60.120.	
Nonconforming Uses and Structures	See Chapter 10.68.	
Signs	See Chapter 10.72.	

**G. Planting Areas.** In required front and corner-side yards, 12 feet adjacent to a public right-of-way shall be planting areas except for necessary drives and walks. For site

landscaping requirements, see Section 10.60.070, Landscaping, irrigation and hydroseeding. Conformance with standards specified in Section 10.60.070 may result in landscaping that exceeds the minimum requirements of this section.

K. All required yards shall provide permeable surfaces as required in Sections 7.32, 7.36, and 10.60.140B.

**10.44.040 and A.44.040—Building permits to conform to overlay district regulations.**

K. Residential projects shall include planter boxes at the pedestrian level involving lots of two thousand five hundred (2,500) square feet (or more) along Highland Avenue. For additional site landscaping requirements, see Section 10.60.070, Landscaping, irrigation and hydroseeding. Conformance with standards specified in Section 10.60.070 may result in landscaping that exceeds the minimum requirements of this section.

**10.52.050 and A.52.050—Accessory structures.**

B. **Location.** Except as provided in this chapter, accessory structures shall not occupy a required front, side, or building separation yard. Mechanical equipment and storage buildings shall be prohibited beyond the front building line of the principal structure on a site. No accessory uses shall be permitted off-site; this shall not prohibit development allowed in subsection F of this section.

**Exceptions.**

1. Ornamental accessory structures may be located in the front yard of a site if they do not exceed forty-two inches (42") in height.
2. One (1) flagpole may be located in the front yard of a site if it does not exceed fifteen feet (15') in height.
3. One (1) decorative lamp post may be located in the front yard of a site if it does not exceed eight feet (8') in height.
4. Architectural screen walls may be located in the front yard of a site pursuant to Section 10.12.030(P).
5. One (1) basketball hoop/post may be located in the front yard of a site if it does not exceed thirteen feet (13') in height.
6. Stormwater retention/detention features and grey water devices may be located in required side, rear, or building separation yards as follows:
  - a. Retention/detention features installed entirely below grade.
  - b. Above grade retention/detention features may project a maximum of twelve inches (12") into required side, rear, or building separation yards provided a five foot (5') clearance from the property line is maintained.
  - c. Other retention/detention feature locations may be approved at the discretion of the Community Development Director.

H. **Decks.** No accessory structure deck or green roof/deck more than thirty inches (30") or more in height shall be located in a required yard.

**K. Fountains, Ponds, and Decorative Water Features.** See Section 10.60.140D for additional requirements.

**10.60.040 and A.60.040—Building projections into required yards or required open space.**

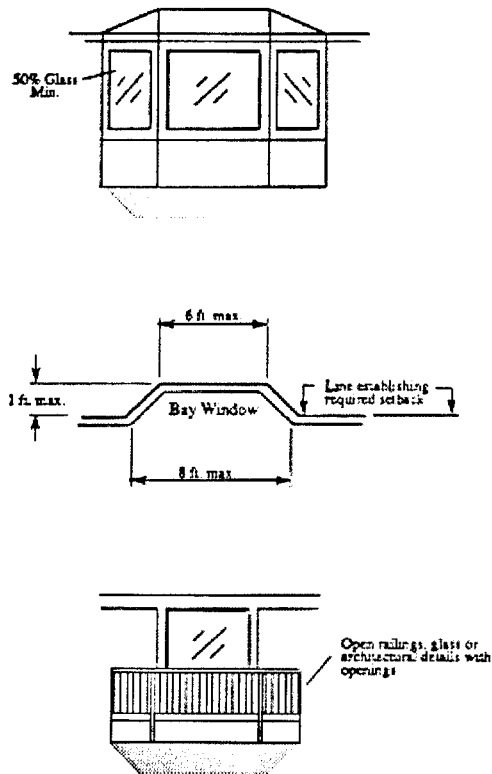
B. Uncovered porches, platforms, decks, green decks and landings, including access stairs thereto, which do not extend above the floor elevation of an adjoining portion of the first story: Three feet in a side or building separation yard, four feet (4') in a front yard and six feet (6') in a rear yard, provided that a two-foot (2') clearance from the property line is maintained. Open-work railing not to exceed three and one-half feet (3½') in height may be installed.

**Exception:** A zero foot (0') clearance shall be permitted from property lines adjoining numbered "walk streets," or unimproved public street or alley easements which are not open to vehicular use.

F. **Balconies and Bay Windows:** Balconies, including green roofs/decks, and bay windows may project into required yards and usable open space, subject to the following limitations:

1. The glass area of each bay window shall be not less than fifty percent (50%) of the sum of the vertical surfaces of such bay window.
2. The maximum length of each bay window shall be eight feet (8') at the line that establishes the yard setback and shall be reduced in proportion to the distance from such line by means of a forty-five-degree (45°) angle drawn inward from the end of the eight-foot (8') dimension, reaching a maximum of six feet (6') along a line that is one foot (1') from and parallel to the setback line. The total aggregate length of all bay windows on each level projecting into a required yard shall not exceed one-quarter (1/4) of the buildable length or buildable width of the lot, as the case may be.
3. No bay window shall project into an open area established by an inclined plane extending upward at forty-five-degree (45°) angle from a horizontal extension of the adjacent floor level. The intent of this requirement is to ensure that no floor area projects into a required yard.
4. Balconies, shall have open railings, glass or architectural details with openings to reduce visible bulk; balconies composed solely of solid enclosures are not allowed to project into required yards.
5. Balcony projections are allowed in either the required front and rear yard, but not both, provided the depth of projection into the required yard does not exceed three feet and the area does not exceed three feet (3') multiplied by one-half (1/2) of the buildable width of the lot, and a minimum two foot clearance to the property line is maintained.
  - a. Exceptions for RM and RH Districts. Balcony projections are allowed in both the required front and rear yard for each dwelling unit to provide private open space. The aggregate area of all balcony projections for the entire lot within required yards shall not exceed three (3) times one-half (1/2) of the buildable width of the lot if all balcony projections are located in either the front or rear yard, and three (3) times two-thirds (2/3) the buildable width of the lot if balconies are located in both the front and rear yards.
6. The aggregate length of all bay window, balcony, chimney, and stair projections into a required yard on a single building level, measured at the setback line, shall not exceed two-thirds (2/3) of the buildable width of the lot.
  - a. Exception for Area Districts I and II. Balcony projections within eight feet (8') of local grade shall not be included in the aggregate length applicable to a single level.





## BAY WINDOWS, AND BALCONIES, AND GREEN ROOFS/DECKS

**J. Stormwater and Greywater Retention/Detention Features.** Stormwater runoff and greywater retention/detention features may be located in required side, rear, or building separation yards as follows:

- a. Retention/detention features installed entirely below local grade.
- b. Above grade retention features may project a maximum of twelve inches (12") into required side, rear, or building separation yards provided a five foot (5') clearance from the property line is maintained.
- c. Other retention feature locations may be approved at the discretion of the Community Development Director.

### **10.60.060 and A.60.060—Exceptions to height limits.**

**Exceptions to height limits.** Vent pipes and radio and television antennas may exceed the maximum permitted height in the district in which the site is located by no more than ten feet (10'). Chimneys may exceed the maximum permitted height by no more than five feet (5'), provided the length and the width of the chimney portion exceeding the height limit shall not exceed three feet (3') in width and five feet (5') in length. Solar energy systems may exceed the maximum permitted height by no more than twelve inches (12").

The Director of Community Development may make exemptions where fire-life safety and access issues are mitigated (See Solar energy systems—Section 9.36.080).

**10.60.070 and A.60.070—Landscaping, Irrigation, and Hydroseeding.**

**A. General Requirement.** ~~Minimum~~ For new projects and projects over fifty percent (50%) in building valuation, all site landscaping and ~~required~~ planting areas shall be installed in accord with the standards and requirements of this section, which shall apply to all projects including construction or exterior alterations of structures ~~with more than a total of two thousand five hundred (2,500) square feet of buildable floor area and covered parking area, except single family residences and two family dwelling units (duplexes).~~

1. Landscape plans shall be prepared by a landscape designer, a licensed landscape architect or other qualified person, and submitted to the Community Development Department for approval prior to issuance of a building permit, and no significant or substantive changes to approved landscaping or irrigation plans shall be made without prior written approval by the Community Development Director and the landscape designer. Substantial changes shall require approval of the Planning Commission or Board of Zoning Adjustment, as appropriate, if these bodies granted approval of the project.
2. Evidence of completion of required landscaping and irrigation improvements shall be supplied to the Community Development Department on a Landscape Certification form. This form shall be required to be submitted prior to issuance of an occupancy permit for new construction unless an extension of up to one (1) year has been granted by the Community Development Director. For projects consisting primarily of additions to or remodeling of existing buildings for which landscaping is required, a deferred completion agreement may be executed prior to issuance of the building permit. The agreement shall guarantee installation of the landscape and any irrigation improvements within one (1) year or prior to occupancy, whichever occurs first.
3. A maximum of twenty percent (20%) of the total landscaped area on private property, parkways, and encroachment areas may be plants of high water use per Region 3 of Water Use Classification of Landscape Species (WUCOLS). When calculating lot sizes, any lot dimensions with fractions shall be rounded down to the nearest whole number prior to calculating the lot size. This requirement may be met as follows:
  - a. For parcels 7,500 square feet or less:
    1. Submittal of a Standardized Water Budget Worksheet per WUCOLS or;
    2. Submittal of design and calculations prepared by a licensed landscape architect.
  - b. For parcels 7,500 square feet or greater:
    1. Submitting a design and calculations prepared by a licensed landscape architect.

**Exceptions**

1. Sites entirely irrigated by non-potable water.
2. Administrative exception for special circumstances or undue hardship as determined by the Director of Community Development.

**10.60.140 and A.60.140—~~Solar-assisted water heating~~. Sustainable Development.**

**A. Solar-assisted water heating.** To promote energy conservation, installation of plumbing for future solar-assisted water heating systems shall be required in all new residential and commercial construction and in major alterations and additions to residential and commercial structures when the total estimated cost of the enlargement or alteration exceeds fifty percent (50%) of the total estimated cost of reconstructing the structure.

**B. Stormwater and Greywater Retention/Detention Design.** For new projects and projects over fifty percent (50%) in building valuation, all stormwater runoff from non-permeable surfaces (ie: roofs, driveways, walkways) must be directed to permeable areas and/or approved retention/detention features (See Sections 10.04.030—Definitions, 10.52.050-Accessory Structures, and 10.60.040-Building projections into required yards or required open space). When calculating lot sizes, any lot dimensions with fractions shall be rounded down to the nearest whole number prior to calculating the lot size. Additionally, plans demonstrating stormwater runoff mitigation measures shall be implemented as follows:

1. For parcels 7,500 square feet or less in all districts:

a. A maximum of twenty percent (20%) of all required yards may be non-permeable or;

b. Landscape plans shall be designed by licensed engineer or landscape architect per California Stormwater Quality Association’s Best Management Practices Handbook and United States Environmental Protection Agency’s (EPA) National Pollutant Discharge Elimination System (NPDES).

2. For parcels 7,500 square feet or greater in all districts:

a. Landscape plans designed by licensed engineer or landscape architect per California Stormwater Quality Association’s Best Management Practices Handbook and United States Environmental Protection Agency’s (EPA) National Pollutant Discharge Elimination System (NPDES).

**Exceptions:** Remodel projects with no expansion of footprint.

3. For parcels in Commercial and other non-residential districts, a minimum of fifty percent (50%) of the parking area shall be paved with pervious surfaces. Pervious parking areas shall be constructed of permeable pavement, turf pavement, or other material as approved by the Community Development Director. The parking lot surface shall be designed and constructed with a structural support when grass or other vegetation is proposed. The areas designated for pervious parking shall be maintained and shall work in conjunction with a stormwater management system. The pervious parking does not count as part of the landscaping requirements as defined in Section 10.60.070. Any landscaped area required by Section 10.60.070 does not count towards the requirements of this section. The Community Development Director may approve alternate materials and specifications in lieu of these requirements.

**C. Green Roofs and Decks.** A green roof or green deck may be located only where decks and balconies are allowed. Green roofs/decks that are designed in a manner that prohibits usability as a deck may be approved administratively by the Director of Community Development if safety, maintenance, slope, and access issues are mitigated (See “Roof, Green or Deck” definition).

