



**ASSOCIATION OF ENVIRONMENTAL AND  
ENGINEERING GEOLOGISTS**  
*San Francisco Section*

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Announcing

**Joint AEG/ASCE San Francisco Section Meeting**

**Engineering Geology and Preliminary Design of the Proposed 4th  
Bore of the Caldecott Tunnel**

**Todd Crampton, C.E.G., Senior Geologist, Geomatrix Consultants**  
**Mike McRae, P.E., Principal Engineer, Jacobs Associates**

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**MEETING DETAILS**

**Restaurant:**

Spenger's Fresh Fish Grotto,  
1919 Fourth Street, Berkeley  
(Phone 510.845.7771 for directions only—not a reservation line)

**Date and Time:**

Thursday, November 9, 2006  
6:00 pm—Social Hour and Sign-in  
7:00 pm—Dinner (Chicken, Fish or Vegetarian)  
8:00 pm—Presentation

**Cost:** \$35 AEG members and non-members, \$10 Students (reflects current ASCE prices)

**Meal Choice:** Chicken, salmon or vegetarian

**Reservations will be taken by ASCE:**

E-mail your **name**, **phone number**, and **meal choice** to [admin@asce-sf.org](mailto:admin@asce-sf.org) (or you can call 415-546-6546) by **12 PM, FRIDAY, NOVEMBER 3**

(1) Name (2) Phone number/e-mail (3) Meal Choice (chicken, salmon or vegetarian)

**Driving Directions:** From the northbound 80 Freeway, exit at University Avenue. Continue north on the off-ramp and turn right (east) onto Hearst Avenue. Cross the railroad tracks and turn right (south) onto Fourth Street. Spenger's is on the east side of Fourth Street.

**Parking:** You may park in the lot in front of the restaurant (sometimes it's free).

**Note:** Meeting is on **THURSDAY**, not our usual 2<sup>nd</sup> Tuesday of the month!  
**Please make reservations by noon FRIDAY, NOVEMBER 3; availability cannot be guaranteed after Friday.**

**\*\*Walk-ins are not guaranteed!\*\***

For financial reasons no-shows and last minute cancellations will be charged.

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See next page for abstract and speaker biography.

## **Engineering Geology and Preliminary Design of the Proposed 4<sup>th</sup> Bore of the Caldecott Tunnel**

**Todd Crampton, C.E.G., Senior Geologist, Geomatrix Consultants**  
**Mike McRae, P.E., Principal Engineer, Jacobs Associates**

The recently completed geologic and geotechnical investigations of the proposed 4th bore of the Caldecott Tunnel were closely coordinated with geologists and engineers of the Tunnel Design Team (TDT). Characterization of the geology and geotechnical ground conditions along the alignment also required close interaction between TDT geologists and engineers to ensure potential geologic/geotechnical hazards were identified and addressed during preliminary design of the new tunnel. The geology along the proposed alignment of the 4th bore is complex and includes variably fractured and locally crushed bedrock, variably oriented bedding, irregular and highly contorted bedding, intra-formational and inter-formational fault zones, diabase and probable sandstone dikes and sills, pockets of "trapped" or confined groundwater, and locally bituminous conditions. Evaluation of the complex geologic structure and geomechanical properties along the alignment by the TDT results in four ground classes, or support categories, which form the basis of the preliminary tunnel excavation and initial support design schemes.

### **Speaker Biographies:**

Todd Crampton, Senior Geologist with Geomatrix Consultants, is the Lead Engineering Geologist on the Tunnel Design Team of the Caldecott Improvement Project. He received his B.S. and M.S. degrees in Earth Science from U.C. Santa Cruz in 1992 and 1994, respectively.

Mike McRae, Principal Engineer with Jacobs Associates, is the Discipline Manager and Lead Engineer of the Tunnel Design Team of the Caldecott Improvement Project. He received his Bachelor of Science, Master of Engineering, and Doctor of Engineering degrees, from U.C. Berkeley in 1981, 1983, and 1994, respectively.

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**Thank you for the RSVP! See you on Thursday, November 9<sup>th</sup>.**