

**CITY OF SAN CLEMENTE
GENERAL NOTES
FOR
GRADING PLANS**

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE GRADING ORDINANCE AND MANUAL OF THE CITY OF SAN CLEMENTE AND ANY SPECIAL REQUIREMENTS OF THE PERMIT.
2. NO GRADING SHALL BE STARTED WITHOUT FIRST NOTIFYING THE CITY ENGINEER. A PRE-GRADE MEETING IS REQUIRED BEFORE START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTORS, DESIGN CIVIL ENGINEER, SOILS ENGINEER, GEOLOGIST, CITY GRADING INSPECTOR OR THEIR REPRESENTATIVES, AND WHEN REQUIRED, THE ARCHAEOLOGIST, PALEONTOLOGIST AND/OR OTHER UTILITY REPRESENTATIVES.
3. THE PERMITTEE OR HIS AGENT SHALL NOTIFY THE ENGINEERING DIVISION 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 TWO DAYS BEFORE ANY GRADING OR BRUSHING IS STARTED.
 - B. TOE INSPECTION: AFTER THE NATURAL GROUND OR BEDROCK IS EXPOSED AND PREPARED TO RECEIVE FILL, BUT NOT BEFORE THE FILL IS PLACED.
 - C. EXCAVATION INSPECTION: AFTER THE EXCAVATION IS STARTED, BUT BEFORE THE VERTICAL DEPTH OF THE EXCAVATION EXCEEDS TEN FEET.
 - D. FILL INSPECTION: AFTER THE FILL PLACEMENTS STARTED, BUT BEFORE THE VERTICAL HEIGHT OF THE FILL EXCEEDS TEN FEET.
 - E. DRAINAGE DEVICE INSPECTION: AFTER FORMING OF TERRACE DRAINS, DOWNDRAINS, OR AFTER PLACEMENT OF PIPE IN SUBDRAINS, BUT BEFORE ANY CONCRETE OR FILTER MATERIAL IS PLACED.
 - F. ROUGH GRADING: WHEN ALL ROUGH GRADING HAS BEEN COMPLETED. THIS INSPECTION MAY BE CALLED FOR AT THE COMPLETION OF ROUGH GRADING.
 - 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.
4. CUT SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
5. 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.
6. FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90% RELATIVE DENSITY. MAXIMUM DENSITY TO BE DETERMINED BY ASTM-D1557 (FIVE (5) LAYER TEST) OR APPROVED EQUIVALENT, AND FIELD DENSITY BY UNIFORM BUILDING CODE STANDARD NO. 70-2, OR APPROVED EQUIVALENT.
7. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE SOILS ENGINEER AND/OR ENGINEERING GEOLOGIST PRIOR TO PLACING OF FILL.
8. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL AS PER DETAIL ON PLAN.
9. ALL EXISTING FILLS SHALL BE APPROVED BY THE SOILS ENGINEER OR REMOVED BEFORE ANY

ADDITIONAL FILLS ARE ADDED.

- 10. THE EXISTING IRRIGATION LINES, SUBGRADE STRUCTURES, SEPTIC TANKS, AND CISTERNS SHALL BE REMOVED, OR CRUSHED IN PLACE AND BACKFILLED, AND APPROVED BY THE CITY INSPECTOR AND SOILS ENGINEER.**
- 11. THE STOCKPILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO EXCAVATION.**
- 12. THE DESIGN CIVIL ENGINEER, PRIOR TO ROUGH GRADE APPROVAL, SHALL PROVIDE THE MINIMUM OF ONE BLUE TOP PER LOT, SET AT THE HIGHEST POINT IN THE FINISHED DRAINAGE SWALE.**
- 13. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SITE SOILS ENGINEER PER THE GRADING CODE.**
- 14. THE ENGINEERING GEOLOGIST AND SOILS ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, OBSERVE AND REVIEW EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, DRAINS (IN ADDITION TO THOSE DEPICTED ON THIS PLAN) WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON. ANY ADDITIONS SHALL BE NOTED ON THE "AS-BUILT" PLANS.**
- 15. SUBDRAIN OUTLETS SHALL BE COMPLETED AT THE BEGINNING OF THE SUBDRAIN CONSTRUCTION.**
- 16. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE AND GRADE AND NOTED AND SHOWN ON THE "AS-BUILT" PLANS.**
- 17. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO EVALUATE THE STABILITY OF EACH SLOPE SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL RECOMMEND NECESSARY TREATMENT TO THE CITY ENGINEER FOR APPROVAL. ALL APPROVAL TO BE GRANTED ON THE BASIS OF DETAILED GEOLOGICAL MAPPING AND WRITTEN FIELD MEMO.**
- 18. 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 CONSTRUCTION. THE ENGINEERING GEOLOGIST AND SOILS ENGINEER WILL OBSERVE THE CONSTRUCTION OF THE BUTTRESSING AND COMMENT ON THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION. ALL CHANGES SHALL BE ADDRESSED IN THE FINAL SOILS REPORT.**
- 19. 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 WILL BE PLACED.**
- 20. THE ENGINEERING GEOLOGIST OR HIS REPRESENTATIVE SHALL BE ON SITE FOR OBSERVATION AND TESTING, AS NECESSARY, AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING.**
- 21. THE FINAL COMPACTION REPORT AND APPROVAL FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD 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.**

