

SEATTLE SECTION NEWSLETTER

January 2014 Volume 49 No. 5

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October 1, 2012 - September 30, 2013

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206-903-3371

UW/SEATTLE U CONTACTS

Amy Plunkett, UW Student Chapter Co-President amaznamy@uw.edu

Devon Becker, UW Student Chapter Co-President dmb33@uw.edu

Chris Padin, Seattle U Student Chapter President padinc@seattleu.edu

KITSAP BRANCH OFFICERS

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360-850-5319

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360-733-5760

BOEING BRANCH OFFICER

Vinny Avendano, President

vinicio.p.avendano@boeing.com

WEBMASTER

Ann Bryant

seattleasce@yahoo.com

ASCE Seattle Section Meeting

Wednesday, January 8, 2014

Place: McCormick & Schmick's Harborside,

1200 Westlake Ave. N., Seattle, WA 98109

Cost: General Admission \$40

Student or Unemployed \$15 Late General Admission \$45 Late Student or Unemployed \$20

Meal: Meat or Vegan entrees are available.

5:30 Social Hour

6:30 Dinner

7:30 Program

Please make your reservations on or before Monday, January 8.

Register online here

To pay at the door with cash/check, select "Pay at Door."

For assistance with online registration, please contact House and Hospitality at seattleascereservations@gmail.com

Direct questions or comments regarding meetings to Section President Perry Cole at seattleascepresident@gmail.com

Program: Un Puente para Prosperidad (A Bridge for Prosperity)

Brooke Shore, a Project Engineer from the Seattle area, spent 3 months volunteering with Bridges to Prosperity (B2P) in Nicaragua and led the construction of a footbridge in the community of Ducuale Grande, Condega, Nicaragua. She will discuss B2P and their strategy to provide innovative designs using appropriate technology, education through community engagement, and inspiration for community leadership through international collaboration. She will also talk about her experiences in Nicaragua and the challenges of building a bridge in a mountain village in northern Nicaragua.

Rural community members in less developed countries often live in a walking world. When the rivers swell, walks to school, work, or the doctor can become life threatening without a bridge to cross. Those

See January Program on page 3

The deadline for the February 2014 issue is 5:00 p.m. Friday, January 24, 2014

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Your newsletter editor is: Todd Crandell seattleASCEnews@gmail.com Phone: (206) 459-2250

#### **CHANGE OF ADDRESS:**

All change of address information (including your e-mail address for the newsletter) should be provided directly to ASCE at <a href="https://www.asce.org">www.asce.org</a> or: 1801 Alexander Bell Drive, Reston, VA 20191-4400.

The Seattle Section will receive your updated information from ASCE.

AMERICAN SOCIETY OF
CIVIL ENGINEERS, SEATTLE SECTION
http://www.seattleasce.org

Volume 49 No. 5, January 2014 Published 10 times a year

### ASCE SEATTLE SECTION NEWSLETTER ADVERTISING RATES

#### **Employment Ads:**

Employees Wanted: 75 cents per word

Seeking Employment: First 75 words free 75 cents per each additional word

**Display and Business Card Ads:** Contact the editor at

seattleASCEnews@gmail.com for pricing and format requirements.

#### **President's Column**

#### By Perry Cole, Seattle Section President

Welcome to 2014. Hope it is going well for you thus far! In the coming few months we are going to have some fantastic dinner meetings and a few changes. Ms. Brooke Shore is going to start us off with her presentation about her experiences building a footbridge in Nicaragua with the Bridges to Prosperity organization. There is more information elsewhere in this newsletter. From Nicaragua we are heading off to Canada as our



February meeting speaker is from the University of British Columbia. The Geotechnical Group is hosting our joint meeting, so watch for the date and time. The March meeting is our annual joint meeting with the Structural Engineers Association of Washington. The topic keeps us on our international tour, this time off to Panama for a presentation on the new Panama Canal work. The SEAW is hosting, so watch for the date and time. For our April Section Meeting we are going to keep the theme of change going; we are hoping to try a noon lunch meeting. This is our annual joint meeting with the Water Resources and Environmental Committee and the topic will be the Pineapple Express and flooding in Western Washington. We are hoping to meet at the Corps of Engineers' new, and award-winning, offices. For June we are meeting at one of the local universities for the student paper presentations, with a more informal meal. We plan to close out the year back where we started, with an evening meeting at McCormick & Schmick's. We will present the Outstanding Engineering Achievement Awards at the meeting. It is time to start thinking about your local projects to nominate; more information will be available early in the new year. Younes and Gene are doing a great job of creating an interesting and diverse set of topics and venues. Please come join us for a Section meeting.

