

Newsletter of the Structural Engineers Association of Oregon

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# CONNECTIONS

December 2023 Volume 23 Issue 4

#### **Upcoming SEAO Meetings and Events:**

#### Tuesday, January 9, 2024: SEAO Chapter Lunch Meeting

Topic: Hayward Field, University of Oregon and Reser Stadium, Oregon State University

Speaker: Wyatt Henderson, PE, SE, Principal at Magnusson Klemencic Associates

Location: Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR

Time: 11:30 am Check-in/Lunch Buffet; Noon-1 pm Program See Page 3 for additional information and links to register.

Tuesday, February 13, 2024: SEAO Structural Engineering Awards Banquet

See page 4 for more information.

Tuesday, March 12, 2024: SEAO Chapter Lunch Meeting (SAVE THE DATE)

Topic: Hyatt Regency Hotel Walkway Collapse Speaker: Marc Sokol, MS, PE, SE; Location: TBD

Tuesday, March 26—Thursday March 28, 2024: International Mass Timber Conference

Location: Oregon Convention Center, Portland, OR

See Page 6 for additional information.

Tuesday, April 9, 2024: SEAO Trivia Night (SAVE THE DATE)

Tuesday, May 14, 2024: SEAO Tradeshow and Seminars (SAVE THE DATE)



SEAO has a LinkedIn account and can be followed at <u>SEAO</u> <u>LinkedIn Page</u>.

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.

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#### PRESIDENT'S DECEMBER MESSAGE BY: Jared Lewis, PE, SE

#### **SEAO Members:**



It's holiday season in the Pacific Northwest! Happy holidays to all and may the final celebratory days of 2023 translate into an easy and fruitful launch to 2024!

This month's theme is Reflection and Engagement.

We do <u>not</u> have a lunch meeting in December. Our next lunch meeting is **January 9, 2024** at The Old Spaghetti Factory. Over lunch, we'll hear from Wyatt Henderson from Magnussen Klemencic Associ-

ates about the new Hayward Field at the University of Oregon. November's meeting sold out! Thanks Kyle Kraxberger and luncheon participants for the rousing discussion about permits and codes and dangerous buildings! Let's bring that same enthusiasm for January's luncheon! Registration is open on the SEAO website, and your attendance and *Engagement* is strongly encouraged! I hope to see many of you there.

Reflecting upon Upcoming Events in the SEAO Connections newsletter, I'm going to reiterate two upcoming opportunities for Reflection and Engagement.

- 1. The 2023 SEAO Awards Banquet, on February 13, 2024, offers opportunities for *Reflection* upon work completed in 2021, 2022, and 2023. The deadline for submitting for an award, or awards, is **December 19, 2023**. Submittal requirements and award categories can be found on SEAO's website. I would like to encourage everyone to submit their work and share it with our peers. Our work is important to our communities and worth celebrating whether selected for an award or not.
- 2. The SEOAC Convention and the Northwest Convention are combining forces next September and offers an opportunity for *Engagement* with our fellow structural engineering peers both in the Pacific Northwest and California to help the Planning Committee! Please contact Seth Thomas (<a href="mailto:seth.thomas@kpff.com">seth.thomas@kpff.com</a>) if you're interested in *Engaging* with the Planning Committee. The joint convention will be held at the Convention Center September 4-7, 2024.

Finally, it is that time of year when we look back and *Reflect* upon the year that was and look ahead and *Engage* with the year that will be. For SEAO, 2023 is another year of progress. We continue to have record membership and are one of the best represented structural engineering organizations nationally. However, our organizational events and *engagement* occur within the Portland metropolitan region. In 2024, we will be launching phase 1 of strategic planning (I teased about this in my October statement) to decide how we want to engage our membership, encourage greater participation, and strengthen this great organization! Please be on the lookout in early 2024 for a survey to begin the strategic planning process.

Thank you all in advance for *Reflecting and Engaging* in any way you are able. SEAO is only strengthened through your continued efforts and involvement!

