President’s Message

After about a year and a half of organizing the 2009 Northwest Conference, the Southwest Chapter board members are exhausted and relieved. Many of this year’s board members, me excluded, were involved with the planning of the Conference from the beginning and deserve the lion’s share of the recognition for their hard work! I was personally approached by several vendors, speakers, delegates and attendees praising our chapter for putting on the show that we did in spite of the dire economic times.

Now that the conference is over, we have many items on our agenda to address as we get back to business as usual. One of our tasks is to secure some programs for upcoming meetings, including our November meeting. We have quite a few ideas for presentations, but none that are secured beyond this month’s program about the Hood Canal Bridge Project. If you would like to make a suggestion and have a speaker in mind, please contact one of the board members with your idea.

Last month I mentioned that one of my goals this year was to establish a Young Members Forum (YMF) within the Southwest Chapter. After speaking with members from other chapters that were present at the Northwest Conference, I found that they are also working to start or have already begun YMFs. I will be passing around a sign-up sheet at this month’s meeting encouraging younger members to get involved with the forum. If you won’t be able to make the meeting, but you are still interested in joining, please e-mail me. With the establishment of the YMF, we will also be looking to create a leadership group, and thus looking for candidates to set up meeting and events. The YMF will be limited to Southwest Chapter members at the age of 35 or under at the start of September of this year.

Andrew Boileau, P.E., S.E.
andrewboileau@sitts-hill-engineers.com
(253) 474-9449
The most pressing problem facing structural engineers is a serious lack of understanding regarding the importance of their profession to society. The root cause of the problem is that many structural engineers do not know exactly what it is that they do for a living.

For years, when asked what I do for a living, I delivered a memorized monologue of oversimplified, generalized, and succinct statements outlining my role as “helping the architect’s and owner’s vision become a reality.” Regardless of whether I was speaking to a group of fourth graders, a civic organization, or a client, my explanation was always similar – vague and uninspiring. Frequently, my explanation included phrases like, “I design beams and columns.” On other occasions I would say, “Behind this wall is a structural column – and I designed it.” When I was feeling unusually bold, I would say, “I make buildings stand up!”

Each answer was technically accurate, but drastically missed the mark by not highlighting the importance of what I did. With explanations like these, it is no wonder that structural engineers are not the focus of popular television shows like doctors, attorneys, and law enforcement and rescue personnel.

Over dinner with a group of structural engineers of varying ages from around the country, the conversation, as it usually does, quickly migrated toward the usual laments: low fees, no respect, no clout, etc.. I have heard the list many times before – nothing new was added this time. Numerous problems about the profession were brought to light, and each participant attempted to diagnose the cause(s) and offer a remedy. Our efforts were to no avail. As usual, the conversation took a circuitous route, ending with an official synchronized shrugging of the shoulders and deep sighs indicating a general agreement that something needs be done, but nobody knew exactly what to do or where to begin.

In the midst of this woe-is-me session, it became apparent to me that the source of the problem (and its remedy) lies in the fact that structural engineers do not have a deep appreciation or understanding of the importance of their services to society. They do not understand how vital they are, as individuals and organizations. In that sense structural engineers are their worst enemy.

I do not believe that there is a particular demographic that can be blamed for the problem – it is evident among senior engineers and junior engineers; eastern, western, and central states; Ivy League graduates and state university graduates. The pandemic crosses all racial, ethnic, responsible, and no single group will be able to fix the situation. The only chance we have is to work together to increase the relevance of the structural engineering profession in society’s eyes.

Again, as a profession we really do not know what we do for a living. We have become confused into believing that we are, in some way, made up of a combination of various external elements that we call our job. But, we are not our educations, tables, books, or volumes of computer output. Nor are we our calculations, specifications, or drawings. Those things are valuable tools that help us move toward our primary goal: to save lives – period. To save lives is the fundamental purpose and reason why we exist as a profession.

Until we all understand this, structural engineers will always be relegated to sitting in the back seat, playing bit parts, and receiving what someone else deems “sufficient” compensation for our efforts. We can glamorize our profession through the written word and imply that engineers are smarter than other professions, but until we are willing and able to articulate firm statements about what structural engineers really do, we will not make any advancement, and may in fact decrease in stature.

If you want to have more respect, stop selling your services as “designing beams and columns.” Instead, emphasize that your role as the structural engineer is to save lives.

If you want to be appreciated, stop occupying the back row in meetings and sitting quietly. Instead, highlight the significance of the contribution that you are making to the project by being on the front line, contributing to the design and performance of the structure in an effort to save lives.

