



## Section/Technical Groups Dinner Meeting

Thursday, February 16, 2006

Social Hour:	5:45 pm
Dinner:	6:30 pm
Business Meeting:	7:30 pm
Technical Group Meetings:	7:45 pm

(See Page 3 for Technical Group meeting agenda)

**Holiday Inn Denver Downtown**  
 ✧ 1450 Glenarm Place (Glenarm at 15<sup>th</sup>) ✧ Denver ✧

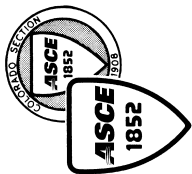
\$25.00 per person                      \$5.00 for students  
 (Pay on site - cash or checks payable to *Colorado Section ASCE*)

**Make Reservations by Noon Monday, February 13, 2006:**

- ☎ Leave a voice reservation on ASCE's answering machine at **303-756-9777** ☎
- ✉ Or send an E-mail message reservation to **colasce@attglobal.net** ✉

→ Please indicate the **Technical Group** Session you will be attending and **spell your last name** ←

## President's Message...National Engineers Week!



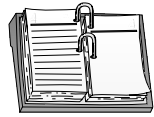
As I flip through my autographed copy of *Engineering Legends: Great American Civil Engineers*, I am impressed with the landmark structures and creative designs that these masters came up with. But this book is not the only place I can go to for inspiration. At our February meeting we will be honoring our new Life Members. Part of the ceremony will consist of us reading highlights of these distinguished engineers' life accomplishments. As in previous years, I expect to be wowed as I hear tales of revolutionary designs and stories of great structures built in remote parts of the world. Maybe one day, I will also be this cool.

Speaking of cool things, here are some activities for this winter and spring. February features National Engineers Week which starts with a legislative breakfast at the State Capitol on Friday, the 17<sup>th</sup>, and ends with the EWeek Annual Dinner sponsored by the Colorado Engineering Council. The dinner will be on Friday, February 24, at 6 PM at the Double Tree hotel near 32<sup>nd</sup> and Quebec and will feature Lockheed Martin Vice President John Karas speaking about space exploration with an update on the Mars Project. To find out more about National Engineers Week, check out the web site at [www.eweek2006.org](http://www.eweek2006.org). If you plan to attend the EWeek dinner, send me an email and we can put together an ASCE table.

Also, on Saturday, April 29, we again will be sponsoring a house for Rebuilding Together Metro Denver where we cram a bunch of well meaning engineers into a house with paint, spackle and power tools. Good times and good repairs result!



**Christoph Goss**



## News & Notes...

### Rebuilding Together – Repairing Homes, Restoring Lives...

Rebuilding Together Metro Denver has asked the Colorado Section ASCE to consider taking on the challenge of renovating the community center, Shiloh. Shiloh Home is a residential treatment facility offering a nurturing, therapeutic and educational environment to boys impacted by abuse, neglect and trauma.

The scope of work for this facility includes the following: replace gutters and downspouts, replace a wooden retaining wall in the back yard with landscape concrete block material, replace doors in the house and garage, replace treads on exterior stairs, prep and paint interior walls and ceilings, install vinyl flooring in the kitchen and bathroom, replace a toilet, and install new appliances in the kitchen.

Using money and materials donated by the engineering community, ASCE volunteers want to transform the Shiloh facility into a warm, safe and independent home. Our goal is to raise \$7,500 to ensure the needed repairs are accomplished on Rebuilding Day, Saturday, April 29. And with your help....we can do it!

Your donation is tax-deductible and will go directly to Rebuilding Together Metro Denver. For additional information contact Gary Brierley at [Gbrierley@BrierleyAssociates.com](mailto:Gbrierley@BrierleyAssociates.com), 303-703-1405

### Saving Places 2006: Building on the Past Is In Denver On February 8-10...

Colorado Preservation, Inc.'s annual historic preservation conference *Saving Places 2006: Building on the Past* will take place in Denver on Wednesday through Friday, February 8-10, at the 1770 Sherman Street Event Complex. This has become the largest statewide historic preservation conference in the country.

