



Structural Engineers Association of
Southern California

5360 Workman Mill Rd.
Whittier, CA 90601

Tel: (562) 908-6131 Fax: (562) 692-3425

E-mail: seaosc@seaint.org Website: www.seaint.org

SEAOSC

Founded in 1928

Vol. 14 March 2004

NEWS

President's Message

First of all, I would like to inform you of the very important work that is in progress by your technical committees. The



Existing Buildings Committee under David Pomerleau is working on very important code additions and revisions in soft-story frame buildings with plywood, stucco, and mixed systems using steel frames and shearwalls. The second Existing

Buildings Committee, chaired by Chukwuma Ekwueme, is working on commentary for the very important nonductile concrete and steel frame with nonductile infill building retrofit design guidelines. These are the two types of buildings that showed the greatest vulnerability as far as collapse or near collapse in the Northridge earthquake, and they are the types of buildings that will probably be the greatest source of collapse and deaths in any future moderate to great earthquakes in this area. They are a part of the the losses

(Continued on Page 3)

PD&D Seminars Mar. 3, 10

The following Practical Design & Detailing (PD&D) seminar and Dinner Meeting will be held Mar. 3 in Monterey Park and Feb., 2005, in Orange County: "Seismic Design of Metal Buildings and Coordination with Other Trades" by Jim Miller, S.E., J.R. Miller & Associates; and "Seismic Design of

Nonbuilding Structures Similar to Buildings" by Rick Drake, S.E., J.S. Dyer & Associates. The third topic, "Design to Anchor/Support Non-Structural Elements in Buildings" by John Silva, S.E., Hilti, Inc., will be presented after dinner. (See blue insert for details.)

(Continued on Page 10)

L.A. Seminar & Dinner Mtg.

Wednesday, Mar. 3

Program: Part 3 of PDD: Design to Anchors/Support Non-Structural Elements in Buildings

Speaker: Jim Miller, S.E.

Location: Luminarias Restaurant, Monterey Park

Time: 5 p.m. Social Hour

6 p.m. Dinner

7 p.m. Program

Menu: Steak

Cost: \$30

(See blue insert for reservation form and details.)

Tri-Counties Seminar & Dinner Mtg.

Wednesday, Mar. 10

Program: Part 3 of PDD: Structural Fabrication Practices & Procedures

Speaker: Dan Luna

Location: Fourpoints Harbortown Sheraton Hotel, Ventura

Time: Social hour: 5 p.m.

Dinner: 6 p.m.

Program: 7 p.m.

Menu: Chicken (Vegetarian dinner available if requested by Noon Jan. 12)

Cost: \$30 (Full-time students \$15)

(See green insert for reservation form and details.)

March & April Calendars

MARCH

3	Noon	SEAOSC Board Meeting	Luminarias Restaurant, Monterey Park
	3:30 p.m.	L.A.PD&D Seminar	Luminarias Restaurant, Monterey Park
	5 p.m.	L.A. Dinner Meeting	Luminarias Restaurant, Monterey Park
9	2 p.m.	Quality Assurance Committee	SEAOSC Offices, Whittier
	4 p.m.	Existing Buildings Committee	SEAOSC Offices, Whittier
10	3 p.m.	Tri-Counties PD&D Seminar	Fourpoints Harbortown Hotel, Ventura
	5 p.m.	Tri-Counties Dinner Meeting	Fourpoints Harbortown Hotel, Ventura
16	1 p.m.	Code Committee	SEAOSC Offices, Whittier
20	8 a.m.	Macro Seminar	Wyndham Hotel, Commerce
23	2 p.m.	Large Existing Buildings Committee	Taylor & Gaines, Pasadena

APRIL

7	Noon	SEAOSC Board Meeting	Luminarias Restaurant, Monterey Park
	3:30 p.m.	L.A. PD&D Seminar	Luminarias Restaurant, Monterey Park
	5 p.m.	L.A. Dinner Meeting	Luminarias Restaurant, Monterey Park
13	2 p.m.	Quality Assurance Committee	SEAOSC Offices, Whittier
	4 p.m.	Existing Buildings Committee	SEAOSC Offices, Whittier
14	3:30 p.m.	Orange County PD&D Seminar	Costa Mesa Country Club, Costa Mesa
	5 p.m.	Orange County Dinner Meeting	Costa Mesa Country Club, Costa Mesa
17	9:30 a.m.	SEAOC Board Meeting	Sacramento
21	Noon	June Newsletter Deadline	
24	8 a.m.	Macro Seminar	Wyndham Hotel, Commerce

President's Message *(Continued From Page 1)*



Guidelines for Seismic Retrofit of Existing Buildings, which is referenced in the 2003 International Existing Building Code. The

City of Los Angeles has voluntary retrofit provisions for both of them, which unfortunately will probably not become mandatory until after that next earthquake hits.

