



# SEATTLE SECTION NEWSLETTER

November 2007  
Volume 43 No. 3

## Section Officers

October 1, 2007 – September 30, 2008

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### WEBMASTER

Jarl Priest seattleasce@yahoo.com

## ASCE Seattle Section Meeting

Wednesday, November 14, 2007

**Place:** McCormick & Schmick's Harborside Restaurant  
1200 Westlake Avenue North  
Seattle, Washington 98109

**Cost:** \$20 per person (\$22 for late reservations)  
Students \$10  
Spouses and guests are welcome.  
Cash or checks payable to ASCE are accepted.

**Meal:** Turkey, Gravy, Stuffing & Mashed Potatoes  
- OR - Cheese Tortellini. Dessert: Key Lime Pie

5:30 Socialize  
6:15 Dinner  
7:15 Program: Large Woody Debris for Shore Protection-  
Engineering Aspects  
8:40 End

Please make your reservations by  
**NOON Monday, November 12, by calling 206-926-0482**  
(voice mail system only — please leave a message)  
or by sending an email to:  
seattleascereservations@gmail.com

## Large Woody Debris for Shore Protection-Engineering Aspects

Dr. Vladimir Shepsis, Ph.D., P.E. will be speaking on the topic of "Large Woody Debris for Shore Protection-Engineering Aspects." Large Woody Debris (LWD) is commonly installed at the water's edge for the purpose of habitat enhancement.

Increasingly, pressure is being applied by resource agencies for engineers to use LWD as erosion control structures, or at least incorporate LWD in erosion control structures. Project criteria for bank protection differ from criteria for environmental enhancement and the risks are vastly different for the two project types. Therefore, it is worthwhile to examine the success rate of LWD projects from an engineering standpoint.

Dr. Shepsis will present information collected by Coast & Harbor Engineering on this issue and propose recommendations regarding use of LWD to achieve an engineering objective.

The deadline for the  
December 2007 issue is  
5:00 p.m.  
FRIDAY, November 16, 2007  
No exceptions.

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Reston, VA 20191-4400 **AND** to the  
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**AMERICAN SOCIETY OF  
CIVIL ENGINEERS, SEATTLE SECTION**  
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## President's Column

By Jack Bjork, PE



We are all aware of the significant transportation package that will be put before voters in early November. The Board endorsed the proposal and wanted input from the members. During our October monthly meeting, the attending members voted to endorse Proposition 1. The following week, we created a statement to the press announcing the vote and the reasons why we support the proposition.

Despite the wishful thinking of many, there are no low-cost solutions for the transportation problems in the Puget Sound area. With the area growth, how bad will congestion become? How much higher will costs be next time we pull together a comprehensive package? The proposition initiates a program for a long-term solution that needs to be started now. As engineers, I think we recognize that the transportation and infrastructure systems within King, Snohomish, and Pierce Counties are in immediate need of improvement and repair.

I believe that the Roads & Transit Proposition will lessen the risks threatening our community from deteriorating infrastructure, improve the region's ability to address its immediate and long-term transportation problems, and promote our regional economic vitality. Is this the perfect package? No, it isn't. But it is a good package, and this is truly a case where the perfect is the enemy of the good. Unfortunately, our elected officials struggle to provide leadership on this issue, most noticeably with Ron Sims' rejection of the package he worked years to create. How does this happen?

Do we as engineers have a vested interest in this package? Yes, because as the engineering community, it will provide a lot of work for us. However, we are voting "yes" because it is the right thing to do. In fact, the Governor has already expressed concern about the ability of the engineering community to complete the needed work.

I ask that you consider supporting it independently and writing articles for local publications. Thanks to Charles Gibbs who wrote a Letter to the Editor that was recently published in the Seattle PI. Thank you to Charles and others for expressing their opinion. Let the public hear the voice of civil engineers. After all, who knows more about this than we do?

*Sincerely, Jack Bjork, P.E.*

Section President

## Bio for November 14th Speaker

**Dr. Vladimir Shepsis, Ph.D., P.E.** is a senior coastal engineer with 34 years of experience specializing in shore protection, habitat restoration and enhancement, ports, harbors, and navigation channels. He is the Principal at Coast & Harbor Engineering, Inc. in Edmonds, WA, where he performs feasibility studies, numerical analyses, designs, and post-construction monitoring of these engineering features.