- D. Decorative Water Features.** All fountains, ponds, and other water features, excluding swimming pools and spas, may not exceed twenty five (25) square feet in total water surface area. Water features must be equipped with a water recirculation system and may not have an overspray feature. The use of non-potable water may be approved at the discretion of the Community Development Director upon submittal and review of water treatment procedures.
- E. Solar Energy Systems.** Solar energy systems may exceed the maximum permitted height by no more than twelve inches (12”). The Director of Community Development may make exemptions where fire-life safety and access issues are mitigated (See Solar energy systems—Section 9.36.080).
- F. Small Wind Energy Systems (Turbines).** Small Wind Energy Systems (SWES) are permitted in all districts subject to the following standards and procedures:
- 1. Development Standards.** The following minimum requirements and standards shall apply to SWES:
    - a. System type and location.**
      1. The SWES shall comply with the definition of Small Wind Energy System in Section 10.04.030.
      2. Where feasible, ancillary SWES equipment shall be located inside a building or screened from public view in a manner compatible with the site.
    - b. The SWES shall not exceed the applicable height limit as defined in Sections 10.12.030, 10.16.030, 10.20.030, and 10.60.050.**
    - c. Setbacks and Clearances.**
      1. The SWES shall comply with the setbacks applicable to the zone in which the SWES is located, provided that a greater setback may be required to reduce impacts to adjacent parcels.
      2. No portion of a blade when fully operational shall extend within ten (10) feet of finished grade or a property line, unless the Director of Community Development finds that a reduced clearance will not adversely affect any person, property or improvement in the vicinity, or conflict with the zone in which the property is located.
      3. A minimum clearance of ten (10) feet shall be maintained between any tower or blade and any structure, tree, utility line, or similar object, unless the Director of Community Development finds that a reduced clearance will not adversely affect any person, property or improvement in the vicinity.
      4. The SWES shall not inhibit or interfere with emergency vehicle or structure access, fire escapes, exits, standpipes, or other Fire Department requirements as determined by the Fire Department.
      5. Every SWES shall be designed so that no ladder or other means of climbing a tower is located within twelve (12) feet of the finished grade or accessible space.
      6. Guy wires or other rough appurtenances shall not be visible unless deemed to be appropriate and necessary by the Director of Community Development.
      7. The SWES shall be equipped with manual and automatic over-speed protection controls so that blade rotation speed does not exceed the system’s design limits.
      8. An on-grid SWES shall be designed to automatically turn off when on-grid connection is lost or the batteries are fully charged.

9. All on-grid SWES shall be approved by the applicable utility prior to installation.
  10. Electrical poles, wires and other items required to convey power generated by a SWES to the public utility grid shall be installed underground .
  11. The SWES shall comply with the requirements of Section 5.48—Noise Regulations, except during short-term events such as utility outages and severe wind storms.
  12. The SWES shall not bear any signs or advertising devices other than certifications, public safety warnings, or other seals or signage required by law.
  13. No lighting shall be placed upon, attached to, or in any way illuminate a SWES unless required by law. Any required lighting shall be designed and located to reduce impacts to properties in the vicinity to the maximum extent allowed by law as determined by the Community Development Director.
- d. Maintenance and removal.
1. The SWES shall at all times be operated and maintained in accordance with manufacturer’s requirements, the requirements of this section, and all applicable laws. In no case shall the condition or operation of the SWES pose noise, safety, or other adverse effects to the site, or persons, improvements or properties in the vicinity.
  2. The Community Development Director may require the SWES to be removed from the property if the Director determines that the SWES has been inoperable, or has ceased to operate, for twelve (12) consecutive months or more.
- 2. Submittal Requirements—All SWES Applications.** Applications for all SWES shall be initiated by submitting the following materials to the Community Development Department.
- a. A completed Master Application form, signed by the property owner or authorized agent, accompanied by the required fees, plans and mapping documentation in the form prescribed by the Community Development Director.
  - b. Written statements to support the standards, required findings and, criteria of this Code section.
  - c. A vicinity map showing the location and street address of the development site.
  - d. A map showing the location and street address of the property that is the subject of the application and of all lots of record within three hundred feet (300') of the boundaries of the property; and
  - e. A list, drawn from the last equalized property tax assessment roll or the records of the County Assessor, Tax Collector, or the City's contractor for such records showing the names and addresses of the owner of record of each lot within three hundred feet (300') of the boundaries of the property. This list shall be keyed to the map required by subsection (d) of this subsection and shall be accompanied by mailing labels.
- 3. Notice to Property Owners.** After receipt of a completed application, the Community Development Director shall provide notice to surrounding property owners as provided in subsection 2 of this section. Said notice shall include: a project description, information regarding where and when project plans can be viewed, a request for comments regarding said exception, and a commenting deadline date. No public hearing shall be required.

#### **4. Director's Review and Action**

- a. **Notice of Decision.** After the commenting deadline date, and within thirty (30) days of receipt of a completed application, the Director of Community Development shall approve, conditionally approve, or deny the application. The Director shall send the applicant a letter stating the reasons for the decision under the authority for granting or denying the SWES, as provided by the applicable sections of this chapter. The letter also shall state that the Director's decision is appealable under the provisions of subsection 6 of this section.
- b. **Request for Planning Commission Action.** At the Community Development Director's discretion, review and action may be deferred to the Planning Commission.
- c. **Findings.** In making a determination, the Community Development Director or Planning Commission shall be required to make the following findings:
  1. There will be no significant detrimental impact to surrounding neighbors, including, but not limited to light, air, noise, and views.
  2. That the proposed project is consistent with the City's General Plan, the purposes of this title and the zoning district where the project is located, the Local Coastal Program, if applicable, and with any other current applicable policy guidelines.
  3. The installation of the SWES is primarily to reduce on-site consumption of electricity.
  4. The proposed SWES will not produce or result in noise levels exceeding the requirements of Section 5.48—Noise Regulations.
5. **Conditions of Approval.** In approving a SWES application, the Director or Planning Commission may impose reasonable conditions necessary to:
  - a. Achieve the general purposes of this chapter and the specific purpose of the zoning district in which the SWES will be located, or to be consistent with the General Plan;
  - b. Protect the public health, safety, and general welfare.
6. **Effective Date—Appeals.** Unless appealed in accordance with Chapter 10.100 of the Manhattan Beach Municipal Code, a decision shall become effective after expiration of the time limits for appeal set forth in Section 10.100.030 Manhattan Beach Municipal Code.

#### **10.64.020—Basic Requirements for Off-street Parking and Loading.**

##### **J. Parking Surface.**

All parking areas, aisles and access drives shall be paved with a minimum of two inches (2") of asphalt on four inches (4") of compacted base or four inches (4") of concrete in residential areas; and 4 inches of concrete in commercial or industrial areas to provide a durable, dustless surface, except as required in Section 10.60.140B. Parking areas, aisles and access drives shall be graded and drained to dispose of surface water without damage to private or public properties, streets, or alleys. The Director of Community Development may approve alternate materials and specifications in lieu of these requirements. See Section 10.60.140(B) for additional requirements for properties located in Commercial and other non-residential districts.

**10.64.100—Application of Dimensional Requirements.**

C. **Vertical Clearance.** Vertical clearance for parking spaces shall be an unobstructed headroom clearance of not less than seven feet (7') above the finish floor to any ceiling, beam, pipe, vent, mechanical equipment or similar construction, except that automatic garage door opening equipment and the garage door entrance may be 6.67 feet. For storage and vehicle refueling purposes (not including mechanical equipment) for residential uses, non-structural improvements including wall-mounted shelves, storage surface racks, ~~or~~ cabinets, or alternative-fuel vehicle charging systems may encroach into the vertical clearance, provided a minimum 4.5 feet vertical clearance is maintained above the finished floor of the garage within the front five feet (5') of a parking space.

**10.68.020 and A.68.020—Continuation and Maintenance.**

- D. Routine maintenance and repairs may be performed on a structure, the use of which is nonconforming; and on a nonconforming structure. Exterior nonconforming elements including, but not limited to: stairways, decks, balconies, green roofs/decks, chimneys, fences, and retaining walls may be replaced in their entirety, if, upon finding in a report prepared by a State of California licensed civil engineer, that, due to a deteriorated condition, such structures are unsafe, and routine repair is infeasible.
- I. **Lots Without Vehicular Access.** Residential buildings on lots with no vehicular access to public streets constitute nonconforming uses and may not be altered or enlarged except in accordance with the provisions of this section. Such buildings may be altered as follows:
1. Interior improvement repairs consistent with all applicable building regulations.
  2. Additions of exterior architectural features such as a fireplace, chimney, balcony, green roof/deck, or bay window, subject to Section 10.60.040, Building projections in yards and required open space.

**CITY OF MANHATTAN BEACH  
DEPARTMENT OF COMMUNITY DEVELOPMENT**

**TO:** Planning Commission

**THROUGH:** Laurie B. Jester, Acting Director of Community Development  
Carol Jacobson, Building Official



**FROM:** Esteban Danna, Assistant Planner 

**DATE:** July 14, 2010

**SUBJECT:** Consideration of Environmental Task Force Recommendations to Amend Title 10 Planning and Zoning of the Manhattan Beach Municipal Code and the City's Local Coastal Program for Comprehensive Sustainable Building Measures, as part of the City Council 2009-2010 Work Plan.

**RECOMMENDATION**

Staff recommends that the Planning Commission discuss and provide comments for upcoming amendments to Title 10 Planning and Zoning of the Manhattan Beach Municipal Code (MBMC) and the City's Local Coastal Program (LCP) to incorporate a comprehensive set of Sustainable Building Measures as recommended by the Sustainable "Green" Building Subcommittee and the Environmental Task Force.

**BACKGROUND**

**Environmental Task Force**

In June 2008 City Council formed a resident-based Environmental Task Force (Task Force) to study environmental issues of priority to the community. Staff solicited applications and on September 2, 2008 Council selected 14 residents to serve on the Task Force. Council then appointed two representatives to the Task Force, Mayor Mitch Ward, and Council Member Portia Cohen. The remaining positions were appointed by the Manhattan Beach Unified School District, including Amy Howorth, School Board Member, and two student representatives.

The 19-member Task Force had its first meeting on October 15, 2008, and divided into four subcommittees to tackle priority environmental issues identified by City Council: Climate Action Plan, Water Conservation and Storm Water Management Issues, Waste Reduction and Recycling, and Sustainable ("Green") Building.

Each subcommittee presented status reports and recommendations to the entire Task Force and gained approval on several proposed solutions to the City's environmental challenges. Once the Task Force approved a set of recommendations, they were presented to City Council for review and direction.

The 2009-2010 City Council Work Plan outlines several Planning and Building Department projects that are fully or partially addressed by the Task Force and the





Sustainable Building Subcommittee. These include Landscaping, Storm Water Retention, and Green Building Residential Standards.

**Sustainable "Green" Building Subcommittee**

The Green Building subcommittee was comprised of three residents: Casey Beyer, Ben Burkhalter, and Chris Conaway. Each member brought unique insight and expertise in the sustainable design, architecture, and energy efficiency areas (Exhibit A). City Staff provided support to the Subcommittee as well, including Acting Community Development Director, Laurie Jester; Carol Jacobson, Building Official; Sona Kalapura, Environmental Programs Manager; and Esteban Danna, Assistant Planner.

To achieve the goals in the group's mission statement (See Exhibit B) the Sustainable Building Subcommittee developed a two-phase approach to sustainable development for the City of Manhattan Beach. The first phase, dealing with public buildings and large non-residential construction, was considered and Ordinance No. 2124 was passed on June 17, 2009. The next phase includes broader recommendations that apply to new residential, non-residential, and commercial construction as well as major remodels.

The subcommittee placed specific emphasis on energy efficiency, water conservation, runoff reduction, solid waste reduction and diversion, and air quality and emissions reductions. City Council approved the Sustainable Building Subcommittee and Environmental Task Force recommendations on March 16, 2010 and directed Staff to prepare code amendments. The recommendations require code amendments to several chapters of the MBMC. The Planning Commission will only review those amendments pertinent to Title 10. The City Council will review all proposed code amendments. Some amendments to Title 10 overlap with amendments in other chapters.

**Green Building Subcommittee Recommendations**

The Sustainable Building Subcommittee's recommendations for comprehensive sustainable measures as reviewed and supported through the Environmental Task Force comprise the following five different areas (Exhibit B) that are typically used in green building rating systems:

- 1. Site Sustainability**
  - a. Stormwater Retention Design- Low Impact Development & Best Management Practices (Building and Safety, Zoning, and Public Works)
  - b. Green Roofs and Decks (Zoning)
- 2. Water Efficiency / Water Use Reduction**
  - a. Landscaping and Irrigation (Building and Safety, Zoning, and Public Works)
  - b. Plumbing Fixtures (Building and Safety and Zoning)
- 3. Energy**
  - a. Energy Efficiency (Building and Safety)
  - b. Renewable Energy (Building and Safety and Zoning)

- 4. **Materials and Resources**
  - a. Waste Management (Building and Safety)
  - b. Material Reuse (Building and Safety)
- 5. **Air Quality – Indoor and Outdoor**
  - a. Indoor (Building and Safety)
  - b. Outdoor (Building and Safety)

Many of the recommendations are required now or in the near future by the City’s Water Conservation Ordinance, California Model Water Efficient Landscape Ordinance, California Energy Efficiency Regulations, and/or the California Green Building Standards (to be effective January 1, 2011). The subcommittee also reviewed Los Angeles County and Santa Monica Low Impact Development requirements and researched of other jurisdictions with cutting edge sustainable policies, such as Santa Monica, Palo Alto, Los Angeles (County and City), San Francisco (County and City), Santa Barbara, San Jose, Chula Vista, and Berkeley when making recommendations. City Council has indicated that one of the goals of Manhattan Beach is to be a leader in our sustainable policies.

