

COUNTY OF SANTA CLARA
General Construction
Specifications

GENERAL CONDITIONS

- ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY C2EARTH INC. AND DATED FEBRUARY 2020. THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS.
- THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS, IN THE EVENT OF CONFLICT, THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
- DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
- DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
- DEVELOPER SHALL OBTAIN AN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
- DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED. TREE REMOVAL PERMIT IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
- DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
- ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
- UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORNER AT (408) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
- THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT FOR THE SEPTIC LINE CONSTRUCTION SHALL BE OBTAINED BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION STAKING

- THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
- ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
- PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
- PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

CONSTRUCTION INSPECTION

- CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
- INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS AND SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
- DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
- THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR TO COMMENCEMENT OF THE BUILDING FOUNDATION.

SITE PREPARATION (CLEARING AND GRUBBING)

- EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:
 - TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
 - FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

UTILITY LOCATION, TRENCHING & BACKFILL

- CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
- ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
- ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE, UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY. GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
- TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
- TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
- BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

RETAINING WALLS

- REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
- SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

GRADING

- EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IT SHALL BE STRIPPED OF ALL VEGETATION, TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL. THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL, THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
- EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
- SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
- NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
- THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- TABLE

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
RESIDENCE			
ACCESSORY STRUCTURE			
POOL/HARDSCAPE			
LANDSCAPE	49	0	VARIES
DRIVEWAY			
OFF SITE IMPROVEMENTS			
TOTAL	49	0	

- NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
- ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
- THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
- ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
- THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
- THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
- GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
- ALL DISTURBED AREA FOR THE PROJECT 380 SQUARE FEET.
- VOID NO.
- THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

TREE PROTECTION

- FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFERING WITH THE LIMITS OF GRADING FOR THE PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING:
 - FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES.
 - THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
 - FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
 - SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT THE PERMISSION OF THE COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT <http://www.sccplanning.gov>." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY.
- PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
- SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

ACCESS ROADS AND DRIVEWAYS

- DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT).
- ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
- THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
- ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
- ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC.

STREET LIGHTING

- PACIFIC GAS & ELECTRIC ELECTROLER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

SANITARY SEWER

- THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
- ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION IN WHICH INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

PORTLAND CEMENT CONCRETE

- CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. THE CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

GEOTECHNICAL ENGINEER OBSERVATION

- A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

- WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
- COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
- PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
- SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
- SWEEP STREETS (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
- ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR PROTECTION OF THE VEHICLE.
- ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
- ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
- POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HIGH, VISIBLE NEAR THE ENTRANCE OF A CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS: OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.

- 15 MILES PER HOUR (MPH) SPEED LIMIT
- 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
- TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAINT HOTLINE IS 1-800-334-6367
- ALL FILL SOILS SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
- ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
- ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SDB.
- ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & QUIT-ALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATORS SHALL BE INSTALLED AT ALL DITCH OUTFALLS, WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
- PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDING IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY REPORT SHALL BE SUBMITTED TO THE COUNTY ENGINEERING INSPECTOR.
- THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPs SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
 - PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
 - PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
- THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
- EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS, DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE AND SITUATIONALLY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

STORM DRAINAGE AND STORMWATER MANAGEMENT

- DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUATE AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAS000004 / ORDER NO. 2013-0001-DWG.
- DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
- WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
- UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
- THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

AS-BUILT PLANS STATEMENT

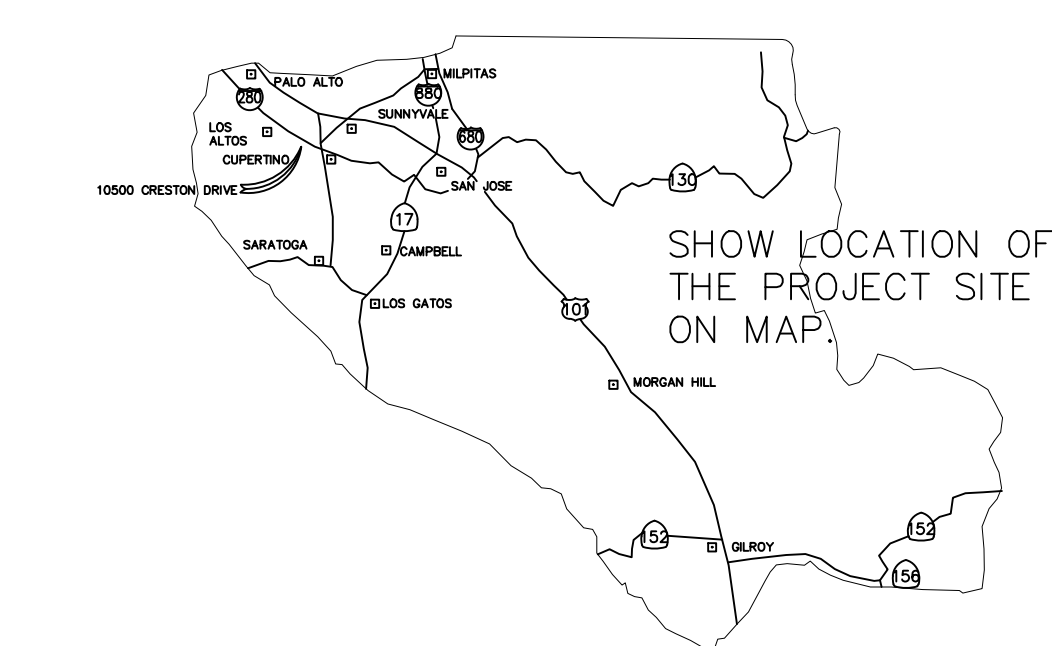
THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (____) WERE (____) WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (C). THERE (____) WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL A.

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPY OF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTER CONSTRUCTION.

COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

DATE _____ SIGNATURE _____
R.C.E. NO. _____ EXPIRATION DATE _____



COUNTY LOCATION
MAP

SURVEY MONUMENT PRESERVATION

- THE LANDOWNER / CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG OR OTHERWISE IDENTIFY WITH PAINT OR OTHER MARKINGS ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
- THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) IN THE SURFACE OF THE NEW CONSTRUCTION OR SET A WITNESS MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.

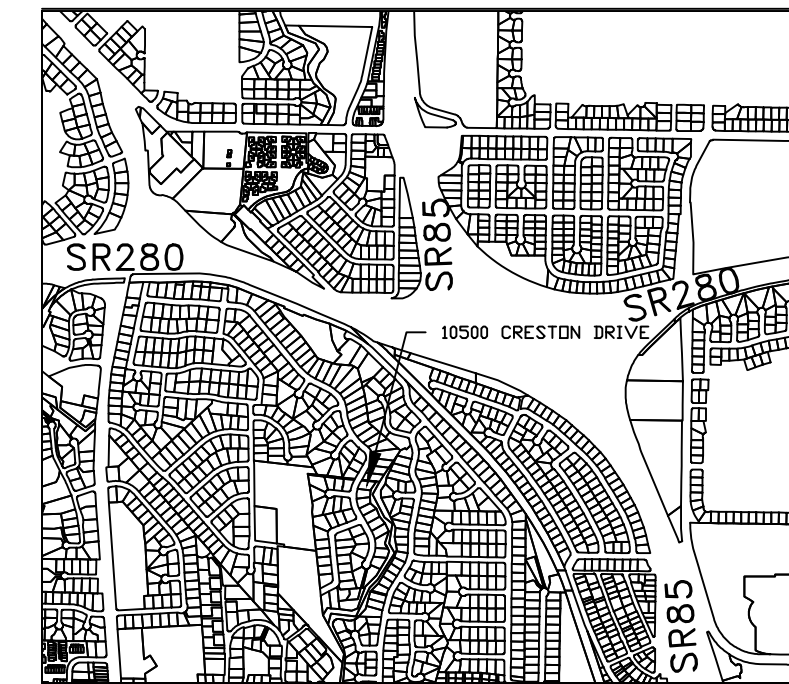
COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS
ISSUED BY: _____ DATE: _____
ENCROACHMENT PERMIT NO. _____

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

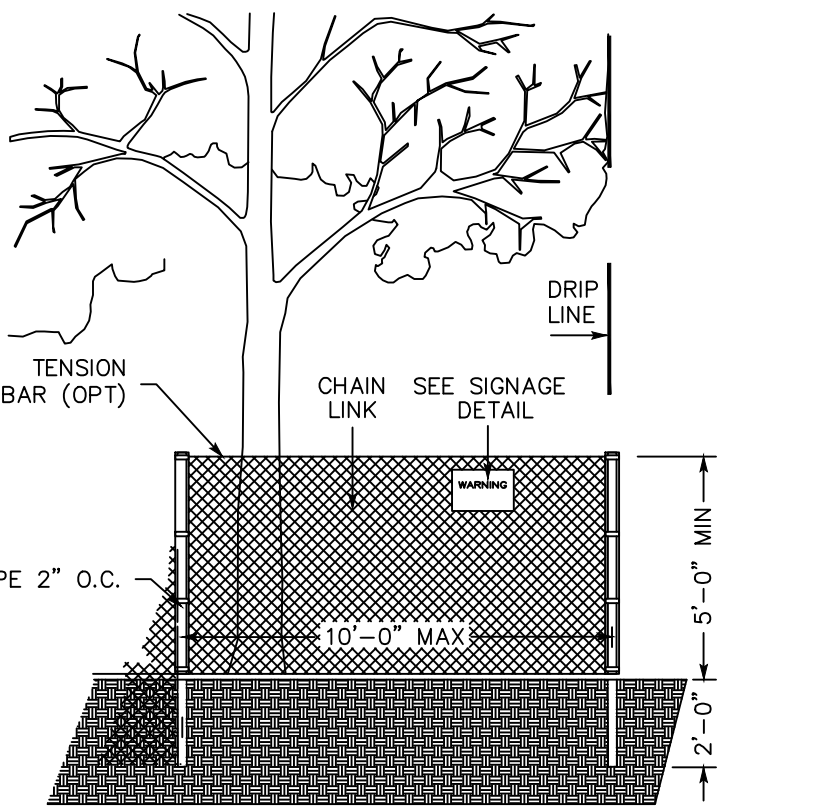
COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING
GRADING / DRAINAGE PERMIT NO. _____
ISSUED BY: _____ DATE: _____

BIOLOGICAL INFORMATION
TOP OF BANK DELINEATED BY MIG INC., 'GENERAL BIOLOGICAL RESOURCE ASSESSMENT' DATED OCTOBER 2019 PROJECT NO. 16710

RESTORATION ENGINEER / GEOMORPHOLOGIST
STILLWATER SCIENCES
2855 TELEGRAPH AVENUE, SUITE 400,
BERKELEY, CA 94705
CHRIS LYLE



VICINITY MAP



EXISTING TREE PROTECTION DETAILS

- PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.
- FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
- FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
- TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL INSPECTION.
- A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

- PERMITEE SHALL COMPLY WITH THE CONDITIONS AND REPORTING REQUIREMENTS WATER BOARD PER WDD#2CWA41144

SHEET INDEX

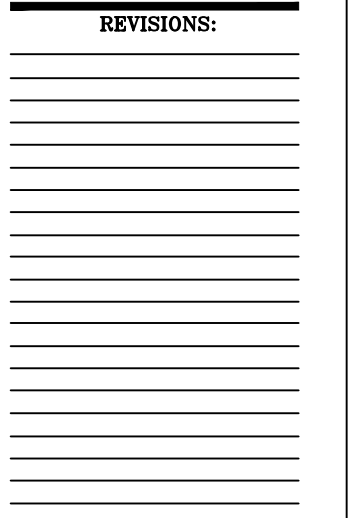
C1	COVER SHEET
C2	BOUNDARY/TOPO SURVEY (BY OTHERS)
C3	DEMOLITION
C4	EARTHWORK
C5, C6	SECTIONS
	EROSION CONTROL (BMP-1, BMP-2)
	PLANTING PLAN (BY OTHERS)
	PLANTING AND SEEDING SPECIFICATIONS (BY OTHERS)
	HABITAT MITIGATION, MONITORING AND REPORTING PLAN (BY OTHERS)

ENGINEER'S NAME: ROBERT SCHNEIDER
ADDRESS: 3111 CARRIKER LANE, SOQUEL, CA 95073
PHONE NO. 831.295.7631



Revision 1	Date	APN	Sheet
Revision 2	Date	326-12-057	1 of
Revision 3	Date	Co. File	6





SUBMITTALS	DATE:	INTT.
FIRST	☐ 10/30/2019	
SECOND	☐ 12/31/2019	
THIRD	☐ _____	
FOURTH	☐ _____	

DRAWN BY: _____

DESIGNED BY:

CHECKED BY: _____ **DATE:** _____

APPROVED BY: _____ DATE: _____



10500 Creston Drive
Los Altos, CA 94024

EARTHWORK &

IMPROVEMENTS

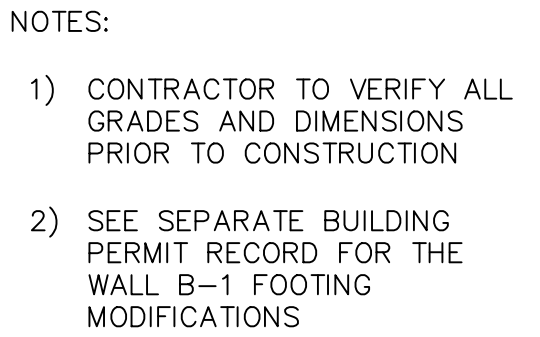
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04/22/2022

PROJECT ID.:
2018_027

DRAWING NO.:

C4

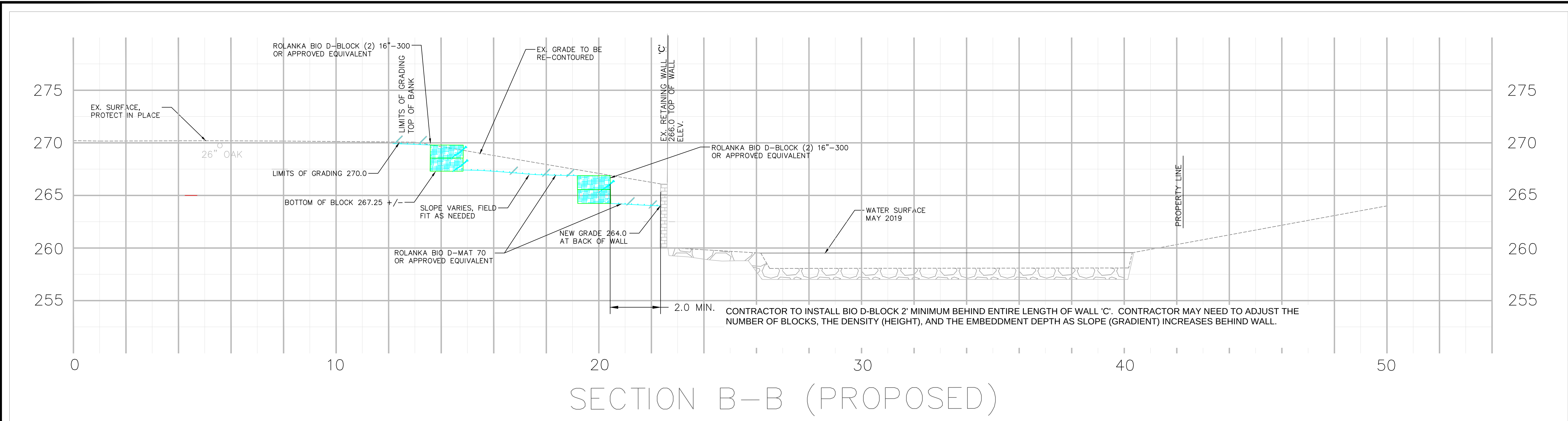
SHT 4 OF 6



	AREA OF <u>DISTURBANCE</u>	LANDSCAPE <u>AREA</u>
WALL A	360 SF	360 SF NEW
WALL C	170 SF	0 SF EXISTING OR NEW
WALL B-1*	165 SF	110 SF EXISTING, 0 SF NEW

