



**CITY OF COLTON PUBLIC WORKS/ENGINEERING DEPARTMENT ROUGH GRADING PLAN REVIEW CHECKLIST**

PROJECT NAME: \_\_\_\_\_ TRACT, PARCEL MAP OR PROJECT ID  
 NO. \_\_\_\_\_ PLAN CHECKED BY: \_\_\_\_\_

	1ST CHECK	2ND CHECK	3RD CHECK	FINAL MYLAR	COMMENTS
DATE CHECKED:					
I. SUBMITTAL REQUIREMENTS – SEE PLAN CHECK REQUIREMENT CHECK LIST					
APPROVED TENTATIVE MAP					
HYDROLOGY/HYDRAULIC CALCULATIONS					
PM10 & SWPPP PLAN					
CONDITIONS OF APPROVAL (ENGINEER TO INDEPENDENTLY VERIFY CONDITIONS OF APPROVAL HAVE BEEN MET)					
ROUGH GRADING PLAN					
SOILS REPORT & UPDATE LETTER					
ARCH/PALEO MONITORING CONTRACT AGREEMENT					
II. GENERAL SHEET REQUIREMENTS – ALL SHEETS					
A. MEDIUM					
1. 24"X36" SIZE. FINAL SUBMITTAL ON 3 MIL. MYLAR FILM					
2. NO "STICKY BACK" FILM, GLUED OR TAPED ON SECTIONS					
B. DRAFING/LAYOUT REQUIREMENTS					
1. PLAN NAME WITH TRACT, PM OR SDP NUMBER & NEIGHBORING TM, PM OR SDP					
3. TYPE OF IMPROVEMENT PLAN, I.E. ROUGH GRADING PLAN.					
4. SECTION, TOWNSHIP AND RANGE					
5. REVISION BLOCK					
6. PREPARER'S NAME, ADDRESS, PHONE NUMBER					
7. BASIS OF BEARING AND APPROVED BENCH MARK					
8. SIGNATURE BLOCKS PROVIDED					
a. CITY SIGN OFF BLOCK – APPROVED BY: CITY ENGR., RCE # __, __, EXP. DATE – __/__/__.					
b. RESPONSIBLE ENGINEER'S SIGNATURE BLOCK AND SEAL – CHECK EXP. DATE					
c. OTHER AGENCY'S SIGNATURE BLOCK(S) IF REQUIRED, PROVIDE HOA APPROVAL SIGNATURE FOR INFILL PROJECTS, PROVIDE CVWD APPROVAL FOR CHANNEL FLOW OR CONNECTION					
9. USA DIG ALERT NOTE WITH PHONE NUMBER 1-800-227-2600					
10. SHEETS NUMBERED NUMERICALLY IN INCREASING ORDER – SHEET __ OF __					
11. 0.08" MINIMUM TEXT HEIGHT – CAD DRAFTED, 0.10" IF HAND DRAFTED – ALL TEXT LEGIBLE					

