PROJECT TITLE
LANDS OF PANGAN

COUNTY OF SANTA CLARA
General Construction Specifications

GENERAL CONDITIONS

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY STEVE CONNELLY, CRG AND DATED 06-24-2020. THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) 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.
2. 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.
3. 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.
4. DEVELOPER SHALL OBTAIN 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.
5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
6. 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 UNLESS AN AMENDED PLAN 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.
7. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
8. 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.
9. 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 CORONER AT (4008) 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).
10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION STAKING

1. 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.
2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
3. 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.
4. 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

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
2. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
3. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & 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.
4. 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.
5. 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)

1. EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:
    - A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
    - B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.
2. 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

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

RETAINING WALLS

1. 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.
2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

PLAN # ____
SHEET ____ OF ____

GRADING

1. 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, IS 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.
2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
3. 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.
4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
RESIDENCE	761	0	10
ACCESSORY STRUCTURE	0	0	
POOL/HARDSCAPE	0	0	
YARD/PARKING	852	106	8.9
DRIVEWAY	1920	345	5.0
OFF SITE IMPROVEMENTS	0	0	
TOTAL	3533	451	

NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE.

EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
11. 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.
12. 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.
13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
14. TOTAL DISTURBED AREA FOR THE PROJECT ______________________ 49570 SF.
15. WDID NO.______________________.
16. 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

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL 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:
    - A. FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES.
    - B. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
    - C. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
    - D. SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA 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.
2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

ACCESS ROADS AND DRIVEWAYS

1. 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).
2. 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.
3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
4. 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.
5. 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

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

SANITARY SEWER

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

PORTLAND CEMENT CONCRETE

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. 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.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

1. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
3. 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.
4. 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.
5. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
6. 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 PROPER OPERATION OF THE VEHICLE.
7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
8. 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.
9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.
    - A. 15 MILES PER HOUR (MPH) SPEED LIMIT
    - B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
    - C. 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 COMPLAIN HOTLINE OF 1-800-334-6367.
10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
11. 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.
12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8.
13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS 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.
14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE.
15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE.
16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.
17. 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;
    - A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
    - B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
    - C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
18. 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.
19. 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 SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

STORM DRAINAGE AND STORMWATER MANAGEMENT

1. 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 ADEQUACY 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-DWQ.
2. 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.
3. 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.
4. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
5. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

AS-BUILT PLANS STATEMENT

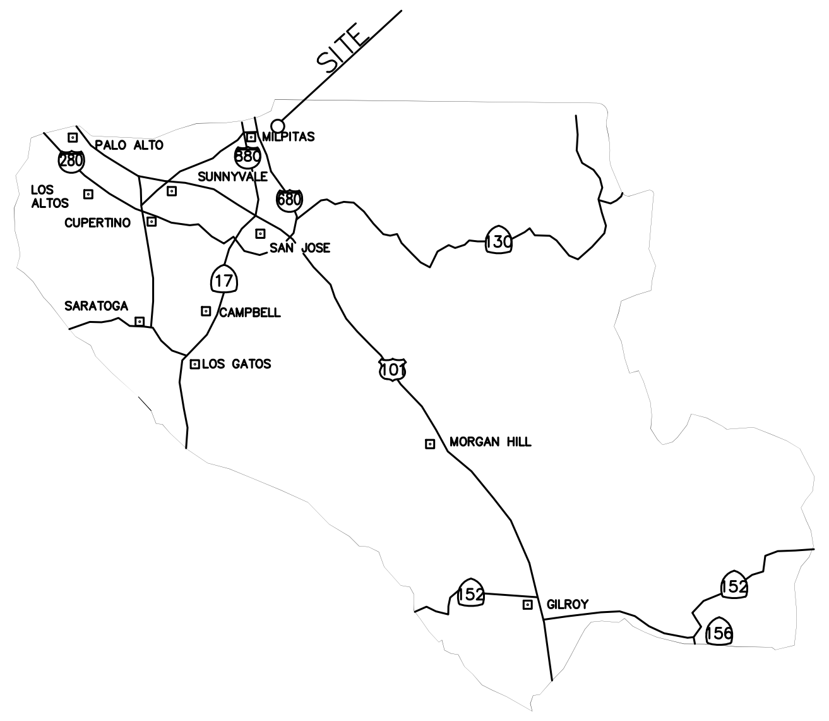
THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (___WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL △.

DATE ____________________ SIGNATURE ____________________

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

GEOTECHNICAL ENGINEER OBSERVATION

1. 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.



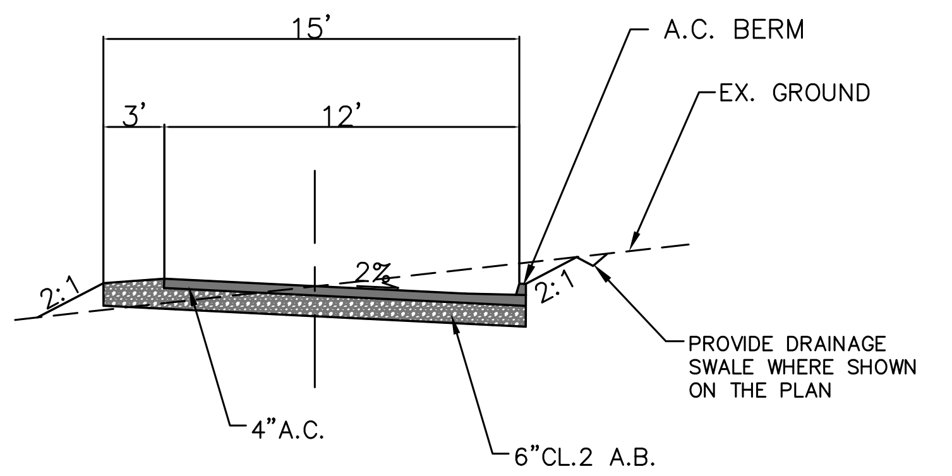
COUNTY LOCATION MAP

SURVEY MONUMENT PRESERVATION

1. THE LANDOWNER / CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. 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.
3. 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.

NOTE:
PRIOR TO BUILDING PERMIT FINAL APPROVAL, THE PROPERTY SHALL BE IN COMPLIANCE WITH THE VEGETATION MANAGEMENT REQUIREMENTS PRESCRIBED IN THE CALIFORNIA FIRE CODE SECTION 4906, INCLUDING CALIFRORNIA PUBLIC RESOURCES CODE 4291 OR CALIFRONIA GOVERNMENT CODE SECTION 51182.

CERTIFICATE OF INSIGNIA FOR THE WUI COMPLIANT MANUFACTURED HOME TO BE PROVIDED TO THE COUNTY INSPECTOR BEFORE FOUNDATION INSPECTION.



TYPICAL SECTION

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

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 ENCROACHEMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

ENGINEER'S STATEMENT

I HEREBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED FILE(S) NO. ____________________

DATE ____________ ____________________ ____________________
SIGNATURE R.C.E. NO.

____
EXPIRATION DATE

KAREL CYMBAL
NO. C 34534
EXP. 09-30-2023

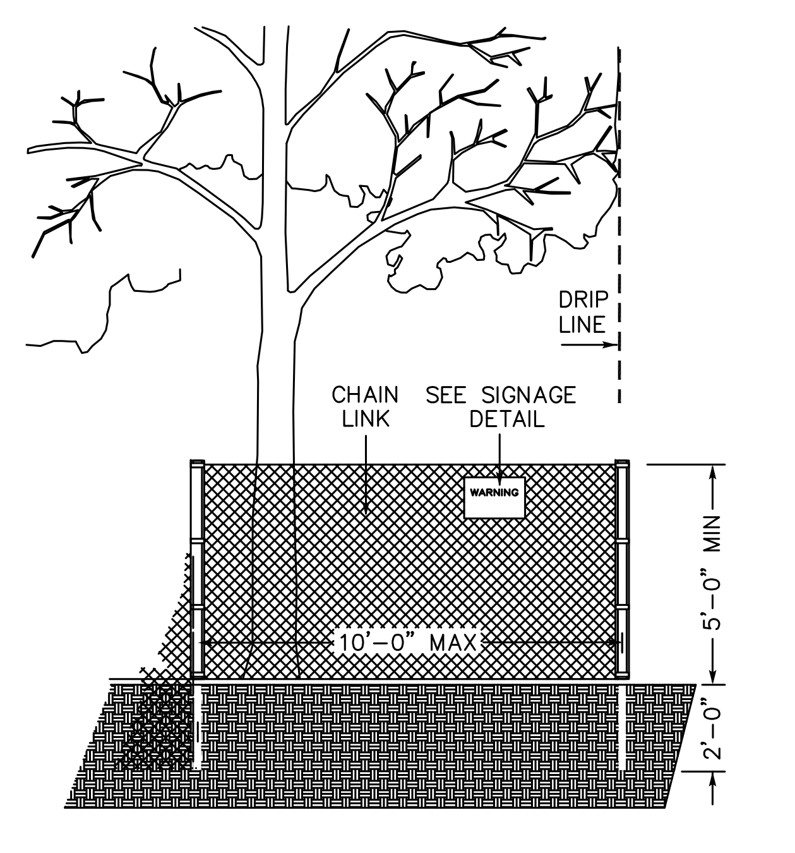
COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE 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 ____________________ ____________________