**DISCUSSION**

Of the subcommittee’s five recommendations, three require the amendment of Title 10 Planning and Zoning in the MBMC. The City Council will review these three items, along with Materials and Resources and Air Quality. They will amend the Public Works (Title 7), Building Regulations (Title 9), and the Planning and Zoning (Title 10) chapters of the MBMC. There will be cross-references throughout the MBMC as needed. The Planning and Zoning code and LCP revisions are in the following areas:

- 1. **Site Sustainability**
  - a. Stormwater Retention Design-Low Impact Development and Best Management Practices
  - b. Green Roofs and Decks
- 2. **Water Efficiency/Water Use Reduction**
  - a. Landscaping and Irrigation
  - b. Plumbing Fixtures
- 3. **Energy**
  - a. Renewable Energy

**1. Site Sustainability Recommendations**

***Stormwater Retention Design – Low Impact Development and Best Management Practices***

Los Angeles County and all 84 cities within the county, including Manhattan Beach, hold a National Pollutant Discharge Elimination System (NPDES) permit through the Los Angeles Regional Water Quality Control Board. Part of the Permit’s objectives is to minimize impacts from stormwater and urban runoff as well as maximize the percentage of pervious surfaces to allow percolation of stormwater into the ground.

The subcommittee vetted the stormwater retention design, low impact development, best management practices, landscaping and irrigation, and water efficiency recommendations

with the Water Subcommittee of the Environmental Task Force. Additionally, Kathleen McGowan (City's consultant for the Municipal Stormwater Permit) reviewed the recommendations for consistency with the current and the proposed revised Los Angeles County Municipalities Stormwater Permit. The goal of the proposed amendment is to design water runoff mitigation measures to achieve zero discharge for ¼" rainfall in a 24 hour period. This can be achieved through the measures detailed in the chart below.

<b>1a.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single and Multi-family Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>
	<b>Measures</b>	<p>Parcels 7,500 s.f. or less</p> <ul style="list-style-type: none"> <li>• Maximum of 20% non-permeable surfaces for required yards/setbacks, parkway (MBMC 7.32), &amp; encroachment areas (MBMC 7.36)</li> <li>• Run-off from non-permeable surfaces (e.g., roofs, parking) to be directed to permeable areas and/or approved retention features (grey water, captured rain storage, and other systems). Administrative flexibility is necessary for location approval of retention systems.</li> <li>• Option to show compliance by submitting design by licensed Civil Engineer or Landscape Architect per California Stormwater Quality Association's Best Management Practices Handbook &amp; US Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES)</li> </ul> <p>Parcels greater than 7,500 s.f.</p> <ul style="list-style-type: none"> <li>• Design by licensed Civil Engineer or Landscape Architect per California Stormwater Quality Association's Best Management Practices Handbook &amp; EPA's NPDES</li> <li>• Run-off from non-permeable surfaces (e.g., roofs, parking) to be directed to permeable areas and/or approved retention features (grey water, captured rain storage, and other systems). Administrative flexibility is necessary for location approval of retention systems.</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Reduce runoff and discharge of pollutants</li> <li>• Meet or exceed municipal discharge requirements</li> </ul>

Due to the fact that properties in commercial districts are not required to provide setbacks, Staff suggests that the Planning Commission explore other options in order to achieve water runoff mitigation measures. A possible option is to require a portion of uncovered parking lots in commercial developments to be surfaced with permeable pavement, grasscrete, or other similar pervious materials.

Furthermore, Staff believes that there are challenges that the Downtown and North End commercial districts present in terms of stormwater runoff mitigation. Since Downtown properties are not required to provide parking when the square footage of the structure is less than or equal to the lot size (1:1 ratio), new developments offer limited opportunities for onsite stormwater retention. Staff suggests the Planning Commission explore options to encourage stormwater retention such as possibly allowing the development to exceed the 1:1 ratio as long as the building is Leadership in Energy & Environmental Design (LEED) certified and a stormwater retention system is used. Another option may be in allowing more flexibility in green roof standards (see below).

Similarly, commercial properties in the North End have not been developed with newer buildings due to the challenges presented by parking requirements and, therefore diminishing opportunities to mitigate negative environmental impacts of existing structures. Staff suggests that the Planning Commission explore opportunities to facilitate new development in the district by considering a parking reduction similar to the Downtown district for LEED certified developments.

***Green Roofs and Decks***

A green roof or balcony is a surface that supports the growth of vegetation over a portion of its area generally for the purpose of water or energy conservation. The roof usually consists of a waterproof, root-safe membrane that is covered by a drainage system, lightweight growing medium, and plants. Green roofs provide a means to decrease stormwater runoff into the public system as well as provide building insulation and improved aesthetics. While balancing height, views, and safety concerns, the recommendation to amend Title 10 Planning and Zoning would provide administrative flexibility for green roofs, which is consistent with the 2009-2010 City Council Work Plan.

<b>1b.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single and Multi-family Residential</li> <li>• Non-residential</li> <li>• Balcony/deck/ roof remodels</li> </ul>
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Treated as other decks and balconies for height and setbacks</li> <li>• Director may approve green roofs on top of roof level if it is not usable as a deck, and if safety, maintenance, slope, and access issues are mitigated</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Reduce stormwater runoff in public system</li> <li>• Filter pollution</li> <li>• Increase thermal and acoustical insulation</li> <li>• Decreased need for air conditioning and other energy consumption</li> </ul>

**2. Water Efficiency/Water Use Reduction Recommendations**

***Landscaping and Irrigation***

The California Model Water Efficient Landscape Ordinance mandates all cities to require plans for water efficient landscape design, installation, and maintenance for larger landscaped developments. The primary goal is to reduce the water needed to irrigate landscapes. This is accomplished through both the type and sizing of the irrigation system used and the types of plants in the landscaped areas.

The intent of the recommendation is to design irrigation to meet requirements for region 3 (which includes Manhattan Beach) per Water Use Classification of Landscape Species (WUCOLS). WUCOLS is a publication designed to assist in the design of more water efficient landscaping in California. These recommendations were discussed by the Sustainable Building Subcommittee with the Water Subcommittee at a joint meeting. The landscaping and irrigation measures exceed the California Model Water Efficient Landscape Ordinance requirements.

<b>2a.</b>	<b>Application</b>	<ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50% valuation)</li> <li>• Single &amp; Multi-family Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Maximum of 20% of the landscaped area (private property, public parkways, &amp; encroachment areas) may be high water use, such as grass</li> <li>• Small lots of 7,500 s.f. or less may use standardized water budget worksheet per WUCOLS or may provide licensed landscape architect design and calculations</li> <li>• Lots over 7,500 s.f. must provide licensed landscape architect design and calculations</li> </ul> <p>Exceptions:</p> <ul style="list-style-type: none"> <li>• Director may allow administrative exemptions for hardship or special circumstances</li> <li>• Sites irrigated with non-potable water are exempt</li> </ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"> <li>• Estimated 20% reduction of water usage</li> <li>• Estimated 20% reduction of runoff discharge</li> <li>• Meet or exceed compliance with California Model Water Efficient Landscape Ordinance</li> </ul>

***Plumbing Fixtures***

On January 1, 2011, the California Green Building Standards will require a 20% reduction in potable water use when installing plumbing for water fixtures for all new residential construction. Additionally, weather-based and/or sensor-based irrigation controls will be required. The Subcommittee recommends adopting these measures in advance of this State Building mandate. The recommendation mainly focuses on water efficient toilets and other water efficient fixtures that are addressed in the Title 9 Building Regulation amendment recommendations. However, Title 10 is amended as the recommendation also addresses limiting the size of exterior decorative water fountains.

<b>2b.</b>	<b>Application</b>	<ul style="list-style-type: none"><li>• All new construction</li><li>• Major renovations (over 50% valuation)</li><li>• Single &amp; Multi-family Residential</li><li>• Non-residential</li></ul>
	<b>Measures</b>	<ul style="list-style-type: none"><li>• Residential and Non-residential fountains, ponds max 25 sq ft footprint with water recirculation system unless using non-potable water; no fountain overspray</li></ul>
	<b>Purpose/ Benefit</b>	<ul style="list-style-type: none"><li>• Estimated 20% reduction water usage</li><li>• Meet or exceed City Water Conservation Ordinance and California Green Building Standards</li></ul>

**3. Energy Recommendations**

***Renewable Energy***

The renewable energy recommendations revise Title 10 of the Manhattan Beach Municipal Code to be consistent with the California Solar Rights Act. It allows administrative approval of solar energy systems not exceeding a maximum of 12” over the maximum allowed height limit in order to meet State regulations. Several solar energy system companies have met with staff and participated in Environmental Task Force meetings. Plan check guidelines have been refined to meet their concerns while balancing safety and access issues for the Fire and Building Department regulations. The City continues to waive plan check and permit fees for solar energy permits. These actions have resulted in triple the number of permits compared to other cities in the South Bay.

This recommendation also discusses wind energy systems. Small-scale units have been demonstrated to the Environmental Task Force; however, this type of technology is not yet in production. Because there are many concerns regarding the viability of current technology as well as height, view, location, and noise concerns; the subcommittee recommends that wind turbines be considered through the public noticing process if located outside of the allowed buildable envelope (height and setbacks).

<b>3a.</b>	<b>Application</b>	All new applications for renewable energy production
	<b>Measures</b>	Solar energy systems <ul style="list-style-type: none"> <li>• Continue to waive fees</li> <li>• Allow 12” over height if needed to meet Solar Rights Act</li> <li>• Director may exempt height restrictions where fire-life safety, and access issues are mitigated</li> </ul> Wind turbines <ul style="list-style-type: none"> <li>• Allowed within building footprint</li> <li>• Public hearing for other locations</li> </ul>
	<b>Purpose/ Benefit</b>	Encourage or facilitate renewable energy

**Next Steps**

Staff will prepare the proposed changes to Title 10 Planning and Zoning of the MBMC and the City’s LCP, as directed by the Planning Commission. Staff will present the proposed amendments to the Commission for final recommendation, then to the City Council for final approval.

**CONCLUSION**

Staff recommends that the Planning Commission discuss and provide comments for the recommendations made by the Environmental Task Force’s “Green” Building Subcommittee to amend Title 10 Planning and Zoning of the MBMC and the City’s LCP. Staff also recommends the Planning Commission to explore alternative development incentives in commercial districts to accomplish stormwater runoff mitigation and environmental sustainability goals.

- Exhibits:
- A. Green Building Subcommittee Member Background and Subcommittee Mission Statement
  - B. City Council Staff Report, minutes, and Select Attachments, dated March 16, 2010

## **Exhibit A. Green Building Subcommittee Member Background and Subcommittee Goals**

### Member Background

The subcommittee on Sustainable Design (Green Building) is comprised of three residents: Casey Beyer, Ben Burkhalter, and Chris Conaway, each bringing unique insight and expertise in the sustainable design, architecture, and energy efficiency areas. City Staff provide support to the subcommittee including the Acting Community Development Director, Laurie Jester; Carol Jacobson, Building Official; and Esteban Danna, City Planner.

The subcommittee is chaired by Chris Conaway, a LEED AP architect with the international design firm NBBJ in Los Angeles. Chris has been involved with the sustainable design movement since the early 1990s and has just completed his 6<sup>th</sup> LEED certified building project.

Casey Beyer is an independent consultant in the energy and environmental policy sector. Ben Burkhalter is an architect with offices located in Manhattan Beach, with a specific focus on energy-efficient design. Ben is currently working on a case study project for a LEED Gold rated single-family residence.

### Green Building Subcommittee Mission Statement

The Green Building Subcommittee developed a working mission statement:

- To identify environmentally responsible, sustainable and energy efficient policies for constructing, renovating and occupying the built environment;
- To develop and make recommendations to City Council that will lead towards a healthy and sustainable city; and
- To educate and promote programs that increase awareness and incentivize sustainable building practices.







Agenda Item #: \_\_\_\_\_

# Staff Report

## City of Manhattan Beach

**TO:** Honorable Mayor Ward and Members of the City Council

**THROUGH:** Richard Thompson, Interim City Manager

**FROM:** Laurie Jester, Acting Director of Community Development  
Carol Jacobson, Building Official  
Sona Kalapura, Environmental Programs Manager

**DATE:** March 16, 2010

**SUBJECT:** Consideration of Recommendations by the Environmental Task Force to Amend the Municipal Code for Comprehensive Sustainable Building Measures.

---

**RECOMMENDATION:**

Staff recommends that the City Council **DISCUSS AND PROVIDE DIRECTION** for staff to prepare amendments to the Manhattan Beach Municipal Code, Title 5 Sanitation and Health, Title 9 Building Regulations, and Title 10 Planning and Zoning, to incorporate a comprehensive set of Sustainable Building Measures as recommended by the Sustainable “Green” Building Subcommittee and the Environmental Task Force.