See President's Column on page 3

#### **Bio for January 8 Speaker**

Brooke Shore is currently a project engineer for PCL's Transportation Infrastructure Group in Seattle, Washington. Brooke has over 10 years of construction, estimating, and engineering design experience on transportation and hydro projects. Brooke received her bachelor of science in civil engineering from the University of Utah in 2002 and has been a licensed professional engineer in the state of Washington since 2008. She continues to volunteer her time with Bridges to Prosperity (B2P) serving as a Technical Mentor for the Portland State University chapter of B2P.



#### President's Column (continued from page 2)

And now for something completely different: a brief description of who we are; how we fit in the larger ASCE organization; and a question about where we may be going. We are in Region 8; Region 8 is one of 10 ASCE geographic units and includes Alaska, Arizona, Hawaii, Idaho, Montana, Nevada, Oregon, Utah and Washington. We are most of the western U.S. except for California. There are 12 Sections and many more Branches, Younger Member Groups and Student Chapters. Washington is the only state in the Region that has multiple Sections - Seattle, Tacoma/Olympia, Inland Empire, and Columbia. Of these, only the Seattle Section has multiple Branches - North, Kitsap, and Boeing (a non-geographical Branch). Additionally, Washington is one of very few states that have multiple Sections. At the last meeting of the Region 8 Board of Governors, there was a discussion of creating a Washington Section with seven Branches (Seattle, Tacoma/Olympia, Inland Empire, Columbia, North, Kitsap, and Boeing). I expect this discussion to continue throughout 2014, and possible beyond. If you have any thoughts, suggestions, or concerns regarding this, please let me know and I will provide them to the Board of Governors at their next meeting, January 30th.

Thanks,

Perry Cole

**ASCE Seattle Section President** 

#### January Program (continued from page 1)

who survive on the least often do not have sufficient infrastructure servicing their communities. Safe and maintained trails and footbridges are necessary to live healthy and productive lives. Bridges to Prosperity is a non-profit organization that provides isolated communities with access to essential health care, education and economic opportunities by building footbridges over impassable rivers. B2P has built 130 bridges in 16 countries from East Timor to Zambia and has 32 more in progress.

#### Seattle Section Exhibit at Museum of History and Industry

The Seattle Section has developed an exhibit related to the history of civil engineering in the region on the occasion of the ASCE Seattle Section Centennial. The exhibit began at the Museum of History and Industry (MOHAI) in their Community Gallery on November 23 and continues until January 19. The gallery also features other local civil engineering projects and a children's play area with building blocks and kid-size safety vests.

Associated with the exhibit will be a Saturday session of hands-on, child-focused activities and demonstrations in the museum's Family Lab. This event will be hosted by the Seattle Section K-12 Outreach committee on January 18 from 11:00 a.m. to 2:00 p.m.

MOHAI is located at 860 Terry Avenue N, Seattle, WA 98109. The hours are 10:00 a.m. to 5:00 p.m. daily and open until 8:00 p.m. on Thursdays. First Thursdays at MOHAI are free.

#### **University Mentor Night Help Needed**

**Location:** Seattle Central Community College (SCCC), 1st floor Atrium of Science & Math Building, 1701 Broadway, Seattle

Time: Thursday, January 30th, 6:00 p.m. to 8:00 p.m.

If you are interested in being a mentor for a night for college students, the Puget Sound Engineering Council (PSEC) needs your help! The purpose of the mentor night activity has been to bring as many practicing engineers together with as many students as possible. We are trying to inspire the students, most of whom are freshmen and sophomores as well as high school seniors, toward a career in engineering. The mentor night allows engineers to relay

their experience in the profession and answer questions posed by students. The event will be kicked off with a brief introduction of the engineering disciplines represented by the volunteers, followed by an open forum where the students visit various tables and converse with the mentors. Mentors are encouraged to bring a sample of their work that will fit on a 30" X 30" table top for potential discussion with the students.

If you are interested in participating please sign up online at <a href="http://www.eventbrite.com/e/2014-seattle-central-community-college-mentor-night-tickets-9919084248">http://www.eventbrite.com/e/2014-seattle-central-community-college-mentor-night-tickets-9919084248</a>.

Thank you for your support.

