

City of Rancho Santa Margarita  
Grading Notes

1. All work shall be in accordance with the City of Rancho Santa Margarita Grading Ordinance, the City Engineer and any special requirements of the permit.
2. No grading shall be started without first notifying the City Engineer 48 hours prior to commencement of work.
3. Prior to any clearing, brushing, or demolition, approval must be obtained from the City Building official.
4. The permittee or his/her agent shall notify the City Engineer when the grading operation is ready for each of the following inspections.
  - A. Initial Inspection. When the permittee is ready to begin work, but not less than 48 hours before any grading or brushing is started.
  - B. Toe Inspection. After the natural ground is exposed and prepared to receive fill, but before fill is placed.
  - C. Excavation Inspection. After the excavation is started, but before the vertical depth of the excavation exceeds 10 feet.
  - D. Fill Inspection. After the fill placement is started, but before the vertical height of the fill exceeds 10 feet.
  - E. Drainage Device Inspection. After forming of terrace drains, downdrains or after placement of pipe subdrains, but before any concrete or filter material is placed.
  - F. Rough Grading. When rough grading has been completed. This inspection may be called for at the completion of rough grading without the necessity of the City Engineer having previously reviewed and approved the reports.
  - G. Final. When all work, including installation of all drainage structures and other protective devices has been completed and the as-graded plan, professional certifications and the required reports have been submitted.
5. Cut slopes shall be no longer than 2 horizontal to 1 vertical.
6. Fill slopes shall be no steeper than 2 horizontal to 1 vertical and shall have not less than 90% compaction out to the finished surface.
7. Fills shall be compacted throughout to a minimum relative compaction of 90%. Testing shall be in accordance with ASTM Test Methods D1556, D2937, D2922 and D3017
8. Areas to receive fill shall be properly prepared and approved by the City Inspector and soils engineer prior to placing of fill.
9. Fills shall be benched into competent material as per detail on plan.
10. All existing fills shall be approved by the City Engineer or removed before any additional fills are added.

11. Fill areas shall be cleaned of all vegetation and debris, scarified to depth 12" and inspected by the City Inspector and the soil testing agency prior to the placing of fill.
12. Any existing irrigation lines and cisterns shall be removed or crushed in place and backfilled, and approved by the City Engineer and soils engineer.
13. All slopes in excess of five (5) feet in height (measured vertically) shall be planted and irrigated to the satisfaction of the City Engineer. This work shall commence immediately after rough grade approval or at a time directed by the City Engineer.
14. The stockpiling of excess material shall be approved by the City Engineer prior to excavation.
15. Design Engineer, after rough grade completion, shall certify that pad elevations are as per the approved grading plan or approved revised grading plan, if changes to obtain dirt balance are made during grading operation.
16. All trench backfills shall be tested and certified by the sight soils engineer per the Grading Code.
17. The engineering geologist and soils engineer shall, after clearing and prior to the placement of fill canyons, inspect each canyon for areas of adverse stability and to determine the presence or absence of sub-surface water or spring flow. If needed, drains will be designed and constructed prior to the placement of fill in each respective canyon.
18. Subdrain outlets shall be completed at the beginning of the subdrain construction.
19. The exact location of the subdrains shall be surveyed in the field for line and grade.
20. All cut slopes shall be investigated both during and after grading by an engineering geologist to determine if any slope stability problem exists. Should excavation disclose any geological hazards or potential geological hazards, the engineering geologist shall recommend necessary treatment to the City Engineer for approval.
21. Where support or buttressing of cut and natural slopes is determined to be necessary by the engineering geologist and soils engineer, the soils engineer will submit design locations and calculations to the City Engineer prior to the construction. The engineering geologist and soils engineer will inspect the stability of the slope and adjacent structures upon completion.
22. When cut pads are brought to near grade the engineering geologist shall determine if the bedrock is extensively fractured or faulted and will readily transmit water. If considered necessary by the engineering geologist and soils engineer, a compacted fill blanket were placed.
23. The engineering geologist shall perform periodic inspections, submit a complete report and map upon completion of the rough grading.

24. The final compaction report and certification from the soils engineer shall contain the type of field-testing performed. Each test shall be identified with the methods of obtaining the in-place density, whether sand cone or drive ring, and shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
25. The soils engineer and engineering geologist shall be perform sufficient tests and inspections and be available during grading and construction to verify compliance with the plans, specification, and code within their purview.
26. The grading contractor shall be responsible for the quality of his work and shall submit a statement of Compliance with the approved grading plans prior to final approval.
27. Dust shall be controlled by watering.
28. Sanitary facilities shall be maintained on the site.
29. The location and protection of all utilities is the responsibility of the permittee
30. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading project.
31. All concrete and gunite shall be treated with a moisture loss retardant for curing.
32. Any water wells shall be abandoned in compliance with specifications approved by the City Building Official.
33. Any oil wells shall be abandoned in compliance with the Orange County Oil Code to the approval of the City Building Official.
34. Any existing cesspools and septic tanks shall be abandoned in compliance with the Uniform Plumbing Code to the approval of the City Building Official.
35. Prior to final approval, the design civil engineer shall certify to the City Engineer the number of yards of cut, fill and import moved during the grading operation.
36. The permittee shall comply with the Grading Code requirements when an excess of 5,000 cubic yards of earth is moved on public roadways from the site of earth grading operation.
37. Slopes shall not exceed 10 feet in height unless approved by the City Planning Commission.
38. All public roadways must be cleaned daily of all dirt, mud and debris deposited on them as a result of the grading operation. Cleaning is to be completed to the satisfaction of the City Engineer.

39. All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of dwelling shall be equipped with properly operating and maintained mufflers.
40. All operations shall comply with Orange County codified ordinances, division 6 (Noise Control)
41. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings and within the limits of the grading permit.
42. Grading operations including maintenance of equipment within 1 ½ miles of human occupancy shall not be conducted between the hours of 8 p.m.-7 a.m. daily, or on a Sunday, or on a federal holiday.
43. Sediment from areas disturbed by construction shall be retained on site using structural drainage controls to the maximum extent practicable.
44. Stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
45. Construction-related materials, wastes, spills or residues shall be retained on site to minimize transport from the site to streets, drainage facilities, or adjoining property by wind or runoff.
46. Runoff from equipment and vehicle washing shall be contained at construction sites unless treated to remove sediment and other pollutants.
47. All construction contractor and subcontractor personnel are to be made aware of the required best management practices and good housekeeping measures for the project site and any associated construction staging areas.
48. At the end of each day of construction activity all construction debris and waste materials shall be collected and properly disposed in trash or recycle bins.
49. Construction sites shall be maintained in such a condition that an anticipated storm does not carry wastes or pollutants off the site. Discharges of material other than Stormwater are allowed only when necessary for performance and completion of construction practices and where they do not: cause or contribute to a violation of any water quality standard; cause or threaten to cause pollution, contamination or nuisance; or contain a hazardous substance in a quantity reportable under Federal Regulations 40 CFR Parts 117 and 302.