**FISCAL IMPLICATION:**

Based on a review of several industry reports, case studies and governmental studies, the cost of the majority of the recommended measures would be zero or an insignificant cost. The residential energy efficiency measures have the most potential for cost variation. The energy efficiency program is extremely flexible, which allows an abundance of choices for the owner. Depending on the options chosen, initial costs may vary between 0% and 5% of total construction cost. On the other hand, a project could choose to incorporate “high end”, innovative, state-of-the-art, or experimental designs and features; and costs could increase significantly. Because the market for sustainable products is changing to accommodate these choices, the construction costs could actually decrease.

Some measures represent considerable energy savings with direct payback potential within 1 to 5 years. Incentives from utilities and programs, such as the New Solar Homes Program can provide significant rebates to homes exceeding California Title 24 energy efficiency, which could offset any incremental costs. Recent and impending State laws, such as the California Green Building Standards effective January 1, 2011, will require incorporating sustainable practices, which could also reduce costs as the supply and demand for such goods increase.

There will be some nominal costs associated with staff training, website updates, and public meetings to educate staff, residents, and the construction community, which are included in the

**EXHIBIT**

B

proposed 2010-2011 budget. The Building Official has obtained accreditation for the level of Green Associate for knowledge of green building practices to understand the Leadership in Energy and Environmental Design (LEED<sup>®</sup>) Green Building Rating System™ and the Principal Building Inspector has earned the designation as a Build It Green Certified Green Building Professional. Other department staff, such as Planners and Plan Check Engineers are expected to complete similar training with the goal of obtaining similar designations. The upcoming fee study will also consider and incorporate costs into permits and applications, if approved by the City Council. Preparation of the required reports to the California Energy Commission has been budgeted in the Community Development Department current budget.

**BACKGROUND:**

**Environmental Task Force**

In June, 2008 City Council decided to form a resident-based Environmental Task Force (Task Force) to study environmental issues of priority to the community. Staff solicited applications and on September 2, 2008 Council reviewed these applications and selected 14 residents to serve on the Task Force. Council then appointed two representatives to the Task Force, Mayor Mitch Ward, and Council Member Portia Cohen. The remaining positions were appointed by the Manhattan Beach Unified School District, including Amy Howorth School Board Member, and two student representatives.

The 19-member Task Force had its first meeting on October 15, 2008, and divided into four subcommittees to tackle priority environmental issues identified by City Council: the development of a Climate Action Plan; Water Conservation and Storm Water Management Issues; Waste Reduction and Recycling; and Sustainable ("Green") Building. Since this first meeting of the Task Force the subcommittees have made significant progress on the goals and tasks identified.

Each subcommittee has presented status reports and recommendations to the entire Task Force, and has gained approval on several proposed solutions to the City's environmental challenges. Once the Task Force has approved a set of recommendations, they are presented to City Council for review and direction, and then Staff carries out the recommendations.

**Sustainable ("Green") Building Subcommittee**

The Green Building subcommittee is comprised of three residents: Casey Beyer, Ben Burkhalter, and Chris Conaway, each bringing unique insight and expertise in the sustainable design, architecture, and energy efficiency areas (see Exhibit A). City Staff provide support to the Subcommittee as well, including Acting Community Development Director, Laurie Jester; Carol Jacobson, Building Official; Sona Kalapura, Environmental Programs Manager; and Esteban Danna, Assistant Planner.

To achieve the goals in the group's mission statement (See Exhibit A) the Sustainable Building Subcommittee developed a four-pronged approach to sustainable development for the City of Manhattan Beach. The first two areas, dealing with public buildings and large non-residential construction, were considered and Ordinance No. 2124 was passed on June 17, 2009. The next two parts include recommendations primarily for new residential construction (energy efficiency standards) as well as sustainable practices and requirements for all construction that are attainable and reasonable for Manhattan Beach. These additional regulations include concerns

regarding stormwater retention and landscaping, which are part of the City Council's 2009-2010 Work Plan.

The Green Building Subcommittee has developed recommendations that are best suited for the environment in Manhattan Beach's largely residential makeup and are intended to augment and supplement the previously adopted ordinances requiring Leadership in Energy and Environmental Design (LEED®) Gold Certification for Public Projects and LEED Silver equivalency for larger Private Sector Projects. LEED is the predominant national non-residential third-party green building rating system, developed by the United States Green Building Council. The rating system provides measurable environmentally sound building design, construction, operations and maintenance solutions. The subcommittee placed specific emphasis on energy efficiency, water conservation, runoff reduction, solid waste reduction and diversion, and air quality and emissions reductions.

If the City Council approves the recommendations, staff would prepare ordinances detailing these recommendations that would amend the Municipal Code Title 5 Sanitation and Health, Title 9 Building Regulations, and Title 10 Planning and Zoning. The draft ordinance would be presented to the Planning Commission, for the Zoning Code amendments, and then to the City Council for their review and consideration.

**DISCUSSION:**

**Green Building Subcommittee Recommendations**

The Sustainable Building Subcommittee's recommendations for comprehensive sustainable measures as reviewed and supported through the Environmental Task Force comprise the following five different areas that are typically used in both green regulations and green rating systems (Exhibit B):

- 1. Site Sustainability**
  - a. Stormwater Retention Design- Low Impact Development & Best Management Practices
  - b. Green roofs
- 2. Water Efficiency/ Water Use Reduction**
  - a. Landscaping and Irrigation
  - b. Plumbing Fixtures
- 3. Energy**
  - a. Energy Efficiency
  - b. Renewable Energy
- 4. Materials and Resources - Waste Management and Material Reuse**
- 5. Air Quality - Indoor and Outdoor**

These recommendations for mandatory measures included reviews of current and impending regulations. The measures would apply generally to residential, non-residential, commercial, and municipal construction. Many of these recommendations are required now or in the near future by the City's Water Conservation Ordinance, California Model Water Efficient Landscape Ordinance, California Energy Efficiency Regulations, and/or the California Green Building Standards (to be effective January 1, 2011). Other reviews included Los Angeles County and Santa Monica Low Impact Development requirements and research of other jurisdictions with

cutting edge sustainable policies, such as Santa Monica, Palo Alto, Los Angeles County and City, San Francisco County and City, Santa Barbara, San Jose, Chula Vista, and Berkeley. City Council has indicated that one of the goals of Manhattan Beach is to be a leader in our sustainable policies. As discussed in the fiscal implications section above, the majority of these measures have insignificant to no net impacts.

**1. Site Sustainability Recommendations**

**STORMWATER RETENTION DESIGN  
LOW IMPACT DEVELOPMENT & BEST MANAGEMENT PRACTICES**

<b>1a.</b>	<b>Application</b>	All New Construction & Major Renovations
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Retain 100% of runoff water on site to pre-development standards</li> <li>• Small lots of 7,500 sq ft or less may use prescriptive method that allows no more than 20% of the required yard, setback, parkways, &amp; encroachment area to be non-permeable <i>or</i> may use the option of engineered design</li> <li>• Lots over 7,500 sq ft must use engineered design</li> </ul>
	<b>Benefit</b>	Reduce runoff and discharge of pollutants Meet or exceed municipal discharge permit

The subcommittee vetted the stormwater retention design, low impact development, Best Management Practices, landscaping and irrigation, and water efficiency recommendations with the Water Subcommittee of the Environmental Task Force. Additionally, Kathleen McGowan (City's consultant for the Municipal Stormwater Permit) reviewed the recommendations for consistency with the current and the impending revised Los Angeles County municipalities Stormwater Permit. Part of the Permit's objectives is to minimize impacts from stormwater and urban runoff as well as maximize the percentage of pervious surfaces to allow percolation of stormwater into the ground. Stormwater retention and encouragement of softscape is part of the 2009-2010 Work Plan.

**GREEN ROOFS**

<b>1b.</b>	<b>Application</b>	All New Construction & Major Renovations & Roof/Deck/Balcony Remodels
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Treated as other decks and balconies for height &amp; setbacks</li> <li>• Director may approve green roofs on top of roof level if not useable as a deck, and if fire-life-safety, maintenance, slope, and access are mitigated.</li> </ul>
	<b>Benefit</b>	<ul style="list-style-type: none"> <li>• Reduce stormwater runoff in public system</li> <li>• Filters pollution</li> <li>• Increases thermal &amp; acoustical insulation</li> </ul>

A green roof is a roof surface that supports the growth of vegetation over a portion of its area generally for the purpose of water or energy conservation. The roof usually consists of a waterproof, root-safe membrane that is covered by a drainage system, lightweight growing medium, and plants. Green roofs provide a means to decrease stormwater runoff into the public system as well as provide building insulation. To encourage this while balancing height, views, and safety concerns; the recommendation to amend Title 10 Planning and Zoning would provide administrative flexibility for green roofs, which is consistent with the 2009-2010 City Council Work Plan.

**2. Water Efficiency/Water Use Reduction Recommendations**

**LANDSCAPING AND IRRIGATION**

<b>2a.</b>	<b>Application</b>	All New Construction & Major Renovations
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Maximum of 20% of the landscaped area (private property, public parkways, &amp; encroachment areas) may be high water use, such as grass</li> <li>• Small lots of 7,500 sq ft or less may use a basic worksheet <i>or</i> may provide an engineered design to allow flexibility</li> <li>• Lots over 7,500 sq. ft. must use a landscape architect for plans &amp; engineered calculations</li> <li>• Director may allow administrative exemptions for hardship or special circumstances</li> </ul>
	<b>Benefit</b>	Estimated 20% reduction water usage and runoff discharge.

These recommendations were also discussed with the Water Subcommittee at a joint meeting. The landscaping and irrigation measures exceed the California Model Water Efficient Landscape Ordinance. The California landscape ordinance mandates all cities to require plans for water efficient landscape design, installation, and maintenance for larger landscaped developments. The primary goal is to reduce the water needed to irrigate landscapes. This is accomplished through both the type and sizing of the irrigation system used and the types of plants in the landscaped areas. If a site uses non-potable water use (i.e., graywater, reclaimed water), it is exempt from the water efficiency measures.

**PLUMBING FIXTURES**

<b>2b.</b>	<b>Application</b>	New Construction, Major Renovations, Plumbing Remodels and Additions, Retrofits upon sale and/or transfer of property
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Residential Remodel and New Construction applicants may have the alternative of providing a Water Use Budget to reduce water use by 20% <i>or</i> install plumbing fixtures that use 20% less water, such as:               <ul style="list-style-type: none"> <li>○ toilets, faucets,</li> <li>○ showerheads,</li> <li>○ weather/sensor based irrigation controls</li> <li>○ clothes washers &amp; dishwashers</li> </ul> </li> <li>• Residential Water Use Budget or prescriptive plumbing fixture options are same requirements as in 2011 Calif Green Building Standards</li> <li>• Residential to retrofit with WaterSense toilets upon sale of property with exemptions, such as foreclosures or transfers within family</li> <li>• Residential and Non-residential fountains, ponds max 25 sq ft footprint with water recirculation system unless using non-potable water; no fountain overspray</li> </ul>
	<b>Benefit</b>	<ul style="list-style-type: none"> <li>• Estimated 20% reduction water usage</li> <li>• Meet or exceed City Water Conservation Ordinance and Calif Green Building Standards</li> </ul>

On January 1, 2011, the California Green Building Standards will require a 20% reduction in potable water use when installing plumbing water fixtures for all new residential construction as well as weather-based and or sensor-based irrigation controls. The subcommittee recommends adopting these measures as leaders of the community in advance of this mandate.

An additional measure would be implemented through the Residential Building Record Reports for sales of property, which require only toilets to be retrofit. Subcommittee members discussed this with a representative of South Bay Association of Realtors as well as other local real estate brokers and agents. These representatives noted that retrofit requirements for property sales or transfer are a common practice. The WaterSense program by the Environmental Protection Agency lists several hundred selections of high efficiency low water-use toilets from major suppliers as well as smaller manufacturers. The local West Basin Municipal Water District often provides toilet rebate incentives for high efficiency toilets and other plumbing fixtures.

**3. Energy Recommendations**

**ENERGY EFFICIENCY**

<b>3a.</b>	<b>Application</b>	New Construction & Major Renovations; Additions
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• Exceed Title 24 Calif Residential Energy Efficiency Standards by 20% - residential only</li> <li>• Individual Water Heater efficiency based on size &amp; type – residential and some non-residential</li> <li>• Provide Energy Star light fixtures - non-residential &amp; residential</li> <li>• Major appliances, fixtures, and equipment to be Energy Star efficient - non-residential &amp; residential</li> <li>• New Swim pools and spas to provide 60% of heating from solar energy system - non-residential &amp; residential</li> <li>• Fireplace energy and venting efficiency - non-residential &amp; residential</li> </ul>
	<b>Benefit</b>	Estimated 20% to 70% reduction of energy demand

Residential construction is the primary target of the Title 24 energy efficiency recommendation. By improving the energy efficiency of all new construction and major renovations, the City potentially reduces energy demand by 20% to 70%. The subcommittee enlisted the services of a local energy design consultant, who provided energy efficiency “baselines” for five different typical homes built in town (See Exhibit C). These homes meet the current “baseline” requirements for energy efficiency established by the California Title 24 requirements. Next, both 15% and 20% efficiency above the baseline were reviewed. The subcommittee concluded that requirements to meet 20% energy efficiency above the California Title 24 requirements were feasible and reasonable. If the City of Manhattan Beach were to require 20% efficiency above Title 24, this would place Manhattan Beach in a leadership role as many of the jurisdictions have only chosen to require 15% over Title 24.

