



EQUILIBRIUM

Newsletter of the Seattle Chapter
Structural Engineers Association of Washington

OCTOBER 2007

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Free Mini-Seminar

Tuesday, October 23rd, preceding
the regular dinner meeting

**"Waterproofing Basics for the
Clueless Structural Engineer"**

Presented by
Stéphane P. Hoffman, M.Eng.
M. Arch, Morrison Hershfield
Corporation

Our mini-seminar will feature the basics of waterproofing, including rain screen design and moisture management. Case studies, including details to consider and to avoid at roof and deck penetrations and at wall ledgers, will be discussed.

Design and Construction of the Second Tacoma Narrows Bridge

Our Tuesday, October 23rd dinner meeting will feature a presentation on the design and construction of the second Tacoma Narrows Bridge.

The two Tacoma Narrows Bridges are the fifth longest suspension bridges in the United States. Built parallel to and south of the first Narrows Bridge completed in 1950, the second bridge provides four eleven-foot wide lanes of east-bound traffic to Tacoma. Opened three months ago after five years of design and construction, the second bridge has completely dissipated several hours of daily traffic congestion along State Route 16.

October 23rd's presentation will include the design and construction of the bridge's caissons, towers, anchorages, spinning set-up and cables, and the orthotropic deck truss superstructure.

Tim Moore, P.E., S.E., Senior Structural Bridge Engineer with the WSDOT Bridge & Structures Office, will be the featured speaker for this distinctive program. Tim has served as a bridge designer for the WSDOT Bridge & Structures Office for over 24 years, with lead roles in the SR509 Foss Waterway Cable-Stayed and Puyallup River Segmental Bridge Projects. For the past 11 years, Tim has been the Owner representative and prime reviewer of all facets of the design and construction of the Second Tacoma Narrows Bridge.



Meeting Information

Date:	Tuesday, October 23, 2007	
Place:	College Club 505 Madison Street, Seattle (parking in garage under Club: \$2.00)	
Time:	5:00-5:45	Free Mini-Seminar "Waterproofing Basics"
	5:30-6:30	Social Hour
	6:30-7:30	Dinner
	7:45-9:00	Business, Program
Menu:	Baked Chicken Divan, Rice Pilaf College Club Salad, German Chocolate Cake	
Cost:	SEAW Members	\$30.00
	Non Members	\$35.00
	Students (with ID)	FREE
	Late Registration, add	\$5.00

Reservation Deadline: 5:00 PM Thursday, October 18

REGISTER ONLINE at www.seaw.org
(be sure to log in to get the member rate!)
Prepayment is appreciated!

Reservations may also be made by email to seaw@seaw.org
or by phoning 206.682.6026.

No shows and reservations cancelled after the deadline
are subject to full charge.

I was in New York City recently. I like to think of New York as a city of structural engineering achievements. All around you are tall skyscrapers, long-span bridges, tunnels, and yes, lots of new construction. Every time I'm there, I can't help but wonder what the structural designs for these structures would look like if they were designed today.

Structural engineering is more sophisticated than ever. We have design and analysis tools not even conceived of 20 years ago. We can analyze faster and more accurately than ever before. We are embarking on a new world of integrated design (BIM). We agree to crazy accelerated design schedules on a regular basis.

Does this produce better design? Are we sometimes going too fast? Are we stepping back and looking at the quality of our documents? Are we taking the time to mentor our young engineers who will have even more sophisticated design and analysis tools 20 years hence?

As we all know, the public depends on structural engineers to provide safe structures. Most people don't think twice about this until something falls down.

Developers want them designed fast and economically, and our architects want them functional and aesthetically pleasing ("Can't you just get rid of that column at the ground floor?"). How do we balance all this, pump out drawings on time, project after project, and maintain quality?

For any of you still reading this, here's some food for thought about achieving quality in our design practice, if the subject is not already high on your list:

- How is your firm developing engineers? What continuing education opportunities do they have? Are they really learning engineering or are they relying solely on analysis programs? (GIGO= Garbage In Garbage Out) If you are a young engineer, are you proactively seeking training and education opportunities?
- Are you actively mentoring? Are you mentoring project managers? They are your future leaders.
- Do you have adequate oversight and review processes?
- Are we teaching communication? Most design problems arise from lack of communication. The best engineers have great communication skills.
- Does senior staff insist on being involved in the early concept phases with the architect and developer to help lead the design? Do they stay involved through construction to make sure the project is executed as planned?
- Does your firm balance project volume with adequate staffing levels – Or are you or your staff getting burned out?
- Lastly – Do you know how to say NO to a client or a project when the schedule is too fast or your workload too high to produce a quality set of documents?

