CONNECTIONS

May 2023 Volume 22 Issue 8

Newsletter of the Structural Engineers Association of Oregon

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SEAO has a LinkedIn account and can be followed at SEAO LinkedIn Page.

Upcoming SEAO Meetings and Events:

Tuesday, May 9, 2023: SEAO Lunch Chapter Meeting

Topics:
- Utilizing Fluid Viscous Dampers in Retrofit Applications
- City of Portland to outline the City's new EQUIP (Emergency Quick Inspection Program)
- Sustainability Committee Presentation

Time: 11:15 am Check-in
11:30 am Lunch
Noon—1 pm Viscous Dampers and EQUIP Programs
1 pm—2:00 pm Sustainability Committee Presentation

Location: Portland City Grill, US Bancorp Tower, 111 SW 5th Ave, 30th floor, Portland, OR
PDH: 1 Hour. Cost: $35 Member; $45 Non-Member; $20 Student
See Page 3 for more information.
Visit: https://www.seao.org/events/may2023/utilizing-fluid-viscous-dampers-retrofit-applications for more information and to register.
See Page 14 for more information on EQUIP program.

Wednesday, July 19, 2023: SEAO/OACI Golf Tournament - GOLF REGISTRATION SOLDOUT/ SPONSORSHIPS ARE STILL OPEN

Location: Pumpkin Ridge Golf Club, 12930 NW Old Pumpkin Ridge Road, North Plains, OR
Shotgun Start: 1:00 pm; Social Hour 6:00 pm; Dinner & Awards 6:30-7:30 pm
For sponsorship form, visit: https://www.seao.org/events/jul2023/seaooaci-golf-tourament
See Pages 7 and 13 for additional Information and Sponsorship Form.

Thursday, July 20, 2023: SE3/YMF Speed Mentoring Event

Time: 5:30 pm to 8:00 pm
Location: Rogue Eastside Brewery, 928 SE 9th Avenue, Portland, OR
See Pages 5 and 12 for Additional Information and

September 14— September 15, 2023: SEA NW Conference (SAVE THE DATE)

Location: Hilton Bellevue, 300 112th Avenue SE, Bellevue, WA
See Page 5 for more information.

February 13, 2024: SEAO Structural Engineering Awards Banquet (SAVE THE DATE)

See page 5 for more information.

CONNECTIONS is a monthly publication of the Structural Engineers Association of Oregon, published to disseminate current news to our membership and others involved in the profession of structural engineering. The opinions expressed reflect those of the author and, except where noted, do not represent a position of SEAO.

Send membership inquiries to:

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PRESIDENT'S MESSAGE

By: Peder Golberg

SEAO Members,

Last month was the return of our annual Trade Show. The seminars were well attended but personally, I was a little disappointed in the overall turnout in the evening. We had lots of vendors attending (who support our design efforts) and eager and ready to meet face-to-face to rekindle connections and share their latest product news. I remember this being so well attended in the past that you couldn't find a parking spot! Yes, now we can get catalogs online or even get most of these vendors to come to your office but, as stereotypical introverted engineers, we can't lose sight of the value of face-to-face social interaction. In-person turnout has been one major challenge post-COVID, and I think many groups (not just SEAO) are still searching for that solution.

Speaking of social interaction, May's lunchtime chapter meeting will include a presentation by Taylor Devices plus we will also get to hear about the City of Portland's new Emergency Quick Inspection Program (EQUIP) which is promoting a collaboration effort between the City and Building owners to allow consulting engineers to be part of inspection teams to quickly respond after a seismic event in our region. As a bonus, we get to meet Jo Ann Offill who is chairing our newest committee on Sustainable Design, and you can hear about the NCSEA efforts and what we can do locally to get involved. Sign up today as we will fill up the room!

The board is looking for topics for future chapter meetings (2024). Since we don't have a program committee, I will be hosting a virtual meeting on June 14th at noon (check website's calendar) and would invite any member to attend or, if you can't, recommend a topic (or speaker) and that can include an interesting project or engineering-related subject. We want to start next year's board off with a year full of interesting topics.

The committee that I want to highlight this month is our newest one – Sustainable Design. Jo Ann Offill from Group Mackenzie Inc. took on the task to get this started. The committee's goal is to advocate for the inclusion of sustainable design products and highlight the role that the SE's can take in the overall process. She is looking for committee members to join her.

Enjoy the spring/summer weather and hope to see everyone in person at one of the many events.