* SEE BUILDING PERMIT

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3111 Carriker Lane
Soquel, Ca 95073
831-295-7631
www.dalveoengineeringandconsulting.com

[illegible]

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GRID

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DESIGNED BY: _____

CHECKED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____



TITLE:

10500 Creston Drive
Los Altos, CA 94024
Grading Abatement Plan

SECTIONS

DATE:
04/22/2020

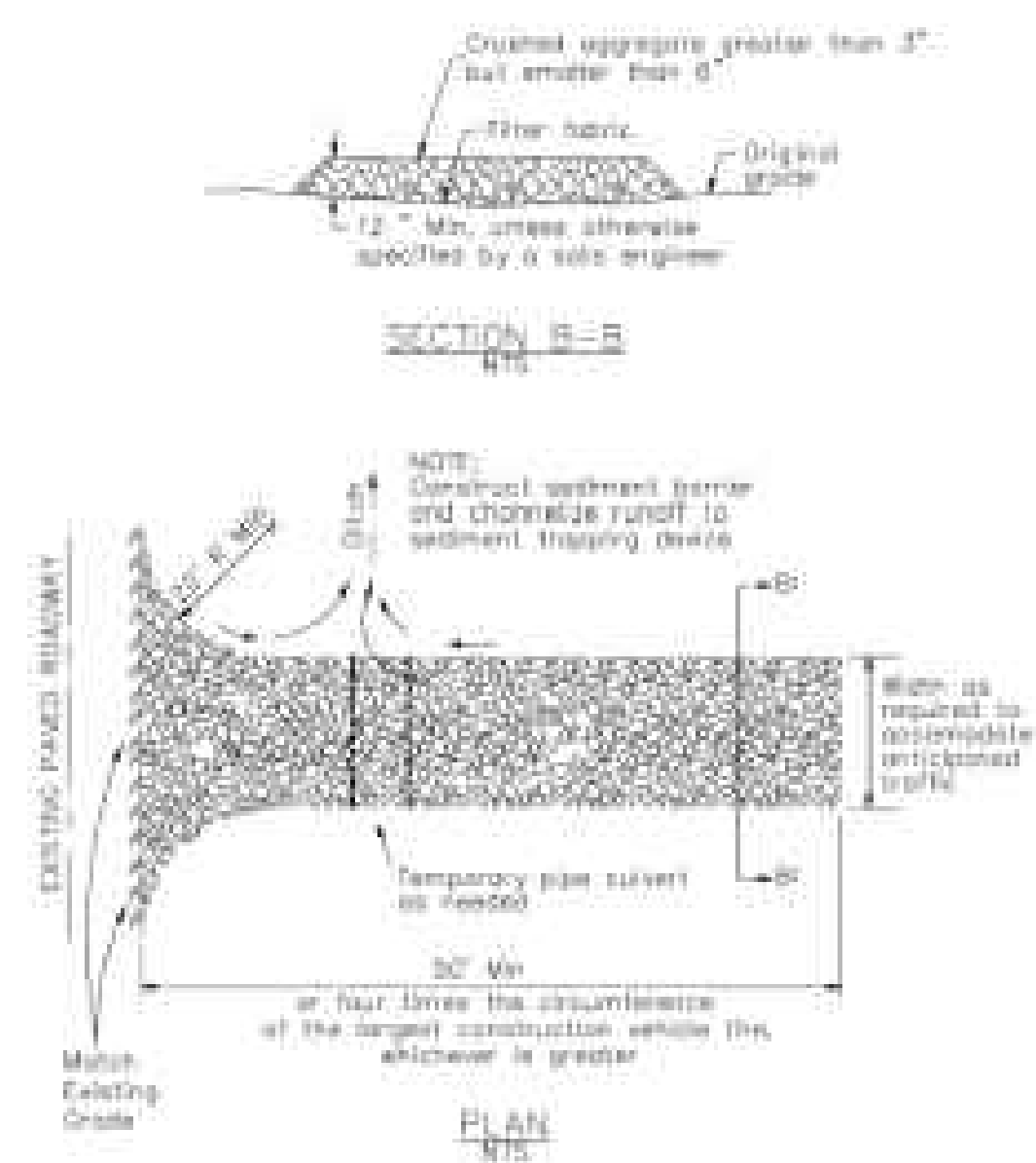
PROJECT ID.:
2018_027

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C6

SHT 6 OF 6

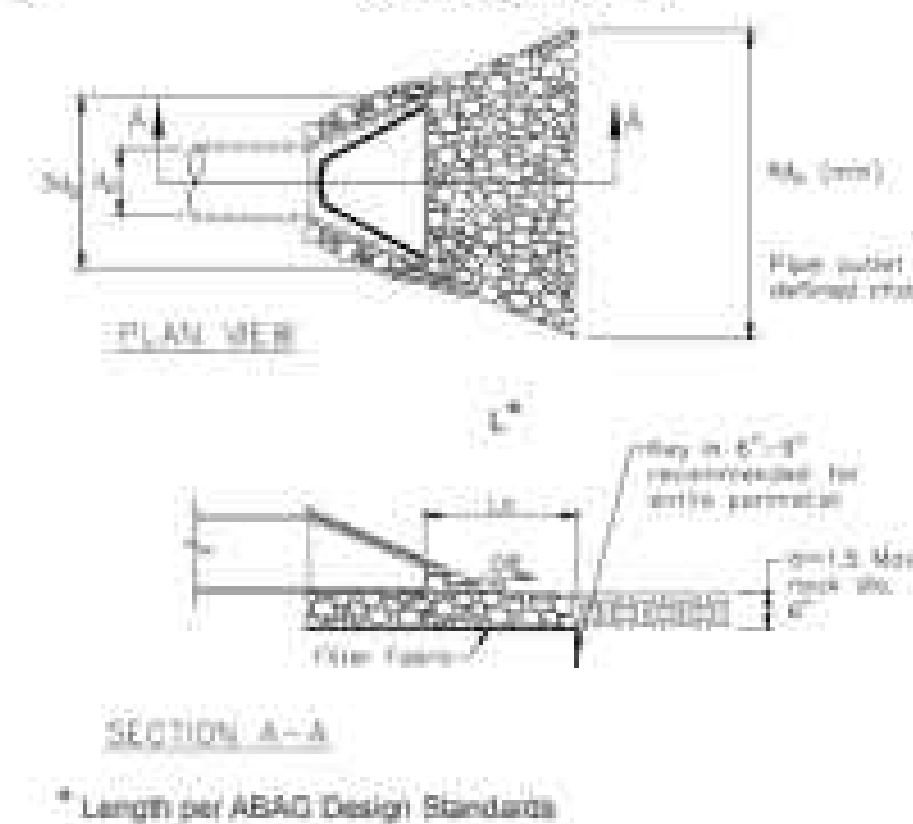
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



4 Velocity Dissipation Devices

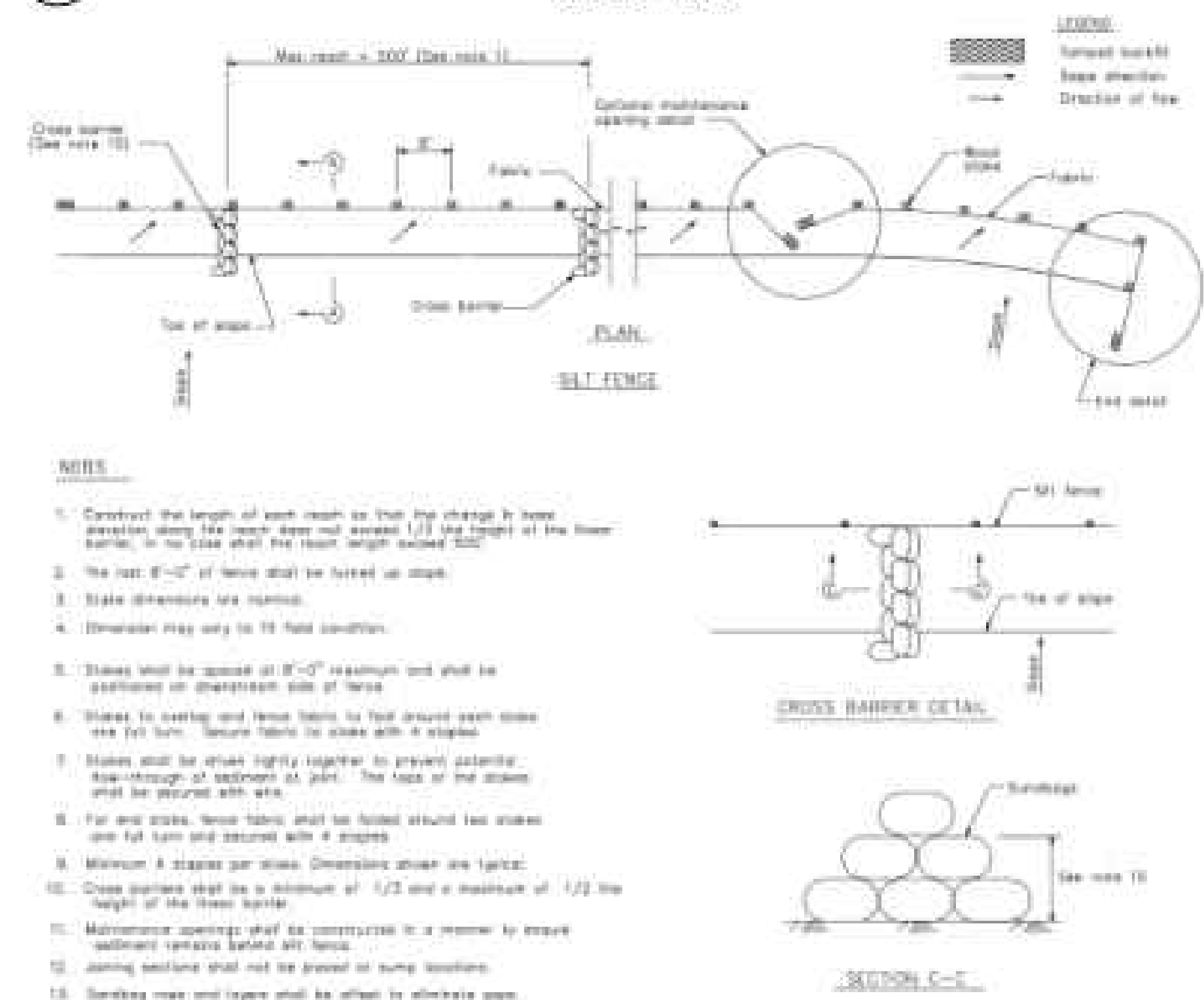
CASQA Detail EC-10



Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

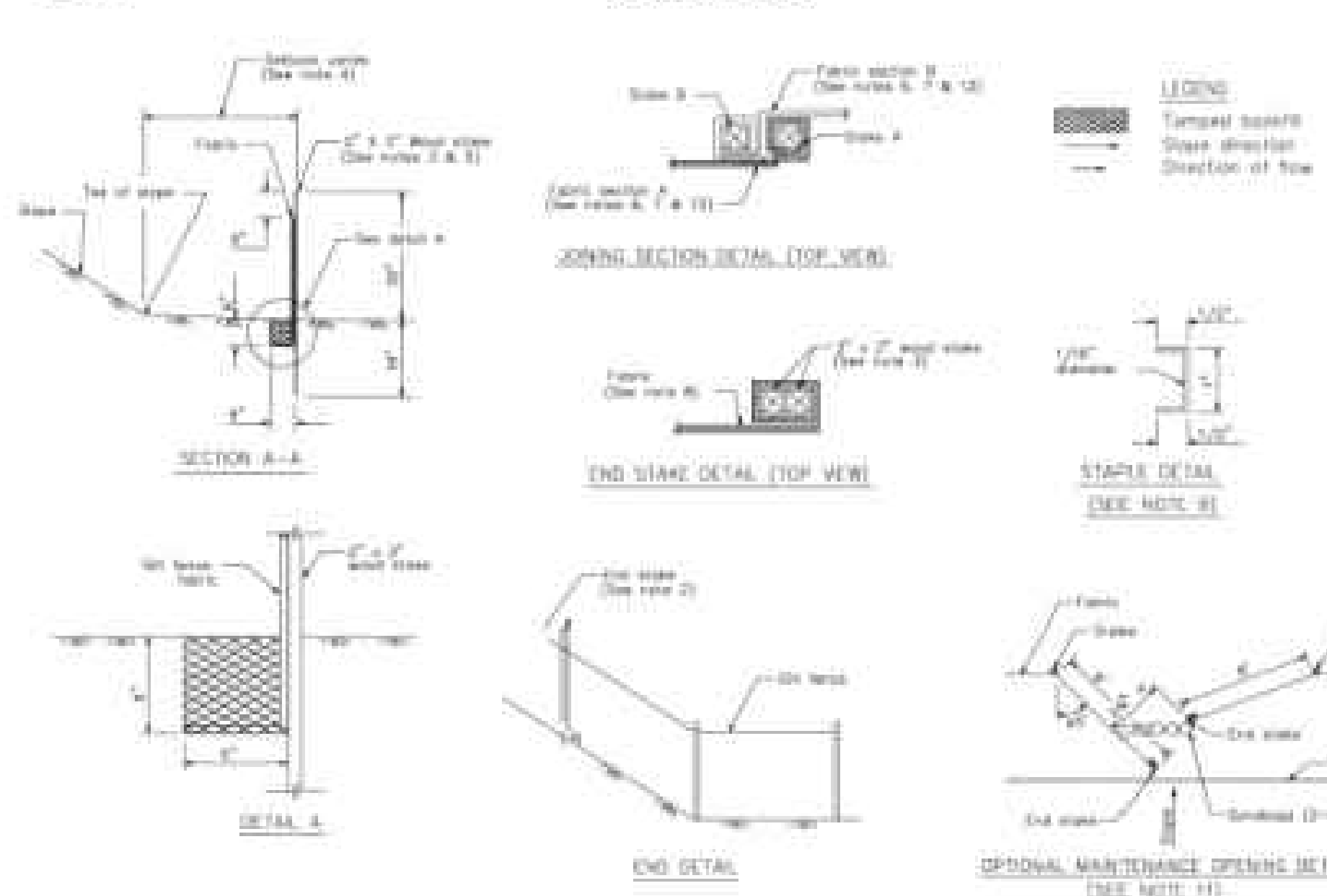
1 Silt Fence

CASQA Detail SE-1



2 Silt Fence

CASQA Detail SE-1



STANDARD BEST MANAGEMENT PRACTICE NOTES

- Solid and Detention Waste Management:** Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-8) or latest.
- Hazardous Waste Management:** Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material handler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
- Spill Prevention and Control:** Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-11 to C-14) or latest.
- Vehicle and Construction Equipment Service and Storage:** An area shall be designated for the maintenance, where outside maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-9) or latest.
- Material Delivery, Handling and Storage:** In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with sealed plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- Excavation and Disposal of Concrete and Cement:** When concrete trucks and equipment are washed on site, concrete washwater shall be contained in designated containers or in a temporary lined and watertight pit where washed concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
- Paving Construction Management:** Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
- Contaminated Soil and Water Management:** Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediation of contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
- Sanitary/Septic Water Management:** Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste handlers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
- Inspection & Maintenance:** Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

- Sediment Control Management:**
 - Tracking Prevention & Clean Up:** Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-11 to B-13) or latest.
 - Storm Drain Inlet and Catch Basin Inlet Protection:** All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber rolls or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.
 - Storm Water Runoff:** No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above-ground watercourses until appropriate erosion control measures are fully installed.
 - Dust Control:** The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.
 - Stockpiling:** Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures (tarp, straw bales, silt fences, etc.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
- Erosion Control:** During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- Inspection & Maintenance:** Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plan must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- Project Completion:** Prior to project completion and sign-off by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
- It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- Erosion and sediment control best management practices shall be operable year-round or until vegetation is fully established on landscaped surfaces.