Thank you, Jared Lewis, 2023/2024 SEAO President

#### SEAO COMMITTEES

#### **CODE ADVISORY COMMITTEE**

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Code Eric Watson eric@miller-se.com

Vintage Building Jennifer Eggers jennifer.eggers@holmesstructures.com

Special Inspections Eric Watson eric@miller-se.com

Mass Timber Eric McDonnell eric.mcdonnell@holmesstructures.com

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EMERGENCY RESPONSE (SEER)

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**PROGRAM COMMITTEE** 

Awards Brynn Adkins badkins@tmrippey.com

Golf Tournament OPEN CHAIR

Conferences

Kevin McCormick
kevin@miller-se.com

#### ADVOCACY COMMITTEE Website

Website Seth Thomas seth.thomas@kpff.com

Engineers Week Michelle Juarez michelle@miller-se.com

Young Member Forum Eric Esqueda & Emma Olds YMF.seao@gmail.com

Annabel Shephard shep.annabel@gmail.com

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Seth Thomas (Alternate) seth.thomas@kpff.com

#### JANUARY CHAPTER MEETING TUESDAY, JANUARY 9, 2023, 11:30 AM-1:00 PM

**Topic:** Hayward Field and Reser Stadium

**Description:** The presentation will be about two recent landmark sports projects in Oregon – the iconic, new Hayward Field Track & Field Stadium at the University of Oregon and the westside completion of Reser Stadium for the Oregon State Beavers.

Speaker: Wyatt Henderson, Principal at Magnusson Klemencic Associates (MKA), an internationally recognized structural and civil engineering firm with offices in Seattle and Chicago. Wyatt is a key member of MKA's Sports Specialist Group with experience throughout the United States and internationally. Wyatt has worked on projects in a variety of configurations, including arenas, stadiums, and sports-



related facilities for the NBA, NFL, NHL, MLB, MLS, and universities. His most recent efforts include leading as Structural Project Manager for the Golden State Warriors Chase Center in San Francisco, the Westside completion project at Oregon State University's Reser Stadium, and the recently completed San Diego State University Snapdragon's Stadium.

Wyatt joined MKA in 2005, after graduating from University of Texas, Austin, with a Master of Science Engineering in Civil Engineering, and the University of Wisconsin, Madison, with his Bachelor of Science in Civil Engineering.

**Location:** The Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR Parking information: Free Parking Lot with Validation Provided During Meeting

Time: 11:30—Check-in Cost: \$35 Prepaid Members
Noon—Lunch & Program \$45 Prepaid Non-Member

\$20 — Students

Reservations: Pre-registration is required for all. You can register and pay online at <a href="https://www.seao.org/events/jan2024/hayward-field-reser-stadium">https://www.seao.org/events/jan2024/hayward-field-reser-stadium</a> before end of day, Friday, January 5. You can also register with Jane Ellsworth via phone at (503)753-3075 or via Email: <a href="mailto:jane@seao.org">jane@seao.org</a>. Note: No-shows will be billed.

**PDH Credit:** 1 PDH has been recommended for this program.

Questions: Contact Jane Ellsworth at jane@seao.org

#### 2023 SEAO EXCELLENCE IN STRUCTURAL ENGINEERING AWARDS

The SEAO Awards Committee has opened the SEAO website to accept submissions for the 2023 awards consideration. Projects must have been completed in 2021, 2022, or 2023. **Submission deadline is end of day on December 19, 2023.** 

#### Award categories include:

- New Buildings Under \$10M
- New Buildings \$10M to \$40M
- New Buildings Over \$40M
- Renovation/Retrofit
- Special Use Structures

The awards banquet will be held on **Tuesday**, **February 13**, **2024**. Visit <a href="https://www.seao.org/committees/advocacy/awards-committee">https://www.seao.org/committees/advocacy/awards-committee</a> to see the Awards Committee web page and to begin your submission(s). Don't forget to login to access the web-site to start your submission. For ease on the submission process, you can start, stop, and save your work as you create your submission.