If you want higher fees, stop selling your
services as “the lowest bidder.” Instead, rehearse with your clients (and their clients) the fact that correctly designed buildings will reduce the chances of a catastrophic failure that may lead to someone’s death.

If all of this is too drastic a paradigm shift for you, unfortunately, you may be part of the problem. Our profession has become marginalized because it has become commoditized. It has become commoditized because there are too many “structural engineers” who believe that their primary purpose is to design beams and columns.

For the longevity, health, and honor of the structural engineering profession, I strongly recommend a moment of self-reflection. Before you punch one more calculator button, tap another computer key, or click a mouse, ask yourself this most important question: “What do I do for a living?” It is time that we quit seeing ourselves as merely designing beams and columns, and start recognizing and proclaiming that we save lives for a living.

Editor’s note: This article was taken from the Structure magazine September issue. It seems to be an appropriate topic this month for the young engineers of the SEAW Southwest Chapter. Even though it applies to businesses and companies, the article is very relevant to young engineers of this profession.

Our chapter president, Andrew Boileau, is calling for young leaders of this chapter to step up and take on responsibilities. Keep this article in mind as you contemplating whether or not you should get involved in SEAW. As a young engineer, you have so many opportunities to make a difference and a chance to shape this profession. You have a responsibility to yourself, the profession and society, so use this opportunity to engage in the local chapter and make a difference.

The only last thing to note is take pride in what you do and hold yourself to a higher standard. This is what will separate you, as a leader, from the rest.

Webinars

October 29, 2009

Better Base Plate Performance by Design

Part of the successful performance of any steel structure is based on the correct design of the base plate and embeds. The base plate is an essential part of every structure and is crucial to its performance during a seismic or wind event. Little research has been completed and therefore little is known about the correct modeling and performance of base plates and embeds. This presentation will take some of the mystery out of the design of these deceptively simple, often overlooked, frequently marginalized, and yet crucial structural elements to minimize the chance of a change order or catastrophe.

Barry Arnold is a Vice President at ARW Engineers in Ogden, Utah. He is a Past President of the Structural Engineers Association of Utah (SEAU), serves as the SEAU Delegate to NCSEA, and is a member of the SEAU and NCSEA Structural Licensing Committee.

This course will award 1.5 hours of continuing education. Cost: $250 per internet connection. Several people may attend for one connection fee. There will be a $5 fee for each continuing education certificate requested. To register, click here.
The Engineer’s Calculations

During the conference, I had learned that structural engineers get very excited over something called structural detail guide wheel. So when I came across this article, it seems rightly appropriate to include this for your enjoyment. Hopefully, this article will give you as much excitement as the structural detail guide wheel.

Faithful Renovation – Another 100 Years

This article retold the renovation design process of a historic treasure that is the largest wood A-frame structure in the world located in Yellowstone National Park. The design teams worked to bring the inn back to its original character despite the harsh environmental effects on the building.

Why fiber Reinforced Polymer (RFP) Structural Shapes Have Become a Material of Choice

In today’s world of focus on structures that can be erected easily and quickly, provide a long service life, and generate fast economic pay-back, FRP structural shapes, plate and building products are rapidly gaining recognition. Structural engineers, as well as architects, constructors and owners, are making pultruded FRP shapes a material of choice on many projects. No longer considered an proven, "exotic" alternative, FRP shapes have very high strength-to-weight ratios and extended life cycles when compared to conventional materials. These materials can improve constructability, lower field installation costs, enhance serviceability and sustainability resulting in less maintenance and will

CSI

October 1, 2009

“Building Envelope: It is more than Good Looks”

The attachment announces Mt. Rainier Chapter CSI’s October 2009 Chapter Dinner Meeting. This month’s program will be “Building Envelope: It is More Than Good Looks”, presented by Rob Bombino from RDH. We’ll be meeting at the LaQuinta Inn & Suites at 1425 E. 27th Street (Portland Avenue and I-5) in Tacoma.
The Silver Lining of the 2009 Northwest Conference

This year's Northwest Conference and Tradeshow is now at an end. The vendors have packed up their booths and the attendees have made their way back home. From purely a monetary standpoint, the conference may be seen as something short of a worthwhile venture. However, putting those numbers aside, there was much to salvage from the event. Because of the low turnout in this rough financial climate, attendees were able to engage in more intimate conversations with vendors and speakers alike. There were moments when the seminars felt less reminiscent of our days spent in academia and more like catching up with old friends. The vendors seized the opportunity to have more lengthy discussions with tradeshow goers that are difficult to come by in a packed house.