Peder

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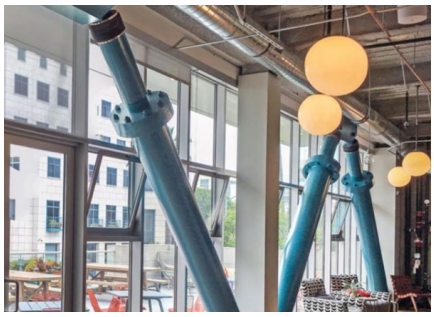
MAY CHAPTER MEETING
TUESDAY, MAY 9, 2023, 11:15 AM–2:00 PM

Topic: Utilizing Fluid Viscous Dampers in Retrofit Applications



Description: Fluid Viscous Dampers (FVDs) are velocity dependent devices which can be used to dissipate seismic energy in structures through fluid flow and friction rather than through yielding of the structure. FVDs have qualities which are uniquely beneficial in retrofit applications where a well-planned design can avoid the need to retrofit deficient beam-column joints, existing foundations, and maintain building operations with only localized work. This presentation will focus on the use of FVDs for retrofit applications and will include general information on damper behavior, examples of FVDs retrofit solutions, a discussion on preliminary design using dampers, and a brief overview of some key code requirements for damper design.

Speaker: Dr. Nathan Canney, PhD, PE. Dr. Nathan Canney is the Director of Structural Engineering at Taylor Devices. He joined Taylor in 2020 after working as a structural engineer at CYS Structural Engineers in Sacramento, CA and before that MKA in Seattle, WA. Nathan has earned Bachelor's degrees in Civil Engineering and Applied Mathematics at Seattle University, a Master's degree in Structural Engineering at Stanford University, and a PhD at the University of Colorado Boulder. After completing his PhD in 2013, Nathan taught structural engineering undergraduate and graduate level courses for four years at Seattle University before returning to consulting work in 2017.

Topic: City of Portland EQUIP Presentation

Description: EQUIP = Emergency Quick Inspection Program. After a large-scale emergency, the City's Bureau of Development Services will likely be overwhelmed by the need to quickly restore public services and utilities. The EQUIP program is being set up to speed up the process of pre-certified post-event building safety evaluations/inspections. EQUIP deputizes approved institutions to evaluate their own facilities after a catastrophic emergency. The City will provide a program overview, who the evaluation team may be comprised of, when EQUIP is activated, and which types of facilities will qualify for EQUIP.

Speakers: Amit Kumar, Greg Wilken & Anne Castleton, City of Portland—Bureau of Development Services

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MAY CHAPTER MEETING (CONT.)
TUESDAY, MAY 9, 2023, 11:15 AM–2:00 PM

Topic: Sustainability Committee Presentation

Description: The newest SEAO committee will speak about their efforts and sustainability in engineering. See page 6 for more information. Additionally, see bottom of page for a grant opportunity.

Speaker: Jo Ann Offill, Sustainability Committee Chair

Location: Portland City Grill, 111 SW 5th Avenue, 30th Floor, Portland, OR
Parking information: Parking is the lower level of the Unico US Bank Tower, entrance on 5th and Pine, or parking is available in the parking garage at SW 4th and Pine. Parking is free for the first 2.5 hours with validation by Portland City Grill.

Time:
11:15—Check-in
11:30 am—Lunch
Noon to 2 pm—Program

Cost:
$35 Prepaid Members
$45 Prepaid Non-Member
$20 — Students

Reservations: Pre-registration is required for all. **You can register and pay online at** https://www.seao.org/events/may2023/utilizing-fluid-viscous-dampers-retrofit-applications **before end of day, Friday, May 5.** You can also register with Jane Ellsworth via phone at (503)753-3075 or via Email: jane@seao.org. Note: No-shows will be billed.

PDH Credit: One PDH has been recommended for this program.
Questions: Contact Jane Ellsworth at jane@seao.org

SUSTAINABILITY COMMITTEE NOTICE OF GRANT OPPORTUNITY
BY: JO ANN OFFILL

The Energy Trust of Oregon is proud to support the innovative people who make net-zero buildings possible. For firms who have committed to the SEI's SE 2050 Commitment and have projects in Oregon, applications are now open for the Net Zero Emerging Leaders Internship (NZELI) Grant.

Grant recipients receive up to $8,000 to offer a 12-week paid internship in which a student or recent graduate will help the firm meet and track progress towards the SE 2050 Commitment and participate in a cohort with mentors and interns at other firms who are working on activities related to SE 2050, AIA 2030, and MEP 2040 Commitments. Recipients will be selected in early fall of 2023, and internships will occur in the first quarter of 2024. Grant applications are open through July 21, 2023.