Dr. Shepsis is the Manager of the US Civilian Research and Development Foundation Grant (UM2-5013-KV-03) entitled "Software System to Simulate Erosion and Sediment Transport under Joint Effects of Waves and Currents." He is also a Manager for the United State European Union Grant for wave physical modeling. Dr. Shepsis was a principal Designer for the Mukilteo Beach project that was awarded the 2007 AAPA Award for Environmental Improvement Projects.

## Engineers Less Depressed?

by Jack Bjork, P.E.

I saw an interesting article in the October 14th Seattle Times entitled "Caregivers: Color them bluest," by Kevin Freking (<http://archives.seattletimes.nwsource.com/cgi-bin/texis.cgi/web/vortex/display?slug=depressing14&date=20071014&query=depression+occupations>)

It showed that of the 14 occupational groups, "engineers, architects and surveyors" have the lowest incidence of depression. I like being an engineer and it looks like most of you also like being engineers. Either that or we're silent sufferers. Here are the results:

### How occupations stacked up

The percentage of full-time workers ages 18 to 64 reporting depression lasting two weeks or longer, by categories of occupation, as provided by the National Survey on Drug Use and Health using 2004 through 2006 data:

| <u>Occupation</u>                             | <u>Percent</u> |
|-----------------------------------------------|----------------|
| Personal care and service                     | 10.8           |
| Food preparation and serving-related          | 10.3           |
| Community and social services                 | 9.6            |
| Health-care practitioners and technical       | 9.6            |
| Arts, design, entertainment, sports and media | 9.1            |
| Education, training and library               | 8.7            |
| Office and administrative support             | 8.1            |
| Building/grounds cleaning and maintenance     | 7.3            |
| Financial                                     | 6.7            |
| Sales and related                             | 6.7            |
| Legal                                         | 6.4            |
| Transportation and material moving            | 6.4            |
| Mathematical and computer scientists          | 6.2            |
| Production                                    | 5.9            |
| Management                                    | 5.8            |
| Farming, fishing and forestry                 | 5.6            |
| Protective service                            | 5.5            |
| Construction and extraction                   | 4.8            |
| Installation, maintenance and repair          | 4.4            |
| Life, physical and social science             | 4.4            |
| Engineering, architecture and surveyors       | 4.3            |

Source: *Substance Abuse and Mental Health Services Administration*

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## Local Firm Wins Region 8 2007 Outstanding Project Award

Congratulations to SvR Design Company from the Seattle Section for winning the first Region 8 Outstanding Project Award! The award was for their work on the High Point Redevelopment and Storm Drainage Project. This project was one of the Section's outstanding winners last June.

See the Section June 2007 newsletter for project description. If you get a chance, give Kathryn Gwilym, PE, LEED® AP and Peg Staeheli a pat on the back from all of us. Thanks for submitting and great effort. Watch for the announcement of the Section's 2007 Outstanding Project Award competition in December's newsletter.

### Time to Update Your Member Information!



Review of our member information shows that some important data is out of date for many of you. We need up-to-date information to keep in touch. E-mail addresses in particular seem to change frequently. If you haven't updated your information in a year or two we ask that you go to [www.ASCE.org](http://www.ASCE.org), click on "Members Only" and "Update Your Member Info." This is the national database and it is downloaded to the Seattle Section every month. Be assured that we are extremely careful with this information and use it only for ASCE-related activities and will never give the list to any person or group.

## Symposium on Aerospace Research in the Pacific Northwest

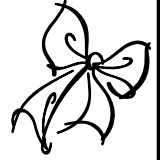
November 3 & 4 at the Univ. of Washington

The American Institute of Aeronautics and Astronautics is hosting a two-day technical symposium at the University of Washington on November 3 and 4 that will discuss Aerospace Research in the Pacific Northwest. The symposium will include discussions on Product Development, Design and Optimization, Analysis, etc.

The goal of the symposium is to facilitate a free exchange of information and knowledge of what is occurring in the aerospace industry here in the Pacific Northwest. Joe Sutter will be Sunday's keynote speaker. Boeing is a sponsor of the event. Information on the event is available at <http://www.pnwaiaa.org/>.



## In Memoriam Josiah "Joe" E. Colcord, Jr. (1922-2007)



Josiah "Joe" Colcord passed away at his home Sunday evening October 21, 2007.