We would like to thank the Mayor of Tacoma, Bill Baarsma for interrupting his schedule to come down and give a welcome address to the attendees. Also, special thanks go to Michael Sullivan of Historic Tacoma for his keynote presentation on the history of the city. Mr. Sullivan's delivery earned him praises from all. One vendor specifically, who had been all over the country with his exhibit for many years, pointed out that he had never heard a speech that had kept the audience so intensely engaged. Both gentlemen were very busy at the end of last week with the matters involving the demolition of the historic Luzon Building two blocks away.

Hotel Murano, as it turns out, was a fantastic venue for the event. The food was wonderful, the hotel was centrally located and easy to find, and the hospitality was superb! We look forward to working with the staff on future events.

Andrew Boileau, P.E., S.E.
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(253) 474-9449
Canam Steel Corporation

Epic Metals Corporation

Delegates Sue Frey (SEAO), Sarah McClendon (SEAI), and Jenny Carlson (SEAO)
Southwest Chapter

Michael Sullivan, Artifacts
Keynote speaker

(Image Above and Below)
Thursday night dinner

(Image Above)
Mark and Patty Anderson
(SEA SW Chapter)

(Image To right)
Subhash Goel Technical Session
AISI Publishes Cold-Formed Steel Design Manual


The material contained in the new manual provides the latest design information for conformance with AISI S100-07, as well as new improvements and additions.

Resources

AISC has gathered all of its free technical resources into one place - freePubs! From Specifications to Modern Steel Construction articles- if it's free, you'll find it here. Click on the logo below or here.

AISC Online Interactive Maps

Two new interactive mapping applications, the Washington Interactive Geologic Map and the Earth Resource Permit Locations map, have been added to the Washington Geologic Information Portal on the Internet.

The Washington Interactive Geologic Map provides access to geologic mapping at several scales, earthquake and tsunami hazard mapping, and geothermal resource information. The Earth Resource Permit Locations map provides access to oil and gas exploration drill hole locations and surface mine reclamation permit sites.

Both applications include base information, such as shaded relief, aerial photography, quadrangle boundaries, highways, rivers, and other geographic reference features. Layers will be added to both applications periodically, as new datasets are prepared.

These applications are available here.

SEAW SW CHAPTER
2009-2010 Board of Directors

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The SEAW Southwest Chapter newsletter is printed monthly from September through May. Circulation is approximately 150 members & related organizations. Articles, letters and announcements are accepted through the SW Chapter office at PO Box 111480, Tacoma WA 98411. Advertising Rates: Help wanted $25; Goods/Services and inserts $50. Items received by the 30th of the month will be considered for publication in the following month’s issue. For information, contact the SW Chapter at 253–382–2936 or email seawswchapter@comcast.net
“Building Envelope: It is more than Good Looks”

Speaker: Rob Bombino of RDH

October 1, 2009
Dinner Program Presentation

Learn how the envelope is suppose to work

Learn the key rules that every successful building envelope obeys

Learn which questions to ask to get the right information and installation for your building envelope components.

Professional Development Talk:
3:00 to 4:00 pm
“Construction Insurance: Why is it so Important and How to do it correctly?”
Michael Highsmith of Arthur J. Gallagher Insurance

Tech Talk:
4:10 to 5:10 pm
“Basics of Roofing and Flashing”
George Faller, RCI, RRO of Olympic Associates

La Quinta Inn & Suites
1425 E. 27th Street
(Portland Avenue & I-5) Tacoma
**Dinner Presentation:** Rob Bombino, RCI, RRO of RDH has many years of experience in designing, executing, and investigating the building envelope. His presentation will provide a practical guide to what is effective and economical, and how to get your design built correctly. This session is being registered to obtain 0.1 CEU from CSI CEN and 1.0 HU from AIA.

**Professional Development Talk:** Michael Highsmith of Arthur J. Gallagher Insurance will talk about the need for construction insurance, its benefits, explain the terminology, and what questions you should be asking to get the coverage you want and need. This session is being registered to obtain 0.1 CEU from CSI CEN and 1.0 HU from AIA.

**Tech Talk:** “Basics of Roofing and Flashing” by George Faller, RCI, RRO of Olympic Associates
George has many years of experience designing and inspecting roofs and flashing. This presentation will show you how flashing and roofing works, and what questions to ask of your consultant to get the results you want. This session is being registered to obtain 0.1 CEU from CSI CEN and 1.0 HU from AIA.