For more information, visit the Energy Trust of Oregon website.

SE3 & YMF PRESENT: SPEED MENTORING
THURSDAY, JULY 20, 2023

Please join us on **Thursday July 20** from **5:30 to 8:00 PM** at the **Rogue Eastside Brewery,** 928 SE 9th Avenue, Portland, Oregon, for refreshments, fun, and mentoring! The SE3 Mentorship Team aims to offer younger engineers opportunities to meet with more experienced professionals. This speed mentoring event is a one-time, two-hour session and focuses on time-efficient conversations, quick advice, immediate mentorship guidance, and professional networking. Food and beverages are provided, engineers of all levels are welcome to attend, and the event is **free**!

Please fill out the form linked here if you are interested in attending and would like more information: https://app.smartsheet.com/b/form/da95b9e9347c4e6d854b4baace13271d

See flyer on page 12 for information.

2023 SEAO EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS
FEBRUARY 13, 2024
SAVE THE DATE

The SEAO Awards Committee is planning for the 2023 SEAO Awards.

Categories may be modified and website will be updated with new entry requirements and open for entry submissions in June, 2023. SEAO will notify all members when the website is officially be open to receiving entries.

We anticipate a deadline for submissions in late October, 2023.

We want to see what you have been working on! Start thinking about a project or projects you want to enter.

SEA NORTHWEST CONFERENCE
SEPTEMBER 14-15, 2023

WHAT DO YOU KNOW ABOUT THE NORTHWEST CONFERENCE
BY: DARRELL STAALESON, SEAW SEATTLE

The Seattle Chapter of SEAW is excited to be the host for the 2023 Northwest Conference, "Innovation in Structural Engineering," taking place this year at the Bellevue Hilton on September 14 and 15.

The Northwest Conference is held annually, although it was canceled for three years during the pandemic. The Northwest Conference serves all of the Structural Engineers Associations of the northwest area of the United States and into Canada, including Washington, Oregon, Idaho, Montana, and British Columbia.

The purpose of the Northwest Conference is to provide a forum for engineers in our region to learn from other engineers in the region and gain from their ideas and experiences, but also to build friendships and business networks, and strengthen our local Structural Engineers Associations. We want to uplift the members of our profession. Everyone should come away from the Conference inspired for the coming year. As a teacher of mine from long ago said, "I want for you to stand on my shoulders!"

Since inception, the organizations have taken turns hosting and planning the Northwest Conference. The past several conferences have been:

2015, Idaho, "Jump Into the Future"
2016, Montana, "Back to School, Under the Big Sky"
2017, British Columbia, combined with the IABSE Symposium, "Engineering the Future"
2018, Spokane/South Central, "Knowledge is Power"
2019, Oregon, "Panic! In the Code Change"

The Northwest Conference Committee will decide who will host the Conference for 2024.

Of these past conferences, one memorable and outstanding conference, in my opinion, was the Spokane/South Central "Knowledge is Power" conference in 2018. It was held in Richland, and John Tate served as Conference Chair.

The NWCMA hosted a "hands-on" masonry apprentice training event for our young members. The masons demonstrated how to lay down a mortar bed: one deft hand flick and a nearly perfect mortar bed of about 24 inches – didn't really

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SEA NORTHWEST CONFERENCE (CONT.)
SEPTEMBER 14-15, 2023

WHAT DO YOU KNOW ABOUT THE NORTHWEST CONFERENCE
BY: DARRELL STAALESON, SEAW SEATTLE

look difficult at all. And then, the young engineers from YMG gave it a try. Um, well, they needed more practice! It was excellent example of the intersection of engineering with construction. The masonry contractors also gave a short presentation about designing with "constructability" in mind. That was valuable for our young engineers and a good reminder for senior engineers.

At dinner, we had a presentation from a National Parks Ranger who had been an engineer in the nuclear industry. Upon retirement he transitioned to the NPS with focus in the Manhattan Project sites, one of which was the Hanford Site. At dinner, I had the pleasure of sitting next to our guest speaker. He talked about the Fukushima Nuclear Accident and the poor decisions that led to it. You never place the emergency backup generators in a location that makes them susceptible to the same hazard as the facility they are protecting! The generators were scheduled to be relocated above the inundation zone, but that doesn't excuse the fact that they should never have been built at the low elevation in the first place. Do you really need a code to tell you that? The consequence of that poor decision was that one of the largest cities on the planet - population of 14 million - almost became a nuclear dead zone. That interesting and useful discussion resonated with me and changed my view of the concept of resilience. Then, his lecture later that evening presented history that I had not known and provided a great preparation for our visit the next day to the Hanford Site – Reactor B. My wife even flew over to visit Hanford, as well. We both greatly enjoyed the tour.