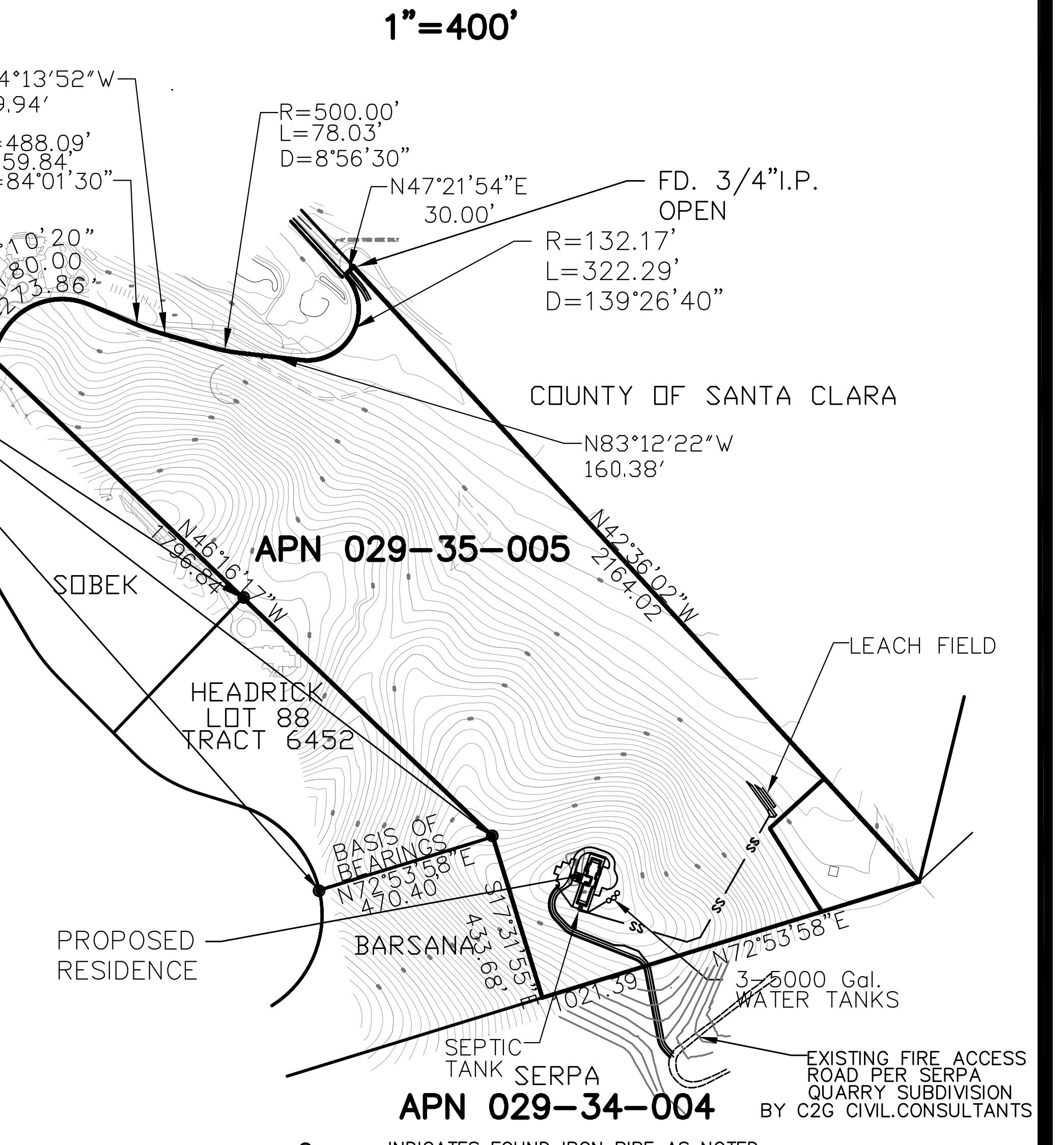
____
R.C.E. NO. EXPIRATION DATE

VICINITY MAP



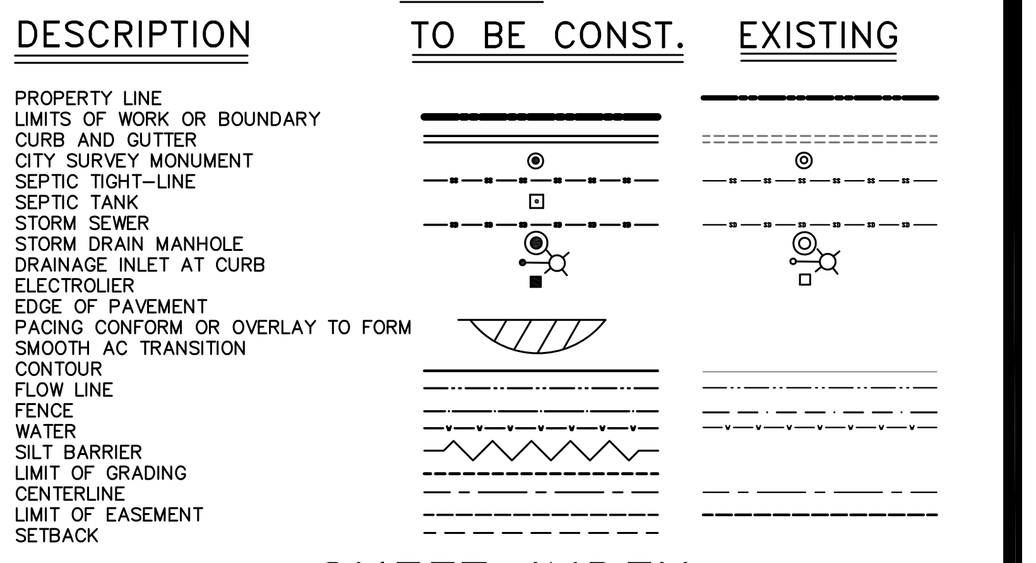
EXISTING TREE PROTECTION DETAILS

1. 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.
2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
4. 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.
5. 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.



● INDICATES FOUND IRON PIPE AS NOTED
◎ INDICATES IRON PIPE TO BE SET

LEGEND



SHEET INDEX

ENGINEER'S NAME: WESTFALL ENGINEERS, INC.
ADDRESS: 14583 BIG BASIN WAY
SARATOGA, CA 95070
PHONE NO. (408)867-0244
FAX NO. (408)867-6261

Revision 1 *Date*	*APN* 029-35-005		*Sheet* 1 *of* 10
Revision 2 *Date*	*Co. File*		
Revision 3 *Date*			

APPLICANT: PANGAN ROAD: OLD CALAVERAS ROAD COUNTY FILE NO.: 10687-148-14G-14DR

NO.	BY	DATE	REVISION	BY	DATE

DATE: SEPTEMBER 2022
SCALE: HOR. 1"=20'
VERT.
DESIGNED: JC
CHECKED: KC
PROJ. ENGR: JC

BY: KAREL CYMBAL, RCE 34534
DATE:

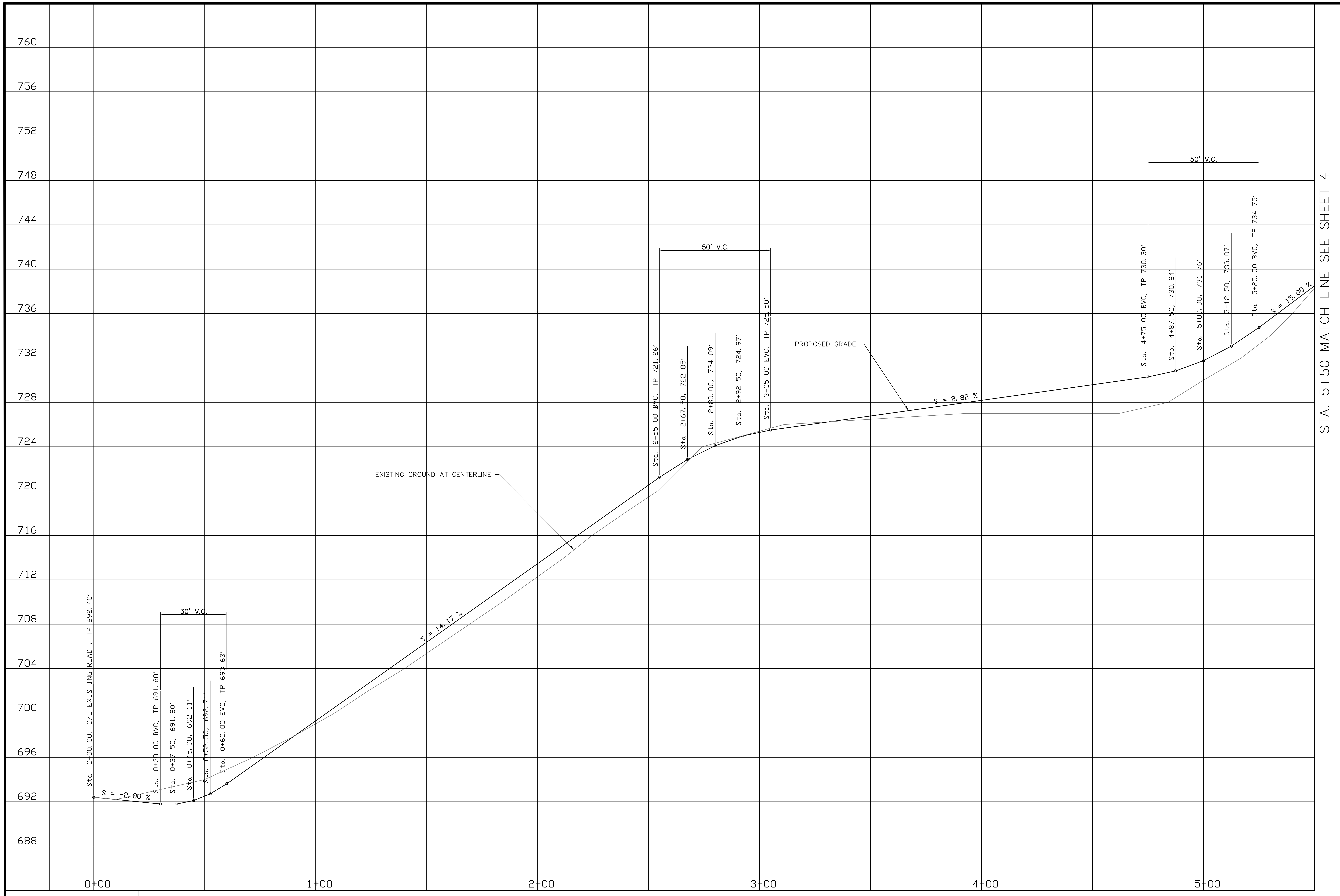
WESTFALL ENGINEERS, INC.
14583 BIG BASIN WAY, SARATOGA, CA 95070 (408)867-0244

GRADING AND DRAINAGE PLAN
LANDS OF PANGAN

APN 029-25-005, MILPITAS, CA

JOB NO.
2013-137

SHEET
2
OF
10



VERT: 1 in = 4 ft
HORZ: 1 in = 20 ft

NO.	BY	DATE	REVISION	BY	DATE

DATE: SEPTEMBER, 2022
SCALE: HOR. 1"=20'
VERT. 1"=4'
DESIGNED: JC
CHECKED: KC
PROJ. ENGR: JC

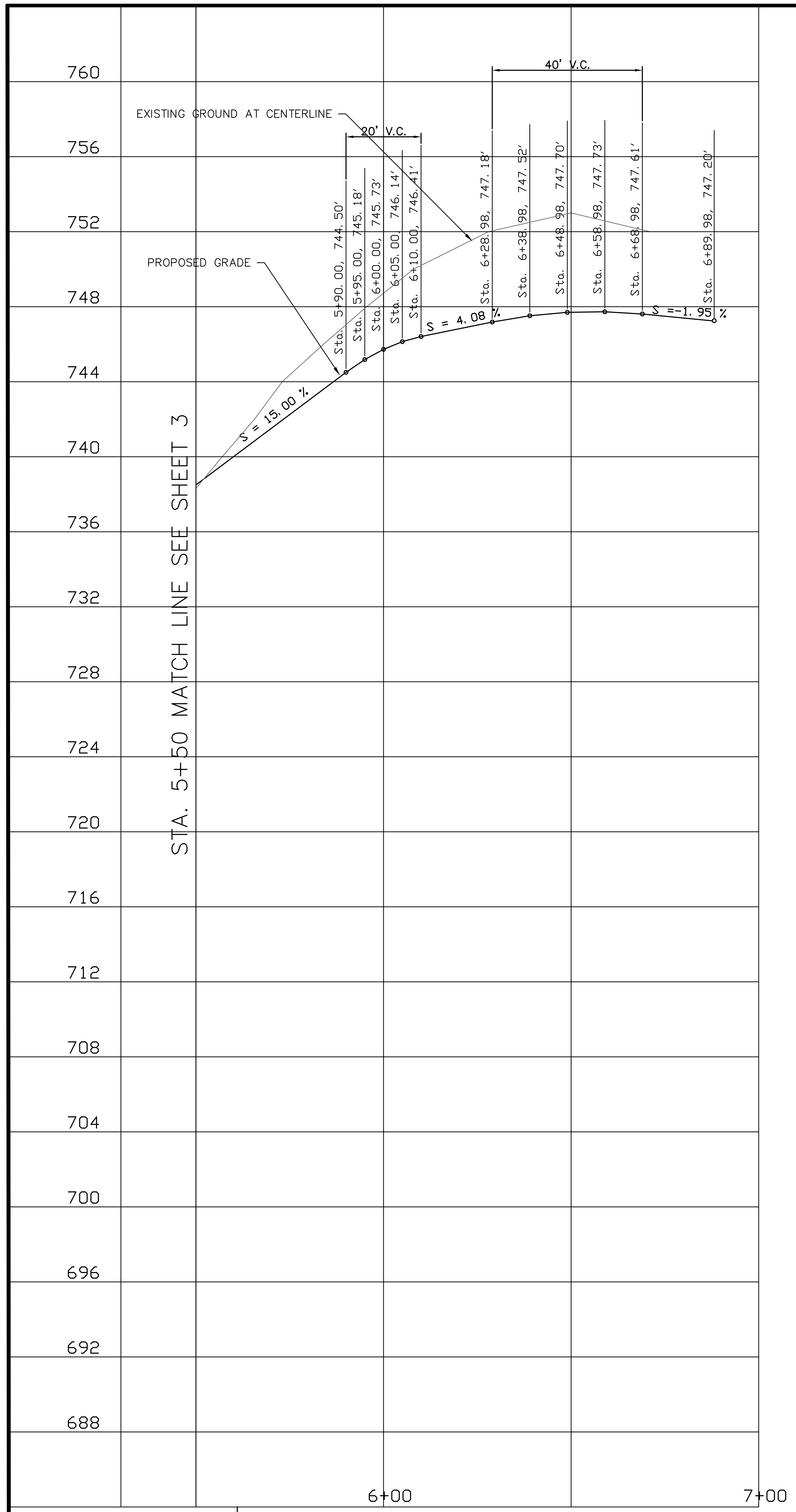
BY: KAREL CYMBAL, RCE 34534
DATE:

WESTFALL ENGINEERS, INC.
14583 BIG BASIN WAY, SARATOGA, CA 95070 (408)867-0244

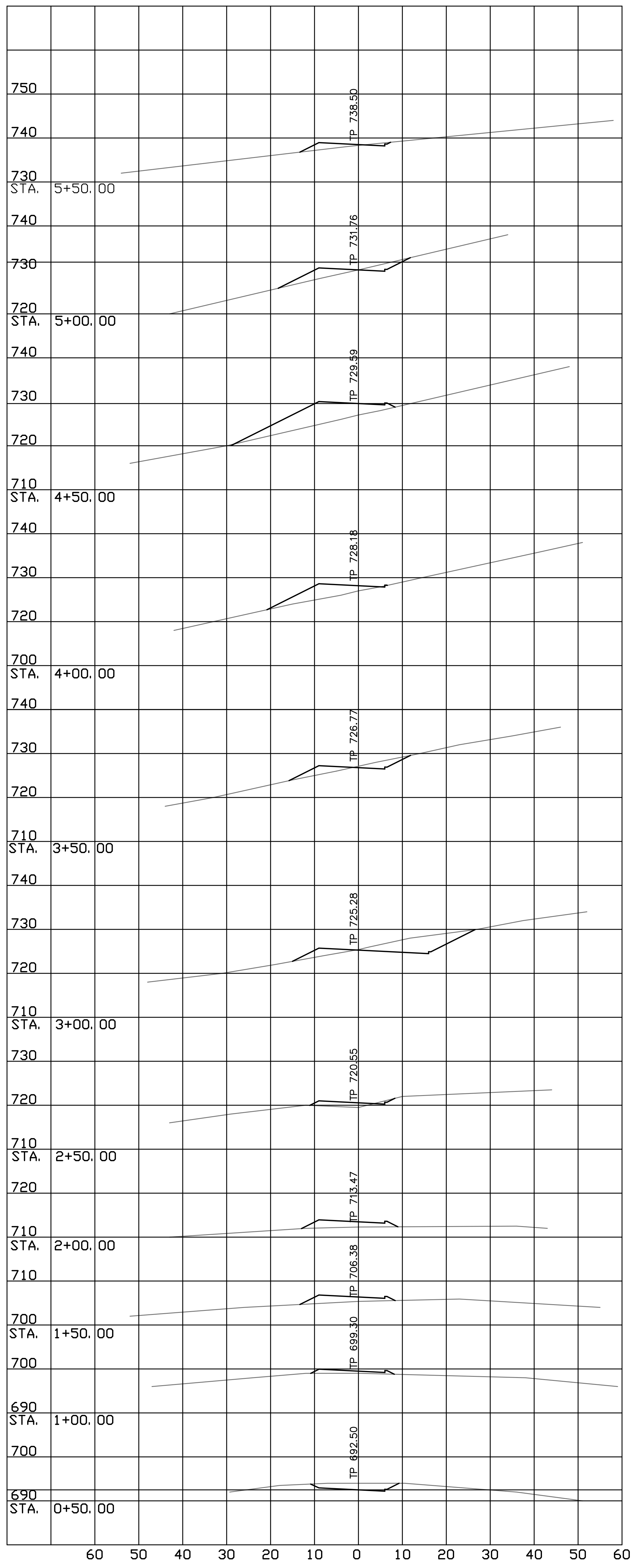
DRIVEWAY PROFILE
LANDS OF PANGAN
APN 029-25-005, MILPITAS, CA

JOB NO.
2013-137

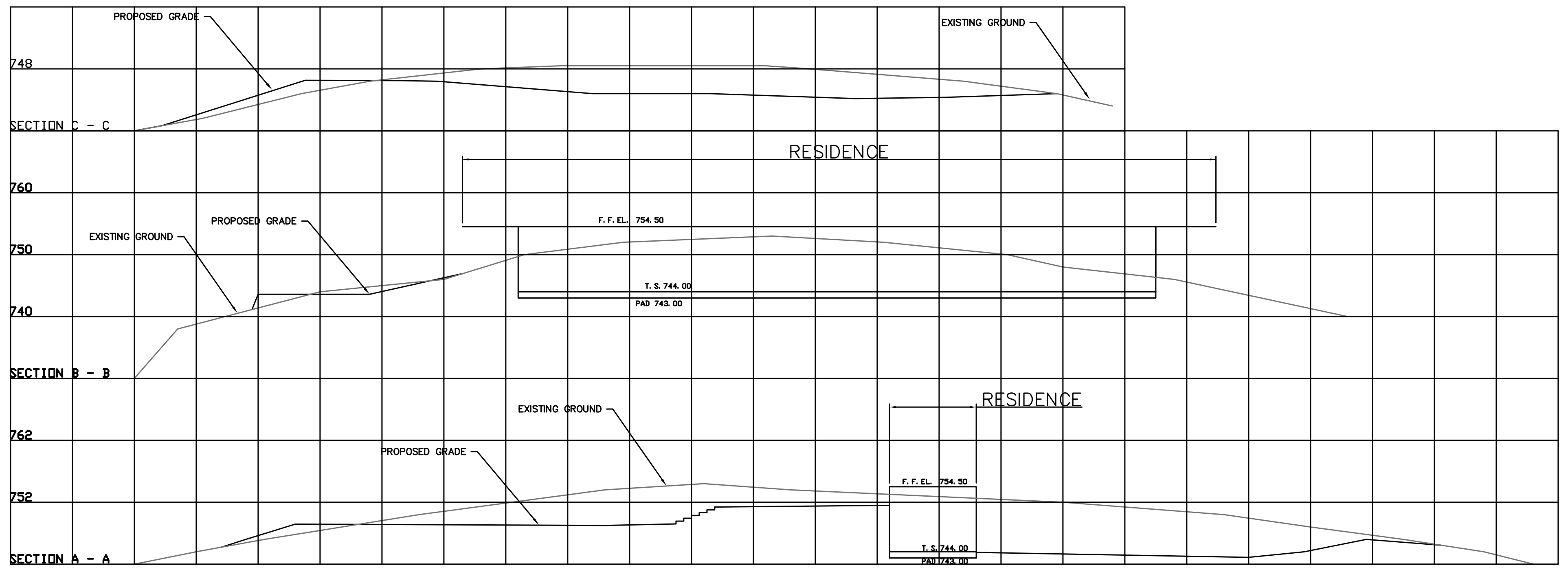
SHEET
3
OF
10

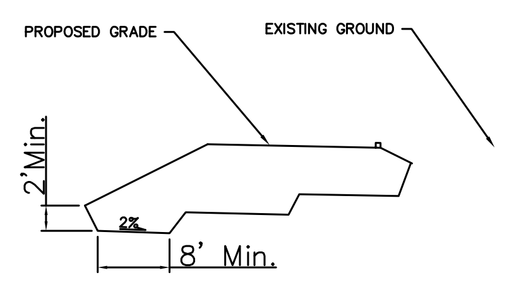


VERT: 1 in = 4 ft
HORZ: 1 in = 20 ft



DRIVEWAY CROSS-SECTIONS
VERTICAL SCALE: 1 inch = 10 feet
HORIZONTAL SCALE: 1 inch = 10 feet





KEY & BENCH DETAIL

NO.	BY	DATE	REVISION	BY	DATE

DATE: SEPTEMBER 2022
SCALE: HOR. AS SHOWN
VERT. AS SHOWN
DESIGNED: JC
CHECKED: KC
PROJ. ENGR: JC

BY: KAREL CYMBAL, RCE 34534
DATE:

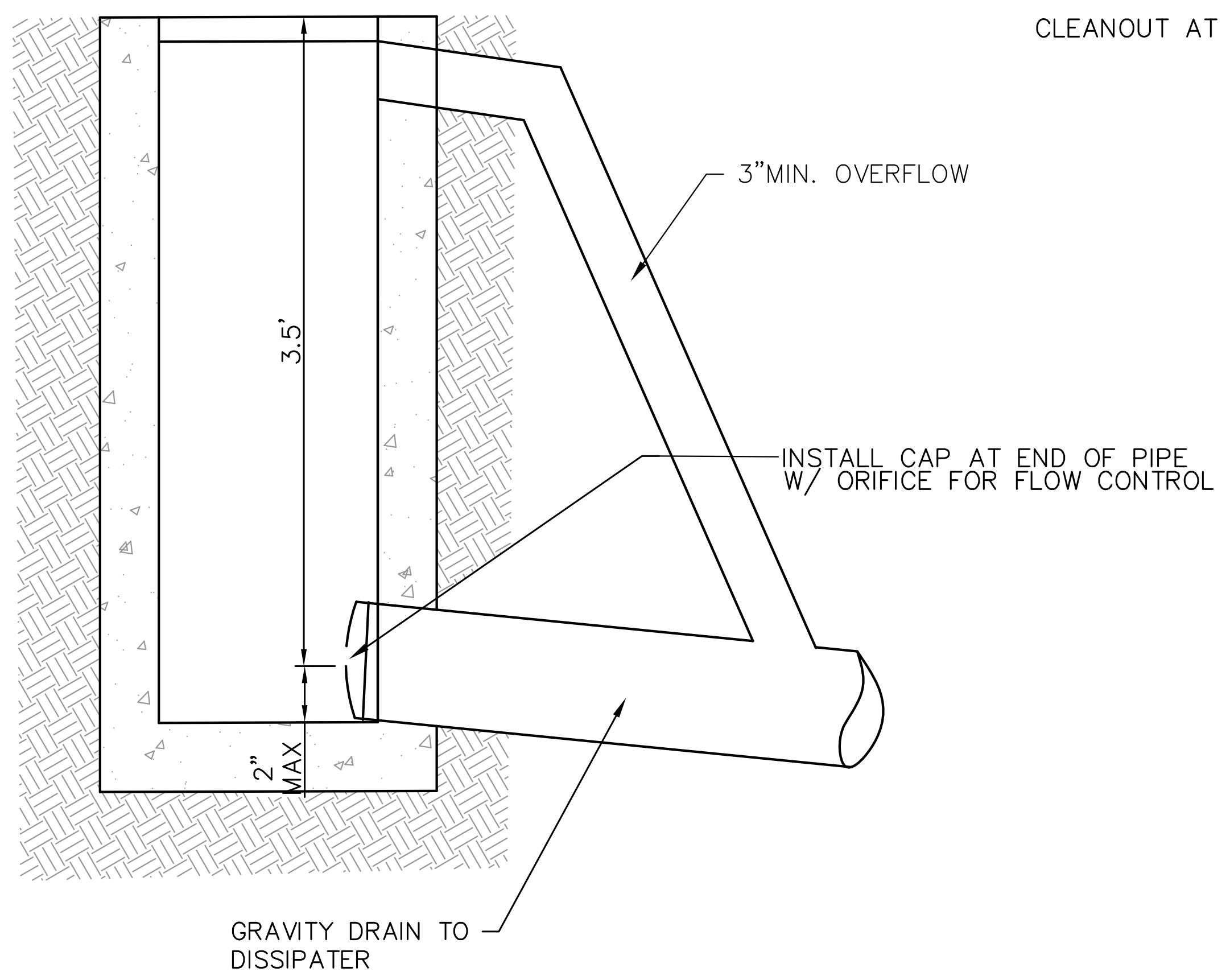
WESTFALL ENGINEERS, INC.
14583 BIG BASIN WAY, SARATOGA, CA 95070 (408)867-0244

