

GEOTECHNICAL REPORTS

Geotechnical Reports (Soils Engineering and Engineering Geology as necessary) are required for the following work:

- Projects with a basement
- Projects 3 stories in height or greater
- Underpinning
- Shoring
- Retaining walls supporting more than 6 feet of backfill [CBC 1803.5.12]
- Deep foundations [CBC 1803.5.5]
- Foundations designed using allowable values exceeding values in CBC T1806.2
- Foundations bearing on uncertified fill. A report is not required for cesspools abandoned in place with Inspector's approval of bottom, 2 sack slurry fill, with receipt. [CBC 1803.5.9]

Geotechnical Report Requirements:

- 1. Provide two copies of the geotechnical report for review at the time of plan check submittal. Scope, basis, and investigated conditions shall be in accordance with CBC 1803. [CBC J104.3 and 1803]
- 2. The report shall contain: The nature and distribution of existing soils; Conclusions and recommendations for grading procedures; Soil design criteria for any structures or slopes required to accomplish the proposed grading; Slope stability studies, and recommendations and conclusions regarding site geology where necessary; Site and project description; geologic/geotechnical map; description of field exploration; ground- water table; laboratory testing; soil classification; static and seismic slope stability analyses; liquefaction; lateral earth pressure; total and differential settlement; mudflow/debris flow analysis; surface fault rupture investigation; recommendations for temporary and permanent cut, fill, and natural slopes, compaction, design of shoring, shallow and deep foundations, retaining/basement walls, pavement, slope setbacks, expansive soil conditions, subdrains, lateral deflection, retaining/basement wall backfill construction sequence, and special inspections by the geotechnical consultant. [CBC 1803]
- 3. If foundations are proposed to bear on compacted fill, the geotechnical report shall include the following: Specifications for site preparation prior to placement of fill, fill material specifications, test methods for maximum dry density and optimum moisture content, maximum lift thickness, field density test method, minimum acceptable dry density expressed as a percentage of maximum dry density, number and frequency of required field tests.