SEAW strives to help engineers achieve quality by providing meaningful continuing education opportunities for both experienced and young engineers. Last month's very successful Northwest Confer-



ence, hosted by the Seattle Chapter is an example. Another opportunity is just around the corner... the SEAW Earthquake Engineering Committee will present its seminar "Seismic Design Using the 2006 IBC and ASCE 7-05" in Portland, Seattle, Spokane and Tri-Cities over the next month. For more information, just go to the SEAW website at www.seaw.org

And last but not least, I'm honored to be able to serve as your Seattle Chapter president for the next year. I look forward to a great year for all of us.

- Shelley Clark
sclark@mka.com

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Member News

Former Chapter Board Member and Professional Practices Chair Bob Morrison, recently diagnosed with leukemia, has sent us the following message:

To All:

Many of you know that I was diagnosed with leukemia in June of this year. For those who didn't know, you can find the full story here:

<http://home.earthlink.net/~rlmorrisonjr/bobsleukemiablog/>

I had hoped to continue working at a very reduced schedule through the treatment process. The hope was that I would be able to work enough to cover my office overhead, and then after treatment slowly return to a full schedule as my energy levels allowed. I now know that the hoped-for scenario is simply not going to be possible. The combination of the disease proc-

ess and the treatment for it have left me with a very low ability to properly visualize the details necessary to carry out a safe and successful structural design. I can still theorize on a sort of macro scale, but that is not enough to get any calculations or drawings finished and out the door.

Accordingly, I find that I am now in a position where I must shut down my engineering practice because I am no longer able to carry the overhead of insurance, telephones, and all the other expenses required to keep a name on the door. I am hopeful that this is really only a sabbatical and that some time next year I will be able to re-establish some sort of design practice. For those of you who have started your own businesses and "babied" them through the formative stages, you know that this is a very emotional decision and one not easily taken. However, the

reality is that it must be done. So, effective today the telephones will be disconnected and the lights turned off.

Finally, I want to thank all of you that I have worked with over the years for allowing me to be your structural engineer. I have learned a lot from you and your projects, no matter what the size. Your faith in my ability to provide you with an economical and safe solution has made the work always a challenge, and has made me try to do better each time. It is now my lack of ability to have confidence that I can produce an economical and safe design that forces me to quit the work I love.

I will maintain my domain name "rlmorrisonengr.com" and my e-mail address. Feel free to contact me about structural design in general or just to chat.

- Bob Morrison

2007 SEA Northwest Conference Summary

The 2007 SEA Northwest Conference was held at the Sheraton Seattle Hotel on September 13-15. The theme for the conference, which had over 170 attendees and over 30 vendors, was "Twisting, Turning, and Learning with the 2006 *International Building Code*." Not surprisingly, the technical program focused on the IBC. However, rather than just the structural aspects of the Code, the technical sessions included topics of a broader range, including fire and life safety issues, mechanical/electrical/plumbing systems, and the geotechnical aspects of foundation design. These presentations provided conference attendees with some background on aspects that are primarily related to other disciplines, but that often have some effect on the structural design. The overall goal is that by having a better understanding of code aspects and building systems, we structural engineers can provide added benefit to our projects and our clients by being more active participants of the design team.

The conference got going with a Thursday lunch featuring Paul Dorpat, editor of the Seattle Times Pacific Northwest magazine weekly column "Now and Then" and

one of Seattle's most prolific historians. The presentation featured photos from the book *Washington Then & Now*, a pictorial history of the development of Washington State, which was coauthored by Mr. Dorpat. Beginning in Seattle and moving around the state, the program provided very interesting photo comparisons of some of the most familiar areas in our state. Examples included Seattle before the Denny regrade, downtown Seattle at the completion of the viaduct, and a timeline of four bridges spanning a river in central Spokane.

Following the afternoon session featuring presentations on the structural and seismic aspects of the IBC (including a detailed example on the application of the nonstructural seismic bracing requirements of ASCE 7-05), the conference attendees gathered for a cocktail reception and dinner presentation by Dan Doyle, Executive Vice President of Venue Construction for the Vancouver Organizing Committee. Mr. Doyle's presentation covered all aspects of the major construction sites – from hockey arenas in Vancouver to the bobsled

track in Whistler – in addition to providing his unique insights into the challenges of planning for thousands of participants, thousands of volunteers, and over a million individual event tickets.

Friday morning's technical sessions covered some of those IBC chapters preceding Chapter 16; chapters to which our books are almost never opened. The sessions explained many building occupancy, construction type, egress, and fire protection issues that usually go in one ear, out the other in early design meetings.

The Friday lunch speaker was Dr. Mahmoud Kamara, a Senior Structural Engineer with the Portland Cement Association (PCA). Dr. Kamara addressed designing concrete buildings to resist many types of natural and manmade hazards. The highlight of the presentation was a summary of a progressive collapse study done by PCA that demonstrated that concrete frame buildings designed for moderate to high seismic loads often have inherent capacity to avoid progressive collapse caused by removal of a single column.

