

Announcing
AEG San Francisco Section Meeting

**Excavation and Support of a Water
Tunnel through the Hayward Fault Zone**

**Sarah C. Holtz, PE
Jacobs Associates**

Restaurant: The Englander Sports Pub & Restaurant
101 Parrot Street, San Leandro
Between Washington Avenue and East 14th Street
(Phone 510.357.3571 for directions only—not a reservation line)

Date and Time: Tuesday, January 17, 2006

6:00 pm—Social Hour and Sign-in
7:00 pm—Dinner (Salmon, Chicken, NY Steak or Veggie Pasta)
8:00 pm—Presentation

Cost: \$35 AEG Members, \$40 Non-members, \$15 Students

Reservations: AEG members fax or e-mail Sachiko Tanikawa (fax # 510.268.5099, treasurer@aegsf.org) with the following information

- (1) Name
- (2) Phone number
- (3) Meal choice

Please Note: Reservation deadline is NOON on FRIDAY, January 13; availability cannot be guaranteed after this deadline. ****Walk-ins are not guaranteed!**** For financial reasons no-shows and last minute cancellations will be charged.

Driving Directions

From the 880 Freeway, exit Davis Street and drive east to Washington Avenue. Turn right (south) on Washington Avenue and then left (east) on Parrott Street. Look for The Englander on the south side of Parrott Street. You may park in the front of the restaurant or on the street.

Bart Directions

Get off at the San Leandro Bart Station and walk south 2 blocks to Parrott Street. Then walk toward the Hayward fault another 4 ½ blocks to reach The Englander on the south side of the street.

See over for abstract and speaker biography.

Excavation and Support of a Water Tunnel through the Hayward Fault Zone

As part of the East Bay Municipal Utility District (EBMUD) Seismic Improvements Program, the existing Claremont Tunnel is being repaired and a new bypass tunnel spanning the Hayward Fault Zone is being constructed. A special design for the bypass tunnel's final reinforced concrete lining is intended to allow significant horizontal offset due to a major event on the Hayward Fault. The excavation and support of this special section of tunnel, called the vault section, was accomplished with a combination of roadheader and drill and blast methods through highly sheared and crushed serpentinite, metabasalt, and alluvial sediments as well as clayey gouge of the Franciscan Formation. Geologic mapping through the vault section was used to confirm the locations of final structural elements.

Speaker Biography

Sarah C. Holtz, P.E. is a Senior Engineer at Jacobs Associates, and has experience in both the design and construction of tunnels. She is a Member of AEG, Secretary for the ASCE Rock Mechanics Committee, and serves on the Board of Directors of the American Rock Mechanics Association. She has a B.S. in Civil Engineering with a specialization in Engineering Geology from Drexel University, and an M.S. in Geotechnical Engineering from U.C. Berkeley. She is the Assistant Resident Tunnel Engineer for the Claremont Tunnel Seismic Upgrade Project.