Since 1949, Joe was a professor of Civil Engineering at the University of Washington. Teaching students was something he always really enjoyed. So much so that, after he retired, he still taught a course for the university gratis, entitled "The Heritage of Civil Engineering."

An active member of the American Society of Civil Engineers, Joe was instrumental in getting official recognition for local and nationwide civil engineering sites. In addition to avidly pursuing travel and photography, Joe also had a life-long interest in birding. This led Joe, in retirement, to undertake creating a regional birding guide. He enjoyed outings with a birding group through the University of Washington Retirees Association and coined the name for the group, "The Ancient Murrelets."

The friendships Joe made during WWII were renewed annually as a member of the 75th Infantry Division Veterans Association. Even when talking about the War, Joe would put a positive spin on his comments; concentrating on finding humor even in such dire situations as the trenches of WWII.

Joe repeatedly saw action on the European Front, including The Battle of the Bulge. Wounded in action, Joe received the Purple Heart in addition to the Bronze Star and the Silver Star. And for gallantry in action, saving two wounded scouts and eliminating two enemy machine gun crews, Joe was awarded the Military Cross by Great Britain.

Another retirement project Joe undertook was writing a memoir of his war experiences titled: "MOS 1542: Some Reminiscences Of An Infantry Platoon Leader In World War II."

The State of Maine and the University of Maine have always held a special place in Joe's heart. After returning from WWII, he finished up his BS in Civil Engineering at the University of Maine and went on to receive a MS in Civil Engineering at the University of Minnesota.

In 1949, Joe and his loving wife, Hazel, and their newborn daughter, Kathy, headed west where Joe accepted an assistant professorship at the UW.

Joe and Hazel would have celebrated their 60th wedding anniversary in December. Joe was 85 years of age at his passing.

Joe is survived by his wife, Hazel Colcord of Seattle, and his daughter Kathy Colcord-Moen and son-in-law George Moen, both of Bainbridge Island, Washington.

In lieu of a memorial, remembrances can be sent to:

The Nature Conservancy of Washington, 1917 First Avenue, Seattle Washington 98101.

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## Water Resources and Environmental Committee

### September Brown Bag Seminar:

#### **The Bellevue Natural Drainage Practices Manual - A New Tool for Implementing Low-Impact Development**

At the September 20th meeting, Mr. Dustin Atchison, PE, a Project Engineer with CH2M Hill spoke on the development and use of the new Natural Drainage Practices (NDP) Manual. Mr. Atchison was a principal author of the City of Bellevue's NDP Manual, along with Mr. Rick Watson, PE, a stormwater engineer for the City of Bellevue. Dustin is preparing to present this topic in November at the AWRA 2007 Annual Conference in Albuquerque, NM. There were 25 attendees, including a Councilmember from the City of Lake Forest Park. We can expect to see a proliferation of Natural Drainage Practices ordinances in the near future; the WRE members will be equipped to lead the industry.

Dustin began his presentation by noting that in the Puget Sound region of Washington State, stormwater management has evolved to include best management practices (BMPs) for basic and enhanced water quality treatment as well as large detention facilities. Low-impact development (LID) is gaining greater popularity and interest as a tool for effective stormwater treatment and reduced detention requirements. NPDES Phase II requirements encourage the use of LID, but also require that municipalities allow for their use. Dustin explained that guidelines for implementing LID techniques and quantifying their benefits are sparse.

The City of Bellevue, Washington has developed a manual for implementing natural drainage practices (NDPs), which are the specific drainage practices that can be used as a part of a comprehensive LID design. The presentation summarized the Bellevue NDP Manual and the benefits of LID in the Puget Sound region. The manual was developed to provide simple and accurate tools for selecting and sizing NDPs, standard and repeatable methods for evaluating proposed LID projects, and methods to accumulate credit toward meeting stormwater management requirements.

The current edition is a template for future manual development. It includes methods for selecting and sizing five NDPs: rain gardens, permeable pavements, vegetated roofs, rain recycling (rainfall harvesting), and amended soils. The manual presents a three-step process for implementing NDPs: selection of the NDP, sizing of the NDP, and determination of flow control credits. Dustin worked through an example design.