The final technical session

featured the geotechnical aspects of foundation design, a summary of the structural aspects of the 2006 *International Existing Building Code*, and a panel discussion with building officials from Portland, Seattle, and Tacoma. The last presentation included a lively discussion between the building officials and the audience about typical issues that arise during permit review. Friday night's social function was an Argosy cruise and dinner around Lake Union and Lake Washington.

The conference was considered a big success both in terms of attendance and program, and the organizing committee offers its sincere thanks to the product vendors, the conference sponsors, and the Sheraton for their support. Also worthy of recognition are the members of the Seattle Chapter YMF who helped with registration and conference set up.

Mark your calendar for next year's Northwest Conference in Sun Valley, Idaho, on June 20-21, 2008. Based on SEA of Idaho's promotional video and the conference theme "Engineers Gone Wild," it promises to be a must-attend event.

Meeting Recap: Seattle Chapter Summer Casual

The annual Summer Casual Meeting started off with the SEAW committee showcase. There are lots of committees out there looking for volunteers. Below is a brief summary of the committees that were represented and their needs.

Program/House Committee—the major announcement here was that the College Club, where the SEAW Seattle Dinner Meetings are traditionally held, will be demolished to make way for a new high rise! So SEAW's final dinner meeting there will be in January of next year. The

committee is considering circulating a survey to get member input on locations/time preferences, so keep your eyes open for that.

Code Advisory Committee—this is a new committee that was formed to ensure that our technical committees speak with a unified voice. It's comprised of a chair and the chairs of the Earthquake Engineering, Wind Engineering, Building Engineering, and Professional Practice committees.

Earthquake Engineering Committee—this is a very

active technical committee. The longtime chair, Mike Valley, is retiring as chair, so there will be opportunities for leadership as things get sorted out.

Wind Engineering Committee—A long established and active committee, they are currently working on updating the popular Wind Commentary and seek people interested in wind.

Building Engineering Committee—the committee was formed two years ago to fill the technical gap between the earthquake engi-

neering and wind engineering committees. They focus mostly on code development, though would like to give more seminars. At present, they lack the manpower (hint, hint).

Education Committee—this is another relatively new committee. They are currently working on organizing a spring 2008 half day seminar and need some help.

Refresher Course Committee—The committee is looking for new instructors for next year.

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Young Member Forum—this is another new committee and it's becoming more formally organized. New members are always welcome!

SEAW/WABO—this joint committee works with the building officials at WABO to improve communication between engineers and building officials. They have produced a number of influential white papers on topics related to plan reviews.

Legislative Committee—Members of this committee attend AELC and follow legislative issues related to architecture and engineering. They were invaluable in getting the SE Practice Act passed last year and are interested in new members.

Newsletter Committee—the newsletter committee is looking for new members as well. There are opportunities to help get this wonderful newsletter written!

Exam Committee—the exam committee is looking for new pre-testers for the SE III exam. If you've passed the SE III within the last five years, they'd like you to help!

If you're interested in joining any of the committees, contact the chair, which can be found on the SEAW website or in this newsletter. If you're interested in the newsletter committee, contact me, Karen Damianick at kdamianick@gmail.com.

NCSEA—More Ways to Get Involved

Ed Huston, SE, Vice President of NCSEA, the National Council of Structural Engineering Associations was the main program presenter. He spoke about NCSEA's history and purpose, and how you can get more involved with it.

NCSEA was formed in 1993 to advance and be a voice for structural engineering. NCSEA as an organization is also very active in pursuing separate licensure for structural engineers. Currently, only ten jurisdictions license SEs. Some areas are using a certification avenue instead. But this is all very difficult because there are nonconforming standards, even in the jurisdictions that have SE licenses. NCSEA is working to develop uniform standards.

As a dues paying member of SEAW, you are already a member of NCSEA! A good way to take advantage of the membership is to join one of their committees, such as the Advocacy Committee, the Code Advisory Committee, or the Basic Education Committee. Visit www.ncsea.com for information.

Get the most out of your SEAW and NCSEA memberships and join a committee!

Karen Damianick is a structural engineer with KLD Engineering in Seattle. She has been a member of SEAW since 2003 and currently serves on the Newsletter Committee. Karen can be reached at kdamianick@gmail.com.

Meetings, Seminars

SEAW Fall Seminar to Cover IBC 2006 Seismic Provisions

SEAW is pleased to announce its "Seismic Design Using the 2006 IBC and ASCE 7-05" Seminar, to be held in four locations this fall.

Many of the structural design requirements of the 2006 IBC, which took effect on July 1, appear in the ASCE 7-05 standard, which has been significantly reorganized and rewritten. The upcoming seminar will address changes to design requirements in these documents and other reference standards.

