

ASSOCIATION OF ENGINEERING GEOLOGISTS

SOUTHERN CALIFORNIA SECTION

"Serving Professionals in Engineering, Environmental and Ground-Water Geology Since 1957"

NOVEMBER 1996

OFFICERS

Chairman: David Ebersold
818.796.9141
dave.ebersold@us.mw.com

Vice Chairman: Thomas L. Slosson
818.376.6540

Treasurer: Mark A. Swiatek
818.785.5244
swiatek@smartdocs.com

Secretary &
Newsletter Editor: Charles Nestle
818.458.4925
ctnestle@ix.netcom.com

COMMITTEE CHAIRS

Membership: John Whitney
714.647.0277

Legislative and Robert Hollingsworth
Regulatory Affairs: 818.889.0844

Field Trip: Kim Bishop
213.343.2409

Short Course: Sue Tanges
619.442.8022

Education: Ali Tabidian
CSUN — 818.885.2536
atabidian@louie.csun.edu

Publications: Rudy F. Ruberti
818.785.2158

THIS MONTH'S MEETING

Tuesday, November 12, 1996

Geologic Applications of Low Cost but Powerful GIS Software

presented by

Woodrow L. Higdon

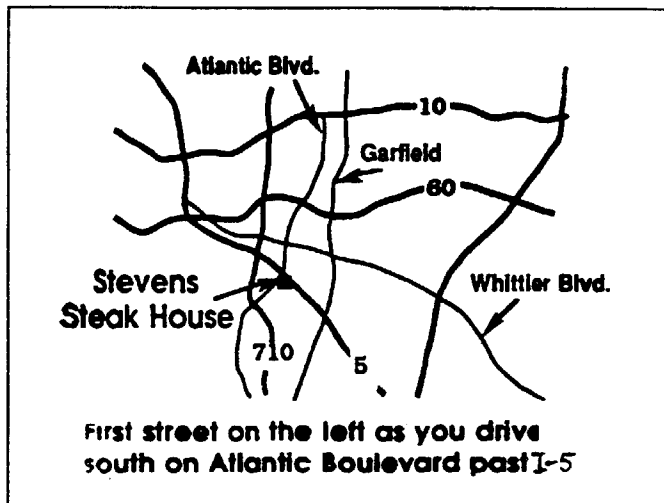
Reservations must be made by **Friday, November 8!**
Call GeoSoils at (818) 758-2158

Location: Stevens' Steak House
5332 Stevens Place, Commerce

Cost: \$20.00
(\$10.00 for full-time students
with valid I.D.)

Social Hour: 6:00 pm
Dinner: 7:00 pm
Talk: 8:00 pm

Map to Meeting



Deadline for submittals to the December Newsletter:
Contact Kelly Rowe at
714-979-7790

NOVEMBER PROGRAM

Geotechnical Applications of Low Cost but Powerful GIS Software

Woodrow L. (Woody) Higdon

*Geo-Tech Imagery Intl.
P.O. Box 2179, Oceanside, CA 92051*

Computer based Geographic Information Systems (GIS) software has been around for many years, but with limited access at a very high cost. In recent years very powerful GIS software packages have been appearing at a very low cost. Mapinfo is such a package. A demonstration of Mapinfo Professional will be given in real time from a computer platform with an emphasis toward geotechnical applications. Several data sets will be used, including USGS Map sets that have been scanned and geocoded for use in GIS software. Data sets of this nature can significantly reduce future cost of map use and production with major improvements in mapping capabilities. Ten years ago a BS-



degree would easily get you a job, today you'd better have a masters. Five years from now, if you are not extensively involved in GIS computer applications, you may not be able to get a job or to compete with companies or individuals that are knowledgeable about GIS.