This year the conference program will include technical presentations by engineers from the Northwest region and vendor speakers. There will be ten abstract presentations and six vendor speakers. At this writing, social events and technical tours are being developed. Look for highlights of these in a future newsletter!

If you have any questions or comments, feel free to contact any member of the Northwest Conference Steering Committee. Thank you to these individuals for all their hard work and dedication to this event!

Chun Lau (Chair)
Scott Douglas (Technical Subcommittee Chair)
Michelle Yee
Jessica Lim
Shalini Prochazka
Darrell Staaleson

The Conference preliminary schedule, presentation descriptions and speaker bios, attendee registration, hotel accommodation, sponsor and vendor registration, and 2023 event sponsors can all be viewed at: https://www.seaw.org/2023seanwconference. Also visit SEAW LinkedIn page at https://www.linkedin.com/company/structural-engineers-association-of-washington/.

SUSTAINABLE DESIGN COMMITTEE ANNOUCEMENT

The Sustainable Design Committee (SDC) is actively seeking new members to support its mission of promoting sustainable design practices within the structural engineering profession through leadership, advocacy, outreach, and education.

There has never been a better time for structural engineers to play a crucial role in reducing human impact on the environment. For years, the green building focus has been on operational emissions, but more recently attention has shifted to embodied emissions, specifically from the materials that structural engineers specify. Scientists believe that the time between 2020 and 2050 is a critical period in which global emissions must peak and then go to zero, and the structural engineering community will be key to developing pathways to significantly reduce embodied emissions.

Join us on May 9th, 2023 at the SEAO monthly meeting to hear more about the committee and sustainability in structural engineering. Reach out to Jo Ann Offill (joffill@mcknze.com) for more information.

2023 SEAO/OACI GOLF TOURNAMENT
July 19, 2023
Sponsorships Available

We've had many Sponsors from previous Tournaments come back and sponsor the 2023 Tournament already, and we wanted to let you know that there's still a little time and space for you to grab a sponsorship as well!

We're getting ready to announce our Sponsors to SEAO and OACI members, but wanted to make sure you didn't miss out on adding your name to this and all future announcements for the 2023 Tournament.

If you're interested, be sure to complete the form attached and send it back as soon as possible. There are a few sponsorships still left, and *there may still be availability for one more Par 3 Sponsor* by the time you read this newsletter, so don't wait too long.

We want to thank these companies that have already committed to sponsoring this year's tournament…

Dinner Sponsor:

RAMJACK

Golf Tournament Event, Prizes, and Awards Sponsors:

ALPHA IRON, CALPORTLAND, catena, CONTECH, DAYTON SUPERIOR, ECO-PAN, EUCLID CHEMICAL, Heidelberg Materials, JOHNSON, KNIFE RIVER, kpff, LaRusso Concrete, Inc., MASCO MASONS SUPPLY, MASTER BUILDERS SOLUTIONS, MILLER CONSULTING ENGINEERS, PIONEER WATERPROOFING COMPANY INC., SureBuilT Concrete Forms & Accessories, TEKTERIOR, WGW, WHITAKER WE ELLIS, W. R. MEADOWS SEALTIGHT

SEAO BOARD OF DIRECTORS UPCOMING ELECTION 2023-2024

It is that time of year that SEAO looks to establish a new Board that will serve during the 2023-2024 year.

SEAO is largely fueled by the volunteer efforts of our members on committees and the leadership board. If you have interest in serving your structural engineering community and helping to provide information that assists in educational and networking opportunities that SEAO provides, please contact David Linton at dlinton@mcknze.com.

This year's election is looking to fill the following positions:

- Vice President
- Secretary
- Director (Non-P.E.) (2-year service)

NEW MEMBERS

Welcome to our new Members:

Kimberly Robinson – EVER Seismic
Steve Hawk – Coffman Engineers
Daniel Herferd – McGee Engineering
Leandro Pimenta – Valar Engineering
William Scott – Kestrel Engineering Group
Randall Toma – ABHT Structural Engineers

WELCOME TO SEAO!

SEISMIC COMMITTEE UPDATE

For seven years, Reid Zimmerman has chaired SEAO's Seismic Committee. Reid is stepping down from his turn as chair and a new chair, Jonathan Knudtsen, is stepping up.