Project Information

REVISIONS:

NO.	DATE	INT.
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SCALE:

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DRAWN BY:

DESIGNED BY:

CHECKED BY: DATE:

APPROVED BY: DATE:



TITLE:

10500 Creston Drive
Los Altos, CA 94024
Grading Abatement Plan

EROSION

CONTROL

DATE:

04/22/2020

PROJECT ID:

2018_027

DRAWING NO.:

EC-1

SHEET - OF -

Best Management Practices and Erosion Control Details Sheet 1

County of Santa Clara



BMP-1

REVISIONS:

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THIRD		☐
FOURTH		☐

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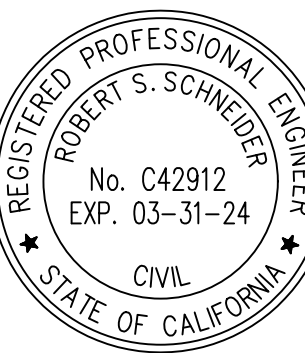
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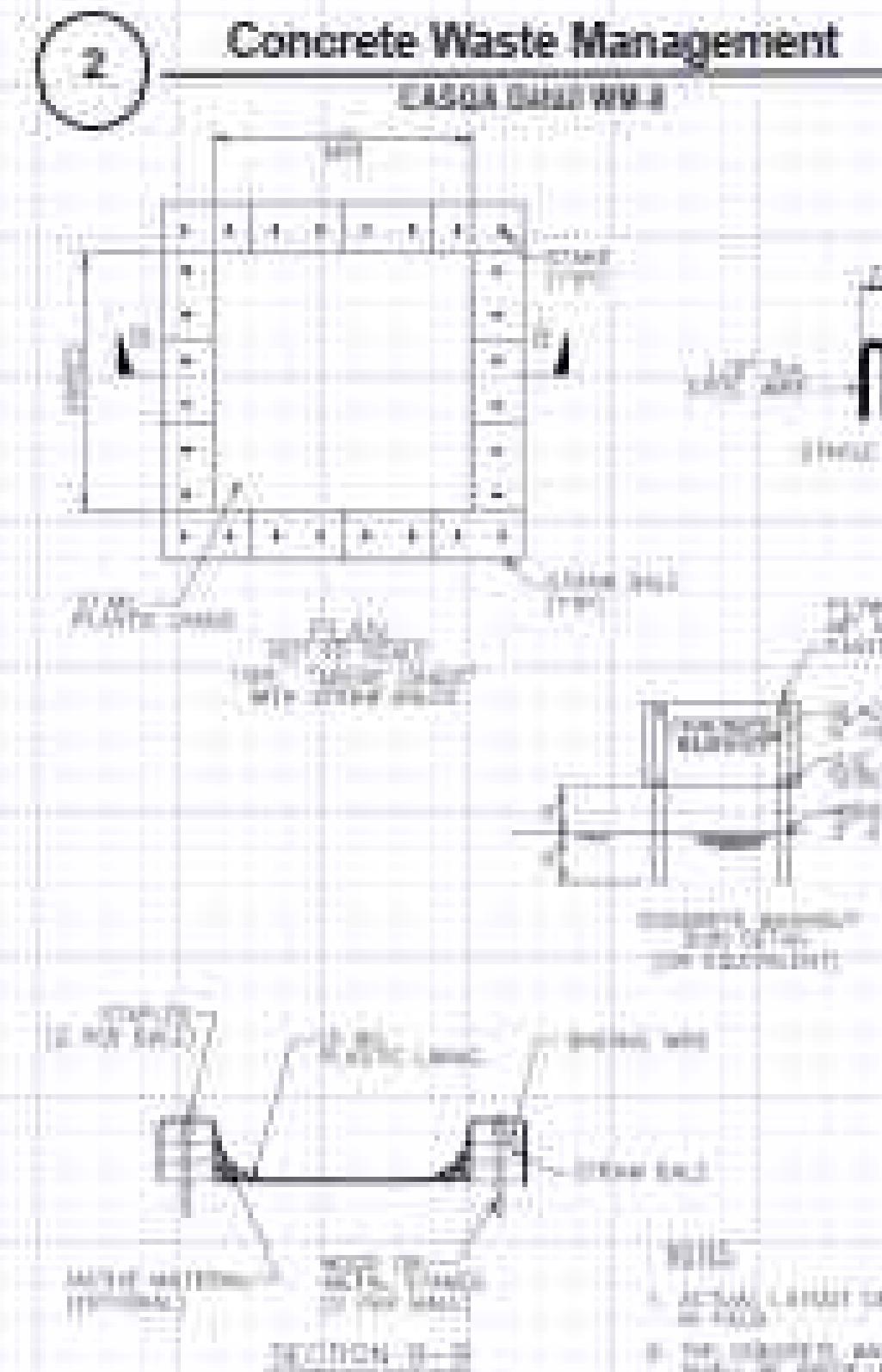
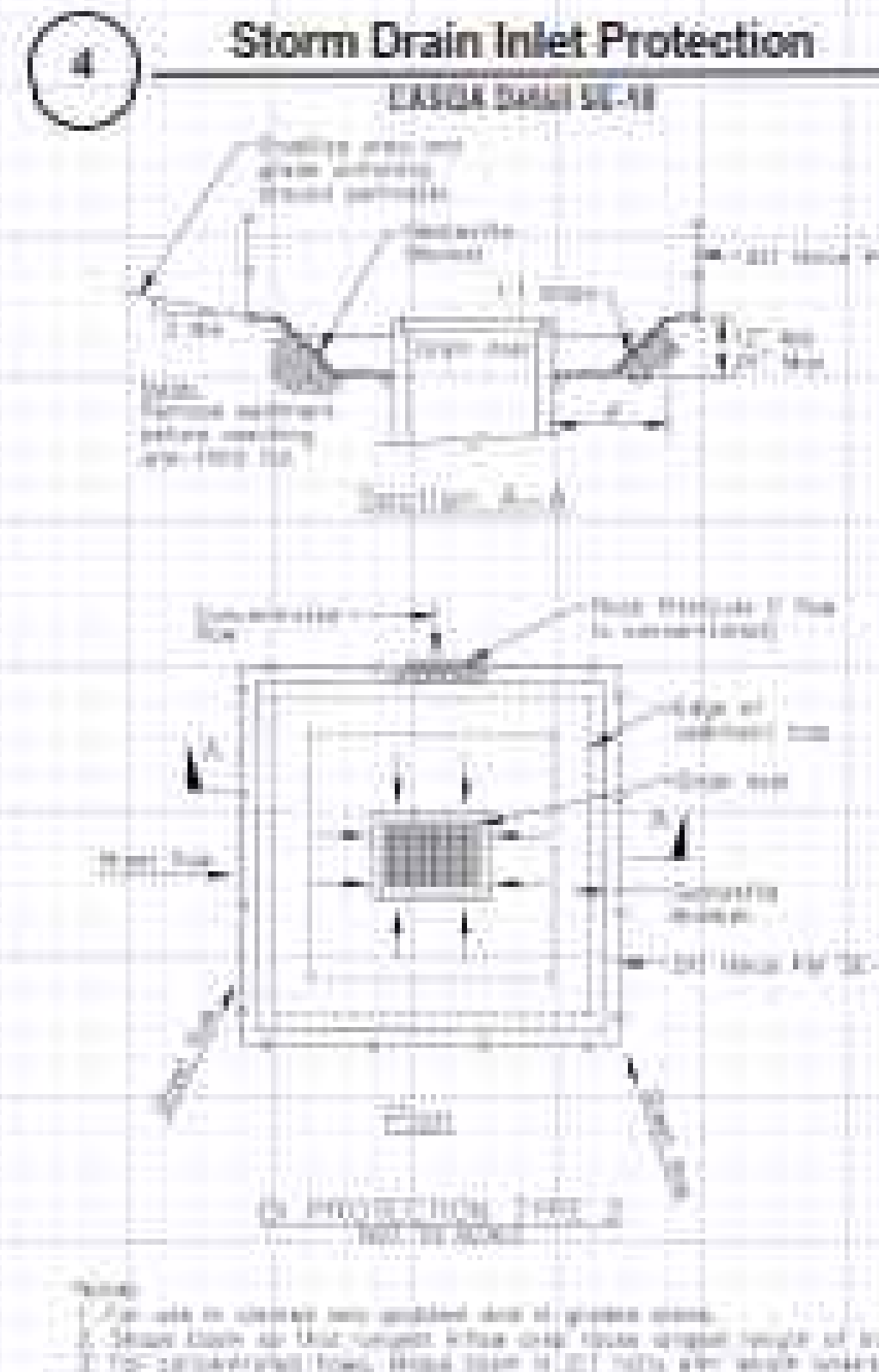
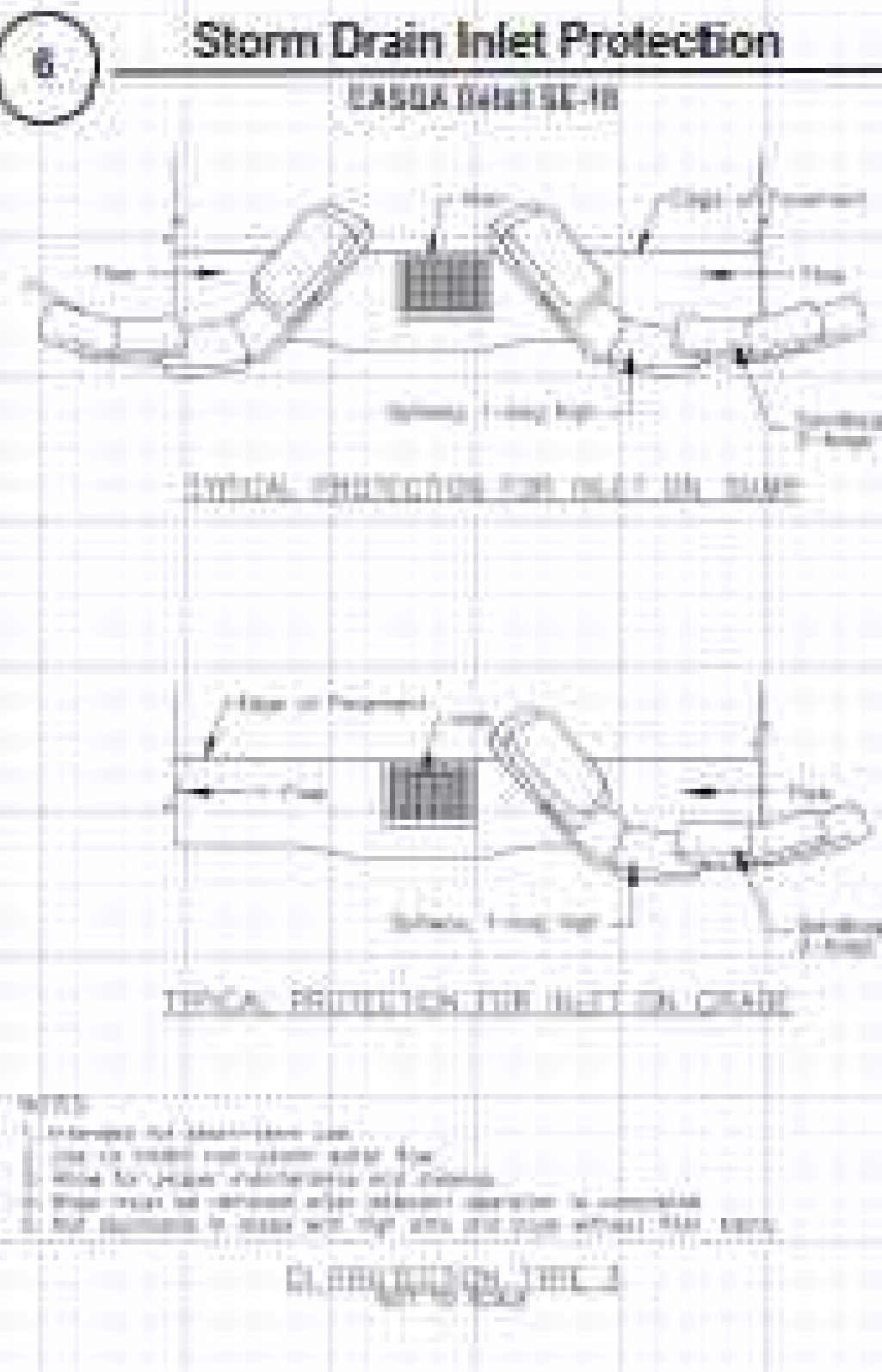
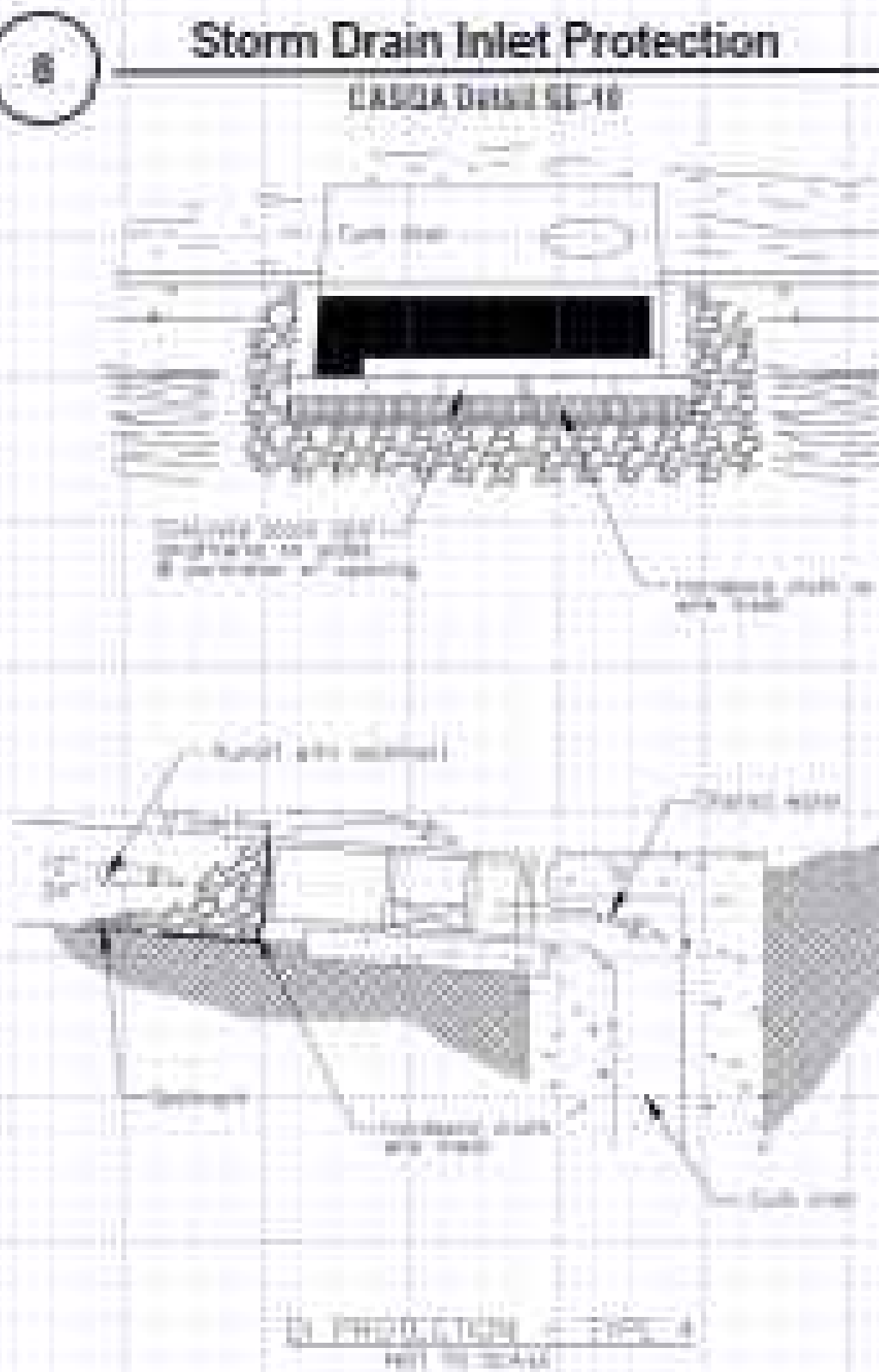
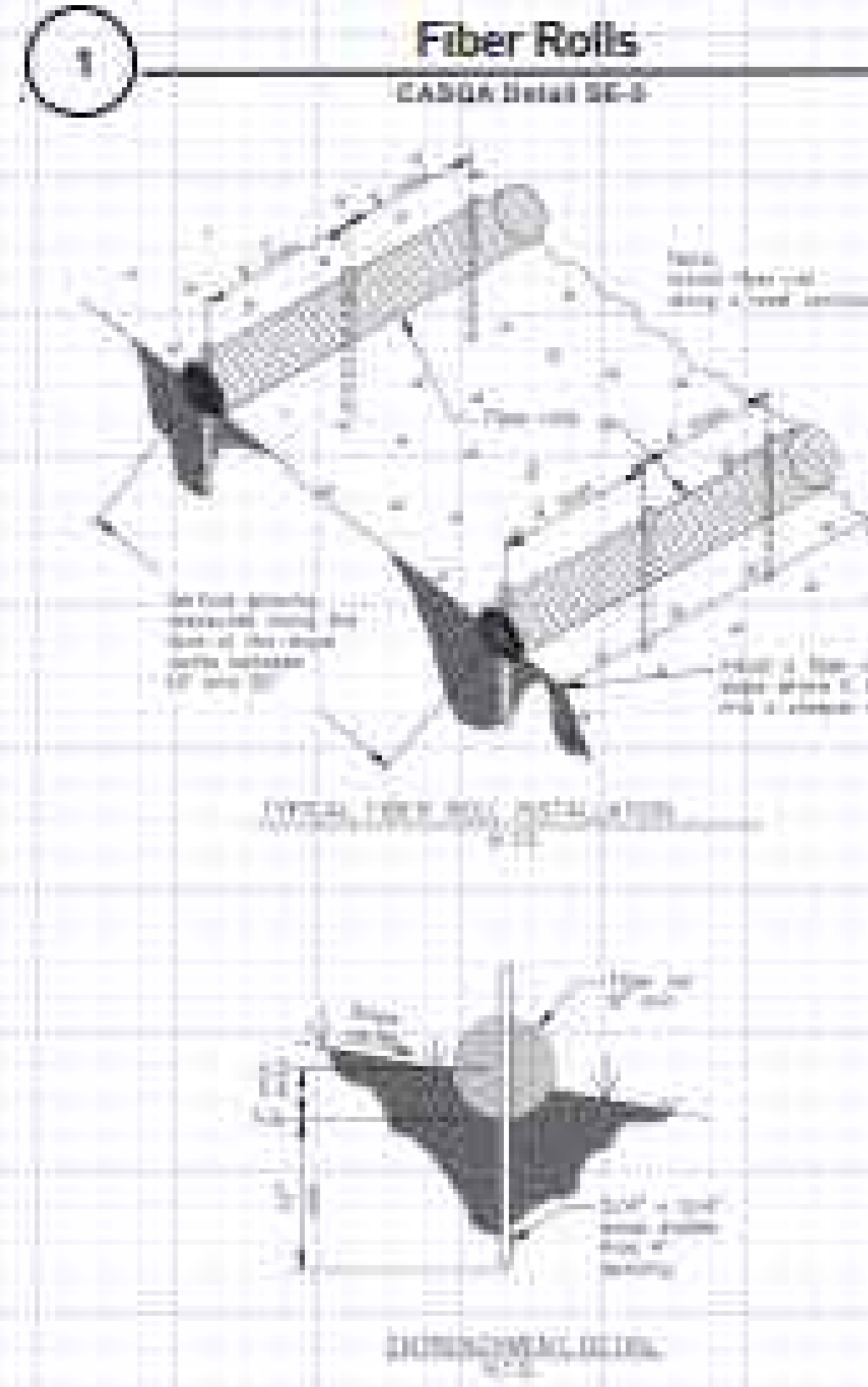
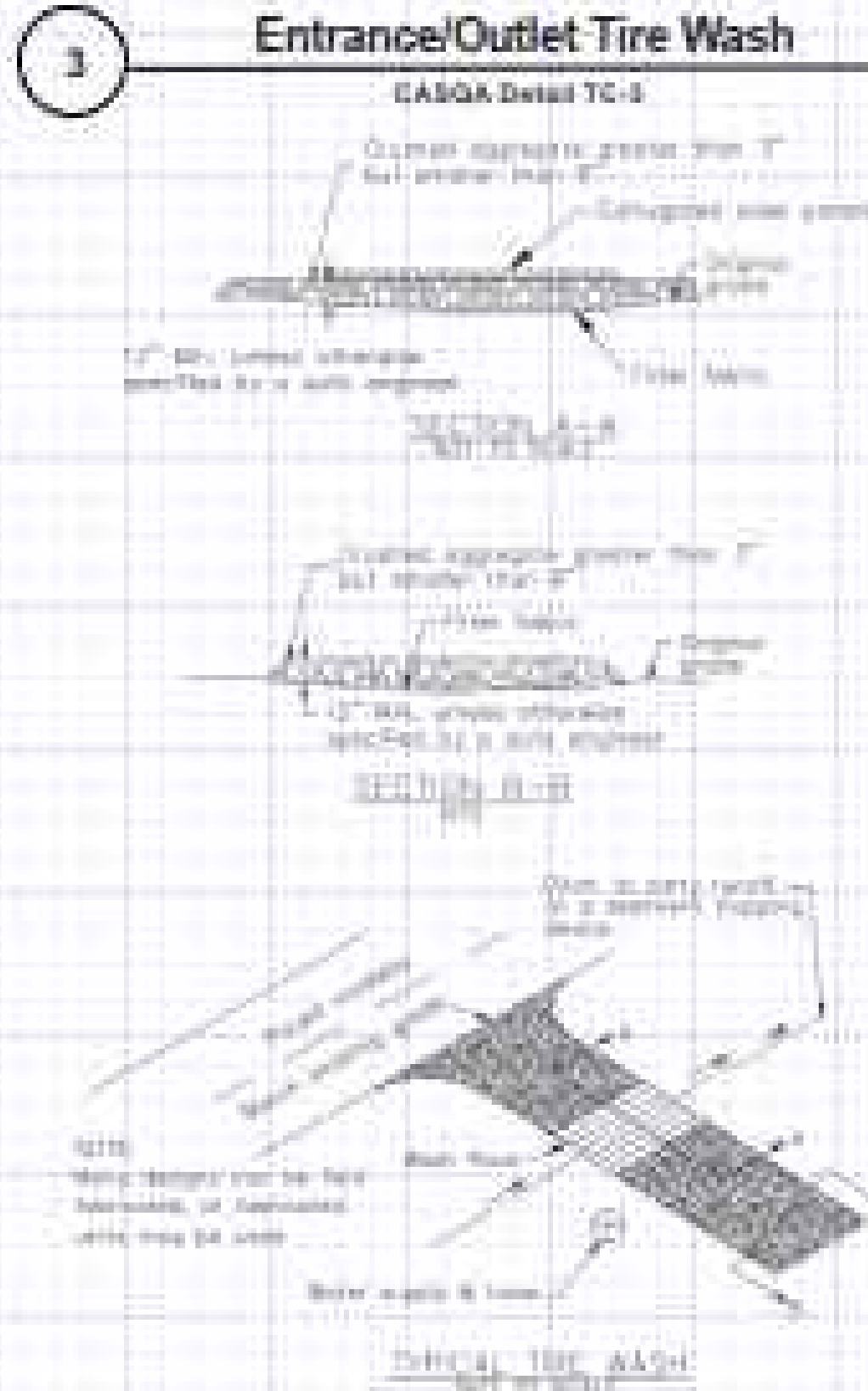
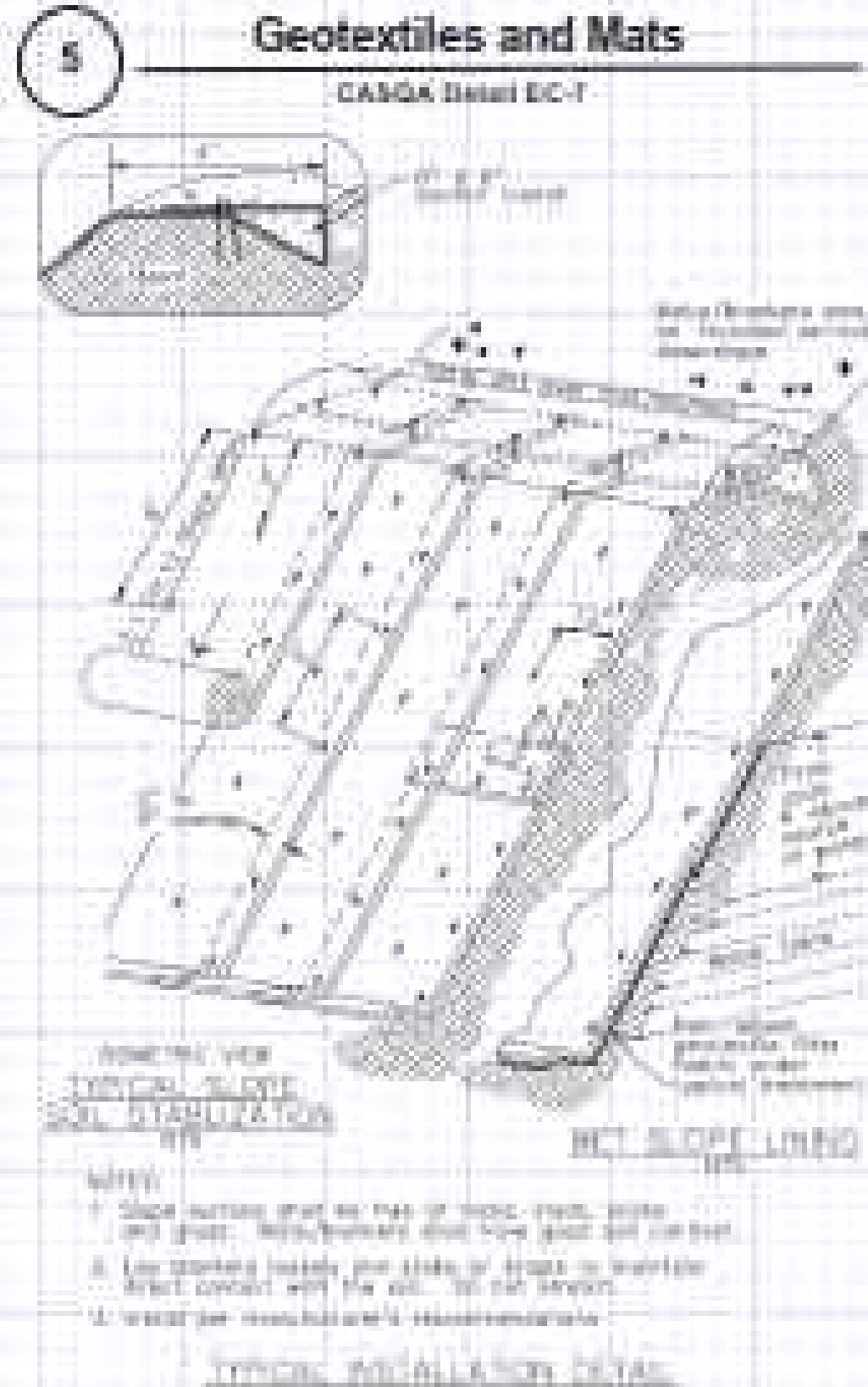
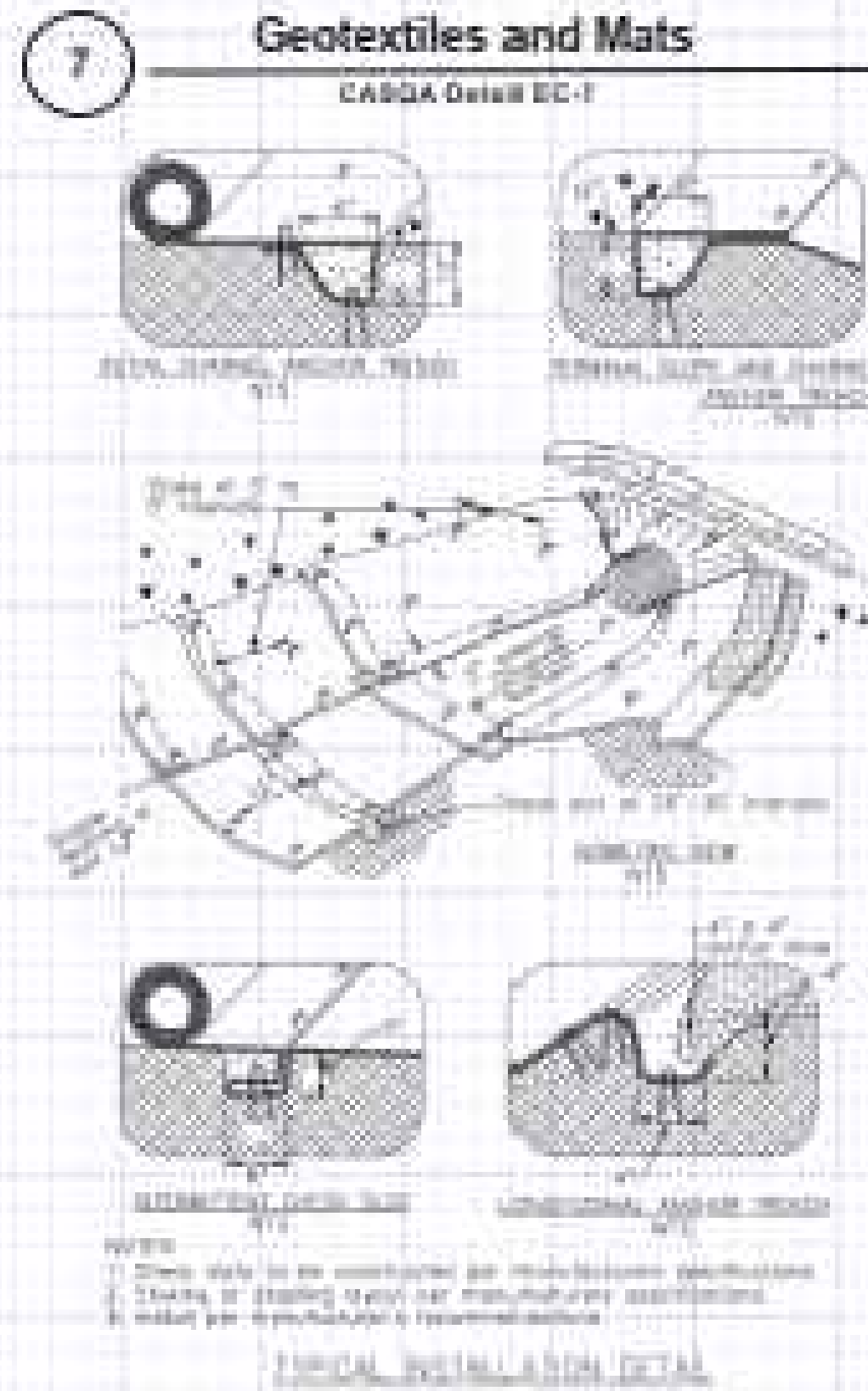
10500 Creston Drive
Los Altos, CA 94024
Grading Abatement Plan