Mr. Woody Higdon, President of Geo-Tech Imagery International, received his BS in Geology from California State University at Long Beach. Mr. Higdon boasts many talents including 30 years experience as a technical and commercial photographer, geologist, helicopter pilot, darkroom specialist, and computer graphic design and reproduction. ϕ

CHAIRMAN'S COLUMN

by

David Ebersold

It is with great pleasure, and a bit of anticipation, that I am writing my first Chairman's Column. As I sit here on the plane traveling back from the 39th Annual Meeting of the Association of Engineering Geologists, I am pleased to report that the hotels in New Jersey are pretty similar to those in California. I should know because for four days, I saw little else. After a great field trip on Wednesday followed by two days of strong technical sessions, the AEG Corporate Luncheon, and the Annual Banquet, the Board of Directors met all day Saturday and also on Sunday.

As your representative to the Board of Directors, I am pleased to report that the Association appears in great hands under the leadership of President Eldon

Gath. For those of you who know Eldon, a Southern California Section Member and Past Chairman, I'm sure you can imagine the spirited speech he presented at the Corporate Luncheon.

This year, the Board is grappling with a variety of issues which significantly impact the direction and operations of your Association. I will be periodically presenting information and seeking your input on key issues at Section meetings. This is necessary in order to represent the interests of the Southern California Section to the best of my ability. I believe it is absolutely critical that the interests of the largest Section in AEG, with over 430 members, be heard loud and clear.

Among the most challenging of the issues currently facing the Association is the selection of a new Executive Director. After nearly 10 years of service to the Association, our current ED, Edwin Blackey, Jr., announced his retirement effective June 1997. But I believe that every adversity represents an opportunity, and this opportunity allows the Association to select and work with a new Executive Director in order to implement the Association's strategic plan and move AEG into the 21st century. And if you care even one iota about the Association, or more importantly the direction which our profession takes, then it is up to you to recognize that you influence these issues, you control the future of our profession, and in fact you must become active in the support of your profession before it is stripped from beneath you while you stand there, head spinning, wondering what just happened.

Perhaps you do not realize just how close we came to completely losing control of licensure in California during the last legislative session. For it is far easier to sit back, relax, and hope that it will all come out OK. In southern California in particular, we ride on the coattails of the tireless effort and extreme dedication of others, while basking in the glory of their success. Well wake up! Only through the luck of our Registration Board's proposed sunset being on the same bill which would have also sunsetted the Board for Certified Public Accountants, are we able to today say that we control the direction of our profession as geologists - for the time being. Dare I say that I am confident that we will not be so lucky next time.

I hope that I now have your attention, that at least one thing I have written slaps you in the face, and that over my term as the Chairman of your section, I can solidify the leadership necessary for us to move forward, conquering our challenges head-on. That is a lofty goal, and I cannot do it alone. In fact, without the strong support of the Section Officers and Committee Chairpersons, we are all but assured of failure.

"Whoa! Back up!" you say. "I just want to come to meetings, see my friends, have a beer, go on a field trip or two, and maybe learn a little bit in a short course along the way." Well, to that I say "Help us out, step up to the plate, and let's make these the best activities we've ever had." Not sure

how to help or how to get active? Call me at 818-568-6943 or e-mail dave.ebersold@us.mw.com. See you all on November 12th!!

φ

POLITICAL SCENE

BILL NUMBER: SB 1077
AMENDED IN ASSEMBLY
AUGUST 27, 1996
INTRODUCED BY Senator Greene

Part of Bill concerning State Board of Registration for Geologists and Geophysicists

SEC. 15. Section 7810 of the Business and Professions Code is amended to read:

7810. The State Board of Registration for Geologists and eophysicists is within the department and is subject to the jurisdiction of the department. Except as provided in this section, the board shall consist of eight members, five of whom shall be public members, two of whom shall be geologists, and one of whom shall be a geophysicist.

Each member shall hold office until the appointment and qualification of the member's successor or until one year has elapsed from the expiration of the term for which the member was appointed, whichever occurs first. Vacancies occurring prior to the expiration of the term shall be filled by appointment for the remainder of the unexpired term.

Each appointment shall be for a four-year term expiring June 1 of the fourth year following the year in which the previous term expired. No person shall serve as a member of the board for more than two consecutive terms.