There is an extremely large toolkit for the designer and owner to choose from in order to reach the 20% above Title 24 energy efficiency goal. There is also a wide variation in potential cost impacts. It is possible to achieve compliance with no net increase to the total construction cost. The probable increase ranges from 0% to 5% of the total construction cost. One example from the toolkit is verification of caulking, insulation, and the heating/air conditioning systems. The verification would be performed by a certified rater from the California Home Energy Rating System (HERS) program. The subcommittee noted that this verification has the potential to substantially increase the energy efficiency and thus reduce the overall operation costs for a minimal expenditure. Some options available include:

- Increasing insulation – added thickness or increased efficiency
- Verifying that caulking around windows, doors, and other opening is not leaking heated or cooled air
- Verifying heating and air conditioning duct leakage is mitigated

- Orientation of glass and shading devices
- Increasing the effectiveness of heaters from 80% to 90% efficiency
- Increasing efficiency of window and glass
- Adding insulation to basement retaining walls and concrete slab edges

Other energy efficiency measures beyond the Title 24 requirements have minimal to no fiscal impacts. These are the “low hanging fruit” that can provide high efficiency for lower costs over the lifetime of the appliances, fixtures, and equipment. In most instances, these measures apply to both residential and non-residential construction. Examples of these requirements include light fixtures, heaters, individual water heaters, and fireplaces, which would need to meet strict energy efficiency requirements. Energy Star is a listing required on some of the fixtures and appliances. Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy that lists products with superior energy efficiency ratings. The heating and insulation of new swimming pools and spas are also addressed to discourage inefficient and fossil-fuel heating that emit greenhouse gas.

**RENEWABLE ENERGY**

<b>3b.</b>	<b>Application</b>	Modification to Title 10 Planning and Zoning
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• <u>Solar energy systems</u> – continue to waive fees; allow 12” over height if needed to meet Solar Rights Act; Director may exempt height restrictions where fire-life safety, and access issues are mitigated.</li> <li>• <u>Wind turbines</u> – allowed within building footprint; public hearing for other locations</li> </ul>
	<b>Benefit</b>	Encourage or Facilitate renewable energy

The renewable energy recommendations would revise Title 10 of the Manhattan Beach Municipal Code to document the City’s support of the California Solar Rights Act. It would allow administrative approval of a maximum 12” over the height limit for solar energy systems that meet the Solar Rights Act. The Director would have the flexibility to allow exemptions to the height limit where fire-life safety and access issues are mitigated. Several solar energy system companies have met with staff and plan check guidelines have been refined to meet their concerns while balancing safety and access issues for the Fire and Building regulations. The City continues to waive plan check and permit fees. These actions have resulted in triple the number of permits compared to other cities in the South Bay.

This recommendation also discusses wind energy systems. Small-scale units had been demonstrated to the Environmental Task Force; however, this type of technology is not yet in production. Because there are many concerns regarding the viability of current technology as well as height, view, location, and noise concerns; the subcommittee recommends that wind turbines outside the building footprint area be considered through the public hearing process.



**4. Material and Resources Recommendations**

WASTE MANAGEMENT and MATERIAL REUSE

<b>4.</b>	<b>Application</b>	New Construction & Major Renovations
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• <u>Waste management</u> - Require 65% waste diversion of construction and demolition debris</li> <li>• <u>Fly ash reuse</u> – Require minimum 20% fly ash in concrete pour in-place cement</li> </ul>
	<b>Benefit</b>	<ul style="list-style-type: none"> <li>• Additional 15% reduction in construction-related waste</li> <li>• Fly ash use diverts waste product &amp; reduces use of Portland cement, which is energy intensive to produce</li> </ul>

Improved waste diversion from the landfill and material reuse are the main objectives of these recommendations. The current requirement is to recycle 50% of construction and demolition debris. This proposal would increase the requirement by 15% for a total of a 65% diversion rate. The recent Wells Fargo project diverted more than 80% of their debris from landfills.

Fly ash is a by-product of coal, which is typically burned to produce electricity. Fly ash can be used as a mixture additive to cement, which reduces the amount of Portland cement used. Portland cement is energy intensive to produce. The subcommittee researched the feasibility and viability of combining fly ash in poured in-place concrete and determined it to be practical, inexpensive and locally available. The quality of the concrete works well with 20% fly ash. Fly ash, which is potentially detrimental to the atmosphere, is instead captured and reused for cement.

**5. Air Quality Recommendations**

INDOOR AND OUTDOOR

<b>5.</b>	<b>Application</b>	New Construction and Major Renovations
	<b>Measures</b>	<ul style="list-style-type: none"> <li>• <u>Indoor</u> - Finishes, Caulks, Sealants, Adhesives – low or no Volatile Organic Compounds (VOC).</li> <li>• <u>Outdoor</u> - Best Management Practices –             <ul style="list-style-type: none"> <li>○ Discourage or prohibit material deliveries to construction sites on trash pick up days</li> <li>○ Educate and enforce limits on idling of gas or diesel fueled construction vehicles</li> </ul> </li> </ul>
	<b>Benefit</b>	<ul style="list-style-type: none"> <li>• Improve indoor air quality</li> <li>• Reduce construction-related traffic and fuel waste</li> </ul>

This recommendation expands the current requirements of Low Volatile Organic Compounds (VOC) in caulking. VOC's are harmful vapors that are regulated by a variety of air quality

governmental agencies. The measure brings the City's regulations in line with that of the California Green Building Standards, which will be effective January 1, 2011. The market for low and no VOC finishes, caulks, sealants, and adhesives is growing rapidly; so a wide selection of these items is easily attainable for reasonable costs.

The outdoor air quality recommendations are Best Management Practices that the Residential Construction Officer will implement and enforce.

**Next Steps**

Staff will develop the appropriate ordinance to implement measures as directed by City Council. Also, the California Public Resources Code (PRC) requires that the City make a determination, as part of the ordinance, that proposed energy efficiency portions of the measures are cost effective. The PRC requires that the energy efficiency information be submitted to the California Energy Commission, who will review the application/ordinance to assure that the proposed standards exceed the current Standards, and by how much (20% per the subcommittee's recommendations).

In order to educate the public and construction community, staff would be trained on the new regulations. Subsequently, staff will conduct public outreach through construction community meetings and newsletter, City cable television public service announcements, and the City's website. It is anticipated that code enforcement of the sustainable measures after final inspections would be minimal; similar to the water conservation measures, which had a strong public outreach - without pro-active enforcement - and the City has reduced water usage by 20%.

**CONCLUSION:**

Staff recommends that City Council approve the recommendations of the Environmental Task Force, and direct staff to prepare amendments to the Manhattan Beach Municipal Code, Title 5 Sanitation and Health, Title 9 Building Regulations, and Title 10 Planning and Zoning. Draft ordinances to incorporate the mandatory measures would then be presented to the Planning Commission, for the Zoning Code amendments, and then to the City Council for their review and consideration.

- Exhibits:
- A. Green Building Subcommittee Member Background and Subcommittee Goals
  - B. Detailed Sustainable Measures Recommendations – Tables 1-5
  - C. Five examples of Title 24 Reports with 20% Improved Energy Efficiency

**Exhibit A. Green Building Subcommittee Member Background and Subcommittee Goals**

Member Background

The subcommittee on Sustainable Design (Green Building) is comprised of three residents: Casey Beyer, Ben Burkhalter, and Chris Conaway, each bringing unique insight and expertise in the sustainable design, architecture, and energy efficiency areas. City Staff provide support to the subcommittee including the Acting Community Development Director, Laurie Jester; Carol Jacobson, Building Official; and Esteban Danna, City Planner.

The subcommittee is chaired by Chris Conaway, a LEED AP architect with the international design firm NBBJ in Los Angeles. Chris has been involved with the sustainable design movement since the early 1990s and has just completed his 6<sup>th</sup> LEED certified building project.

Casey Beyer is an independent consultant in the energy and environmental policy sector.

Ben Burkhalter is an architect with offices located in Manhattan Beach, with a specific focus on energy-efficient design. Ben is currently working on a case study project for a LEED Gold rated single-family residence.

Green Building Subcommittee Mission Statement

The Green Building Subcommittee developed a working mission statement:

- To identify environmentally responsible, sustainable and energy efficient policies for constructing, renovating and occupying the built environment;
- To develop and make recommendations to City Council that will lead towards a healthy and sustainable city; and
- To educate and promote programs that increase awareness and incentivize sustainable building practices.

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**1 a. SITE SUSTAINABILITY**  
**STORMWATER RETENTION DESIGN**  
**LOW IMPACT DEVELOPMENT & BEST MANAGEMENT PRACTICES**

<b>Application</b>	<b>Measures</b>	<b>Purpose/Benefit</b>	<b>Fiscal Impact</b>	<b>Similar Policies</b>
<p>Title 9 Building Regulations</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50%)</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>	<p>Design runoff mitigation measures to achieve zero discharge for ¼" rainfall in 24 hr period &amp; retain 100% pre-development runoff capacity</p> <p>Parcels 7,500 sf or less</p> <p>Two Methods:</p> <p>Prescriptive –</p> <ul style="list-style-type: none"> <li>• Non-permeable surface max 20% required yard &amp;/or setback, parkway, &amp; encroachment areas</li> <li>• Run-off from non-permeable surfaces (e.g., roofs, parking)direct to non-permeable areas &amp;/or approved *Retention Features.</li> </ul> <p>Performance –</p> <p>Licensed Civil Engineer or Landscape Architect design per Calif Stormwater Quality Assn Best Management Practices Handbook &amp; US Environ.Protection Agency NPDES</p> <p>Parcels greater than 7,500 sf may only use Performance method above</p>	<p>Reduce runoff &amp; discharge of pollutants</p> <p>Meet or exceed compliance with Municipal discharge Permit</p> <p>* Retention Features – may include Gray water, captured rain storage, and other systems – Administrative approval to allow some flexibility for placement</p>	<p>Moderate to no net impacts</p>	<p>Santa Barbara; Santa Monica; Palo Alto</p>

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**1 b. SITE SUSTAINABILITY  
GREEN ROOFS**

<b>Application</b>	<b>Measures</b>	<b>Purpose/Benefit</b>	<b>Fiscal Impact</b>	<b>Similar Policies</b>
<p>Title 10 Planning &amp; Zoning</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50%)</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential</li> <li>• Roof/Deck/Balcony remodels</li> </ul>	<p>Green Roofs allowed : Where decks &amp; balconies allowed</p> <p>Director exemptions:</p> <ul style="list-style-type: none"> <li>• Administrative approval where usability at roof level prohibited if fire-life safety, maintenance, slope, &amp; access issues are mitigated</li> </ul>	<p>Filters pollution</p> <p>Decreases stormwater runoff into public system</p> <p>Increases thermal &amp; acoustical insulation</p> <p>Lowers need for air conditioning &amp; energy consumption</p>	<p>Very moderate to no net impacts</p>	<p>Los Angeles City; Monterey</p>

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**2 a. WATER EFFICIENCY**  
**WATER USE REDUCTION**  
**LANDSCAPING AND IRRIGATION**

<b>Application</b>	<b>Measures</b>	<b>Purpose/Benefit</b>	<b>Fiscal Impact</b>	<b>Similar Policies</b>
<p>Title 9 Building Regulations</p> <p>Sites using potable water</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Major renovations (over 50%)</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>	<p>Design irrigation to meet requirements for Region 3 per <u>Water Use Classification of Landscape Species</u> (WUCOLS)</p> <p>Plants of high water use – max. 20% total landscaped area on private property, parkways, &amp; encroachment areas per WUCOLS</p> <p>Parcels 7,500 sq ft or less</p> <p>Two Methods:            Prescriptive –                Standardized Water Budget Worksheet per WUCOLS            Performance –                Licensed Landscape Architect design &amp; calculations</p> <p>Parcels greater than 7,500 sq ft may only use Performance method above</p> <p>Exemptions:</p> <ul style="list-style-type: none"> <li>• Sites irrigated w/ non-potable water</li> <li>• Dept Director administrative for hardship or special circumstances</li> </ul>	<p>Estimated 20% reduction of water usage</p> <p>Estimated 20% reduction of runoff discharge</p> <p>Meet or exceed compliance with California Model Water Efficient Landscape Ordinance</p>	<p>Very moderate to no net impacts</p>	<p>Santa Barbara;            Santa Monica;            Palo Alto</p>