DRIVEWAY PROFILE & SECTIONS
LANDS OF PANGAN

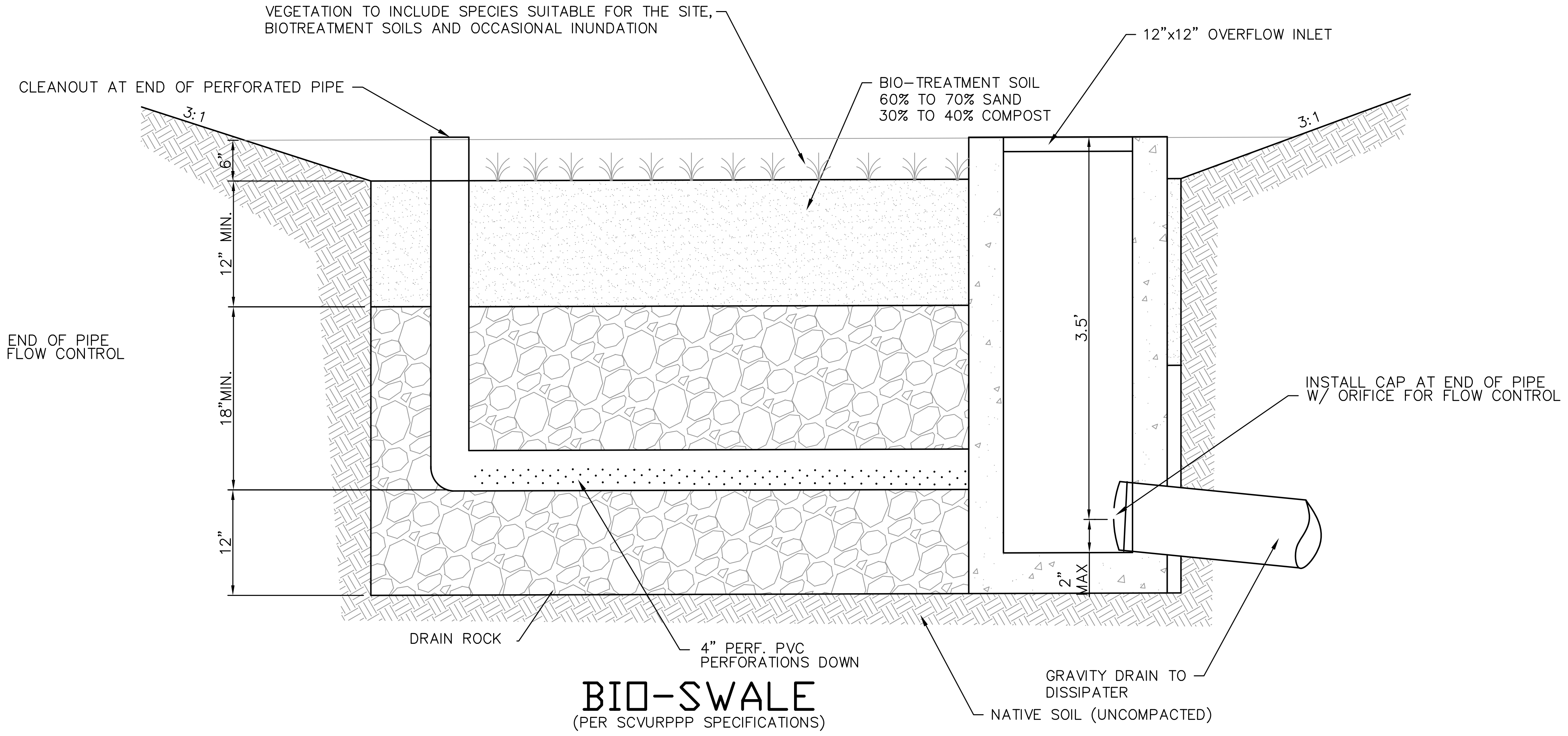
APN 029-25-005, MILPITAS, CA

JOB NO.
2013-137

SHEET
4
OF 10

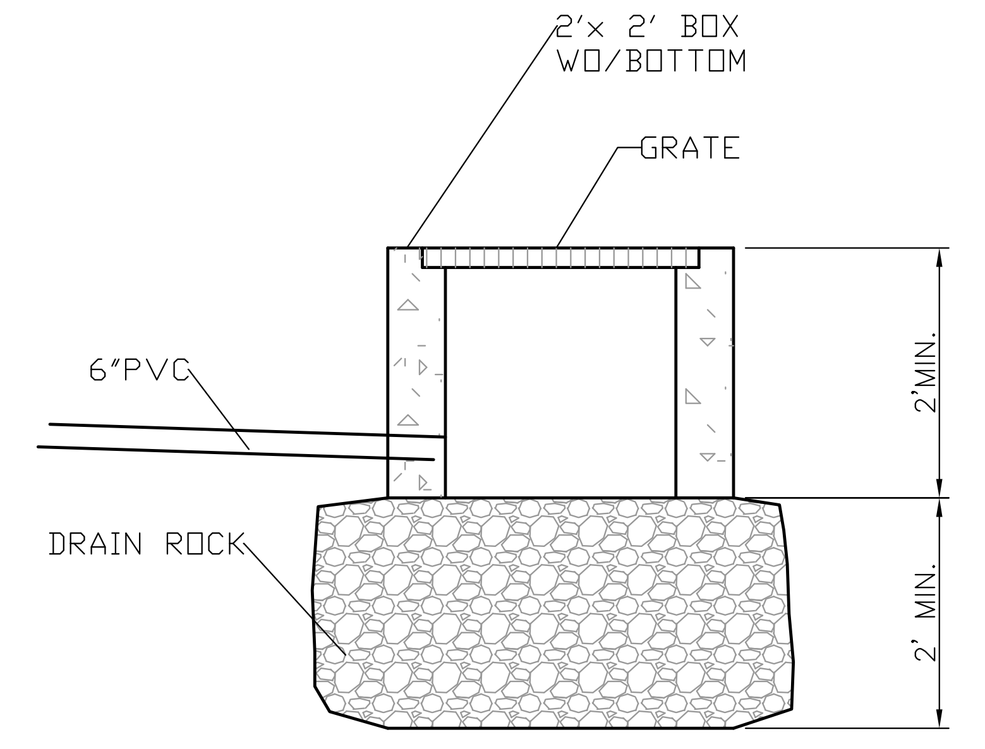


INLET W/
FLOW CONTROL

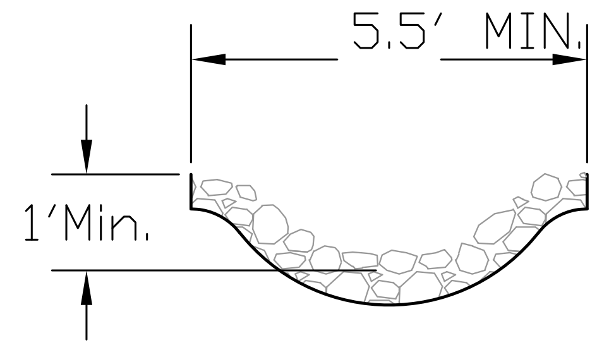


BIO-SWALE
(PER SCVURPPP SPECIFICATIONS)

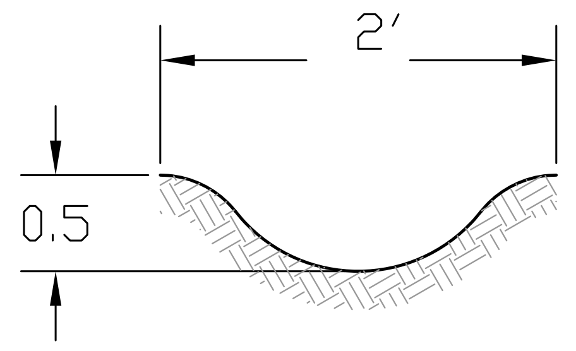
DRAINAGE AREA	BIOSWALE LENGTH	BIOSWALE WIDTH	BIOSWALE DEPTH	ORIFICE OPENING
A	26'	10'	3'	1.8"
B	28'	9'	3'	1.5"
C	25'	7'	3'	1"
D	27'	10'	3'	1.2"