The Governor shall appoint three of the public members and the three members qualified as provided in Section 7811. The Senate Committee on Rules and the Speaker of the Assembly shall each appoint a public member, and their initial appointment shall be made to fill, respectively, the first and second public member vacancies that occurred on or after January 1, 1983.

At the time the first vacancy is created by the expiration of the term of a public member appointed by the Governor, the board shall be reduced to consist of seven members, four of whom shall be public mem-

bers, two of whom shall be geologists, and one of whom shall be a geophysicist. Notwithstanding any other provision of law, the term of that member shall not be extended for any reason, except as provided in this section.

This section shall become inoperative on July 1, 2001, and, as of January 1, 2002, is repealed, unless a later enacted statute, that becomes operative on or before January 1, 2002, deletes or extends the dates on which it becomes inoperative and is repealed. The repeal of this section renders the board subject to the review required by Division 1.2 (commencing with Section 473).

SEC. 16. Section 7814 of the Business and Professions Code is repealed.

SEC. 17. Section 7817 of the Business and Professions Code is amended to read:
7817. Five members of the board shall constitute a quorum for the transaction of business; provided, however, that four members of the board shall constitute a quorum for the transaction of business when the board's membership is reduced to seven pursuant to Section 7810.

SEC. 18. Section 7823 of the Business and Professions Code is amended to read:

7823. The board shall have the authority to appoint committees as required or as deemed advisable to perform duties as the board may direct; provided, however, that the board shall not delegate any final decision making authority to any committee that has as a member any person who is not a member of the board.

Membership on those committees is at the pleasure of the board.

No member of a committee shall receive any other compensation than his or her necessary expenses, as approved by the board, connected with the performance of his or her duties as a member of the committee.

SEC. 19. Section 7824 of the Business and Professions Code is repealed.

"Any American who is prepared to run for president should automatically, by definition, be disqualified from ever doing so."

Gore Vidal

NEWS

As of October 8, there are several new earthquake hazard products available from the California Department of Conservation. You may access hypertext versions at <http://www.consrv.ca.gov/dmg/>

- o Preliminary Maps of Proposed Seismic Hazard Zones. These six maps address liquefaction and earthquake-induced landslide hazards and cover parts of San Francisco, Orange, Los Angeles, and Ventura Counties. Screen-size versions of the 1:24,000-scale maps are available for viewing.
- o Draft Guidelines for Evaluating and Mitigating Seismic Hazards: This edition covers liquefaction and earthquake-induced landslide hazards.
- o Draft Probabilistic Seismic Hazard (Earthquake Shaking) Map for California, with Fault Parameter Table. The map was produced in cooperation with the U.S. Geological Survey.

Questions? Contact Ted Smith at tsmith@consrv.ca.gov or ted.smith@cdmg.uucp.netcom.com

LOCAL PRELIMINARY SEISMIC HAZARD ZONE MAPS OUT FOR REVIEW

The latest tool to help protect life and property during an earthquake is in the works, thanks to the California Department of Conservation. The department has just distributed six preliminary seismic hazard zone maps and draft map guidelines to local officials for technical review.

The maps show areas in portions of San Francisco, Los Angeles, Orange and Ventura counties that during an earthquake are likely to be susceptible to landslides and/or to water-saturated ground failure known as liquefaction.

The first set of preliminary maps encompass 17 communities including the northern half of San Francisco and in Southern California, Simi Valley, the western portion of Santa Monica and an area from Fullerton

and Buena Park south to Newport Beach. Each of the six maps is a 7 1/2-minute quadrangle, covering approximately 60 square miles at a scale of one inch equals 2,000 feet.

Subsequent sets of preliminary maps for portions of Los Angeles, Orange and Ventura counties will be distributed for review approximately every six months until the currently funded total of 38 maps are produced. The mapping was completed in cooperation with the Governor's Office of Emergency Services and the Federal Emergency Management Agency.