22. THE SOILS ENGINEER AND ENGINEERING GEOLOGIST SHALL PROVIDE OBSERVATION AND TESTING, SERVICES, AS NECESSARY, AND BE AVAILABLE DURING GRADING TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE WITHIN THEIR PURVIEW.
23. THE DESIGN CIVIL ENGINEER SHALL EXERCISE SUFFICIENT CONTROL DURING GRADING AND CONSTRUCTION TO INSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE WITHIN HIS PURVIEW.
24. DUST SHALL BE CONTROLLED BY WATERING.
25. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.
26. THE LOCATION AND PROTECTION OF ALL UTILITIES ARE THE RESPONSIBILITY OF THE GRADING CONTRACTOR.
27. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT.
28. PRIOR TO FINAL APPROVAL, THE DESIGN CIVIL ENGINEER SHALL CERTIFY TO THE ENGINEERING DIVISION THE NUMBER OF YARDS TO CUT, FILL AND IMPORT MOVED DURING THE GRADING OPERATIONS.
29. ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON-SITE SOILS SHALL BE CONSTRUCTED WITH TYPE 5 CEMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
30. EXPORT SOIL MUST GO TO A LEGAL DUMP OR TO A PERMITTED SITE APPROVED BY THE CITY ENGINEER.
31. SLOPES EXCEEDING FIVE FEET IN HEIGHT MUST BE PLANTED WITH A PLANT MATERIAL DESIGNED BY A REGISTERED LANDSCAPE ARCHITECT AND APPROVED BY THE CITY AND MUST BE PROVIDED WITH AN APPROVED IRRIGATION SYSTEM.
32. PRIOR TO FINAL APPROVAL, THE GRADING CONTRACTOR SHALL SUBMIT A STATEMENT OF COMPLIANCE FOR THE APPROVED GRADING PLAN.
33. FOR GRADING PERMITS ISSUED BEFORE AUGUST 15, EROSION CONTROL PLANS, IF NECESSARY, SHALL BE REQUIRED AND SHALL BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER BY SEPTEMBER 15. FOR GRADING PERMITS WHICH ARE ISSUED AFTER AUGUST 15, AND WHERE GRADING IS NOT EXPECTED TO BE COMPLETED BY OCTOBER 15, EROSION CONTROL PROVISIONS SHALL BE REQUIRED.
34. THE APPROVED SOIL ENGINEERING REPORT PREPARED BY

ENTITLED

REPORT NO:

DATED:

AND ALL REVISIONS ARE TO BE CONSIDERED PART OF THE PLANS, AND THE RECOMMENDATIONS CONTAINED THEREIN ARE TO BE ADHERED TO.

35. CONCRETE FOR SIDEWALK, CURB & GUTTER, ACCESS RAMPS, AND DRIVE APPROACHES SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 3250 PSI. CONCRETE MAY BE PNEUMATICALLY PLACED AND SHALL CONFORM TO SECTION 201 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK).
36. CONCRETE FOR EXTERIOR RETAINING WALLS AND STRUCTURAL FOUNDATIONS SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 4500 PSI WITH A WATER-CEMENT RATIO OF 0.45.