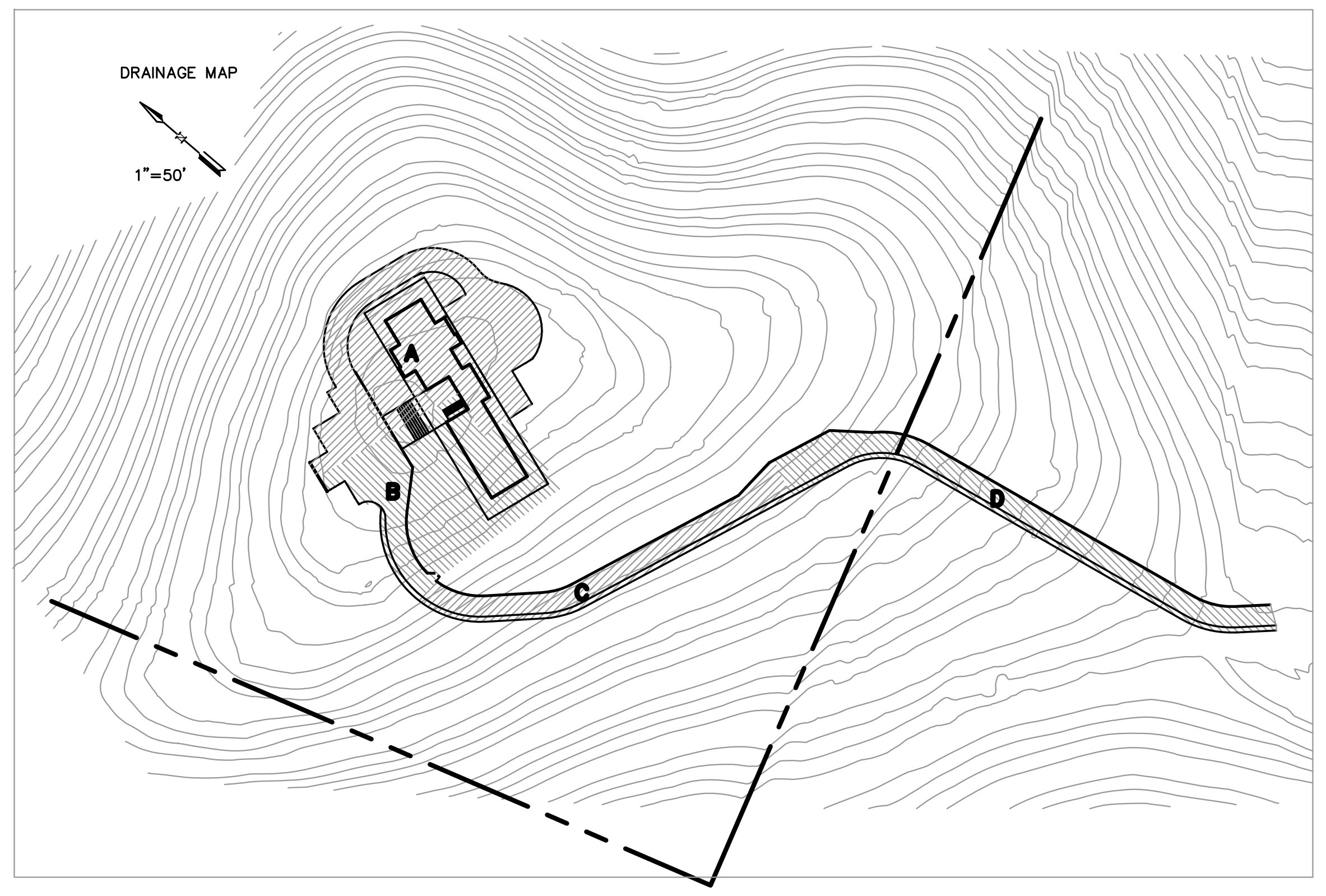
BUBBLE UP
ENERGY DISSIPATOR



ROCK LINED SWALE



SWALE



NOTES:

STORM DRAIN INLETS WILL BE PRE-CAST CONCRETE CURB INLETS WHERE ADJACENT TO AC BERM SUCH AS SANTA ROSA CAST PRODUCTS MODEL 2 ½ A.

FOR DROP INLETS USE PRE-CAST CONCRETE INLETS SUCH AS SANTA ROSA CAST PRODUCTS MODEL 2K.

NO.	BY	DATE	REVISION	BY	DATE

DATE: SEPTEMBER 2022
SCALE: HOR.
VERT.
DESIGNED: JC
CHECKED: KC
PROJ. ENGR: JC

BY: KAREL CYMBAL, RCE 34534
DATE:

WESTFALL ENGINEERS, INC.
14583 BIG BASIN WAY, SARATOGA, CA 95070 (408)867-0244

DETAILS
LANDS OF PANGAN
APN 029-25-005, MILPITAS, CA

JOB NO.
2013-137

SHEET 5
OF 10

NO.	BY	DATE	REVISION	BY	DATE

DATE: SEPTEMBER 2022
SCALE: HOR. 1″=20′
VERT.
DESIGNED: JC
CHECKED: KC
PROJ. ENGR: JC

BY: KAREL CYMBAL, RCE 34534
DATE:

WESTFALL ENGINEERS, INC.

14583 BIG BASIN WAY, SARATOGA, CA 95070 (408)867-0244

EROSION CONTROL PLAN
LANDS OF PANGAN

APN 029-25-005, MILPITAS, CA

JOB NO.
2013-137

SHEET 6 OF 10

form modified from Santa Clara County form

SOIL PROFILE RESULTS
CONVENTIONAL SYSTEMS

△2 May 25, 2022
County Comments

SR #:
DATE OF INSPECTION: 5-12-2022
APN #: 029-35-005
OWNER: Roy Pangan
APPLICANT: Roy Pangan
SITE ADDRESS: Auguste Court, Milpitas, CA 95035
CONDUCTED BY: Steve Hartsell
CHECKED BY: Raymond Chung

HOLE #: SP7	HOLE #: SP8
0-4' TAN LOAMY SAND	0-4' DARK BROWN SANDY CLAY
4-12' YELLO BROWN TANK SANDY CLAY LOAM	4-12' TAN SANDY CLAY LOAM
MAXIMUM DEPTH 12' NO WATER ENCOUNTERED	12' MAXIMUM DEPTH MNO WATER ENCOUNTERED

COMMENTS:

These percolation test holes were set up and the test was conducted in accordance with county standards, including the pre-soak. I was on site during the entire test. SR Hartsell, REHS

County of Santa Clara– Department of Environmental Health
SOIL PERCOLATION TEST RECORDED MEASUREMENTS

OWNER / APPLICANT: Roy Pangan
LOCATION: Ausguste Court, Milpitas
CONTACT PERSON: Steve Hartsell
SR #:
PLN FILE #:
REHS: Steven Hartsell
PHONE: 650 888-2419
DATE: May 25, 2022

HOLE # 1 7, DEPTH 4'

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
840	910	68	71	30	3"	10
910	940	68	69 7/8	30	1 7/8	16
940	1010	68	70	30	2	15
1010	1040	68	69 7/8	60	1 7/8	16

HOLE # 2 8, DEPTH 4'

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
841	911	69	74 6/8"	30	5 6/8	5.2
911	941	69	73 4/8	30	4 4/8	6.7
941	1011	69	74	30	5	6
1011	1041	69	74	30	5	6
1041	1111	69	72 2/8	30	5 2/8	5.7

HOLE # 3 9, DEPTH 4'

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
842	912	70	74 1/8	30	4 1/8	7.3
912	942	70	73 6/8	30	3 6/8	8
942	1012	70	73 5/8	30	3 5/8	8.3
1012	1042	70	73 4/8	30	3 4/8	8.6

HOLE # 4 10, DEPTH 4'

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
843	913	69	empty	30		
913	943	69	empty	30		
943	1013	69	empty	30		
1013	1043	69	empty	30		
1044	1054	69	72 3/8	10	3 3/8	3
1054	1104	69	72 1/8	10	3 1/8	3.2
1104	1114	69	72 1/8	10	3 1/8	3.2

HOLE # 5, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI

HOLE # 6, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI

HOLE		1 (7)	2 (8)	3 (9)	4 (10)	5	6
Stabilized MPI	R	15.3	5.9	8.3	3.2		
Adjusted Stabilized MPI	R_1=R x 1.4	21.4	8.3	11.6	4.5		
Average Adjusted Stabilized MPI	R_2=(Σ R_1)/ # Holes	45.8 /4 = 11.45 minutes per inch					
# Bedrooms:	FOR OFFICE USE ONLY	Tank Size (Gal)		Leach line (Ft)			

Santa Clara County – Department of Environmental Health
SOIL PERCOLATION TEST RECORDED MEASUREMENTS

OWNER / APPLICANT Roel Pangan
LOCATION Calava Creek Heights
CONTACT PERSON Ken Mabie
FILE #
REHS Darius Haghighi
PHONE
DATE 6/11/14

Fill 45"

HOLE # 1, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
[illegible]	12:33pm	45	41 7/8	30	3 1/8"	9.6
12:35pm	1:05pm	45	41 3/8	30	3 3/8"	8.9
1:07pm	1:37pm	45	42	30	3"	10
1:38pm	2:08pm	45 6/8	42 4/8	30	3 2/8"	9.2
2:09pm	2:43pm	45	41 6/8	30	3 2/8	9.2
2:45pm		45				

45

HOLE # 2, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
	12:35pm	45	39 7/4	30	5 2/8"	5.7
12:37pm	1:07pm	45"	39 5/8"	30	5 3/8	5.6
1:09pm	1:39pm	45"	39 7/8"	30	5 1/8"	5.9
1:40pm	2:10pm	45"	39 6/8"	30	5 2/8"	5.7
2:11pm		45		30		

TYPED NUMBERS WERE ADDED BY ME

44"

depths ~4'

HOLE # 3, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
	12:40pm		38 1/8	30	na	na
12:40pm	1:10pm	44 1/8"	38 1/8"	30	6	5
1:12pm	1:22pm	43 7/8"	41"	10	2 7/8"	10.4
1:23pm	1:33pm	44	41"	10	3"	10
1:33pm	1:43pm	44"	41 2/8	10	2 6/8"	10.9
1:50pm	2:00pm	44	41 1/8	10	2 7/8"	10.4
2:02pm	2:12pm	44	41	10	3"	10

HOLE # 4, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
	12:41		42 3/8	30	na	na
12:43	1:13	44 5/8"	42 [illegible]	30	2 [illegible]	14
1:14pm	1:44	44 [illegible]	42 [illegible]	30	2	15
1:45pm	2:15pm	44 [illegible]	42 5/8	30	1 7/8	16
2:16pm	2:46pm	44 [illegible]	42 6/8	30	1 6/8"	17.1
2:47pm	3:17pm	44 [illegible]	42 5/8	30	1 7/8"	16

45"

HOLE # 5, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
	12:44pm		44 3/8"	30	na	na
12:45pm	1:15pm	45 2/8	44	30	1 2/8	24
1:16pm	1:46pm	45"	44	30	1	30
1:47pm	2:17pm	45"	44	30	1	30
2:18pm	2:48pm	45"	44 1/8	30	1	30

HOLE # 6, DEPTH

TIME START	TIME FINISH	WATER LEVEL START	WATER LEVEL FINISH	Δ MIN	Δ INCH	MPI
	12:46		43 [illegible]	30	na	na
12:47	1:17	45"	43 7/8	30	1.125	1.6
1:18	1:48pm	45"	43 7/8	30	1.125	1.6
1:49pm	2:19pm	45"	43 7/8	30	1.125	1.6

HOLE		1	2	3	4	5	6
Stabilized MPI	R	9.5	5.8	10.3	16.4	30	1.6
Adjusted Stabilized MPI	R_1=R x 1.4	13.3	8.1	14.5	23	42	2.2
Average Adjusted Stabilized MPI	R_2=(Σ R_1)/ # Holes	103.1/6 = 17.2 minutes per inch					
# Bedrooms:	FOR OFFICE USE ONLY	Tank Size (Gal)		Leach line (Ft)			

MPI.doc (3.03)

SCOPE OF WORK

The following work will be done under permits issued by Santa Clara County Environmental Health.