	1 <sup>ST</sup> CHECK	2 <sup>ND</sup> CHECK	3 <sup>RD</sup> CHECK	FINAL MYLAR	COMMENTS
12. PROVIDE CONSISTENT REFERENCES WITH RESPECT TO PARCEL & TRACT NUMBER MATCHUP, ENSURE BOUNDARY & ELEVATION CALLOUTS ARE CONSISTENT WITH TENTATIVE MAP					
III. TITLE SHEET					
A. GENERAL NOTES PROVIDED					
B. GRADING NOTES PROVIDED – PLANS STATE GRADING PERFORMED TO CITY OF COLTON MUNICIPAL CODE.					
C. INDEX MAP					
1. SCALE IS 1"=500' OR SMALLER - USE STANDARD SCALE					
2. SHEET COVERAGE IS SHOWN					
3. STREET NAMES AND LOT #s SHOWN, CALL OUT ADJACENT TRACTS					
4. LOCATIONS OF PRIMARY STORM DRAIN SYSTEMS (CATCH BASINS, CULVERTS, INLETS, RETENTION BASINS, OVERFLOWS ETC) ARE SHOWN ON INDEX MAP. SHOW FLOW DIRECTION ON INDEX MAP.					
D. VICINITY MAP					
1. ARTERIAL STREETS SHOWN					
2. ORIENT NORTH AS ON INDEX MAP					
3. PROJECT LOCATION INDICATED ON MAP					
4. SCALE NOTATION PROVIDED ("NTS" IS OK)					
E. LEGEND OF SYMBOLS USED, INCLUDES CONSTRUCTION NOTE SYMBOLS, TYPICAL ABBREVIATIONS, SPECIAL LINETYPES, HATCHING LEGEND, ETC.					
F. OWNER'S INFORMATION					
1. SITE ADDRESS					
2. OWNER'S NAME/ADDRESS AND TELEPHONE NUMBER					
G. UTILITY AGENCY INFORMATION FOR:					
1. COLTON WASTEWATER (909) 370-6131					
2. COLTON WATER (909) 370-6131					
3. THE GAS COMPANY 800-427-2200					
4. VERIZON (FORMALY GTE) 800-483-5000					
5. TIME WARNER CABLEVISION 760-340-1312					
H. EARTHWORK VOLUMES – SHOWN RAW VOLUMES AND SHINKAGE, SUBSIDENCE, BULKING, IMPORT AND OVEREXCAVATION QUANTITIES. SHRINKAGE FACTORS SHOWN					
I. ROUGH GRADED STREET TYPICAL SECTIONS AND DETAILS (MAY BE SHOWN ON SEPARATE SHEET IF ROOM DOES NOT PERMIT ON TITLE SHEET). SHOW LIMITS OF ROUGH GRADE, DEPTH, AND ALL HINGE POINTS.					
J. FEMA FLOOD ZONE DESIGNATION.					
K. TYPICAL LOT GRADING DETAIL(S).					

	1 <sup>ST</sup> CHECK	2 <sup>ND</sup> CHECK	3 <sup>RD</sup> CHECK	FINAL MYLAR	COMMENTS
L. SHOW DETAIL OF KEYING AND BENCHING.					
M. SOIL ENGINEER STAMP & SIGNATURE BLOCK – ENSURE UPDATE LETTER IS WITHIN 1 YEAR OF PLAN SET SUBMITTAL AS APPLICABLE PLANS SIGNED BY SOIL'S ENGINEER.					
N. GRADING NOTES IDENTIFY OVEREXCAVATION DEPTH AND LIQUIFACTION ISSUES AS APPLICABLE					
O. PROVIDE DIMENSIONED STREET SECTIONS					
V. PLAN SHEETS					
A. PLAN VIEW SHOWS:					
1. NORTH ARROW (PREFERRED TO POINT UP OR TO THE RIGHT OR LEFT)					
2. 4" BAR SCALE – SCALE TO BE A TYPICALLY USED SCALE, I.E. 1"=20' OR 1"=40'.					
3. SCALE 1"=40' OR LARGER FOR HOUSING OR COMMERCIAL DEVELOPMENT AREAS.					
4. SCALE NOT SMALLER THAN 1"=100' FOR GOLF COURSE OR LARGE OPEN SPACE AREAS.					
5. SHOW COMPLETE BOUNDARY INFORMATION AND LOT LINE ANNOTATION.					
6. SHOW ALL LOT NUMBERS, LOT DIMENSIONS AND STREET NAMES.					
7. SHOW RIGHT OF WAY AND ALL EASEMENTS INCLUDING LANDSCAPE, DRAINAGE, PUBLIC UTILITY, STREET CENTERLINES, ETC. ALSO PROVIDE SAME DETAIL IN SHEET SECTIONS					
8. SHOW ADJACENT RECORD MAP REFERENCES. SHOW EXISTING FACILITIES WITH SCREEN LINES. SHOW TRACT BOUNDARY & LOT LINES WITH SOLID LINES. SHOW EXISTING STREETS & STORM DRAINS WITH DASHED LINES					
9. DIMENSION STREET AND RIGHT OF WAY WIDTHS – PROPOSED & EXISTING AS APPLICABLE					
10. EXISTING CONTOURS SHALL BE SHOWN IN SCREENED OR DASHED LINES:					
a. SHOW EXISTING CONTOURS A MINIMUM OF 50' BEYOND ALL PROPERTY LINES OR AS NEEDED FOR DAYLIGHT OR TO JUSTIFY THE DESIGN.					
b. 2' MAXIMUM CONTOUR INTERVAL.					
c. 10' MAXIMUM CONTOUR INTERVALS ON STEEP HILLSIDE AREAS					
d. SHOW 1 FOOT CONTOURS IN VERY FLAT AREAS.					
11. SHOW PROPOSED CONTOURS IN HEAVY SOLID LINES. MATCH CONTOUR INTERVALS FOR REQUIRED EXISTING CONTOURS. SHOW DAYLIGHT LINE LIMITS					
12. SHOW PAD (PAD) ELEVATIONS TO THE NEAREST 0.1'. PROVIDE HIGH POINT ELEVATION PER PAD. ADD SWALE LINES ON LOTS OR SHOW EXAMPLE LOT GRADE DETAIL					
13. PAD ELEVATION SHALL BE A MINIMUM OF 1 FOOT ABOVE Q100 ELEVATION.					