Local governments and other interested parties now have until January 7, 1997 to review and comment on the maps and guidelines. Once the maps are made official in March 1997, the Seismic Hazards Act of 1990 requires local governments use them to identify areas where geologic or soils investigation are required before permitting urban development. The guidelines will help guide cities, counties and consulting engineers and geologists in the investigation and mitigation of these types of hazards inside and outside the mapped areas.

"These maps identify areas having an increased likelihood of liquefaction and earthquake-triggered landslides occurring," said Charles Real, supervising geologist, Department of Conservation, at a briefing held for local media. "However, we're not saying the seismic hazards will necessarily occur."

In February 1996, the California Department of Conservation released 16 reconnaissance seismic hazard maps for portions of Southern California. The preliminary seismic hazard zone maps just distributed for technical review cover a different area from the reconnaissance maps and are a refinement of the type of information in the earlier maps, including sub-surface geologic data not present in the reconnaissance maps.

The preliminary Seismic Hazard Zone Maps are available to interested parties for review at cost through two reprographic services. For details, see the Department's WWW site at <http://www.consrv.ca.gov/dmg/shezp/> or call the Department's Public Information Offices: Los Angeles (213) 620-3560; San Francisco, (415)904-7707; or Sacramento (916) 445-5716. Copies of the draft guidelines, a geographic index of the maps released for review, images of the maps released, and other related informa-

tion are also available through the web site.

Comments from interested parties or organizations must be submitted to the State Mining and Geology Board by January 7, 1997.

The six preliminary seismic hazard zone maps released on October 8 include these cities or portions of cities: the northern half of San Francisco and in Southern California, Anaheim, Buena Park, Costa Mesa, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Moor Park, Newport Beach, Orange, Placentia, Santa Ana, Santa Monica, Simi Valley, Stanton and Westminster.

The California Department of Conservation has one of the oldest geological surveys in the United States in its Division of Mines and Geology. An integral part of the survey's purpose is to prevent or minimize injury, death and property damage from geologic hazards. The department also safeguards farmland; oversees oil, gas and geothermal wells; regulates mining; studies earthquakes and landslides; promotes beverage container recycling; and manages California's earth resources. φ

FROM THE EDITOR

With this issue of the Southern California Section newsletter I will be ending my two-year rein as editor. Kelly Rowe, who had done such a fine job as editor from October 1988 to September 1990, will be taking on this formidable task once again with the December 1996 issue. For information about submittals to the December issue contact him at 714-979-7790, or via e-mail at krowe@ix.netcom.com.

I will remain on board as Secretary, so if you have items you would like to be included in the Section or Member News sections of the quarterly AEG NEWS, send them to me at the address on the back page, or to my e-mail address on the front page (NOTE: Although my new e-mail address has been listed on the masthead for several months, I am still receiving e-mail on my aol account. I will soon be dropping that account, so please change my address in your address books, or I will not be able to receive or acknowledge your messages). φ

LETTERS

The "Geoquote of the Month" in your September 1996 Newsletter was beyond cynical. A professional geologist should feel responsible for his colleagues and their knowledge. Your own AEG participation and production of the newsletter are laudatory behavior, showing you have put your own effort well beyond where my big mouth is. For that reason I hesitate to criticize, and rightly so.

I do not know the context of the Geoquote, but the spirit goes against my impressions of what a profession should be. As colleagues and lifelong students of geology, we strive to improve our individual and collective understanding of the earth, assisting each other when necessary.

Please, you are a spokesperson for professional geologists because you want to be. Please be kind to your colleagues. We only have each other. And thank you for 24 months of great newsletters!

Bob Dickey

The quote attributed to Jeff Johnson was submitted by a 3rd party - ed.

Regarding your choice for Geoquote of the Month for September, 1996...What a heart-felt, uplifting, optimistic outlook on our profession. I [believe] the "vast majority" (my own survey) of geologists care deeply about their work and are trying to do the best job they can. It's not easy while being slandered by their own as clients pinch their fees and bureaucrats attempt to strip their licenses.