#### Eligibility requirements include:

- 1. Project must have completed construction during the calendar years of 2021, 2022, or 2023.
- 2. At least one member of the design team, research team, or a principal of the firm responsible for entry must be a member of SEAO.
- 3. Entries may be of any size, type, and location.
- 4. Projects may be submitted into one category only. SEAO reserves the right to reassign the category, should it meet the criteria for more than one category.
- 5. Each company may submit up to two projects per category (10 projects total).

We especially encourage small firms to submit their projects. Remember to submit as much technical information as possible. The judges are looking for your engineering challenges and creative structural ideas. We want to see what you have been working on! Start thinking about a project or projects you want to submit for consideration or visit the link above to begin your submission(s).

#### JOIN THE SEAO SUSTAINABLE DESIGN COMMITTEE

Do you believe that structural engineers will play a crucial role in achieving emission reduction targets?

Are you interested in promoting sustainable design practices within the structural engineering profession?

If so, the Sustainable Design Committee (SDC) is seeking new members to support its mission through leadership, advocacy, outreach, and education.

Contact Jo Ann Offill (joffill@mcknze.com) for more information.

#### 2023 NCSEA SUMMIT RECAP By: David Linton, PE, SE

David Linton (delegate) and Seth Thomas (alternate delegate) attended the NCSEA Summit in Anaheim at "the happiest place on earth" as representatives of SEAO. This was the largest attended Summit in history with over 900 people in attendance! It is important to highlight that SEAO continues to be active at the national level with both Jo Ann Offill (SEAO sustainability chair) and Seth Thomas (NCSEA seismic chair) presenting during conference sessions.

As delegates our responsibility is to be a conduit from SEAO to NCSEA and to bring our successes and challenges forward to the national level in effort to help all of the state organizations better serve their membership. Some states have very small memberships and others have numerous members and additional resources that come with that. Expanding on the topics from the leadership retreat held in June, NCSEA continues to help organizations, such as SEAO, build strategies based on other member organization successes. COVID and the hybrid work environment has reset some of the expectations from members and what they value, and our organizations need to continue to adapt.

From the annual business meeting, NCSEA is doing well financially after rebounding from COVID, and the NCSEA foundation continues to invest in scholarships for students (our future) and other important initiatives. This year the NCSEA diversity in structural engineering scholarship continued to grow with new contributions from sustaining firms/

organizations. This year's scholarships included a winner from Oregon State University (Emily Dahbura). In addition to scholarships and existing grant programs, NCSEA is now supporting a new research grant for innovation in structural engineering, with this year's emphasis exploring the impacts of artificial intelligence on structural engineering.

Beyond the usual technical topics, a common theme for some of the keynote speakers and other sessions was focused on leadership through the lens of equity and mental health. NCSEA has embraced the SE3 committee and the information they bring forward as our work environment continues to evolve and younger generations enter the workforce. The SEAO SE3 committee continues to be one of our most active committees within SEAO.

If you have not attended a Summit, it is a good opportunity to meet other engineers, attend seminars on the latest technical developments in engineering (code changes, sustainability, integrated project delivery, new technologies, etc.).

The 2024 Summit will be in Las Vegas, Nevada, November 5-8<sup>th</sup>, 2024. If you have not been to an NCSEA Summit, I encourage you to attend.

If you would like to see NCSEA's recap, visit <a href="https://www.multibriefs.com/briefs/ncseacom/">https://www.multibriefs.com/briefs/ncseacom/</a>
<a href="https://www.multibriefs.com/briefs/ncseacom/">ncseacom/12823.php</a> for more information.

#### ASK A QUESTION, GET AN ANSWER

Do you have a code question you would like to ask the Wind Committee or Snow Committee?

SEAO is pleased to provide a simple way for Q&A's with technical committees. Email questions to <a href="mailto:jane@seao.org">jane@seao.org</a>, and SEAO will direct your question to the appropriate committee chair for a response.

Questions and their answers will be made anonymous and available to the membership on the website <a href="https://www.seao.org">www.seao.org</a>. Committees include: Seismic, Wind, Snow, Code, Vintage Building, and Special Inspections.