Colorado Section ASCE members may be especially interested in the Thursday, February 9, Session A2 on "Ancient and Modern Engineering" which will be moderated by Colorado Section ASCE members Fred Rutz and Ken Wright along with Eric DeLony, retired NPS-HABS/HAER coordinator. See page 8 of the 20-page pdf downloadable conference program on the conference's web site for a description of this and other sessions that same day including "Building Codes and Green Rehabilitation" and "Saving Colorado's Endangered Places."

For complete information on registration and the full conference program, visit the web site at [www.coloradopreservation.org/spc/index.html](http://www.coloradopreservation.org/spc/index.html).



## Colorado Section 2005-2006 Leadership Roster

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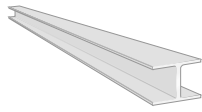
### Committee Chairs & Special Contacts

ASCE District 16		
Council Delegate	Dan Overton	970-223-9600
Director	Stein Sture	303-492-7651
Awards	Sharon Wilson	303-757-9337
Constitution & By-Laws	Vaughan Griffiths	303-273-3669
History & Heritage	Dick Wiltshire	303-445-3042
Legislative &		
Government Affairs	Steve Fisher	303-312-8849
Life Member Forum	David Day	303-694-2948
	Kurt Gerstle	303-492-6383
Membership	Reid Tucker	303-292-5056
Nominating	John Gormley	303-858-8008
Northern Branch President -		
	Chris Pauley	970-226-0120
Partnering	Chuck Childs	720-540-6800
Southern Colorado Branch President -		
	Travis Boone	719-531-0001
Student Chapter Affairs	Edward Stafford	720-898-7745
Web Master	Dale Meck	303-480-1700
Younger Member Group	Laura Conyers	303-264-1024

### Colorado Section ASCE Office

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**Colorado Section ASCE NEWSLETTER** is published 9 times per year monthly September through May.



### Joint Structures & Transportation Group Meeting

**Mick Gigone**, Structural/Bridge Plant Manager, Rocky Mountain Prestress, will give a presentation on the **2004, 12-day replacement of 3 bridge decks on US 6 over Clear Creek**. This PCI award winning project replaced 3 bridge decks in Clear Creek canyon in only 12 days, working 24 hours a day using precast/prestressed concrete panels. Challenges included 24 hour schedule planning among numerous designers, subcontractors, suppliers and the general contractor as well as preplanning for unforeseen conditions in the design of the replacement system given the 1949 vintage of the original bridges, lack of access to the middle bridge cut off by the removal of the other two bridges, and the tight work site in canyon. Mick's presentation will focus on the planning process required to execute a fast track project of this type, design and construction challenges, and the advantages and disadvantages of this type of bridge deck. It will include precast design drawings, numerous project photos and a project video.

### 2006 Engineers Week Annual Dinner

Friday, February 24, 2006  
Double Tree Hotel (Off I-70 at 32<sup>nd</sup> & Quebec)

#### “Space Exploration News & Mars Project Update”

John Karas, Lockheed Martin VP of Space Exploration

Reception: 6:00 PM – Dinner: 6:30 PM  
(Reception time includes Order of the Engineer Ceremony at a separate cost of \$20 per person which includes the Order's ring. Participants in the ceremony must arrive by 5:30 PM to complete paperwork and be fitted for their ring.)

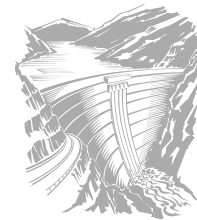
Dinner Cost: \$40.00 per person  
Corporate Table of 8: \$320.00 & includes name in program if received by Feb. 10<sup>th</sup>

Make reservations by contacting the Professional Engineers of Colorado  
11166 Huron Street, Suite 27  
Denver, CO 80234  
Phone: 303-480-0002  
Fax: 303-458-0002  
Email: [pec@imigroup.org](mailto:pec@imigroup.org)