EROSION

CONTROL

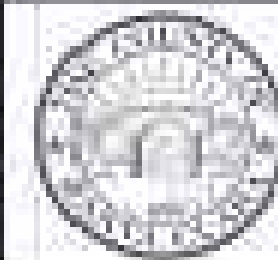
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PROJECT ID:	2018_027
DRAWING NO.:	EC-1
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Project Information

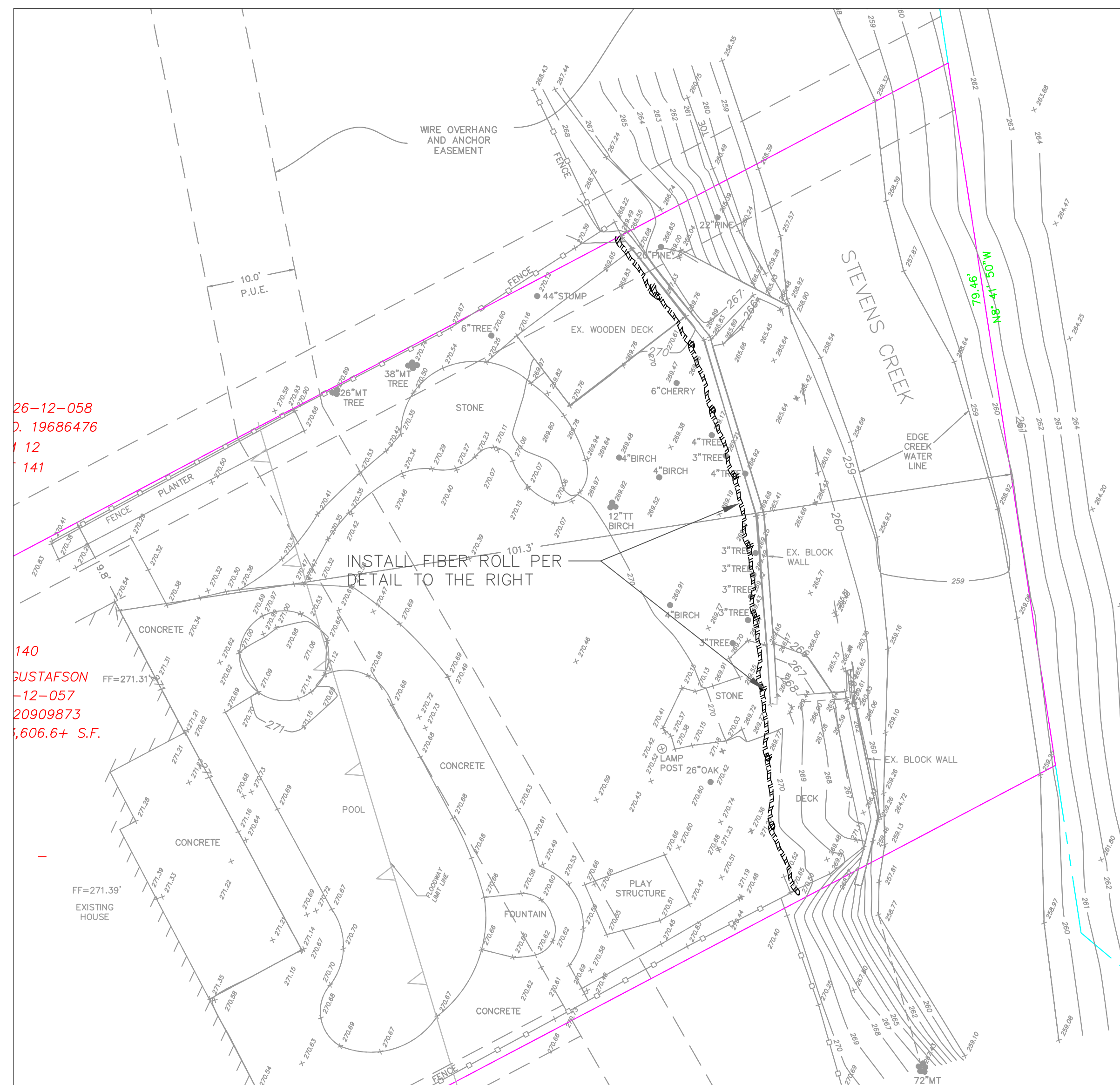


Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2005. Available from www.csbmphandbook.com.

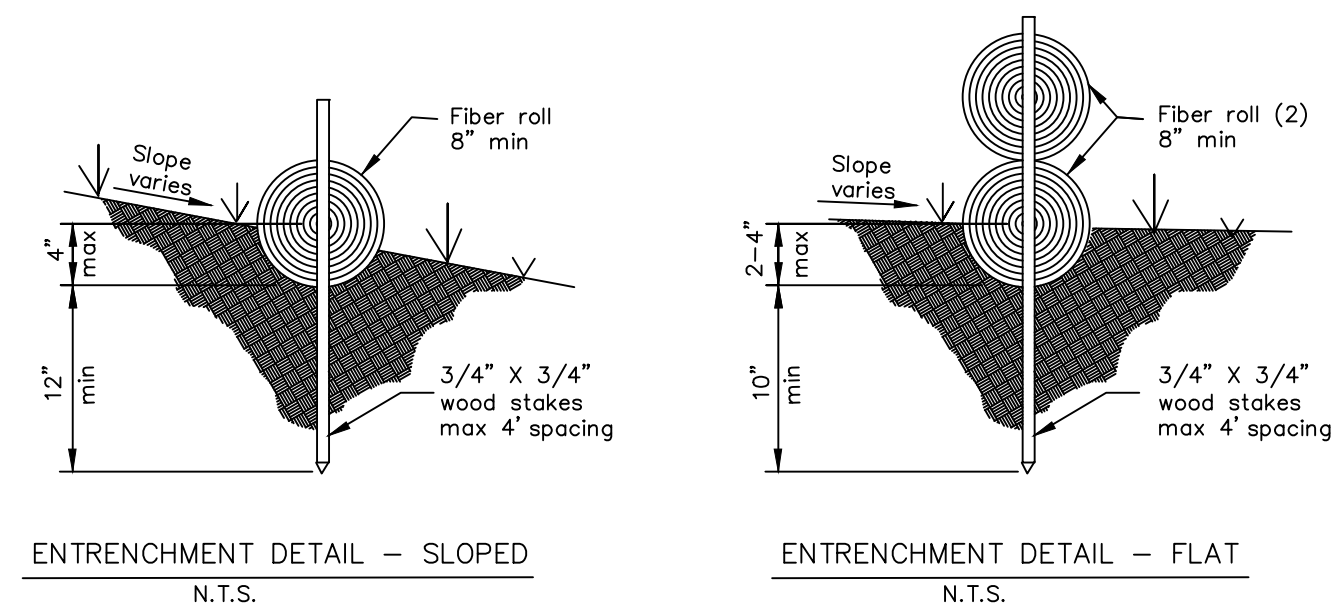
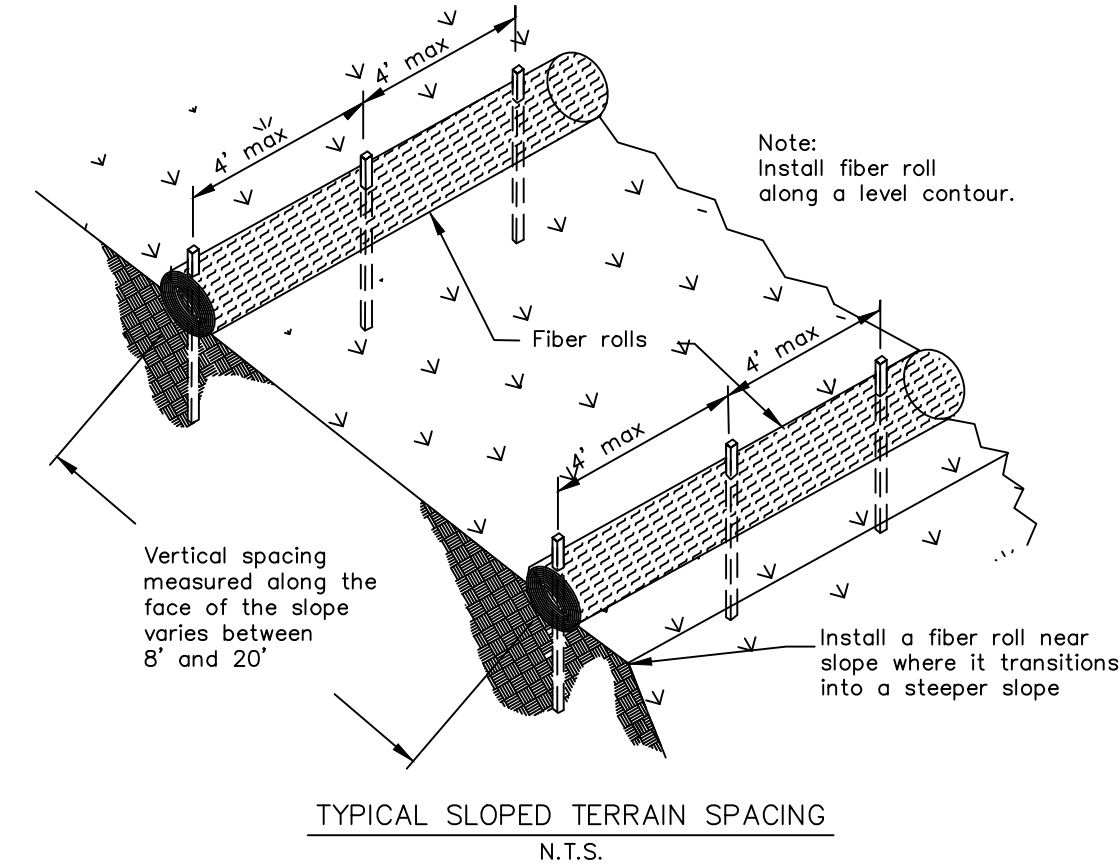
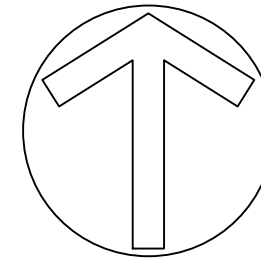
Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara



BMP-2



EROSION CONTROL PLAN



- NOTES:
1. INSTALL FIBER ROLL FROM BOTTOM OF SLOPE UP.
 2. ADJACENT FIBER ROLLS SHOULD OVERLAP.
 3. INSTALL LOCATIONS AS SHOWN ON PLANS, IMPROVISE AS NEEDED.
 4. USE WOODEN STAKES AS SHOWN.

1 FIBER ROLL N.T.S.



Delve
Engineering
& Consulting

3111 Carriker Lane
Soquel, Ca 95073
831-295-7631
www.delveengineeringandconsulting.com

REVISIONS:

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SUBMITTALS	DATE:	INT.
FIRST	☐	_____
SECOND	☐	_____
THIRD	☐	_____
FOURTH	☐	_____

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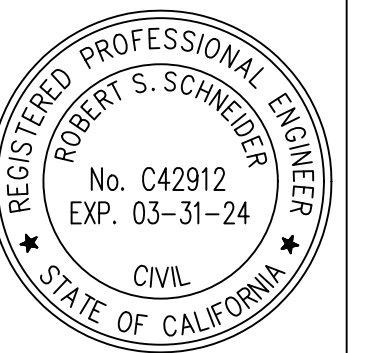
$$\underline{1'' = 10'}$$

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DESIGNED BY:

CHECKED BY: _____ **DATE:** _____

APPROVED BY: _____ DATE: _____



TITEL:

10500 Creston Drive
Los Altos, CA 94024
Grading Abatement Plan

EROSION

CONTROL

DATE: _____

04/22/2020

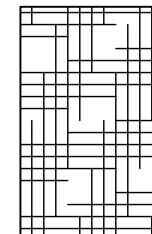
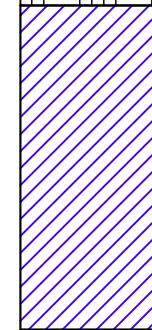
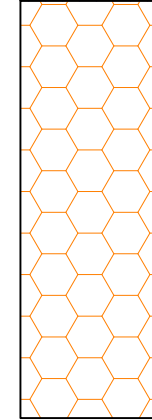
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2018_027

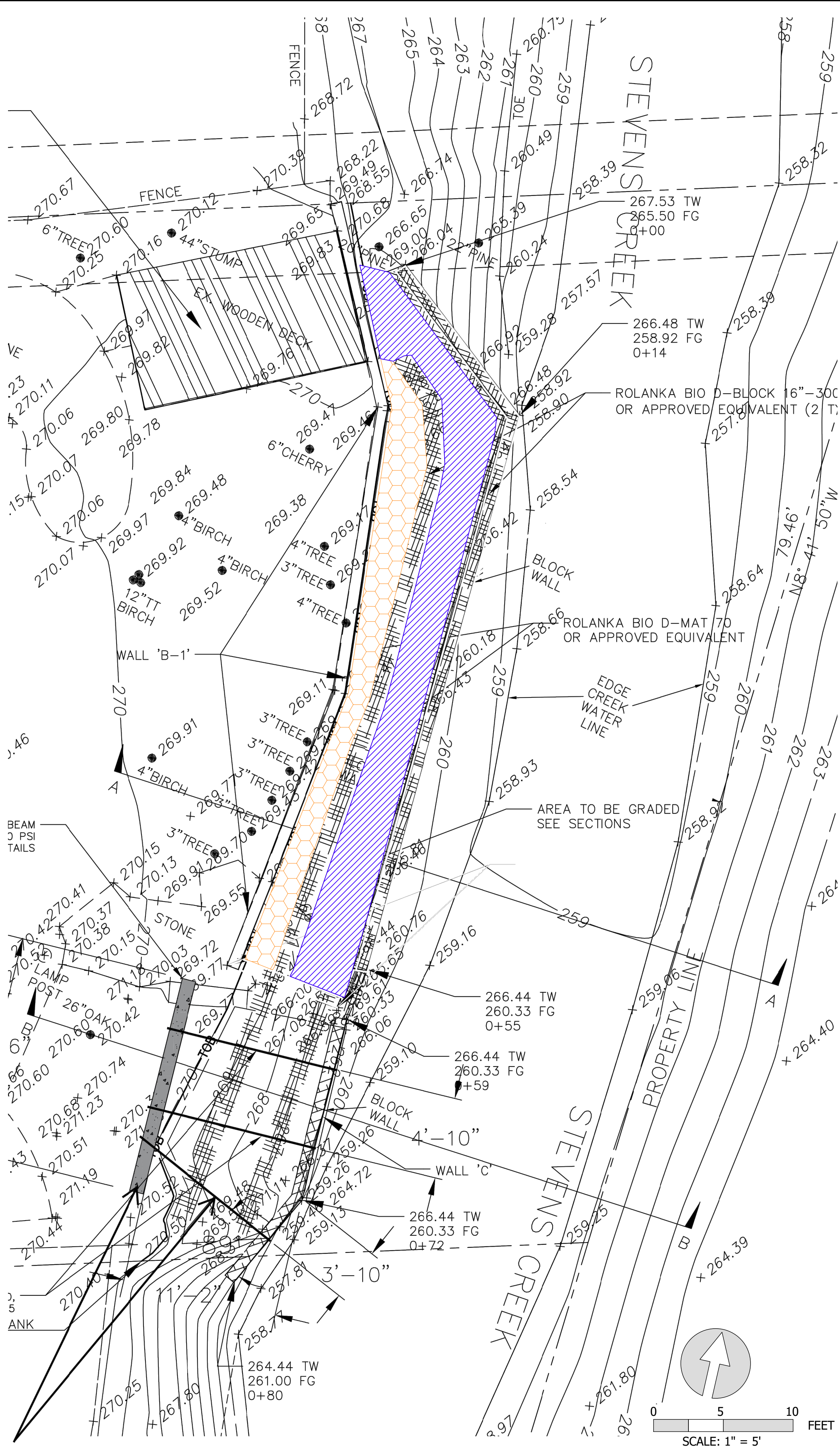
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EC-3

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	Planting Zone	Area of Planting Zone (acres)	Scientific Name	Common Name	Life Form	Container plant size	Average Spacing (feet on-center)	Percent Fill	Number of Plants	Plant Factor	Irrigation Method
	Coir Staking	0.009	Salix exigua	narrow-leaved willow	shrub or small tree	cutting	3	15%	6	n/a*	hyporheic exchange (no irrigation)
		0.009	Salix laevigata	red willow	tree	cutting	3	25%	11		
		0.009	Salix lasiandra	Pacific willow	shrub or small tree	cutting	3	25%	11		
		0.009	Salix lasiolepis	arroyo willow	shrub or small tree	cutting	3	35%	15		
			Total Willow Stakes					100%	43		
	Lower Terrace	0.004	Acer negundo	box elder	tree	container (≥ deepot 40)	6	50%	2	0.4	Temp. Auto Sprinkler
		0.004	Baccharis salicifolia	mule fat	shrub	container (≥ deepot 16)	3	15%	3	0.05	Temp. Auto Sprinkler
		0.004	Cornus sericea	American dogwood	shrub	container (≥ deepot 16)	3	20%	4	0.7	Temp. Auto Sprinkler
		0.004	Physocarpus capitatus	ninebark	shrub	container (≥ deepot 16)	3	15%	3	0.075	Temp. Auto Sprinkler
			Total Lower Terrace Tree/Shrubs					100%	12		
		0.004	Juncus patens	spreading rush	perennial herb	plug	3	65%	12	0.1	Temp. Auto Sprinkler
	Upper Terrace		Total Lower Terrace Container Herbaceous Plants					65%	12		
		0.002	Acer macrophyllum	big-leaf maple	tree	container (≥ treeband 4)	6	20%	1	0.2	Temp. Auto Sprinkler
		0.002	Aesculus californica	California buckeye	tree	container (≥ deepot 40)	6	20%	1	0.1	Temp. Auto Sprinkler
		0.002	Rubus parviflorus	thimbleberry	shrub	container (≥ deepot 16)	3	40%	4	0.1	Temp. Auto Sprinkler
			Total Upper Terrace Tree/Shrubs					80%	6		
		0.002	Artemisia douglasiana	mugwort	perennial herb	plug	2	25%	6	0.1	Temp. Auto Sprinkler
		0.002	Clematis ligusticifolia	Creek clematis	woody vine	container (≥ deepot 16)	3	25%	3	0.3	Temp. Auto Sprinkler
		0.002	Elymus triticoides	beardless wild-rye	annual to perennial herb	plug	2	25%	6	0.1	Temp. Auto Sprinkler
		0.002	Scrophularia californica	California figwort	perennial herb	container (≥ deepot 16)	3	25%	3	0.1	Temp. Auto Sprinkler
			Total Upper Terrace Container Herbaceous Plants					100%	18		

*Note: Temporary automatic sprinklers will be used to establish new planting but will be removed within the first ~3-years depending on water year type, plant survival and health. Also, all staked cuttings end root will be installed at or below ordinary high water so will not need additional irrigation.