**Junior Professional Project Talks:**
Kellie Kaiser of McGranahan Architects will do a presentation on Tacoma School District’s replacement of Hunt Middle School

**Product Displays:**

**Dinner Cost:** $35.00 Members/ $40 Non-Members

**Reservations:** Guests are always Welcome
Please RSVP by 5:00 p.m. on Tuesday, 09/29/09 to Bob Kenworthy by phone or email
Phone: (253) 931-4904  Email: bkenworthy@auburn.wednet.edu
Or
Register on line at [www.csimtrainier.org](http://www.csimtrainier.org). Select "Events" or "Register". You Can Register On Line and Pay by Credit Card through PayPal or You Can Register On Line and Pay by Cash or Check at the Meeting.

If you RSVP and then find that you will be unable to attend, please cancel by 5:00 p.m. on Tuesday, 09/29/09. No shows will be billed to cover charges by the restaurant.

**Meeting Schedule:**

3:00 to 4:00 pm  Professional Development Talk  
4:10 to 5:10 pm  Tech Talk  
4:30 to 6:00 pm  Product Displays  
5:00 to 6:00 pm  Social Hour / Gathering Time  
6:00 to 6:50 pm  Dinner  
6:50 to 7:05 pm  Design/ Construction Talks  
7:15 to 8:15 pm  Dinner Program Presentation

**Next Tacoma Chapter Meeting:** “Ethics in Troubled Times” Jeff Van Duzer, Dean of Business & Economics at Seattle Pacific U, November 5, 2009

**Next Olympia Lunch Meeting:** “Surviving a Public Bid” Sandra Matson of Matson Carlson on November 13, 2009 at Noon at Rambling Jacks.
Construction Document Education Program
“From the Idea to Facility Operations”

Construction Specifications Institute (CSI) Continuing Education

Construction Document Technology Class
11 weeks, 11 classes starts Tuesday, October 6, 2009, 4:00 to 5:30 pm

You do not have to be a member of The Construction Specifications Institute to take this class. You are eligible for AIA CES and CSI CEN learning units for taking this course.

The Construction Documents Technology (CDT) Education Program teaches a thorough overview of the design and construction process. It promotes an understanding of contractual agreements, roles, responsibilities, drawings and specifications, and construction delivery systems and how to consistently develop organized, effective construction documents.

This program is based on CSI’s Project Resource Manual (PRM), which is the result of collaboration with American Institute of Architects (AIA), Associated General Contractors (AGC), and National Society of Engineers (NSE). The goal of the CSI’s CDT certification is to have construction documents that present information in a thorough and consistent manner, which results in better quality of the construction process from procurement through completion of construction.

Apprentice Architects preparing for the Architect Registration Exam (ARE) and in the IDP 2.0 will receive 5 training units from NCARB for passing the CDT exam. The CDT Class will give a thorough understanding of the principles and requirements of the design / construction including specifications. Experienced Architects, Owners, Contractors, and Manufacturers Representatives will benefit with a greater understanding of these principles and standards.

The Mt. Rainier Chapter will host an eleven week seminar class on the CDT Program starting Tuesday October 6, 2009. We will have a study class for all who have registered for the CDT exam being held online December 18 - 19, 2009.

Kit Burns AIA, CSI, CCS, CCCA has 31 years of experience in the design and construction of educational facilities. In the past he has worked on new and remodel projects of all sizes. These include K-12 projects in the Puget Sound area such as Kentlake High School, Auburn Mountainview, Interlake High School, and many elementary and middle schools. He has been teaching the CDT class for the past four years. The lessons learned in the design and construction of these and other projects will be shared as part of the class. There will be guest instructors whose knowledge and expertise is as varied and extensive as Kit’s.

Class and Study Sessions:

Where: Clover Park Technical College - Lakewood
Contact: Kit Burns - BLRB Architects
Phone 253.627.5599 Fax 253.572.5167
Email: kburns@blrb.com
Mt. Rainier Chapter

The Construction Specifications Institute

CDT Class – Fall 2009 Registration

When: Tuesdays – beginning on October 6, 2009
11 weeks of classes

Time: 4:00 to 5:30 pm

Where: Clover Park Technical College

Building 19, Room 203 Mechanical Engineering
(second floor)

Prior to First Class

Send Class Registration Form to:

Kit Burns
BLRB Architects
1145 Broadway Plaza, Suite 1200
Ph: 253.627.5599  Fax: 253.572.5167
Email: kburns@blrb.com

Class Fee: Payment on First day of class

Make check payable to: CSI Mt. Rainier Chapter

| Bates & Clover Park Student: | Free |
| CSI Member taking Exam: | $75.00 |
| CSI member not taking exam: | $100.00 |
| Non-CSI Member taking Class: | $200.00 |

Amount Paid: ________________________________

Name: ________________________________
Company: _______________________________________________________
Address: _______________________________________________________
Phone: _______________________________________________________
Fax: _______________________________________________________
E-Mail: _______________________________________________________

Note: Class resource material is the CSI Project Resource Manual (PRM). It is available from CSI at www.csinet.org. A limited number may be available from Puget Sound Chapter CSI at a discount. Contact Brian Keil – 800.669.1015x301.

