

CURRICULUM VITAE - TED M. SAYRE

Principal Engineering Geologist/Geologic Engineer

Current Address

COTTON, SHIRES AND ASSOCIATES, INC.
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Registration

Registered Geologist in California, RG 5711
Certified Engineering Geologist in California, EG 1795
Engineer in Training (EIT passed 1986)

Education

M.E., Geological Engineering: Colorado School of Mines, Golden, Colorado, 1985
B.A., Geology: University of California, Berkeley, California, 1981

Areas of Specialization

Geotechnical peer review and investigation of proposed development, primarily in hillside areas, potentially constrained by slope instability, fault rupture, ground shaking and liquefaction.

Representative Experience

Mr. Sayre has over 36 years of experience in the fields of engineering geology, geological engineering, and hydrogeology. As a principal engineering geologist with Cotton, Shires and Associates, Inc., Mr. Sayre helps to administer a variety of projects. In this capacity, he is responsible for overall project supervision and coordination, compilation, collection and analysis of geologic and geotechnical data, and preparation and presentation of technical maps and reports. In addition, his duties include analysis of aerial photographs, field mapping of bedrock and surficial deposits and subsurface geologic exploration.

Mr. Sayre uses his combined background of engineering geology and geological engineering to investigate and resolve interrelated geologic and geotechnical issues. This background is especially useful when investigating landslide or seismic hazards that require close coordination between geologic characterization and engineering mitigation of the hazard. As a geologist, he has worked on a variety of projects in Alaska, California, Hawaii, Nevada, and Oregon. As a geological engineer and hydrogeologist with the U. S. Geological Survey Nuclear Hydrology Program, Mr. Sayre conducted research to investigate water flux through the unsaturated zone at Yucca Mt., Nevada. This work was part of a detailed characterization program to evaluate candidate sites for the nation's first high-level nuclear waste repository.

Mr. Sayre currently is responsible for the coordination of geotechnical peer review, including evaluation of proposed land divisions and building permit applications, for several San Francisco Bay Area communities. Proper recognition, characterization and mitigation of unstable ground are topics Mr. Sayre critically examines in his review capacity on a regular basis. In addition, evaluation of other common Bay Area seismic hazards such as surface fault rupture, amplified ground shaking, liquefaction and seismically induced slope failure are also part of Mr. Sayre's responsibility as a quality control reviewer of development safety. After the 1989 Loma Prieta earthquake, Mr. Sayre worked with the Santa Cruz County Earthquake Recovery Unit as a Supervising Engineering Geologist where he assisted in technical review of hundreds of building permit applications for repair of seismically damaged structures. More recently, Mr. Sayre has completed many residential damage assessments for local communities impacted by El Niño induced landslides.

TED M. SAYRE (cont.)

Professional Affiliations

Association of Engineering Geologists
Geological Society of America
Earthquake Engineering Research Institute

Selected Publications

UNSTABLE SLOPES IN THE FRANCISCAN COMPLEX TERRANE-LESSONS LEARNED FROM QUARRY SLOPES IN THE SAN FRANCISCO BAY AREA: 2007 (with John Wallace) First North American Landslide Conference Proceedings, pg. 1318-1325

GEOLOGIC CHARACTERIZATION OF RANGE-FRONT THRUST FAULTS, WESTERN MARGIN OF SANTA CLARA VALLEY CALIFORNIA: 2004 (with R.S. Rubin and J. M. Wallace), Geological Society of America Cordilleran Section 2005 Meeting, Paper No. 39-3

GEOLOGIC MAP OF LOS ALTOS HILLS, CALIFORNIA: 2005 Final map to the Town of Los Altos Hills, California (1"=600')

RANGE FRONT THRUST FAULTS- SARATOGA, LOS ALTOS HILLS, SANTA CLARA COUNTY, CALIFORNIA:2004 (with W.F. Cole, J.M. Wallace, and W.R. Cotton) in Association of Engineering Geologists Field Trip Guidebook- San Francisco Section, Chapter 2-1, 10 pgs

MITIGATION OF THE 1998 EL NINO SEA CLIFF FAILURE, PACIFICA, CALIFORNIA: 2001 (with P.O. Shires, and D.W. Kelly), Engineering Geology Practice in Northern California, Association of Engineering Geologists Special Publication 12, pg. 607-618

THE JAHNSIAN STEPS TO GEOLOGIC SAFETY: THE ENGINEERING GEOLOGIC APPROACH: 1992 (with W.F. Cole, and W.R. Cotton), Association of Engineering Geologists 35th Annual Meeting Proceedings, 6 pgs.