Dates and locations:

Portland: Thursday, October 4, 2007; McMenamins Edgefield

Seattle: Saturday, October 13, 2007; UW Kane Hall

Spokane: Thursday, November 2, 2007; (venue TBD)

Tri-Cities: Friday, November 2, 2007 (venue TBD)

Visit the SEAW website. www.seaw.org, for details and registration information.

Free Webinar on Strengthening Buried Pipelines

Via WebEx or by download

The Network for Earthquake Engineering Simulation (NEES), the ASCE Technical Council on Earthquake Engineering, and the Earthquake Engineering Research Institute (EERI) have teamed together to offer an online webinar addressing how to strengthen buried pipelines.

The free 90 minute webinar, "Ground Rupture Effects on Critical Lifelines: Strengthening Buried Pipelines and Utility Conduits to Avoid Post-Quake Disruption," will update you on the latest research on high density polyethylene (HDPE) and steel pipes, explain implications for mitigating extreme loads, outline tools for retrofitting existing pipelines, and alert you to how these findings may be applied to California water pipelines.

You can participate in this training session via WebEx at noon EDT and again at noon



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Support Needed for Science Decathlon

The National Science Decathlon, based north of Seattle in Lake Forest Park, is in need of local volunteer and financial support for ambitious 2007-2008 operations. Funding donated by engineers, firms, companies and individuals associated with the Puget Sound Engineering Council and associated societies and groups would be used for subsidizing registration (\$195.00/team, \$295.00/school), tournament development, and to help up to 850 6th–12th grade science students from throughout Washington State.

If funding goals are met by October 15 (November 1st at the latest), Science Decathlon would then need volunteer support from professionals to help with operations of a 2007 Washington Science Decathlon tournament at Canyon Park Junior High School in Bothell and Hudson's Bay High School in Vancouver. These volunteers would serve as tournament officials (10 hours/tournament), event supervisors (25 hour commitment/tournament) and coaches (100 hours minimum annually).



Participating in the Science Decathlon is a fun and unique way to interest students in science and allow them to

develop their knowledge and skills as they relate to integration of engineering disciplines, as well as other non-engineering areas of science and academics. Detailed information about the program is available at www.sciencedecathlon.com. 501(c)(3) tax-deductible donations can be made via PayPal by visiting <http://www.sciencedecathlon.com/registration.htm>. E-mail requests for additional information, donation information and volunteer support can also be sent to Jason Colberg, executive director, at cranefly@sciencedecathlon.com

Attracting Today's Youth to Engineering Professions

Are you concerned that today's youth are not interested in math and science?

Are you the parent of an incoming 7th or 8th grade student?

Consider sharing your enthusiasm for your profession by recruiting your children's middle school to participate in National Engineers Week Future City Competition.

Our local Washington State Steering Committee is here to help you introduce the program to your math and science educators. We have information packets, an all-encompassing presentation and a great web-site (<http://www.ieee-seattle.org/futurecity/index.html>) to help describe the program. We will be happy to set up a meeting with your school and share information about this exciting opportunity for your children.

The Future City Competition is a national program sponsored by the engineering community to promote technological literacy and engineering to middle school students. In its 16th year of existence, this is the 10th year the regional competition has been held in the State of Washington, and the 7th year that it has been hosted by the IEEE in Seattle.

The local regional competition is organized and managed by a local steering committee and supported financially by local sponsors.

The Future City Competition fosters an interest in math, science, team building and engineering through hands-on, real world applications. The competition is open to all public, private, home, and parochial schools. The regional finals of the Future City Competition will be held at the Seattle Center on Saturday, January 19, 2008. The national finals of the



Future City Competition are a featured event during National Engineers Week, with students from across the country competing in Washington, D.C. The winning team from the Washington State Regional Competition will advance to the national competition in Washington, D.C.

Interested? Schools need to sign up by mid-October, but it is best if the teams get to work as soon as school is back in session. Check out our web-site and contact Karen Pavletich, the Washington State Regional Coordinator, at kpavle@ieee.org or 425-462-3871.



Official and the WAC/RCW Rules, Permit Technician Certification Class
Fire Track - 4 Day Fire Plan Review, IFC High Piled Combustible Storage, Hazardous Materials & the International Codes, IBC/IFC Crossover

And much more.
 Watch for more information on the WABO Website: www.wabo.org

Meetings, Seminars

-Continued from page 4

PDT on Tuesday, October 9, or download the broadcast at any point after that date by registering at www.nees.org/ebrownbag.

2008 WABO Annual Education Institute

March 24-28, 2008
 Doubletree Suites Hotel Tukwila, Washington

Co-sponsored by the Washington Association of Building Officials and the Washington State Association of Fire Marshals

MARK YOUR CALENDAR!
 The 2008 WABO Education Institute will be held March 24-28, 2008, at the Double-Tree Suites Hotel Southcenter Parkway Tukwila, Washington.
 Don't miss this important

training opportunity. Over 20 classes will be offered, including:
2006 Code Track - IBC, IRC, IFC, IMC/IFGC & UPC
Codes & Standards Track - ANSI A117.1, Green Building, IRC Plan Review, Means of Egress, Prescriptive Lateral Bracing, Soils & Foundations, ASCE 7-05
Administrative Track - Building Inspection 101, Code



NEW AISC Seismic Provisions and Manual Seminar in Seattle!

“AISC Seismic Design – Updates and Resources for the 21st Century”

Wednesday, October 24, 2007

Hotel Seminar Location will be posted at www.aisc.org/seminars ~ 30 days before the seminar.

Speaker: Thomas A. Sabol, PhD, SE, Principal, Englekirk & Sabol Consulting SEs, LA

Structural engineers across the country have appealed to AISC for good resources and continuing education seminars on seismic design. In response, Dr. Thomas Sabol, SE – referencing AISC’s extensive Seismic Design resources – has developed an outstanding seminar tailored to meet those needs. If you are a practicing structural engineer looking to increase your knowledge of seismic design of structural steel – make sure you attend this seminar! Highlights include:

- 2005 AISC Seismic Provisions – the first *Seismic Provisions* to combine ASD and LRFD into a unified format. You will be introduced to new design terms as well as design provisions for new systems, including Buckling Restrained Braces and Steel Plate Shear Walls. The seminar will address quality assurance and special welding requirements for steel seismic systems, which have been significantly simplified from those in FEMA 353.
- 2005 AISC Moment Frame Prequalified Connection Standard – the first national consensus standard to replace FEMA 350 for the design of moment frame prequalified connections. The Standard, which provides design requirements, design limitations and a design procedure for Reduced Beam Section and Bolted End Plate connections that apply to Special, Intermediate and Ordinary Moment Frames, will be introduced in the seminar.
- 2005 AISC Seismic Design Manual – a newly developed resource to help the structural engineer apply the 2005 *Seismic Provisions* and 2005 *Moment Frame Prequalified Connection Standard* into his/her seismic design of structural steel. Design examples of Moment Frames and Braced Frames using prequalified connections will be presented in the seminar.

No matter what level of seismic engineering you are currently practicing, this seminar will offer you important information on the new AISC resources and updates available to help you design effectively and efficiently!



Bring a Buddy to this AISC Seminar for \$275 – he/she will receive all of the handouts including a copy of the new 2005 AISC *Seismic Design Manual*, 2nd Printing.

SEAW, CASE, ASCE and SEI Members qualify for the AISC Member price!**

Each attendee will receive a CEU Certificate from AISC, Inc. for 8.0 PDHs/0.80 CEUs.

Register Online quickly and easily at www.aisc.org/2007seminars .

For more information or to download a Registration Form, go to www.aisc.org/seminars .

**If you are a member of SEAW, check the “AISC Member” box when registering and write in “SEAW”.

Seminar Schedule: 7:30 am: Registration and Breakfast Refreshments
8:00 am: Seminar Begins
12:00 pm: Lunch (Provided)
5:00 pm: Seminar Concludes

Questions? E-mail seminars@aisc.org OR call Shanna @ 312.670.5418.

Meetings, Seminars, Announcements

Upcoming COSMOS 2007 Technical Session to Focus on Evaluation and Recommendations for the Selection and Scaling of Ground Motions for Building Code and PBEE Applications

The Consortium of Organizations for Strong Motion Observation Systems (COSMOS) will be holding its Annual Meeting and Technical Session at the Hilton Garden Inn in Emeryville, California, on Friday, November 9th. This year the Technical Session is being co-sponsored by the Pacific Earthquake Engineering Center (PEER) and the California Geological Survey (CGS). Registration for the Technical Session will begin at 7:30 am (with coffee and pastries). The Technical Session will begin promptly at 8:30 am and with a lunch break at 11:30 am. The COSMOS Annual meeting will start at noon and adjourn by 1:00 pm. The Technical Session will reconvene at 1:15 pm and end at 5:00 pm. Similarly to last year, it will be followed by a no-host cocktail hour and poster session.

The theme of the 2007 technical session is: "Evaluation and Recommendations for the Selection and Scaling of Ground Motions for Building

Code and Performance Based Earthquake Engineering Applications". This theme builds upon on the successful COSMOS Technical Sessions of 2004, 2005 and 2006.

