



SEATTLE SECTION NEWSLETTER

February 2007
Volume 42 No. 6

Section Officers

October 1, 2006—September 30, 2007

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Tarelle Osborn, *YMF Representative* 425-451-4009

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Rob Parrish, *UW Liaison* 206-223-0326
Nimmy Gnanapragasam, *Seattle U Liaison* 206-296-5522

UW/SEATTLE U CONTACTS

Adam Parast, *UW President*
adambp@u.washington.edu
Monica Joyce, *Seattle U President*
joycem@seattleu.edu

KITSAP BRANCH OFFICERS

Roger Mustain, *President* 360-697-3713
David Dinkuhn, *Vice President* 360-850-5319
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Steven Goodrich, *Secretary/Treasurer* 360-826-4628
Rhett Winter, *YMF Chairperson* 360-647-7151
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WEBMASTER

Jarl Priest seattleasce@yahoo.com

ASCE Seattle Section Meeting

Thursday, February 15, 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: Cashew Crusted Tilapia with Jamaican Butter Rum Sauce or
Vegetarian Grilled Portobello w/ Grilled Blue Cheese Polenta.
Dessert: Crème Brûlée

5:30 Socialize

6:15 Dinner

7:00 Business Meeting

7:15 Break

7:30 Program: How Much Longer 2-D Paper Drawings?

Also, Life Award plaques will be presented to new Life Mem-
bers and the 2006 Jones Award Scholarship will be presented
to Mr. David Sommer, a Senior at Seattle University.

8:30 End

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

How Much Longer 2-D Paper Drawings?

Mr. Steve Murphy of The Boeing Company; and Mr. Cristiano Ceccato of Gehry Technologies, Inc. will be presenting February's program on the future of 2-D paper drawings. Paperless construction in the aerospace, automotive and manufacturing industries is a practical reality; witness the Boeing Company. However, in the building industry, 2-D CAD and paper based delivery processes remain at the heart of our business. But we all know we too will change.

Boeing is using the CATIA Dassault Systemes V5 Product Lifecycle Management (3D PLM) system, and their supplemental Boeing developed applications, to design and build the 787 program. Boeing is designing the 787 around the world. They are taking CAD capability to new levels by completely designing and building the airplane in the computer first. This involves using a complete flow of all digital data around the world to all the affected participants. The 787 has set numerous sales records and continues to be groundbreaking as we move forward to the rollout of the first airplane. The program is on track for the first flight next summer.

Come to this program and learn about Gehry Technologies' Digital Project process that is based on the same CATIA V5. We would like to conclude the evening's presentations by asking attendees to this program to share their ideas regarding what impedes paperless building construction and your estimates of how long before 2-D is no longer mainstream. It should be an unusual and interesting evening.

The deadline for the
March 2007 issue is
5:00 p.m.

FRIDAY, February 16, 2007
No exceptions.

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Your newsletter editor is:

**Kristin Quick**  
seattleASCEnews@gmail.com

Please send correspondence to:

Attn: ASCE Newsletter Editor  
3728 Beach Drive SW, #4  
Seattle, WA 98116  
Phone: 206-310-4847  
Fax: 206-842-9259

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## President's Column

By Roger Mustain, ASCE President - Kitsap Branch

Over the years, I have met articulate, even eloquent, civil engineers. Unfortunately, many of us do not communicate as well as we should, particularly with non-technical audiences. This has consequences ranging from minor frustration to delays, cost overruns, and failure to gain public support for needed infrastructure projects.

I believe that civil engineers need to focus on communicating more effectively, both within the profession and with the public. In the Navy Civil Engineer Corps, as a City Engineer, and now in the private sector, I have found that being technically capable is not enough. We need to be able to communicate complex ideas clearly to a host of audiences; clients, investors, citizens, and elected officials to name a few, in a way they can understand.

Too often, engineering reports or presentations are poorly organized, saturated with technical jargon, and more confusing than informative. There are situations when only technically precise terminology will do, but often plain English will do as well or better.

