

GENERAL NOTES:

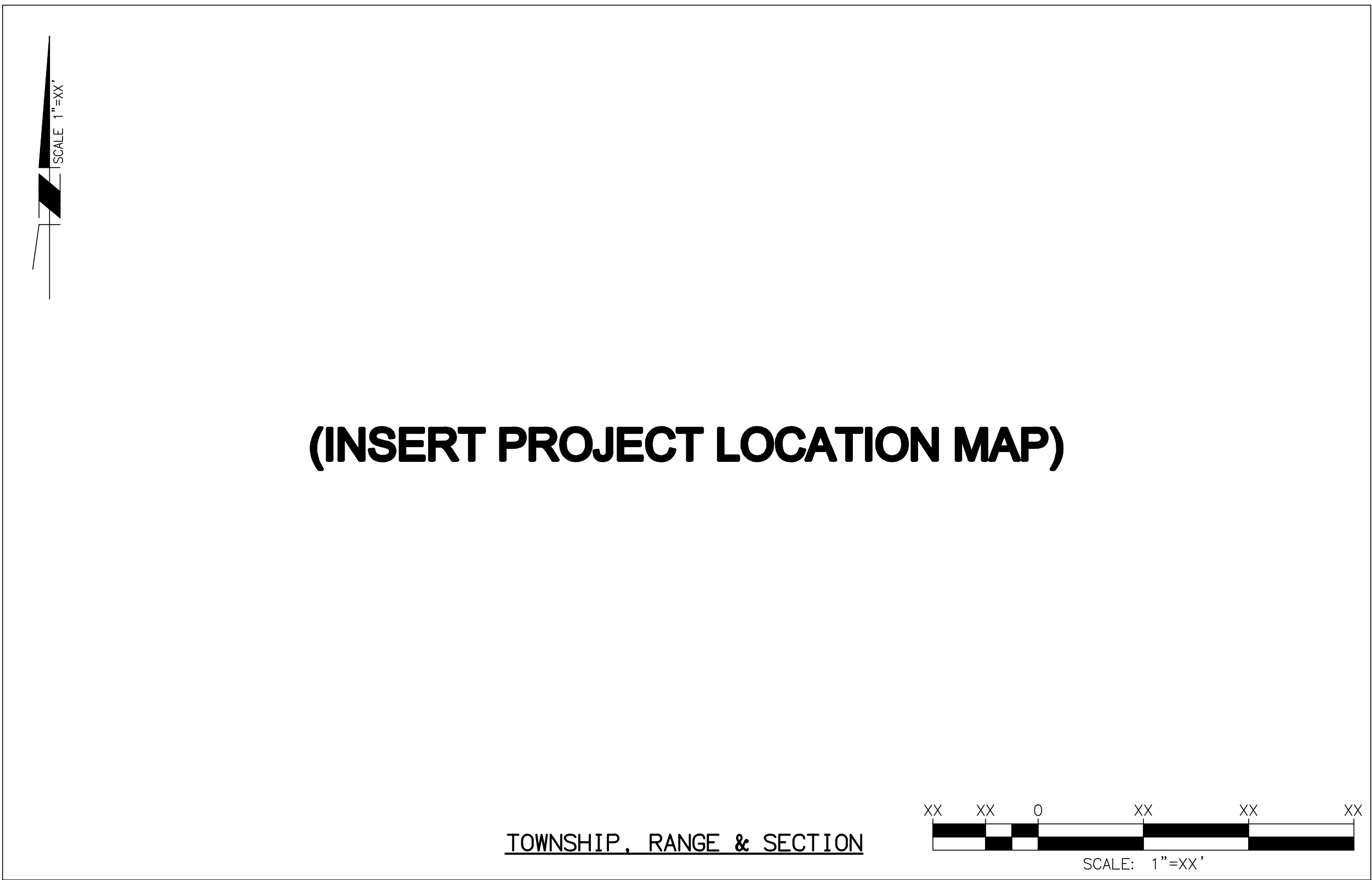
- ALL GRADING SHALL CONFORM TO THE LATEST CALIFORNIA BUILDING CODE (CBC) CHAPTERS 17, 18, & APPENDIX-J AS AMENDED BY ORDINANCE 457.
- ALL PROPERTY CORNERS, GRADING BOUNDARIES AND ALL CONSERVATION AREAS/LEAST SENSITIVE AREA (LSA) SHALL BE CLEARLY DELINEATED AND STAKED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
- ALL WORK UNDER THIS PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. ALL WORK WITHIN THE ROAD RIGHT-OF-WAY WILL REQUIRE ENCROACHMENT PERMIT FROM THE TRANSPORTATION DEPARTMENT, CONTACT (951) 955-6790.
- ALL GRADING SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER. COMPACTED FILL TO SUPPORT ANY STRUCTURES SHALL COMPLY WITH SECTION 1803.5.8.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE DIGGING AT 1-800-422-4133.
- NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES SHALL BE BURIED OR PLACED IN FILLS CLOSER THAN 10 FEET TO THE FINISHED GRADE.
- DRAINAGE ACROSS PROPERTY LINES SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING, SHALL PERPETUATE NATURAL DRAINAGE PATTERNS, AND SHALL NOT ADVERSELY AFFECT ADJACENT PROPERTY. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY. EROSION OF THE GROUND IN THE AREA OF DISCHARGE SHALL BE PREVENTED BY INSTALLATION OF NON-EROSIVE DOWN DRAINS OR OTHER DEVICES. NO OBSTRUCTION OF NATURAL WATER COURSES SHALL BE PERMITTED.
- PROVIDE 5' WIDE BY 1' HIGH BERM ALONG THE TOP OF ALL FILL SLOPES STEEPER THAN 3:1 (HORIZONTAL TO VERTICAL).
- PRECONSTRUCTION MEETING - PRIOR TO GRADING PERMIT ISSUANCE, THE SITE DEVELOPER SHALL ARRANGE A PRE-CONSTRUCTION MEETING TO DISCUSS GRADING RESPONSIBILITIES AND COMPLETION SCHEDULE. THOSE REQUIRED IN ATTENDANCE INCLUDE THE DEVELOPER, PROJECT SUPERINTENDENT, ENGINEER OF RECORD, SOILS ENGINEER, AND GRADING CONTRACTOR. ARRANGE FOR A PRE-CONSTRUCTION MEETING BY CALLING COUNTY DISPATCH AT (951) 955-1800.
- WQMP REQUIREMENTS DO NOT APPLY, SINCE THE PROJECT DOES NOT PROPOSE SINGLE-FAMILY RESIDENCES WHERE THE NATURAL SLOPE IS 10% OR GREATER; HOME SUBDIVISIONS WITH 10 OR MORE HOUSING UNITS; OR A PARKING LOT OF 5,000 SQUARE FEET OR MORE OR WITH 25 OR MORE PARKING SPACES, AND POTENTIALLY EXPOSED TO URBAN RUNOFF.
- THE PROJECT DOES NOT PROPOSE ANY IMPORT OR EXPORT OF FILL MATERIAL. ANY EXCESS OF MATERIAL WILL BE FILLED ON SITE.
- THE ENGINEER HAS EVALUATED THE SITE AND HAS DETERMINED THAT THE PROJECT IS NOT PRONE TO LIQUEFACTION OR SUBSIDENCE.
- FOR PROJECTS IN THE DESERT LESS THAN 10 ACRES, THE PM10 FUGITIVE MITIGATION PLAN NOTES SHALL BE READ, FILLED, DATED, AND SIGNED BY THE OWNER, AND SUBMITTED TO THE COUNTY WITH THE GRADING PLAN. ADDITIONALLY, COMPLETE AND PROVIDE A COPY OF FORMS "A", "B", AND "C" FROM THE COACHELLA VALLEY FUGITIVE DUST CONTROL HANDBOOK.
- FOR PROJECTS IN THE DESERT MORE THAN 10 ACRES, A COMPLETE PM10 FUGITIVE DUST MITIGATION PLAN AND MANUAL PER AQMD RULE 403 AND COACHELLA VALLEY FUGITIVE DUST CONTROL HANDBOOK SHALL BE COMPLETED AND SUBMITTED TO THE COUNTY WITH THE GRADING PLAN.
- PRIOR TO ANY BUILDING PERMIT ISSUANCE, AND A 'ROUGH GRADING CERTIFICATION' FROM THE ENGINEER OF RECORD SHALL BE SUBMITTED. FORMS CAN BE DOWNLOADED FROM [HTTPS://WWW.RCTLMA.ORG/BUILDING/FORMS](https://www.rctlma.org/building/forms), SEE GRADING SECTION.
- AFTER BUILDING PERMIT ISSUANCE AND PRIOR TO OCCUPANCY, THE ENGINEER OF RECORD SHALL SUBMIT TO THE BUILDING AND SAFETY DEPARTMENT A WRITTEN 'FINAL GRADING CERTIFICATION'. AFTER THE FINAL GRADING CERTIFICATION IS SUBMITTED, THE CONTRACTOR SHALL NOTIFY THE BUILDING AND SAFETY DEPARTMENT AT LEAST 24 HOURS IN ADVANCE AT (951) 955-1800 TO REQUEST FINISH LOT GRADE AND DRAINAGE INSPECTION. THIS INSPECTION MUST BE APPROVED PRIOR TO BUILDING PERMIT FINAL INSPECTION FOR EACH LOT.
- NO ROUGH GRADE INSPECTION IS REQUIRED, ONLY A FINAL GRADING INSPECTION IS REQUIRED. NO BMP PERMIT IS REQUIRED, SINCE INSPECTIONS WILL BE CHARGED TO THE GRADING PERMIT. NO GRADING BONDS, PAD CERTIFICATION, OR COMPACTION REPORTS ARE REQUIRED FOR THIS PROJECT.
- EXISTING BUILDING STRUCTURES ARE TO REMAIN.
- THE ENGINEER WHO PREPARED THE GRADING PLAN HAS VERIFIED THE CONSISTENCY BETWEEN ON-SITE GRADING INFORMATION AND THE WORK WITHIN THE R/W APPROVED BY THE TRANSPORTATION DEPARTMENT.
- EXCEPT FOR THE RETAINING WALLS IN CONJUNCTION WITH THIS GRADING, ALL INFORMATION ASSOCIATED WITH BUILDINGS (INCLUDING SETBACKS AND FINISH FLOOR ELEVATIONS) IS FOR REFERENCE ONLY AND THE APPROVAL OF THIS GRADING PLAN DOES NOT INCLUDE ANY PROVISIONS ASSOCIATED WITH BUILDINGS.
- POSITIVE DRAINAGE FOR THE ROAD IS REQUIRED, BUT NO MINIMUM LONGITUDINAL GRADES ARE REQUIRED. THE MINIMUM CROSS SLOPE IS 2% IS REQUIRED. TO ADDRESS DRAINAGE, 2% LONGITUDINAL SLOPE IS PREFERRED, THE MINIMUM LONGITUDINAL SLOPE IS 0.5% FOR PAVED SURFACES, OR 1% FOR BASE/ ALL PVIOUS WEATHER SURFACES. LESS SLOPE FOR THE ROADWAY WILL LIKELY CAUSE UNDESIRABLE PONDING ON PRIVATE PROPERTY. AGGREGATE BASE OR EQUIVALENT SECTION IS ACCEPTABLE, AS LONG AS FIRE DEPARTMENT APPROVES. SHOW THE CENTERLINE SPOT ELEVATIONS, CORRESPONDING EDGE OF ROADWAY TOWARD THE DOWNSTREAM END, AND ANY LOW POINTS. TO MAXIMIZE THE LONGITUDINAL SLOPES FOR VERY FLAT SITES, IT IS RECOMMENDED TO CREATE A LOW POINT TOWARD THE MIDDLE OF THE PROJECT, THEN GRADE A SWALE TO THE DOWNSTREAM RETENTION BASIN.
- IF ASPHALT IS PROPOSED THE MINIMUM SECTION REQUIRED IS THREE (3) INCHES OF ASPHALT OVER FOUR (4) INCHES OF CLASS 2 AGGREGATE BASE, OR A TRAFFIC INDEX OF 5.5. AN APPROVED SOIL STERILIZER SHALL BE USED ON ALL SUBGRADE SURFACES PRIOR TO PLACEMENT OF PAVING. ASPHALTIC EMULSION (FOG SEAL) SHALL BE APPLIED NOT LESS THAN FOURTEEN (14) DAYS FOLLOWING PLACEMENT OF THE ASPHALT SURFACING AND SHALL BE APPLIED AT A RATE OF 0.05 GALLONS PER SQUARE YARD. ASPHALT EMULSION SHALL CONFORM TO SECTIONS 37, 39, AND 94 OF THE STANDARD SPECIFICATIONS. ALL PAVING INSPECTIONS WILL BE PERFORMED BY SPECIAL INSPECTORS HIRED BY THE OWNER. TWO (2) INSPECTIONS ARE REQUIRED. INSPECTION NO. 1: INSPECTION AT THE COMPLETION OF THE BASE COURSE. INSPECTION NO. 2: INSPECTION WHEN THE AC AND CONCRETE ARE PLACED. A COMPACTION REPORT BY A GEOTECHNICAL ENGINEER SHALL CERTIFY THE AGGREGATE BASE (AGGREGATE BASE) UNDER ASPHALT CONCRETE (AC) IS COMPACTED TO 95% RELATIVE DENSITY OR 90% RELATIVE DENSITY UNDER CONCRETE. THIS INCLUDES TRENCHES FOR UTILITIES UNDER THE PAVING AREA. PRIOR TO THE INSTALLATION OF THE AC OR CONCRETE, THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE CONTRACTOR WITH WRITTEN CERTIFICATION THAT THE AGGREGATE BASE IS PROPERLY INSTALLED AND ADEQUATE TO SUPPORT THE AC, CONCRETE, AND INTENDED LOADS. PRIOR TO REQUESTING A BUILDING FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE A COPY OF SPECIAL INSPECTION REPORT NO. 1 AND THE GEOTECHNICAL ENGINEERS CERTIFICATION TO THE BUILDING AND SAFETY GRADING COUNTER FOR REVIEW AND APPROVAL. THE GRADING STAFF WILL CLEAR THE CONDITIONS OF APPROVAL ALLOWING THE BUILDING FINAL INSPECTION.
- FEMA FLOODPLAINS, BLUE LINE STREAMS, OR WATERCOURSE ON THE PARCEL MAP SHALL BE DELINEATED ON THE GRADING PLAN WITH THE FLOODPLAIN ZONE DESIGNATION. PROJECTS IN A FLOODPLAIN REQUIRE REVIEW FROM COACHELLA VALLEY WATER DISTRICT, OR RIVERSIDE COUNTY FLOOD CONTROL IN THEIR RESPECTIVE JURISDICTIONS.

TEMPORARY EROSION CONTROL NOTES:

- TEMPORARY EROSION CONTROL MEASURES ARE REQUIRED FOR GRADING OPERATIONS SCHEDULED FROM OCTOBER 15TH TO APRIL 15TH.
- IN CASE OF EMERGENCY CALL _____ AT _____
- ALL PROTECTION DEVICES (BEST MANAGEMENT PRACTICES) SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF GRADING OPERATIONS AND GRADED AREAS AROUND THE PROJECT PERIMETER SHALL DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY WHEN RAIN IS PREDICTED.
- AFTER A RAINSTORM, ALL SITE AND DEBRIS SHALL BE REMOVED FROM PROTECTION DEVICES.

PLANCO PARK GRADING PLAN

APPLICABLE FOR PLANCO PROJECTS OF 12 UNITS OR LESS



PROJECT CONTACTS

OWNER/
DEVELOPER: _____ ATTN: _____
ADDRESS: _____
EMAIL: _____ PHONE: _____

CIVIL ENGINEER
/SURVEYOR: _____ ATTN: _____
ADDRESS: _____
EMAIL: _____ PHONE: _____

SOILS
ENGINEER: _____ ATTN: _____
ADDRESS: _____
EMAIL: _____ PHONE: _____

OWNER'S CERTIFICATION:

I CERTIFY THAT I HAVE READ THE PM10 NOTES. I AGREE TO COMPLY WITH RIVERSIDE COUNTY ORDINANCE 742.1 AQMD RULE 403.1 AND ALL TERMS OF THE GRADING PERMIT. I AUTHORIZE REPRESENTATIVES OF RIVERSIDE COUNTY TO ENTER UPON THE PROPERTY FOR INSPECTION AND ABATEMENT PURPOSES. I AGREE TO HOLD HARMLESS THE COUNTY OF RIVERSIDE AND ITS REPRESENTATIVES FROM LIABILITY FOR ANY ACTIONS RELATED TO THE GRADING PERMIT.

OWNERS SIGNATURE: _____
OWNERS NAME PRINTED: _____
DATE: _____
24-HOUR TELEPHONE NO.: _____

SOILS ENGINEER CERTIFICATION:

I, _____ OF _____, A REGISTERED CIVIL ENGINEER, PRINCIPALLY DOING BUSINESS IN GEOTECHNICAL ENGINEERING AND/OR APPLIED SOIL MECHANICS, HEREBY CERTIFY THAT A SAMPLING AND STUDY OF THE SOIL CONDITIONS PREVALENT WITHIN THE SITE WAS MADE BY ME OR UNDER MY DISCRETION. THESE GRADING PLANS HAVE BEEN REVIEWED BY ME OR UNDER MY DIRECTION TO CONFORM TO THE RECOMMENDATIONS MADE IN OUR 2 GEOTECHNICAL ENGINEERING INVESTIGATION REPORTS ENTITLED:

TO THE BEST OF MY KNOWLEDGE, THE REFERENCED REPORT REPRESENTS THE MOST CURRENT AND COMPLETE INFORMATION RELATIVE TO THE PROPOSED GRADING OF THE SITE. IT IS THE PROFESSIONAL OPINION OF _____ THAT THE CONCLUSIONS AND RECOMMENDATIONS RENDERED IN OUR REPORT ARE APPROPRIATE AND APPLICABLE TO THIS PROJECT AND THEY ARE IN SUBSTANTIAL CONFORMANCE WITH ALL APPLICABLE CODE, ORDINANCE, AND STANDARDS OF PRACTICE FOR THE PROJECT PROPOSED.

SIGNATURE: _____ DATE: _____
R.C.E #: _____

SIGNATURE: _____ DATE: _____

APN

Add assessors parcel number.

SHEET INDEX

- SHEET 1 - TITLE SHEET
- SHEET 2 - GRADING PLAN/EROSION CONTROL PLAN

UTILITIES

WATER	CITY OF COACHELLA	(760) 398-5744
SEWER	CITY OF COACHELLA	(760) 391-5008
ELECTRIC	IMPERIAL IRRIGATION DISTRICT	(760) 341-2348
GAS	THE GAS COMPANY	(760) 335-7772
TELEPHONE	VERIZON	(760) 778-3620
CABLE T.V.	TIME WARNER CABLE	(760) 674-5603
IRRIGATION	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA	UNDERGROUND SERVICE ALERT	(800) 227-2600

ABBREVIATIONS

E	EAST	FS	FINISHED SURFACE
N	NORTH	GB	GRADE BREAK
S	SOUTH	GFF	GARAGE FINISHED FLOOR
W	WEST	HP	HIGH POINT
NE	NORTHEAST	INV	INVERT
NW	NORTHWEST	L.F.	LINEAR FEET
SE	SOUTHEAST	LP	LOW POINT
SW	SOUTHWEST	MAX.	MAXIMUM
AC	ASPHALT CONCRETE	MIN.	MINIMUM
BC	BEGINNING OF CURVE	NG	NATURAL GROUND
BFE	BASE FLOOD ELEVATION	N.T.S.	NOT TO SCALE
BSL	BUILDING SETBACK LINE	P/L	PROPERTY LINE
BW	BAY WINDOW OPTION	PE	PAD ELEVATION
C/L	CENTERLINE	PROP	PROPOSED
CB	CURB AND GUTTER	PUE	PUBLIC UTILITY EASEMENT
C.B.	CATCH BASIN	R/W	RIGHT OF WAY
C.Y.	CUBIC YARDS	S.F.	SQUARE FEET
DWG.	DRAWING	TB	TOP OF BERM
DWY	DRIVEWAY	TC	TOP OF CURB
EA.	EACH	TF	TOP OF FOOTING
EC	END OF CURVE	TG	TOP OF GRADE
ESMT.	EASEMENT	TP	TOP OF PAVEMENT
EX	EXISTING	TRW	TOP OF RETAINING WALL
FF	FINISHED FLOOR	TW	TOP OF WALL
FL	FLOWLINE	TYP.	TYPICAL
FG	FINISHED GRADE	UCE	UTILITY COMPACT EASEMENT

NOTE TO CONTRACTOR: SITE CONDITIONS

CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT APPLIES CONTINUOUSLY AND IS NOT LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND (CONSULTANT NAME), HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR

(CONSULTANT NAME) _____

PM10 SIGN REQUIREMENTS:

(RESIDENTIAL)
SIZE = 2FT. X 3FT
RIVERSIDE COUNTY PERMIT NO. _____
BGR (_____) _____
(THE PROJECT NAME)
IF YOU SEE DUST COMING FROM THIS PROJECT CALL

(24 HR. CONTACT NAME) _____ (24 HR CONTACT PHONE #) _____

IF YOU DO NOT GET A RESPONSE WITHIN ONE HOUR, PLEASE CALL RIVERSIDE CO. AT (760) 427-9989 AND CALL A.Q.M.D. AT 1-800-CUT SMOG (1-800-288-7664)

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

PROJECTS DISTURBING OVER 1 ACRE REQUIRE SUBMITTING A STORMWATER POLLUTION PREVENTION PLAN TO THE COUNTY FOR REVIEW AND APPROVAL AND OBTAIN COVERAGE UNDER THE STATE WATER QUALITY CONTROL BOARD CONSTRUCTION GENERAL PERMIT.

DISTURBED AREA: _____ACRES

- IS DISTURBED AREA LESS THAN 1 ACRE?
 YES - SWPPP NOT REQUIRED. SKIP STEPS 2 THROUGH 3.
 NO - COMPLETE STEP 2
- IS DISTURBED AREA BETWEEN 1 AND 5 ACRES?
 YES - CALCULATE R FACTOR AT WEBSITE BELOW [HTTPS://LEW.EPA.GOV/](https://lew.epa.gov/)
IS R FACTOR LESS THAN 5?
 YES - APPLY FOR EROSIONITY WAIVER
 NO - SWPPP REQUIRED
 NO - SWPPP REQUIRED
- DISTURBED AREA IS GREATER THAN 5 ACRES.
 YES - SWPPP NOT REQUIRED.

WDID# : 9 33C3. _____

BGR# XXXXXX
WDID # (IF APPLICABLE) _____

<p>NOTE:</p> <p>WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.</p> <p>THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE COUNTY.</p>	MARK	BY	DATE	APPR.	DATE	SEAL-ENGINEER	ENGINEERING COMPANY	ADDRESS CITY, STATE, CA PHONE NUMBER EMAIL	THESE PLANS ARE TO BE USED "ONLY" IN UN-INCORPORATED AREAS OF RIVERSIDE COUNTY JURISDICTION	OWNER / DEVELOPER NAME: XXX _____ ADDRESS: STREET ADDRESS CITY, STATE, ZIP CODE PHONE NO. - XXX-XXX-XXX EMAIL: XXX _____	COUNTY OF RIVERSIDE PLANCO PARK GRADING PLAN HEALTH AND SAFETY CODE: 17021.6 EXPRESS	SHEET NO. X
							(NAME) PREPARED BY (SIGNATURE)	R.C.E. NO. DATE	FOR:	W.O.	COUNTY FILE NO.	OF XX SHTS.

REQUIRED RETENTION BASIN VOLUME (APPROVED):

Table with 5 columns: IMPERVIOUS AREA (%), DRAINAGE AREA (AC), EXISTING CONDITION TOTAL RUNOFF VOLUME (CF), PROPOSED CONDITION TOTAL RUNOFF VOLUME (CF), and REQ. RETENTION BASIN VOLUME (CF). Rows show percentages from 55% to 75%.

APPLICABLE FOR SITES ONE ACRE OR SMALLER
FOR SITE GREATER THAN ONE ACRE, DETERMINE REQUIRED BASIN VOLUME BELOW.

HYDROLOGY CALCULATIONS:

ANY DISTURBANCE/ IMPERVIOUS AREA LESS THAN 5-ACRES WITH IMPERVIOUS AREA EQUAL TO OR LESS THAN 75% IS SUFFICIENT COMPLIANCE WITH DRAINAGE LAW REQUIREMENTS WHEN REQUIRED RETENTION VOLUME IS PROVIDED PER TABLE ABOVE.

CONSIDERING THE SITE CONDITIONS INCLUDING THE SOIL AND THE CLIMATE, THE PROPOSED SITE DRAINAGE SLOPES SHALL BE SATISFACTORY AND DO NOT WARRANT THE MORE CONSERVATIVE.

SITE-SPECIFIC HYDROLOGY ANALYSIS REQUIRED FOR SITE FIVE ACRES OR GREATER.

REQUIRED RETENTION BASIN VOLUME: (SITE GREATER THAN ONE ACRE)

NOTE: TO CALCULATE REQUIRED BASIN VOLUME FOR A DRAINAGE AREA NOT ON TABLE ABOVE, MULTIPLY THE BASIN VOLUME FROM DRAINAGE AREA 1 WITH THE DESIRED DRAINAGE AREA. THE SAME CALCULATION MAY BE APPLIED TO THE EXISTING AND PROPOSED RUNOFF VOLUME.

EXAMPLE FOR 60% IMPERVIOUS:
SITE DRAINAGE AREA = 2.3 ACRES.
EX. RUNOFF VOLUME = 2.3 x 6,492 = 14,932 CF
PROP. RUNOFF VOLUME = 2.3 x 10,462 = 24,063 CF
REQUIRED BASIN VOLUME = 2.3 x 3,970 = 9,131 CF

COMPLETE TABLE BELOW FOR DRAINAGE AREAS NOT ON TABLE.

SITE DRAINAGE AREA = _____ ACRES
PERCENT IMPERVIOUS = _____
EX. RUNOFF VOLUME = ACRES x 6,492 = _____ CF
PROP. RUNOFF VOLUME = ACRES x TOTAL RUNOFF VOLUME = _____ CF
REQUIRED BASIN VOLUME = ACRES x REQ. RETENTION BASIN VOLUME = _____ CF

EXAMPLE: RETENTION BASIN (PRE-APPROVED SIZING):

FOR EVERY 5 ACRES OF PROJECT AREA

REQ. BASIN VOLUME: 19,848 CF
ESTIMATED SIZE: 140' x 75' (TOP), 90' x 25' (BOT)
ESTIMATED AREA: A1= 8,450 SF (TOP)** A2= 2,250 SF (BOT)
ESTIMATED DEPTH: D = 4' (5' INCLUDING 1' OF FREEBOARD)

**TOP AREA (A1) IS AREA AT 4' DEPTH. 1' FREEBOARD IS NOT INCLUDED IN MINIMUM REQUIRED BASIN VOLUME CALCULATION.

BASIN VOLUME: $V = (\frac{D}{3})[A_1 + A_2 + (A_1 \times A_2)^{0.5}]$
 $V = (\frac{4}{3})[8,450 + 2,250 + (8,450 \times 2,250)^{0.5}]$
 $V = 20,080$ CF (WITHOUT 1' FREEBOARD)

RETENTION BASIN PROVIDED:

REQ. BASIN VOLUME: _____ CF

PROPOSED DEPTH: D= _____' (WITHOUT 1' FREEBOARD)

PROPOSED AREA: A1= _____ SF (TOP) A2= _____ SF (BOT)

BASIN VOLUME: $V = (\frac{D}{3})[A_1 + A_2 + (A_1 \times A_2)^{0.5}]$

$V = (\frac{D}{3})[\quad + \quad + (\quad \times \quad)^{0.5}]$

$V = \quad$ CF (WITHOUT 1' FREEBOARD)

IS BASIN VOLUME > REQUIRED VOLUME?

- YES - BASIN IS ADEQUATELY SIZED
- NO - INCREASE SIZE OF BASIN

BASIN VOLUME WITH FREEBOARD:

PROPOSED DEPTH: D'= _____' (D + 1' FREEBOARD)

PROPOSED AREA: A1'= _____ SF (TOP WITH 1' FREEBOARD)

A2= _____ SF (BOT) [SAME AS ABOVE]

BASIN VOLUME: $V = (\frac{D'}{3})[A_1' + A_2' + (A_1' \times A_2')^{0.5}]$

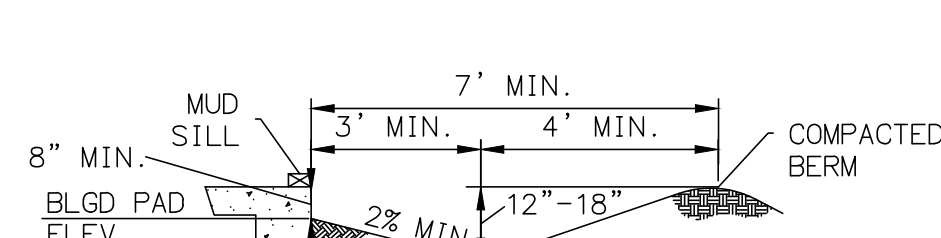
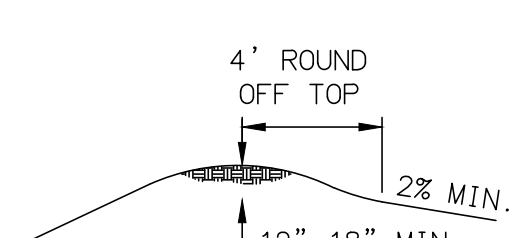
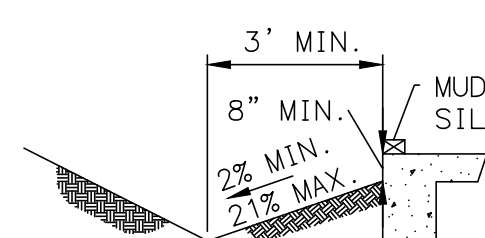
$V = (\frac{D'}{3})[\quad + \quad + (\quad \times \quad)^{0.5}]$

$V = \quad$ CF (WITH 1' FREEBOARD)

OVERALL LENGTH: _____(FT), & WIDTH: _____(FT)

NOTES:

1. SIDE SLOPES TO BE 3:1 OR FLATTER, SLOPES STEEPER THAN 3:1 WILL REQUIRE FENCING.



TYPICAL LOT DRAINAGE DETAIL NTS

CONSTRUCTION NOTES:

- 1. CONSTRUCT ROADWAY _____ INCHES HOT MIX ASPHALT OVER _____ INCHES CLASS 2 BASE
- 2. CONSTRUCT RETENTION BASIN
- 3. CONSTRUCT EARTHEN SWALE
- 4. INSTALL ASPHALT DRIVEWAY PER RIVERSIDE COUNTY STD. NO. 206

EROSION CONTROL NOTES:

- 1. SANDBAG
- 2. FIBER ROLLS
- 3. STABILIZED CONSTRUCTION ENTRANCE

QUANTITY ESTIMATE

XXX SF
XXX CF
XXX LF
XXX EA

QUANTITY ESTIMATE

XXX EA
XXX LF
XXX LF

(INSERT GRADING PLAN HERE)

GRADING PLAN CHECKLIST (INFORMATION TO BE INCLUDED)

Table with 2 columns: LABEL and INFORMATION TO BE INCLUDED. Includes categories like CALLOUT, DESIGN, and EROSION CONTROL with specific items to check.

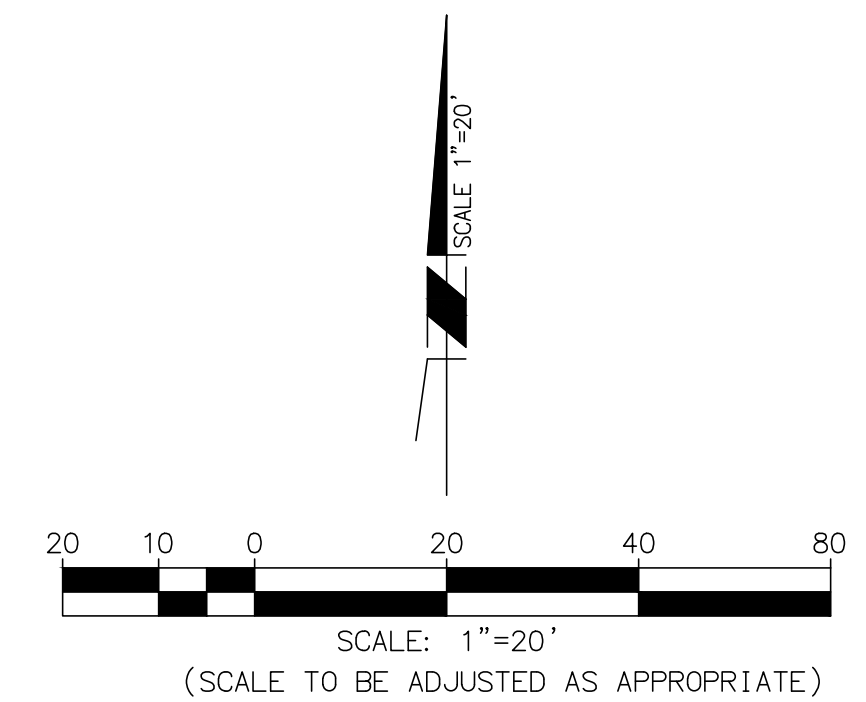


Table with columns for MARK, BY, DATE, ENGINEER, REVISIONS, APPR., DATE, COUNTY.

SEAL-ENGINEER section with fields for ENGINEERING COMPANY, ADDRESS, CITY, STATE, CA, PHONE NUMBER, EMAIL, (NAME), PREPARED BY, R.C.E. NO., (SIGNATURE), DATE.

THESE PLANS ARE TO BE USED "ONLY" IN UN-INCORPORATED AREAS OF RIVERSIDE COUNTY JURISDICTION. OWNER / DEVELOPER fields for NAME, ADDRESS, CITY, STATE, ZIP CODE, PHONE NO., EMAIL.

COUNTY OF RIVERSIDE SHEET NO. PLANCO PARK GRADING PLAN HEALTH AND SAFETY CODE: 17021.6 EXPRESS GRADING PLAN OF XX SHTS. FOR: W.O. COUNTY FILE NO.