10500 CRESTON DRIVE,
LOS ALTOS, CA 94024

SANTA CLARA COUNTY, CA

Stillwater Sciences

2855 TELEGRAPH AVENUE, SUITE 400
BERKELEY, CA 94705

P: (510) 848-8098



PROJECT NUMBER: 859.00

SCALE: AS NOTED

DATE: 1/14/2022

DESIGN: CL

DRAWN: CL

CHECKED: MK

APPROVED: ----

PLANTING PLAN

DEV21-2546

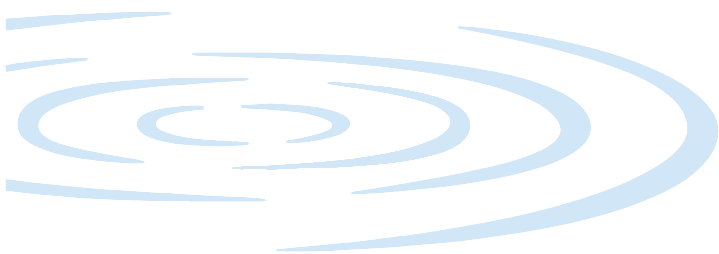
SHEET 1 OF 2

10500 CRESTON DRIVE,
LOS ALTOS, CA 94024

SANTA CLARA COUNTY, CA

Stillwater Sciences

2855 TELEGRAPH AVENUE, SUITE 400
BERKELEY, CA 94705 P: (510) 848-8098



PROJECT NUMBER: 859.00

SCALE: AS NOTED

DATE: 1/14/2022

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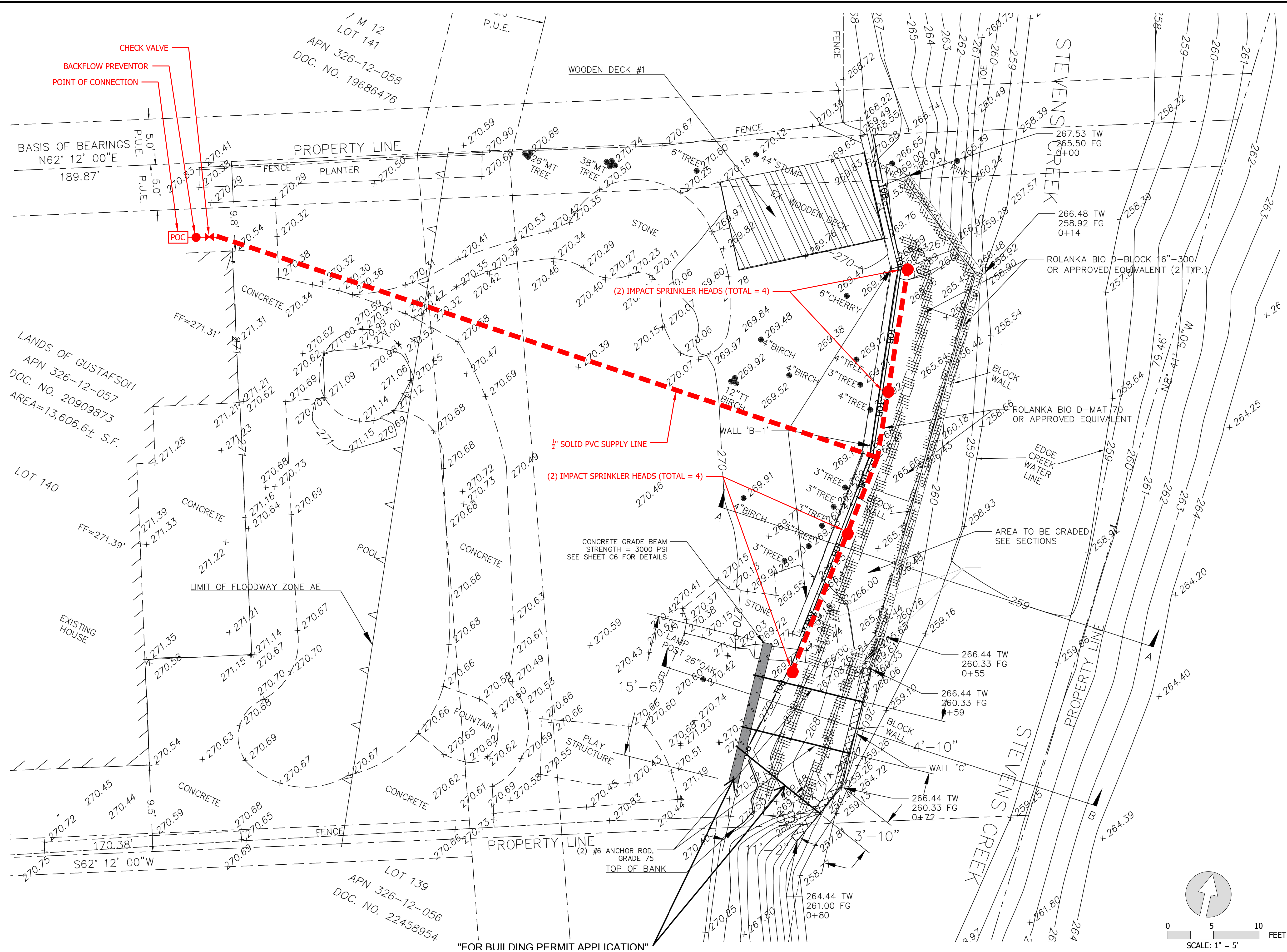
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IRRIGATION PLAN

DEV21-2546

SHEET 2 OF 2



Planting and Seeding	Planting and Seeding	Planting and Seeding	Planting and Seeding
PLANTING AND SEEDING SPECIFICATIONS PART 1 GENERAL 1.01 PROJECT A. The specifications below have been developed specifically for the implementation of the Stevens Creek Wall Mitigation Project (Project) at 10500 Creston Drive, Los Altos, California 94024. 1.02 PARTIES A. Contractor 1. The selected Contractor shall implement the Project according to the specifications contained herein. B. Construction Manager 1. The Construction Manager is the landowner, Michael Gustafson, or his representative, MIG, Inc. C. County 1. Representatives of Santa Clara County may require or request input or reporting on items specified below. 1.03 DESCRIPTION A. This section covers the contract item for Planting and Seeding. B. The work described in this section shall be performed in designated planting areas shown on the Drawings and shall include: 1. Site preparation, 2. Plant material procurement, delivery, storage, and installation, including container plants, plugs, and pole cuttings, 3. Seedbed preparation and seeding of all areas shown on the contract drawings, 4. Maintenance during the installation period, and 5. Cleanup. 1.04 REFERENCES 1	A. The following publications form a part of this specification to the extent referenced: 1. Grading Abatement Permit and Plan. 10500 Creston Drive, Los Altos, CA 94024. Design Plans. Delve Engineering. 2019. 2. Guidelines and Standards for Land Use Near Streams. Valley Water. 2006. 3. American National Standards Institute (ANSI) – ANSI Z60.1 (2004), Nursery Stock. 4. Swiecki, T., and E. Bernhardt. 2016. CNPS Best Management Practices (BMPs) for Producing Clean Nursery Stock. 5. Swiecki, T., and E. Bernhardt. 2016. Phytosanitary Procedures for CNPS BMPs for Producing Clean Nursery Stock. 6. Agricultural Marketing Service: AMS-01 (Amended through: Aug 1988) Federal Seed Act Regulations (Part 201-202). 7. California Food and Agricultural Code. 8. Species names: All container plant material and seeds shall be true to botanical and common name (and variety or subspecies, if specified) as indicated in Jepson Flora Project. 2020. Jepson eFlora. http://ucjeps.berkeley.edu/eflora/. 1.05 SUBMITTALS A. The Contractor shall submit the following: 1. Implementation schedule. 2. Plant source (i.e., nursery supplier) and evidence of nursery order. 3. Seeding product data a. Materials certifying that each container of seed delivered meets the specification requirements (bag tags). b. Seed mixes: The Contractor shall furnish certified seed mix labels from the supplier affixed to sealed seed mix bags prior to seeding. Scans of the seed tags shall be submitted upon opening the seed bag. c. Native grass straw (weight receipts from scales shall be required), including harvest date, location, species, and invasive plant content. d. The cuttings shall be cut into a minimum of 4-foot sections with the stem diameter between 3/4 and 3 inches at the base. No cuttings shall be made from the tips of branches. A clean, angled cut (approximately 45-degree angle) shall be made at the base. All other branches shall be removed from the primary cutting. 4. Preparation procedures: a. Stripping: Remove all side branches and all leaves along the entire length of each cutting, immediately at time of collection, so cutting is one single stem. Stems shall be straight and unbranched from the base of the stem through at least half the stem length. Spread pruned-off branches and trimmings in the designated willow cutting areas so that no areas are left unsightly. b. Dipping: Seal top end of each cutting by dipping it in 50:50 mix of light-colored latex paint in water. Assign one different color to each species (a total of four species as indicated on the Drawings shall be collected). Use pure latex paint only. Do not use other synthetic paints or paints containing lead additives. Comply with all legal requirements regarding VOC (Volatile Organic Compounds). c. Packaging: Bundle cuttings and label by species (in addition to dipping in paint). Wrap bundles in burlap or other suitable material that protects the cuttings from sunlight, heat, and wind, and allows air to circulate. Soak cuttings in water for a minimum of 5 days, but no more than 21 days, prior to planting. Proper soaking consists of saturating at least one third of the basal end of the cuttings in water for the specified period in a shaded location. Avoid soaking latex painted cutting tops. d. Temporary Storage: Under no conditions shall any cuttings be allowed to dry out. Any temporary storage (less than 24 hours) shall ensure that cuttings are maintained in a moist, shaded, and cool condition. 1.10 DELIVERY, STORAGE, AND HANDLING A. Plants 1. Delivery a. The Contractor will provide the plants for the initial planting and for any required re-planting during the Installation Period. The plants will be delivered to the Project site. 2	4. Following plant delivery to the Project site, the Contractor shall submit inspection, inventory, and receiving records that describe the condition of the plants at time of delivery (i.e., delivery receipts). 1.06 DEFINITIONS A. Installation period: The installation period shall start when the Contractor commences work within this section and shall continue until all requirements indicated in this section and accompanying drawings are successfully completed as determined by the Construction Manager's favorable review. 1.07 SEED QUALITY ASSURANCE A. Seed material shall be provided by the Contractor and shall be from locally collected propagules sourced within 50 miles of the Project site. Seed may be grown outside of 50 miles of the Project site only with prior written approval from the County. B. Seed shall be pre-mixed by the supplier before shipment to the Project site. Seed mix shall not contain invasive plants or mold. Seeding rates in the tables assume seeding areas will be broadcast seeded. C. The Contractor shall furnish seed that is unopened, tagged and labeled in accordance with the California Food and Agricultural Code (§ 52451–52456). D. Seed shall be of a quality which has a minimum pure live seed (PLS) content as specified (percent purity x percent germination) and invasive plant seed shall not exceed 0.5 percent of the aggregate of PLS and other material. Seed mixes and materials not meeting the Construction Manager's favorable review shall immediately be removed from the site and replaced at the Contractor's expense. 1.08 PLANT INSPECTIONS A. The Contractor shall notify the Construction Manager at least 5 days prior to each of the anticipated inspection events described below: 1. Plant Delivery Inspection: Following delivery of plants to the Project site, the Construction Manager shall inspect the plant material (prior to installation) for conformity to the ANSI Z60.1 (2004), Nursery Stock and these specifications. Such inspections shall not impair the right of additional observations during further progress of the work. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous, and free of insect infestations, plant diseases, sun scalds, fresh abrasions of the bark, excessive abrasions, or other objectionable disfigurement. Tree trunks shall 3	be sturdy and have well hardened systems. The trees should have fibrous root systems which are not root- or pot-bound. The size of the plants shall correspond with that normally expected for species of commercially available nursery stock and as specified on the Drawings. If inspections find that sample plants are defective, the Construction Manager reserves the right to reject the entire lot of plants. a. Replacement Plants. All plants not conforming to the requirements in these specifications shall be considered defective and such plants shall be marked as rejected and immediately removed from the Project site and replaced with conforming plants. Substitutions of plant species shall be approved in writing by the County. 2. Plant Installation Inspection: Plant installation will be inspected by the Construction Manager for conformance with the plans and specifications. Installation inspection shall be initiated only after all collective Project requirements have been completed, which include but are not limited to: site preparation, seeding, planting, watering, and all other associated work. The quantity and type of plants and rootstock installed, clean up requirements, and the acceptability of the plants installed, in accordance with the requirements stated herein, shall be determined and noted in writing by the Contractor and submitted to the Construction Manager. At the inspection, the Construction Manager will evaluate any deficiencies previously noted to ensure they have been corrected. Time for the inspection shall be established in writing. An Installation Acceptance will be given after all installation requirements have been satisfactorily completed and approved by the Construction Manager. 1.09 PLANT PROCUREMENT A. Phytophthora Control and Management: The contracted nursery shall follow best management practices (BMPs) for minimizing the spread of Phytophthora species (CNPS Best Management Practices (BMPs) for Producing Clean Nursery Stock and Phytosanitary Procedures for CNPS BMPs for Producing Clean Nursery Stock). B. Container plants and plugs: Local plant stock collected from the San Francisco Peninsula, growing under similar ecological conditions (e.g., climate, soils, depth to groundwater) shall be used; if possible, material shall be collected from within 50 miles of the Project site. The contracted nursery shall collect material during the appropriate time of 4
Planting and Seeding year per species or provide existing in-stock material already collected from within the region. C. Pole cuttings: 1. Collection origin: Where cuttings are specified, and the plant species has been documented on-site, cuttings may be taken from riparian and mesic areas on site. If the Project site does not supply sufficient source materials, cuttings shall be obtained from plants within 50 miles of the site. 2. Timing of collection: Cuttings shall be collected during the species' dormant period, kept moist, and installed within one week of collection. Collection during late fall/early winter shall coincide with the species' dormancy period and the planting schedule. Local cuttings may be substituted for the container stock requirements identified for species if it is determined to be more cost-effective and consistent with high survival rates. 3. Collection procedures: a. Cuttings shall be taken from healthy trees that are at least 1 year old or older and only straight branches should be used. The optimal age is 4-5 years, smooth barked, not with deeply furrowed bark. Do not collect suckers and current year's growth (these do not have sufficient energy reserves). b. Collect cuttings from various sources to ensure genetic diversity of the plant material. Do not cut more than 30 percent of the plants in a designated area. Do not cut more than 30 percent of any individual plant; leave a minimum of 70 percent of each individual plant intact. Leave a minimal impact to donor areas. Select for collection only branches whose removal will not impair the parent tree's health and appearance. Remove branches from the inside of the crown area rather than the more visually obvious exterior area. c. Harvest cuttings with pruning shears, lopping shears, small wood saw, or brush cutters. Do not use chain saw. Do not use anvil type shears of any type (these tend to crush and split cutting ends). Make cuts with sharp, clean tools. Make clean cuts without any additional damage or scarring of parent tree. For easy recognition of top and bottom of cutting at time of planting, cut off top end with a horizontal square cut above a leaf bud, bottom end with a cut at 45 degree angle below a leaf bud. 5	Planting and Seeding Planting and Seeding Planting and Seeding Planting and Seeding 1.11 TIMING AND CONDITIONS A. Planting 1. Planting operations shall be performed only during periods when beneficial results can be obtained. When excessive moisture, winds, or other unsatisfactory conditions prevail, the work shall be stopped when directed by the Construction Manager. If the temperature is expected to be 90 degrees Fahrenheit or greater, the Contractor shall schedule plant installation in the mornings to avoid stressing plants. When special conditions warrant a variance to the planting operations, changes to operations shall be approved by the Construction Manager. The Contractor shall be prepared to install plants at the earliest time when all conditions (weather, moisture, temperature, and river flows, etc.) are acceptable. B. Seeding 1. Seeding shall be performed within 5 days of completion of BioD-Mat (or equivalent) installation in all areas subject to erosion control measures. No variance to the start date will be allowed unless given in writing by the Construction Manager. 2. Areas subject to replanting with plug and container plants shall be seeded within 5 days of final plant installation. 3. Seeding Conditions: Seeding operations shall be performed only during periods when beneficial results can be obtained. When conditions are unsatisfactory for seeding, as determined by the Construction Manager, the work shall be stopped as directed by the Construction Manager. At no time shall the Contractor's equipment be operated during rain events or on saturated work areas. If the seeding schedule calls for installation when the temperature is expected to be 90 degrees or greater, the Contractor shall schedule seeding in the mornings to avoid stressing plants during seeding. The Contractor shall be prepared to seed at the earliest time when all conditions (weather, moisture, temperature, wind) are acceptable. When special conditions warrant a variance to the seeding operations, a proposed seeding time shall be submitted for the Construction Manager's favorable review. PART 2 PRODUCTS 2.01 PLANTING A. Plants 6	Planting and Seeding Planting and Seeding Planting and Seeding Planting and Seeding 1. The Contractor shall provide proper storage of the seed. Storage facilities shall be cool, clean, dry, and free from other seed sources such as invasive plants or agricultural products. Seed stored where temperatures exceed 80 degrees F will be considered defective and shall be replaced at no additional expense to the Construction Manager. 2. Seed, which in the Contractor's possession, has become wet, moldy, or otherwise damaged, will be considered defective and shall be replaced at no additional expense to the Construction Manager. 3. Upon delivery to the site, store seed, and fertilizer in cool, dry locations away from potential contaminants. Do not store chemical materials with landscape materials. 7	Planting and Seeding Planting and Seeding Planting and Seeding Planting and Seeding 8