During Reid's time as committee chair, the Seismic Committee has completed several major projects. The success of these projects is owed to the committee's deliberation and consensus-based decision-making. These projects included:

- *Improved prescriptive method for seismic strengthening of wood-frame single-family homes.* Prescriptive methods are intended to be used by a homeowner or contractor to provide a retrofit solution for cripple wall strengthening and sill bolt anchoring without the assistance of an engineer. The Seismic Committee reviewed the City of Portland's and other local jurisdictions' prescriptive methods for seismic strengthening of wood-frame homes. Through the committee's work, a newer document released by FEMA after the 2014 South Napa Earthquake was recommended. A committee statement was posted to the SEAO website pointing authorities having jurisdiction, homeowners, and contractors to the improved method and listing several Oregon-specific modifications to be considered. We hope that this statement will continue to serve as a resource and thus support the voluntary seismic retrofit of single-family homes in Oregon.

- *Seismic instrumentation of buildings in Oregon.* Although the Oregon Structural Specialty Code (OSSC) requires new buildings over certain height and floor area combinations to be seismically instrumented, these provisions provide an exception which allows building owners to forego instrumentation and instead pay into a fund. Furthermore, there appeared to be little enforcement of operation and maintenance of seismic instruments with multiple examples of previously instrumented buildings having missing, damaged, or inoperable seismic instruments. The Seismic Committee reviewed the current status of seismic instrumentation in Oregon, including compilation/mapping of all known seismically instrumented buildings in the state. Recommendations for improving the code provisions and practice of seismic instrumentation were made. Finally, the Seismic Committee helped review the instrumentation plan for the Multnomah County Central Courthouse which used "set-aside" funds from the OSSC exception to provide a more dense array of accelerometers in the building than the code minimum.

- *Seismic provisions updates in the Oregon Structural Specialty Code and City of Portland Chapter 24.85.* The Seismic Committee supported the SEAO Code Committee during the 2019 and 2022 updates to the Oregon Structural Specialty Code (OSSC). This included review and modification of multiple SEAO change proposals within OSSC Chapters 16, 17, 18 and 34, notably those related to the transition to ASCE 7-16. Additionally, the Seismic Committee partnered with the SEAO Vintage Buildings Committee to provide recommendations on updates to the City of Portland's Chapter 24.85, notably during the transitions to ASCE 41-13 and ASCE 41-17 where the Basic Performance Objective for Existing Buildings (BPOE) was introduced.

Thank you, Reid, for your leadership and commitment to SEAO. We have all benefited from your time as chairperson of the Seismic Committee and wish to thank you for your service and many efforts to keep our communities safe and keep our membership informed.

We welcome the new chair, Jonathan Knudtsen. Jonathan has been with KPFF Consulting Engineers since 2018. During this time, he has worked on projects large and small, new and existing, in the Portland area and beyond. Notable projects include the Portland Art Museum Rothko Pavilion, PGE Integrated Operations Center in Tualatin, and Benson High School in Portland. Prior to joining KPFF, he completed a B.S. degree at Colorado School of Mines, an M.S. degree at Oregon State University, and a specialized Masters in Italy and Czechia focused on the preservation and strengthening of historic structures. He is looking forward to working with the seismic committee to promote the success of the structural engineering community in Oregon. In his free time, he can be found reading, brewing, or exploring the great Pacific Northwest.

NCSEA UPCOMING LIVE WEBINARS
Register At: http://www.ncsea.com/education/webinars/

May 9, 2023, 10 am Pacific Time (Fee for Webinar)
Seismic Design Series: Steel Deck Diaphragm Design
Speaker: Matt Eatherton, Ph.D., S.E., Professor of Civil and Environmental Engineering at Virginia Tech
This presentation describes the seismic design of concrete-filled steel deck diaphragms based on the latest research. Design equations in the latest (and in some cases upcoming) code editions along with supporting research will be presented for the two basic limit states of diagonal tension cracking and shear transfer failure. An example will be provided to demonstrate the design of a concrete-filled steel deck diaphragm for these limit states using demands calculated with the alternative diaphragm design provisions in ASCE 7. Calculation of diaphragm deflections and design of shear transfer along collectors will also be discussed. The presentation will conclude with a description of how buildings will perform during earthquakes if designed using these approaches. (1.5 PDH)

