



ozone

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creating more sustainable communities on every level

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PROJECTS

LEED SILVER IS GOAL FOR POWER DISTRIBUTION HEADQUARTERS



With its application for a LEED green building rating pending, the Power Distribution Headquarters for King County (WA) Metro is completed and occupied. This building houses staff and equipment that supports Metro's electric-power trolley infrastructure and radio systems for a fleet of buses with zero emissions, providing clean and quiet transportation around the County. Metro maintains almost 150 standard trolley buses that run on electricity and use overhead wires, covering more than 70 two-way street miles. Considering Metro's commitment to clean transit, it made sense to also construct a green building to house its offices. The 24,000 SF green building began with remediation of the site soil and demolition of an existing facility, and included a site design that allowed uninterrupted service and operations as the County inhabited the existing building until the new one was complete. King County's green building ordinance promotes green buildings throughout the County's divisions and its solid waste division maintains a website devoted to green building and LEED to further help projects achieve sustainable buildings. The LEED Green Building Rating System provide a benchmark for the design, construction, and operation of high performance green buildings that feature responsible site development, water savings, energy efficiency, sustainable materials selection, and enhanced indoor environmental quality.

STORMWATER OUTFALL DESIGNED TO EASE POLLUTION IN WILLAMETTE RIVER

When the U.S. Environmental Protection Agency mandated a pollution reduction program for the City of Portland, Otak's Gregg Weston was able to help with a really big pipe that is 25 feet deep in spots, directly adjacent to a high pressure water main and along the foundation of the I-5 bridge in downtown Portland. As the design engineer for the South Waterfront Stormwater Outfall Project, Weston says this particular 96-inch diameter conduit is one of the main combined sewer/stormwater overflow pipes and will improve a situation that has plagued the City for years. Typically, every rainfall event has created a corresponding raw sewage overflow directly to the Willamette River. During the summer months this was a constant concern for those using the river for recreation plus its impact on wildlife. "We found a path

RESOURCES

BUILDING OR BUYING A GREEN HOME?

King County, Washington, has produced two new resources for green home building that promise to help builders decide whether to pursue green options based on cost and value and help homeowners decide which green options to request from their builders. Using the Built Green Home at Suncadia as the study model, the County worked with builder Grey Lundberg of CMI Homes to compare a conventional custom home and its products with a custom green home. The resulting comparison matrix looks at the green products and systems as choices against conventional products and systems. A brief case study describes the green aspects of the project.



to the river for this project that was less impacting, created another small opportunity to create less impact to the existing riverbank, and eliminate two aging pipe systems that traverse a brownfield while preventing potential pollutants from following the old trench lines to the river,” Weston explains. Having been involved in South Waterfront for the last ten years, Weston points out the bigger picture is the sustainable approach that’s being adopted in areas such as the separation of a large portion of the combined sewer system into independent storm and sanitary systems and implementation of more natural stormwater treatment in the Central District starting at the roof tops. This integrated approach to stormwater has come about through cooperation with the City and builder/developers, and uses a holistic approach to storm water management incorporating everything from eco roofs to green street applications and surface swales in the Willamette River Greenway, he adds.



How many people can be squeezed into a 96-inch outfall pipe?

AWARDS

BEST TRANSPORTATION PROJECT IN OREGON



Otak's I-84 Corridor Strategy project was selected as the Best Transportation Project in Oregon by Northwest Construction magazine for its Best of 2006 competition. Winners are featured

in the December issue of Northwest Construction and will be presented with an award during the annual event in December. Best of 2006 Awards celebrate and honor the teams that created the best projects of 2006 as selected by a jury of local prominent industry professionals. Categories cover a variety of building and highway/heavy construction categories.

WHAT MAKES IT GREEN?

RECYCLED PAPER PRODUCTS

As your company considers stocking the shelves with paper products, here are a few considerations. Seventh Generation, one of the largest producers of recycled paper and non-toxic household products, estimates that if every U.S. household switched to recycled paper we'd save a lot of trees:

- One million trees would be saved if every U.S. household replaced just one 250-count package of virgin fiber napkins with 100 percent recycled ones.
- 544,000 trees would be saved by replacing a 70-sheet roll of virgin fiber paper towels.
- 424,000 trees would be spared by replacing a 500-sheet roll of virgin fiber toilet paper.
- 170,000 trees would be saved by replacing one 175-count box of virgin fiber facial tissue.
- Plus, with recycled paper, every pound saves approximately four pounds of carbon dioxide because recycled paper requires less energy to manufacture.