DESIGN MANUALS

The Seismology Committee under the chairmanship of Bob Lyons is very active, as always, working on the Blue Book and the design manuals using current ASCE 7 standards and the IBC. The design manuals are very useful additions for the profession, and their use with the seminars is both an excellent instruction guide for engineers and a source of income for the Association. Our Code Committee under the chairmanship of Carl Sramek has maintained a very busy and productive schedule despite the confusion that has arisen after the end of the UBC code provision cycles and the introduction of the IBC and other codes. The Research Committee under the chairmanship of Bahram Zarin-Afsar is currently working, among other projects, on the testing of a damaged post-tensioned concrete building, which will be tested to failure since it is planned to be demolished. Cecil Teoh chairs the Quality Assurance Committee, which has developed concise quality assurance guidelines governing testing, inspection, and structural observation. And much more needs to be done in incorporating these provisions into new codes.

We currently have representatives from these committees on the corresponding NCSEA committees. It is through the NCSEA committees that we have the best chance of introducing code provisions and modifications to the new editions of the IBC.

Engineers often ask what does the Structural Engineers Association do for them to justify the payment of dues. Of the many benefits, the most important is networking and learning from others. In order to survive in this business, in good times and bad, you have to be able to solve a wide range of engineering problems. Some engineers limit themselves to one thing – but they have to be prepared to hibernate during the periods of low demand – and that can be for a long time.

GET INVOLVED

Attending our seminars is a great way to keep abreast of new methodologies. Even better is participating in the technical committees that develop these seminars, design manuals, and code language. This is especially true for our younger members, who have the opportunity to hear and discuss problems with more experienced peers. Therefore, I encourage you to call one of these Chairs to get involved where you can both learn and contribute to the profession.

On another topic, January 17, 2004, was the 10th anniversary of the Northridge earthquake, which cost \$40-billion in damages and the loss of 57 lives. Cal Tech hosted an event on that date to commemorate

(Continued on Page 4)

President's Message *(Continued From Page 3)*

and also to highlight the advances that have been made in the past years in understanding and preparing for earthquakes. SEAOSC was represented there, and I want to thank Mike Cochran, Brenda Guyader and Herb Stockinger for spending their Saturday promoting the structural engineering profession at the event. Our Public Relations, Speakers Bureau, and Disaster Preparedness Committees are doing a good job in informing people and helping to get the word out about what structural engineers do to mitigate these disasters. I am sure that there are some members who would like to assist in the work of these committees, and I encourage you to contact one of the people mentioned above or myself to learn more about what is being done and how you can contribute to it.

IN THE NEWSPAPER

There were eight articles concerning the Northridge earthquake in the Los Angeles Times last week, starting Wednesday the 14th through Sunday, Jan. 18th. For those of you who read them, you will know how many times the words “structural engineers” and “the Structural Engineers Association” were mentioned. According to my tally, and if my arithmetic is correct, the phrase “structural engineer” was mentioned once, and that was because one of the two engineers quoted gave that as his title. The Structural Engineers Association of Southern California was mentioned exactly zero times.

We are having some new handouts, such as pencils and rulers, made up to provide people at events like the one at Cal Tech, to advertise our existence, and I am having the words “Structural Engineers Association”

placed upon them rather than “SEA” because I suspect that most people would think that stood for “Silent Engineers Association.” Don’t worry, the public loves us – they just don’t know who we are.

One of the long-range goals for our association is to advance the image of the structural engineering professional and of our Association. A great deal of time is spent at our regional and state board meetings talking about this. Even more time is spent at various meetings and among engineering discussions to lament the fact that our profession is not appreciated to the extent that we think it should be because of our contributions in the protection of property and the saving of lives after disasters.

On the other hand, engineers who speak out about the importance of what we do and demand more recognition are not applauded and encouraged. Engineers who refuse to accept contracts from architects and builders who limit our ability to affect the quality of construction by performing structural observation, and those who refuse to take jobs that do not provide adequate compensation to fully detail construction elements on their drawings, are usually considered to be too outspoken and purveyors of a negative impression of what we do.

To some, not “blowing our own horn” is considered the professional way to act; however, I can make the case that it is actually ducking from the responsibility that we owe to the general public.