#### ANNUAL DUES REMINDER

Annual dues for SEAO membership were due by October 31, 2022. The SEAO website is open for paying dues. Visit: <a href="https://www.seao.org/">https://www.seao.org/</a> to login and pay your dues. Please contact Jane at <a href="mailto:jane@seao.org">jane@seao.org</a> if you'd like to pay an alternate way. Renewal rates are as follows:

- Member (licensed PE in Oregon): \$125
- Affiliate Member (unlicensed): \$110
- Student Member (full-time student in Civil or Structural Engineering): \$20
- Life Members, Retired Members/Affiliates, or Professors: \$25

#### SEER UPDATE BY: DAVID TARRIES, PE, SE

The SEER committee continues to work with OrSAP to develop the program. The OrSAP training in October went well and more training opportunities will be announced in the future. If anyone has interest in OrSAP training (ATC 20/45) please email seer@seao.org.

The City of Portland Bureau of Development Services has a new post-disaster building evaluation program they would like to promote that is related to OrSAP in that allowance for jurisdictions to set up programs was provided in the same law that created the OrSAP office in Salem. Here is a notice from BDS:

- After an earthquake, buildings require a safety evaluation before they can be reoccupied, repaired, or demolished. When businesses can't function, the economic losses impact the entire city. 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 to determine if a structure can be safely reoccupied 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. To manage this challenge, some jurisdictions in San Francisco, Salt Lake City, and now Portland have implemented a quick inspection program that works with large 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 response plan that benefits all parties.
- Would your organization be interested in having the Bureau of Development Services present to your engineering firm to discuss this program further? If so please let us know and we are happy to coordinate.

Please email <a href="mailto:seer@seao.org">seer@seao.org</a> or <a href="mailto:equip@portlandoregon.gov">equip@portlandoregon.gov</a> if you would like to get connected with the program.

#### MASS TIMBER CONFERENCE MARCH 26-28, 2024

The International Mass Timber Conference is the largest gathering of mass timber experts in the world, covering the entire industry supply chain.

Explore cross-laminated timber (CLT), nail-laminated timber, glulam, mass plywood panels, dowel-laminated timber, and laminated veneer lumber; and the opportunities and obstacles in global design, construction, development, manufacturing, and more.

Visit: <a href="https://masstimberconference.com/">https://masstimberconference.com/</a> to find out more information on the conference and to register. Note that hotels are filling fast. Make sure to book via the mass timber conference website to obtain the best rates at the closest hotels.

# SEAOC ANNUAL CONVENTION & SEANW CONFERENCE JOIN FORCES NEXT YEAR SEPTEMBER 4-7TH, 2024

Next year the Structural Engineers Associations of California (SEAOC) is holding their annual convention in Portland, Oregon on September 4-7, 2024.

Due to the location, the delegates to the NWSEA Conference decided to partner the annual NWSEA Conference with the SEAOC event instead of holding a separate conference.

As part of this partnership, SEAO is responsible for providing some planning committee support. If you are interested in participating in some aspect of planning please reach out to Seth Thomas at seth.thomas@kpff.com.

#### ADVERTISING SPACE AVAILABLE

SEAO is pleased to provide full page advertising to members for \$500 and to non-members for \$600. That is the price to run the ad the entire year from September to August.

If you'd like to advertise, please contact Jane at jane@seao.org.

# NCSEA UPCOMING LIVE WEBINARS REGISTER AT: HTTP://www.ncsea.com/education/webinars/

# December 14, 2023, 10 am Pacific Time (Fee for Webinar) <u>An Introduction to the New ASCE Solar/PV Structures Manual of Practice</u>

Speakers: Steve Gartner, P.E., Principal Engineer Renewable Energy, Chair ASCE Solar PV Structures Committee