	1ST CHECK	2ND CHECK	3RD CHECK	FINAL MYLAR	COMMENTS
14. ELEVATIONS SHOWN AT:					
a. B.C.'s, E.C.'s, AND GRADE BREAKS. CALL OUT TOP OF CURB AT 50' INTERVALS OR AT LOT LINE WHICH EVER IS GREATER DETAIL					
b. AT 50' INTERVALS ON THROUGH VERTICAL CURVES					
c. SHOW EACH SIDE GRADE ELEVATION, TOP OF FOOTING & TOP OF WALL ELEVATIONS FOR ALL PRIVACY & RETAINING WALLS – ENSURE 1 COURSE OF FOOTING COVER FOR MASONRY WALLS					
d. PROVIDE EXISTING OFFSET ELEVATIONS OUTSIDE OF PROJECT					
e. CALL OUT RETENTION BASIN BOTTOM ELEVATION, WS ELEVATION 100					
15. SHOW GRADE SECTIONS & SLOPES FOR TRACT BOUNDARIES, RETAINING WALLS, SETBACKS & OTHER FEATURES CALL OUT GRADES ON ALL SECTION FEATURES					
16. SHOW LOCATION OF DAYLIGHT LINES (TRANSITION LINES BETWEEN CUT AND FILL AREAS) MAKING THEM CONTINUOUS AND OBVIOUS.					
17. MINIMUM RATES OF GRADE SHALL BE AS FOLLOWS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. SHOW GRADES AND FLOW DIRECTION AT GUTTERS AND OTHER ROUGH GRADE FLOW AREAS EVERY 200 FEET (MINIMUM) CALL OUT STREET FLOW DIRECTION IN ALL PLAN VIEWS					
a. SWALE HIGH POINT IS A MINIMUM 2% BELOW PAD ELEVATION. SHOW STANDARD SECTION FOR SWALE					
b. EARTH OR TURF REAR AND SIDEYARD SWALES ARE 0.50%, MIN.					
c. BLDG. PAD OR REAR YARD TO SWALE IS 4%, MAX., 1% MIN, 2% PREFERRED, MAXIMUM SWALE CROSS-SLOPE 20%					
d. SIDEYARD IS 2.0% MIN., 20% MAX SIDEYARD CROSSFALL.					
e. ASPHALT CONCRETE PAVEMENT – 1.0% MIN.					
f. PORTLAND CEMENT CONCRETE PAVEMENT – 0.5% MIN.					
g. CUL-DE-SAC GUTTER OR WEDGE CURB – 1.0 % MIN. HIGH POINT TO CUL-DE-SAC TO BULB -0.7% TO 3.0% TYPICAL					
18. TOPS AND TOES OF SLOPES SHALL BE CLEARLY DEFINED. 2:1 MAX SLOPE SHOW SLOPE BETWEEN LOTS IF PAD ELEVATION DIFFERENCE >0.1 FEET					
19. NO DRAINAGE OVER 2:1 SLOPES. TERRACE AND INTERCEPTOR DRAINS SHALL CONFORM TO CHAPTER 33 OF THE UBC.					
20. VELOCITY REDUCERS ARE REQUIRED WHERE DRAINS DISCHARGE ONTO NATURAL GROUND. IF RIPRAP IS USED, SPECIFY CLASS AND SIZE.					
21. CONCENTRATED DRAINAGE EXCEEDING 4% REQUIRES CONCRETE OR OTHER APPROVED NON-EROSIVE DEVICE.					