May 11, 2023, 10 am Pacific Time (FREE Webinar & PDH)
3rd Annual Structural Engineering Innovation & Excellence Webinar Series—New Buildings $30 Million to $80 Million: Idaho Central Credit Union Arena
Speaker: Erik Warkentin, StructureCraft
The University of Idaho basketball arena models the use of timber in long-span sports facilities in North America, with the 4,000 seat facility built to home the Vandal's varsity basketball teams and to act as a gathering place for a variety of school and community events. StructureCraft joined the consultant team at concept design as the Structural Engineer of Record for the timber superstructure, taking on responsibility for both gravity and lateral load resisting systems, including seismic design. The roof is a doubly curved plywood diaphragm supported by hybrid timber/steel trusses. StructureCraft's engineering team worked closely with the architect to develop, shape and optimize the curved roof for fabrication and constructability, enhancing the architectural vision, while meeting the numerous constraints and challenges associated with a doubly curved structure. Erik will show how StructureCraft designed and optimized the structure for both manufacturing and construction. (1 PDH)

May 17-18, 2023, 10 am to 1 pm Pacific Time (Fee for Webinar)
CalOES Safety Assessment Program (Days 1 and 2)
Speakers: Derek Hanson, P.E., and Klaus Perkins, P.E., S.E.
This California Office of Emergency Services (CalOES) Safety Assessment Program (SAP), presented by NCSEA, is based on ATC-20/45 methodologies and forms. This SAP training course provides engineers, architects and code-enforcement professionals with the basic skills required to perform safety assessments of structures following disasters. Licensed design professionals and certified building officials will be eligible for SAP Evaluator certification and credentials following completion of this program and submission of required documentation.

May 25, 2023, 10 am Pacific Time (Fee for Webinar)
Load Testing of Existing Structures: Methods, Case Studies and Lessons Learned
Speaker: Brian Greve, P.E., S.E., Wiss, Janney, Elstner Associates
This webinar will provide an overview of load testing conducted to evaluate the strength of existing structures when the safety or serviceability of the structure is in question. The presentation will discuss situations where it may be appropriate to perform a load test and review the ACI load testing requirements. Case studies of load tests of various structures will be presented to review the planning and execution of a load test including the related field assessment, structural analysis, test protocol, loading methods, data acquisition and monitoring required during the test. The presentation will also discuss the challenges associated with implementing a load test and review lessons learned from past load tests. . (1.25 PDH)

June 8, 2023, 10 am Pacific Time (FREE Webinar & PDH)
3rd Annual Structural Engineering Innovation & Excellence Webinar Series—New Buildings $80 Million to $200 Million: Tianfu Agricultural Expo Main Hall
Speaker: Lucas Epp, P.Eng., StructureCraft
At over 807,000 sf, the new Tianfu Agricultural Exposition is the largest timber structure in Asia, and one of the largest timber structures in the world. This series of five vaults uses hybrid timber-steel Vierendeel-inspired trusses, achieving clear spans up to 110m (360ft) and heights up to 44m (144ft). The unique wave of the building ensemble blends gently into the landscape, displaying agricultural products from the region and providing a direct connection with the surrounding farmland. Through the cooperation of team members on 3 continents in 1.5 years, a series of world-class long-span timber structures was achieved. (1 PDH)

June 13, 2023, 10 am Pacific Time (Fee for Webinar)
Recommendations for Performing Structural Engineering Quality Assurance Reviews
Speaker: Clifford Schwinger, P.E., The Harman Group (now IMEG)
Fast schedules, sophisticated modeling software, and young engineers taking on more responsibility earlier in their careers has made greater the need for all structural engineering firms to conduct Quality Assurance reviews for all projects. This presentation, applicable to engineers of all levels of experience, reviews strategies and procedures for performing structural engineering Quality Assurance reviews. Firms adopting a formal QA review process may realize benefits that can include: better designs and drawings, fewer RFI's and change orders, fewer problems during construction, greater profits, and an enhanced reputation within the profession. (1.5 PDH)

There are also recorded webinars that can be purchased for professional development hours (PDHs) online at https://www.pathlms.com/ncsea/events#on-demand-events-content

EMPLOYMENT OPPORTUNITIES

EXELTECH

Lead Structural Engineer
Lacey or Seattle, WA; Beaverton, OR; or Missoula, MT

An exciting opportunity exists for an experienced Lead Structural Engineer to join Exeltech, a leading, multi-discipline engineering consulting firm, in our Lacey or Seattle, WA, Beaverton, OR, or Missoula MT offices. We are looking for a passionate and motivated engineer with an interest in structural building engineering and leading a group of committed professionals.

