



SEAU NEWS

The Newsletter of the Structural Engineers Association of Utah

Volume VI- Issue VIII May 2002

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This newsletter is a monthly publication of the Structural Engineers Association of Utah.

Articles or advertisements appearing herein may be submitted by anyone interested in expressing a viewpoint on structural engineering.

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▼



Double Arm Wing Salt Stacker for G.S.L. in Ogden Utah, by ESI Engineering, Salt Lake City, Utah

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MAY EVENT

SEMINAR:

IBC Wind Load Provisions



Wednesday, May 15, 2002
8:00 a.m. – 5:00 p.m.

Presented by:
SEAU

Location:
University of Utah
EMCB Room 103

Cost:
\$60 (SEAU Members)



MESSAGE FROM THE BOARD

ANOTHER YEAR COMES TO A CLOSE



By James M. Williams,
SEAU President

This month will be our last SEAU membership meeting until the September opening social. If you are like me, you are wondering where the time went? SEAU now has 13 committees, most of which have been very busy this last year, not to mention approximately 10 other

delegates and members who sit on other boards. The success of any organization depends on the activity of its members. This last year we have had very good participation in committees, membership meetings and seminars. We hope to continue to improve on this trend next year. Although there will be a three month recess from membership meetings over the summer, some committees and several individuals will continue providing hours of service.

We are sad to see some of our SEAU Board Members leave, and are grateful for the time and service they have provided. Until serving on the Board, I had no idea of the amount of hours they spend on behalf of the membership and profession. At the same time, we are excited to see who the new Board Members will be, and are equally eager to continue working through the summer months in an attempt to

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MEMBER FORUM

FOCUS

Utah Structural Engineers provide a significant contribution to a wide variety of projects for commercial, government, industrial, and residential clients. Each month, SEAU would like to focus attention on the accomplishments, successes, and hard work of our Utah Structural Engineering and related firms. This month the focus is on:

Reeve & Associates

Reeve & Associates, formerly Reeve & Reeve, was founded in 1960. The firm's staff of 22 includes structural engineers, civil engineers, land planners, surveyors and landscape designers. SEAU member, John Reeve, PE, CSE, is a Principal and President of Reeve & Associates. He has extensive structural experience designing commercial, industrial and public building projects.



Weber State University Cooling Tower

Weber State University is a long-term client of Reeve & Associates. Recent projects include a new student-housing complex, a cooling tower, as well as structural analysis of the existing Stewart Stadium prior to the SkyBox addition. The Weber State University housing complex was a fast-track, design-build project, located south of the Dee *Weber State University Student Housing Complex*



Events Center. Situated on a 10-acre site, the project consists of five three-story wood-frame apartment style buildings, a community center and common areas. The buildings were designed using seismic zone 4 criteria because of their proximity to a fault line. During the project, the company

worked closely with Tingey Construction, Hilton Architects, Ogden City, DFCM, and Weber State University. Coordinating with the Salt Lake Olympic Committee, two of the buildings were finished in time for the 2002 Winter Olympic Games. The entire project will be completed by the summer of 2002, just in time for Fall Semester at Weber State University.

Reeve & Associates recently designed a reinforced concrete tunnel for Jack B. Parsons' new concrete mixing facility in Ogden. The tunnel is 140 feet long, 8 feet tall, and 10 feet wide and houses a conveyor belt for transporting materials from aggregate silos to the batch processing plant. Four 32-foot tall silos are located atop the tunnel and contain aggregate material, weighing up to 1,100 tons each. Along with poor soil quality, further challenges included designing twelve 7-foot square openings connecting the four 30-foot silo bases to the tunnel while accommodating the weight of each 1,100-ton silo.

Reeve & Associates has developed substantial experience with many national clients providing design services for companies such as Old Navy, Holiday Inn, Family Dollar, Chevron, Hollywood Video, and others. Owners based out of state find the firm's multi-disciplinary services to be particularly useful.



Old Navy Logan, Utah

Reeve and Associates has provided structural evaluation and design for historic buildings throughout Ogden City. Work includes building inspection and design to remediate structural deficiencies for many buildings on Historic 25th Street as well as the Grant Professional Building (formerly the Stevens Henagar building), and the Masonic Temple building in downtown Ogden.



Historic 25th Street Buildings Ogden, Utah

MESSAGE FROM THE BOARD (continued from page 1)

accomplish yet more of our goals.

