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Statement of Energy Conservation 1930 Ocean St. Ext. 40 Apts./Condos

The property is located in the City of Santa Cruz, approx. 500' from a major vehicular arterial and 1/3 of a mile from Hwy. 1. This proximity provides very short driving distances to all services. Sidewalks provide pedestrian travel to Ocean St. and, via the new San Lorenzo pedestrian bridge, to downtown Santa Cruz. The properties location meets the desire to locate new housing close to urban areas and required services.

The 2.7 acre site is an open, southwest facing slope. This orientation allows for structures to enjoy abundant natural light and passive solar gain. The slope averages approx. 15%. By building 10 smaller structures and staggering the structure across and up the slope, none of the buildings are hidden in the shadow of another. Seven of the buildings on the upper 2/3 of the property have semi-subterranean parking under the living spaces. Tucking this parking into the hillside reduces the project's building footprint and the amount of asphalt.

Each of the 10 buildings contains four, single level living spaces. This design allows each living space to have 3 exterior walls with ample windows. In every living space, the living room, dining room and kitchen have a southwest orientation. A private deck, with roof, is located off the living area on the southwest side. This design allows for interior solar gain during the winter and adequate shading during the summer.

The project will be constructed in accordance with the Green Building Guidelines. Each living space will incorporate energy efficient hydro heat, insulated windows, Energy Star appliances, and water conserving plumbing fixtures.

Just by the nature of each unit's size, approx. 1,000 sq. ft., the project is creating efficient living spaces. The landscaped areas are common to all units and utilize drought resistant plantings and drip irrigation.

AGENDA REPORT

PC Meeting of October 7, 2010

SUBJECT: 1930 Ocean Street Extension - CP10-0033

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The proposed project will be required to comply with the City's Green Building Program through the building permit process. The applicants included the attached "Statement of Energy Conservation" as part of the project application (Attachment 8). The City's Green Building Coordinator reviewed the site and floor plans and recommended that the applicant focus on the following general elements of the City's Residential Green Building Program during the design development phase of the project:

- Renewable Energy Technology. Optimize solar orientation for future or immediate installation of renewable energy technology.
- Passive Design Elements. Include passive design elements like stack effect and day lighting to promote a higher degree of comfort, health and long term affordability.
- Alternative Fuel Vehicles. Include preparatory design for electric vehicle fueling stations for three percent of the total vehicle parking capacity for the site.
- Development Footprint. Maximize open space and reduce the development footprint.
 Provide ample open space within the project boundary that exceeds the zoning requirement.
- *Heat Island Effect.* Use roofing materials with a Solar Reflectance Index (SRI) of 78 or better and paving materials that have and SRI of 29 or better.
- Indoor Environmental Quality. Ensure that building occupants are comfortable and
 protected from dangerous chemicals. Implement a construction phase Indoor Air
 Quality (IAQ) plan to protect workers. Measures include, but are not limited to, sealing
 duct work during construction, using low or no Volatile Organic Compound (VOC)
 paints and coatings, sealants and adhesives, and specifying materials without harmful
 additives such as phenol formaldehyde.

Landscaping and Site Improvements. The applicants submitted a preliminary landscape plan that has been reviewed by the Water Conservation Division for compliance with the City's Water Efficient Landscape Ordinance. Per the recommendations of the Arborist Reports prepared by Ellen Cooper and Associates, six of the 15 trees (all Heritage Coast Live Oaks) at the subject parcel will be preserved and the remaining nine will be removed as they are invasive, non-native species. With the six Heritage Oak trees, the landscape plan provides approximately 80 trees, shrubs, vines, and other plantings that are drought-tolerant and native species that will give the landscaping a textured effect. With the exception of the two-way main entry drive to the development, the entire 15-foot front yard setback along Ocean Street Extension will be fully landscaped. In addition, four street trees (Flowering Pear) are proposed directly across Ocean Street Extension from the project site. The decorative trellis structures above the building entrances will be planted with climbing vines (Trumpet Vine).

The landscaping plan provides ample landscaping to soften the appearance of the proposed buildings and to screen parking and paved circulation areas from public view. Prior to the issuance