Qualifications/Minimum Requirements:

- BS in Civil/Structural Engineering, advanced degree preferred.
- 8 years of structural design engineering experience
- Experience in seismic design and analysis
- Working knowledge of framing and building systems, including wood, steel, concrete, and masonry
- Self-starter with a desire to work and learn with a great group of engineers and the ability to work in an environment that can occasionally be fast-paced.

Salary Range: $120-$135k per year depending on experience. For more information, visit: https://www.xltech.com/lead-buildings-facilities-structural-engineer

CATENA CONSULTING ENGINEERS

Structural Engineer
Portland, OR

catena consulting engineers provides the personal environment of a small firm while providing the opportunity to work on a variety of projects. Our projects vary in size from a single day's effort to large projects with construction values in excess of $300 million. You will gain design experience in concrete, steel, timber, and masonry buildings and will work on a wide variety of project types including buildings created for healing, learning, living, and interacting.

Due to the technical complexity and challenge of many of our projects, we seek engineers that hold a Masters degree, and that have a desire to learn, grow, and be challenged. U.S. citizenship is preferred. We are currently seeking engineers at all levels of experience in structural engineering for buildings.

For a detailed advertisement and to submit your resume, visit our website http://www.catenaengineers.com/opportunities/

US ARMY CORPS OF ENGINEERS

Structural Engineer
Walla Walla, WA

The US Army Corps of Engineers in Walla Walla, WA is looking for a civilian STRUCTURAL/CIVIL ENGINEER who can independently perform all of the following activities: (1) designing structural features through calculations such as: using spreadsheets, and structural analysis/finite element analysis software by following current codes and standard practice; (2) developing structural engineering plans and specifications; (3) performing/documenting field inspections, AND (4) performing technical reviews of structural designs developed by others. Please clearly describing your experience on your resume.

To learn more and apply (U.S. Citizens): https://www.usajobs.gov/job/706830600

Salary Range: $97,169 to $118,499 per year. Payment of Permanent Change of Station (PCS) costs is authorized!

Please contact Julio Morelos at Julio.C.Morelos@usace.army.mil with questions about the position.

PACE ENGINEERS

Structural Engineer & Project Manager
Lake Oswego, OR

PACE is growing our structural engineering team to deliver unique and challenging project designs for our clients in the public and private sectors. We are recruiting engineers at all experience levels who will be empowered to share and grow their skills within a collaborative and respectful working environment. Our current structural team includes nine (9) SEs or PEs and five (5) structural designers. We partner with our civil engineers and surveyors to complete projects throughout the PNW, the Mountain West, and beyond. Project types include hydraulic structures for potable water systems; roadway, pedestrian, and utility bridges; building and non-building structures; and contractor and vendor services. Our family-first, client service culture cultivates technical, PM, BD, and managerial growth in a hybrid work environment.

PACE is a team of 130 civil and structural engineers, surveyors, and GIS professionals located in Lake Oswego, OR and Kirkland, Everett, and Wenatchee, WA. See www.paceengrs.com or contact HR manager, Karmell Dawson at karmelld@paceengrs.com for more information.

EMPLOYMENT OPPORTUNITIES (CONT.)

OTAK

Structural Engineer
Vancouver, WA

Otak is hiring a Bridge/Structural Engineer to join our team! We are a highly collaborative team with award-winning multidisciplinary expertise in urban design, architecture, planning, engineering, and construction management. Our Bridge/Structural Engineer collaborates with multi-discipline engineers, planners, architects, and public and private clients to design solutions for bridge and structure projects of all types, sizes and levels of complexity. From designing pedestrian and vehicular bridges; facilities at local, state and national parks; community transit services; and site development structures, we continually seek the best balance among the demands of form, function, safety, sustainability, constructability, schedule and budget.

This position may be based out of either our Redmond, WA or Vancouver, WA office.

Please apply at: Bridge/Structural Engineer - Redmond, WA

or Bridge/Structural Engineer - Vancouver, WA

JAMES G. PIERSON

Structural Engineer
Portland, OR

Since 1945, JG Pierson, Inc. has been serving the Portland Area and beyond. We work on a wide variety of projects and sizes and our engineers stay involved and participate in all project phases. We support large tech companies around the country to local school districts, builders and architects plus provide specialty engineering for that bidder designed item. Wood, steel, masonry, concrete, and aluminum.

We are looking for a mid-level experienced PEs who are interested in working in a fast-paced environment and towards ownership of a smaller design firm.

Please send resumes or questions about opportunities to: Peder@jgpierson.com.

SE3 & YMF PRESENT:

SPEED MENTORING

NEED A MENTOR?
WANT TO BE A MENTOR?