The first step provides guidelines for evaluating site infiltration capabilities and a selection matrix for choosing appropriate NDPs for the given site conditions. The next step provides a simplified approach to sizing NDPs to determine the required size to meet a given stormwater management goal (e.g., water quality treatment, partial or full flow control). He demonstrated the use of a design nomograph developed using continuous hydrologic modeling to size a variety of NDPs. The manual provides a method for crediting the application of NDPs on-site to meet the overall stormwater management goals for a site. The City of Bellevue has estimated that application of NDPs can meet water quality requirements and can significantly reduce the size of downstream facilities for meeting flow control requirements, typically by 30 to 50 percent.

We would like to thank our host, HDR, Inc. for their continued support of the WRE committee with meeting space and light snacks. We would also like to remind you of the WRE webpage, which can be reached through the Sections' website.

### **2007 RICHARD WILLIAMSON JONES SCHOLARSHIP**

Attention Civil Engineering Students: Applications are being received for the **Richard Williamson Jones Memorial Scholarship**. The maximum \$2,000 award is given out annual to a student who has attained at least a Junior standing in civil engineering. Candidates must be US citizens and a permanent resident within the jurisdiction of the Seattle Section of ASCE. Applications must be submitted by November 20<sup>th</sup>, 2007 for consideration.

For further information and application forms contact Cliff Williams, PE, Immediate Past President; the SU and UW ASCE Section Presidents; or the ASCE Faculty Advisors. Good Luck!

### **ASCE Seattle Section Executive Board Meeting Minutes For October 10, 2007**

The minutes from the October meeting will be published in the December newsletter.

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## Geotechnical Group Update

by Jeffrey A. Fowler, P.E.

In early September, the Geotechnical Group reached its goal of donating \$100,000 to the creation of the Dr. Robert D. Holtz Fellowship at the University of Washington. We pledged to accomplish this at last year's Spring Seminar by September and thanks to several of our member's efforts, we did. The group donated \$50,000 and challenged our membership to donate an additional \$50,000. By reaching the \$100K level, the fellowship will receive an additional \$25,000 from the state.

To kick off the year, the Geotechnical Group hosted a joint meeting with the Association of Environmental and Engineering Geologists (AEG) on September 20th on the *Mitigation of Surface Fault Rupture Hazards* featuring Dr. Jonathan Bray of the University of California at Berkeley. The meeting was well attended and we received very positive feedback.

On October 9th, Sarah West, our Public Relations Chair, participated in a mentor night at Seattle University hosted by the Puget Sound Engineering Council (PSEC). Sarah was there to meet and answer questions undergraduate students had about Geotechnical Engineering. Sarah also attended a BBQ hosted by the University of Washington ASCE Student Chapter on October 18th to again meet with students and answer questions they may have concerning Geotechnical Engineering. We are dedicated to educating future civil engineers about the world of Geotechnical Engineering and we will continue to support future events like these.

Sean Caraway, our group's Education Chair, arranged our dinner meeting on October 25th concerning the Bremerton Dry Dock - Compaction Grouting of Loose Soil Beneath the West Coast's Largest Dry Dock featuring Monique Nykamp, the project manager with Shannon & Wilson. Sean's Education Committee is also planning field trips and short courses to offer our members throughout the coming year.

Eric Heller, our group's President-Elect, is currently putting together his planning committee for our annual Spring Seminar that will be held April 5, 2008 on the University of Washington Campus.

Our group will have a booth at the upcoming City of Seattle's Landslide Workshops on November 3rd and December 1st. These workshops provide the citizens of Seattle the opportunity to come and listen to experts in the field and discuss how everyone can help to prevent landslides. It also gives citizens a chance to talk with these experts and have their questions answered.

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## Invitation to Join the Section Board

The Section will commence a search for new Board Members starting in the new year. A commitment to be a nominee frequently entails obtaining employer concurrence. Further, the Nominating Committee does not have a good index of all candidates that may have an interest in serving and are willing to devote time necessary to do service to our section.

The Committee welcomes members indicating their interest either orally, by email or by letter. Please contact either President, Immediate Past President, or any of the members of your Board of Directors (see the contact information on the front page of this newsletter).

The Nominating Committee for your section includes the Immediate Past President, the outgoing Director, the Younger Member Forum Representative, and two subscribing members selected by the President.

Thank for your support in enhancing Section membership services and community outreach.