Planting and Seeding
 1. All plant species included in the planting plan are locally sourced and native to the watershed the Project is within, in conformance with the Guidelines and Standards for Land Use Near Streams. 2. The Contractor will provide the plants, including container plants, plugs, and pole cuttings for the initial planting and for any required re-planting during the Installation Period. 3. The location, quantity, and spacing of container plants, plugs, and pole cuttings will be implemented as indicated in the Project design Drawings. 2.02 SEEDING A. Seed 1. All seed species included in the planting plan are locally sourced and native to the watershed the Project is within, in conformance with the Guidelines and Standards for Land Use Near Streams. 2. Seed species and seeding rates shall be applied as specified in the Project design drawings.

PART 2 EXECUTION

3.01 SITE CONDITIONS AND COORDINATION

A. Site preparation: Site preparation shall include planting zone preparation, and seedbed preparation as described in Paragraphs 3.02, 3.03, and 3.04 below.

B. Watering: The water supply and equipment shall be verified by the Construction Manager prior to planting and seeding.

C. Vandalism: The Contractor shall be responsible for securing the Project site to minimize negative effects from vandalism and theft.

D. Equipment Operation: At no time shall the Contractor’s equipment be operated during rain events or on saturated work areas, as defined herein. If saturated work areas exist, no mechanized equipment shall be permitted without prior approval in writing by the Construction Manager. Contractor shall coordinate with the Construction Manager to determine when work can begin following saturated work area conditions.

E. Existing Features: During plant installation operations, care shall be taken to avoid damaging existing facilities, overhead utilities, roads and access ramps, sensitive habitats, or any other items on or around the

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Planting and Seeding
 Project areas. The Contractor shall schedule seeding after planting to avoid compacting or otherwise damaging the prepared surface and seed. 3.02 PLANTING ZONE PREPARATION A. After grading activities have been completed, the Contractor shall prepare the planting areas including hand-grading of the planting surface, and soil loosening if deemed necessary.

3.03 PLANT MATERIAL INSTALLATION

A. Site preparation as described in Paragraphs 3.01 and 3.02 of this section shall be completed prior to plant installation. Plants shall be installed under moist soil conditions at planting locations.

1. Container Plant Installation: The location, quantity, and spacing of cuttings, plugs, and container plants shall be implemented as shown in the Project Drawings. The Contractor shall provide and remove container plants from their containers without damage to the plant or root system. For container plants a hole shall be prepared that is the depth of the container and 1.5 to 2 times the diameter of the root ball. The plant shall be placed so the root crown is 0.5 to 1 inch above the soil surface, and the hole shall be backfilled with the original soil that was removed. The Contractor shall backfill carefully, with existing soil, and work around the root ball then tamp soil so that all air pockets are removed, and the plant is secure and at the proper grade. Additional fill shall be placed due to settlement of soil as required. If planting is on a slope, a downslope berm that is 4 inches tall shall be installed to form a basin for retaining water.

2. Plug installation: Plugs shall be planted in planting holes slightly deeper than the length of the plugs; plugs shall be inserted deeply so that the top of the plug soil is at least 0.5 inches below the adjacent native soil. Firm soil around plugs and cover all nursery soil with 0.5 inch of native soil.

3. Pole Cutting Installation:

a. Time:

1) Do not use cuttings allowed to dry out. Dispose of unused cuttings.

2) Do not plant cuttings until the soil is moist to a minimum depth of 6 inches, unless otherwise permitted by the Construction Manager.

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Planting and Seeding
 3) Plant cuttings between the months of September through December and no later than mid-February. b. Watering: If the soil in and around the planting area is not wet prior to planting, water the soil and maintain in a wet state until the cuttings are planted. c. Planting Pits: Make planting pits perpendicular to the ground and form with a steel bar, hand-held auger or similar tool or equipment. Make pits large enough so that cuttings may be planted to the proper depths without damage to the bark. Where rock or other hard material prevents the installation of cuttings as specified, new pits shall be excavated elsewhere and the abandoned pits backfilled. d. Cuttings Adjustment: Do not cut or prune cuttings after their initial collection to adjust them to the pit size or for any other reason. The growth hormones concentrate at both ends of the cutting immediately after collection. A second cutting for length adjustment would remove the majority of these hormones and substantially limit the probability of their growth. e. Installation Method: Plant cuttings with the bottom angle-cut ends in the ground and latex painted straight-cut tops above ground. Leaf bud scars shall point up. Cuttings shall be pressed or pounded into the soil so that the rooting end of the cutting is at a depth of 2 to 2.5 feet. Avoid damaging cuttings, stripping their bark, or splitting them during installation. Remove and replace split or damaged cuttings. Do not hammer cuttings into the soil.

3.04 SEEDBED PREPARATION

A. After planting activities have been completed, the Contractor shall prepare the seeding areas including hand-grading of the planting surface, and soil loosening if deemed necessary. Soil shall be scarified to a depth of 1–2 inches to create a loose and friable topsoil medium prior to seeding operations.

B. Soil surfaces that are too hard and smooth, or soil clods too large to accept seeding, as determined by the Construction Manager, shall be broken up by methods approved by the Construction Manager until the condition of the soil is acceptable as a suitable seed bed.

C. Soils shall be wetted to a minimum of 4-inch depth immediately prior to seed application.

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Planting and Seeding
 3.05 EROSION CONTROL DEVICES A. Before completion of erosion control devices the seedbed shall be prepared. 2.01 SEEDING METHODS AND SEQUENCE A. The Contractor shall perform restoration seeding by broadcast seeding after installation of erosion control devices. In conjunction with or immediately following broadcast seeding, the seed shall be raked in and covered with blown straw mulch.

3.06 MAINTENANCE DURING INSTALLATION PERIOD

A. General Maintenance: The Contractor shall maintain installed plants (including pole cuttings) and seeding material in a healthy, and vigorous growing condition. Maintenance shall begin immediately after each plant is installed and after seeding material is installed, and shall continue throughout the installation period. Maintenance shall include regular observations of the site, watering, pruning, straightening, adjusting, repairing, and other necessary operations to ensure each plant and all seeded areas are maintained in a healthy growing condition.

B. Watering: The Contractor shall provide the labor, materials, and water necessary to fully water the planting and seeding areas during the installation period. The Contractor shall be responsible for maintaining the watering system during the installation period. Maintenance shall include the repair, checking, adjustment and replacement of parts, ensuring the system is delivering the required amount of water, and ensuring the system is fully operational. Failure of the watering system or failure of the system to provide full and proper coverage shall not relieve Contractor of the responsibility to provide adequate water as required for vigorous growth of all plants.

C. Area Protection: Seeded areas shall be protected from pedestrian traffic or other compaction.

D. Watering-In Planting: The Contractor shall water-in plant material including pole cuttings immediately after installation, completely saturating each plant location.

E. Watering-in Seeding: The Contractor shall keep the soil at the seeded area constantly moist throughout the installation period. Thereafter the Construction Manager shall keep the soil constantly moist during the first 3 weeks immediately after seeding.

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Planting and Seeding
 F. Watering Frequency, Rate, and Duration: Watering of all plants installed under this contract shall start at the earliest time during the installation period. The Contractor shall be responsible for watering and keeping the soil around newly installed plants sufficiently moist at a rate and frequency sufficient to provide healthy, vigorous growth. The Contractor shall wet soil to a minimum depth of 18 inches during each watering event. Water shall be applied in a manner that ensures deep penetration in the soils surrounding the plant root balls. Water shall not be applied at a rate that will cause erosion, damage to the plants, or cause runoff. G. Repair: Areas damaged shall be repaired to their original condition and/or reseeded within 7 working days at no additional expense to the Construction Manager. H. Re-seeding: Seeded areas that have failed to germinate or without substantial growth (as determined by the Construction Manager) shall be re-seeded within 1 month after seeding with the same seed mix as originally specified at no additional expense to the Construction Manager.

3.06 CLEANUP

A. Excess and waste material from the planting and seeding operations shall be removed and disposed of off-site at the Contractor’s expense and according to all federal, State, and local codes.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract price will be paid for PLANTING AND SEEDING; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

Creek Bank Restoration on Stevens Creek at 10500 Creston Drive
Habitat Mitigation, Monitoring, and Reporting Plan

The following describes the Habitat Mitigation, Monitoring, and Reporting Plan (HMMRP) for the Creek Bank Restoration on Stevens Creek at 10500 Creston Drive, Los Altos Project (project) located in the City of Los Altos, Santa Clara County. The responsible party is the property owner, Michael Gustafson.

1. Project Location

The project site is located at 10500 Creston Drive (latitude: 37.330186, longitude: -122.060737; APN: 326-12-057) in unincorporated Santa Clara County, California surrounded by the cities of Los Altos and Cupertino (Attachment B, Exhibit 1). The project site occurs within the U.S. Geological Survey (USGS) 7.5' series Cupertino Quadrangle. This property has been in private ownership since before California joined the United States. It is therefore not part of the Township and Range system, which was a survey of federal lands.

To access the site from I-280 South, take the Foothill Expressway exit and merge onto Foothill Boulevard. Turn left onto Starling Drive, left onto Baxter Avenue, and right onto Creston Drive.

The project site is located along Stevens Creek upstream of I-280.

2. Project Description

The proposed project entails the demolition of an unpermitted retaining wall and patio located adjacent to Stevens Creek, subsequent bank stabilization, and replanting of native vegetation (Appendix A and B). The proposed construction period is between June 15 and October 15 and construction is expected to last up to 30 days.

The purpose of the project is to remove an unpermitted retaining wall, restore the creek bank, and comply with all regulations and guidelines.

The 0.31-acre parcel is developed with a single-family dwelling including a pool, paved parking area, ornamental vegetation, and a lawn. It is adjacent to Stevens Creek, which flows from its headwaters in the Santa Cruz Mountains to San Francisco Bay. The flows in Stevens Creek are controlled by a dam at the Stevens Creek Reservoir; at this location upstream of Fremont Avenue, the flows are typically perennial, but reaches downstream of the project are not perennial.

The parcel is mostly developed and includes a single-family house, swimming pool, yard/landscaped areas, and a small deck and patio area that is located adjacent to Stevens Creek. At the time of a biological survey, Stevens Creek was flowing and supported mixed riparian woodland. The project site (i.e. limits of disturbance) is confined to the stone retaining wall and stone patio area adjacent to the creek and is elevated approximately seven feet above the creek bed.

The mixed riparian woodland habitat is dominated by Fremont's cottonwood (*Populus fremontii*) and western sycamore (*Platanus racemosa*). The understory is dominated by English ivy, California

Creek Bank Restoration on Stevens Creek at 10500 Creston Drive, Los Altos Project
Mitigation, Monitoring, and Reporting Plan

feet in one strip), and the upper terrace zone (87 square feet in one strip). The plantings include stakes, plugs, and container plants, as noted in Table 1.

Monitoring shall capture percent vegetation cover in the herbaceous, shrub, and canopy layers to compare to the success criteria in Table 2. The same scientific method should be used each year for consistency and comparability, and the method shall be described in detail in the monitoring report. If the approved biological monitor believes a different method should be used, that should be documented in the monitoring report.

The agency approved biological monitor will visually assess total percent live vegetation cover and bare ground in each planted strip using the transect method. In this method, a transect line will be established along each revegetation zone (i.e. four transects total), and percent cover will be estimated at points approximately every 10 feet along the transect. The points don't need to be in exactly the same location each year, the but the same number of points will be gathered.

The monitor shall also document and map naturally recruited native species, and shall document percent cover of invasive non-native plant species. Presence of invasive non-native plant species shall be documented anywhere in the restoration area, regardless of presence along a transect point.

Vegetation Survivorship and Species Richness

Each tree and shrub planting (i.e. pole cuttings and container plantings) will be permanently marked in the field so that the planting can be found each monitoring visit to determine if it has survived. The survivorship of each tree and shrub will be monitored for ten years. Shrub and tree survivorship will be documented on a data sheet that will be appended to the monitoring report. Species richness will be calculated based on the vegetation survivorship monitoring data.

Bank Stability

The restored area and areas upstream, cross channel, and downstream will be visually examined for signs of bank instability, including soil slumping, erosional channels or rills, fissures or cracks, and bank undercuts. Areas of concern will be flagged and documented for subsequent consultation with a hydrologist/geomorphologist. They will be assessed for repair actions prior to the next rainfall. The survey will occur during each monitoring visit. Creek bank conditions will also be documented photographically. Monitoring will be conducted/overseen by the approved biological monitor who may consult a hydrologist/geomorphologist.

