

## **Sustainable development for a healthier community**

By Suzanne Arlie

Crescent Village in Eugene, Ore. represents more than just a new development. Arlie & Company, the developer, shapes it to exemplify the new urbanism concept and focus on environmental sustainability for a healthier community.

As the first mixed-use development in its city, Crescent Village provides spaces for residents, retailers and commercial businesses. Each building features environmentally-friendly amenities.

Part of the developer's strategy includes involving the local officials. The new establishment won a place in the City of Eugene's Green Building Demonstration Project. As a result, Crescent Village's planning, design, development and construction become the primary basis for future green building projects in its city.

In addition, the development company is pursuing LEED-CS (Leadership in Energy and Environmental Design Core and Shell) certification for one of its mixed-use buildings. The certification gives the retail and commercial tenants the opportunity to seek LEED certification for commercial interiors (LEED-CI) as well.

"Tenants are extremely interested in LEED certification," says Arlie & Company Marketing Director Sadie Dressekie. "As business owners, they recognize that an energy-efficient building is a cost-efficient building and that employees are more productive in a healthy indoor environment."

The green efforts of Crescent Village include decreasing water and air pollution, daylighting and energy efficiency. Each of these elements, whether technologically or naturally improved, contributes to a better, environmentally safer atmosphere.

## **Improving Water**

Crescent Village's beautifully landscaped gardens serve as visually aesthetic attributes and useful water filtrates. They incorporate bioswales, specifically called rain gardens, to capture and filter surface run-off before it flows into local streams and rivers.

According to Rain Gardens of West Michigan, government studies show that up to 70 percent of pollution in local waters result from storm surface run-off. The flowing water on the ground contains contaminants, such as lead from automobile deposit, petroleum and pesticides. As part of the water cycle, the run-off results in decreasing-crop-productivity land erosions, aquatic habitat damage and health risks.

Arlie & Company put the bioswale rain gardens at Crescent Village because buildings, pavements, rooftops and parking lots negatively contribute to the water flow. The structure of each garden includes a planted depression, the bioretention area, that allows storm water to collect and infiltrate into the ground. Its slow absorption helps increase the filtering process. To ensure year round water filtration, landscape architect Kate McGee selected drought-resistant, native plants that sustain under the region's climate.

In addition to the gardens, the development includes an underground private parking garage. Its technology enables Arlie & Company to forgo building a drainage system for the lot and prevents water pollution from automobile leaks.

## **Daylighting**

Beyond saving the environment from excessive water pollution, the structures of Crescent Village incorporate daylighting technologies to decrease the amount of energy usage and to maximize the amount of natural light.

Daylighting especially lightens the south-facing sides of the buildings due to the orientation of the sun. Windows, light shelves and solar panels make up the three key lighting features.

Large windows increase the amount of natural light in the rooms. Light colored walls supplement the windows by reflecting the light from one wall to the next.

Similar to the window designs, the light shelves assist the sun in lighting the room. The horizontal structures attached to the windows reduce glare on the glass, as well as reflect sunlight upwards to illuminate the ceiling with light.

The last daylighting feature works a little differently than the windows and light shelves. Found on top of several building roofs, solar panels convert the sun's energy to electricity to power the parking lot lights.

### **Other Health-minded and Efficient Elements**

Arlie & Company's green building practices infiltrate the interior of the buildings to improve the living and working qualities for residents, retailers and commercial businesses.

Energy Star and Earth Advantage certify all of the construction.

The builders use recycled and locally produced materials, non-toxic low- and no-VOC releasing interior finishes, efficient windows and efficient HVAC output.

Energy-efficient appliances, low-flow water fixtures and dual flush toilets all contribute to green conservation efforts.

The architectural selection for the type of window glass used focuses on energy efficiency as well. The double-paned, low-emissive-coated windows improve insulation, reducing HVAC loads and improving ventilation. Also, each air heating and cooling component individually filters for clean and healthy breathing air.

## **Localizing New Urbanism Brings a Higher Quality of Life**

Building a pedestrian-friendly community is an important aspect of the urban village. Crescent Village accommodates the people's needs and wants into one place. They can live, work and play all in the same area.

Arlie & Company designed the development to focus on a higher quality of life for the community. Wide sidewalks, open sustainable parks and pedestrian-friendly streets promote an interactive and pleasant human-scaled experience. Since living essentials stay within walking distance, the need for driving decreases. It benefits the quality of air because a lower number of cars out polluting it.

Other air quality and car decreasing solutions include biking and local transportation. The development provides a generous number of secure bike storage to promote it and healthy living through exercise. Pedestrians can also easily access the local transportation.

Businesses plan to thrive because of the increase in foot traffic.

"It was decision about six months in the making," said J.B. van Hecke, owner of newly renamed Cornerstone Café. "We were considering other locations, but we liked the uniqueness of what Crescent Village will bring the City of Eugene, as well as the opportunity for growth in this area."

Community members also flourish from the localization of the urban village. It generates more interest and success.

"It's great to see 'smart growth' concepts happening in Eugene. This project promises local jobs, local support, and local prosperity and is a great business opportunity for Eugene," said local resident Robert Michael.

Arlie & Company and its partners are shifting into the next phase of the project. – a 50,000 square-foot grocery store. They plan to continue the environmentally sustainable qualities through enhancing the features an urban village has to offer to its community.

*Suzanne Arlie is the founder and president of Arlie & Company. As the leader, she is committed to environmentally-friendly real estate development and management practices.*

### **Crescent Village Credits**

Owner and Developer: Arlie & Company

Architect: Rowell Brokaw Architects

General Contractor: Gale Roberts Construction

Town Home Builders: Oregon Estates, Ruhoff Home Builders

Row House Builder: Pacific Crest Rock Builders

Landscape Architecture: Kate McGee

### **Links:**

<http://www.crescent-village.com>

<http://www.arlie.com>

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