(Continued on Page 5)

President's Message *(Continued From Page 4)*

One example: our association has taken the position that the State of California should adopt a state building code based on the International Building Code because of the work that we, and other professionals, have contributed to it. And yet some who are in positions of authority do not believe that we should speak out in a definitive way for fear of upsetting someone. It follows that you can't upset someone if they don't know you exist.

Many of us are quite comfortable in this semi-anonymous position. We have our niches and our clients who know that we will keep producing the engineering they need without causing any ripples by demanding to have involvement in the overall design and construction process, as I believe we should. How often have you heard someone say that if you promote

yourself and your profession, you will merely appear to be trying to get more money out of the process.

I look at it another way: I consider the possession of special knowledge that can result in the saving of lives results in the responsibility to use that knowledge for the betterment of society. Doctors make more money if more people have regular medical checkups. That is true. However, it is also true that if more people get checkups, more will live longer and in better health. I believe that to be analogous to the position of structural engineers in demanding that more resources be spent on producing adequate design, detailing, and structural observation of projects in which they are involved.

Richard Hess,
President

Thank You Donors!

THANK YOU to all the firms and individuals who contributed to making the 2004 SEAOSC Student Scholarship night on Feb. 4 a terrific success by either donating to the scholarship fund or for paying for extra dinners so that the students' dinners were free to them. The following contributed to this year's scholarship fund:

DMJM Design
JCE Structural Engineering Group
Smith-Emery Company
ABS Consulting
Breiholz Qazi Engineering

Correia Consulting & Design
James Lai
RBF Consulting
Hess Engineering
Tetra Tech ISG
Englekirk Partners Structural Engineers
Grossman & Speer Associates

The following students were awarded a total of \$5,100 in scholarships and a one-year student membership in SEAOSC provided by the SEA Auxiliary: Allen Au, Barbara Chang, Giovanni Damato, Ann Marie Duty, Darren Okimoto, Prudencio Alonso, and Art Chianello. Congratulations to them!



The Evolution of the Structural Engineers Association of California: Some Historical Notes (Part 1 of 3) By Thomas G. Atkinson, S.E.

Editor's Note: This was written shortly after the 1981 SEAOC Convention. It will be published in the SEAOSC NEWSletter in three parts:
Part 1 – In the Beginning – March 2004
Part 2 – The 40's, The 50's, and the 60's – April 2004
Part 3 – The 70's, The Present (1981), and Past Association Presidents – May 2004

IN THE BEGINNING

“To advance the science of structural engineering; to assist the public in obtaining dependable structural engineering services; to encourage engineering education; to maintain the honor and dignity of the profession and to enlighten the public with regard to the province of the structural engineer.”

This was the avowed purpose of the new Structural Engineers Association of Southern California as it came into being in a meeting at the University Club in Los Angeles on Feb. 20, 1929. The organizers were a group of twelve structural engineering consultants; two were also architects and one was a professor at the California Institute of Technology. Many of their names are well known today for their contributions to the science of structural engineering: Rufus M. Beanfield, Oliver G. Bowen, Clarence J. Derrick, Ralph A. Deline, Murray

Erick, Mark M. Falk, Paul E. Jeffers, William Mellema, Romeo R. Martel, Clarence E. Noerenberg, Blaine Noice, () Walz.

The membership grew rapidly, and by the end of 1930 included many additional engineers who are well remembered in the State of California, such as R.V. Labarre, D.F. Shugart, S.B. Barnes, R.W. Binder, W.M. Butts, B. Benioff, F.J. Converse, C.G. DeSwarte, M.F. Deering, N.W. Kelch, A.F. Miller, D.L. Narver, A.A. Sauer, S.S. Stahl, H.L. Whittlesey, W.E. Wilson, R.W. Wehr, and T. Von Karman.

SEAONC

Meanwhile, consulting structural engineers in the San Francisco area were meeting informally. The official beginning of the Northern California Association is traced to a meeting organized by R.C. Buell of the Portland Cement Association and held at the Engineer's Club on Sansome Street on Jan. 18, 1930. Those invited to attend were H.F. Brunnier, E.L. Cope, W.P. Day, H.B. Hammill, W.L. Huber, C.H. Snyder, R.S. Chew, M.C. Couchot, H.D. Dewell, J.H. Hjul, J.B. Leonard, and L.H. Nishkian. On Apr. 14, 1930 the Northern California Association was officially orga-

(Continued on Page 7)

The Evolution of SEAOC *(Continued From Page 6)*



nized, with 18 of a total membership of 31 present. Henry J. Brunnier was the first president, and Harold B. Hammill was the secretary-treasurer.