Join us for a **free** 1-time mentorship event focused on immediate guidance, quick advice, and professional networking.

5:30 PM TO 8:00 PM

THURS JULY 20, 2023

Rogue Eastside Brewery
928 SE 9th Ave, Portland, OR 97214

REGISTER HERE: https://tinyurl.com/se3mentor

food and beverage provided | engineers of all levels welcome

Company Name: _____

Contact Name: _____

Phone: _____ **Fax:** _____

Email: _____

HOLE SPONSORSHIP *(choose any or all of the following)*

☐ **HOLE SPONSORSHIP - $300**
Comes with individual tee signage and recognition at the on-site dinner.

☐ **PAR-3 SPONSORSHIP - $750**
Set your company up near the tee at one of 4 available, 3-par holes and also receive recognition at the on-site dinner. (Only available to 4 sponsers)

☐ **DINNER SPONSORSHIP - $3,000**
Join the SEAO and OACI by sponsoring the on-site barbacue dinner! Includes tournament registration for a team of four, and distinct recognition from SEAO/OACI at the on-site dinner.

WE THANK YOU FOR YOUR SUPPORT!

If you or your company would like to sponsor more than the above hole sponsorships, please check any of the additional sponsorship items below, or the option to sponsor/donate your own raffle prize:

ADDITIONAL SPONSORSHIPS

☐ **LD/KP/Long Putt Hole Sponsor**
$150

☐ **On Course Drink Refreshment Sponsor**
$500
(Host drink cart for one beverage per participant to be redeemed during play)

☐ **Tee Off Sponsor**
$300
(Host keg of Micro-brew)

☐ **19th Hole Sponsor**
$300
(Host keg of Micro-brew)

☐ **Golf Cart Sponsor**
$500
(Host the golf carts with a sign in each cart with your company name)

☐ **Sponsor Provided Raffle Prize:**
(ex: Sport Event Seats, Electronics, Golf Gear, Gift Cards, etc)
(If you would like to sponsor by providing your own Raffle Prize, please list and describe any prizes below.)

_____

_____

_____

_____

_____

Please Return This Form A.S.A.P. to:
SEAO
PO BOX 2958
Vancouver, WA 98668

Pay By MAIL: ☐ **Check Included** **TOTAL:** $ _____

Name: (As it appears on Credit Card) _____ **Contact Phone #:** _____

Credit Card #: _____

Credit Card Exp Date: _____ **3-Digit Code:** (On back of Credit Card) _____ **Billing Zip Code:** _____

City of
Portland, Oregon
Bureau of Development Services
FROM CONCEPT TO CONSTRUCTION

Ted Wheeler, Mayor
Rebecca Esau, Director
Phone: (503) 823-7300
Fax: (503) 823-6983
TTY: (503) 823-6868
www.portlandoregon.gov/bds

EQUIP
Emergency Quick Inspection Program
Getting Portland Back to Business

EQUIP – Emergency Quick Inspection Program

"Getting Portland Back to Business"

Buildings and structures in seismically active regions vary in their levels of damage after an event and require a safety evaluation before they can be reoccupied, repaired, or demolished. Depending on the size of the event or aftershock, businesses can be disrupted, and people displaced from work and homes. If businesses can't function, the economic losses impact the entire city. If the city is also without housing, that often leads to displacement and a loss of productivity. If the functionality of facilities is not resumed quickly, both businesses and residents may leave the area which results in a delayed and less complete recovery.

Local building departments are responsible for ensuring the safety of the facilities within their jurisdiction. A building safety evaluation needs to be completed after a seismic event and any subsequent major aftershocks to determine if a structure can be safely re-occupied or if access should be restricted until it is repaired.

There will be a huge demand for building safety evaluations and evaluators after a major earthquake and the process of coordinating evaluations for an entire jurisdiction's facilities will be challenging and a significant departure from daily business functions. To manage this challenge, some communities (i.e., San Francisco, Salt Lake City, and soon Portland) have implemented a quick inspection program that works with large institutional facility owners prior to an event to organize, qualify, and deputize a private team of qualified inspectors. **EQUIP** program applicants create a written inspection plan, identify a qualified team, and submit a detailed application to the City for approval.

EQUIP allows building owners and the City to work collaboratively and creates an emergency plan that benefits all parties. The Bureau of Development Services is preparing to launch **EQUIP** in the City of Portland; it would allow qualified and approved private inspection teams to respond quickly after a seismic event. City resources could then be applied to other structures and tasks to speed recovery in the region.

December 2022