#### **DEVELOPMENT SERVICES**



## Geotechnical Study Requirements

INFORMATION BULLETIN

515

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This information bulletin describes the minimum submittal requirements for geological/geotechnical reports supporting development permits, subdivision approvals, or grading permits. Geotechnical report requirements for building permits are contained in Land Development Code Section 145.1803.

Geologic conditions exist within the City of San Diego that can pose serious problems when land is developed. Unstable slopes, slide-prone geologic formations, faults, and liquefaction-prone soils occur in many parts of the City. The relative risk of these potential conditions has been mapped as part City of San Diego Seismic Safety Study (available at <a href="http://www.sandiego.gov/development-services/industry/hazards/index.shtml">http://www.sandiego.gov/development-services/industry/hazards/index.shtml</a>). The maps indicate where potentially adverse geological conditions may exist. Correction of these conditions may create unintended environmental impacts which must be addressed during the development permit phase of the project.

#### I. GEOTECHNICAL/GEOLOGICAL STUDIES

The City recognizes two basic types of geological/geotechnical studies: preliminary geotechnical reports and as-built or asgraded geotechnical reports. Geotechnical reports that address a proposed project are considered preliminary reports whether they address development or construction plans. Types of preliminary geotechnical reports include soils reports, geologic reconnaissance reports, geologic hazard investigation reports, geotechnical investigation reports, or many other types of focused geotechnical reports addressing a proposed development or construction project. All geotechnical reports submitted to the City should be prepared in accordance with the most current version of the City's Guidelines for Geotechnical Reports.

The appropriate scope of a geological/ geotechnical investigation is a function of the type of proposed land use or project,

### Documents Referenced in this Information Bulletin

- San Diego Municipal Code, (SDMC)
- <u>Information Bulletin 513</u>, Preliminary Review
- <u>Technical Guidelines for Geotechnical</u> <u>Reports</u>

the soil/geologic conditions of the project site, and permit/approval being requested. The geotechnical consultant (appropriately licensed professional geologist and/or professional engineer) is responsible for targeting the scope of their investigation, testing, analyses, and documentation to balance these factors. Unnecessary delays in obtaining permits/approvals can be avoided by submitting appropriately focused geotechnical investigation reports that address the proposed development or construction plans.

### II. REQUIRED GEOTECHNICAL INVESTIGATION REPORTS FOR DEVELOPMENT PROJECTS

Table 515A identifies when a geotechnical investigation report is required for proposed development projects based upon the geologic hazard category of the site (as identified on the San Diego Seismic Safety Study, Geologic Hazards and Faults maps) and other conditions.

A preliminary geotechnical investigation report is required for all proposed subdivisions, except condominium conversions.

### III. EXCEPTIONS TO STUDY REQUIREMENTS FOR DEVELOPMENT PROJECTS

The submittal requirement for a geotechnical investigation report may be waived by the City for proposed additions of less than 500 square feet of floor area, or other project of a minor nature, not located in Geologic Hazard Categories 11-13, 21, 41-47, not

### TABLE 515A GEOTECHNICAL REPORT REQUIREMENTS FOR PROPOSED DEVELOPMENT

Geologic Hazard Category	Geotechnical Investigation Report Required
Fault Rupture Hazard	
11-12	Conditional <sup>1,2</sup>
13	Conditional <sup>1,2,3,5</sup>
Potential Slope Instability	
21, 22, 24, 26	All proposed development*
23, 25, 27	Conditional <sup>1,3,4,5</sup>
Liquefaction Potential	
31-32	All proposed development
Coastal Bluffs	
41-47	All proposed development
Coastal Beach	
48	All proposed development
Other Conditions	·
51	Conditional <sup>1,4,5</sup>
52 -55	Conditional <sup>1,3,4,5</sup>

#### Proposed Development or Specific Conditions Requiring Geotechnical Investigation Report:

- \* See Section III for exceptions
- <sup>1</sup> Proposed subdivision (condominium conversions exempt)
- <sup>2</sup> Proposed structure for human occupancy (2000 person hours/year)
- <sup>3</sup> Proposed development on a slope 25 percent or greater, existing or proposed (\*including basement excavations)
- <sup>4</sup> Proposed development on property with Environmentally Sensitive Lands (ESL)
- 5 Most priority development projects and proposed projects that includes storm water infiltration/percolation BMPs.

located on slopes greater than 25 percent, and for standard projects where no storm water infiltration/percolation BMPs are proposed.

A geotechnical investigation report may be required or waived based on site conditions and the nature of the proposed development. To determine if a geotechnical investigation report will be required prior to project submittal, a preliminary review may be requested (see Information Bulletin 513, Preliminary Review).

# IV. REQUIRED GEOTECHNICAL INVESTIGATION REPORTS FOR PROPOSED GRADING PERMITS

A preliminary geotechnical investigation report is required to be submitted with all proposed grading plans and improvement plans showing grading, subsurface drainage, or storm water BMPs that involve infiltration or percolation. The preliminary geotechnical investigation report must specifically address the proposed construction plans.

An as-graded geotechnical report is required following the completion of permitted grading shown on a standard City Drawing (D-sheet with City title block). The as-graded geotechnical report is required to document implementation of the geotechnical recommendations and specifications. The submittal requirements for an as-graded geotechnical report will be noted on the grading plan.

## V. EXCEPTIONS TO GEOTECHNICAL INVESTIGATION REPORTS FOR PROPOSED GRADING PERMITS

A preliminary geotechnical investigation report may be waived for minor filling of a void or pit created by removal of an underground storage tank (UST) or removal of a swimming pool where adjacent structures or improvements will not be threatened. The grading is typically shown on a construction plan, not a D-sheet. An asgraded geotechnical report or uncontrolled embankment agreement will be required for placement of fill shown on a construction plan.