



Bruce L. Roth, MS, PE

Engineering Director

Education

MS, Civil and Environmental Engineering,
1991, Cornell University

BS, Geological Engineering, 1985,
University of Arizona

Harvard Executive Leadership Program,
2016

Registrations

Professional Engineer (PE): PA
#PE045910E, NC #036727,
VA #0402047094, MD #0043493, and WV
#020281

Skills

Foundation Analysis and Design

Rock and Soil Mechanics

Slope Stability Analysis and Design

Subsurface Exploration and Investigation

Geophysical Investigations

Geosynthetic Engineering and Design

Certifications / Training

Leaders to Watch Program, GAI
Consultants, Inc., 2009

Advanced Project Management Training,
GAI Consultants, Inc., 2009

High Performance Management Training,
GAI Consultants, Inc., 2008

ASFE Fundamentals of Professional
Practice, 2001

Troxler Moisture-Density Gauge Operation

Commonwealth of PA Drilling Inspector
Level 2

Industry Experience

GAI Consultants, Inc.. 1990-Present

Professional Summary

Mr. Roth has 35 years of geotechnical experience, specializing in foundation and slope stability analysis and design, rock and soil mechanics, subsurface exploration, geophysical investigation techniques, and geosynthetics. He is currently the Director of the Geotechnical Engineering Group at GAI Consultants. With a staff of 20 engineers and geologists, he provides geotechnical engineering services for dam and building foundations, coal combustion residuals (CCR) facilities, electrical and gas transmission lines, and transportation projects. His geotechnical engineering experience for clients in both the public and private sectors includes 20 years of project management experience. He has prepared and presented several papers including the Mt. Washington landslide in Pittsburgh, Pennsylvania (PA), a transmission line foundation design project in an environmentally sensitive area in Southern Virginia, and foundations for a transmission line crossing at Albermarle Sound in North Carolina (NC).

Mr. Roth also specializes in earthquake induced permanent ground deformations and the effects on lifeline facilities. His research work at Cornell University included evaluating earthquake induced ground failure from soil liquefaction and surface faulting and assessing buried lifeline response to large ground deformations. Mr. Roth studied case histories of the 1971 San Fernando and 1979 Imperial Valley earthquakes for his master's thesis. He participated in post-earthquake site investigations in San Francisco and the epicentral area after the 1989 Loma Prieta earthquake. He also has conducted research during his professional career on steel fin foundations and CCR's.

Mr. Roth is a past Director of ASCE and Chairman of the Geotechnical Engineering Group (Geo-Institute)