#### **Employment Notices**

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



#### Engineer II/III - Seattle, WA

The Engineer II/III is responsible for planning and conducting structural inspection work requiring good judgment in evaluation, selection, and implementation of standard techniques, procedures and criteria.

### **TYPICAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

- Able to perform moderately difficult engineering computations and estimates for design engineering projects.
- Able to prepare complete engineering plans or reports.
- Works directly with clients.
- Responsible for project schedules and timely completion of projects.
- Ability to be responsible for moderately difficult engineering projects in field or office in accordance with plans and specifications.
- Ability to supervise the work of entry-level engineers, drafters and administrative staff.
- Ability to make independent decisions within a general framework.
- Plans, schedules, conducts, and/or coordinates detailed phases of assigned project work
- Makes design recommendations and/or adaptations.
- Uses computer assisted engineering and design software and equipment to prepare engineering and design documents.

- Takes an increasingly responsible role in the management of the projects.
- Will act as the Project Manager/Team Leader on small projects.
- Assists in preparing project scoping and costs for proposals.
- Represents Collins in some project meetings.
- Be active in technical societies.
- Be available to attend meetings or events outside of normal working hours.
- Knows how to perform his/her duties safely.

#### **EDUCATION and/or EXPERIENCE:**

Bachelor's degree in Civil Engineering from an accredited four-year university, plus appropriate continuing education and a minimum of 5-7 years of experience in structural inspection, design, or evaluation of structures, including bridges, transportation structures, and/or waterfront structures. Short-term field work assignments with up to 50% travel should be expected. Open Water Dive Certification a plus or the ability to obtain immediately. Commercial Dive certification and P.E. license preferred. Completion of FHWA-NHI Course 130055 - Safety Inspection of In-Service Bridges a plus.

For full Job Description or to apply, please visit <a href="http://ch.tbe.taleo.net/CH11/ats/careers/requisition.jsp?">http://ch.tbe.taleo.net/CH11/ats/careers/requisition.jsp?</a> org=COLLINSENGR&cws=1&rid=78

Employment ads continued on page 5



#### Multimodal Transportation Planner with Transpo Group

Location: Kirkland

#### **Position Summary:**

One of our senior principals would like to retire in 2015 and be able to transition his current client base to this high impact achiever who can follow in his footsteps. This role will be responsible to help prepare multimodal transportation plans for public sector clients, attend meetings, make presentations, and be heavily involved in developing marketing proposals.

#### 7 years minimum experience

#### **Required Qualifications:**

- 4 year degree in a job related field
- Experience developing a variety of multimodal transportation plans
- Experience making presentations to planning meetings
- Able to direct the work of others
- Skills and desire to be successful in helping develop new business
- Understanding of transportation/land use connections

#### **Additional Qualifications:**

- AICP or PE
- Background in transit planning and/or nonmotorized planning

Transpo Group <a href="www.transpogroup.com">www.transpogroup.com</a> is a leading, award winning civil engineering firm that offers full-spectrum transportation planning and engineering solutions. Corporate headquarters are located in Kirkland, WA. and our international headquarters are in Abu Dhabi, UAE.

We are constantly seeking the best and the brightest talented professionals to join our team. If you have a passion for what you do and can demonstrate a high level of customer service, we want to hear from you! Please submit your resume online to <a href="https://www.transpogroup.com">www.transpogroup.com</a> or apply directly to this hyperlink:

http://www.pcrecruiter.net/pcrbin/apply.asp? r=GxVUWSat%2bz5MtDL% 2bj1AenxY4bkHSnHxyQksMoiGs%2breVAdfmcJ% 2fp2oArEfdX72Py6%2bLRiaen

## Reach over 2,000 Engineering Professionals

Post Your Employment Ad in this Newsletter and on the Seattle Section Web Site

See advertising details on page 2

#### ASCE Seattle Section Executive Board Meeting Minutes for November 13, 2013 Meeting

#### Attendees:

Perry Cole

Liz Korb

Sam Swartz

Shane Binder

Stefanie Herzstein

Jessica Aguilar

Lisa Harbert

Doug Knapp

Tim Lane

Caleb Marshall

Meeting called to order at 4:35 pm by Perry.

One slight change to old minutes is spelling of Nancy Burson. MOTION to approve agenda brought by Perry and passed unanimously.

