

ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS
Southern California Section

"Connecting Professionals, Practice, and the Public."

NEWSLETTER – July 2007

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Visit the Southern California Section Website: www.aegsc.org

Newsletter Editor – Steve Varnell, svarnell@lqcggeo.com

- Meeting Date:** *****Tuesday, July 10th*****
- Location:** Steven's Steak House, 5332 Stevens Place, Commerce, California
- Time:** 6:00 p.m.-Social Hour; 7:00 p.m.-Dinner; 7:45 p.m.-Presentation
- Cost:** \$30 per person with reservations, \$35 at the door, \$15 for students with a valid Student ID
- Reservations:** Please call Peter Thams at (805) 644-7976 or email pthams@wcnenviro.com
- Speaker:** **John E. Newby, P.E., G.E., Senior Vice President, CDM**
- Topic:** **Geotechnical Aspects of the King County Brightwater Conveyance System**

Abstract:

Washington's King County is constructing a third regional wastewater treatment facility, called Brightwater, in response to growth in the greater Seattle region. The project includes a new treatment plant and an extensive conveyance system. Brightwater will provide secondary treatment capacity in 2010 for 36 mgd, with anticipated expansion in 2040 to 54 mgd. The associated design peak hourly flows are 130 mgd and 170 mgd, respectively.

The Brightwater Conveyance System consists of more than 13 miles of tunneled influent and effluent conveyance lines, five tunnel portals/shafts, microtunneled influent and outfall connections, a large pump station, and a 1-mile-long marine outfall extending to a depth of 605 ft in Puget Sound. The conveyance alignment traverses topographically complex terrain and all conveyance pipes are being constructed using tunnel boring machines (TBMs) and microtunnel boring machines (MTBMs) to limit impacts to roads, residences and commercial buildings. The complex geology, depth of the tunnels and shafts, and high variation of overburden and groundwater head along the tunnel alignment all contribute to one of the most challenging soft ground tunnel projects in United States tunneling practice.

Recognizing the importance of consistency in addressing geotechnical issues associated with the deep tunnels and shafts, WTD selected a single geotechnical engineering team led by CDM to perform all the conveyance geotechnical work from predesign through construction. The exploration program included more than 200 exploration borings to an average depth of 265 ft, cone penetration testing, pressuremeter testing, and slug testing and pumping tests. The geotechnical explorations provided a unique regional understanding of the complex glacial and interglacial deposits. They also allowed correlation between various geologic units and physical soil properties. All investigation data was included in the project Geotechnical Data Report. A separate Geotechnical Baseline Report was prepared for each contract to address varying design and construction issues. Data used to develop the baseline parameter values was biased based on the location of the data for each contract. Construction is now under way on most of the Brightwater Conveyance System and the actual conditions encountered are being tracked for comparison to the baseline values.

The presentation will present an overview of the geotechnical investigation program and approach used to characterize complex geologic and groundwater conditions. Geotechnical issues addressed in the design will be summarized including selection of the tunnel vertical alignment; establishment of baseline soil properties; addressing high groundwater head; limiting dewatering impacts to aquifers and streams; dealing with boulders, abrasion, sticky clays; and required construction methods such as inspection and maintenance stops and ground freezing. A summary of the construction completed to date will also be presented.

Speaker:

John Newby is serving as project manager for the CDM Team providing geotechnical engineering services for the Brightwater Conveyance System. He is a professional civil engineer with over 30 years experience in geotechnical and environmental engineering.

Mr. Newby began his professional career in 1976 with HLA in the S.F. Bay Area, transferred to the Seattle area in 1980, purchased HLA's local office in 1983 to create AGI Technologies, and then

managed its growth from a 6-person local office to a 100-person diverse regional geotechnical engineering practice. Since AGI's acquisition by CDM in 1999, he has assisted with CDM's geotechnical discipline's strategic technical and personnel development. He is currently responsible for the geotechnical practice in the western U.S.

Chair Column

Roz Munro

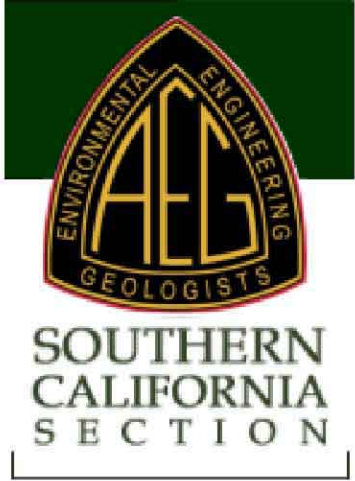
Happy Fourth of July Everyone! See you at the meeting Tuesday, July 10 and the Golf Tournament Friday, July 13!!

*****Announcements*****

We are saddened to report that Jack Eagen passed away Friday, June 22 from a long battle with cancer. Our thoughts and prayers go out to the family. Jack was a long-time member of AEG and a past Chair of the Section. He had planned to participate in this year's annual meeting.

The family requests that in lieu of flowers donations be made to the American Cancer Society (800) ACS-2345 ref. Jack Eagen, 24992 Calle Vecindad, Lake Forest, CA 92630 or Rescue African Children at www.rescueafricanchildren.org.

2nd Annual Golf Tournament
to benefit the **Martin Stout Fund**



Date: Friday, July 13, 2007
Time: First tee time at 11:00 a.m.
(times will be assigned)
Check in time: 30 min. prior to tee time
Location: 7000 W. Los Verdes Dr.
Rancho Palos Verdes, CA
90275
www.losverdes.americangolf.com
(310) 377-7888



Entry Fee: \$85.00 per person*

Tournament Format: 2 - Man Scramble

Includes green fee, cart, range balls,
and awards

Prizes will be awarded for:

Closest to the Pin

Longest Drive

Low Gross (Scramble) Teams

1st, 2nd and 3rd Place

Dress Code Enforced:

"Soft Spikes only"

BBQ included

Santa Maria - Style BBQ to follow
directly after play at nearby

Point Vicente

Interpretive Center Park

31501 Palos Verdes Drive West

*BBQ only is \$30.00 per person

Deadline to Register: July 2, 2007

Registration Form

(detach and submit with your payment)

Mail to: Peter Thams c/o West Coast Environmental, 1938 Eastman Avenue, Ventura, CA 913660

Call (805) 644-7976 if you have any questions

Cut along solid line

Enclosed is my payment for: _____ player(s) at \$85 each

\$ _____ Total Amount

(checks should be made payable to "AEG")

Name: _____

Firm: _____

Mailing Address: _____

Telephone Number: _____ Email: _____

Chapter Meetings

Inland Empire:

For the latest information and updates, please visit <http://www.aegsc.org/chapters/inlandempire/>

Central Coast:

Monthly meetings will take place on the last Wednesday of every month at Rusty's Pizza in Goleta. Social hour begins at 6 pm, the meeting begins at 7pm.

For the latest information and updates, please visit <http://www.aegsc.org/chapters/centralcoast/>

For more information or to be added to the CA Central Coast Chapter email list, please contact Robert Urban via email at robert_urban@urscorp.com.

San Diego:

For the latest information and updates, please visit <http://www.aegsc.org/chapters/extremesocal/>

National Business Donation

- Platinum - \$1,000
- Gold - \$500
- Silver - \$250

Company name, address and contact information are presented in AEG News and section receives 10% of donation. A national donation does not yield a line in our local section newsletter.

Company & Employment Advertising Newsletter (includes SoCal website posting)

	<u>Month</u>	<u>Year</u>
▪ Business Card	\$10	\$100
▪ ¼ Page	\$20	\$200
▪ ⅓ Page	\$30	\$300
▪ ½ Page	\$35	\$350
▪ Full Page	\$50	\$500

SoCal website posting only

\$20/month

* The deadline for submitting an advertisement for next month's newsletter is Friday, August 3rd.

YEAR 2007 CONTRIBUTORS NEEDED

Contributions from corporations and individual members are greatly appreciated. Contributors will be listed in our newsletter throughout the year and can post their logo or business card in the newsletter if so desired. Please mail contributions made out to **AEG** to our section treasurer, Peter Thams.

2007 MEMBERSHIP RENEWAL

For those of you who have not yet renewed (**the deadline was November 1**), are unsure about your membership status, or did not receive your membership dues statement, please contact AEG Headquarters at www.aegweb.org. You can renew your membership online. Please update your membership if you wish to continue to receive future issues of the newsletter.

*****NOTICE: Proposed New AEG Publication*****

WHO'S WHO in SO CALIFORNIA ENGINEERING GEOLOGY
The Evolution of Engineering Geology in Southern California

Have you ever wondered "Whatever happened to___?" or "I've heard of ____, who is he?"

The undersigned have decided to try to prepare an internet publication with the above title, which will include biographies of engineering geologists in southern California. We would like you to share your biography (autobiography) with other EGs. If you have worked on an interesting project, others would like to know about it.

If we limit each autobiography to 3 pages of text, plus photos, this publication would be more than 1,000 pages long. Therefore, we plan to utilize a proposed new AEG Foundation internet website, where there is no limit to total pages, and we can use color photos. Also, this new website will be available for no-charge access, worldwide, thus spreading the word on the history and evolution of engineering geology, and southern California's immense contribution.

We suggest (not require) three criteria for inclusion: 1. That you are a CA licensed CEG; 2. That you are now or once were a member of AEG; 3. That you have enough years of professional experience to relate one or more significant projects you have worked on. We believe there are more than 250 such EGs in southern California. This will be an evolving internet site where new autobiographies can be added.

We will also include Memorial biographies of past notable geologists in southern California. So far, we have identified 30, including John Buwalda, Ian Campbell, Tom Dibblee, Rollin Eckis, Perry Ehlig, Richard Jahns, John Mann, F.L. Ransome, Charles Richter, Dottie & Marty Stout, Gene Waggoner. We will give a presentation on many of these notable geologists at AEG's 50th Anniversary Annual Meeting in September in Los Angeles.

Here is a CHECKLIST FOR YOUR AUTOBIOGRAPHY:

Complete NAME, address, phone, email; BIRTH DATE and place; UNIVERSITY(s) attended, major(s), degree(s), year(s); MILITARY service; FIRMS/AGENCIES you worked for; up to 3 significant PROJECTS you worked on; possibly relate a serious or humorous INCIDENT; a MENTOR you may wish to acknowledge; professional SOCIETIES, HONORS, AWARDS; HOBBIES; up to 5 PUBLICATIONS; PHOTOS of yourself and of projects (scanned images preferred).

So, if you wish to be included in this new internet publication, prepare your autobiography and email it with photos to: allen@hatheway.net and in the Subject box, type: So. Cal. Geologist. Or mail it to Allen Hatheway, 10256 Stoltz Dr., Rolla, MO 65401. Please, no more than 3 pages of text, single-spaced, Times New Roman, 12 pt.

Please pass this notice on to those you may know who no longer get this Newsletter.

In the spirit of camaraderie, we thank you,

Richard Proctor
 Allen Hatheway
 David Rogers
 Larry Cann
 Bob Lynn

EMPLOYMENT OPPORTUNITIES & ADVERTISING



— engineering and constructing a better tomorrow

MACTEC Engineering and Consulting, Inc., a leading national geotechnical and environmental firm, is seeking Staff and Project Engineering Geologists for the Los Angeles office Geotechnical Division.

STAFF GEOLOGIST: The position requires a BS, MS preferred. 1 to 2 years experience is desirable.
(Job ID 1251)

PROJECT GEOLOGIST: The position requires a BS, MS preferred, and minimum 3 to 5 years of experience.
(Job ID 2058)

MACTEC offers excellent benefits and salary commensurate with experience.
Please email, fax, or mail your resume to:

MACTEC
200 Citadel Drive
Los Angeles, CA 90040
fax (323) 889-5398
dtliu@mactec.com

Job descriptions and requirements at: <http://www.mactec.com/careers/>



Lawson & Associates
Geotechnical Consulting, Inc.

Lawson & Associates Geotechnical Consulting, Inc.

2045 Royal Avenue, Ste. 125
Simi Valley, CA 93065
Tele: (805) 579-3434 Fax: (805) 579-3435
Email: kesmond@lqcgeo.com

Website: www.lqcgeo.com

LGC is looking for dynamic individuals to join our team and work on some of Orange, Los Angeles, Ventura, San Bernardino, Santa Barbara and Kern Counties' most interesting and technically challenging projects. If you are an experienced geotechnical professional, or just starting your career, please do not hesitate to contact us. All inquiries will be considered in the utmost confidence. We look forward to hearing from you.

HETHERINGTON ENGINEERING, INC.

HEI has current employment opportunities for Engineering Geologists, Geotechnical Engineers and Soils Technicians. Established in 1985, HEI has demonstrated a level of professionalism that has resulted in being retained to consult on some of the most challenging geotechnical projects in California. We have immediate position openings in offices located in Laguna Beach, San Juan Capistrano and Carlsbad.

Project to Senior level Engineering Geologists and Geotechnical Engineers: BS or higher and CEG or RCE registrations required. Experience on a variety of projects and excellent verbal and written communication skills a must.

Technicians: At least three years of experience in the field and/or laboratory.

HEI offers salary commensurate with experience, a benefits package and bonuses. Send resume in confidence to lindal@hetheringtonengineering.com or FAX to (949) 487-9116.

COUNTY OF SANTA BARBARA

The Santa Barbara County Planning and Development Department is currently seeking a full-time engineering geologist to supervise and perform engineering geology work and to review plans for conformance with county ordinances dealing with soil and earth stability.

Registration as a certified engineering geologist in the State of California and a valid California Class C driver's license are required.

The salary range is \$71,847-\$87,709 annually. The County's benefits package includes contributions to health and dental plan premiums as well as a \$5466 annual cash benefit allowance.

With a mild climate and spectacular setting that includes scenic coastline, beautiful valleys, and rugged mountain peaks, Santa Barbara County is one of the most desirable places in the world to live and work.

To learn more about the position and to apply on line, visit www.sbcountyjobs.com, or call (805) 568-3273. This position is open until filled.

JOIN NINYO & MOORE

Company Profile

Since 1986, clients have turned to Ninyo & Moore for complex geotechnical and environmental challenges. As a leading geotechnical and environmental sciences engineering and consulting firm, Ninyo & Moore provides specialized services including evaluations for airports, bridges, commercial developments, dams, educational facilities, harbor and offshore structures, highways and roadways, hospitals, industrial developments, landfills, light rail transit lines, pipelines, power stations, railroads, residential developments, reservoirs and tanks, transmission lines, tunnels, water and wastewater treatment plants to clients in both the public and private sectors. With offices in Colorado, California, Nevada, Arizona, and Texas, the firm is fully committed to being responsive, cost-efficient, and thorough in meeting its clients' project needs and objectives.



Available Positions:

- ✓ **DENVER:** *Project Engineer/Geologist, Senior Environmental Professional, Senior Geotechnical Engineer, Staff Engineer, Staff Environmental Scientist, and Staff Geologist.*
- ✓ **IRVINE:** *Asbestos & Lead Professional, Project Engineer/Geologist, Senior Staff Engineer/Geologist, Senior Environmental Engineer, Staff Engineer/Geologist, Staff Environmental Scientist, and Marketing Assistant.*
- ✓ **LAS VEGAS:** *Asbestos & Lead Professional, Construction Field Technician, Geotechnical Engineer, Project Engineer, Project Geologist, Senior Project Engineer, Staff Engineer, and Staff Geologist.*
- ✓ **OAKLAND:** *Field Special Inspectors, Materials Project Manager/Supervisor, Project Environmental Geologist, Scientist or Engineer, Senior Geotechnical Engineer, Senior Project Geotechnical Engineer, Staff Geotechnical Engineer, and Administrative Manager.*
- ✓ **PHOENIX:** *Construction Field Technician, Project Environmental Scientist, Project Manager-Construction Materials Testing, and Senior Environmental Professionals.*
- ✓ **SAN DIEGO:** *Project Engineer/Geologist, Senior Geotechnical Engineer, Staff Engineer, Construction Field and Laboratory Technicians, and Information Systems Specialist.*

Successful candidates should have a BS or MS degree for staff-level positions and five years or more of experience for project to senior-level positions. The candidates should be detailed oriented and have excellent verbal and written communication skills. Professional Engineer (PE) and/or Professional Geologist (PG) registrations are preferred for project or senior positions.



Ninyo & Moore offers excellent benefits and great opportunities for professional growth. Please visit our website for complete and detailed job descriptions and to submit your resume in confidence at www.ninyoandmoore.com/careers.html or mail to our corporate office at 5710 Ruffin Road, San Diego, CA 92123, Attention: Human Resources. EOE

www.ninyoandmoore.com

Ninyo & Moore is an equal opportunity employer.

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