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## Openings for Three Region 8 Governor Positions

by Cliff Williams, PE — Immediate Past President

Three governor positions will become available in 2008. The Region 8 Board will review applications for these openings at their spring assembly in Las Vegas. Voting for the positions will take place with the summer 2008 ASCE national elections. The new Governors will take office following the Fall Assembly. **The Seattle Section, which is one of the two largest sections in the Region, has yet to provide a candidate.**

Working at the Regional level is an excellent opportunity to enhance your resume, improve your leadership skills and meet with fellow engineers in exotic places such as Las Vegas, Hawaii and Alaska. The Region is still in its early stages of development, which gives you the opportunity to share your ideas and leadership skills with other leaders in sections, branches and student chapters.

The Seattle Section should be putting forward candidates as I believe the Region can benefit from our successes. If you have held leadership positions within the Section, Branches, committees or technical groups please consider stepping forward and moving on to the next level. For further information, please contact Cliff Williams, PE, Immediate Past President or any of the Section Board members.

Thank You.

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# Engineers Without Borders

by Sarah E. Mann



Ever thought about applying your sustainable engineering skills to enhance communities and improve health in developing countries? Engineers Without Borders' (EWB's)

new partnership with ASCE will provide you that opportunity. EWB, founded in 2000, has completed over 200 humanitarian projects in developing countries around the world.

Engineers Without Borders-USA (EWB-USA) currently has 235 professional and student chapters working on EWB projects. EWB-USA recently partnered with ASCE at a national level for project and financial support; it also has a partnership agreement with Mercy Corps to provide engineering assistance as needed with Mercy Corps' ongoing projects. EWB-USA has also recently partnered with Dr. Ashok Gadgil, of the University of California at Berkeley, to set up a facility in Sudan to manufacture and distribute an efficient, low-cost stove to refugees (Newsweek®, July 16, 2007).

The EWB - Puget Sound Professional Partners (PSPP) Chapter, now in its third year, provides opportunities for professional engineers and non-engineer professionals to get involved with projects and the organization. It also provides mentorship and support to the EWB Student Chapters at University of Washington, Seattle University and Washington State University. Current projects include:

## **Susudel, Ecuador Irrigation Project** – EWB-PSPP Chapter

EWB – PSPP and University of Washington student Chapter (EWB-UW) have been collaboratively working on this project. In Spring 2006, both EWB-PSPP and EWB-UW members performed a site visit and assessment for the potential Susudel irrigation. The project team has performed hydrologic modeling, crop modeling, preliminary conveyance design, and demand forecasting to evaluate whether drip irrigation alone could meet the water demands for future fruit crop needs or if new water resources would need to be developed. The project team is currently finishing a feasibility study highlighting recommended and potential irrigation options for Susudel. A follow-up trip will be conducted to deliver the results of the site assessment/feasibility analysis and plan for future projects by the community .

## **Liban Zone, Ethiopia Water Project** – EWB-PSPP Chapter

Global Poverty Action (GPA), a Seattle-based NGO, is implementing an initiative to alleviate poverty and disease in the pastoralist communities of the Liban Zone in southern Ethiopia. Accessibility to clean water is a limiting factor to community development. EWB-PSPP is teaming with GPA to evaluate and design water supply and treatment projects. In Winter 2007, EWB-PSPP sent chapter members to perform a site assessment of the Dhibu Qordobo and Qobo sites, meet with regional and community leaders, and perform a community health assessment. The assessment included an evaluation of the dams, reservoirs, and water handling practices in the community, health and sanitation issues, livestock management, available materials and equipment.

## **Yanayo, Bolivia Irrigation Project** – EWB-UW Student Chapter

The University of Washington (UW) Student Chapter has been working with the Peace Corps and NGO Water for People on this project to develop additional water resources for the Village of Yanayo. With additional water resources, the village will be able to increase their food production capacity, provide more work opportunities to help keep community members in the community and broaden their diet for better nutrition. The project team has made several visits to the community and is looking at alternatives for developing water resources.

## **Mae Nam Khun, Thailand Drinking Water System Project** – EWB-SU Student Chapter

The Seattle University (SU) Student Chapter is working with the Society of Environmental Engineers and Scientists (SEES), an SU student chapter of the Water Environment Federation, to construct a prototype drinking water treatment system for a children's dormitory in Mae Nam Khun. The project team had initially helped design the dormitory and septic system; the need for a water treatment system become evident during the course of their project. This year, the team will be making modifications to the system, including adding solar power and hand pumping, enabling the system to be a stand-alone unit capable of treating surface water in areas without pressurized water systems or power.