The impetus which brought the structural engineers together was the need to improve their business practices and their relationships with architectural clients. During the years immediately following their formation, both the Southern California and Northern California associations limited their membership to structural engineers in private practice. To expand the membership, however, this criterion was later abandoned, and all structural engineers, whether in private practice or otherwise employed, were encouraged to become members.

SANTA MONICA, 1931

After the formation of the Northern California Association in 1930, it quickly became apparent that much could be gained from closer contact between the Northern and Southern California groups. There was considerable discussion in both groups about establishing a means of correlating efforts and exchanging ideas between the north and the south. An exploratory meeting was held in Santa Monica in 1931 between representatives of the two organizations. A. J. Saph, Jr. of the Northern Association recalled that the Southern Association at that time seemed more inclined to identify with the architects, whereas members of the Northern Association considered themselves to be civil engineers. Later that year the state organization was founded. The first convention of SEAOC was held at the Santa Maria Inn on December 3 and 4, 1932. A

constitution was adopted at that time, and was later ratified by the constituent associations.

Efforts had already begun to obtain the title of Structural Engineer for registered civil engineers in California specializing in this practice. The minutes and records of the Association of Northern California indicate that they spearheaded these efforts, and H.J. Brunnier devoted considerable personal effort to this task. Initially there was some difference of opinion about the scope that the license of structural engineer should have. Many thought it should include and regulate bridge designers as well as those who specialized in buildings. A few, particularly in the south, thought that the title should be tied to the architect's license rather than to that of the civil engineer. Nonetheless, the structural engineer title in its present form was brought into being by the state legislature in 1932.

LONG BEACH EARTHQUAKE

Probably no single incident had as profound an effect on the practice of structural engineering in the state California as the severe earthquake that struck the city of Long Beach on the evening of March 10, 1933. The disaster occurred at a time when interest in the problem of earthquakes was prominent among structural engineers. Only nine days earlier at a meeting of the Southern California Association the program included motion pictures of shaking building models which had been subjected to varying load conditions and horizontal forces. The film was the property of the Structural Engineers Association of Northern California.

(Continued on Page 8)

The Evolution of SEAOC *(Continued From Page 7)*



Two days after the earthquake, a meeting of the board of directors of the Southern Association was called by Professor Romeo R. Martel of the California Institute of Technology. Three major actions were taken at that meeting. First, a joint committee, consisting of ASCE, SEAOSC, and the Associated General Contractors, made a complete report on the damaged area in order to ensure that reconstruction would be carried out on a sound basis. Second, a motion was passed that the Board of Building Safety of Los Angeles require that all buildings be checked for lateral and vertical forces. Finally, it was agreed that a letter be sent to the supervising architect of the U.S. Treasury Department strongly urging that all federal buildings built on the west coast be designed and checked for lateral forces by competent engineers. The Northern Association was informed of this action and also wrote a letter supporting this recommendation.

NO COMPENSATION

Much of the work of reconstruction and inspection was being done without compensation at that time in order to meet the urgent needs of the City of Long Beach and the surrounding areas. Mr. Charles Wailes, Chief Building Inspector for Long Beach, was a guest at the next general meeting of SEAOSC on March 14, 1933. He described conditions in his city, and discussed building safety and efforts to guard dangerous buildings. He discussed the Uniform Building Code that was in force, and stated that it was a good code, although it obviously did not require construction that would resist earthquakes of the magnitude of the one that occurred on March 10. He also thanked the engineers for all of their help and cooperation in Long Beach.

At another meeting which was held the following week much discussion concerned the problems of public schools and public buildings and possible legislation that would provide proper structural design of such buildings. J.B. Leonard of the Northern Association stated that the State Architect, George B. McDougall, had been asked to suggest legislation for design to withstand earthquake forces in public buildings, particularly in schools. Mr. McDougall in turn had telephoned him to ask whether there was unified opinion as to what legislation was desired. This exchange led ultimately to the passage of the Field Act, which assigned to the State Architect the responsibility for the safe design and construction of public schools.

Some of the early members of SEAONC worked for several years in drafting a State Chamber of Commerce Uniform Building Code which included provisions for design of buildings to resist seismic forces. These data were made available to the State Division of Architecture following passage of the Field Act, and later became the basis for Title 21 and Appendix A which regulate the structural design of public schools.

EARTHQUAKE DESIGN REQUIREMENTS

The Long Beach earthquake had painfully emphasized the fact that little work had been done by engineers to establish earthquake design requirements. Individual differences of opinion regarding earthquake design had hampered the formulation of a consensus regarding specific provisions until the Long Beach event. Since that time, the Structural Engineers Association

(Continued on Page 9)

The Evolution of SEAOC *(Continued From Page 8)*



1937 Annual SEAOC Convention

which continues today in the SEAOC Seismology Committee and the Applied Technology Council.