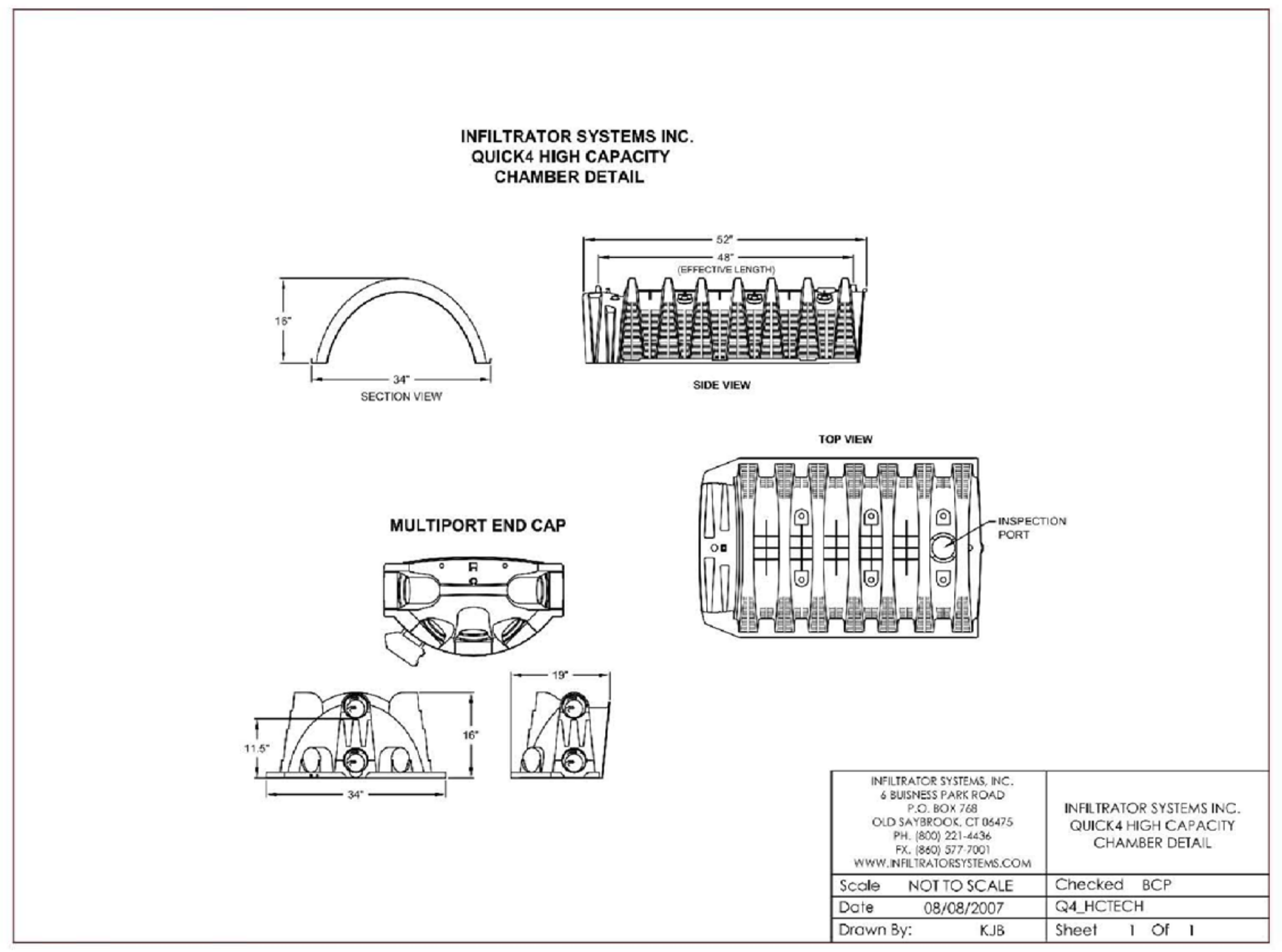
1. Install a new 1500-gallon Chapin Septic Tank as shown.
2. Install Two Way Valve as shown.
3. Install tight line from the tank to the valve and from the valve to the leach trenches as shown.
4. Install leach field trenches as shown.
5. Connect the sanitary sewer stub-out to the inlet of the tank as shown.
6. Septic system installation shall be done when the soil is "dry".

All material and methods shall comply with Santa Clara County regulations and policies. All work must be inspected and approved before covering it.

Nothing herein should be considered to be a warranty or guarantee of any kind and the designer liability is hereby limited to $500 or the fee paid for the design whichever is less.

△2 May 25, 2022
County Comments

The County of Santa Clara Environmental Health staff requested that additional perk test and soil profile data be obtained in the vicinity of the revised leach field locations. This was done as shown on this plan.



INFILTRATOR SYSTEMS, INC.
6 BUISNESS PARK ROAD
P.O. BOX 768
OLD SAYBROOK, CT 06475
PH. (800) 221-4436
FX. (860) 577-7001
WWW.INFILTRATORSYSTEMS.COM

INFILTRATOR SYSTEMS INC.
QUICK4 HIGH CAPACITY
CHAMBER DETAIL

Scale NOT TO SCALE	Checked BCP
Date 08/08/2007	Q4_HCTECH
Drawn By: KJB	Sheet 1 Of 1

REVISIONS	
△1 1-3-2022 lot line adjustment	SRH
△2 May 25, 2022 County Comments	SRH

STEVEN R. HARTSELL # 5979 EXPIRES 12-31-2023

Steven R. Hartsell

map of entire parcel

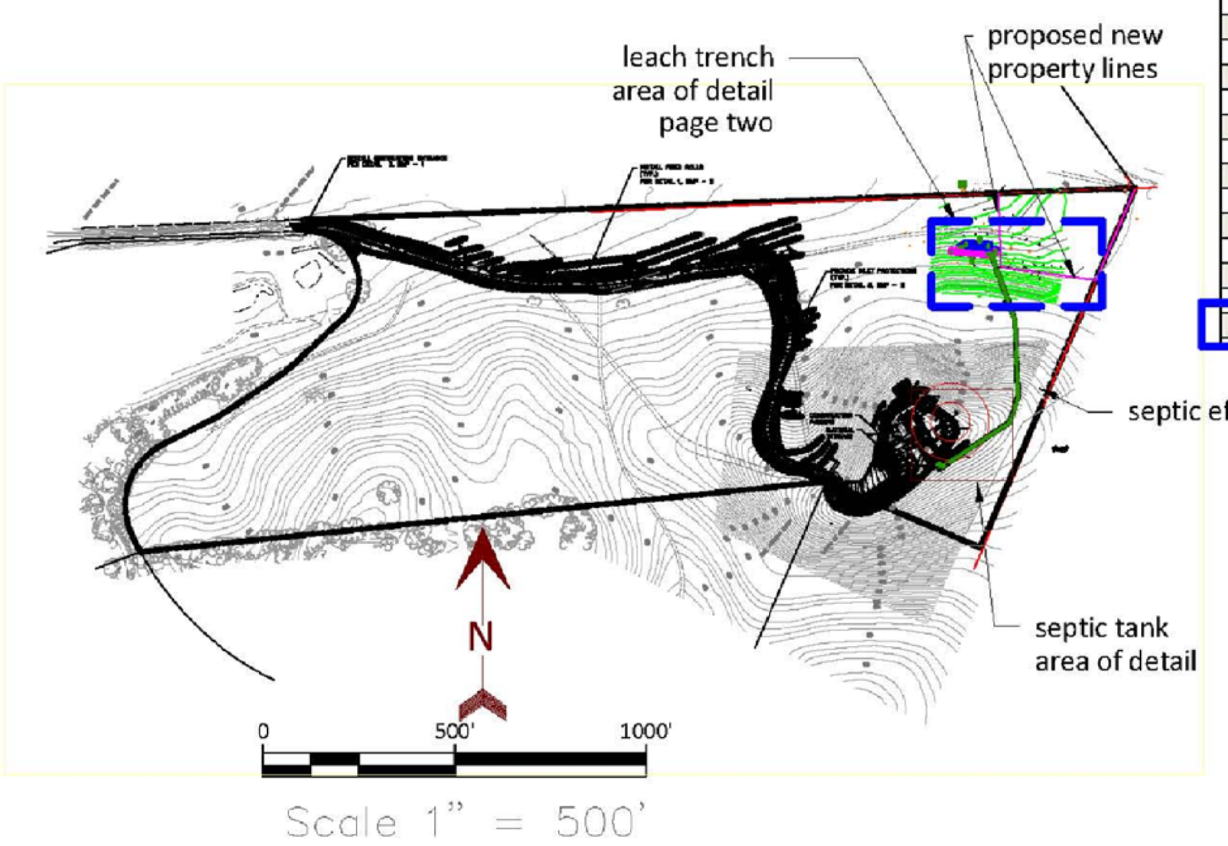


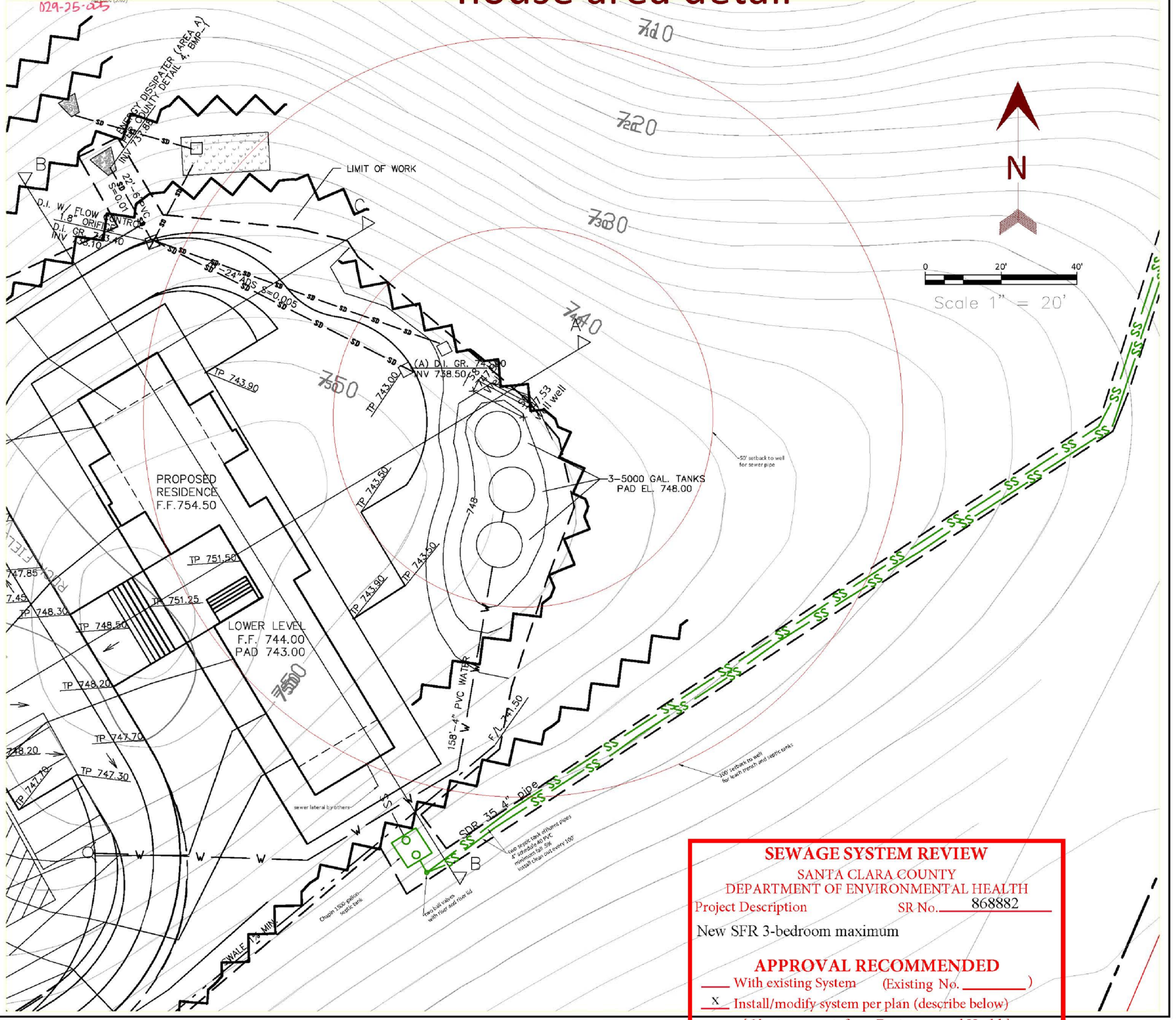
Table 1. Standard Wastewater Application Rates - Septic Tank Effluent