EWB – PSPP Chapter invites you to become involved. Please feel free to join us at one of our upcoming monthly chapter meetings and learn more about who we are and what we do. [The November Chapter Meeting is scheduled for 11/7 at the Pyramid Brewery.](#) For more information, including meeting dates and places, descriptions and updates of our latest projects, visit us at our website, [www.ewb-pugetsound.org](http://www.ewb-pugetsound.org).

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## Employment Notices

To post an employment notice in the newsletter and on the section's web site, please contact the editor in advance of the monthly deadline. Rates for advertising are shown on page 2.

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**R. W. Beck, Inc.  
CAD Technician  
Seattle, WA 98154**

R. W. Beck, Inc. is a premier international business consulting firm that provides planning, financial and engineering solutions to our clients in the Energy, Solid Waste, Water and Water Resources industries. We do this by combining our business acumen with our technical expertise to help our clients confront the impacts of aging infrastructures and solve economic and technical challenges.

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**Description:**

The CAD Technician will work closely with engineers, project managers, and other CAD personnel within the Seattle Solid Waste Practice to develop CAD drawings for solid waste transfer facilities, landfills, and other civil projects. Opportunity exists for rapid advancement to CAD Lead Drafter and/or Designer status for motivated applicants.

**Experience Required:**

- Proficiency with AutoCAD 2004 or more recent release required
- 3-5 years relevant experience preferred
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- Experience with Land Desktop (LDD), Civil 3D, Microstation, and/or GIS preferred
- Must be highly motivated, a self-starter, a team player, and a quick learner

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<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=3809754&JBID=1436>

Employer JobCode: 07-0177



**HDR, Inc.  
Rail Engineer  
Bellevue, WA 98015**

HDR is an employee-owned architectural, engineering, planning and consulting firm that excels at helping clients manage complex projects and make sound decisions.

**Description:**

HDR is nationally ranked amongst the Top 10 Mass Transit and Rail Design Firms. Our Bellevue, WA office is looking for a Rail Engineer to join our team of engineering professionals. The primary duties of the Rail Engineer are to serve in a technical role, under the direction of a Project Manager. Overseeing the work of EITs and junior project engineers, the duties of this position include preparing detailed engineering designs for rail projects. Project involvement will range from site feasibility analysis to final design and through the construction phase. Experience should include geometric alignment, track layout general civil and transportation design.

**Experience Required:**

- BS in Civil Engineering.
- 2+ years experience in transportation design - railroad projects preferred.
- PE preferred.
- Demonstrated hands-on experience using AutoCAD, Microstation, Inroads and Inrail.
- Must be able to work both independently and in a team setting.
- MS Office software experience.
- Excellent oral and written communication and project management skills.

**Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=3883827&JBID=1436>

Employer JobCode: 071909



Gravitec Systems, Inc. is an industry leader in the expanding field of fall protection. We are seeking a qualified structural or civil engineer to join our team of dedicated professionals.

Duties will include, but not be limited to:

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- project management.

At Gravitec you will find:

- an opportunity to work on challenging and rewarding assignments;
- a chance to grow professionally in a strong stable business that is well-positioned to respond to market trends;
- a work environment encouraging an entrepreneurial spirit and a can-do attitude among employees that is built on mutual respect, honesty, and camaraderie, and;
- a compensation package that includes a comprehensive medical/dental/vision program, a 401(k) savings opportunity, and paid time off.

To learn more about our company, please visit our website at: [www.gravitec.com](http://www.gravitec.com).

Applicants should be aware that we are based on Bainbridge Island, and serve a wide range of industry and government agencies throughout North America. Some travel will be required.

To apply, send resume and cover letter to [peach@gravitec.com](mailto:peach@gravitec.com) or fax to 206.780.2893.



**R. W. Beck, Inc.**  
**Civil Engineer**  
**Seattle, WA 98154**

R. W. Beck, Inc. is a premier international business consulting firm that provides planning, financial and engineering solutions to our clients in the Energy, Solid Waste, Water and Water Resources industries.