Many of the engineers who were involved in earthquake reconstruction design operated under somewhat difficult conditions because of the economic conditions which prevailed during those depression years. In the year 1934 engineering fees on school reconstruction projects were based on a standard fee set at 4 mils per cubic foot of building. (During that same year at a meeting of the Northern Association at the Engineer's Club, dinner was one dollar per plate.) Nonetheless, the year 1934 was an important one for the Structural Engineers Association both in southern and in northern California. Numerous programs related to earthquake design were presented by both associations in 1934, and much progress was made toward improving the state of the art. One of the meetings of the Northern Association was devoted to discussion of construction of the Golden Gate Bridge towers and founda-

tions which were under way at that time. During this year much of the work was done which established a relationship of mutual respect between structural engineers and architects, particularly in the area of school design. A SEAOSC meeting notice of June 21, 1934, illustrates the problems of the times. The notice contained the following resolution which was to be offered at the next meeting of the Association:

"Resolved, because of technical limitations established by the State Division of Architecture and economic limitations set by the Board of Education, the structural engineer is prevented from exercising his independent judgment and therefore cannot accept responsibility for the structural sufficiency of schoolhouse design."

Although the record does not show whether this resolution was passed, an arrangement for handling

(Continued on Page 10)

The Evolution of SEAOC (Continued From Page 9)



structural engineering fees on school design work was subsequently established with the Southern California Chapter of the American Institute of Architects.

A joint convention of the northern and southern California sections was held on October 18 to 20, 1934 at the Santa Maria Inn, Santa Maria, California. The main items of discussion concerned earthquake hazard and protection, the pending legislation for the Field and Riley Acts, and technical features of building code changes.

Overall, the decade of the Thirties was one of curtailed activity in the structural engineering profession because of the low volume of building construction during the depression years. SEAOC's files contain a number of letters from individual members of the association who were experiencing hard economic times. Most of the letters contained apologies for nonpayment of dues which had taken a lower priority than the payment of day to day living expenses. Yet of technical significance was the development during this era of more accurate means of designing statically indeterminate beams and frames using procedures devised by Professor Hardy Cross and other distinguished engineering researchers of the day. Many programs on analysis of continuous frames and similar subjects were developed and presented to both associations, and structural engineers were quick to take advantage of these more sophisticated approaches to a more reliable design of structures.

During the mid-thirties the U.S. Bureau of the Budget threatened to discontinue the seismological program of the U.S. Coast and Geodetic Survey in California. This was vigorously opposed by the Structural Engineers Association. The profession is particularly indebted

to A.V. Saph, Jr., of San Francisco who led the fight to have funds restored and kept the program alive so that strong motion earthquake records were obtainable in later years.

Structural engineers were enjoying increasing prestige during this period. SEAONC sponsored legislative joint meetings in San Francisco in 1935, 1937 and later years. Many prominent members of the legislature and executive branch of the state were invited guests. The meetings were attended by representatives of SEAOC, ASCE, and other professional groups.

(Watch for Part II in the April NEWSletter.)

PD&D Seminars Mar. 3, 10 (Continued From Page 1)

The following PD&D Seminar and Dinner Meeting will be held Mar. 10 in Ventura for the Tri-Counties Chapter and August, 2004, for the Orange County Chapter: "Open-Web Joists" by Gary Tiedgen and "Light-Gauge Steel Framing Connections" by John Maciel. The third topic, "Structural Fabrication Practices & Procedures" by Daniel Luna will be presented following dinner. (See green insert for details.)

Want to Volunteer?

If you are interested in joining one of SEAOSC's technical committees, please contact the chair of the committee you are interested in. Contact information and a list of committees can be found on the back page of every SEAOSC *NEWS*letter.

New Members

SEAOSC welcomes its newest members:

Angela Hernandez, *Associate*, Thornton Tomasetti Engineers, Tustin

Scott N. Jones, *Member*, Wright Engineers, Las Vegas, NV

Winnie Lam, *Associate*, KPFF, Irvine

James C. Orland, *Member*, Self, Manhattan Beach

Jordan Truesdell, *Corresponding*, Truesdell Engineers, Newport, VA



Advertisement



Saiful/Bouquet Invites Goal-Oriented Thinkers to Join our Expanding Team.

Participate in the growth of one of the fastest growing, multiple award-winning engineering firms in Southern California. Experience the challenge and pride of being responsible for a variety of projects from new unique buildings to strengthening of existing structures. Execute state-of-the-art performance-based engineering, fast track design and construction projects, historical renovations, implementing energy dissipating systems, and much more.