	1ST CHECK	2ND CHECK	3RD CHECK	FINAL MYLAR	COMMENTS
22. NO DRAINAGE OVER RETAINING WALLS. USE CONCRETE "V" DITCHES, AREA DRAINS, DOWN DRAINS OR OTHER APPROVED DRAINAGE DESIGN. CONNECT "V" DITCH BETWEEN GARDEN WALLS TO STORM DRAIN LINE & ROUTE TO RETENTION BASIN OR EQUAL					
23. A 12" HIGH BY 4' WIDE BERM IS REQUIRED AT THE TOPS OF ALL SLOPES WITH A 3' NEIGHORING PAD ELEVATION DIFFERENCE. SHOW TYPICAL DETAIL.					
24. PROVIDE A 1' WIDE (MIN.) BENCH AT THE TOP OF ALL 2:1 SLOPES BETWEEN LOTS.					
25. JOIN ELEVATIONS AND RELATIONSHIPS TO SURROUNDING PROPERTIES ARE SHOWN.					
26. SHOW LOCATIONS OF ALL EXISTING AND PROPOSED STRUCTURES, BURIED TANKS AND WELLS, ETC.					
27. LOCATIONS OF BLOCK WALLS & RETAINING WALLS AND OTHER STRUCTURES ARE CLEARLY SHOWN.					
28. SUPPLY ROADWAY CURVE DATA TABLE					
29. LOCATIONS OF PRIMARY STORM DRAIN SYSTEMS (CATCH BASINS, CULVERTS, CROSS GUTTERS, INLETS, RETENTION BASINS, OVERFLOWS, SAND FILTERS, LEACH LINES, ETC) ARE SHOWN. RETENTION BASIN SLOPES ARE IDENTIFIED.					
30. INCLUDE DISPOSITION NOTES FOR EXISTING FACILITIES. THE TERM "BY OTHERS" SHALL NOT BE USED BUT SHALL BE DEFINED.					
31. INCLUDE CONSTRUCTION NOTES ON EACH SHEET. DO NOT REFER BACK TO CONSTRUCTION NOTES ON THE TITLE SHEET.					
32. REFER TO CITY STANDARD DRAWING NO. IF APPLICABLE TO WORK. PROVIDE SPECIFICATIONS, NOTES, DETAILS OR OTHER APPROVED STANDARD DRAWING NO. IF DIFFERENT FROM CITY STANDARD.					
33. EXCLUDE BENCHING DETAIL FROM SLOPES UNLESS SPECIFIED BY CITY					
34. NO INDIVIDUAL LOT RETENTION UNDER 1 ACRE LOT SIZE					
35. NO FLOW CROSSING PROPERTY LINE – UTILIZE ADDITIONAL INLET STRUCTURES OR SWALES					
36. CALL OUT STREET DIMENSION IN PLAN VIEWS, UNDERGROUND OR OVERHEAD UTILITIES AND ROW					
37. CALL OUT SWALE LINES ON LOTS OR PROVIDE SAMPLE GRADE DETAIL – ENSURE PAD ELEVATION IS 1 FOOT MINIMUM ABOVE 100 YEAR STORM					
38. CALL OUT SLOPES OF RETENTION BASIN SIDES					
37. CALL OUT TOP OF CURB AT ALL ADJACENT STREETS					
VI. GENERAL REQUIREMENTS					
A. GEOTECHNICAL REPORT					
1. CHECK FOR CONFORMANCE WITH SOILS ENGINEER RECOMMENDATIONS.					