In the morning part of the program, Norm Abrahamson will first present a summary of findings from previous technical session regarding current building code selection and scaling procedures along with suggestions for improvement. Next, Ron Hamburger will provide and overview of the ATC-58 project which is developing the Next Generation Performance Based Earthquake Engineering (PBEE) Guidelines along with the latest preliminary selection and scaling procedures which are specified in the ATC-58 35% Draft Assessment Guidelines document. Charles Kircher will next make a presentation

on the latest modifications to the selection and scaling procedures being used in the ATC-63 project (which is focusing on the predicted collapse of structural systems). And Woody Savage and Tony Shakal will make a presentation on the New National Center for Engineering Strong Motion Data. In the afternoon session, members of PEER Ground Motion Strong Motion Working Group led by Yousef Bozorgnia will present its recommendations for Selection and Scaling of Ground Motions and will provide an evaluation of the ATC-58 procedures. As in past years,

the presenters will also serve on a panel that will discuss (along with session participants) concerns and issues with the current procedures, and suggestions for their improvements in future codes and guidelines.

Registration fees are \$120 for COSMOS and PEER members, and \$160 for nonmembers, which includes both lunch and refreshments. There is also a special reduced student rate. For complete program and registration details for the COSMOS Annual Meeting and Technical Session, visit the COSMOS website at www.cosmos-eq.org.

A Call for Nominations:

SEAW Lifetime Service Award

Nominations for the SEAW Lifetime Service award may be made by any SEAW member to the State Board of Trustees by **November 1st** of each year. Qualifications of a nominee include: SEAW Member; service to SEAW on a Statewide level; Sustained, significant, multiple contributions; committee service; nurturing/mentoring abilities. The award may be made posthumously.

If nominations have been submitted, the SEAW State Board will convene a selection panel consisting of four most recent awardees (if possible) and a representative of each chapter to meet prior to the January State Board meeting. The Award will be presented at the appropriate chapter's May meeting or at the Northwest Conference. The award will consist of a unique trophy/plaque, a cash award, and a contribution in the awardee's name to the SEAW Endowment Fund.

Send your nomination by e-mail to the SEAW State Board of Trustees at seaw@seaw.org.

SEAW Calendar of Events

October, 2007

Thursday	4th	Seismic Design Seminar - Portland
Tuesday	9th	PSEC Mentor Night - Seattle University
Saturday	13th	Seismic Design Seminar - Seattle
	11th-13th	NCSEA Annual Conference - Salt Lake City UT
Tuesday	23rd	Dinner Meeting - College Club Seattle Chapter Board meeting
Friday	26th	November Newsletter Deadline

November, 2007

Thursday	1st	Seismic Design Seminar - Spokane
Friday	2nd	Seismic Design Seminar - Tri-Cities
Friday	23rd	December Newsletter Deadline
Tuesday	27th	YMF-Sponsored Dinner meeting location: UW Waterfront Activities Center Seattle Chapter Board meeting

December, 2007

Tuesday	18th(?)	Seattle Chapter Board meeting (date TBD - no dinner meeting in Dec)
Friday	28th	January Newsletter deadline

January, 2008

	*****	Dues Statements go out
Tuesday	22nd	Chapter Dinner meeting *selection of nominating committee Seattle Chapter Board meeting
Friday	25th	February Newsletter deadline
Friday	25th	State Board meeting

STRUCTURAL ENGINEERING: From Vision to Reality



Skagit Station, Mount Vernon, WA



Del Mar Transit Village, Pasadena, CA



Lofts On The Alameda, San Jose, CA



Pacific Cascade Freshman Campus,
Sammamish, WA



Trinity Parish Episcopal Church,
Seattle, WA



Kovats McKay Cabin, Priest Lake, ID

Quantum Consulting Engineers is a growing structural engineering firm involved in civic/cultural, single/multi-family housing, commercial/retail, mixed-use, K-12/higher-education, religious and industrial projects.

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Opportunities

Structural Engineer/Principal

EISI, Ltd. is seeking a licensed Structural Engineer who is interested in becoming a Principal and part owner of the multidisciplinary, engineering firm (located in Seattle at Fishermen's Terminal). Must have at least 10 years of structural design experience, including a background in steel, concrete and timber construction. Fascinating structural/mechanical projects including cranes, ship unloading equipment, material handling systems, industrial buildings, marinas, multimillion dollar residences, retail buildings, construction engineering and aircraft construction support facilities. Interested individuals should contact Kerry Complita, e-mail: eisi@eisiengrs.com or write to EISI Ltd., 1900 West Emerson Place, Suite 200, Seattle, WA. 98119.