Multiple positions available for engineers with 0 to 10 years of experience in the following areas:

- Concrete, steel and wood design of new buildings
- Seismic Strengthening
- Conventional to cutting-edge computer analysis
- Project Engineer and Management level experience

Join us in a personable and stimulating environment, exchange ideas with a creative, dynamic and forward thinking team, and realize your career potential.

Send resumes by fax or e-mail to:
Mehran Pourzanjani
Mehran@sbise.com | Fax: 626.304.2676



150 E. Colorado Blvd., Suite 350 Pasadena, California 91105 | Tel: 626.304.2616 Fax: 626.304.2676 | www.sbise.com

Advertisements, announcements and inserts are for the information of readers and are not intended as endorsements by SEAOSC.



STRUCTURAL ENGINEERS

We are a well-established company doing seismic evaluation, retrofit, and strengthening work as well as design of new construction. Desire engineers ranging from new grads to 3 years experience, with good analytical and communication skills. EIT minimum. Positions are available in Irvine and Oakland offices. Excellent work location and benefits with opportunities for growth.

Contact John G. Shipp
300 Commerce Drive, Suite 300
Irvine, CA 92602
714-734-4242
jgshipp@absconsulting.com

PLAN CHECK ENGINEER POSITION

CITY OF BURBANK
Building Division
Community Development Department

Salary Range: \$4,367 - \$5,306
For Application: 818-238-5021

Additional Questions:
jcheng@ci.burbank.ca.us
tsloan@ci.burbank.ca.us

expertise  that is solid below the

SEEKING:

Sr. Structural Engineer (CA S.E.): 8+ years steel and concrete building design experience in CA. DSA/OSHPD and timber experience a big plus. ETABS and/or SAP expertise. Knowledge of base Team leadership, communications and project engineering and management skills essential. Interest in business development aspects a plus.*

Structural Design Engineer (PE. or soon to be): 2-4 years similar experience as described above.

CAD Operator/Designer with 5-7 years of experience in design of steel and concrete commercial and institutional facilities in California. Must be proficient in the latest release of Autocad. Must be able to perform limited design work with engineering supervision and have an excellent understanding of drawing production and coordination.

These positions offer a outstanding salary & benefits (*generous signing bonus), and extraordinary advancement potential doing k. To get a better idea about our ebsite - www.coffman.com

Qualified applicants should fax or email their resume to:

51

Seattle
Spokane
Anchorage
Los Angeles

S
U
R
F
A
C
E

challenging ... innovative ... fun ... positive ... YOU

STRUCTURAL CONSULTING ENGINEERS

If you are looking for a company where:

- § You will be respected
- § Your mind will be challenged to grow
- § You will enjoy coming to work
- § You can select the office where you want to work
- § You will work on major high profile projects

Come and join the **Taylor & Gaines** team. Engineering positions are available for engineers with these qualifications:

- § 7 – 10 years experience in structural design of all varieties of buildings
- § 3 – 5 years experience in wood, steel, concrete
- § Written communication skills, teamwork skills and computer proficiency
- § California P.E. or S.E. preferred

Join our **exceptional** team and work on exciting, challenging projects.

Send resume to:

Ed Gharibans

FAX (626) 351-5319

Email: edg@taylorgaines.com

Visit our web site: www.taylorgaines.com



PASADENA · ENCINO · SAN DIEGO · ANAHEIM



Lionakis Beaumont
Design Group Inc.

The largest A/E firm in the Sacramento region presents exceptional career opportunities for qualified engineers and drafters. Strong communication and teamwork skills are essential for both positions.

Project Engineer

Minimum two years experience in structural analysis, design and detailing of buildings required. Candidate should possess design experience in timber, concrete, steel and masonry structural building systems. Seismic building design experience required. California PE licensure preferred.

CAD Drafter

Minimum two years experience CAD drafting of architectural or structural engineering projects required. Proficiency in utilizing CAD software efficiently required. Knowledge of structural building systems required.

www.lbdg.com

jobs@lbdg.com

Fax: (916) 558-1919



Structural Engineer \$67,262-\$83,486/yr.

Minimum Requirements

A valid Certificate of Registration as a Professional Engineer in Structural Engineering issued by the California State Board of Registration of Civil and Professional Engineers, preferably supplemented by a course in supervision.

Desirable Additional Background

A working knowledge of CADD applications, CBC Title 24, Public School Design and DSA work experience is highly desirable.

Special Physical Requirement

Agility to climb ladders and scaffolds, walk on roofs, and move safely in partially completed building crawl spaces.

The LAUSD offers a complete benefits package, including family medical, dental, and vision coverage.

Apply During: March 15-March 29

Call: (213) 353-4200

Or Visit: www.lausdjobs.org

Los Angeles Unified School District
Equal Opportunity Employer

CREATIVE ENGINEERING CHALLENGE

JOB DESCRIPTION:

- ##Research and Develop Technical Information for Publications
- ##IBC and Related Standards Code Involvement
- ##Present Seminars



Masonry Institute of America

JUNIOR ENGINEER POSITION AVAILABLE

Minimum 2-5 years engineering experience with the desire to promote and develop masonry design for practical applications. The successful candidate must have excellent communication skills and be willing to travel. We offer an independent work environment with opportunities for growth and national recognition within the masonry design community.

Mail, Fax or E-mail resume to:

John Chrysler

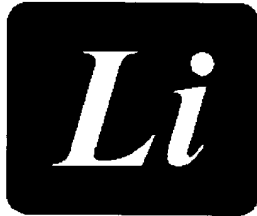
Masonry Institute of America

386 Beech Ave., Suite #4, Torrance, CA 90501

Telephone: (310) 328-4400 - Fax: (310) 328-4320

jc@masonryinstitute.org

SENIOR ENGINEERS



Li and Associates in beautiful Thousand Oaks has positions open for Senior Engineers...P.E. or S.E. preferred. Applicant must have three years design experience in steel, concrete, wood, and masonry. Industrial, commercial, and school experience is also required. We provide excellent compensation and opportunities to grow.

FAX resumes to (805) 495-4083

or

Email to: joe@li-associates.com

JCE STRUCTURAL ENGINEERING GROUP, INC.



OPENING POSITIONS

Innovative, mind challenging, cutting edge and fast growing Consulting Structural Engineering Firm is offering outstanding career opportunities to work on challenging projects.

- § **Structural Project Manager.** Minimum 7+ years of experience in structural/seismic design of all variety of buildings. M.S. Degree and California S.E. license required.
- § **Structural Designer.** Minimum 3+ years of experience in structural/seismic design of all variety of buildings. M.S. Degree and California P.E. license required, (S.E. license preferred or able to obtain it within one year.
- § **Junior Engineers:** 0 to 3 years experience. M. S. degree & EIT license required (P.E. preferred or able to obtain P.E. license within one year)

Previous DSA/OSHPD experience is a plus. Verbal and written communications skills, teamwork skills, computer proficiency and self-motivation are essential. Projects include Seismic Retrofit and New Construction of Schools, Hospitals and High-Rise Commercial Buildings.

Send cover letter and resume to: Juan Carlos Esquivel, S.E.
E-mail: jc@jcesgroup.com

CONTECH

CONTECH SERVICES, INC.

“Repair, Strengthening & Protection of Concrete Structures”

Concrete & Masonry Restoration
Seismic Repairs
Composite Strengthening – FRP
Seismic Expansion Joints

Epoxy Crack Injection
Grouting
Shotcrete
Waterproofing Systems

California
(714) 557-6425

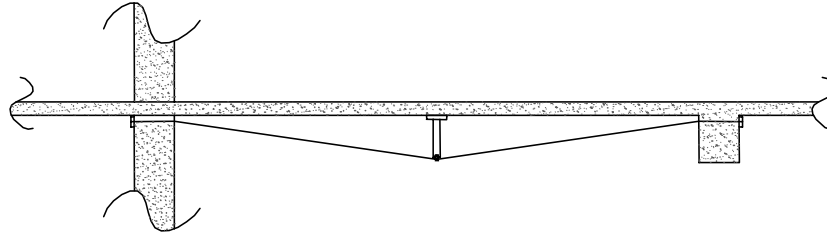
Washington
(206) 763-9877

Oregon
(503) 223-9817

Contractors Licenses: CA # 707880 NV # 0051493
www.contechservices.com brian@contechservices.com

The Great American Cable Company II, Inc.

**Specialists in the Design *and* Installation of External
Post-Tensioning Systems for Strengthening and Repair
of Existing Concrete and Steel Structures**



**Contact Dirk Bondy at (949) 595-8182
E-Mail: Dirk@senecastructural.com**

CA Contractor License #812081



INTEGRATED DESIGN SERVICES, INC.
Structural Engineers

**IDS, a leading orange county structural engineering firm
has immediate openings for:**

**Structural Engineers, S.E.
Structural Analysts and Designers, P.E.**



**This is an outstanding career opportunity to work on very challenging
projects covering:**

**Structural Design of Major Structures
Structural Assessment and Seismic Retrofit
Risk Analyses & Building Research**

We provide a nice working environment & an excellent compensation package.

**IDS: 13891 Newport Ave., Suite 110, Tustin, CA 92780
Tel: 714-368-5080 Fax: 714-368-5088, e-mail resume to: jenny.warren@idsse.com**

2003-2004 SEAOSC Officers and Committee Chairs

Get involved! Members and interested parties are invited to join a SEAOSC committee. Contact the chairperson for information on current projects and meeting times, dates and locations.

SEAOSC Officers & Board Members

	Name	Phone	Fax	Email
President	Richard Hess ^{1,2}	562-799-9787	562-799-4973	rlhess@hesseng.com
President-Elect	Larry Brugger ^{1,2}	562-570-6921	562-570-6205	lawrence_brugger@longbeach.gov
Treasurer	Martin Johnson ²	714-734-4242	714-734-4272	mwjohnson@absconsulting.com
Secretary	Henry Huang	626-574-0941	626-979-5376	hhuangpe@yahoo.com
Immediate Past President	Dan Novak ^{1,2}	626-683-0941	626-683-0060	dan.novak@ttisg.com
Directors	Daniel Bayless	805-642-3636	805-642-7874	dbsegr2@sbcglobal.net
(¹ Delegate to SEAOC)	David Cocke	310-323-9924	310-323-9924	dcocke@structuralfocus.com
(² Member of Exec. Cmte)	Jeff Crosier	714-567-2458	714-567-2729	jeff.crosier@dmjm.com
	Juliet DeMoss	310-212-5778	310-212-0993	julietdemoss@caaprofessionals.com
	Juan C. Esquivel	626-585-1822	626-585-1824	jc@jcesegroup.com
	Robert Lyons	213-484-8950	213-483-5550	rlyons@bjase.com
	Eric Stovner	714-505-2751	714-505-1689	estovner@lzatechnology.com

Committee

	Chairperson	Phone	Fax	Email
Building Code	Carl Sramek	562-597-5756	562-597-5756	sramekca@aol.com
Business Operations & Practice	Dave Breiholz	310-530-3050	310-530-0184	dave@bqe.com
Certification	Bill Warren	949-722-0185	949-722-0661	bill@sesol.com
Convention	Tom Harris	805-499-4484	805-499-7303	harrisengr@aol.com
Disaster Emergency Services	Brenda Guyader	213-596-5000	213-596-5960	bguyader@degenkolb.com
Existing Buildings	David Pomerleau	949-474-0502	949-474-1801	dpomerleau@fwse.com
Field Day	Amer Soudani	626-962-8751	626-962-8752	amer@ddcms.com
House	Amy Duink	714-505-2751	714-505-1689	aduink@tengineers.com
Large Existing Buildings	Chuk Ekwueme	310-998-9154	310-998-9254	ekwueme@hart.wai.com
Legislative	(open)			
Membership	Juan C. Esquivel	626-585-1822	626-585-1824	jc@jcesegroup.com
Online Publications/Webcasting	Michael Cochran	310-207-6638	3102076188	mclse@aol.com
Professional Practices	Gerald Lehmer	626-796-3217	626-796-6512	lehmer@att.net
Public Relations	Michael Cochran	310-207-6638	310-207-6188	mclse@aol.com
Quality Assurance	Cecil Teoh	818-986-4326	818-986-4262	cecil.teoh@ladwp.com
Research	Bahram Zarin-Afsar	949-261-6988	949-251-8727	zarinafsar@usa.com
Seminar	Eric Stovner	714-505-2751	714-505-1689	estovner@lzatechnology.com
Seismology	Bob Lyons	213-484-8950	213-483-5550	rlyons@bjase.com
Speakers Bureau	Herb Stockinger	909-595-0840	909-598-9204	herbstock@aol.com
Steel Structures	Peter Maranian	213-484-8950	213-483-5550	pmaranian@bjase.com
	Yeuan Chou	213-368-7258	213-368-7227	n/a
Younger Member	David Corman	949-252-1022	949-252-8082	dcorman@kpff-irvine.com
Seaint Website Administrator	Shafat Qazi	310-530-3050	310-530-0184	shafat@bqe.com
SEAOSC Office	Don Gilbert	562-908-6131	562-692-3425	seaosc@seaint.org

Structural Engineers Association of Southern California
5360 Workman Mill Rd.
Whittier, CA 90601

PRESORTED
STANDARD RATE
U.S. POSTAGE
PAID
TORRANCE, CA
PERMIT NO. 203