There are many resources available to improve communications skills. I recommend Toastmasters International to anyone who wants to polish their public speaking. I highly recommend that every engineer buy and read *The Elements of Style*, by William Strunk, Jr. and E. B. White. It's one of the best \$10 investments I ever made - 85 pages of concise guidance on how to write clearly. It's a favorite of mine, but there are other good writing guides available as well.

See *President's Column* on page 3

## Bios for February 15th Speakers

**Mr. Steve Murphy** has been at The Boeing Company for 19 years. He began in Aerospace and then transferred to Commercial Airplanes for the 747-400. Since then he has worked on all Boeing airplanes including the 737-600/700/800, the 757-300, the 767-400 and the 777. For five years, Steve managed the Knowledge Based Engineering Group in Boeing. For the last five years he has been associated with the Sonic Cruiser/7E7/787 program. He has held multiple positions including Engineering Process Leader, V5 Implementation Manager and is currently the 787 Process Implementation Leader.

**Mr. Cristiano Ceccato** is currently Director of Research & Consulting for Gehry Technologies, where he is responsible for professional consulting services and technology transfer. Cristiano trained as an architect and computer scientist, and specializes in the development of design solutions for complex forms using parametric technologies and computer programming, supporting computational design tools and associated fabrication methods.

Cristiano conducts extensive project-based R&D at Gehry Partners, where he is responsible for the development and application of parametric design tools and integrated modeling principles, and associated digital construction methods, on a wide range of design projects at all stages of development. Additionally, Cristiano is involved in a wide range of external (non-Gehry) projects through Gehry Technologies, most recently on the Baha'i Temple with Hariri-Pontarini, the One Island East Tower in Hong Kong and the new 2008 Olympic Stadium in Beijing with Herzog & de Meuron and Arup. Cristiano has practiced architecture in Europe, Asia and the US. He has lectured widely on the subject of computational rule-based design systems and parametric form finding in digital building processes.

I also encourage senior engineers to help the younger members of the profession improve their writing and speaking skills. In the rush of things, it's often easier to correct a report yourself than discuss it with the author and explain why it needs to be edited and how it's improved by the process. But unless we explain how things should be written, we encourage continued poor writing. Likewise, unless we let junior people make a presentation occasionally, we can't expect them to become effective public speakers.

In deference to Strunk and White's Rule 17, "Omit Needless Words," I'll conclude briefly with *Telephone Engineer & Manager's* review of their manual:

"It's hard to imagine an engineer or manager who doesn't need to express himself in English prose as part of his job. It's also hard to imagine a writer who will not be improved by a liberal application of *The Elements of Style*."

I agree.

*Roger S. Mustain, PE*

President, Kitsap Branch

## 2006 Outstanding Projects Awards Program

It's time to start thinking about submitting your entries for the Section's 2006 Outstanding Project Awards Program. Applications and rules for the program are available on the Section's website ([www.seattleasce.org](http://www.seattleasce.org)) and the entries are **due on February 14, 2007**.

Depending on the number of entries, awards will be given in the following categories:

- Geotechnical
- Structures
- Ports & Waterways
- Transportation
- Site Development
- Water Resources
- Small Project

The small project category is for any project with a construction cost under \$1,500,000. Projects constructed in 2005 and projects that are almost complete are eligible. Project submittals are welcome from governments, clients and consultants. For more information please contact Paul Grant at [pgrant@pangeoinc.com](mailto:pgrant@pangeoinc.com) or 206-262-0370. Those interested in judging any of the categories are also encouraged to contact Paul.

## ASCE Seattle Section Program Schedule

### February

**Date:** February 15, 2006 (Thursday)

**Location:** McCormick & Schmick's Harborside, Seattle

**Topic:** How Much Longer 2-D Paper Drawings? By Steve Murphy, The Boeing Company; and Cristiano Ceccato, Gehry Technologies, Inc.