By the way, Your Increasingly Cynicalness, nice timing, while Senate bills 2031 and 1077 await the Governor's approval.

David J. Grover

There are approximately 430 members of the southern California Section of AEG of which about 40-50 attend Section meetings on a regular basis. There are at least that many geologists practicing in southern California who are not members and who rarely, if ever, attend meetings. I dare say that few people know, or are familiar with the work of, "the vast majority" of these approximately 860 geologists. People

generally associate with others of similar philosophy, and therefore, any "personal survey" is necessarily biased.

The purpose for printing the quote was not to "slander" anyone, rather, it was to promote dialogue to keep this topic alive so that we can effect change such that we won't have to justify the board's existence when it is threatened once again with sunseting in four years. The Governor's signing of bills 2031 and 1077 is no cause for complacency. It is important that this topic remain fresh so that we, as an organization of professionals, can attempt to solve quality concerns (one of the DCA's main issues) in a logical, equitable, and fair manner. — ed.

COMPUTER CORNER

If you haven't checked out AEG's web site recently, you should. This site has recently been given a new look, and has also been stocked with all sorts of useful information and links. Comments and Suggestions for things you'd like to see at the site are requested. The address is: <http://geoweb.tamu.edu/aeg/>

New pictures from the eruption at Vatnajökull glacier in Iceland are found at: <http://www.itn.is/lio>
For additional information contact Arnar Hákonarson at network@itn.is, or P.O. Box 8783, IS-128 Reykjavík, Iceland.

Electronic Geology

Electronic Journals Ltd. is very pleased to announce that the first volume of Electronic Geology has just been published. A second volume will be published very shortly, and a third is already planned. The unexpectedly rapid growth in the journal owes much to the following characteristics:

- 1) rapid, flexible publication, potentially within two months of original submission.
- 2) one can subscribe however much they wish - there is no fixed subscription charge. You can also check the balance of your subscription at any time.

3) Each paper is individually priced and packaged - you only have to download exactly what you require, rather than whole journal issues. The balance of your subscription is instantly debited by the displayed amount.

4) Each article is fully desk top published and electronically formatted for viewing on both PC and Mac systems (and others)....and for printing on postscript printers.

We therefore invite Earth Scientists to review the journal. Free articles and a dummy account have been constructed so that you may test the system before committing funds for a subscription.

We also invite you to submit articles to us for publication. These will normally be peer-reviewed papers, but we also accept news/ discussion articles on topical interest to the Earth Sciences (such as the currently erupting Iceland volcano, for instance) which in some instances we may distribute as a free service. We also publish non-exclusive consultancy reports and would like to hear from Earth Science consultants who may wish to publish with us. (see also our journal Electronic Oil Exploration).

Electronic Journals Ltd. can be found at the following URLs:

<http://www.electronicjournals.co.uk> (UK/Europe site)

<http://www.he.net/~proton> (US Site).

Other new services include:

Oil and Minerals Directory

(<http://www.electronicjournals.co.uk/OMD.html>)

- for all organizations concerned in some way with the Earth Sciences - please submit the URL of your organization!

Finally, we are always very grateful to hear any criticisms of our services and any suggestions of how they can be improved. We would especially like to hear what other services in your opinion we could offer to the Earth Science community.

Andrew Cadman, Ph.D.

φ

JOB OPPORTUNITIES

Montgomery Watson, one of the world's leading environmental engineering firms, is seeking candidates for an immediate Associate Hydrogeologist position in its Southwest/Latin America Water Resources Group, based in Pasadena. Prerequisites for the position include a B.S. or M.S. in geology or hydrogeology, 0 to 2 years of experience, a working knowledge of common computer applications, and a desire to take on challenges. Résumés may be submitted in confidence to:

David B. Ebersold
Supervising Hydrogeologist
Montgomery Watson
301 N. Lake Ave., Suite 600
Pasadena, CA 91101
ph 818.568.6943
fax 818.568.6052