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**2 b. WATER EFFICIENCY  
WATER USE REDUCTION  
PLUMBING FIXTURES**

<b>Application</b>	<b>Measures</b>	<b>Purpose/Benefit</b>	<b>Fiscal Impact</b>	<b>Similar Policies</b>
<p>Title 9 Building Regulations</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Additions/renovations with new plumbing</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential</li> <li>• Retrofit toilets upon residential sale/transfer</li> </ul>	<p>New Construction, Additions, Renovations with new/replaced plumbing fixtures, such as:</p> <ul style="list-style-type: none"> <li>• Lavatory faucets, kitchen faucets, toilets, clothes and dishwashers to reduce water use by 20% - residential</li> <li>• Weather &amp;/or sensor-based irrigation controls</li> <li>• Fountains -unless non-potable water, excluding swim pools/spas, max 25 sq ft foot print with water recirculation system; No Overspray.</li> </ul> <p>Two Methods:</p> <p>Prescriptive – Specific plumbing fixtures meeting high efficiency standards</p> <p>Performance – Water Use Budget per the Calif Green Building Standards</p> <p>Residential Sale/Transfer Retrofits</p> <ul style="list-style-type: none"> <li>• Toilets WaterSense rated or equivalent with exemptions (eg: foreclosures; transfer within family)</li> </ul>	<p>Estimated 20% reduction of water usage</p> <p>Estimated 20% reduction in effluent discharge</p> <p>Meet or exceed current Manhattan Beach Water Conservation Ordinance &amp; California Green Building Standards effective 1/1/11</p>	<p>Very moderate to no net impacts</p>	<p>Berkeley; Santa Monica; San Francisco</p>

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**3 a. ENERGY**  
ENERGY EFFICIENCY

Application	Measures	Purpose/Benefit	Fiscal Impact	Similar Policies
<p>Title 9 Building Regulations</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Additions/renovations</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential per MB LEED ordinance</li> <li>• Municipal per MB LEED ordinance</li> </ul>	<p><u>Energy Efficiency:</u> Exceed 2008 Title 24 Calif Energy Efficiency Standards by 20% - Residential Only</p> <p><b>RESIDENTIAL &amp; NON-RESIDENTIAL:</b> <u>Lighting Efficiency</u> – Light fixtures – Energy Star rated</p> <p><u>Major Appliances, Fixtures, Equipment Efficiency:</u> Energy Star rated -</p> <ul style="list-style-type: none"> <li>• Exhaust &amp; Ceiling fans</li> <li>• Clothes &amp; Dish Washers</li> <li>• Refrigerators &amp; Freezers</li> <li>• Heating, Ventilating, Air Conditioning</li> <li>• Wine coolers</li> </ul> <p><u>Water heaters</u> – min efficiency req'ts based on size &amp; type <u>Pipe insulation</u> (currently required)</p> <p><u>Heat traps for non-circulating water heaters &amp; tanks</u></p> <p><u>Gas Fireplaces</u> – sealed, direct vent – min 65% efficiency <u>Swim pools &amp; spas</u> -</p> <ul style="list-style-type: none"> <li>• Solar energy system for 60% minimum heating of new pools/spas</li> <li>• Thermal covers/blankets – minimum R-15 rating</li> <li>• Electric resistance heaters must be powered by renewable energy system</li> </ul>	<p>Estimated minimum 20% to 70% reduction of energy demand</p> <p>Meet or exceed LEED requirements, current California Energy Efficiency regulations &amp; California Green Building Standards effective 1/1/11</p>	<p>Moderate to no net impacts</p> <p>Direct operational &amp; Life cycle cost savings</p>	<p>San Jose; Chula Vista; San Francisco</p>



**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**3 b. ENERGY**  
RENEWABLE ENERGY

Application	Measures	Purpose/Benefit	Fiscal Impact	Similar Policies
Title 10 Planning & Zoning	<p><u>Solar Energy Systems:</u> Administrative approval - Max 12" over height if to meet State Solar Rights Act;</p> <ul style="list-style-type: none"> <li>• Director exemptions where fire-life safety, access issues are mitigated</li> </ul> <p><u>Wind Turbines:</u> Allowed within building footprint; public hearing for other locations:</p> <ul style="list-style-type: none"> <li>• Small scale units technology not yet viable</li> <li>• Prevailing wind velocities may make this inefficient</li> <li>• Other concerns re: height, location, noise, view, bird capture need to be mitigated</li> </ul>	Encourage and/or facilitate renewable energy & resource conservation	Not applicable; voluntary	Hermosa Beach;

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**4. MATERIALS & RESOURCES**  
**WASTE MANAGEMENT & MATERIAL REUSE**

<b>Application</b>	<b>Measures</b>	<b>Purpose/Benefit</b>	<b>Fiscal Impact</b>	<b>Similar Policies</b>
<p>Title 5 Sanitation &amp; Health and Title 9 Building Regulations</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Additions/renovations</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>	<p><u>Waste Diversion:</u>                      Require waste from Construction &amp; Demolition to be recycled – Modify current requirement from 50% to 65%.</p> <p><u>Fly ash or Similar Supplementary Cementitious Materials (SCM) Reuse:</u>                      Require use of minimum 20% fly ash in concrete poured in-place cement.</p>	<p>Additional 15% reduction in construction-related waste</p> <p>Use of fly ash diverts waste product and reduces use of Portland cement, which is energy intensive to produce.</p> <p>Meet or exceed LEED requirements and California Green Building Standards effective 1/1/11</p>	<p>Very Moderate to no net impacts</p>	<p>Santa Monica; Los Angeles County; San Francisco</p>

**EXHIBIT B. Detailed Sustainable Measures Recommendations – Tables 1-5**

**5. AIR QUALITY**  
INDOOR & OUTDOOR

<b>Application</b>	<b>Measures</b>	<b>Purpose/Benefit</b>	<b>Fiscal Impact</b>	<b>Similar Policies</b>
<p>Title 9 Building Regulations &amp; Best Management Practices</p> <ul style="list-style-type: none"> <li>• All new construction</li> <li>• Additions/renovations</li> <li>• Single &amp; Multi-Residential</li> <li>• Non-residential</li> <li>• Municipal</li> </ul>	<p><u>Indoor - Finishes, Caulks, Sealants, Adhesives:</u> Low Volatile Organic Compound (VOC) or No -VOC</p> <p><u>Outdoor - Best Management Practices:</u></p> <ul style="list-style-type: none"> <li>• Discourage or prohibit equipment and/or material deliveries to construction sites on Refuse &amp; Recycling Pickup days that block or interfere with traffic flow through Residential Construction Officer &amp; Contractor Meetings</li> <li>• Educate contractors &amp; enforce Calif Air Resources Board limits on idling of gas &amp;/or diesel fueled vehicles to maximum 5 minutes. Exceptions include concrete mixers</li> </ul>	<p>Improve indoor air quality</p> <p>Reduce construction-related traffic &amp; fuel waste</p> <p>Meet or exceed LEED requirements and California Green Building Standards effective 1/1/11</p>	<p>Very Moderate to no net impacts</p>	<p>Beverly Hills; San Francisco; Palo Alto</p>

## **PUBLIC HEARINGS**

None.

## **GENERAL BUSINESS**

### **03/16/10-16. Consideration of Environmental Task Force Recommendations to Reduce Greenhouse Gas Emissions**

Interim City Manager Richard Thompson introduced the subject item and Environmental Programs Manager Sona Kalapura, Climate Action Subcommittee Chairperson Bob Scott and Climate Action Subcommittee member Todd Dipaola provided a PowerPoint presentation.

#### **The following individuals spoke on this item:**

- **Casey Beyer, Green Building Subcommittee member**
- **Peter De Maria, No Address Provided**
- **David Wachtfogel, No Address Provided**

**MOTION:** Mayor Pro Tem Montgomery moved to approve the following recommendations from the Climate Action Subcommittee: a plan for phasing in energy efficiency measures for municipal facilities when funds become available; replacement of the City's vehicle fleet with low-emissions vehicles; restructuring of the City's Rideshare Program to encourage use by commuters with larger carbon footprints; adoption of a Green Purchasing Plan; continued work with the South Bay Bicycle Coalition to access County grant funding for a regional bike plan; and the inclusion of traffic circles and roundabouts as potential traffic mitigation tools that can reduce CO2 emissions. The motion was seconded by Councilmember Tell and passed by the following roll call vote.

Ayes: Tell, Powell, Cohen, Montgomery and Mayor Ward.  
Noes: None.  
Absent: None.  
Abstain: None.

Council also recommended that some of the items be funded in the Capital Improvement Plan.

Hearing no objection, it was so ordered.

## **RECESS AND RECONVENE**

At 8:47 p.m. the Council recessed and reconvened at 9:05 p.m. with all Councilmembers present.

### **03/16/10-17. Consideration of Recommendations By the Environmental Task Force to Amend the Municipal Code for Comprehensive Sustainable Building Measures**

Interim City Manager Richard Thompson introduced the subject item and Building Official Carol Jacobson, Green Building Subcommittee Chairperson Chris Conaway, Green Building Subcommittee Member Ben Burkhalter and Green Building Subcommittee Member Casey Beyer provided a PowerPoint presentation.

#### **The following individual spoke on this item:**

- **David Kissinger, South Bay Association of Realtors**

**MOTION:** Councilmember Cohen moved to approve the recommendations from the Green Building Subcommittee which involve amending the Municipal Code to include several changes regarding Site Sustainability, Water Conservation, Energy Efficiency, Materials, & Air Quality and approve several zoning issues related to Green Roofs, Wind Turbines and Solar Panels as outlined in the staff report. The motion was seconded by Councilmember Powell and passed by the following roll call vote.

Ayes: Tell, Powell, Cohen, Montgomery and Mayor Ward.  
Noes: None.  
Absent: None.  
Abstain: None.

Council further directed Staff to review the above with the Planning Commission, as needed; to return with the subject changes in an ordinance for Council consideration; and to provide more information regarding the upgrades to water efficient toilets, the cost implications of requiring 60% of pool heating by renewable resources, and the implications of storm water and landscaping improvement requirements for large scale (over 50%) interior remodels.

Hearing no objection it was so ordered.

---

Because the time was after 10:30 p.m. (the cut off for introduction of new agenda items) and due to Resolution No. 6132 stating that "the City Council shall adjourn each regular meeting thereof by 10:30 p.m., unless four-fifths (4/5) of the Council Members present vote to waive or extend the required adjournment time" the following motion was made.

---

**MOTION:** At 10:36 p.m. Mayor Pro Tem Montgomery moved to continue the meeting past the 10:30 p.m. cut off. The motion was seconded by Councilmember Powell and passed by the following unanimous roll call vote.

Ayes: Tell, Powell, Cohen, Montgomery and Mayor Ward.  
Noes: None.  
Abstain: None.  
Absent: None.

03/16/10-18. Consideration of a City Council Work Plan Item to Consolidate the City's March General Municipal Election with the Los Angeles County's November Odd-Year Election

Interim City Manager Richard Thompson introduced the subject item and City Clerk Liza Tamura provided the staff presentation.

**The following individuals spoke on this item:**

- **Martha Andreani, Downtown Manhattan Beach**
- **Don McPherson, 1000 Block of 1<sup>st</sup> Street**
- **Todd Dipaola, 100 Block of 14<sup>th</sup> Place**
- **David Wachtfogel, No Address Provided**
- **Sandra Seville-Jones, No Address Provided**
- **Charles Foley, 1100 Block of 2<sup>nd</sup> Street**

Following a brief discussion regarding the possibility of moving the City's General Municipal Election in March of odd-years to the Manhattan Beach Unified School District (MBUSD) November odd-year election, Council directed staff to contact MBUSD to find out whether they would be interested in consolidating their November odd-year election with the City's General Municipal Election in March of odd-years; to obtain information from the Los Angeles County Registrar Recorder's Office regarding the possibility of consolidating the City's General Municipal Election with the County's November even-year election utilizing the same polling locations, and if doable, contact the MBUSD to determine whether they would be interested in consolidating with the City; and to research historical data regarding voter turnout not only for MBUSD, but for other jurisdictions that combine their General Election with their School Districts.

**07/14/10-2 Consideration of Environmental Task Force Recommendations to Amend Title 10 Planning and Zoning of the Manhattan Beach Municipal Code and the City's Local Coastal Program for Comprehensive Sustainable Building Measures, as part of the City Council 2009-2010 Work Plan**

Assistant Planner Danna summarized the staff report. He commented that the Sustainable Green Building Subcommittee of the Environmental Task Force is comprised of three residents and City Staff. He said that the subcommittee placed emphasis on energy efficiency, water conservation, runoff reduction, solid waste reduction and diversion, and air quality and emissions restrictions. He indicated that the City Council approved the Sustainable Green Building Subcommittee Environmental Task Force recommendations on March 16, 2010, and directed staff to prepare the proposed Code Amendments. He stated that the recommendations for amendments pertain to site sustainability; water efficiency and water use reduction; energy materials and resources; and air quality. He pointed out that many of the recommendations are required now or will be in the near future by the City's Water Conservation Ordinance, the California Model Water Efficiency Landscape Ordinance, the California Energy Efficiency Regulations; and California Green Building Standards.