The Professional Practices and Ethics Committee will soon be ready to submit a SEAU Standard of Practice to the Building Officials. Many Building Officials have requested this, and are eager to get it. This is an attempt to raise the bar here in Utah. This will not have a large impact on firms that are already providing detailed engineering and plans.

SEAU has made a concerted effort to provide educational seminars for a reasonable price. We have utilized as much money as possible from the DOPL Education fund in order to help subsidize the cost of our seminars, and we will continue to do so.

This last year we were able to make a by-laws change, and are in the process of reviewing other changes that may be beneficial to our organization.

With the adoption of the Utah Amended Code we now have better triggers for determining when a seismic upgrade should be required. If you don't already have a copy of the Amended Code it can be downloaded from the DOPL website.

The IBC was adopted after many hours were spent reviewing its content and making suggestions for code changes and clarifications. Many of our members continue in this effort.

All of our Delegates have been very active and have represented our organization very well. The Delegates have provided informative news articles and continue to represent our organization and help coordinate efforts with other organizations at state and national levels.

SEAU successfully hosted the WCSEA annual meeting and conference.

SEAU endorsed SB 424, legislation providing funding for

seismic retrofitting of buildings throughout the country.

The SEAU membership committee was active in increasing our membership.

We encourage all members and member firms to aid in increasing our membership. Please encourage employees, and fellow engineers to join our ranks and to participate in our organization. Their participation will help strengthen our organization, and will make them better engineers through the knowledge and association they receive.

The SEAU newsletter is one of the best of its kind. I receive newsletters from several organizations, both on a state and national level. Our newsletter is one of the best!

Our programs have been informative as well as entertaining. They have also been reasonable as far as the expense and time required to participate. If you have ideas for other programs you would like to see, please contact our programs committee and let them know.

Our website continues to improve each year. Please visit it regularly. Thanks to Larry Reaveley, we are in the process of hosting our website on the University of Utah's server. Because we are a non-profit organization, if all goes as planned, we should be able to be hosted for free.

The Seismic committee has been meeting on a regular basis. I have been updated each month as to their progress on code and seismic related items. They have studied the Guidelines for the Seismic Retrofit of Existing Buildings and have also reviewed issues pertaining to residential design under the 2000 IRC, in conjunction with other issues.

The Structural Licensing Committee is active in establishing guidelines as to when a structural license should be required. They are also monitoring the NCSEA who, in conjunction with other organizations, is making an attempt to standardize licensing requirements across the country. Eventually we will probably see a structural license with approximately 5 certifications for specialty engineering (high seismic being one of them).

The technical committee has been reviewing an empirical snow load equation that was submitted by Carl Erikson. They are also looking at the IBC wind provisions and possible options or alternate methods. They are also reviewing the OSHA Steel Erection Standard.

Chris Barker has been active in providing and updating a SEAU Association Guidelines Manual. This will help provide stability between boards.

The Structural Engineers Emergency Response Committee is being formed. We hope that this committee will have representatives from all member structural firms. There is a great need for preparedness on our part as structural engineers, so that we will be ready to better aid the public in times of emergency.

This sounds like a lot of work, but is only a part of what we are doing as an organization. My term as president this past year has gone by faster than I could ever have imagined. I know next year will be as equally eventful. I am looking forward to serving on the board and hope that everyone will actively participate on one or more of our committees. If you are not already involved, this next year is the time to do it!

BULLETIN BOARD**BULLETIN BOARD EDUCATOR FEATURE**

During the months of March, April, and May, SEAU News is featuring the structural engineering activities of the Civil Engineering Department from one of Utah's three largest universities, highlighting their areas of research and expertise and research projects they are pursuing. This month's focus is on:

UTAH STATE UNIVERSITY

The Utah State University Department of Civil and Environmental Engineering employs 35 full time faculty members. In addition there is a diverse variety of adjunct faculty, staff, graduate, and undergraduate students. As part of its mission as Utah's designated Land Grant Institution, the department enjoys a rich history and reputation for teaching, research, and extension at a state, national, and international level.

The Department of Civil and Environmental Engineering consists of 5 academic divisions, each having both undergraduate and graduate programs. These divisions include Structural Engineering, Geotechnical Engineering, Water (Hydraulics and Hydrology) Engineering, Environmental Engineering, and Transportation Engineering.