Register for CDT Exam with CSI Institute Deadline for Early Registration is October 15, 2009;
Final Registration November 15, 2009 An application form can be downloaded from www.csinet.org and registration made on-line or Fax application form with credit card information to: 703.684.8436 or Mail the application, along with a check or money order payable to The Construction Specifications Institute, to: The Construction Specifications Institute, P.O. Box 85080, Richmond, Va 23285-4374

CDT Online Exam Dates:
December 18 - 19, 2009
Exam Code: 09CECPTCW

CDT Exam Cost:
early bird $235 CSI member $370 non-member
Student $105 Final $295 CSI member $430 non-member
Friday, October 9, 2009
8:30 am to 3:55 pm at
Tacoma Country & Golf Club
13204 Country Club Drive SW  Lakewood, Wa

Two Education Tracks with 4 Sessions each
These sessions are being registered for CEU’s from
CSI CEN and LU’s from AIA CES

Lunch Keynote Speaker
Arun Raha, Executive Director of Washington State
Economic and Revenue Forecast Council

Education Sessions include:
Greg Markling, FCSI, CCCA, CCS, LEED AP: “Writing
Effective LEED Specifications”
Steve Pinnell: “Analyzing Contractor Delay Claims”
Paul Casey, AIA: “Strategies for Limiting Wall
Water Damage”
Buildings 30% more Energy Efficient”
OSPI: “High Performance Schools: How to do it”

Space is Limited to first 60 Registrants
Cost: Early Bird $170 before September 15  After $195
Contact: Bob Kenworthy, Auburn School District  253-931-4904
bkenworthy@auburn.wednet.edu

Hosted by Mt. Rainier Chapter
www.csimtrainier.org
<table>
<thead>
<tr>
<th>Track A</th>
<th>Track B</th>
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<tr>
<td>7:30 - 8:30 am</td>
<td>Registration and Continental Breakfast</td>
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<td>8:30 to 9:30 am</td>
<td>Session 1A</td>
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<td>Brian Thompson, PE</td>
<td>Patricia Jatczak of OSPI</td>
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<td>&quot;How to get the Fire Suppression System you want&quot;</td>
<td>&quot;High Performance Schools How to do it&quot;</td>
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<td>9:30 - 10:00 am</td>
<td>Break &amp; Product Displays</td>
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<td>10:00 - 11:30 am</td>
<td>Session 2A</td>
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<td>Greg Markling, FCSI, CCA, CCS</td>
<td>Martha Gillis, CBO</td>
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<td>&quot;Writing Effective LEED Specifications&quot;</td>
<td>&quot;IBC Chapter 7 - Fire Resistive Construction and How It Relates to Exiting&quot;</td>
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<td>Break &amp; Product Displays</td>
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<td>Lunch 12:00 - 12:30 pm</td>
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<td>Arun Raha, Executive Director</td>
<td>Washington State Economic and Revenue Forecast Council</td>
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<td>1:30 - 1:45 pm</td>
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<td>1:45 to 2:45 pm</td>
<td>Session 3A</td>
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<td>Paul Casey, AIA</td>
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<td>&quot;Strategies for Limiting Wall Water Damage&quot;</td>
<td>&quot;Analyzing Contractor Delay Claims&quot;</td>
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<td>2:45 - 2:55 pm</td>
<td>Break &amp; Refreshments</td>
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<td>2:55 to 3:55 pm</td>
<td>Session 4A</td>
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<td>Greg Markling, FCSI, CCA, CCS</td>
<td>Luke Howard, WSU Energy</td>
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**Friday, October 9, 2009**

8:30 am to 3:55 pm at

Tacoma Country & Golf Club

13204 Country Club Drive SW  Lakewood, Wa

**Space is Limited to first 60 Registrants**

**Lunch Keynote Speaker**

Arun Raha, Executive Director of Washington State Economic and Revenue Forecast Council

**Registration:**

Early Bird before September 15: $170
After September 15: $195

Register on line at  [www.csimtrainier.org](http://www.csimtrainier.org).
Select "Events" or "Register".
Use PayPal to Pay by Credit Card

For Information or Questions Contact:
Bob Kenworthy,  Auburn School District
253-931-4904  bkenworthy@auburn.wednet.edu

Hosted by Mt. Rainier Chapter
[www.csimtrainier.org](http://www.csimtrainier.org)