Assistant Planner Danna indicated that the goal of the proposed Amendment regarding site sustainability is to design water runoff mitigation measures to achieve a zero discharge for a ¾ inch rainfall in a 24 hour period. He indicated that the requirements would apply to all new construction and major renovations over 50 percent in valuation for single family and multi family residential, non residential, and municipal developments. He indicated that parcels for 7,500 square feet or less would be permitted to have a maximum of 20 percent of non-permeable surfaces for required yard setbacks, parkways, and encroachment areas. He said that runoff from non-permeable surfaces such as roofs and parking pads would be required to be directed to permeable areas and/or approved retention features. He said that there would be an option to show compliance to the requirements by submitting a design from a licensed Civil Engineer or Landscape Architect per California Storm Water Quality Association's Best Management Practices Handbook and the Environmental Protection Agency's National Pollutant Discharge Elimination System. He stated that parcels greater than 7,500 square feet would need to show plans designed by a licensed civil engineer or landscape architect. He indicated that the purpose of the Amendment is to reduce the runoff and discharge of pollutants into the streets and storm drains and to meet municipal discharge requirements. He indicated that there are challenges of imposing the regulations in commercial areas where there are no setback requirements. He indicated that staff is suggesting that the Commission explore alternative means of achieving storm water runoff mitigation through other measures for commercial properties.

Commissioner Seville-Jones asked regarding the role of the Commissioners in reviewing the amendments, as the Council has already approved the guidelines.

Assistant Planner Danna said that the role of the Commission is to discuss the proposed Amendments and add any suggestions that they may have for improving the requirements.

In response to comments from the Commissioners, Acting Director Jester indicated that the item is being brought to the Commission at this stage to provide an introduction to the language and concepts of the proposed new standards without providing all of the details of the Zoning Code language. She indicated that the Task Force did look at very specific requirements from other cities while also recognizing that Manhattan Beach is unique. She said that staff would like for the Commissioners to understand the basic concepts and provide any opinions or

suggestions they may have to provide ideas to help further refine or improve the recommended amendments.

Commissioner Lesser indicated that it would be helpful for him to have further information regarding actions taken by other cities. He stated that it would also help to have a better idea of what measures the task force considered and the reasons why the measures were rejected or accepted. He stated that he would like more specific information regarding the origin of the proposals. He said that the City Council has basically approved the proposals, and he is not certain how much the Commission should suggest changing the recommendations of the task force.

In response to a question from Commissioner Seville-Jones, Building Official Carol Jacobson indicated that the standard of zero discharge for  $\frac{3}{4}$  inches of rain within a 24 hour period is required for communities in the area under the Municipalities Permit. She indicated that currently the standard only pertains to commercial areas and not residential. She indicated that applying the requirement to smaller lots would help Manhattan Beach to be ahead of other cities in the area in applying the standard.

Commissioner Lesser asked whether staff feels that there would be a difficulty in complying with the standard for smaller residential properties or for commercial properties with very little setback.

Ms. Jacobson commented that Santa Monica has requirements that are similar to the subject proposal, and there has not been a problem with projects being able to comply. She stated that materials are readily available for providing permeable pavements. She indicated that the costs can range depending on whether the material that is used is low or high end. She said that there are numerous materials that can provide permeable surfaces that are very reasonable in cost.

In response to a question from Commissioner Seville-Jones, Assistant Planner Dana said that it was suggested to include renovations that are over 50 percent valuation in the requirements because such renovations are generally quite substantial. He indicated that most likely that such a substantial remodel would include removing and replacing brick or concrete sidewalks and that the cost of changing the material to a permeable surface would not be a large percentage of the total cost of the project.

In response to a question from Commissioner Seville-Jones, Acting Director Jester commented that meeting the requirement would not necessarily require installing an expensive system and could be as simple as replacing a concrete walkway with pavers.

Commissioner Andreani suggested encouraging capturing rain water for use in irrigation.

Assistant Planner Dana commented that the recommendations do include capturing rain water from non-permeable surfaces in water retention bins or other approved systems.

In response to a question from Commissioner Seville-Jones, Acting Director Jester indicated that staff has discussed making allowances for water collection bins to be located within the required setback.

In response to a question from Commissioner Lesser, Assistant Planner Dana stated that flexibility needs to be provided in the language to allow the Community Development Director discretion in approving systems that currently are not developed provided that they meet the required findings.

Chairman Fasola indicated that he has a concern that the requirement that parcels less than 7,500 square feet have a maximum of 20 percent non-permeable surfaces for required yards, setbacks, parkway and encroachment areas penalizes smaller lots which have a proportionately larger setback area than a larger lot. He indicated that it would be very difficult for a half lot to meet the requirement. He commented that water does soak through sandy soil but does not soak through clay soil very easily. He indicated that he has a concern with making a requirement that 80 percent of required yards, setbacks, parkway and encroachment areas surfaces be permeable when it may not be feasible for properties where water may not soak through depending on the soil. He indicated that including such a blanket requirement in the Code could be detrimental to many projects where the water would not soak in but instead could end up saturating the soil and flooding the property. He said that a better option may be to list the goals and for the property owner to have the option of submitting a design from a licensed civil engineer that meets the goal. He indicated that the intent regarding sustainability is not necessarily to have permeable surfaces for walkways or patios but rather that the storm water be collected and directed down into the soil. He indicated that he is concerned with forcing a technical specific solution to solve a general problem.

Commissioner Seville-Jones commented that her understanding is that people would have the option of not meeting the requirement provided they submit a design from a licensed engineer that meets the goal of zero discharge for  $\frac{3}{4}$  inches of rainfall within a 24 hour period.

Commissioner Lesser said that he would like to confirm that the goal of achieving zero discharge for  $\frac{3}{4}$  inches of rainfall within a 24 hour period is possible for all properties in the City.

Acting Director Jester said that it is a good suggestion to allow for an administrative process for properties on which retaining the storm water on site is not feasible because of the soil conditions or other limitations.

Ms. Jacobson said that it was felt that it is important to allow for administrative approval to provide flexibility for situations where the options for retaining storm water on site are not feasible.

Assistant Planner Danna indicated that a green roof balcony or deck is a surface that supports the growth of vegetation over a portion of its area for the purpose of water or energy conservation. He said that green roofs usually consist of a waterproof safe membrane that is covered by a drainage system, a light weight growing medium, and plants. He stated that green roofs provide a means to decrease storm water runoff into the public system as well as provide building insulation and improved aesthetics. He said that the proposed regulations for green roofs would apply to all new construction and major renovations of over 50 percent valuation for single and multifamily residential and nonresidential projects. He indicated that green roofs would be treated the same as other decks and balconies in terms of height and setback requirements. He commented that the Community Development Director may approve green roofs on top of a roof level if it is not usable as a deck and if safety, maintenance, access and slope issues are mitigated. He indicated that the Code currently does not allow rooftop decks. He indicated that staff is concerned that green roofs would be used as decks, as providing access to the roof is necessary in order to maintain the plants. He said that a green roof may be approved if it is not usable as a deck due to the slope and limited access. He indicated that the benefit of a green roof is to reduce storm water runoff into the public system, to filter out pollution, to increase thermal and acoustical insulation, and decrease the need for air conditioning and other energy consumption.



Assistant Planner Danna said that the primary goal of recommendations regarding water efficiency and water use reduction is to reduce the water needed to irrigate landscapes. He indicated that the intent of the recommendation is to design irrigation to meet the requirements for region 3 per Water Use Classification of Landscape Species (WUCOLS) to assist in the design of more water efficient landscaping. He stated that the regulations would apply to all new construction, major renovations of over 50 percent valuation, single and multifamily residential, non residential and municipal projects. He indicated that the recommendation is to allow a maximum of 20 percent of landscaped area (private property, public parkways and encroachment areas) to require high water usage such as grass. He commented that lots under 7,500 square feet may use a standardized water budget worksheet as provided by WUCOLS or may provide a licensed landscape architect design and calculations. He stated that lots over 7,500 square feet would be required to provide a design and calculations from a licensed landscape architect. He indicated that the Community Development Director would be able to give exemptions for hardships or special circumstances. He commented that sites irrigated with non-potable water would also be exempt from the requirement. He stated that the requirement would provide for an estimated 20 percent reduction in water usage; would provide for an estimated 20 percent reduction in runoff discharge; and would meet or exceed compliance with the California Model Water Efficient Landscape Ordinance.

Assistant Planner Danna commented that the recommendation regarding plumbing fixtures within the water efficient and water use reduction recommendations would apply to all new construction and major renovations of over 50 percent valuation for single and multifamily residential and non residential projects. He commented that the recommendation is that residential and non residential fountains and ponds be limited to a maximum of 25 square feet with a water recirculation system unless non-potable water is being used. He indicated that the purpose and benefit would be to provide an estimated 20 percent reduction in water use and meet or exceed the City's Water Conservation Ordinance and California Green Building Standards.

Assistant Planner Danna indicated that the renewable energy recommendations would allow administrative approval of solar energy systems on top of buildings that do not exceed a maximum of 12 inches above the maximum allowable height for the structure. He stated that several solar panel companies have met with staff and participated with the Environmental Task Force meetings. He indicated that plan check guidelines have been refined to meet the concerns expressed by the representatives of solar energy companies while balancing the safety and access issues for the Fire Department and Building Department regulations. He indicated that the City continues to waive the plan check fees for all solar system permits. He commented that the recommendation would also address wind energy systems. He stated that much of the technology for wind energy systems is not yet available, and flexibility needs to be provided in the Code language to allow for future changes in technology. He said that because of concerns regarding height, view obstruction, noise, and the viability of current technology, the Subcommittee recommends that approval of wind turbines be done through a public noticing process if they are proposed to be located out of the allowed buildable envelope. He commented that the purpose and benefit of the recommendations regarding renewable energy is to encourage or facilitate the installation of renewable energy systems.

Chairman Fasola opened the public hearing.

**Toni Reina**, representing Continental Development Corporation, said that they would suggest that a mechanism be provided in the Code Amendments to allow for flexibility to approve Minor Exceptions or exemptions. She said that consideration should be given to practicality

and feasibility of implementing the proposed new regulations. She commented that they would also be interested in receiving further information on how the City intends to exceed the State agency requirements for storm water retention and the California Efficient Landscape Ordinance.

**Laura Gillin**, representing Solar City, said that their solar panel system would require a height of 23 inches above the level of the roof on which it is installed for optimal efficiency. She said that their panels require an angle of tilt of 5 degrees on a flat roof to provide for maximum performance. She commented that they have submitted a report to the Environmental Task Force in January of 2010. She stated that the lowest height she found for solar panel systems provided by other companies was 18 inches. She requested that the Commission consider allowing 18 inches above the maximum height limit for installation of solar panels on the roof of buildings.

In response to a question from Commissioner Lesser, **Dustin Huskins**, representing Solar City, said that a 5 degree tilt for the panels is necessary in order for them to receive the optimal amount of ultra violet rays from the sun and to prevent water or debris from collecting on them rather than running off. He indicated that having the panels raised also allows for air flow under the panels which aids in their efficiency.

**Ben Burkhalter**, a member of the Green Building Task Force, said that the recommendations of the Subcommittee arrived after a year and a half of studying the requirements of numerous other cities and counties in California regarding energy efficient standards. He indicated that they also received input from applicants of projects and Code enforcement officials. He said that they also took into consideration requirements that they knew were in the process of being enacted as well as the direction of the City Council. He commented that they utilized a tremendous amount of information, and they included references where possible in their recommendations. He said that they are still in the process of writing the language of the Amendments. He commented that they arrived at the recommendation of allowing 12 inches over the maximum building height for solar panels based on a report they received from Solar City. He indicated that their intent was for the requirements to be attainable with the technology that is available.

In response to a question from Commissioner Lesser, **Mr. Burkhalter** said that the soil permeability rating for the City is about 87 percent sand and 13 percent clay. He pointed out that the requirements they are recommending regarding water retention would apply to the maximum extent practicable. He said that providing a blanket requirement that could be met on the vast majority of properties would push the City's storm water permit compliance well into the future. He commented that for the vast majority of sites simply not paving would allow the storm water to permeate into the soil rather than running off into the storm drains.

Commissioner Lesser said that having the standard apply to the extent practicable is different than having it apply strictly to all properties.

Acting Director Jester commented that her understanding is that the Commission wants to provide flexibility in applying the requirement for having a maximum of 20 percent of non-permeable surfaces for required yard setbacks, parkways, and encroachment areas.

Chairman Fasola suggested requiring that a maximum of 5 percent of the site be permitted to have non-permeable surfaces rather than requiring that 20 percent of the setback area have permeable surfaces. He said that allowing for 5 percent of the site would arrive at the same goal for water retaining while allowing more flexibility.

Chairman Fasola commented that his understanding is that the City does a good job in filtering storm runoff water and that not much unfiltered water flows from the storm drains into the ocean. He asked regarding the amount of storm water runoff that is being filtered currently. He asked about the necessity of such a requirement for retaining storm water runoff on individual sites if the vast majority of the water is already being filtered back into the soil.

