GERDLING EDLIN DEVELOPMENT

# PAE Living Building Challenge Office

*Portland, Oregon*

ZGF Architects

*The PAE Living Building Challenge office will be the first certified Living Building in Portland, Oregon.*

*Innovative water infrastructure helps ensure net-positive water use in a five-story, mixed use building.*

**SERVICES**
Assess
Plan
Engineer & Design

Located less than two blocks from the Willamette River, A five-story, mixed-use structure planned for Portland, Oregon's Old Town Historic neighborhood is poised to become the city's first certified Living Building Challenge (LBC) project and the largest commercial Living Building in the state. Designed by ZGF Architects and PAE Consulting Engineers—a future occupant of the building—the 58,700-square foot structure will produce 105 percent of its energy needs and meet its potable water needs from harvested rain and internal water recycling. The project also aims to become the first office building in North America to produce fertilizer from captured high strength waste onsite (urine and compost leachate).

A key member of the integrated design team, Biohabitats is engineering the building's water and waste infrastructure, which includes onsite systems for harvesting rainwater for potable water supply, greywater treatment for reuse in toilet flushing and irrigation, and nutrient recovery. The nutrient recovery system turns high strength waste into retail grade fertilizer. The building includes 20 composting bins to manage toilet waste and a 71,000-gallon cistern.

In addition to supporting the project's pursuit of the LBCs stringent Water Petal, the water infrastructure contributes to the building's positive impact on Willamette River Watershed and the broader regional ecology.