37. CONCRETE REINFORCING SHALL BE 6" X 6 - w 1.4 WELDED WIRE MESH (W.W.M.) OR APPROVED EQUAL.
38. GROUND SHALL BE PREWETTED TO THE SATISFACTION OF THE CITY INSPECTOR OR THE SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE. MOISTURE LOSS RETARDANT SHALL BE USED WHEN REQUIRED BY THE SOILS ENGINEER.
39. FOR COMPACTED FILL:
 - A. A MINIMUM FOUNDATION BEARING VALUE OF 1500 P.S.F. IS REQUIRED UNLESS MODIFIED BY THE SOILS REPORT.
 - B. NUMBER OF TESTS TO BE MADE SHALL BE:
 - 1 TEST FOR EACH 2 FEET OF FILL OR
 - 1 TEST FOR EACH 1,000 CUBIC YARDS (WHICHEVER IS GREATER).
40. THE UNDERSIGNED CIVIL ENGINEERS WILL BE RESPONSIBLE FOR THE MINIMUM PROFESSIONAL INSPECTIONS IN ACCORDANCE WITH SUBARTICLE 14 OF THE CITY OF SAN CLEMENTE'S GRADING ORDINANCE & GRADING MANUAL.
41. DETRIMENTAL AMOUNTS OF ORGANIC MATERIAL SHALL NOT BE PERMITTED IN FILLS. EXCEPT AS OUTLINED BELOW, NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN TWELVE (12) INCHES SHALL BE BURIED OR LACED IN FILLS.
 - A. THE SOILS ENGINEER MAY PERMIT PLACEMENT OF LARGER ROCK WHEN THE SOILS ENGINEER PROPERLY DEvised A METHOD OF PLACEMENT, CONTINUOUSLY INSPECTS PLACEMENT, AND APPROVES THE FILL STABILITY AND COMPETENCY. THE FOLLOWING CONDITIONS SHALL ALSO APPLY:
 - B. PRIOR TO ISSUANCE OF THE GRADING PERMIT, POTENTIAL ROCK DISPOSAL AREA(S) SHALL BE DELINEATED ON THE GRADING PLAN.
 - C. ROCK SIZES GREATER THAN TWELVE (12) INCHES IN MAXIMUM DIMENSION SHALL BE TEN (10) FEET OR MORE BELOW GRADE, MEASURED VERTICALLY. THIS DEPTH MAY BE REDUCED UPON RECOMMENDATION OF THE SOILS ENGINEER AND APPROVAL OF THE BUILDING OFFICIAL PROVIDING THAT THE PERMITTED USE OF THE PROPERTY WILL NOT BE IMPAIRED.
 - D. ROCKS GREATER THAN TWELVE (12) INCHES SHALL BE PLACED SO AS TO BE COMPLETELY SURROUNDED BY SOILS; NO NESTING OF ROCKS WILL BE PERMITTED.
 - E. ALL RECOMMENDATIONS SHALL BE REVIEWED AND APPROVED BY THE CITY.
42. GRADING OPERATIONS AND MAINTENANCE OF EQUIPMENT WITHIN ONE HALF MILE OF HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 5:30 P.M. AND 7:30 A.M. OR ANY TIME ON A SATURDAY, SUNDAY OR A CITY HOLIDAY.
43. THE DESIGN ENGINEER SHALL CERTIFY ALL HORIZONTAL LINES AND VERTICAL GRADES PRIOR TO RELEASE OF GRADING.
44. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE.
 - A. ALL EROSION PROTECTION DEVICES MUST BE IN PLACE EACH DAY THE RAIN PROBABILITY FORECAST IS EQUAL TO OR GREATER THAN 40%. AFTER A RAIN EVENT (OR DURING AN EXTENDED EVENT IF NECESSARY), ALL EROSION PROTECTION DEVICES SHALL BE

INSPECTED AND REPAIRED/CLEANED AS NEEDED TO ENSURE PROPER FUNCTION.

- B. DISCHARGES OF MATERIAL OTHER THAN STORMWATER ("NON-STORMWATER" DISCHARGES) 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. SITE SHALL INCLUDE BEST MANAGEMENT PRACTICES (BMPs) TO REDUCE THE QUANTITY (AMOUNT AND NUMBER OF INCIDENTS) OF NON-STORMWATER DISCHARGES AND TO IMPROVE THE QUALITY OF ANY NON-STORMWATER DISCHARGES.**
 - C. STORMWATER AND NON-STORMWATER DISCHARGES SHALL NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHINGS.**
 - D. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER AND NON-STORMWATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.**
 - E. THE PERMITTEE SHALL NOTIFY ALL GENERAL CONTRACTORS, SUBCONTRACTORS, MATERIAL SUPPLIERS, LESSEES AND PROPERTY OWNERS THAT THE DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN SYSTEM OR OTHER WATERSHED DRAINAGE FEATURES IS PROHIBITED.**
- 45. DEWATERING OF CONTAMINATED GROUNDWATER OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.**
 - 46. PRIOR TO CONSTRUCTION, ALL SURVEY MONUMENTS AND CENTERLINE TIES ARE TO BE LOCATED IN THE FIELD. UPON COMPLETION OF CONSTRUCTION, ALL DAMAGED OR DESTROYED CENTERLINE TIES AND SURVEY MONUMENTS ARE TO BE RESET AND "CORNER RECORDS" PREPARED FOR SURVEY MONUMENTS FOR SUBMISSION TO THE CITY'S ENGINEERING DIVISION AND FILING WITH THE COUNTY SURVEYOR IN COMPLIANCE WITH AB1414. THIS MUST BE COMPLETED PRIOR TO CERTIFYING COMPLETION OF THE PROJECT. ALL RESTORATIONS OF SURVEY MONUMENTS SHALL BE CERTIFIED BY THE DESIGN REGISTERED ENGINEER IN ACCORDANCE WITH SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE.**
 - 47. PRIOR TO GRADING, HYDRO AUGERS ARE TO BE INSTALLED AT THE TOE OF SLOPE FACE (IF APPLICABLE). ACTUAL LOCATIONS WILL BE DETERMINED BY SOILS ENGINEER IN THE FIELD. (MAXIMUM SPACING 50 FEET).**
 - 48. A CITY OF SAN CLEMENTE ENCROACHMENT PERMIT WILL BE REQUIRED PRIOR TO ANY GRADING OR WORK IN CITY'S PUBLIC RIGHT-OF-WAY.**