Seventh Generation estimates that in ten years, they've saved 327,800 trees!

NEWS

MARK YOUR CALENDARS!



The 2007 Built Green Conference & Expo will be held at the Everett Events Center March 13, 2007. This annual green home building conference for

industry professionals will feature a keynote speech from Hunter Lovins, a plenary speech from Joseph Lstiburek, a green products and services tradeshow, and numerous educational workshops on green building design, marketing, and real estate, among others. More than 500 people attended last year's conference. Click here for further information.

PEOPLE

Otak's newest LEED Accredited Professionals are Lindsay Mitchell, an engineer in development services, in our Lake Oswego, OR, office, and Ayako Nakagawa, a landscape architect and civil designer in our Kirkland, WA, office.

Lindsay Mitchell graduated from Oregon State University ("GO BEAVS!!," she



says) with a degree in civil engineering and began working for Otak in the development services group right out of college a little over two years ago. She recently bought a condo about three miles from work to cut down on her commute and she's looking forward to ski season!



Ayako Nakagawa has worked at Otak almost for four years as a landscape architect and civil designer. As a member of the water and natural resources group, she is very interested in stream/wetland restoration design, as well as sustainable urban design.

FROM THE EDITOR

HAPPY (GREEN) HOLIDAYS!!

Whatever your inclinations for celebrating, there are many organizations that offer ideas for greening parties, events, gift exchange, and general holiday camaraderie.

Volunteering? Responsible Travel offers an extensive choice of volunteer travel and holiday opportunities to work abroad, from specialist volunteering companies. Otak's Greg Laird and his family take a group of volunteers over the Thanksgiving holiday to build houses for families in need in Mexico, for example. They work through YWAM (Youth with a Mission) and their Homes of Hope program to build homes that are 16-foot-wide and 20-foot-long. Split into two rooms, and built with local wood on a cement slab, they include a door, three windows, and a handful of electrical outlets, with no indoor plumbing. "In most places where we've built these homes, they are the best house on the block," says Laird. "They are miracles in the lives of these families." This year, Greg's group of 72 built four homes over a three-day period.



Volunteers begin to place trusses for the roof on the new red home, situated next to the family's existing home (at left) in Mexico

READING

BUILT GREEN HOME AT SUNCADIA IN THE NEWS

The November issue of *EcoStructure* magazine features an article about the Built Green Home at Suncadia, of which Otak was a sponsor.



Environmental Design + Construction features an article on the Built Green Home at

Suncadia in its Sustainable Home special section. The most recent issue of *Environmental Design + Construction* features a four-page article, authored by Patti Southard, in its special section called Sustainable Home.



Saving resources? There's a whole website devoted to waste-free holidays in the Puget Sound area. King, Thurston, and Kitsap Counties, and the cities of Tacoma and Seattle have come together to offer special deals for holiday gifts. Participating businesses and organizations offer discounted tickets and gift certificates if purchased between November 15 and December 31, 2006 to encourage the public to reduce waste. Businesses include restaurants, sporting events, museums, theatres, lodging, and

health and fitness.

Recycling? The US Environmental Protection Agency suggests on its EcoCool website buying cards from recycled paper or using post cards that don't require envelopes to save paper, along with many more ideas on reducing waste during the holidays. Or visit Earth 911 for ideas on holiday recycling.

Traveling? Check out EcoTour that lists a directory of 59 companies offering eco-tours or eco-lodging that is eco-friendly. Or dine on organic food at hotels all around the world; Organic Holidays provides a list of international lodging, mainly small hotels and guest houses.



Shopping? You can buy nature gifts such as a national parks pass or purchase custom postage stamps to support parks in King County, WA. Shop online to save gasoline or buy locally produced products to support your local economy and save long-distance transportation costs. Purchase organically grown wines and other foods to save on pollution or buy jewelry made from 100 percent recycled gold. You can even purchase green tags as gifts from your energy provider.

Whatever you do and however you celebrate during the holidays, your friends and colleagues at Otak wish you the very best!

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Parting Shot by Dyanne Sheldon — Whidbey Island, Washington

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