### March

**Date:** March 14, 2006 (Wednesday)

**Location:** McCormick & Schmick's Harborside, Seattle

**Topic:** Kitsap Branch Joint Meeting; Hood Canal Floating Bridge Replacement by WSDOT

### April

**Date:** April 11, 2006 (Wednesday)

**Location:** McCormick & Schmick's Harborside, Seattle

**Topic:** Water Resources Group Joint Meeting; The Affect of Global Climate Change on the Water Resources Infrastructure. By Dr. Richard Palmer, University of Washington Climate Laboratory

### May

**Date:** May 9, 2006 (Wednesday)

**Location:** McCormick & Schmick's Harborside, Seattle

**Topic:** Order of the Engineer Ceremony; Annual Student Presentations

### June

**Date:** June 13, 2006 (Wednesday)

**Location:** McCormick & Schmick's Harborside, Seattle

**Topic:** Outstanding Civil Engineering Project Awards

# ASCE Seattle Section Executive Board Meeting Minutes

## For January 10, 2007

### Attendance:

**Board Members:** Paul Grant, Cliff Williams, Garth Merrill, Eric O'Brien, Tarelle Osborn, Arthur Fleming, Jack Bjork, Jeanne Justice, and Tom Schnetzer

**Other Section Members:** None

**Visitors:** Jennifer Sandberg

**1. Call to Order:** Section President Cliff Williams called the meeting to order at 4:30 PM.

### 2. Regular Business

- The December 13, 2006, Executive Board Meeting minutes were approved.

### 3. New Business

- Inactive Section Committees – The following action items were identified for each of the inactive committees:
  - ◊ Continuing Education/Professional Practice – Cliff Williams will coordinate with the Legislative Committee to identify potential candidates for committee chairperson (s). This committee will possibly be combined with the Professional Practice Committee.
  - ◊ Diversity Program – The Diversity Program Committee will be temporarily combined with the Membership Committee.
  - ◊ Infrastructure and Transportation – Arthur Fleming and Garth Merrill will identify potential candidates for committee chairperson.
  - ◊ Urban Planning – Arthur Fleming and Garth Merrill will identify potential candidates for committee chairperson.
  - ◊ Lifeline Earthquake Engineering – Tom Schnetzer to review the Lifeline Earthquake Engineering committee and identify potential candidates for committee chairperson.
  - ◊ Board members involved in evaluations of inactive committees will report back to the Board at the March 14th meeting.
- A motion was passed to reduce the monthly dinner cost from \$30 to \$20 per person for members and from \$15 to \$10 per person for students starting in February 2007 to encourage an increase in meeting attendance.
- Membership Survey – Jack Bjork will simplify the categories in the membership committee and coordinate with the Section Webmaster for the electronic voting.
- Newsletter articles due by January 19, 2007.
- An ASCE Political Involvement Town Hall Meeting is scheduled for February 23, 2007 from 1:00 to 2:30 pm at the Bellevue Hyatt Regency Hotel in conjunction with WRYMC and the Section/Branch leadership workshop.
- The WRYMC Conference is scheduled for the weekend of February 25, 2007. The Seattle Section is currently looking for sponsorships from local engineering firms for the Friday night icebreaker.
- Engineering Week - The Section is looking for a volunteer to coordinate the staffing and setup of the ASCE booth for the weekend of February 17, 2007. Contact Cliff Williams for more information.

### 4. Treasurer's Report

- Garth Merrill will check on the Section's allotment from ASCE National.
- Garth Merrill will check with the Section's committees on the proposed spending in relation to the Section's budget.

### 5. Standing Committees Action Items – Jeanne Justice, Director

- Tom Schnetzer and Garth Merrill will submit past records to the History and Heritage Committee.
- Public Relations Committee - Jennifer Sandberg is the new committee chair.

### 6. Technical Committee Action Items – Eric O'Brien, Director

- Eric O'Brien will submit Technical Committee Report on January 11, 2007.

### 7. Branch Action Items – Arthur Fleming, Director

No board action items were identified.

### 8. YMF Action Items – Doug Knapp, YMF Board Rep

No board action items were identified.

### 9. Awards, Scholarships, Fellows/Life Members – Randy Sleight, Past Section President

- Life Awards will be presented to four Section members at the February Section meeting.
- The Jones Scholarship will be presented at the February Section meeting. Approximately five applications were received and have been evaluated.
- PSEC Engineer of the Year banquet – A motion was unanimously passed to donate \$300 to PSEC to defray the 2007 banquet costs. For this donation, ASCE will be recognized as a banquet sponsor.

### 10. Round Table Announcements for Meeting

- Outstanding Awards deadline (Paul Grant)
- Rebuilding Together (Arthur Fleming)

**Meeting adjourned at 6:30 pm.**

### January 19, 2007 Supplemental Board Meeting

On January 19, 2007 a supplemental Executive Board meeting was held via conference call to discuss funding for the 2007 National Concrete Canoe Competition to be held in Seattle. A motion was passed to advance \$25,000 to the Concrete Canoe Committee provided oversight is granted to the Executive Board for any checks written. The motion also provides an option to increase the loan to \$40,000 with the ASCE Seattle Section Board's approval. It is expected that the committee's fundraising efforts will repay the loan.

### Next Meeting:

Thursday, February 15, 2007 at the McCormick and Schmick's in Seattle.

**Minutes taken by:** Tom Schnetzer

## Life Inside the Beltway - A Congressional Fellow Returns Including Experience with Homeland Security and Response to Hurricane Katrina

by Jeff Highley, P.E.

Thank you for this opportunity to share with you my Congressional Fellowship. I had the honor to have served as ASCE's ninth Congressional Fellow in 2005. Although it required relocating to "the other" Washington for a year, I would gladly do it again if asked. It is difficult to describe the experience to those that have not been there; however, I have found that it is easier to explain to those that have an interest in their government.

When I first heard of the ASCE Congressional Fellows program, I was thrilled to discover that my professional society offered the prospect for me to spend one year working in the U.S. Congress. I had been student body president in elementary school, so I know that my interest in government dates back that far. My interest flourished while I was chair of the Seattle Section Legislative Committee. To me, it is obvious that Civil Engineering and elected government have a mutual responsibility to each other. Many of ASCE's professionals are engaged in the public works projects that governments commission. Therefore, it would seem not only appropriate but also necessary for our profession to be engaged in the governments that decide those projects.

After a lengthy interviewing process, I found an ideal match with the Office of Senator Mark Pryor of Arkansas. Arkansas might seem like a strange choice, but I did not base my decision on geography but on committee assignments. Besides, the United States Senate is the chamber of equal representation. Senator Pryor is a member of the Homeland Security and Government Affairs Committee (HSGAC), where he works with the Department of Homeland Security to protect the nation from the threat of domestic terrorism. The Senator's legislative staff was seeking a fellow to cover Homeland Security issues and the Senator's HSGAC assignment. I worked with two Legislative Assistants that split responsibilities for HSGAC. During the year, one of the Legislative Assistants left the office, so for a few months in late summer it was just me - just in time for Hurricane Katrina.

Before Hurricane Katrina, the issue that I was most associated with was formula-based homeland security state grant funding. High-density population communities argue that all homeland security dollars be distributed solely on "risk". Usually when speaking of risk, they are arguing perceived threat and anticipated consequence and rarely factor vulnerability. It was my responsibility to develop the arguments the Senator used "to ensure that local governments, especially in rural America, are given the training and resources they need to keep their

communities safe." I even had the opportunity to join the Senator on the Senate Floor for his delivery of a speech I had written on the subject.

Typically, HSGAC and its subcommittees would have a couple hearings a week. The process for a hearing starts with the chair of the committee selecting an issue. Then, the congressional staff of that committee secures the hearing witnesses, performs pre-hearing interviews, researches media coverage, and sometimes performs their own investigations. About a week before the scheduled hearing date, the committee staff briefs the staff of the individual committee members, including briefing books that contains the written testimony of the witnesses. The written testimony is vital because it allows me, the staffer, to prepare questions for the Senator to ask of the witnesses. Then the day of the hearing, I would sit on the bench behind the Senator's seat and wait for him to arrive. Sometimes he did not make it to the hearing. However, when he did, I would place his placard on the dais, hand him the briefing book with prepared questions, and give whatever briefing time allowed.

Upon coming back from August recess, the nation and the US Congress were faced with the aftermath of Hurricane Katrina. All prior HSGAC legislation came to a screeching stop and the Senate became consumed with the "who, what, why, how" of the nation's most costly natural disaster. I found myself attending briefings from the Department of Homeland Security, the US Postal Service, and the National Guard, amongst others. Because the Administration's party had the majority in Congress, HSGAC was reluctant to point fingers and ramped up a full time staff to investigate Hurricane Katrina. This effort was getting under way in earnest at the same time I was preparing to make my exit from Washington, D.C.

Since returning to Seattle, I still follow the activities of the nation's upper house. Senator Pryor is now a majority member on HSGAC and has risen in seniority. And, the Seahawks still cannot win the Superbowl.

If you have an interest in becoming directly involved in the process of crafting federal legislation and advising members of Congress, the deadline for application to the 2008 ASCE Congressional Fellow is March 16. Please feel free to contact me if you have any questions or would like to know more about the Congressional Fellows program and an "inside story" from the Halls of Congress.

## ASCE Member Carlos Ospina Honored With Award for Best Paper in New Construction

Carlos E. Ospina, project engineer with BERGER/ABAM Engineers Inc., was recently honored in the Best Paper in the New Construction category at the Composites in Civil Engineering (CICE) 2006 Conference. Organized every two years by the International Institute for Fiber-Reinforced Polymers in Construction (IIFC), the conference was held in December in Miami, Florida.

The award was presented to Carlos E. Ospina and Charles E. Bakis for their paper "Indirect Crack Control Procedure for Fiber-Reinforced Polymer (FRP)-Reinforced Concrete Beams and One-Way Slabs." Charles Bakis, coauthor of the paper, is a professor at Pennsylvania State University, Department of Engineering Science and Mechanics.

The paper provides an alternative model for flexural crack control of FRP-reinforced members in which, consistent with current ACI 318 recommendations for steel-reinforced members, cracks are controlled indirectly through a maximum bar spacing requirement instead of being calculated directly. The procedure results from the impracticalities associated with direct crack width measurement in concrete structures due to the high variability of both concrete cracking and crack width measurements. The proposed model accounts for the dominant effects that bar cover, FRP reinforcement stress, stiffness, and bond properties have on cracking of FRP-reinforced concrete beams and one-way slabs. The process is part of an effort towards unifying the crack control design provisions in ACI 440.1R-06, the design guideline that regulates the design of concrete structures reinforced with FRP bars, to follow the format adopted by the ACI 318 code.

### Seattle ASCE Section Officer Positions

ASCE is a volunteer organization and depends upon your involvement to enrich our professional community. Involvement can range from committee participation to leadership roles with the Section Board. If you are interested in greater involvement with the Section, the Board has the following positions that are open for nomination:

- ◇ **President Elect** (3 year term - President-Elect, President, Immediate Past President)
- ◇ **Director** (Technical Committees) (3 year term)
- ◇ **Secretary** (2 year term)

Please call or e-mail Paul Grant (206-262-0370 or [pgrant@pangeoinc.com](mailto:pgrant@pangeoinc.com)) for more information on these positions. We are looking for self nominations or suggestions of others that would enjoy serving over 2,400 members in our Section.

## Engineer's Fair ASCE Booth

Do you love playing with children (our next generation of engineers)? Come, join the fun and volunteer for the ASCE Booth at the Museum of Flight Saturday, February 17, 2007. Call Cliff Williams at 206-714-7161 or email [cliffwilliams@earthlink.net](mailto:cliffwilliams@earthlink.net) to schedule your slot.

## Richard Williamson Jones Memorial Scholarship

The Seattle Section is pleased to select David Glen Sommer as the 2006-2007 Recipient of the Richard Williamson Jones Memorial Scholarship. The Scholarship is being awarded in honor of Richard Jones who was a member of the Seattle Section of ASCE after joining National ASCE in 1949 and who became a Fellow of ASCE in 1959. He was the Executive Vice President of General Construction Company, one of the leading marine and waterfront construction firms on the West Coast at the time of his passing.

He first joined General Construction Company in 1933 during the depths of the depression, but men like Richard turned this Country around at that time. He worked as a Civil Engineer on the Bonneville Dam Project in the Portland area and later was the Chief Construction Engineer on the Hungry Horse Dam Project. His wife Kathie established the scholarship to help students have just a little more money for books and supplies. The scholarship continues through the Kathie Jones' estate.

David Sommers is a 4.0 student at Seattle University majoring in Structural Engineering with hopes to go onto graduate school in the future. He is currently Vice President of the WA Gamma chapter of Tau Beta Pi-National Engineering Honor Society, past Vice President of Engineers without Borders, Bannan Scholar and other scholastic achievements of being on the Dean's and President's List.

He is active in several churches and is a professional pianist and plays the trombone as a member of the Seattle University Jazz Band in his spare time.

David is currently employed as an engineer in training intern at the firm of Dibble Engineers, Inc. They are extremely pleased with his work ethic and grasp of a variety of structural engineering assignments that he has been introduced to.

His professors identified him as having the necessary technical expertise and communication skills to become a strong leader in the Structural Engineering field of Civil Engineering.

# The 12th Annual Popsicle Stick Bridge Competition

by Doug Knapp, P.E., PSB Co-Chair

The Younger Member Forum (YMF) of the American Society of Civil Engineers' (ASCE) Seattle Section invites YOU to help host the 12th annual Popsicle Stick Bridge

(PSB) Competition on February 17, 2007 at the Museum of Flight. The competition is held in conjunction with National Engineers Week and the Puget Sound Engineering Council's Engineers Fair. This year will include some exciting new changes; the event will be held in the Museum of Flights auditorium, and TV Washington is interested in covering the event. Also featured at the Museum on the day of the event will be the Northwest Physical Model show and a presentation by Museum of Flight director, and former astronaut, Bonnie Dunbar.

The Popsicle Stick Bridge Competition consists of teams of high school students from around Western Washington that will be designing and constructing bridges made from hardwood Popsicle sticks and white glue. The students must ensure that their designs meet competition guidelines, similar to how engineers are responsible for their designs conforming to established design codes. At the competition, the bridges will be inspected for conformance to competition guidelines then load-tested to failure. Awards are given to the top three bridges in each of the following categories: total load, best estimated load, aesthetics, and overall (a combination of efficiency and aesthetics).

ASCE YMF hosts this annual event to introduce high school students to careers in Civil Engineering and Construction. This year, PSB volunteers visited 20 high schools throughout the region introducing the competition and talking about careers in engineering. A series of lesson plans, a complete set of rules, helpful hints, and the Popsicle sticks were also provided during the visit.

The Popsicle Stick Bridge Competition is fully sponsored by local engineering firms and would not be possible without their generous donations. Also, it is made possible by numerous volunteer engineers working together to inspect, judge, test, and score the many bridges. If your engineering firm is interested in sponsoring the PSB Competition, please contact Josh Shippy at [Joshua.Shippy@hdrinc.com](mailto:Joshua.Shippy@hdrinc.com). In addition, if you are a young (or young at heart) engineer interested in getting involved with the PSB competition, please come to the pre-planning meeting at 6 P.M. on February 7th at Jillian's on Lake Union, 731 Westlake Ave N, Seattle, WA. For more information on the event and how to volunteer, please contact Eric Herzstein at [eric.herzstein@parsons.com](mailto:eric.herzstein@parsons.com). Bridge breaking will start around 10a.m. at the museum of flight on February 17th and we encourage you to come early to scope out the competition and get a good seat. We look forward to seeing you there!



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Further information:

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(Refer to Job #702122)

Closes: January 28, 2007 or until filled

#### Sr. Environmental Analyst

Salary: \$31.60 to \$36.82 an hour (DOE)

Further information:

Visit <http://www.seattle.gov/jobs/>  
(Refer to Job #702151)

Closes: January 28, 2007 or until filled



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#### Position Description:

Position is responsible for the daily operations of HDR's Seattle Department Water Treatment Business Class (BC) including strategic planning and tactical initiative development and implementation; keeping up with emerging water treatment technologies and market trends; supporting and implementing company policies; staff recruiting, selection, training, development, morale; workload planning and utilization; business class project profitability and management reviews; implementation of quality assurance and control policies and procedures; and marketing support; works with BG Manager and BC staff and financial controllers to see that BC projects are contracted, scoped, budgeted, scheduled, organized, monitored, controlled, and evaluated using pro-active project management, management reviews, and QA/QC procedures.

#### Experience Required:

- \* Bachelors degree in related field required
- \* Washington State professional engineer registration (or ability to apply for PE license reciprocity from another state)
- \* Minimum of ten years of project-related experience

#### Apply Online:

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Employer JobCode: 061771



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**Transportation Project Manager**  
**Seattle, WA**

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**Position Description:**

The primary duties of this position are to plan and manage all aspects of small to medium single discipline projects or large, routine projects. Independently coordinates the work of engineers and the balance of the team throughout the entire projects development. Establishes client relations and is involved with the marketing, contractual, design and production meetings. Participates in reviews with various governing agencies for code compliance. Conducts work sessions for design development and contract document in conjunction with other staff. Is responsible to coordinate workload through the entire project development to complete documents on schedule. Is responsible to track the financial aspects of the projects, and coordinates and adjusts the work effort with the team to ensure that the work is completed within the parameters of the agreed to schedule. Works with the Business/Accounting Manager or Project Controller and the Department Manager for project reviews and with company management on an as needed basis. Maintains engineering professional registration.

**Experience Required:**

- Bachelor's degree in Engineering
- PE License
- Prior project manager experience that includes responsibility for client relationships, production of work projects, QA/QC, and budgeting and invoicing.

*This position is located in our Seattle, Washington office.*

Apply Online:

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Employer JobCode: 061655



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We are hiring a proven **Transportation Engineer** to deliver a quality product on time and within budget for our **Tacoma office**. This role will include providing roadway and highway geometric design, preparation of project reports, and. serve as engineer or task leader as appropriate. Lead highway teams for major highway improvements.

**Qualifications:**

- Bachelors degree in Civil Engineering
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- Strong communication skills

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**HDR, Inc.**  
**Senior Bridge Project Manager**  
**Seattle, WA 98015**

HDR is an architectural, engineering, planning and consulting firm that excels at complex projects and solving challenges for clients. More than 5,000 employee-owners, including architects, engineers, consultants, scientists, planners and construction managers, in over 125 locations worldwide, pool their strengths to provide solutions beyond the scope of traditional A/E/C firms.

**Position Description:**

May be viewed as a technical expert with recognized authority in an area of specialization that resolves problems of greater scope and complexity. May plan and develop projects or design activities which have significant impact on major company programs. May plan, organize, and supervise work of medium to large staff of professionals and technicians. Although may serve as project manager on larger projects, project management is not sole focus of position.

**Experience Required:**

Requires a bachelors degree, P.E., and 10 or more years of experience.

*This position is located in our Seattle, Washington office.*

**Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=766400&JBID=1436>

Employer JobCode: 061569



**HDR, Inc.**  
**Traffic Engineer**  
**Seattle, WA**

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**Position Description:**

The primary duties of this position include working, as a team member, under the direction of the project engineer/manager on a variety of traffic analysis and design needs for the 520 Bridge improvement project. More specifically, this person will be involved with design and design oversight for all aspects of traffic and Intelligent Traffic Systems (ITS) with regards to: signing, striping, traffic signals, lighting, CCTV, VMS and capacity analysis. The projects will have clear, specified objectives and limited variables.

*This position is located in our Seattle, Washington office.*

**Experience Required:**

- \* BS in Civil Engineering
- \* EIT
- \* 5+ years experience with traffic analysis and transportation planning
- \* Computer skills: Synchro/Sim Traffic, HCS

**Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=559533&JBID=1436>

Employer JobCode: 060614



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

R. W. Beck, Inc. is a premier engineering-based management consulting firm that helps our clients in the Energy and Water & Waste Resource market sectors make better business decisions and accomplish their objectives. We do this by guiding our clients through the aftermath of natural disasters, confronting the impacts of aging infrastructures, and solving the problems of economic and technical challenges.

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
- 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=1240418&JBID=1436>

Employer JobCode: 06-0050



**HDR, Inc.  
Drainage Engineer  
Seattle, WA**

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**Position Description:**

The primary duties of this position include hydrology and hydraulic studies, stormwater and flood control facilities, and highway drainage systems including roadway pavement drainage, channel and storm sewer conveyance systems and grading plans; erosion and sediment control plans, construction sequencing plans and traffic control design for the 520 Bridge improvements project. Team member on roadway design projects with responsibilities that include coordination with various other design leads during the development of plans, special provisions, and construction estimates. Use engineering software (GEO PAK Microstation, SelectCAD, AutoCAD and LDD) for planning and design.

**Experience Required:**

- \* Bachelors degree in Engineering
- \* PE license
- \* 5+ years of experience

*This position is located in our Seattle, Washington office.*

**Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=559534&JBID=1436>

Employer JobCode: 060615



**HDR, Inc.**  
**Transportation/CSS/CSD Planner**  
**Bellevue, WA 98015**

HDR is an architectural, engineering, planning and consulting firm that excels at complex projects and solving challenges for clients. More than 5,000 employee-owners, including architects, engineers, consultants, scientists, planners and construction managers, in over 125 locations worldwide, pool their strengths to provide solutions beyond the scope of traditional A/E/C firms.

**Position Description:**

Project management, technical, and strategic leadership for urban design applications for transportation and transit projects. The candidate is responsible for identifying and marketing opportunities for urban design/context sensitive solutions or design (CSS/CSD)/corridor aesthetics/transit-oriented development (TOD) and/or sustainable solutions related to transportation projects in Seattle/Northwest, as appropriate.

**Experience Required:**

Demonstrates technical and strategic leadership to grow TOD/CSS, CSD/corridor aesthetic/ sustainable solutions for the Seattle/Northwest Transportation practice. May be involved in selected projects at the national level. Provides leadership for and collaborates with transportation/transit planners, engineers and landscape architects (including subcontractors) throughout the project development process. Establishes client relations and is involved with the marketing, contracting, and design. Participates in meetings with state/local government agencies, external stakeholders and the public to achieve effective project solutions. Must have demonstrated verbal and graphic communications skills and capabilities.

*This position is located in our Seattle, Washington office.*

**Apply Online:**

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=704227&JBID=1436>

Employer JobCode: 061423

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## Calendar of Upcoming Events:

### February 3, 8:30am

#### **History & Heritage Committee Meeting**

Location: UW More Hall, Rm 228

Contact: Cindy Hirsch, (206) 438-2150 or

[Cindy\\_Hirsch@urscorp.com](mailto:Cindy_Hirsch@urscorp.com)

### February 6, 5:30 – 7pm

#### **YMF Happy Hour**

Location: Red Lion Terrace Garden, 5th Floor (Seattle)

Contacts: Josh Shippy, [Joshua.Shippy@hdrinc.com](mailto:Joshua.Shippy@hdrinc.com)

or Robin Lee, [RLee@BrownCald.com](mailto:RLee@BrownCald.com)

### February 17, 10am – 5pm

#### **Engineers Week Fair Featuring ASCE YMF's popular Popsicle Stick Bridge Competition**

Location: Boeing Museum of Flight, 9404 East Marginal  
Way South

### February 23 – 24

#### **AACE's Construction Claims 101 Seminar**

Location: SeatTac Airport Hilton Hotel

Contact: [www.pseconline.org](http://www.pseconline.org)

### February 24, 5:30 – 9:30pm

#### **PSEC Engineer of the Year Award Banquet**

Location: Boeing Museum of Flight – Skyline Room

Contact: Reservation form on ASCE web site

### February 28, 5:30pm

#### **Ports & Harbors Committee Meeting**

Location: Siam on Lake Union, 1880 Fairview Ave. E,  
(Seattle)

Topic: Master Planning and Realignment of Marinas - Port  
of Oak Harbor by Julie Bassuk, Partner, MAKERS

Contact: Susan Tonkin, (206) 622-0222 or

[stonkin@moffattnichol.com](mailto:stonkin@moffattnichol.com)

### March 3-4

#### **YMF Ski Trip**

Location: Mount Baker Ski Area

Contact: Shane Binder, [shane.binder@parsons.com](mailto:shane.binder@parsons.com)

## TIME VALUE

February 2007 Newsletter  
Volume 42, Number 6

Attn: ASCE Newsletter Editor  
3728 Beach Drive SW, #4  
Seattle, WA 98116

AMERICAN SOCIETY  
OF CIVIL ENGINEERS

SEATTLE SECTION