At this time the U.S. solar industry is operating without solar specific structural consensus standards or codes to provide engineers, owners, manufacturers, developers, and contractors guidance on how to design and build solar photovoltaic (PV) structures. Design engineers and manufacturers have to rely on what they can interpret from the local building codes, or any literature they can find, to design these unique structures. The challenge with allowing a young industry to grow and mature under this type of model is that it results in a wide variety of interpretations of the codes and design literature that leads to a lack of reliability of many solar PV structures. To provide a more reliable and consistent approach to the design of solar PV structures the Structural Engineering Institute (SEI) has through the Solar PV Structures Committee developed a Manual of Practice. This Manual will provide guidelines that engineers can use to rationally design solar PV structures for ground mounted PV, elevated PV, rooftop PV, and floating PV. The committee is made up of structural engineers, geotechnical engineers, contractors, tracker manufacturers, wind specialists, solar developers, and owners who are all working together to provide this guidance document. (1 PDH)

#### January 25, 2024, 10 am Pacific Time (Fee for Webinar) Boston University Data Science Center

Speaker: Nathan Roy, P.E., Principal, LeMessurier

The Boston University Center for Computing & Data Sciences is a dynamic vertical campus building that leverages shifting free-floating volumes to organized research neighborhoods, each with their own outdoor terrace. Exposed two-story deep perimeter steel trusses cantilever to support the offset massing. A slender concrete core reduced building weight allowing the building to be supported by a concrete mat slab bearing on marine clay, eliminating the need for deep foundations. The project employed concrete with Portland cement replacement rates of up to 70%. (1 PDH)

### February 6, 2024, 10 am Pacific Time (Fee for Webinar) Elevator 101

Speaker: Adarsh Jagannath, VDA

This introductory course explores the basic types of elevators, escalators, and miscellaneous lift applications. Additionally, concepts involving structural requirements for different types of elevators will be explored.

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

#### **EMPLOYMENT OPPORTUNITIES**

#### LIVERMORE ARCHITECTURE

# Structural Engineer Portland, OR

Livermore Architecture & Engineering is an architectural design and structural engineering firm in Portland, Oregon, specializing in commercial and industrial building types. We are a small firm that regularly completes big projects in a range of different markets. We have a friendly, positive work environment where employees are given considerable responsibility for project design and management.

We have an opening for a full-time, experienced structural engineer. Responsibilities include performing structural calculations, drafting construction AutoCAD/Revit drawings, field inspections, and construction administration.

We provide competitive salaries, incentive compensation, paid vacation/sick leave, reasonable work hours, 401(k) plan and paid professional development.

The ideal candidate will have a bachelor's or master's engineering degree and 1 to 5 years of experience with steel and concrete structural systems.

Please submit cover letter and resume via email to <a href="mailto:jobs@livermoreAE.com">jobs@livermoreAE.com</a> and visit <a href="mailto:www.livermoreae.com">www.livermoreae.com</a> to

#### KURT FISCHER STRUCTURAL ENGINEERING

## Structural Engineer Portland, OR

Kurt Fischer Structural Engineering (<a href="www.kfseng.com">www.kfseng.com</a>) is looking for entry-level or experienced structural engineers to join our Portland office. KFSE provides innovative and creative solutions for the built environment. We are looking for passionate and ambitious structural engineers to join our versatile, progressive, and experienced firm. Current projects include: historic non-ductile concrete and URM seismic rehabilitation, mid-rise office buildings, residential apartment and mixed use complexes, luxury residential, and a mid-rise luxury hotel. We highly value our employees and strive to foster a positive and energetic work environment by providing engineers with the tools, resources and mentoring to further their knowledge and career. There is ample opportunity for upward mobility within our firm, and we invite you to talk with us about exciting opportunities at KFSE.

Contact and/or send resumes to: LT@kfseng.com

#### **OTAK**

#### Structural Engineer Redmond, WA

Otak is hiring a Bridge/Structural Engineer to join our team for our Redmond, WA office! 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.

Otak employees enjoy no-cost medical, dental, vision, life and disability insurance; 401(k)-retirement match (100% vested immediately); Paid Time Off (PTO) accrual based on industry experience and more!

Please apply at: Otak Bridge/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 <a href="http://www.catenaengineers.com/opportunities/">http://www.catenaengineers.com/opportunities/</a>



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