**Description:**

The Civil Engineer will work with a team of engineers on a wide range of projects for utility clients including solid waste, water, stormwater, wastewater, gas and electric. He/she will prepare construction drawings, documents, specifications, reports and cost estimates. Additionally, he/she will provide project design support, depending on practice assignment, for:

- Site development for solid waste facilities such as transfer stations, landfills, material recovery facilities
- Site development for utility system projects such as surface water management and water supply facilities
- Foundations, retaining walls and other structures

**Experience Required:**

- B.S. degree in Civil Engineering
- 0-3 years experience related to solid waste, water resources, or water/wastewater engineering required
- Engineer-in-Training Certificate or ability to obtain one within one year, depending on position
- Moderate level of computer competency in software programs including AutoCAD, LDD, Civil 3D, hydraulic/hydrologic analysis programs, RISA 3D, etc.
- Strong analytical skills
- Effective communications skills
- Team player

**Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=2077892&JBID=1436>

Employer JobCode: 07-0082



ASM International Puget Sound Chapter  
Short Course

**CORROSION OF METALS**

This course is designed for those who must deal directly or indirectly with the surface treatment of metals: **materials procurement specialists, machine shop personnel, heat treaters, design engineers, manufacturing engineers, manufacturing managers, technicians, quality control inspectors, and marketing personnel.** It will benefit those who are new to the subject as well as those who need to update their knowledge.

**When:** 9:00 a.m. – 4:00 p.m., Saturday, November 17<sup>th</sup>, 2007

**Where:** Fatigue Technology, Inc. - 401 Andover Park East, Tukwila, WA  
(On the road to COSTCO near Southcenter Mall)

**Course Fee:** \$125 for ASMI members, and sustaining member company employees;  
(Includes lunch)  
Full-time students \$15; All others \$150  
On-site Registration: \$150 for ASMI members and sustaining member company employees; Full-time students \$25, All others \$175

**Course Overview:**

**Corrosion of Metals**

- **Corrosion Introduction** Definitions, Corrosion cost to industries, Electrical double layer, and why corrosion occurs?
- **Basic Concepts in Corrosion** Active, immune, and passive corrosion behavior, Corrosion rates, How metallurgy and environment affect corrosion potential and rates.
- **Forms of Corrosion** Ways to identify them, causes, prevention methods, with emphasis on galvanic and crevice corrosion
- **Corrosion Control Methods** Design, material selection, environment control, inhibitor application.

**Instructor:** Dr. Alain Adjorlolo

For further information and course registration please contact: [gabrielle.m.green@boeing.com](mailto:gabrielle.m.green@boeing.com)



**HDR, Inc.**  
**Deputy Program Engineering Manager**  
**Bellevue, WA 98015**

HDR is an employee-owned architectural, engineering, planning and consulting firm that excels at helping clients manage complex projects and make sound decisions.

**Description:**

Deputy Program Engineering Manager needed to support fast pace, high-profile project office located in downtown Seattle. This position is critical to the smooth operation of 100+ person "Blended" co-located team. This position requires the utmost in professionalism, outstanding communication skills, and the ability to work well with others.

*The primary duties of the Deputy includes:*

Planning, directing and monitoring all aspects of large multi-discipline projects, typically in excess of \$1 billion and involving a large project staff from multiple firms

Experience on a wide-range of large, politically sensitive, public projects

Ability to work diplomatically through long decision processes with staff from all levels of the organization and a variety of constituents from the public

Establishes client relations and is involved with design, management, and policy meetings

**Required: Maintains**

- PE registration in WA
- BS in engineering discipline

15+ years project management experience including experience leading or managing pieces or an entire transportation program and varied delivery methods

**Full Job Description & Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=3618229&JBID=1436>

Employer JobCode: 071653

## Calendar of Upcoming Events:

**November 27th, 12:00pm - 1:00pm**

### Urban Development and Transportation Committee Meeting

Location: HNTB - Bellevue

Speaker/Topic: Alex Pietsch, Renton's Economic Development Administrator - The Landing

Contact/**RSVP**: Attila Laszlo, (206) 440-4961 or [Attila.laszlo@dmjmharris.com](mailto:Attila.laszlo@dmjmharris.com)

**December 12th, 6pm - 9pm**

### North Branch Meeting

Location: TBD

Speaker/Topic: Karen Dix-Colony - Boeing runway design protocols

Contact: Inga Drechsel, (360) 676-6985 ext. 215 or [mid@deainc.com](mailto:mid@deainc.com)



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## TIME VALUE

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AMERICAN SOCIETY  
OF CIVIL ENGINEERS

SEATTLE SECTION