### Geotechnical Group Meeting



**Don Deere**, Deere & Ault Consultants, Inc., will present **The Manapouri Tailrace Tunnel No. 2 Construction – A Very Large TBM Tunnel in Very Strong Rock**. The Manapouri Tailrace Tunnel No. 2 (2MTT) in southern New Zealand was constructed between 1997 and 2002 as part of Meridian Energy, Ltd.'s 700 MW hydro-electric facility. The 10 km long tunnel is one of the World's largest full face TBM tunnels, at 10 m diameter, driven in strong to very strong rock. Many obstacles were traversed by the contractor. The TBM passed through five major fault zones, 5 to 120 m wide with cumulative groundwater flows up to 1,000 l/s; however, the most difficult ground for the TBM was the hard, blocky ground. This project pushed the envelope in hard rock TBM tunneling due to tunnel size, water inflows, the strength of rock, environmental considerations, and the isolated nature of the site. Construction difficulties and ensuing contractor claims resulted in exhaustive studies of rock properties and TBM behavior which now provide important insight into rock boreability.



### Joint Environmental & Water Resources Group Meeting

**Loren Losh**, CEO of AgSmart, will talk on **Algae As An Answer? – A New Wastewater Treatment Technology**, the title of his presentation on an aerobic biological waste remediation system using single-cell algae generated in an on-site greenhouse as an oxygen provider for agricultural, municipal, and industrial waste treatment. Loren originally developed the system for use on his hog farm near Strasburg. Over a six-month period, the system reduced BOD from 7260 to 480 mg/l, TSS from 10740 to 645 mg/l, and nitrate nitrogen from 1645 to 694 mg/l in one of the primary wastewater lagoons. Dissolved oxygen increased from less than 0.1 to 1.42 mg/l over the period. The treatment also almost entirely eliminated crusting of the lagoon, and significantly reduced odor. The system has also been successfully used in other agricultural applications, small municipal wastewater treatment systems, and at a meat processing plant.

## Soil Nailing Specialty Seminar

Friday, February 17, 2006  
Embassy Suites Hotel, 1881 Curtis St., Denver  
View Details at [WWW.DFI.ORG](http://WWW.DFI.ORG)

The Deep Foundations Institute (DFI) Tiebacks & Soil Nailing Committee is presenting this 1-day event on the subject of soil nails. The program will present issues regarding the design, construction and quality control concerns associated with soil nail earth retention structures. Keynote speakers include Dr. Stephen Wright, PE, University of Texas, author of the well-known and widely used UTEXAS3 and UTEXAS4 slope stability software, Richard Luark, PE, L.E.G., Golder Associates, Inc., designer of the Bellevue Technology Tower shoring system which is one of the deepest vertical soil nail walls in the world, and Thomas Richards, Jr., PE, Nicholson Construction Company, who will present on Soil Nail Design. DFI & Colorado Section ASCE member registration fee is \$250, Government employee fee is \$175, and student fee is \$50 (ID required). Registration fees include seminar session, breaks, lunch, reception, handout binder and registration materials. Contact DFI at (973) 423-4030, Fax (973) 423-4031, and web site [www.dfi.org](http://www.dfi.org).

## Younger Member Group

The Colorado YMG was established in 1999 and its members are civil engineers 35 years of age or younger. The group is a stepping stone for young engineers and recent graduates to develop professionally via social activities and community service. These opportunities assist individuals in building a network of peers who are also in the early stages of their career. The group is very informal so come out and enjoy the fun!

We have some great upcoming events including our annual ski trip in March, volunteering at the Urban Peak Youth Shelter and the Denver Rescue Mission, and tutoring 6<sup>th</sup> – 12<sup>th</sup> graders in math. If you're interested in any of our activities, or if you would like to learn more about the Colorado Section Younger Member Group, come to one of our happy hours on the second Thursday of each month. Please visit our website at:

**<http://www.ASCEcoloradoYMG.org>**

and click on the "Newsletter" tab for more information on upcoming events.

Questions or comments? Feel free to contact Laura Conyers at [lconyers@geiconsultants.com](mailto:lconyers@geiconsultants.com).



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