

CTL Engineering's Geotechnical Department routinely performs subsurface investigations and soil and rock testing. We prepare engineering reports, make recommendations regarding foundation and construction techniques, and perform other geotechnical services, as dictated by a given project.

Drilling Services

CTL Engineering owns and operates its own fleet of drill rigs, the largest of which has a capacity to drill and take samples up to 300 feet deep. Our rigs are equipped with large diameter soil and rock core samplers, *in-situ* pressure meters, and cone penetrometers. These rotary drilling rigs conduct standard split-spoon sampling.

Our drill rigs are equipped with pumps, wirelines, and standard coring equipment for proper and efficient execution of subsurface investigations. We can perform pressure meter tests and vane shear tests in the field, in addition to conducting and/or monitoring of well pump tests.



Triaxial & Permeability Testing

Analytical Laboratory

Our Soils Laboratory has consolidometers, triaxial and direct shear apparatus, state-of-the-art permeability devices, and standard soils classification equipment.

CTL Engineering provides a detailed analysis of the surface and subsurface composition and chemistry of the soils at the proposed site. For existing structures, we provide a foundation analysis. We also provide services for structures under construction.



Drilling in Rugged Terrain



Drilling on Flat Terrain

Service Listing

- ◆ Complete Subsurface Exploration Study
- ◆ Foundation Analysis
- ◆ Pile, Pier, and Caisson Analysis & Inspection
- ◆ Embankment & Earth Dam Analysis
- ◆ Slope Stability Analysis
- ◆ Settlement Analysis
- ◆ Pavement Design
- ◆ Rock & Mineral Testing
- ◆ Hydrogeologic Studies
- ◆ Field and Laboratory Testing of Soils
- ◆ Legal Testimony
- ◆ Dynamic Pile Testing



CTL Engineering routinely provides subsurface investigations on the following:

- ◆ Roads and Bridges
- ◆ Airport Terminals, Runways, and Taxiways
- ◆ Water/Wastewater Treatment Facilities
- ◆ Hospitals, Parking Garages, Higher Education, and PK-12 School Buildings
- ◆ Energy Facilities
- ◆ Telecommunication Towers
- ◆ Commercial, Retail, and Industrial Facilities