Percolation Rate (MPI)	Application Rate (gpd/ft²)		Percolation Rate (MPI)	Application Rate (gpd/ft²)
1 to 5	1.20		51	0.41
6	1.12		52	0.40
7	1.04		53	0.40
8	0.96		54	0.39
9	0.88		55	0.38
10	0.80		56	0.38
11	0.78		57	0.37
12	0.77		58	0.36
13	0.75		59	0.36
14	0.74		60	0.35
15	0.72		61	0.35
16	0.70		62	0.34
17	0.68		63	0.34
18	0.67		64	0.34

Table 3-1.
Wastewater Design Flows for
Single Family Residences and Second Units

No. of Bedrooms	Design Flow (gal/day)
1	150
2	300
3	450
4	525
5	600
6	675
>6	+ 75 per bedroom

house area detail



△2 May 25, 2022
County Comments

PROJECT DISCUSSION

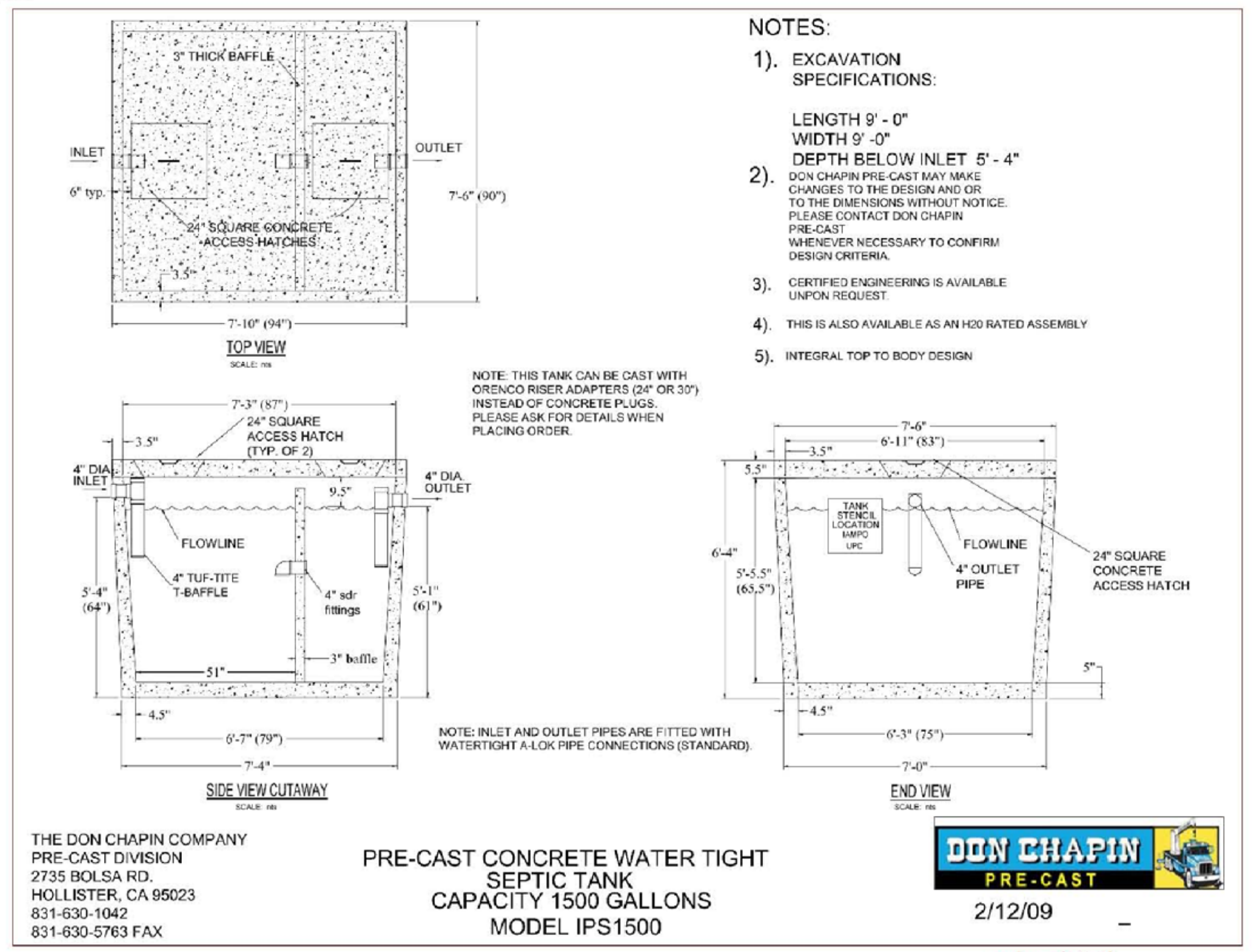
This plan shows a revised leach field area to allow a proposed lot line adjustment. Environmental Health required more perk test holes and soil profiles in this new leach field area. This testing was done and is shown on this plan. The results are included in the discussion below.

A new home is proposed on this undeveloped parcel. Since there is no public sewer close enough to be utilized the new dwelling(s) will be served by a septic system. This plan was developed to show where and how this septic system will be installed.

To determine if the soil is suitable for septic system use soil profiles and percolation testing an was performed on this site as shown by Environmental Concepts in 2014 and by me in 2022. The area where the perk tests used for leach trenches are proposed has suitable soil and no ground water to a minimum depth of 12 feet (per 2022 soil profiles). The perk rate achieved in 2014 is 17.2 minutes per inch. The perk rate achieved in 2022 is 11.5 minutes per inch. This plan uses the higher perk rate of 17.2 minutes per inch.

At this rate the County allows an application rate of .67 gallons of wastewater per square foot of infiltrative area. The proposed dwelling has 3 bedrooms for which a septic system must be installed that can treat and dispose of 450 gallon of wastewater a day. The septic system will need two leach fields each with 168 linear feet of standard leach trench. Since this plan specifies the use of High Capacity Quick Four Infiltrator Chambers instead of using gravel in the trenches the County allows us to reduce the amount of leach trench per leach field to 118' linear feet (a 30% reduction). This plan shows two leach fields, each with 200 linear feet of leach trench, which exceeds this requirement.

A fifteen hundred gallon tank is provides more than the required two time the daily wastewater flow of 900 gallons (450 gallons per day * 2 days = 900 gallons) and will be used as specified on this plan.



NOTES:

1). EXCAVATION SPECIFICATIONS:

LENGTH 9' - 0"
WIDTH 9' -0"
DEPTH BELOW INLET 5' - 4"

2). DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN PRE-CAST WHENEVER NECESSARY TO CONFIRM DESIGN CRITERIA.

3). CERTIFIED ENGINEERING IS AVAILABLE UNPON REQUEST.

4). THIS IS ALSO AVAILABLE AS AN H20 RATED ASSEMBLY

5). INTEGRAL TOP TO BODY DESIGN

NOTE: THIS TANK CAN BE CAST WITH ORENCO RISER ADAPTERS (24" OR 30") INSTEAD OF CONCRETE PLUGS. PLEASE ASK FOR DETAILS WHEN PLACING ORDER.

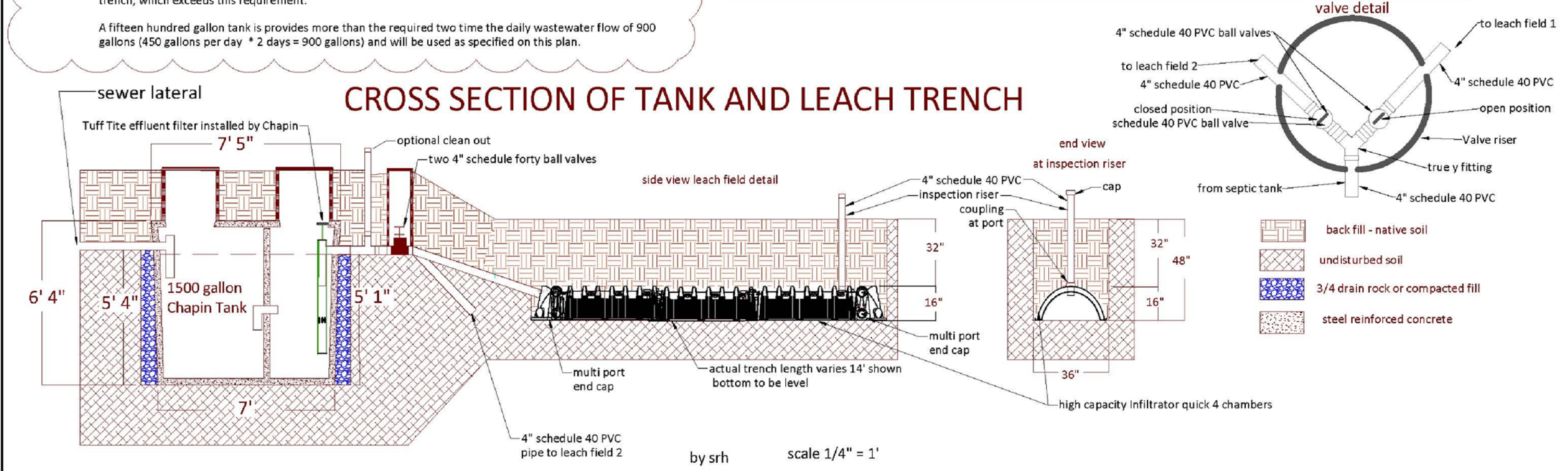
NOTE: INLET AND OUTLET PIPES ARE FITTED WITH WATERTIGHT A-LOK PIPE CONNECTIONS (STANDARD).