#### **Old Business**

-None to report

#### Treasurer's Report

- Current with AELC.
- Have not received funds from Centennial yet.
- National wants taxes complete by December.
- Correct mistake of budget has two 63D items for convention expenses.
- MOTION to approve treasure's report brought by Perry and passed unanimously.

#### **Membership Report**

- 23 new members.
- Year to year, we're about the same.
- Membership is localized in downtown Seattle followed by Redmond and Bellevue on Eastside.
- Constant contact lets you do a survey for membership.

#### **Standing Committees**

- Rebuilding Together:
  - Tim Lane and Caleb Marshall want to make sure that Rebuilding Together continues.
  - Goal is to help low income and veteran individuals and families.
  - Spring rebuilding day is flagship event.
  - Want to continue relationship and help with fundraising.
  - Board changed budget to \$1,500 from \$4,000 in previous years. Rebuilding Together is asking for \$2,500.
  - Looking for other sponsorship opportunities from other groups.

#### • Legislative:

- Larry Costich invited to go to AELC Leadership meeting tomorrow. Shane is attending.
- PSEC group is seeking nominations for engineering of the year award.
- History and Heritage
  - Exhibit up at MOHAI.
  - Two kids days- Nov 23 and Jan 18 from 11AM-12PM.
  - Email blast announcing these two items.
  - Additional people that want to receive newsletter should go to website.
  - Centennial exhibits need to be donated or stored. It is preferred to keep them on display or storage. YMF has potential storage unit. The Pioneer Association has volunteered to store.
     Gene has volunteered to store them at SPU. Perry will ask Cindy how large the display is.
- Legislative fly in
  - National wants someone chosen by December 2.

#### **Branch Reports and Action Items**

- North branch is headed to WSBL.
- Boeing Branch is speaking at next meeting.
- Columbia section had 76% in favor of Washington section. All other states in region have a state section.

#### **Technical Committees and Action Items**

- Geotechnical group
  - The Geotechnical Group held its monthly dinner meeting on October 24. Mark Koelling of Hayward Baker gave a presentation titled, "Geotechnical Engineering and Construction in Australia and New Zealand."
  - This month started off with a short course presented on November 7, title, "Design and Construction of Steel Sheet Piling Structures",
- Urban Development & Transportation:
  - None.
- Water Resources
  - In October the Water Resources Committee had Katy Vanderpool from King County's River and Floodplain Management Section present about the King County Flood Management Plan Update.
- Ports and Harbors
  - In October the Ports and Harbors hosted a monthly meeting in downtown Seattle. The

See November Minutes on page 7

#### November Minutes (continued from page 6)

speaker was Tripp Howard of KPFF discussing the design and construction of 520 pontoon mooring anchors. Attendance was around 35.

- Centennial Committee
  - None.
- SEAW
  - None.
- Sustainability
  - Amanda would like to add to website. Ask Ann Bryant to add.
  - Amanda requesting WSBL (workshop for section and branch leaders) funding. No budget at this time but it is strongly encouraged for her to seek other means.
  - Trying to do presentations with companies or groups. James has had discussed with Diana Hasegan to create a summary proposal to send out.

#### **YMF**

- Has a new board, which is very enthusiastic.
- Sponsored a well-attended tour of 520 Bridge.
- Working on popsicle stick bridge competition. Donation forms have gone out. Lots of interest from schools.

- Soccer team is going well.
- Winter retreat collaborations potentially North Branch or Portland.
- Shane to set up conference call to discuss webmaster roles.
- Holiday party in early December.

#### **Upcoming events**

- WRYMC on January 30th and January 31st.
- WSBL January 31st and February 1st.
- Board of Governor's and Assembly meet on January 29th and January 30th.
- WSBL on January 31st.
- Stefanie and Perry and branch leaders are attending.

#### Miscellaneous

- Call for Governors from Doug and Christina. General consensus that Board would support Ron for governor.
- Life members ceremony in January- 18 life members.

#### **Old Business**

• None

Next board meeting: December 11, 4:30pm.

Meeting called to a close at 5:44pm.

#### **New Member Report**

Based on the new membership information from the ASCE national database, the following members enrolled to the Seattle Section between November 7 and December 5, 2013.