Acting Director Jester indicated that the Environmental Task Force and the Subcommittee considered implementing a series of citywide filtration systems rather than requiring individual property owners to retain storm water. She indicated that there is the ability because of the sandy soil for water to be retained on individual properties, and it is much easier and less expensive. She said that there are very few sites in the City that have clay soil. She indicated that there are a number of filtration devices at different locations in public parking lots throughout the City.

In response to a question from Chairman Fasola, Acting Director Jester said that staff could provide further information regarding the amount of untreated water runoff that reaches the ocean from Public Works.

Chairman Fasola said that retaining storm water runoff on site is a goal that the City should attempt to reach, but he would like to know more regarding if there is a large concern with untreated water reaching the ocean currently.

**Mr. Burkhalter** commented that the City has taken measures to filter storm water runoff during certain conditions; however the requirements for filtering are becoming more stringent in both wet and dry conditions. He indicated that it was indicated to the Subcommittee that water containment must be done on site in conjunction with larger filtration systems. He said that the main concern is with large storms during which the storm drains become overwhelmed. He stated that the system is designed to discharge the water into the sand and use the sand as filtration, but the filtration system becomes overrun during large storms.

Commissioner Lesser requested further information regarding the specific areas in the City that have clay soil and the additional challenges that would be posed for projects on such properties. He indicated that he would also like further input regarding any exceptions that should be considered for such properties. He indicated that he would also like further information regarding how the Ordinances of other cities are written to address retaining storm runoff water on properties with clay rather than sandy soil.

In response to a question from Commissioner Lesser, Assistant Planner Dana said that staff would like for the Commission to suggest possible solutions for addressing water runoff retention on site for commercial properties that are built out to near the property line and have very little setbacks. He indicated that a possible alternative would be to require permeable pavement for parking lots along the Sepulveda Boulevard corridor. He said that another possibility would be to allow more square footage for structures in the downtown area provided that a water retaining system is provided on site.

Acting Director Jester stated that staff also has suggested the possibility of allowing a parking reduction for buildings that are built to the Leadership in Energy and Environmental Design (LEED) standards for buildings in the North End.

In response to a question from Commissioner Seville-Jones, Assistant Planner Dana said that currently there is not much development in the El Porto area because the lot sizes are not large

enough to accommodate the parking that is required. He said that staff is suggesting the commission consider the possibility of allowing a parking reduction in order to encourage building more sustainable developments.

Chairman Fasola said that there is a question as to whether it is economically feasible to build in the North End. He said that the issue in the North End is that there are not opportunities for providing parking and there is no in lieu fee for providing parking. He commented that it would seem that the best approach to providing sustainable building practices is to retain existing structures which saves a large amount of materials from being used to build new structures.

Assistant Planner Danna said that property owners in the North End are limited in remodeling their properties because of the parking. He indicated that allowing a parking reduction could be an incentive for providing energy efficiency if a property owner wants to remodel an existing building.

Commissioner Andreani commented that she does not feel parking requirements should be relaxed in exchange for building energy efficient structures, as it could result in exacerbating existing parking problems which already is a large issue.

Commissioner Seville-Jones said that she likes the idea of requiring a portion of uncovered parking lots in commercial developments to be built with permeable pavement or other permeable materials.

Chairman Fasola suggested the possibility of only applying the standards to residential properties, as a very small percentage of the properties in the City are commercial.

Commissioner Andreani commented that it is possible to place requirements on commercial properties such as permeable surfaces for parking lots that would help address storm water runoff.

Chairman Fasola commented that it would be difficult to address commercial properties that are built to the property line.

In response to a question from Commissioner Lesser, Acting Director Jester indicated that the green roofs she is familiar with generally use drought tolerant plants.

Commissioner Lesser asked whether restrictions would be placed on the type of plants that could be placed on such a roof.

Acting Director Jester said that it would not be practical to place landscaping that requires a large amount of water on a green roof, as the intent is that such roofs are not usable surfaces that are easily accessed.

Assistant Planner Danna pointed out that property owners would also be limited by the requirement that only 20 percent of the landscaped area on the property require high water usage.

In response to a question from Commissioner Lesser, Assistant Planner Danna said that staff can determine from plans that are submitted whether a roof would be able to be easily accessed and used as a deck.

Commissioner Seville-Jones asked about regulating the height of plants on roofs, as they do continually grow.

Acting Director Jester said that the plants used for the green roofs that she has seen typically are succulents and other drought tolerant plants that do not grow very tall. She pointed out that the type of plants that are used is limited because they would require a shallow soil surface. She said that a height limit could be placed for plants on green roofs.

Commissioner Seville-Jones commented that she does feel a height limit should be considered for plants on green roofs, although she would not want to restrict the type of plant that could be grown on a green roof. She said her understanding is that the intent is that green roofs function to lower energy consumption by helping to cool structures. She indicated that the intent is not for such roofs to become gardening areas. She said that she is not certain about the balance of being overly restrictive and at the same time not providing for roofs that become usable areas.

Acting Director Jester indicated that staff would not want for third story roofs to become usable spaces in areas zoned for three stories. She indicated that having usable areas on roof levels results in concerns with providing for railing and other safety measures. She said that decks are permitted on the second level of homes in areas that are zoned for three stories. She commented that green roofs that are on the third level would be required to be sloped and to not have access from a permanent staircase and would only have limited access.

Chairman Fasola indicated that his experience is that green roofs are generally done on large commercial structures. He asked about circumstances where the plants die because the roof is not maintained.

Commissioner Seville-Jones requested that she would like more information regarding the State requirements and how the proposed Amendments would meet or exceed those requirements.

Commissioner Lesser said that he would also like more information regarding cities that have adopted similar measures to the proposed Amendments.

In response to a question from Commissioner Lesser, Ms. Jacobson commented that there are many toilets now on the market that use 1.2 gallons of water per flush as opposed to 1.6 gallons per flush which is currently the standard.

Chairman Fasola indicated that with the small size of many of the lots in the City, he would like to know where Manhattan Beach compares in terms of water usage with other cities in the Los Angeles area where the properties have much larger lawns. He asked whether it would be appropriate to allow smaller lots to be exempt from being restricted to 20 percent of the landscaped area requiring high water usage.

Chairman Fasola stated that he would like further information regarding which of the proposed requirements are measures mandated by the State and which are additional measures that are being taken by the City.

Acting Director Jester pointed out that information regarding which of the suggested regulations are State requirements has been included in the staff report. She indicated that references can also be added to the charts that are in the staff report regarding which suggested regulations are State requirements.

Commissioner Paralusz said that she is concerned that not allowing solar panels to extend up to the height required for their maximum performance may discourage some people from installing solar panel systems because of the cost involved.

Acting Director Jester said staff's understanding is that allowing solar panels to extend up to 12 inches about the maximum height limit would meet the State requirement that solar panels not be restricted from reaching up to at least 80 percent of their maximum performance.

Commissioner Andreani stated that she is concerned regarding allowing the height of solar panels to extend beyond the maximum permitted building height considering all of the work that has been done to reduce visual bulk and density in the City. She suggested that the maximum height limit be reduced to allow for the added height of the panels.

Acting Director Jester said that she would want to consult with the City Attorney as to the implications of not adhering to the State requirement that solar panels be able to reach at least 80 percent of their maximum efficiency.

Commissioner Andreani pointed out that the regulation would pertain to new construction which the City does have a right to control.

Commissioner Lesser said that the renewable energy proposals would also apply to projects on existing construction which is why the City must adhere to the State law as to existing structures. He said that he would like more information regarding how other cities have addressed the issue regarding solar panels being installed on structures built to the height limit.

Acting Director Jester commented that there are a number of cities that allow solar panels on roofs to exceed the maximum height limit.

Commissioner Seville-Jones said that she would most like to see information as to the requirements of other coastal cities.

Commissioner Andreani indicated that she feels it is appropriate that any projects for wind turbines require noticing. She indicated that the issue of approving wind turbines is similar to the issue regarding the approval of cellular communication towers.

Commissioner Seville-Jones pointed out that wind turbines that are proposed within the building footprint on residential properties would not require noticing. She indicated that she has a concern that wind turbines that are built in residential areas within the building footprint could create additional impacts to neighbors. She said that she would like further information regarding any additional impacts that could result in the turbines being allowed on residential properties.

Chairman Fasola pointed out that there are noise standards that would restrict the noise generated by turbines from exceeding a certain level.

Acting Director Jester indicated that staff felt allowing turbines within the building footprint would be basically the same as allowing mechanical equipment. She said that the turbines would be tied in with noise regulations.

Commissioner Paralusz commented that she would like further information regarding wind turbines that have been installed in other coastal areas or other cities.

Commissioner Seville-Jones asked whether there could be an impact to neighbors from seeing the continual motion of the turbines. She said that she would also like any additional information regarding possible visual impacts of turbines. She commented that she would like to see examples of turbines in other areas.

Commissioner Paralusz commented that determining what is considered visual pollution can be very subjective.

Chairman Fasola asked about limiting the size of fountains to 25 square feet when swimming pools are allowed to be much larger.

Acting Director Jester commented that the distinction that was made during the discussions is that swimming pools provide a recreational use whereas fountains are decorative.

Chairman Fasola commented that he does not believe that very much water is being evaporated from fountains and he questions whether there is much of an issue regarding their water usage.

**Mr. Burkhalter** pointed out that the new restrictions that are being proposed for swimming pools are very onerous and will be a systemic change to pools in the City. He said that the Subcommittee looked at the requirements of other cities in considering fountains.

Chairman Fasola closed the public hearing.

The Commissioners decided to close the public hearing and have the item be renoticed for a future date.

#### **E. DIRECTORS ITEMS**

Acting Director Jester stated that the Parking and Public Improvements Commission will be continuing their hearing regarding regulations for RVs and oversized vehicles at their meeting on July 22, 2010, at 6:30 p.m.

#### **F. PLANNING COMMISSION ITEMS**

#### **G. TENTATIVE AGENDA July 28, 2010**

1. Shade Hotel Resolution
2. 626 Rosecrans Avenue- Appeal of Director Decision

#### **H. ADJOURNMENT**

The meeting was adjourned at 9:55 p.m. to Wednesday, July 28, 2010, in the City Council Chambers, City Hall, 1400 Highland Avenue

SARAH BOESCHEN  
Recording Secretary

ATTEST:

\_\_\_\_\_  
LAURIE JESTER  
Acting Community Development Director



NOTICE OF A PUBLIC HEARING  
BEFORE THE PLANNING COMMISSION  
OF THE CITY OF MANHATTAN BEACH  
ZONING CODE AMENDMENT (TITLE 10) AND LOCAL  
COASTAL PROGRAM AMENDMENT TO INCORPORATE  
COMPREHENSIVE SUSTAINABLE BUILDING MEASURES

A public hearing will be held before the Planning Commission for the project described below.

Applicant: City of Manhattan Beach- City Council 2010 Work Plan Item—Sustainable Building Measures  
Filing Date: August 25, 2010  
Property Location: Citywide

Project Description: Continuation of discussion to amend Title 10 Planning and Zoning of the Manhattan Beach Municipal Code (MBMC) and the City's Local Coastal Program to incorporate a comprehensive set of Sustainable Building Measures as recommended by the Sustainable "Green" Building Subcommittee and the Environmental Task Force to the City Council. Measures include site sustainability (landscaping, irrigation, and plumbing fixtures), water efficiency (stormwater retention and green roofs), and energy efficiency (solar panels and wind turbines).

Environmental Determination: Pursuant to California Environmental Quality Act (CEQA) and the Manhattan Beach CEQA Guidelines, portions of the subject amendments are exempt in that they are covered by the general rule that CEQA [Section 15061 (3)] only applies to projects which have the potential for causing a significant effect on the environment, and since it can be seen with certainty that there is no possibility that the activity will have a significant effect on the environment, the activity is not subject to CEQA. Portions not covered by the aforementioned exemption are Categorically Exempt, Class 8, Section 15308 in the CEQA Guidelines.

Project Planner: Esteban Danna, Assistant Planner (310)-802-5514, edanna@citymb.info

Public Hearing: **Wednesday August 25, 2010 at 6:30 p.m.**  
**Council Chambers, City Hall, 1400 Highland Avenue**

Further Information: Proponents and opponents may be heard at that time. For further information contact the project Planner. Project files are available for review at the Community Development Department at City Hall. A Staff Report will be available for review at the Civic Center Library on Saturday, August 21 and at the Community Development Dept. on Monday, August 23 or on the City website: <http://www.citymb.info>.

Public Comments: Oral and written testimony will be received during the public hearing. Anyone wishing to provide written comments for inclusion in the Staff Report must do so by August 18, 2010. Comments received after this date will be forwarded to the Planning Commission at or prior to the public hearing.

On the Zoning Code Amendment, the Planning Commission will make a recommendation to the City Council and the City Council will make a decision on the application. On the Local Coastal Program Amendment, the Planning Commission will make a recommendation to the City Council and City Council decision will be forwarded to the California Coastal Commission for review and certification.

*If you challenge the proposed actions in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this Notice, or in correspondence delivered to the Planning Commission at, or prior to, the public hearing.*

Laurie B. Jester  
Acting Director of Community Development