The structural engineering division participates in the education of all the civil engineering undergraduate students and conducts an active graduate program. The structural engineering division teaches courses in Structural Dynamics and Vibrations, Finite Element Methods, Theory of Elasticity, Theory of Plates and Shells, and an assortment of design and analysis courses. Graduate courses are usually selected from the Department of Civil and Environmental Engineering, Department of Mechanical Engineering, Department of Geology, and the Department of Mathematics. The department offers Bachelor of Science (BS), Master of Engineering (ME), Master of Science (MS), and PhD degrees. The masters degree can be completed in one year.

Research in the structural division is quite diverse depending on the individual faculty member. A current sustained area of research interest is in dynamic field testing of full-scale structural and geotechnical systems. Vibration equipment, instrumentation, large-scale data acquisition systems, and mobile trailers and

vehicles help to support this strong structural engineering research program. Substantial work has been done in recent years related to both the old and the new I-15 corridor in Salt Lake City. The structural engineering research is complimented by a strong research program in soil dynamics and geophysical field testing.

CONTACT SEAU

For any information concerning the Structural Engineers Association of Utah or association activities, contact:



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Peggy Ogzewalla, Executive Director

BOARD OFFICER ELECTIONS

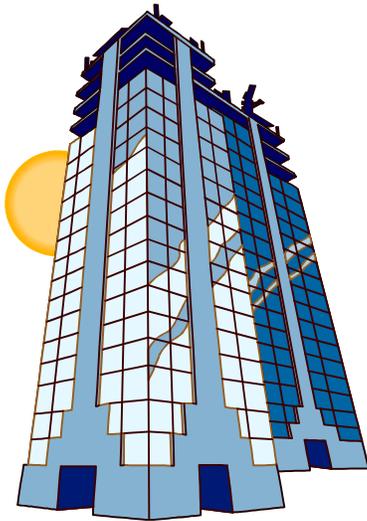
Ballots have been sent to all voting grade members for electing next year's SEAU officers and board of directors. Please return your completed ballot as soon as you can. Thank you!



BULLETIN BOARD**CLASSIFIEDS****STRUCTURAL ENGINEER**

Established consulting firm looking for talented project engineer with 3 – 10 years building design experience. Opportunity for productive engineer to grow with company. Send resume and statement of interest to:

CALDER-KANKAINEN, Inc.
307 W. 200 S
Suite 4002
Salt Lake City, UT 84101
Fax: 328-2737

**UPCOMING NATIONAL SEMINARS**

ATC-17-2 Seminar on Response Modification
Technologies for Performance-Based
Seismic Design

Los Angeles, California
May 30 – 31, 2002

Sponsored by:

- Applied Technology Council
- Multidisciplinary Center for Earthquake Engineering Research
- National Science Foundation

For information visit www.atccouncil.org or call 650-595-1542.

Seventh U.S. National Conference on
Earthquake Engineering (7NCEE)
Urban Earthquake Risk

Boston, Massachusetts
July 21 – 25, 2002

Sponsored by:

- Earthquake Engineering Research Institute
- Federal Emergency Management Agency
 - United States Geological Survey
- Multidisciplinary Center for Earthquake Engineering Research
 - Pacific Earthquake Engineering Research Center
 - Mid-America Earthquake Center

For information visit:

www.eeri.org/news/Meetings/7nceef.html or
email: eeeri@eeri.org or call: 510-451-0905

ARE YOU A STRUCTURAL ENGINEER?

The following definition of structural engineering is reprinted from The Illinois Structural Engineering Licensing Act of 1989.

“A person shall be regarded as practicing Structural Engineering within the meaning of this Act who is engaged in the designing or supervising of the construction, enlargement or alteration of structures, or any part thereof, for others, to be constructed by persons other than himself. Structures within the meaning of this Act are all structures having essential features, foundations, columns, girders, trusses, arches and beams, with or without other parts, and in which safe design and construction require that loads and stresses must be computed and the size and strength of parts determined by mathematical calculations based on scientific principles and engineering data.”

SEAU PRESENTS:

IBC 2000 WIND LOAD PROVISIONS

Presentation by:
S.K. Gosh and Jerry Neville

May 15, 2002
8:00 a.m. – 5:00 p.m.

University of Utah
Engineering and Mines Classroom Bldg
Room 103

Cost:

\$60.00 for SEAU Members

(This program is generously subsidized by SEAU and other organizations. Please take advantage of this offer for a full-day seminar at a reduced price and help support SEAU's efforts to bring useful and informative programs to you.)

Resgistration forms were faxed to all members. If you did not receive one, please register with the SEAU Office, phone 801-321-0259

STRUCTURAL ENGINEERS ASSOCIATION OF UTAH

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