Mans ThurfjellHaichuan DengNammy Khai TranRiley SmithTimothy John PeruchiniRatanak KhutChristian MeinhardtLong ChenRyan Joseph Gutierrez

George Nick Gimas Nasser Abdulazim Marafi Matt Scott Hazenberg
Debra Carol Overbay Joe Maddock Ellingson Chelsea Ann Khang
Lim Sam Adiputra Devon Montgomery Becker Bradley Philip Gaylor

Brian Wilson Alex Grant Jerald Lim

Harry Enrique Williams Sara Grace Salmonsen David N Pogreba
Yixin Mao Nicholas Daniel Eagan Derrick Quang-Khoi Vu
Roilly McClung Royanna Kharragi Teographydraith

Reilly McClung Roxanna Kharrazi Tsenguun Tsogbadrakh
Kyle Lukacovic Wai Lok Chung Richard E Punt

Sarah McCrea Ryan Gordon Johnson Dylan Ramon Nordstrom

Brian Frederick West Chris D Svolopoulos Park Minjae

Amy Elizabeth Riley Chris Cecil Rhodos Kathryn Ann Debenedetto Samiah Rizu Connor Jeffrey Lester Lok Hin Lee

Hin Kei Wong William Arthur King Jonathan Karta
Euan Patrick Estelle Trevor Keenan Ralph Jean-Luc Jackson

Euan Patrick Estelle Trevor Keenan Ralph Jean-Luc Jackson
Haixlao Yu Liang Shuang Hyung Ju Kim
Logan Lamaria James Elaheh Daneshnia

Mauricio R Stoppo

Kok Wong

#### **Volunteer Judges Needed for Future City Competition**

Seattle Section members are encouraged to consider serving as a judge in the Future City competition. IEEE (Institute of Electrical and Electronic Engineers) sponsors the local Future City competition as part of Engineers' Week. The competition is open to teams of middle school students (6th, 7th and 8th grades). The winning team from this year's event will win an expenses-paid trip to Washington, D.C., to participate in the national competition.

There are four aspects to the competition. This is designed to promote teamwork, increase awareness of the need for infrastructure in cities, expand the definition of success beyond "just getting the right answer," and expose students to engineering-oriented career possibilities. All this, plus the competition itself is a challenging and rewarding experience for the students!

#### Each team:

- a. simulates their city using SimCity software, and runs the simulation for a specified interval. Criteria for judging include city layout, energy, transportation, and recreation.
- b. builds a physical model of their futuristic city (or a portion of it).
- c. writes a narrative about their city detailing a futuristic concept which is part of its design, and an essay on a given topic. This year's essay topic is "Tomorrow's Transit: Design a way to move people in and around your city."
- d.makes an oral presentation about their city.

Judges are needed for two areas: city narratives and essays; and physical models and oral presentations. Following is a brief description of each, and more information is at: <a href="http://www.futurecity.org/rules-rubric">http://www.futurecity.org/rules-rubric</a>

#### City narratives and essays:

• Expectations: Read and review 8 to 10 essays (up to 1,000-word research essay) and City Narratives (up to 500 words describing the city's design features and key attributes), and score them using the rubric provided. Scores are based on such aspects as how fully the engineering feasibility plan is described, how well-organized and well-written it is, and whether it is a creative solution.

- Time commitment: Several hours (flexible, between about January 14 and 23).
- Location: Flexible. (You can sign up to judge these no matter where you live.)

#### Physical models and oral presentations:

- These are presented on the day of the actual competition, which is Saturday, January 25.
- Expectations:
  - View and judge teams' physical representations of their cities using the rubric provided. Interact with student teams in a positive, encouraging manner. Criteria include creativity, accuracy and scale, infrastructure, moving part, attractiveness, and use of recycled materials.
  - View and judge teams' oral presentations about their cities using the rubric provided. Interact with student teams in a positive, encouraging manner. Criteria include delivery/presentation, knowledge, and cooperation.
- Time commitment: Several hours between 7:30 a.m. and early afternoon on Saturday, January 25.
- **Location:** This year we are at a new competition site, the Museum of Flight.

Judging teams (for both physical models and presentations) will be assigned on competition day. If for some reason, January 25 presents a conflict for your schedule, then signing up to judge essays and abstracts might be a good fit. Both are a fun activity and a great way to promote interest in engineering among young people. It is very impressive to watch some of these young folks and see the outcome of their labor!

For more information, refer to the Washington state Future City website at <a href="http://futurecity.org/washington">http://futurecity.org/washington</a>

If you are interested in volunteering to be a judge, contact Jeanne Harshbarger (Judge Coordinator) directly at <a href="mailto:jeanne.harshbarger@washingtonfuturecity.org">jeanne.harshbarger@washingtonfuturecity.org</a>.