4.3 Monitoring Schedule

The mitigation site will be monitored for 10 years and maintained as required to meet the success criteria. This includes monthly monitoring the first year after planting, quarterly monitoring for subsequent years to year 5, and bi-annual monitoring in years 5-10. The following monitoring schedule is proposed:

Prior to installation: Obtain approval for the biological monitor.

Creek Bank Restoration on Stevens Creek at 10500 Creston Drive, Los Altos Project
Mitigation, Monitoring, and Reporting Plan

blackberry (*Rubus ursinus*), and mint (*Mentha* sp.). Other understory species present include flatsedge (*Cyperus* sp.) and stinging nettle (*Urtica dioica*).

Stevens Creek is 22 miles long. It originates in the Santa Cruz Mountains on the western flank of Black Mountain in the Monte Bello Open Space Preserve. From its headwaters the creek flows into Stevens Creek Reservoir. Past the reservoir, the creek flows north through dense residential and commercial development through Cupertino, Los Altos, Sunnyvale and Mountain View before emptying into San Francisco Bay at Whisman Slough. The creek watershed has been modified, and currently includes a portion of the Permanente Creek Watershed, due to the Permanente diversion channel that connects the two creeks downstream of Fremont Avenue. In addition, flows in Stevens Creek are affected by a dam at Stevens Creek Reservoir upstream of the parcel.

3. Mitigation

Impacts to jurisdictional waters will be mitigated in place by restoring approximately 0.009 acres (approximately 392 square feet) of riparian habitat along Stevens Creek. The project area will be restored by grading the bank to stable contours, installing biodegradable coir erosion control measures, and planting native riparian trees, shrubs, and herbaceous plants. Three planting zones will be established as shown in Appendix A. Coir staking with willows will occur throughout the entire 0.009 planting area, although it will be focused in a 0.003 acre area on the outer edges as shown in the planting plan in Appendix A. It will include live stakes of narrow-leaved willow, red willow, Pacific willow, and arroyo willow. The Lower Terrace planting area of 0.004 acres will include container plantings of box elder, mule fat, American dogwood, and nine bark, as well as plugs of spreading rush. The Upper Terrace planting area of 0.002 acres will include container plantings of big-leaf maple, California buckeye, thimbleberry, creek clematis, and California figwort, as well as plugs of mugwort and beardless wild-rye. All species are native to California and appropriate for the setting and habitat type in the project area. Quantity, area, and spacing are described in Table 1, below.

Plants will be sourced, handled, and installed in accordance with Appendix B, Planting Specifications. Restoration planting will occur as soon as possible after construction. Temporary drip-line irrigation will be installed to irrigate plantings as necessary until established.

The project will avoid the transmission of *Phytophthora* species, including Sudden Oak Death (*Phytophthora ramorum*), to the project site. Plants and seeds will be sourced from nurseries that are certified free of *P. ramorum* contamination. Equipment, tools, and shoes will be inspected, cleaned, and sanitized before entering the project site.

Creek Bank Restoration on Stevens Creek at 10500 Creston Drive, Los Altos Project
Mitigation, Monitoring, and Reporting Plan

Year 1

- The plantings and irrigation will be monitored and maintained monthly by the Contractor;
- Plants that die in the first year will be replaced by the Contractor;
- The As-built drawing will be completed by the Contractor;
- The As-built drawing and photo-documentation point map will be submitted to the permitting agencies;
- Tree and shrub plantings will be monitored for percent survival and species richness on a quarterly basis per methods described in this plan;
- Bank stability will be monitored on a quarterly basis per methods described in this plan; and
- The project site will be photographed once during the spring/summer growing season at the established photo-documentation points.

Years 2-3

- The plantings and irrigation will be monitored and maintained by the Contractor/Owner on a quarterly basis in years 2 and 3. Suggested months are February, May, August, and November;
- Percent cover will be monitored on a quarterly basis per methods described in this plan;
- Tree and shrub plantings will be monitored for percent survival and species richness on a quarterly basis per methods described in this plan;
- Bank stability will be monitored on a quarterly basis per methods described in this plan;
- The project site will be photographed annually during the spring/summer growing season at the established photo-documentation points; and
- The first annual monitoring report will be provided to the agencies at the end of year 2. A submittal date of January 31 is proposed. An annual monitoring report will be provided for year 3.

Years 3-5

- Percent cover will be monitored on a quarterly basis per methods described in this plan;
- Tree and shrub plantings will be monitored for percent survival and species richness on a quarterly basis per methods described in this plan;
- Bank stability will be monitored on a quarterly basis per methods described in this plan;
- The project site will be photographed annually during the spring/summer growing season at the established photo-documentation points; and
- Annual monitoring reports will be submitted by January 31 following each monitoring year.

Years 5-10

- Percent cover will be monitored bi-annually per methods described in this plan;
- Tree and shrub plantings will be monitored for percent survival and species richness bi-annually per methods described in this plan;
- Bank stability will be monitored bi-annually per methods described in this plan;
- The project site will be photographed annually during the spring/summer growing season at the established photo-documentation points; and

Creek Bank Restoration on Stevens Creek at 10500 Creston Drive, Los Altos Project
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Table 1. Plant Palette

	Area of Planting Zone (acres)	Scientific Name	Common Name	Life Form	Container plant size	Average Spacing (feet on-center)	Percent Fill	Number of Plants	
Planting Zone	0.009	<i>Salix repens</i>	narrow-leaved willow	shrub or small tree	cutting	3	15%	6	
	0.009	<i>Salix bevigata</i>	red willow	tree	cutting	3	25%	11	
	0.009	<i>Salix lasioandra</i>	Pacific willow	shrub or small tree	cutting	3	25%	11	
	0.009	<i>Salix lasiolepis</i>	arroyo willow	shrub or small tree	cutting	3	25%	15	
			Total Willow Stakes					100%	43
Coir Staking	0.004	<i>Acer negundo</i>	box elder	tree	container (2 deepot 40)	6	50%	2	
	0.004	<i>Baccharis salicifolia</i>	mule fat	shrub	container (2 deepot 16)	3	15%	3	
	0.004	<i>Cornus sericea</i>	American dogwood	shrub	container (2 deepot 16)	3	20%	4	
	0.004	<i>Physocarpus opulifolius</i>	ninebark	shrub	container (2 deepot 16)	3	15%	3	
			Total Lower Terrace Tree/Shrubs					100%	12
Lower Terrace	0.004	<i>Juncus patens</i>	spreading rush	perennial herb	plug	3	60%	12	
			Total Lower Terrace Container Herbaceous Plants					60%	12
	0.002	<i>Acer macrophyllum</i>	big-leaf maple	tree	container (2 treeband 4)	6	20%	1	
	0.002	<i>Aesculus californica</i>	California buckeye	tree	container (2 deepot 40)	6	20%	1	
	0.002	<i>Rubus parviflorus</i>	thimbleberry	shrub	container (2 deepot 16)	3	40%	4	
Upper Terrace			Total Upper Terrace Tree/Shrubs					80%	6
	0.002	<i>Artemisia douglasiana</i>	mugwort	perennial herb	plug	2	25%	6	
	0.002	<i>Clematis ligusticifolia</i>	Creek clematis	woody vine	container (2 deepot 16)	3	25%	3	
	0.002	<i>Phytolacca</i>	beardless wild-rye	annual to perennial herb	plug	2	25%	6	
	0.002	<i>Scrophularia californica</i>	California figwort	perennial herb	container (2 deepot 16)	3	25%	3	
			Total Upper Terrace Container Herbaceous Plants					100%	18

4. Monitoring & Success Criteria

The mitigation area will be monitored and maintained for 10 years, and until the success criteria are met. Monitoring will assess vegetation cover, vegetation survivorship, and bank stability.

4.1 Success Criteria

The following criteria will be used to assess the project's post-construction revegetation and bank stabilization success:

Table 2. Success Criteria

Location	Size	Planting Types	Percent Cover Goals by Year					
			Year 2*	Year 3	Year 4 and 5	Year 6 and 7	Year 8 and 9	Year 10
Coir staking	392 SF, 0.009 ac, but primarily in 0.003 ac Bio-d block area	43 willow cuttings	10	20	30	50	70	75% total cover of willow species in 0.003 ac Bio-d block area
Lower Terrace	174 SF, 0.004 ac	2 trees (deepot 40)	5	10	15	30	50	75% total cover of vegetation
		10 shrubs (deepot 16)	10	15	25	30	50	
Upper Terrace	87 SF, 0.002 ac	12 herbaceous plants (plug)	10	15	25	40	65	
		2 trees (treeband 4, deepot 40)	5	10	15	30	40	75% total cover of vegetation
		4 shrubs (deepot 16)	10	15	25	30	40	
		18 herbaceous plants (plug, deepot 16)	10	15	25	40	65	

*Success criteria will start to be measured the second year after planting. The first year will document installation in an as-built report.

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- Annual monitoring reports will be submitted by January 31 following each monitoring year.

4.4 Contingency Measures

If vegetation success criteria are not met, or if the bank shows evidence of instability, the following contingency measures will be taken:

Vegetation Cover. If vegetation cover criteria are not being met by year 3, the approved biologist shall identify possible reasons and the biologist or applicant shall implement any, or all, of the following measures:

- Improve or increase irrigation;
- Judiciously trim canopy to allow more light into the growing zone, but take potential impacts to water temperature in the creek into account;
- Plant additional container plants to fill in where needed, and add irrigation if necessary;
- Introduce new native plant species into the mix; and/or
- Other measures recommended by the biologist.

The proposed measures will be described in the annual monitoring report for year 3 and implemented in year 4. They can also be implemented earlier if the success rate in the first two years is very low, however, measures for replacing species during the first year are already incorporated into the plan.

Vegetation Survivorship and Species Richness. If survivorship criteria have not been met, then dead plants shall be replaced in the same year that they died, preferably in the fall or winter, unless they have been replaced by natural recruitment of a native species, in which case the specific native recruit will be monitored and survive for a minimum of five years before it is determined to be a viable native recruit.

If certain native plant species are not growing successfully, then other species suited to the environment shall replace those species, as long as the species richness criteria is met for the restoration site.

Restoration Site Erosion. If soil slumping or erosion rills are detected on the restored creek bank, they shall be repaired and protected as necessary with straw wattles (no plastic casing), jute netting, coir mat, or a similar biodegradable method and hand seeded with a native erosion mix.

Creekbank Stability Up, Down, and Cross-Stream. If the creek banks upstream, downstream or cross channel from the restoration site are showing signs of undercutting, erosion or slumping, a fluvial geomorphologist or hydrologist shall inspect the damage, assess whether the project is causing the damage, and recommend remediation. Remediation may include modifications to the project and/or protection measures along other areas of the creek bank. Remediation methods shall be discussed with the permit agencies to determine if permit amendments are required.

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Table 1. Plant Palette

- Revegetated areas will contain no more than 5 percent cover of California Invasive Plant Council (Cal-IPC) rated moderate and high impact weed species (excluding Cal-IPC-rated annual grasses) in any year. These shall be removed annually.
- Revegetated areas will attain a species richness of at least four native species by the end of the monitoring period.
- Tree and shrub plantings (i.e. pole cuttings and container plantings) will maintain at least 95 percent survival in year 1, 85 percent survival in years 2 through 4, and 80 percent survivorship in years 5 through 10.
- Creek banks upstream, cross-stream, downstream, and at the restoration site shall not show signs of failure, such as significant slumping, erosional channels or rills, fissures and cracks, or bank undercutting as a result of the restoration project.
- If the survivorship criteria cannot be met during a monitoring year, naturally recruited native plants of at least five years of age may be added to the survivorship calculation, if approved by CDFW. Survivorship for planted vegetation and naturally recruited vegetation would be discussed separately in each annual report to map and document the age of naturally recruited plants.

If success criteria are not met in any monitoring year, remedial or adaptive management measures will be taken as described in section 4.4.

4.2 Methods

The following methods will be used during the 10-year monitoring period. If field conditions dictate a change in monitoring methods, the recommended changes made by the agency approved biologist will be included in the annual report and implemented in subsequent years unless there is agency comment to the contrary.

Photo-Documentation Points

Before impacting the project site, the agency approved biologist will establish a minimum of six permanent photo-documentation points to track the stability of the creek channel and the progress of revegetation. The photo-documentation points will include the bank restoration area, upstream of the restoration area, downstream of the restoration area, and the bank across the stream ("cross-stream") from the restoration area. The photo-documentation points will be marked on a site map before construction begins and the locations will be reported in the first year with the As-built report. The project site will be photographed at the photo-documentation sites shortly before construction, after construction, and annually each spring/summer growing season. The photo points will be used to document both vegetation success at the restoration site and the streambank conditions upstream, cross-stream, and downstream of the project.

Vegetation Cover

The restoration area is approximately 392 square feet in size and is divided into three linear zones: the Bio-d block coir willow stake zone (131 square feet in two strips), the lower terrace zone (174 square

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feet in one strip), and the upper terrace zone (87 square feet in one strip). The plantings include stakes, plugs, and container plants, as noted in Table 1.

Monitoring shall capture percent vegetation cover in the herbaceous, shrub, and canopy layers to compare to the success criteria in Table 2. The same scientific method should be used each year for consistency and comparability, and the method shall be described in detail in the monitoring report. If the approved biological monitor believes a different method should be used, that should be documented in the monitoring report.

The agency approved biological monitor will visually assess total percent live vegetation cover and bare ground in each planted strip using the transect method. In this method, a transect line will be established along each revegetation zone (i.e. four transects total), and percent cover will be estimated at points approximately every 10 feet along the transect. The points don't need to be in exactly the same location each year, the but the same number of points will be gathered.

The monitor shall also document and map naturally recruited native species, and shall document percent cover of invasive non-native plant species. Presence of invasive non-native plant species shall be documented anywhere in the restoration area, regardless of presence along a transect point.

Vegetation Survivorship and Species Richness

Each tree and shrub planting (i.e. pole cuttings and container plantings) will be permanently marked in the field so that the planting can be found each monitoring visit to determine if it has survived. The survivorship of each tree and shrub will be monitored for ten years. Shrub and tree survivorship will be documented on a data sheet that will be appended to the monitoring report. Species richness will be calculated based on the vegetation survivorship monitoring data.

Bank Stability

The restored area and areas upstream, cross channel, and downstream will be visually examined for signs of bank instability, including soil slumping, erosional channels or rills, fissures or cracks, and bank undercuts. Areas of concern will be flagged and documented for subsequent consultation with a hydrologist/geomorphologist. They will be assessed for repair actions prior to the next rainfall. The survey will occur during each monitoring visit. Creek bank conditions will also be documented photographically. Monitoring will be conducted/overseen by the approved biological monitor who may consult a hydrologist/geomorphologist.

4.3 Monitoring Schedule

The mitigation site will be monitored for 10 years and maintained as required to meet the success criteria. This includes monthly monitoring the first year after planting, quarterly monitoring for subsequent years to year 5, and bi-annual monitoring in years 5-10. The following monitoring schedule is proposed:

Prior to installation: Obtain approval for the biological monitor.

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5. Reporting

Progress toward meeting the success criteria will be documented and submitted to the appropriate agencies during the monitoring period.

5.1 As-built Report

An as-built report will be prepared for the construction activities and for the planting plan. A map of the photo-documentation points will be included. These will be prepared as soon as possible after the completion of construction and after the completion of restoration planting, including installation of the irrigation system.

5.2 Annual Report

An Annual Monitoring Report will be prepared by January 31 after each monitoring year beginning the second year after completion of the mitigation (e.g., if the project is completed in 2021, the first annual monitoring report is due January 31, 2023). The Annual Monitoring Report will include a description of any revegetation and non-native species removal, methods used to assess restoration success, the results of the monitoring, an assessment of the progress made towards achievement of the success criteria, and recommendations of any contingency measures that may be necessary or prudent. Recent photo-documentation will also be included in each report.

It is suggested that the annual report include the following sections:

- Executive Summary
- 1. Project Description
- 2. Monitoring Methods
- 3. Monitoring Results
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