Converse Consultants Inland Empire is seeking staff to Project level Engineering Geologists with 3 to 5 years experience. Environmental experience a plus. Must have experience in: hillside grading, drilling, field mapping, and report preparation. Send Résumé to:

Converse Consultants
10391 Corporate Drive
Redlands, CA 92374

Attn: Mr. Quazi Hashmi, Branch Manager

ANNOUNCEMENTS

Proposed Session on "Hydrogeology of Landslides" at the 1997 GSA Annual Meeting in Salt Lake City

This is a first call for those geoscientists who are interested in the hydrogeology of landslides to indicate their intentions to participate. The session would cover modeling, theoretical aspects, case histories, dewatering, affect on activation and rate of movement, debris flows, and anything else you can think of. If you are interested in participating, please contact:

Robert A. Larson, 6416 Woodley Avenue, #5, Van Nuys, CA 91406.

phone: 818-786-8884

e-mail: 73540.2312@compuserve.com

The Dibblee Foundation is planning to publish a new geologic map of the Palos Verdes Peninsula in the near future. We want to have the latest geologic data on the Cabrillo and Palos Verdes faults (on and off shore), possible mega-landslides, large grabens, new data on the Portuguese bend and other large landslides, and any other significant new geologic information. Proper credit will be

given in the references on the map for any relevant data used. Please contact the Dibblee Foundation Editor, Helmut Ehrenspeck at 805-968-0481, and/or Dick Brown at 310-598-0595, or e-mail at geo_fine@aol.com. ϕ

NOTICE

It's that time of year again and our AEG fees are due. You must return your payment by the November 15 deadline or you will be dropped from the mailing list and the Directory. If this happens, you will not be placed back on the mailing list until you have proved that your fee has been paid.. To avoid the embarrassment, send your renewal in on time. If you don't, shame on you. ϕ

FOOD FOR THOUGHT

A recent letter from the Board of Registration for Geologists and Geophysicists entitled:

NOTICE OF PROPOSED RULEMAKING

TITLE 16, DIVISION 29

CALIFORNIA CODE OF REGULATIONS

states that "the proposed amendment will delete the fixed 70% percentage passing score requirement presently in regulation and establishes a criterion-reference method for setting a pass point for the written examination administered to applicants for registration as a geologist or geophysicist, or for certification in any specialty provided by regulation." This is under a heading of "Informative Digest/Plain English Overview." WOW! For a discussion with an attempt to decipher this proposed code revision, attend the November meeting. ϕ

ZIP-A-DIP

Combination protractor, scales and most efficient apparent dip calculator!

Only \$4.00 each, 2-10: \$3.50; 11+: \$3.00; 50+: \$2.50

Brochure describes ZIP-A-DIP, equal angle stereonet plotter, and stratigraph. PLEASE NOTE NEW ADDRESS BELOW!

Brochure only ZIP-A-DIP quantity total cost

Name _____

Address _____

To: ZIP-A-DIP, 3891 Ashford Dr. Eugene, OR 97405

Solutions

Consulting Geohydrologist

Land

Engineering Geologist

Water

Water Quality Specialist

Sanford L. Werner

Registered Geologist
Certified Engineering Geologist

21031 Blythe St., Canoga Park, CA 91304, (818) 998-8178

ASSOCIATION OF ENGINEERING GEOLOGISTS PUBLICATIONS ORDER FORM

Ordered By/Shipping Address

Mail Order Form To:

NAME		AEG Southern California Section, Publications Chairman % GeoSoils, Inc. 6634 Valjean Avenue Van Nuys, CA 91406-5830 Attn: Rudy Ruberti
ADDRESS		
CITY, STATE, ZIP		
PHONE *		

* In case we have a question about your order

Ph: 818.785.2158 (Inquiries only, orders must be mailed with payment)