	1 <sup>ST</sup> CHECK	2 <sup>ND</sup> CHECK	3 <sup>RD</sup> CHECK	FINAL MYLAR	COMMENTS
2. PLANS SIGNED BY SOIL'S ENGINEER.					
3. UPDATE LETTER IF SOILS REPORT IS MORE THAN 1 YEAR OLD.					
4. DELINEATE AREAS OF OVEREXCAVATION AND RECOMPACTION – HATCH/SHADE IN PLAN VIEW SHEETS. WHERE DEPTH EXCEEDS 12", SOILS ENGINEER TO RECOMMEND COMPACTION IN THE FINAL REPORT.					
5. RECOMMENDATIONS FOR SHRINKAGE AND SUBSIDENCE.					
6. RECOMMENDATIONS FOR PERCOLATION PROVIDED FOR RETENTION BASIN SIZING.					
7. DELINEATE ON THE PLANS AND PROVIDE DETAILS FOR ROCK DISPOSAL AREAS AS RECOMMENDED BY THE SOILS ENGINEER.					
8. BORINGS DRILLED TO 50 FEET FOR LIQUIFACTION AREAS – ON LARGER PROJECT STP BORINGS CONFIRMED WITH CPT BORINGS. CEG SIGNATURE ALSO REQUIRED FOR LIQUIFACTION AREAS					
9. CORROSIVE SOIL CONDITIONS HAVE BEEN INVESTIGATED AND MITIGATION MEASURES PROPOSED AS APPLICABLE					
10. GEOTECH RECOMMENDATIONS MATCH GRADING NOTES ON PLANS. PLANS STATE GEOTECH OF RECORD WILL PROVIDE CERTIFIED LETTER THAT ENGINEERED FILL HAS BEEN PLACED ACCORDING TO APPROVED PLANS					
<b>B. EROSION CONTROL REQUIREMENTS</b>					
1. CUT SLOPES EQUAL TO OR GREATER THAN 5' IN VERTICAL HEIGHT SHALL BE PLANTED WITH AN APPROVED GROUND COVER TO MINIMIZE EROSION.					
2. FILL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT SHALL BE PLANTED WITH AN APPROVED GROUND COVER TO MINIMIZE EROSION.					
3. GRADED SLOPES EXCEEDING 15° IN VERTICAL HEIGHT ARE TO BE PLANTED WITH TREES AND/OR SHRUBS IN ADDITION TO THE APPROVED GROUND COVER.					
4. LOCAL AIR QUALITY MANAGEMENT PLAN (LAQMP) HAS BEEN SUBMITTED AND APPROVED BY THE CITY.					
5. NPDES AND STATE WATER RESOURCE REQUIREMENTS HAVE BEEN MET.					
<b>C. DESIGN REQUIREMENTS</b>					
1. PLAN SET AND PAD ELEVATIONS AND GRADING CONCEPTS ARE IN ACCORDANCE WITH THE APPROVED TENTATIVE MAP AND CONDITIONS OF APPROVAL.					
2. DRAINAGE SHALL BE CONDUCTED TO A STREET, NATURAL WATERCOURSE, RETENTION BASIN OR OTHER APPROVED LOCATION.					
3. A NOTARIZED LETTER OF PERMISSION/ACCEPTANCE FROM ADJACENT PROPERTY OWNER(S) REQUIRED FOR SLOPE ENCROACHMENT, ACCEPTANCE OF UN-NATURAL DRAINAGE OR OTHER OFF SITE GRADING OR WORK. INCLUDE LEGAL DESCRIPTION AND ASSESSOR'S PARCEL NUMBERS.					

	1 <sup>ST</sup> CHECK	2 <sup>ND</sup> CHECK	3 <sup>RD</sup> CHECK	FINAL MYLAR	COMMENTS
4. PROVIDE CC&R'S OUTLINING DRAINAGE RIGHTS AND MAINTENANCE RESPONSIBILITIES. NO CROSS LOT DRAINAGE ALLOWABLE.					
5. ALL WALL CONSTRUCTION IS BY SEPARATE PERMIT. SUPPLY WALL ELEVATIONS, FOOTPRINT AND SECTION W/O STRUCTURAL STEEL DETAIL. ENSURE THAT NO PART OF WALL FOOTING CROSSES OVER PROPERTY LINE PROVIDE DIRT, GUNITE SWALE (EROSION CONDITIONS) OR EQUAL AT WALL SECTION DETAILS AS REQUIRED – NO CROSS LOT OR OFF PROPERTY LINE DRAINAGE. NO BLOCKING OF DRAINAGE BY WALLS. I.D. & DEFINE FLOW AT PERIMETER OF WALLS TO CATCH BASIN					

COMMENTS: