



EXHIBIT B

## Shingle Springs Village Improvements Site Plan Review SPR15-0003



Exhibit C - General Plan Land Use Map 15-1008 3D 3 of 16

## Shingle Springs Village Improvements Site Plan Review SPR15-0003



# Exhibit D - Zoning Map

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## Shingle Springs Village Improvements Site Plan Review SPR15-0003



Exhibit E - Aerial View of Project Area 15-1008 3D 5 of 16

	LIST OF ABBREVIATIONS:
	AB AGGREGATE SUBBASE
	ANG. PT. ANGLE POINT ARV AIR RELEASE VALVE
	BB BOTTOM OF BERM BNDY BOUNDARY
	BO BLOW OFF VALVE
	BOW BACK OF WALK
	BRW BOTTOM OF RETAINING WALL BSW BOTTOM SOUND WALL
	BV BUTTERFLY VALVE
	BWV BACKWATER VALVE
	CAW CALIFORNIA AMERICAN WATER CH CHORD
	CL CLASS
	CO CLEANOUT
	COMB. COMBINATION C/L CENTERLINE
	CONC. CONCRETE CONST. CONSTRUCT
	CR CURVE RETURN
	CT COURT
	CTS CORROSION TEST STATION C&G CURB AND GUTTER
	DEL DELTA
	DIA. DIAMETER
	DI DROP INLET D.I.P. DUCTILE IRON PIPE
	DR DRIVE
	(E) – EX – EXIST EXISTING
	ELEV. ELEVATION EP EDGE OF PAVEMENT
	ESMT EASEMENT
	FC FACE OF CURB
	FF FINISHED FLOOR ELEVATION FG FINISH GRADE
	FH FIRE HYDRANT
	FO FIBER OPTIC
	GALV. GALVANIZED GB GRADE BREAK
	G.I.P. GALVANIZED IRON PIPE
	GSL GRAVITY SEWER LIMITS
	GN GAS MAIN GV GATE VALVE
	HGL HYDRAULIC GRADE LINE HP HIGH POINT
	INV. INVERT
	IRRI IRRIGATION
	INTX INTERSECTION JT JOINT TRENCH
	JP JOINT POLE
	LF LINEAR FEET
	LN LANE LP LOW POINT
	LT LEFT MAX. MAXIMUM
	MH MANHOLE
	MIN, MINIMUM M MAIL BOX
	N.A.P.O.T.C. NOT A PART OF THIS CONTRACT O.C. ON CENTER
	O.D. OUTSIDE DIAMETER PAC RELL PACIFIC TELEPHONE
	P.G.&E PACIFIC GAS AND ELECTRIC
	P/L PROPERTY LINE
	PRC POINT OF REVERSE CURVE
	P.S.I. POUNDS per SQUARE INCH
	PVC POLYVINYL CHLORIDE PIPE
	R RADIUS RCP REINFORCED CONCRETE PIPE
	RD ROAD OR ROOF DRAIN
	RT RIGHT
	R/W RIGHT OF WAY RW RAW WATER
	S SLOPE
	SHGL SLOPE HYDRAULIC GRADE LINE
	SMUD SACRAMENTO MUNICIPAL UTILITY DISTRICT
	S.O. SIDE OPENING
	SSFM SANITARY SEWER FORCE MAIN
	ST STREET STA. STATION
	SUBD. SUBDIVISION
	TC TOP CURB
	TRW TOP OF RETAINING WALL
	TSW TOP SOUND WALL TWM TOP OF WATER MAIN
	TW TOP OF WALK
	TP TOP OF PAVEMENT
	TYP. TYPICAL VC VERTICAL CURVE
	W WATER
	WM WATER MAIN
).	DESCRIPTION ENGR CITY APPROVAL INIT APPROVED BY DATE
	3/
1	

WATER LEGEND EXISTING PROPOSED AIP RELEASE VALVE, COMBINATON, AIR VACUUM & AIP RELEASE VALVE W/SIZE 2\* COMBINATION AIR VACUUM & AIR RELEASE VALVE W/SIZE UNLESS OTHERWISE NOTED REDUCED PRESSUPE HA BENDS BLIND FLANGE 5 2" BLOWOFF WITH SIZE \_\_\_\_ CAP CHECK VALVE - - CHECK VALVE - - - DOMESTIC PIPELINE E PANDER / REDUCER - - FIRE HYDRANT - FIRE HYDRANT GATE VALVE PRESSURE REDUCING PRESSUPE RELIEF SERVICE LATERAL WITH METER BOX SERVICE LATERAL WITH METER BOX TEE CPOSS 

## LEGEND:

	PROP.	SANITARY SEWER FORCE MAIN
	EXIST.	SANITARY SEWER FORCE MAIN
•	PROP.	FLUSHER BRANCH
o	EXIST.	FLUSHER BRANCH
	PROP.	SEWER SERVICE
►	EXIST.	SEWER SERVICE
	PROP.	MANHOLE
0	EXIST.	MANHOLE
<u></u>	PROP.	STORM DRAIN
	EXIST.	STORM DRAIN
	PROP.	DROP INLET
	EXIST.	DROP INLET
W	PROP.	WATER MAIN
	EXIST.	WATER MAIN
≪—₩	PROP.	FIRE HYDRANT ASSEMBLY
¢– –⊳+	EXIST.	FIRE HYDRANT ASSEMBLY
_ <b>_</b>	PROP.	AIR RELEASE VALVE
-Ť-	EXIST.	AIR RELEASE VALVE



ITEM	
PIPE	
MANHOLES	
SERVICES	

	-
1	ITEM
	PIPE
	SERVICES
	FIRE HYDRANTS
t	VALVES (BY TYP

NO.	DESCRIPTION	ENGR	CITY APPROVA APPROVED BY	DATE	benchmark <u>BM-DH6479</u> elev. <u>1494.00</u>			PLOT DATE
					3/4" ALUMINUM ROD IN 6"PVC WELL. THE STATION	6	No.39875 Z	09-18-15
					ROAD EXIT 37' 16.7M SOUTHWEST OF OF A NUT PINE, 9 OM NORTH OF THE WESTBOURD EDGE OF PAVEWENT		Exp.12-31-17	01-13-10
					OF HIGHMAY, 6.5M SOUTH OF A CHAIN R/W FENCE,		CIVIL CALLED	
					I.OM SOUTH OF A METAL GUARD POST.	MICHAEL	T ROBERSTON RPE#3	59875

- EL DORADO COUNTY COMMERCIAL GENERAL NOTES: 1. ALL IMPROVEMENTS SHALL CONFORM TO THE COUNTY OF EL DORADO "DESIGN AND IMPROVEMENT STANDARDS MANUAL", THE "GRADING, EROSION AND SEDIMENT CONTROL ORDINANCE", THE DRAINAGE MANUAL", THE OFF-STREET PARKING AND LOADING ORDINANCE. AND THE STATE OF CALIFORNIA HANDICAPPED ACCESSIBILITY STANDARDS.
- 2. ALL REFERENCE TO "STANDARD SPECIFICATIONS" SHALL MEAN THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, JULY 1992. ALL REFERENCE TO "COUNTY" SHALL MEAN THE COUNTY OF EL DORADO.
- 3. CLEARING AND GRUBBING SHALL CONFORM TO THE PROVISIONS OF SECTION 16 OF THE STANDARD SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL CONTACT THE EL DORADO COUNTY RESOURCE CONSERVATION DISTRICT PRIOR TO COMMENCING WORK ON REVEGETATION. REVEGETATION SHALL BE ACCOMPLISHED BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATION OF THE EL DORADO COUNTY RESOURCE CONSERVATION DISTRICT.
- 5. IF GRADING ACTIVITIES ARE NOT COMPLETED BY SEPTEMBER, THE DEVELOPER SHALL IMPLEMENT A TEMPORARY GRADING AND EROSION PLAN. SUCH TEMPORARY PLANS SHALL BE SUBMITTED TO SOIL CONSERVATION SERVICE FOR THEIR REVIEW AND FORWARDING OF RECOMMENDATIONS TO THE DEPARTMENT OF TRANSPORTATION. TRANSPORTATION DEPARTMENT SHALL APPROVE OR CONDITIONALLY APPROVE SUCH PLANS AND CAUSE THE DEVELOPER TO IMPLEMENT SAID PLAN ON OR BEFORE OCTOBER 15. ALL AREAS GRADED DURING THE RAINY SEASON (OCTOBER 15-MAY 15) SHALL BE REVEGETATED WITHIN 15 DAYS UPON COMPLETION.
- 6. ALL EXCAVATION, EMBANKMENT, AND BACKFILL SHALL CONFORM TO THE PROVISIONS IN SECTION 19, "EARTHWORK", OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BELOW. TRENCH BACKFILL WITHIN ROADWAY SHALL BE "3 MINUS AND COMPACTED IN ACCORDANCE WITH COUNTY STANDARD PLAN 119.
- 7. ALL MATERIALS, INCLUDING CULVERT PIPE, CLASS A CONCRETE AND REINFORCING STEEL, SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THE STANDARD SPECIFICATIONS.
- 8. AGGREGATE BASE SHALL CONFORM TO THE PROVISIONS OF SECTION 26 OF THE STANDARD SPECIFICATIONS FOR CLASS 2 AGGREGATE BASE. 9. ASPHALT CONCRETE SHALL CONFORM TO THE PROVISIONS OF SECTION
- 39 OF THE STANDARD SPECIFICATIONS FOR TYPE B AGGREGATE, « INCH MAXIMUM, MEDIUM GRADATION, AND VISCOSITY GRADE AR 4000. PRIME COAT SHALL BE SC-70. FOG SEAL SHALL BE SS-1. 10. SUBGRADE – WHEN ASPHALT CONCRETE OR ASPHALT CONCRETE BASE
- IS TO BE PLACED ON THE GRADING PLANE, THE GRADING PLANE AT ANY POINT SHALL NOT VARY MORE THAN 0.05 FOOT ABOVE OR BELOW THE GRADE ESTABLISHED BY THE ENGINEERS. WHEN SUB-BASE OR BASE MATERIAL (OTHER THAN ASPHALT CONCRETE BASE) IS TO BE PLACED ON THE GRADING PLANE, THE GRADING PLANE AT ANY POINT SHALL NOT VARY MORE THAN 0.05 FOOT ABOVE THE GRADE ESTABLISHED BY THE ENGINEER.
- 1. STREET NAME SIGNS SHALL BE PLACED ON EACH INTERSECTION. MATERIALS, LOCATIONS AND INSTALLATION SHALL CONFORM TO THE STANDARDS OF THE EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION.
- 12. STOP SIGNS. PAINTED STOP BARS AND THE PAINTED WORK "STOP" SHALL BE PLACED AS SHOWN ON THE PLANS. STOP SIGNS SHALL CONFORM TO COUNTY STANDARD PLAN 105a.
- 13. THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE F-2 MARKERS AT BOTH ENDS OF CULVERTS. THE CULVERT MARKERS SHALL HAVE A TWO-INCH WIDE BLACK STRIP AT THE TOP OF THE MARKER. ABOVE ELEVATION 3.000 FEET. THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE F MARKERS WITH SNOW POLE BRACKETS ON ALL DIKES AT 100 FEET INTERVALS AND AT BOTH ENDS OF CULVERTS. ABOVE ELEVATION 3,000 FEET, THE CONTRACTOR SHALL INSTALL METAL MARKER POSTS WITH SNOW POLE BRACKETS NEAR EACH FIRE HYDRANT.
- 14. THE CONTRACTOR SHALL HAVE A RESPONSIBILITY PARTY, WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR, ON THE JOB SITE DURING ALL WORKING HOURS.
- 15. THE CONTRACTOR SHALL CONTACT THE EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION 48 HOURS IN ADVANCE OF COMMENCING WORK TO SCHEDULE A PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOT START ANY GRADING UNTIL THE COUNTY COMPLETES PRE-GRADING INSPECTION. THE CONTRACTOR SHALL OBTAIN A GRADING PERMIT AND THE NECESSARY DRIVEWAY ENCROACHMENT PERMIT(S) FROM THE TRANSPORTATION DEPARTMENT PRIOR TO STARTING WORK.
- 16. CONTRACTOR SHALL NOT START ANY UTILITY WORK UNTIL A JOINT TRENCH COMPOSITE PLAN HAS BEEN APPROVED BY THE TRANSPORTATION DEPARTMENT (WATER AND SEWER EXCEPTED). ALL UTILITY WORK PERFORMED IN THE COUNTY RIGHT OF WAY SHALL REQUIRE AN ENCROACHMENT PERMIT.
- 17. ALL WORK SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE EL DORADO COUNTY DIRECTOR OF TRANSPORTATION OR HIS AUTHORIZED REPRESENTATIVE.
- 18. WATER & SEWER LINES SHALL BE TESTED AND APPROVED PRIOR TO PLACING PAVEMENT ON THE STREET.
- 19. ALL SERVICES, INCLUDING WATER METER BOXES, WILL BE TAKEN TO PROPERTY LINE OR JUST BEYOND TOP OF CUTS AND TOE OF FILLS, WHICH EVER IS FURTHER FROM CENTERLINE. (IF SLOPES ARE 3:1 OR FLATTER, SERVICE STUBS MAY TERMINATE AT THE PROPERTY LINE.)
- 20. ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS, SPECIAL PROVISIONS. APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS. AND THE APPLICABLE DEVELOPMENT STANDARDS OF THE COUNTY OF EL DORADO. 21. EARTHWORK
- EXCAVATION ???? C.Y. EXPORT ???? C.Y. EMBANKMENT\_\_\_\_\_C.Y. IMPORT\_\_\_\_N/A\_\_\_\_C.Y.
- 22. IF UNUSUAL AMOUNTS OF STONE, BONE, OR ARTIFACTS ARE UNCOVERED DURING CONSTRUCTION, ALL WORK SHALL BE STOPPED WITHIN ONE HUNDRED FEET (100') OF THE FIND, AND A QUALIFIED ARCHAEOLOGIST CONSULTED FOR AN ON-SITE EVALUATION. IF THE BONE APPEARS TO BE HUMAN, THE EL DORADO COUNTY CORONER AND THE NATIVE AMERICAN HERITAGE COMMISSION (916-322-7791) MUST BE CONTACTED.
- 23. WHERE TYPE B DROP INLETS EXCEED 5 FEET IN HEIGHT, REINFORCING STEEL SHALL BE INSTALLED. REINFORCING STEEL SHALL BE #4 BARS, INSTALLED IN THE VERTICAL WALLS AT 12" O.C. (BOTH DIRECTIONS). 3" CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE FACE OF THE WALLS. UNDER NO CIRCUMSTANCES WILL TYPE B DROP INLETS BE ALLOWED IN EXCESS OF 8 FEET IN HEIGHT.

- 24. WHERE ANY PORTION OF THE STRUCTURE EXCAVATION FOR VERTICAL CONCRETE STRUCTURES (MANHOLES, INLETS, VAULTS, ETC.) IS WITHIN THE STREET, MATERIAL USED TO BACKFILL SUCH STRUCTURES SHALL CONFORM TO SECTION 19-3.06, "STRUCTURE BACKFILL" OF THE STANDARD SPECIFICATIONS. COMPACTION TESTS WILL BE TAKEN EVERY 2-3 FEET VERTICALLY. WHERE CAST-IN-PLACE STRUCTURES ARE PLACED AGAINST UNDISTURBED NATIVE MATERIAL, THE REQUIREMENT SHALL NOT APPLY.
- 25. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7, "LEGAL RELATIONS AND RESPONSIBILITY" OF THE STANDARD SPECIFICATIONS.
- 26. THE CONTRACTOR SHALL NOT CONSTRUCT ANY WORK WITHOUT ADEQUATE CONSTRUCTION STAKING. AS A MINIMUM. THE FOLLOWING STAKING SHALL BE REQUIRED: 1) CLEARING LIMITS, 2) SLOPE STAKES, 3) WATER LINE STAKES, 4) SEWER LINE STAKES, 5) STORM DRAIN STAKES, 6) FINISHED GRADE STAKES. ADDITIONAL STAKING MAY BE REQUIRED BY DOT DUE TO THE NATURE AND/OR COMPLEXITY OF THE WORK. LOST OR DAMAGED STAKES SHALL BE REPLACED TO THE SATISFACTION OF DOT WHETHER RESULTING FROM
- CONSTRUCTION PROCEDURES, VANDALISM, OR ANY OTHER CAUSE. 27. THE CONTRACTOR SHALL PROVIDE, PLACE AND MAINTAIN ALL LIGHTS, SIGNS, DELINEATORS, BARRICADES, TEMPORARY TRAFFIC STRIPING, FLAGMEN, DETOURS OR OTHER DEVICES NECESSARY TO PROVIDE FOR THE SAFE AND CONVENIENT PASSAGE OF PUBLIC VEHICLE AND PEDESTRIAN TRAFFIC THROUGH THE CONSTRUCTION SITE.
- 28. IF THE PRESENCE OF SERPENTINE ROCK (SaF) IS DISCOVERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, DOT AND THE EL DORADO COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT THAT SERPENTINE ROCK IS PRESENT ON THE SITE. ADDITIONALLY, THE CONTRACTOR SHALL IMPLEMENT THE ASBESTOS HAZARD MITIGATION PROVISIONS OF THE FUGITIVE DUST PLAN PRIOR TO CONTINUATION OF EARTHWORK IN AREAS WHERE SERPENTINE ROCK IS PRESENT.
- 29. UPON JOB COMPLETION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE INFORMATION TO BAKER-WILLIAMS ENGINEERING GROUP (ENGINEER), REGARDING ANY MATERIAL CHANGES MADE DURING CONSTRUCTION AS WELL AS ANY OTHER INFORMATION WHICH IS REQUIRED TO BE SHOWN ON THE RECORD DRAWINGS BY DOT, THE EL DORADO IRRIGATION DISTRICT (EID), OTHER UTILITY COMPANIES, OR OTHER RESPONSIBLE AGENCIES AND TOWN CENTER EAST DESIGN REVIEW COMMITTEE.

## <u>EARTHWORK AND GRADING:</u>

- 1. THE CONTRACTOR SHALL CONTACT THE COUNTY OF EL DORADO DOT 48 HOURS PRIOR TO THE START OF EARTHWORK AND GRADING CONSTRUCTION.
- 2. THE OWNER SHALL RETAIN THE SERVICES OF A QUALIFIED SOILS ENGINEER TO MONITOR THE SITE CONDITIONS AND PROVIDE EARTHWORK RECOMMENDATIONS SUBJECT TO COUNTY APPROVAL, AND INSPECT THE CONTRACTOR'S WORK FOR COMPLIANCE WITH THE APPROVED RECOMMENDATIONS. ALL EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 70 OF THE UNIFORM BUILDING CODE AND THE SOILS REPORT PREPARED BY YOUNGDAHL & ASSOC.
- 3. ALL COMPACTION TESTING SHALL BE PERFORMED BY THE OWNERS DESIGNATED AGENT AND BE PAID FOR BY THE DEVELOPER (OR CONTRACTOR IN CASE OF RETESTING). ALL TESTS WITHIN THE RIGHT-OF-WAY SHALL BE APPROVED BY THE COUNTY AND ALL TESTS OUTSIDE THE RIGHT-OF-WAY SHALL BE CERTIFIED BY THE SOILS ENGINEER FOR THE PROJECT.
- 4. ALL UNSUITABLE AND SURPLUS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS THE ENGINEER SPECIFIES OTHERWISE.
- 5. IF BLASTING ACTIVITIES OCCUR IN CONJUNCTION WITH THE IMPROVEMENTS, THE CONTRACTOR SHALL CONDUCT THE BLASTING ACTIVITIES IN COMPLIANCE WITH STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL SUBMIT BLASTING PLANS FOR REVIEW AND APPROVAL PRIOR TO COMMENCING ANY ON-SITE BLASTING ACTIVITIES. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE WORK TO BE ACCOMPLISHED AND A STATEMENT OF THE NECESSITY FOR BLASTING AS OPPOSED TO OTHER METHODS CONSIDERED INCLUDING AVOIDANCE OF HARD ROCK AREAS, SAFETY MEASURES TO BE IMPLEMENTED SUCH AS USE OF BLAST BLANKETS AND TRAFFIC GROUND SHAKING IMPACTS. CONTRACTOR SHALL COORDINATE ANY BLASTING ACTIVITIES WITH POLICE AND FIRE DEPARTMENTS TO INSURE PROPER SITE ACCESS CONTROL AND TRAFFIC CONTROL. BLASTING SPECIFICATIONS AND PLANS SHALL INCLUDE A SCHEDULE THAT OUTLINES THE TIME FRAME WHICH BLASTING WILL OCCUR IN ORDER TO LIMIT NOISE AND TRAFFIC INCONVENIENCES.
- 6. THE CONTRACTOR SHALL AT ALL TIMES CONFORM TO THE RECOMMENDATIONS FROM THE COUNTY ON DUST CONTROL. AREAS SURROUNDING THE WORK SHALL BE KEPT CLEAN AND RETURNED TO ORIGINAL CONDITION UPON COMPLETION OF CONTRACT. GRADING SHALL NOT OCCUR WHEN WIND SPEED EXCEEDS 10 MPH CONTINUOUSLY FOR MORE THAN 1 HOUR.
- 7. CONTRACTOR SHALL APPLY EROSION CONTROL HYDROSEEDING TO ALL GRADED OR DISTURBED SOILS WITHIN THE WORK AREA AFTER COMPLETION OF IMPROVEMENTS OR AS SOON AS PRACTICAL AFTER GRADING TO REDUCE DUST AND EROSION POTENTIAL. STRAW OR HYDROMULCHING SHALL BE COMBINED WITH THE SEEDING ON SLOPES EQUAL TO OR GREATER THAN 4:1 AND PLACED PRIOR TO COMPLETION OF PROJECT IF DEEMED NECESSARY FOR CONTROLLING SOIL EROSION.
- 8. THE CONTRACTOR SHALL DO THE FOLLOWING IF GRADING AND CLEARING IMPROVEMENTS ARE INCOMPLETE BY OCTOBER 15TH. INSTALL EROSION PROTECTION ON SLOPES 10:1 OR STEEPER
- AND SWALES WITH SLOPES 2% OR GREATER. PREVENT SEDIMENT FROM LEAVING THE PROJECT AREA.
- GRADE GUTTER SAG POINTS TO DRAIN. PROVIDE FOR DRAINAGE FROM ENDS OF IMPROVEMENTS. - PREVENT SEDIMENTATION IN EXISTING STORM DRAIN SYSTEM
- AND CLEAN PIPES AS NECESSARY. - SEAL OFF ALL SANITARY SEWER CONNECTIONS TO EXISTING SYSTEMS. THE CONTRACTOR SHALL MAINTAIN WINTERIZATION FACILITIES AT ALL TIMES UNTIL THE CITY ACCEPTS THE SUBDIVISION IMPROVEMENTS.

						D PROFESSION	
NC	DESCRIPTION	ENGR INIT	COUNTY APPR APPROVED BY	ROVAL DATE	benchmark <u>BM—DH6479</u> elev. <u>1494.00</u>		PLOT DAT
						SIJ NO.39875 Z NEE	09-18-1
						Exp.12-31-17 *	01-13-1
					(SEE SHEET NO.1)	CIVIL FORM	
						MICHAEL T ROBERSTON RPE#39875	

# GENERAL WATER NOTES:

#### 1. WORK SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION AND TO THE SATISFACTION OF THE EL DORADO IRRIGATION DISTRICT (EID). CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID'S LÀTEST VERSION OF THE TECHNICAL SPECIFICATIONS AND STANDARD DRAWINGS. 2. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH EID INSPECTION FIVE WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO

LATER THAN FIVE DAYS AFTER THE PRE-CONSTRUCTION CONFERENCE. 3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY -THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION

AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES. (PHONE 1-800-642-2444)

5. CONNECTIONS TO EXISTING WATER FACILITY SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATIONS.

6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED FIVE FEET IN DEPTH, CONTRACTORS SHALL OBTAIN AN EXCAVATION PERMIT FROM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800) POST PERMIT AT THE CONSTRUCTION SITE AND COMPLY WITH ALL REQUIREMENTS.

7. THE CONTRACTOR SHALL NOTIFY EID INSPECTION FORTY-EIGHT HOURS PRIOR TO START OR RESTART OF WORK.

8. ONLY EID PERSONNEL SHALL OPERATE ANY VALVES ON EXISTING WATER SYSTEM. 9. THE TOTAL SITE REQUIRED FIRE FLOW IS **1,875** GPM AT 20 PSIG

RESIDUAL. 10. BASED UPON A HYDRAULIC GRADE LINE OF **<u>1.765</u>** FEET AT STATIC CONDITIONS AND 1.696 FEET DURING FIRE FLOW AND MAXIMUM DAY DEMANDS. THE MAXIMUM AND MINIMUM PRESSURES ARE CALCULATED TO

BE 138 PSI AND 168 PSI RESPECTIVELY. 11. PIPELINES SHALL BE DISINFECTED, FLUSHED AND HYDROSTATICALLY

- TESTED IN ACCORDANCE WITH EID'S TECHNICAL SPECIFICATIONS. 12. SERVICE INSTALLATIONS IN ROADWAYS WITH CUTS OR FILLS GREATER THAN SIX FEET IN HEIGHT AND SLOPES STEEPER THAN 3:1 SHALL HAVE THE METER BOX SET AT FINISH GRADE NEXT TO THE ROAD IN THE LOCATION DIRECTED BY EID. THE SERVICE LINE SHALL THEN BE EXTENDED FIVE FEET BEYOND THE SLOPE CATCH POINT WITH PVC SCHEDULE 40 SIZED TO MATCH THE SERVICE. PLACE STEEL T-POSTS PAINTED BLUE AT THE END OF THIS SERVICE LINE.
- 13. LIDS SHALL BE MARKED "WATER". 14. CURBS SHALL BE WET STAMPED WITH A "W" BRAND WHERE WATER SERVICES INTERCEPT.
- 15. CONTRACTOR SHALL HAVE A COPY OF EID'S CONSTRUCTION STANDARDS ON THE JOB.
- 16. REVISIONS TO THE DRAWINGS MUST BE APPROVED IN WRITING BY EID. 17. STAKING INFORMATION: MINIMUM SPACING SHALL BE FIFTY FEET (TWENTY-FIVE FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED. CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.

### FUGITIVE DUST PREVENTION AND CONTROL AND ASBESTOS HAZARD DUST MITIGATION NOTES:

- 1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 10, "DUST CONTROL" OF THE STANDARD SPECIFICATIONS. COUNTY OF EL DORADO AIR POLLUTION CONTROL DISTRICT (APCD) RULE 223. AND ORDINANCE 4548 MAY BE OBTAINED FROM THE COUNTY OF EL DORADO DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, 2580 FAIRLANE COURT,
- PLACERVILLE. CA 95667. 2. THE CONTRACTOR SHALL KEEP A COPY OF THE FUGITIVE DUST PLAN AND THE ASBESTOS MITIGATION PLAN (IF ISSUED) AT THE
- CONSTRUCTION SITE AT ALL TIMES DURING THE CONSTRUCTION PERIOD.

# GENERAL SEWER NOTES:

- ALL WORK WILL BE SUBJECT TO INSPECTION AND APPROVAL BY THE EL DORADO IRRIGATION DISTRICT (EID). ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID'S LATEST VERSION OF THE TECHNICAL SPECIFICATIONS AND STANDARD DRAWINGS.
- 2. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH EID INSPECTION FIVE WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE DAYS AFTER THE PRE-CONSTRUCTION CONFERENCE.
- 3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY -THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (PHONE 1-800-642-2444).
- 5. CONNECTIONS TO EXISTING SEWER FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATIONS.
- 6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED FIVE FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800). THAN SIX FEET IN HEIGHT AND SLOPES STEEPER THAN 3:1 SHALL HAVE THE CLEAN OUT SET AT FINISH GRADE NEXT TO THE ROAD IN THE
- 7. SERVICE INSTALLATIONS IN ROADWAYS WITH CUTS OR FILLS GREATER LOCATION DIRECTED BY THE DISTRICT. THE SERVICE LINE SHALL THEN BE EXTENDED FIVE FEET BEYOND THE SLOPE CATCH POINT WITH PVC SDR 35 SIZED TO MATCH THE SERVICE. PLACE STEEL T-POSTS PAINTED GREEN AT THE END OF THIS SERVICE LINE. 8. ALL LIDS SHALL BE MARKED "SEWER".
- 9. ALL CURBS SHALL BE WET STAMPED WITH AN "S" BRAND WHERE SEWER SERVICES INTERCEPT.
- 10. LINED MANHOLES REQUIRED.
- 11. CONTRACTOR SHALL HAVE A COPY OF THE EID'S CONSTRUCTION STANDARDS ON THE JOB. 12. ALL REVISIONS TO THESE DRAWINGS MUST BE APPROVED IN WRITING BY
- EID. 13. THE CONTRACTOR SHALL NOTIFY THE EID INSPECTOR FORTY-EIGHT
- HOURS PRIOR TO START OR RESTART OF WORK. 14. STAKING INFORMATION: MINIMUM SPACING SHALL BE FIFTY FEET (TWENTY-FIVE FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID.
- INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED, CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.
- 15. ON REPLACEMENT PROJECTS, THE EXISTING FACILITY MUST REMAIN IN SERVICE UNTIL THE NEW UTILITY IS ACCEPTED AND PUT INTO SERVICE.



## BAKER-WILLIAMS CIVIL ENGINEERING NOTES:

1. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS OR OTHER SITUATIONS NOT ADDRESSED ON THESE PLANS WITH THE APPROPRIATE INSPECTOR AND THE ENGINEER PRIOR TO PROCEEDING.

- 2. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS.
- 3. THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIOR TO COMMENCING CONSTRUCTION HE IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND REQUESTING A VERIFICATION AT THE CONSTRUCTION SITE OF THE LOCATIONS OF THEIR UNDERGROUND UTILITIES WHERE SUCH FACILITIES MAY POSSIBLY CONFLICT WITH THE PLACEMENT OF IMPROVEMENTS AS SHOWN ON THESE IMPROVEMENT PLANS.
- 4. THE CONTRACTOR SHALL EXPOSE THE ENDS OF EXISTING SEWER AND DRAIN LINES AND VERIFY THEIR LOCATION AND ELEVATION PRIOR TO PLACEMENT OF PIPE. ALL COSTS OF SUCH EXCAVATION AND BACKFILL SHALL BE INCLUDED IN THE PRICE PAID FOR VARIOUS OTHER ITEMS OF WORK. 5. BAKER-WILLIAMS ENGINEERING GROUP SHALL NOT BE RESPONSIBLE FOR
- GRADING AND DIRT QUANTITIES UNLESS THE CONSTRUCTION STAKING IS PERFORMED BY BAKER-WILLIAMS ENGINEERING GROUP.
- 6. THE CONTRACTOR SHALL NOTIFY BAKER—WILLIAMS ENGINEERING GROUP, (2) FULL WORKING DAYS, IN ADVANCE OF DOING ANY DISCING, GRADING OR EARTHWORK OF ANY KIND. IN THE EVENT THAT NOTIFICATION IS NOT GIVEN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF RESETTING ANY SURVEY CONTROL POINTS DESTROYED BY HIS OPERATION.
- 7. EXISTING A.C. SURFACE SHALL BE CUT IN A NEAT STRAIGHT LINE PARALLEL WITH OR PERPENDICULAR TO THE STREET CENTERLINE AS APPLICABLE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING. SAWCUTTING MUST BE MADE A MINIMUM OF 1-FOOT FROM THE EXISTING E.P. THE EXPOSED BASE MATERIAL SHALL BE GRADED, RECOMPACTED AND RESEALED PRIOR TO PAVING.
- 8. IT IS THE CONTRACTORS' RESPONSIBILITY TO EXPOSE AND VERIFY THE ELEVATION OF ALL EXISTING UTILITIES THAT CROSS PROPOSED UTILITIES PRIOR TO PLACING ANY PROPOSED UNDERGROUND PIPES OR CONDUITS. THE ENGINEER SHALL BE NOTIFIED OF THE ELEVATION TO DETERMINE IF CONFLICTS EXIST AND TO POSSIBLY ADJUST PROPOSED FACILITIES.
- 9.DURING CONSTRUCTION, NEW AND EXISTING PIPES OR UTILITIES LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED WITH PLATE STEEL OR MAINTAIN ADEQUATE COVER TO PREVENT ANY DAMAGE FROM HEAVY EQUIPMENT. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO PIPES OR UTILITIES DURING CONSTRUCTION. 10.THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER KRAZAN & ASSOCIATES, INC.
- 48 HOURS IN ADVANCE OF DOING ANY GRADING. 11.BAKER-WILLIAMS ENGINEERING GROUP (BWEG) HAS EXERCISED A REASONABLE AND ACCEPTABLE STANDARD OF CARE IN THE PREPARATION OF THESE PLANS. HOWEVER, THE DESIGN PROCESS INCLUDES ACTIVITIES OCCURRING AFTER PLAN SIGNATURE, THESE ACTIVITIES INCLUDE CALCULATIONS, PLAN INTERPRETATIONS AND VERIFICATIONS DURING CONSTRUCTION. SHOULD PERSONS OTHER THAN (BWEG) PERFORM THE CONSTRUCTION STAKING OPERATIONS, THEY SHALL INDEMNIFY (BWEG) FROM ANY DAMAGES RESULTING FROM OMISSION OR ERROR CONTAINED IN THE PLANS WHICH WOULD REASONABLY HAVE BEEN DISCOVERED
- AND CORRECTED BY (BWEG). 12.CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY/COUNTY. OWNER AND THE ENGINEER 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 CITY/COUNTY, OWNER OR ENGINEER.

GENERAL NOTES & DETAILS

SHINGLE SPRINGS VILLAGE

SEWER MAIN & WATER MAIN EXTENSION

SHEETS 14-11-53

SHEET

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CALIFORNIA JOB NUMBER





	SCALE	drafted by: S.F.L.		
i.	horiz: 1*=40'	designed by: M.T.R.	BAKER-WILLIAMS ENGINEERING GROUP	
	vert: N/A	checked by: S.F.L.	Engineering / Surveying / Land Blanning / Entitlement Processing / CPS Services	
	06/2015	710	6020 Rutland Drive, Suite 19 ~ Carmichael, CA. 95608	
	date	field book	(916) 331-4336 ~ fax (916) 331-4430 ~ office@bwengineers.com	IFI







![](_page_12_Figure_0.jpeg)

![](_page_12_Picture_4.jpeg)

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

Erosion and Sediment Control General Notes: Subdivisions, Parcel Maps, Commercial and General Grading Permits March 2000

The Contractor's attention is directed to section 7-1.01G, ?Water Pollution? of the Standard Specifications.

The project Erosion and Sediment Control (ESC) features are intended to ensure compliance with the National Pollutant Discharge Elimination System (NPDES) provisions of the Clean Water Act (CWA) under the State of California Statewide General Permit for Construction Discharges.

To this end, the Contractor shall:

Make him/herself aware of the requirements of said General Permit and the provisions of the Storm Water Pollution Prevention Plan (SWPPP). SWPPPs are required for all construction activities with soil disturbances of five(5) acres or more in size.

Implement the ESC features and Best Management Practices (BMPs) contained in the Improvement Plans and the SWPPP, and otherwise diligently pursue compliance with the

Assist the Owner, Engineer, and DOT in the assessment of the functionality of and modifications to the features and practices implemented and proposed.

Meet with the Engineer, Owner, the Resource Conservation District (RCD), and DOT by August 15th to determine and discuss the status of the project, construction schedule, and any modifications and/or additions to the ESC features and/or SWPPP in order to diligently pursue compliance with the CWA.

Document any maintenance, replacement, inspection, modifications or additions to the project ESC features, and notify the Engineer, Owner and DOT of any substantial modifications or additions to the ESC practices and features. All disturbed areas shall be straw mulched or otherwise protected with approved materials within 15 days of completion of the finished grades. For construction completed between October 15 and May 1, documentation of inspection and maintenance of all ESC features will be completed on a weekly basis and prior to, during, and after the completion of all storm events.

Subdivisions, Parcel Maps, Commercial and General Grading Permits March 2000

Contact the RCD @ 530.295.5630 a minimum of forty-eight (48) hours prior to commencing work on re-vegetation. Re-vegetation shall be accomplished in accordance with the requirements and specifications of the RCD.

Maintain an inventory of ESC materials (straw bales, 1.5 - 3? clean crushed rock, fiber rolls, silt fence, rock bags, etc.) on site for emergency use as directed by the Engineer, Owner, or the Department of Transportation.

If grading activities are not complete by October 15, the Contractor shall implement any modifications or additions to the ESC plans and features as directed by the Engineer, Owner, or Department of Transportation in order to ?winterize? the project. Such winterization may include restrictions on the types and scheduling of work to be completed between October 15th and May 1st, and/or installation of additional features in order to comply with the CWA.

It is expressly understood that approval of the project Grading, ESC, or Improvement Plans shall not relieve the Developer, Engineer, or Contractor of any responsibilities under the permit, agreement, or plans for the successful implementation of sedimentation control in conformity with the requirements of all County, State and Federal Ordinances, Laws, Manuals, Conditions, Permits, Agreements or Plans.

The ESC features, as outlined below, shall be provided at the associated stage of development in the ESC plan. The ESC plan shall be comprehensive in nature, with modifications as needed, through the development of the project. The High Sierra RCD Guidelines (October 1991) shall be utilized as the BMPs in the implementation of the following ESC features:

Stage 1 - Initial perimeter ESC features to be placed prior to the commencement of work include but are not limited to the following: silt fences, fiber rolls, straw bales, entrance/exit tire wash, sediment basins.

Stage 2 – Intermediate ESC features to be placed after initial disturbance of soil surface include but are not limited to the following.

After clearing and grubbing: diversion ditches with channel lining if necessary, sediment traps and basins at all boundary out falls.

During rough grading, placement of underground facilities, and roadway construction: Temporary channel lining, inlet/outlet protective lining, temporary slope drains, temporary and permanent seeding/mulching or hydro seeding, permanent ESC blankets, settlina structures, temporary and permanent check dams, sediment traps and basins in depressions, vacuum sweepers, and the placement of any other permanent ESC features.

Stage 3 - Final ESC features for final stabilization to be placed prior to final sign off of improvements include but are not limited to the following:

Placement of seeding/mulching, hydro seeding, permanent turf on all unprotected soil surface, removal of debris from all drainage facilities, removal of any temporary ESC features (if necessary), and the placement of any other permanent ESC features.

Alternatives for the placement of ESC Features for Construction activities during May 1 - October 15.

For construction activities during May 1 – October 15, the plan checker/inspector may consider the alternative of only requiring the stockpiling of ESC features on-site for sites with gentle slopes, minimal grading, and no adjacent existing drainage facilities. This alternative requires immediate (same working day) installation of ESC features to prevent sediment discharge, to be accomplished by the contractor. The placement of final ESC features is required on all projects.

#### NOTE:

SUBSTITUTION OF EARTHGARD FOR STRAW MULCH ON ALL DISTURBED AREAS IS ACCEPTABLE FOR TEMPORARY EROSION CONTROL MEASURES. APPLICATION AND MAINTENANCE PER MANUFACTURER RECOMMENDATIONS IS REQUIRED. DISTURBED AREAS, AFTER EARTHGUARD TREATMENT, WILL REQUIRE A RE-APPLICATION TO ASSURE ADEQUATE COVERAGE TO REDUCE EROSION.

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NO.	DESCRIPTION	ENGR INIT	APPROVED BY	DATE	benchmark <u>BM-DH6479</u> elev.	1494.00	No 30875	PLOT DATE: 06-30-15
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						1	MICHAEL T ROBERSTON RPE#39875	1. Carlos

(JULY 2006)

I. MINIMUM CONSTRUCTION SITE STORM WATER MANAGEMENT PRACTICES THE STORM WATER MANAGEMENT PRACTICES DESCRIBED BELOW ARE THE MINIMUM, REQUIRED WATER QUALITY PROTECTION MEASURES APPLICABLE TO ALL CONSTRUCTION SITES, WITHIN WESTERN EL DORADO COUNTY. THIS LISTING DOES NOT INCLUDE THE VARIOUS INSPECTION, RECORD KEEPING, TRAINING AND REPORTING REQUIREMENTS. ADDITIONALLY, THERE WILL BE INSTANCES WHERE PROJECT AND SITE CONDITIONS REQUIRE SUPPLEMENTING OR DEVIATING FROM THESE MINIMUM PROTECTION REQUIREMENTS. THE CONTRACTOR IS EXPECTED TO DEPLOY MEASURES SUFFICIENT TO ACHIEVE COMPLIANCE WITH THE COUNTY'S GRADING ORDINANCE; AND, AS APPLICABLE (PROJECTS WHICH INVOLVE ONE ACRE OR MORE OF DISTURBED SOIL OR ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT THAT ENCOMPASSES ONE ACRE OR MORE OF DISTURBED SOIL). WITH THE STATE WATER RESOURCES CONTROL BOARD'S (SWRCB) NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

A. SCHEDULING WETLANDS, AND WHERE SLOPES EXCEED 16%.

DISTURBED SOIL AREA. CONSTRUCTED AS AN EARLY WORK ITEM. B. PRESERVATION OF NATURAL FEATURES

FOR AS LONG AS POSSIBLE TO MINIMIZE EROSION. C. STORM WATER RUN-ON AND CONCENTRATED FLOWS SHALL BE CONVEYED IN A NON-ERODING FASHION.

D. STOCKPILE MANAGEMENT STOCKPILES SHALL BE MANAGED AS FOLLOWS: 1. SOIL STOCKPILES RAINY SEASON:

NON-RAINY SEASON: BARRIERS

2. CONCRETE/ASPHALT RUBBLE, ROCK AND AGGREGATE BASE/SUB-BASE • COVERED OR PROTECTED WITH PERIMETER SEDIMENT BARRIERS 3. "COLD MIX" ASPHALT

 COVERED E. SEDIMENT TRACKING CONTROL APPROPRIATE MEASURES SHALL BE DEPLOYED TO MINIMIZE ANY TRACKING OF SEDIMENT OFFSITE BY VEHICLES AND/OR EQUIPMENT. THESE MEASURES INCLUDE STABILIZED CONSTRUCTION ENTRANCES/EXITS & ROADWAYS, AND TIRE WASHING. WHERE TRACKING OCCURS, STREETS SHALL BE SWEPT USING A PICKUP SWEEPER WITH WATER SUPPLY.

F. NON-STORM WATER MANAGEMENT

SPILL PREVENTION/CONTROL MEASURES.

G. DISTURBED SOIL AREA MANAGEMENT DISTURBED SOIL AREAS (DSA) SHALL BE PROTECTED WITH AN "EFFECTIVE COMBINATION" OF MEASURES INCLUDING SOIL STABILIZATION. SEDIMENT BARRIERS AND BASINS / TRAPS. THERE MAY BE SITUATIONS WHERE "SEDIMENT BASINS" OR "TREATMENT" ARE ABLE TO SUBSTITUTE AS ALTERNATIVE CONTROL MEASURES TO THE NORMALLY REQUIRED "EFFECTIVE COMBINATION" OF SOIL

● HYDRAULIC MULCH (REF. CASQA BMP # EC-3)

• GEOTEXTILES, MATS, PLASTIC COVERS AND EROSION CONTROL BLANKETS (REF. CASQA BMP # EC-7) • STABILIZED CONSTRUCTION ROADWAYS (REF. CASOA BMP #

TC-2) 2. SEDIMENT BARRIERS INCLUDE: • SILT FENCES (REF. CASQA BMP # SE-1) • SAND/GRAVEL BAG BARRIERS (REF. CASQA BMP #'S SE-6 & SE-8) • STRAW BALE BARRIERS (REF. CASQA BMP # SE-9) • FIBER ROLLS (REF. CASQA BMP # SE-5)

3. BASIN / TRAPS INCLUDE: • DESILTING BASINS (REF. CALTRANS BMPS) • SEDIMENT TRAPS (REF. CALTRANS BMPS) 4. ON DSAS WITH SLOPE LENGTHS GREATER THAN 10 FEET, THE FOLLOWING MEASURES SHALL BE DEPLOYED: A. RAINY SEASON (OCT. 15TH TO MAY 1ST):

NON-ACTIVE AREAS (NO SOIL DISTURBING ACTIVITIES FOR 21 OR MORE DAYS)

• ON SLOPES EQUAL TO OR FLATTER THAN 1:20 (V/H), SOIL STABILIZATION • ON SLOPES STEEPER THAN 1:20 (V/H), SOIL STABILIZATION AND

SEDIMENT BARRIERS ACTIVE AREAS

ROFESSION

• ON SLOPES STEEPER THAN 1:20 (V/H), SEDIMENT BARRIERS • ON SLOPES STEEPER THAN 1:2 (V/H) WITH SLOPE LENGTHS GREATER THAN 50 FEET: SOIL STABILIZATION; SEDIMENT BARRIERS; AND WHERE FEASIBLE, BASINS / TRAPS

B. NON-RAINY SEASON: NON-ACTIVE AREAS (NO SOIL DISTURBING ACTIVITIES FOR 21 OR MORE DAYS) • ON SLOPES STEEPER THAN 1:2 (V/H), SEDIMENT BARRIERS

5. GENERAL: • PROTECTION SHALL BE DEPLOYED ON NON-ACTIVE DSAS WITHIN 14 DAYS FROM THE CESSATION OF SOIL-DISTURBING ACTIVITIES OR ONE DAY PRIOR TO THE PREDICTED (40% OR MORE CHANCE) ONSET OF SIGNIFICANT PRECIPITATION, WHICHEVER OCCURS FIRST. PROTECTION SHALL BE DEPLOYED ON ACTIVE DSAS PRIOR TO THE PREDICTED (40%

SCALE

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## EL DORADO COUNTY RESOURCE CONSERVATION DISTRICT EROSION CONTROL REQUIREMENTS AND SPECIFICATIONS

CONSTRUCTION SHALL BE SCHEDULED TO MINIMIZE CONSTRUCTION ACTIVITIES IN "HIGH-RISK AREAS" AND THE AMOUNT OF ACTIVE DISTURBED SOIL AREAS, DURING THE RAINY SEASON (OCT. 15TH TO MAY 1ST), "HIGH-RISK AREAS" INCLUDE THOSE AREAS WITHIN 50 FEET OF USGS WATERCOURSES, 100-YEAR FLOOD PLAINS, REGULATED

UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY'S ON-SITE REPRESENTATIVE, DURING THE RAINY SEASON THE CONTRACTOR SHALL NOT SCHEDULE CONSTRUCTION ACTIVITIES IN "HIGH RISK AREAS" OR SCHEDULE TO HAVE MORE THAN 5 ACRES OF ACTIVE

WHERE PERMANENT STORM WATER TREATMENT DEVICES ARE TO BE CONSTRUCTED, THESE DEVICES SHOULD, WHENEVER FEASIBLE, BE

PRIOR TO THE COMMENCEMENT OF SOIL-DISTURBING ACTIVITIES, AREAS OF EXISTING VEGETATION THAT ARE TO REMAIN AND ENVIRONMENTALLY SENSITIVE AREAS (I.E. WETLANDS, PROTECTED HABITATS, ETC) SHALL BE FENCED FOR PROTECTION. IN GENERAL, SITE DESIGNS SHALL PRESERVE EXISTING VEGETATION TO THE MAXIMUM EXTENT POSSIBLE; AND DURING CONSTRUCTION, EXISTING VEGETATION SHALL BE PRESERVED (AND PROTECTED BY FENCING)

EXISTING WATERCOURSES SHALL BE PROTECTED; AND IF DIVERTED, HANDLED IN A NON-ERODING FASHION. TO THE EXTENT FEASIBLE, ALL CONCENTRATED WATER FLOWS SHALL BE CHANNELED AWAY FROM DISTURBED SOIL AREAS / STOCKPILES. CONCENTRATED WATER FLOWS

#### • COVERED, OR PROTECTED WITH SOIL STABILIZATION MEASURES & PERIMETER SEDIMENT BARRIERS

• COVERED OR PROTECTED WITH PERIMETER SEDIMENT

NON-STORM WATER DISCHARGES SHALL BE MINIMIZED TO THE EXTENT FEASIBLE. SEDIMENT LADEN NON-STORM WATER IS REQUIRED TO BE FILTERED (OR EQUIVALENT TREATMENT) PRIOR TO DISCHARGING. MEASURES REQUIRED TO MANAGE NON-STORM WATER DISCHARGES INCLUDE: WATER CONSERVATION PRACTICES, DUST CONTROL MATERIAL STORAGE PRACTICES, VEHICLE/EQUIPMENT OPERATION AND MAINTENANCE REQUIREMENTS, WASTE MANAGEMENT PRACTICES, AND

STABILIZATION, SEDIMENT BARRIERS AND BASINS / TRAPS. HOWEVER, WHEN SUBSTITUTING THESE MEASURES, THE CONTRACTOR MUST BE PREPARED TO DEMONSTRATE THAT THE SEDIMENT LOAD WITHIN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE DOES NOT EXCEED NATURAL OR PRECONSTRUCTION LEVELS. 1. SOIL STABILIZATION MEASURES INCLUDE:

• HYDROSEEDING (REF. CASQA BMP # EC-4) • SUITABLY STABILIZED. NON-POLLUTING STRAW / WOOD ORGANIC MULCH (REF. CASQA BMP #'S EC-6 & EC-8)

OR MORE CHANCE) ONSET OF SIGNIFICANT PRECIPITATION.

drafted by: S.F.L.

esigned by: M.T.

checked by: S.F.L

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field book

• TERRACES." FOR CUT SLOPES UP TO 60 FEET IN HEIGHT, TERRACES AT LEAST 8 FEET (2.4 METERS) IN WIDTH SHALL BE ESTABLISHED AT NOT MORE THAN 30-FOOT (9.1 METERS) VERTICAL INTERVALS ON ALL CUT SLOPES TO CONTROL SURFACE DRAINAGE AND DEBRIS EXCEPT THAT WHERE ONLY ONE TERRACE IS REQUIRED, IT SHALL BE AT MIDHEIGHT. FOR CUT SLOPES GREATER THAN 60 FEET (18 METERS) AND UP TO 120 FEET (37 METERS) IN VERTICAL HEIGHT, ONE ADDITIONAL TERRACE AT APPROXIMATELY MIDHEIGHT SHALL BE 12 FEET (3.6 METERS) IN WIDTH. TERRACES SHALL SLOPE A MINIMUM OF 5 PERCENT GRADIENT TOWARD THE HILLSIDE. TERRACE WIDTHS AND SPACING FOR CUT SLOPES GREATER THAN 120 FEET (36 METERS) IN HEIGHT SHALL BE DESIGNED BY THE CIVIL ENGINEER AND APPROVED BY THE DIRECTOR. SUITABLE ACCESS SHALL BE PROVIDED TO PERMIT PROPER CLEANING AND MAINTENANCE.

• "SEDIMENT BASIN:" A BASIN WITH A CAPACITY EQUIVALENT TO AT LEAST 3600 CUBIC FEET OF STORAGE (AS MEASURED FROM THE BOTTOM OF THE BASIN TO THE PRINCIPAL OUTLET) PER ACRE DRAINING INTO THE BASIN. THE LENGTH OF THE BASIN SHALL BE MORE THAN TWICE THE BASIN'S WIDTH (LENGTH IS DETERMINED BY MEASURING THE DISTANCE BETWEEN THE INLET AND THE OUTLET). THE DEPTH OF THE BASIN MUST NOT

BE LESS THAN THREE FEET NOR GREATER THAN FIVE FEET. • "TREATMENT ": A COMBINATION OF BASIN AND TREATMENT ENGINEERED TO CAPTURE AND TREAT (TO REMOVE 0.01 MM SIZED PARTICLES AND LARGER) THE 10-YEAR. 6-HOURRAIN EVENT USING Q=C×I×A WHERE C=0.5 AND I RANGES FROM 0.286 (EL DORADO HILLS) TO 0.500 (SLY PARK). II. CRITICAL AREA PLANTING SPECIFICATIONS (January 2006)

A. SCOPE ESTABLISHING VEGETATION ON SEVERELY ERODING AREAS OR AREAS WITH AN EROSION POTENTIAL. ITS PURPOSE IS TO STABILIZED THE SOIL. MINIMIZE OR PREVENT DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS, PROTECT WILDLIFE HABITAT, AND MAINTAINAESTHETIC QUALITIES.

B. AREAS TO BE SEEDED, TIMING OF SEEDING COMPLETE REVEGETATION AND STABILIZATION OF ALL DISTURBED SOILS, BOTH WITHIN AND OUTSIDE COUNTY RIGHTS-OF-WAY, WILL BE ACCOMPLISHED WITH SPECIFIED AMOUNTS AND TYPES OF VEGETATIVE SPECIES, MULCH AND FERTILIZER MATERIAL. SEE MAJOR LAND RESOURCE AREA EXHIBITS MLRA 18 OR 22. ALL EROSION AND SEDIMENT CONTROL PRACTICES PERFORMED AFTER

OCTOBER 15, SHALL FOLLOW "RAINY SEASON" SPECIFICATION CONTAINED IN THE STORM WATER MANAGEMENT PRACTICES. C. MATERIAL

1. SEED -ALL SEED SHALL BE DELIVERED TO THE SITE TAGGED AND LABELED IN ACCORDANCE WITH THE CALIFORNIA AGRICULTURAL CODE AND SHALL BE ACCEPTABLE TO THE COUNTY AGRICULTURAL COMMISSIONER.

SEED SHALL BE OF A QUALITY WHICH HAS A MINIMUM PURE LIVE SEED CONTENT OF 80% (% PURITY × % GERMINATION) AND WEED SEED SHALL NOT EXCEED 0.5% OF THE AGGREGATE OF PURE LIVE SEED AND OTHER MATERIALS. LEGUME SEED SHALL BE INOCULATED WITH INOCULATE SPECIFIC TO ITS NEEDS WITHIN TWO HOURS PRIOR TO SEEDING. INOCULANTS SHALL NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER OR AS OTHERWISE SPECIFIED. ALL INOCULATED SEED SHALL BE LABELED TO SHOW WEIGHT OF SEED, DATE OF INOCULATION, AND THE WEIGHT AND SOURCE OF INOCULANT MATERIALS.

2. FERTILIZER - A COMMERCIAL FERTILIZER SHALL BE AMMONIUM PHOSPHATE AND CONTAIN A MINIMUM OF 16% NITROGEN, 20% PHOSPHORUS AND OX POTASH, UNIFORM IN COMPOSITION, DRY AND FREE FLOWING, PELLETED OR GRANULAR. ALL FERTILIZER SHALL BE DELIVERED IN UNBROKEN OR UNOPENED CONTAINERS. LABELED IN ACCORDANCE WITH APPLICABLE STATE REGULATIONS AND BEARING THE WARRANTY OF THE PRODUCER FOR THE GRADE FURNISHED.

3. MULCH - MULCH SHALL BE ONE OF THE FOLLOWING MATERIALS AS APPROVED BY THE GOVERNMENT REPRESENTATIVE. 3A. STRAW – STRAW SHALL BE NEW STRAW DERIVED FROM RICE, WHEAT, OATS, OR BARLEY AND BE FREE OF MOLD AND NOXIOUS WEED SEEL STRAW SHALL BE FURNISHED IN AIR DRY BALES. EVIDENCE SHALL BE

FURNISHED THAT CLEARANCE HAS BEEN OBTAINED FROM THE COUNTY AGRICULTURAL COMMISSIONER, AS REQUIRED BY LAW, BEFORE STRAW OBTAINED FROM OUTSIDE THE COUNTY IN WHICH IT IS TO BE USED IS DELIVERED TO THE SITE OF THE WORK.

3B. WOOD FIBER MULCH - WOOD FIBER MULCH IS A WOOD CELLULOSE FIBER THAT CONTAINS NO GERMINATING OR GROWTH INHIBITING FACTORS. IT IS COLORED WITH A NON-TOXIC, WATER SOLUBLE. GREEN DYE TO PROVIDE A PROPER GAUGE FOR METERING OVER GROUND SURFACES. IT HAS THE PROPERTY TO BE EVENLY DISPERSED AND SUSPENDED

WHEN AGITATED IN WATER. D. SEEDING REQUIREMENTS

1. GENERAL - ALL SEEDING, FERTILIZER AND MULCHING OPERATIONS SHALL BEGIN WHEN APPROVAL IS GIVEN BY THE APPROPRIATE COUNTY ENGINEER OR CONSERVATION DISTRICT REPRESENTATIVE. 2. SEEDBED PREPARATION - THE ENTIRE AREA TO BE SEEDED SHALL BE REASONABLY SMOOTH AND CONFORM TO THE DESIRED SHAPE

BEFORE ACTUAL SEEDBED PREPARATION IS BEGUN. ANY DEBRIS WHICH WOULD INTERFERE WITH SEEDING OPERATIONS, GROWTH OR MAINTENANCE OF THE VEGETATIVE COVER WILL BE REMOVED. THE AREA TO BE SEEDED SHALL HAVE A FIRM SEEDBED WHICH HAS PREVIOUSLY BEEN ROUGHENED BY SCARIFYING, DISKING, HARROWING, CHISELING, OR OTHERWISE WORKED TO A DEPTH OF

TWO TO FOUR INCHES (2"-4"). NO IMPLEMENT SHALL BE USED THAT WILL CREATE AN EXCESSIVE AMOUNT OF DOWNWARD MOVEMENT OF SOIL OR CLODS OF SLOPING AREAS. SEEDBED MAY BE PREPARED AT TIME OF COMPLETION OF EARTH-MOVING WORK.

3. FERTILIZING – FERTILIZER SHALL BE DISTRIBUTED UNIFORMLY OVER THE SEEDBED AT THE RATE OF 300 POUNDS PER ACRE, AND SHALL BE IN SUCH PHYSICAL CONDITION TO INSURE UNIFORM APPLICATION OVER THE AREA TO BE FERTILIZED. FERTILIZER MAY BE APPLIED IN ANY WAY THAT WILL RESULT IN UNIFORM DISTRIBUTION. THE FERTILIZER SHALL BE INCORPORATED INTO THE SOIL.

4. SEEDING - SEED SHALL BE BROADCAST BY HAND, MECHANICAL HAND SEEDER, POWER OPERATED SEEDER, HYDROSEEDER OR OTHER APPROVED EQUIPMENT. 'SEED SHALL HAVE A SOIL COVER OF NOT MORE THAN ONE-HALF INCH. SEEDING WILL BE CARRIED OUT USING EITHER OF THE FOLLOWING METHODS:

METHOD 1 THE SEED MAY BE DRILLED, NOT TO EXCEED ONE-HALF (1/2) INCH DEEP AND CULTIPACKED OR ROLLED ONCE OVER WITH A CORRUGATED ROLLER ON ALL AREAS WHERE EQUIPMENT CAN BE OPERATED SAFELY. SEED OPERATIONS WILL BE ACROSS THE SLOPE.

METHOD 2 THE SEED MAY BE APPLIED IN A SLURRY MIX OF WOOD CELLULOSE FIBER DISTRIBUTED UNIFORMLY AT THE PRESCRIBED RATE (SEE ITEM E.2, WOOD CELULOSE FIBER -HYDRO-MULCHING, BELOW). THE APPLICATION UNIT USED FOR "HYDRO MULCH" SHALL BE EQUIPPED WITH AN AGITATOR TO MAINTAIN THE SEED AND MULCH IN SUSPENSION WITHIN THE UNIT'S TANK PRIOR TO AND DURING APPLICATION. METHOD 3 WHERE EMERGENCY TREATMENT OF EXPOSED SOILS EXTENDS BEYOND OCTOBER 15, EMERGENCY MULCHING

WITHOUT SEED WILL BE PRESCRIBED IN ACCORDANCE WITH "SOIL STABILIZATION MEASURES" DESCRIBED PREVIOUSLY.

SPECIAL NOTE: A MINIMUM 70% SEED GERMINATION WITH AT LEAST 1" GROWTH MUST BE OBTAINED BY DECEMBER 1ST, OR AREA MUST BE COVERED WITH STRAW MULCH. (SECTION E-1)

PERIOD	METHOD	TYPE OF SEED
15Sep-15Oct	Hydroseed	Blando Brome and either Wimerra '62' or Annual Ryegrass
15Sep-15Oct	Broadcasted	Blando Brome and Rose Clover
16Oct-14Sep	Hydroseed	Blando Brome and either Wimerra '62' or Annual Ryegrass
16Oct 14Son	Broadcasted	Blando Brome and Rose
A MU SEEI SEEI	JLCH COVIN DED AREA. DING UNLES	Clover IG SHALL BE APPLIED MULCHING SHALL FO SS OTHERWISE DIREC
A MU SEEI SEEI MAT	JLCH COVIN DED AREA. DING UNLES ERIAL INDIC	Clover IG SHALL BE APPLIED MULCHING SHALL FC SS OTHERWISE DIREC ATED. TIONS ABOVE PLACEI
A MU SEEI SEEI MAT SEED MIX I PERIOD	JLCH COVIN DED AREA. DING UNLES ERIAL INDIC FOR ELEVA METHOD	Clover IG SHALL BE APPLIED MULCHING SHALL FO SS OTHERWISE DIREC ATED. TIONS ABOVE PLACED TYPE OF SEED
A MU SEEI SEEI MAT SEED MIX I PERIOD	JLCH COVIN DED AREA. DING UNLES ERIAL INDIC FOR ELEVA METHOD Hydroseed or Broadcasted	Clover IG SHALL BE APPLIED MULCHING SHALL FC SS OTHERWISE DIREC CATED. TIONS ABOVE PLACEI TYPE OF SEED Potomac Orchardgrass or Luna Pubescent Wheatg or Topar Pubescent Wheatg and Wimmera '62' Ryegras

SEEDING UNLESS OTHERWISE DIRECTED. MULCH WILL BE OF THE MATERIAL INDICATED.

BAKER-WILLIAMS ENGINEERING GROUP

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![](_page_15_Figure_95.jpeg)