Structural Engineer

Anderson-Peyton Engineers (25-year firm) is seeking junior and senior level Structural Engineers for our Federal Way office expansion. All levels of experience are being sought. Design team needs are post-tension concrete, timber, red iron steel, and cold-formed steel. Opportunities to

work on a wide variety of project types will include multiple construction materials. Enjoy rapid growth potential, progressive benefit package, informal office culture, flexible work schedules, including Friday afternoons off. Email Resume to dpeyton@anderson-peyton.com

Structural Engineer

Peterson Strehle Martinson (www.psm-engineers.com) is looking for structural engineers with 4-10 years of experience. (Master's degree preferred.) We perform a variety of structural design work for buildings and other structures throughout the

United States, from our office in Seattle's South Lake Union area. We are a team-oriented firm, well established in Seattle (over 80 years), with opportunities for professional growth. Please reply to: resume@psmengineers.com.

Engineer III

King County Department of Transportation Road Services Division is seeking an Engineer III to support the Bridge & Structural

Design Unit with design of bridges and other roadway

structures, project management, investigating and trouble shooting of engineering related issues, plan reviews, bridge load ratings, bridge inspections, and review and approval of shop drawings.

Qualified candidates must have knowledge of engineering principles equivalent to a bachelor's degree in civil engineering

and minimum two (2) years of progressively responsible experience in structural design and project management. Application required. For additional details and to apply visit: <http://www.metrokc.gov/jobs/assets/07June/6961.htm>. King County is an EEO employer.

Bridge Engineer, Olympia, WA 98512

HDR, Inc. is an employee-owned architectural, engineering, planning and consulting firm that excels at helping clients manage complex projects and make sound decisions. Approximately 6,000 professionals, including architects, engineers, consultants, scientists, planners and construction managers, in over 140 locations worldwide, pool their strengths to provide solutions beyond the scope of tradi-

tional A/E/C firms.

Description:

Performs complex assignments exercising judgment in evaluation, selection, and modification or standard engineering techniques and procedures. Fully experienced, competent engineer. May make decisions on significant design and engineering procedures. May function as technical specialist or project manager on mid-size projects but project management is not sole focus of position. May supervise small staff of professionals and technicians.

Experience Required:

Typically requires a Bachelor's Degree in Engineering, P.E., and 5+ years of experience.

Apply Online:

<http://www.gojobs.com/seeker/aoframeset.asp?JobNum=1822169&JBID=1404>
Employer Job Code: 070314 [GJ.1822169.1404]

Engineers

MURPHY BURR CURRY, INC is seeking creative and talented engineers to join our San Francisco firm as full-time project engineers/managers. Projects

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www.kpff.com

Opportunities

include new construction and retrofit in residential, commercial, schools and historical retrofit and restoration. Applicants must have 4-10 years of experience in structural design and detailing and preparing construction drawings as well as excellent communication skills. PE or SE license preferred. Excellent salary and benefits package offered. Email resumes to scurry@mbcse.com or fax to 415-882-7257. Please visit us at www.mbcse.com.

Civil/Structural Engineer

Large, International Structural Steel Corporation offers **Challenging Civil/Structural** opportunities with potential for career advancement!

Positions: Sr. Design Engineer (Civil/Structural Engineer) \$55K - \$110K/yr

Entry-level Engineer (Civil/Structural Engineer) \$40K - \$55K/yr

Salary: DOE

Locations: Seattle Metro, Central Washington

JOB SUMMARY:

- Design steel structures through the use of computer software
- Design components to ensure they meet code requirements
- Design specialty components without supervision
- Responsible for field modifications, repair sketches, and site visits
- Understand Company products and processes
- Review and validate contract documents
- Review drafting work for completeness
- Provide clear instructions to drafters
- Meet shop schedule requirements
- Participate in design meetings

REQUIREMENTS:

-BS in Civil Engineering (or equivalent)

Interested parties please contact Thane Meads at (509) 340-6440 or via email at: thane@dynamicrecruiting.com.

Structural Engineers

Tyee Consulting is a small, growing engineering firm located in downtown Bellingham. We specialize exclusively in structural design. We have very interesting projects to work on and great clients to work with.

We pride ourselves on having a casual, friendly, relaxed working environment in which we provide high quality, cost efficient engineering services to our clients.

If you are interested in this opportunity please fax your resume to 360-733-8936 (or email to jw@tyeeconsulting.com).

Thank you for your consideration!

Staff Engineers



Established and growing Structural Engineering design firm seeks outstanding individuals to fill immediate openings for Staff Engineers in our Seattle/Belltown office. All experience levels considered and encouraged. We're a mid-size dynamic company recognized for our team work, creativity and innovation. Our informal studio setting facilitates collaboration and communication between all staff levels and departments. We combine a very progressive benefits package with a fun, flexible and casual office culture. Our diverse project teams and loyal clients provide opportunities to work with a variety of materials and building types.

Benefits include medical, dental, vision, 401(k), cafeteria plan, subsidized transportation passes, three weeks vacation, paid sick leave, paid professional development opportunities, testing and licensing reimbursement, paid volunteer time off, tons of office social events and much more. We've got a desk all ready for you. Come join our team!

Email resume to bbresko@swensonsayfaget.com or fax attention Blaze Bresko at 206 443-4870.

Structural Engineer

BRIDGE, WATERFRONT & BUILDING STRUCTURAL ENGINEERING OPPORTUNITIES

As a leader in structural design, **KPFF CONSULTING ENGINEERS** is looking for **STRUCTURAL ENGINEERS** with experience in bridges, buildings and/or waterfront design to join our high performing team in our Seattle office.

Come work with us on a diverse array of projects in a team environment with a variety of clients in both the public and private sectors. Join our multidiscipline

teams, expanding your overall project knowledge base and incorporate the context-sensitive design philosophy of balancing function with aesthetics.

Strong technical and organizational skills, and a minimum of 3 years of experience are required; PE preferred. Benefits include a bus pass subsidy, flexible work schedule, competitive salaries and other benefits.

Come join our team, pursue your passion and work on great projects with exceptional clients. Visit our website www.kpff.com to see the types of projects you could be working on.

Send resume and cover letter to: KPFF Consulting Engineers, 1601 5th Ave., Suite 1600, Seattle, WA 98101, hrseattle@kpff.com

Structural Engineer

MLA Engineering, pllc seeks an engineer who has at least 4 years of experience designing buildings. Candidates who are motivated to use their technical, organizational, and communication skills and who work well

with a small group of professionals will welcome this opportunity. Our services include structural engineering for local, regional and national projects, designed with concrete, steel, masonry and wood. An upcoming construction management field assignment will also be available for an interested and qualified engineer.

MLA provides a flexible work schedule and environment that allows our staff to meet their professional and personal goals. We offer competitive compensation and benefits. Please mail or email your letter of interest and resume to Michael Leonard, Principal: mleonard@mleaengineering.com

MLA Engineering, pllc
1411 Fourth Ave, Suite 760
Seattle, WA 98101

PAO Structural

Peter A. Opsahl Structural Engineering is a young, dynamic and growing firm located on Capitol Hill, in Seattle. We offer a collaborative, flexible work environment and a competitive compensation and benefits

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Opportunities

package. Currently, we have the following full-time positions open:

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Structural Engineer

Candidate will have 4-5 years of experience, excellent written and oral communication skills, an excellent multi-tasking ability, an extensive experience in client communications and project management. Professional registration as a Structural Engineer in Washington preferred.

Senior Structural Engineer

Candidate will have at least 8-10 years of experience, excellent written and oral communication skills, an excellent multi-tasking ability, an extensive experience in client communications and project management. Professional registration as a Structural Engineer in Washington is required. Ownership opportunities in the Company will be available to the ideal candidate.

Please email hr@paostructural.com with a letter of interest and a resume.

Engineer

Seattle Structural

Seattle Structural PS Inc is a downtown Seattle firm looking for engineering candidates at all experience levels. Share in our vision of client-based service and hard working enthusiasm on diverse and challenging projects in the US and overseas. Join our collaborative staff of 10 in one of Seattle's most vibrant office towers, specializing in public, commercial, retail, industrial and specialty projects. We offer excellent benefits and stimulating work in a casual environment. Visit our website at: www.seattlestructural.com

Send resumes to: Pete Pawlak, PE 1420 Fifth Avenue, Suite 425, Seattle, WA 98101

206-343-3000 phone; 206-343-3013 fax; PPawlak@SeattleStructural.com



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Food for Thought: You Might be an Engineer if . . .



This comes from Stan Caldwell, who is currently a member of the ASCE Board of Directors and the president of the Building Security Council, as well as the former chair of the NCSEA Advocacy Committee.

You might be a (happy/productive/successful) structural engineer, if ...

You take considerable pride in being a structural engineer. In fact, you view structural engineering as one of the "highest callings" imaginable.

You understand that a typical structural engineer plays a larger role in public safety than nearly anyone else, and you strive to practice accordingly.

You view structural engineering as a career, not as a job. Moreover, you view structural engineering as a profession, not simply as an occupation.

You consistently place ethics, integrity, and quality above any and all business pressures.

You strive to team effectively with those in other professions and treat them as respected peers, but you make all structural engineering decisions independently.

You take considerable pride in the tangible, constructed results of your efforts.

For the most part, you truly love your work and wake up each day genuinely looking forward to going to your place of employment.

You typically work somewhat in excess of 40 hours/week because you want to, and you couldn't care less about "the clock".

You expect to be fairly compensated with a salary and bonus based on the value of what you accomplish, not with a wage based on the hours that you spend.

You understand and accept the obligation to eventually give something back to the profession of structural engineering through financial contributions, active participation in professional organizations, or some other means.

Best regards,

Stan R. Caldwell, P.E.



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