TITLE/DESCRIPTION	PRICE	QTY	TOTAL
Baldwin, J.E., and Sitar, N., 1991, <u>Loma Prieta Earthquake: engineering geologic perspectives</u> , AEG Special Publication No. 1, 170p.	\$10.00		
Bishop, K, and Tandy, L., 1995, <u>Ground failure during the January 17, 1994 Northridge earthquake</u> : Association of Engineering Geologists, Southern California Section, Annual Field Trip Guidebook, November 11, 1995, 106 p.	\$25.00		
Blake, T.F., 1996, Technical Program Coordinator, <u>What's shaking in southern California? Seismic hazards analysis - The sequel</u> : Association of Engineering Geologists, Southern California Section, Short Course, January 20, 1996, program notes in 2-inch 3-ring binder.	\$40.00		
Blake, T., and Larson, R.A., eds., 1991, <u>Engineering geology along the Simi-Santa Rosa fault system and adjacent areas, Simi Valley to Camarillo, Ventura County, California</u> : Association of Engineering Geologists, Southern California Section, Annual Field Trip Guidebook, August 24, 1991, v. 1 & 2., 383 p. 4 map sheets.	\$33.00		
Buckley, C. I., and Larson, R.A., eds., 1990, <u>Geology and engineering geology of the western Soledad Basin, Los Angeles County, California</u> : Association of Engineering Geologists, Southern California Section, Annual Field Trip Guidebook, November 3, 1990, 185 p., 2 map sheets.	\$25.00		
City of Los Angeles, 1982, <u>Geologic maps of the Santa Monica Mountains, Los Angeles, California</u> : compiled by the City of Los Angeles, Department of Public Works, Bureau of Engineering, reprinted by the Association of Engineering Geologists, Southern California Section, 342 p., 333 map sheets, 1" = 400'.	\$25.00		
Ehlig, P.L., and Steiner, E.A., eds., 1992a, <u>Engineering geology field trips: Orange County, Santa Monica Mountains and Malibu</u> : Association of Engineering Geologists, 35th Annual Meeting, October 2-9, 1992.	\$25.00		
Leighton, F.B., <u>Mitigation of geotechnical litigation in California</u> : Munson Book Associates, Huntington Beach, CA, 274 p.	\$44.00		
Sieh, K.E., and Matti, J.C., 1992, <u>Earthquake geology, San Andreas fault system, Palm Springs to Palmdale</u> : Association of Engineering Geologists, 35th Annual Meeting, Field Trip Guidebook, October 3-4, 1992, ??p.	\$5.00		
Stout, M.L., ed., 1992, <u>Proceedings of the 35th annual meeting, Association of Engineering Geologists, October 2-9, 1992</u> : 740 p.	\$5.00		
<u>A Guide to Services as a Forensic and Expert Witness</u> : 1995	\$15.00		
<u>National Colloquium on Professional Registration for Geologists</u> : Association of Engineering Geologists, 33rd Annual Meeting, October 1-5, 1990.	\$5.00		
<u>National Symposium on Mine Subsidence - Prediction and Control</u> : Association of Engineering Geologists, 33rd Annual Meeting, October 1-5, 1990.	\$5.00		
<u>Perspectives in Paleoseisomology</u> , AEG Special Publication No. 6	\$20.00		
<u>Professional Licensure of Geologists, An Exploration Issue</u>	\$12.00		

Delivery charges are \$2.50 for the first book, 50¢ for each additional book


	SUBTOTAL	
	DELIVERY	
	TOTAL ORDER	



ASSOCIATION OF ENGINEERING GEOLOGISTS

Place
Stamp
Here

Charles Nestle
AEG Newsletter Editor
6224 W. 82nd Street
Los Angeles, CA 90045-2901

 Please Recycle

FIRST CLASS POSTAGE



D & Construction Specialties, Inc.

LIC. # 681416



"Specializing In Hillside Drilling & Tough Hand Excavations"

- * Test Pits/Test Borings
- * Foundation Underpinning & Repair
- * Caissions/Grade Beams
- * Slope Repairs/Recompaction
- * Demolition & Hauling

Friendly & Professional Service

(818) 767-8864