THE DON CHAPIN COMPANY
PRE-CAST DIVISION
2735 BOLSA RD.
HOLLISTER, CA 95023
831-630-1042
831-630-5763 FAX

PRE-CAST CONCRETE WATER TIGHT
SEPTIC TANK
CAPACITY 1500 GALLONS
MODEL IPS1500

DON CHAPIN PRE-CAST
2/12/09

CROSS SECTION OF TANK AND LEACH TRENCH



▨ back fill - native soil
▨ undisturbed soil
▨ 3/4 drain rock or compacted fill
▨ steel reinforced concrete

by srh
scale 1/4" = 1'

SEWAGE SYSTEM REVIEW
SANTA CLARA COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH
Project Description SR No. 868882
New SFR 3-bedroom maximum
APPROVAL RECOMMENDED
____ With existing System (Existing No. ________)
X Install/modify system per plan (describe below)
[Obtain a permit from Environmental Health]
1500 gallon tank with 200' + 200" and d-valve
R.E.H.S. Raymond Chung Date 06/02/2022
Not A Sewage System Permit. *Plan is void if absent signature.*

S.R. HARTSELL, R.E.H.S.
202 WATERFORD DRIVE
VACAVILLE, CA 95688
srhartsell@gmail.com (650) 888-2419

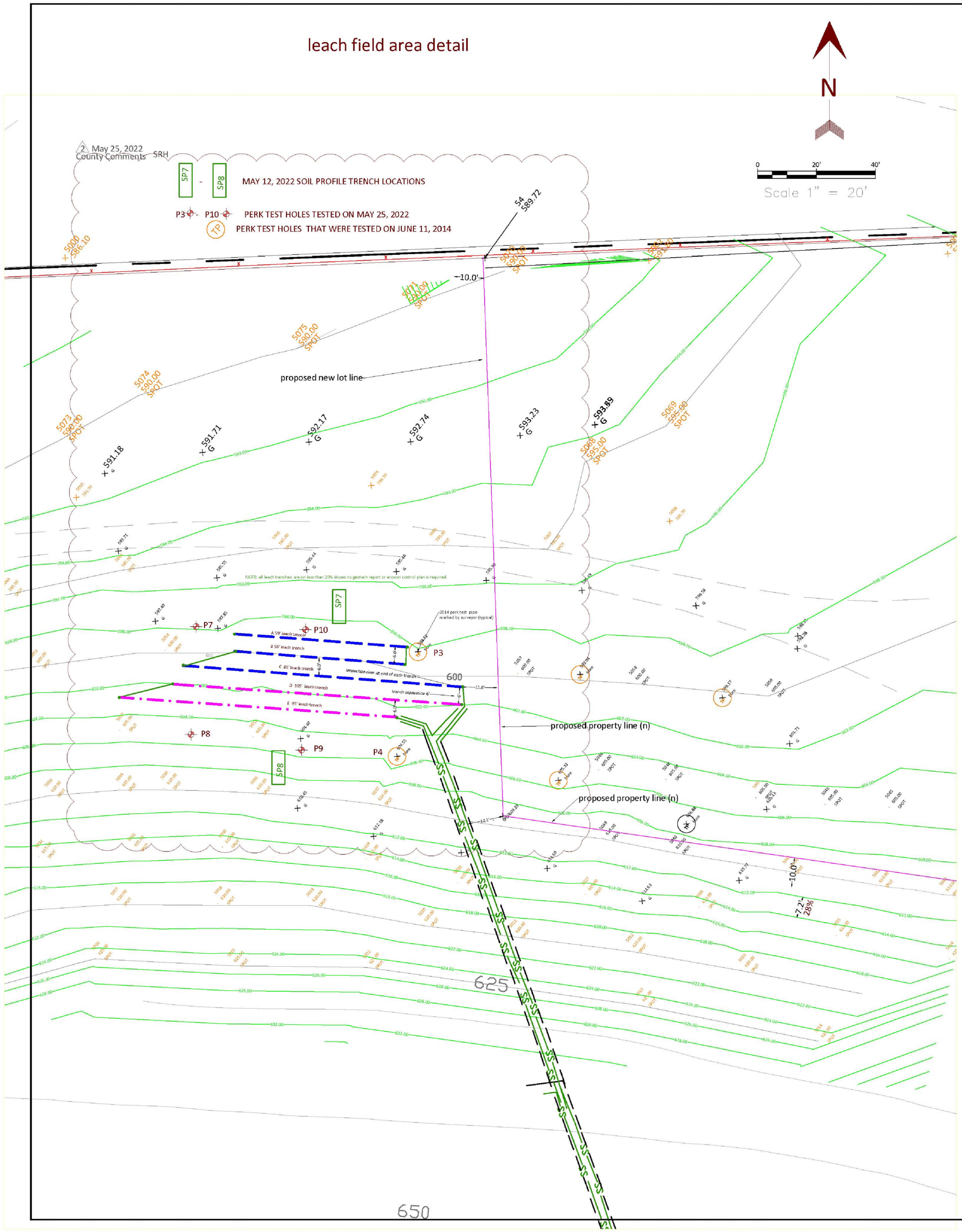
SEPTIC
SYSTEM
PLAN

PANGAN RESIDENCE
AUGUSTE CT
MILPITAS, CA 95035
APN 029 35 005

OCTOBER 2, 2018
SCALE AS NOTED
BY SRH

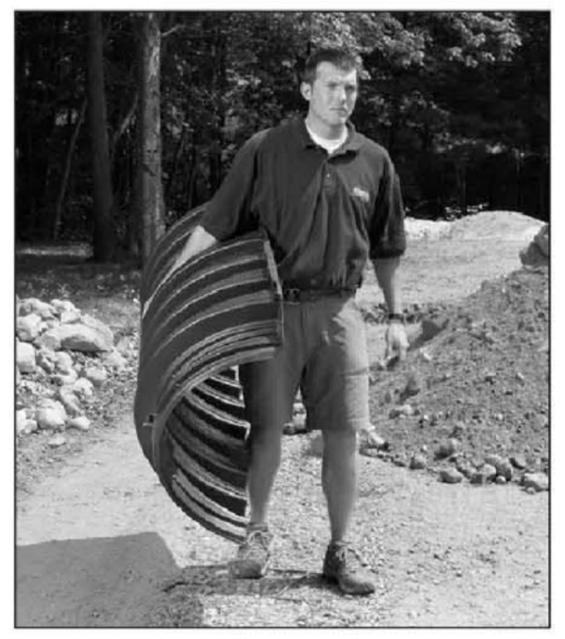
PAGE
ONSITE
ONE
1 OF 2

leach field area detail



Septic System Installation Instructions

INFILTRATOR
water technologies



Quick4® High Capacity Chambers
Quick4® Standard Chambers

Before You Begin

Quick4 High Capacity Chambers and Quick4 Standard Chambers may only be installed according to State and/or local regulations. If unsure of the installation requirements for a particular site, contact the local health department.

Like conventional systems, the soil and site conditions must be approved prior to installation. Conduct a thorough site evaluation to determine the proper sizing and siting of the system before installation.

Materials and Equipment Needed

☐ Quick4 Chambers	☐ Hole Saw*
☐ MultiPort End Caps	☐ 2-inch Drywall Screws*
☐ PVC Pipe and Couplings	☐ Screw Gun*
☐ Backhoe	☐ Small Valve-Cover Box*
☐ Laser, Transit, or Level	☐ 4-inch Cap for Inspection Port*
☐ Shovel and Rake	
☐ Tape Measure	
☐ Utility Knife	* Optional

These guidelines for construction machinery must be followed during installation:

- ☐ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an H-10 AASHTO load rating.
- ☐ Only drive across the trenches when necessary. Never drive down the length of the trenches.
- ☐ To avoid additional soil compaction, never drive heavy vehicles over the completed system.

Excavating and Preparing the Site

Note: As is the case with conventional systems, do not install the systems in wet conditions or in overly moist soils, as this causes machinery to smear the soil.

Note: The Quick4 Standard and Quick4 High Capacity chambers have a maximum cover depth of 48" for bed applications and 96" for trenches. Please refer to Infiltrator Cover Policy or call Infiltrator Water Technologies with any questions.

1. Stake out the location of all trenches and lines. Set the elevations of the tank, pipe, and trench bottom.

2. Install sedimentation and erosion control measures. Temporary drainage swales/berms may be installed to protect the site during rainfall events.

3. Excavate and level 3-foot wide trenches with proper center-to-center separation. Verify that the trenches are level or have the prescribed slope.

Note: Over excavate the trench width in areas where you are planning to contour.

4. Rake the bottom and sides if smearing has occurred while excavating. Remove any large stones and other debris. Do not use the bucket teeth to rake the trench bottom.

Note: Raking to eliminate smearing is not necessary in sandy soils. In fine textured soils (silts and clays), avoid walking in the trench to prevent compaction and loss of soil structure.

5. Verify that each trench is level using a level, transit, or laser.

Preparing the End Cap

1. With a utility knife start the tear-out seal at the appropriate diameter for the inlet pipe. The seal allows for a tight fit for 3-inch, 4-inch SDR35, and 4-inch SCH40 pipe.


1
Start tear-out seal.

2. Pull the tab on the tear-out seal to create an opening on the end cap.

3. Snap off the molded splash plate located on the bottom front of the end cap.


2
Pull tab on tear-out seal.

4. Install splash plate into the appropriate slots below the inlet to prevent trench bottom erosion.


4
Install splash plate.

5. Insert the inlet pipe into the end cap at the beginning of the trench. The pipe will go in several inches before reaching a stop. (Screws optional.)


5
Insert inlet pipe.

Installing the System

1. Check the header pipe to be sure it is level or has the prescribed slope.

2. Set the invert height at 11.5 inches from the bottom of the trench for the Quick4 High Capacity Chamber. For the Quick4 Standard Chamber, set the invert height at 8 inches from the bottom of the trench.

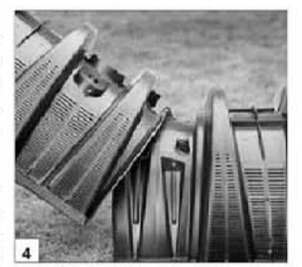
3. Place the inlet end of the first chamber over the back edge of the end cap.

4. Lift and place the end of the next chamber onto the previous chamber by holding it at a 90-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower to the ground to connect the chambers.

Note: When the chamber end is placed between the connector hook and locking pin at a 90-degree angle, the pin will be visible from the back side of the chamber.

Note: The connector hook serves as a guide to ensure proper connection and does not add structural integrity to the chamber joint. Broken hooks will not affect the structure nor void the warranty.

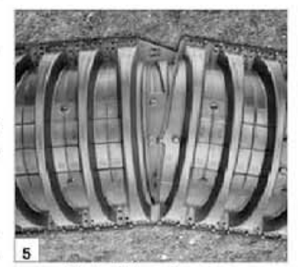

3
Place first chamber onto end cap.


4
Connect the chambers.

5. Swivel the chamber on the pin to the proper direction for the trench layout.

Note: Quick4 Chambers allow for 10 degrees of swivel in either direction at each joint.

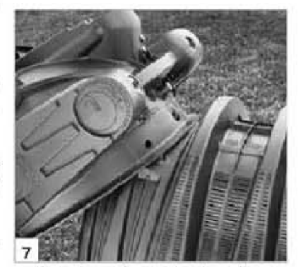
6. Where the system design requires straight runs, use the StraightLock™ Tabs to ensure straight connections. To activate the tabs, pop the tabs up with your thumb and lock into place.


5
Swivel the chamber.

7. Continue connecting the chambers until the trench is completed.

Note: As the chambers are installed, verify they are level or have the prescribed slope.

8. The last chamber in the trench requires an end cap. Lift the end cap at a 45-degree angle and insert the connector hook through the opening on the top of the end cap. Applying firm pressure, lower the end cap to the ground to snap it into place. Do not remove the tear-out seal.


7
Attach end cap to chamber.

9. To ensure structural stability, fill the sidewall area by pulling soil from the sides of the trench with a shovel. Start at the joints where the chambers connect. Continue backfilling the entire sidewall area, making sure the fill covers the louvers.


9
Walking-in the fill.

10. Pack down the fill by walking along the edges of the trench and chambers. This is an important step in assuring structural support.

Note: In wet or clay soils, do not walk in the sidewalls.

11. Proceed to the next trench and begin with Step 1.

Installing Optional Inspection Ports

1. With a hole saw drill the pre-marked area in the top of the chamber to create a 4-inch opening.

2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port sleeve.

Note: The sleeve will accommodate a 4-inch SCH40 pipe.

3. Use two screws to fasten the pipe to the sleeve around the inspection port.

4. Attach a threaded cap or cleanout assembly onto the protruding pipe at the appropriate height.

5. A small valve cover box may be used if inspection port is below the desired grade.

Covering the System

Before backfilling, the system must be inspected by a health officer or other official as required by State and local codes. Create an as-built drawing at this time for future records.

1. Backfill the trench by pushing fill material over the chambers with a backhoe. Keep a minimum of 12 inches of compacted cover over the chambers before driving over the system.

Note: Do not drive over system while backfilling in sand.

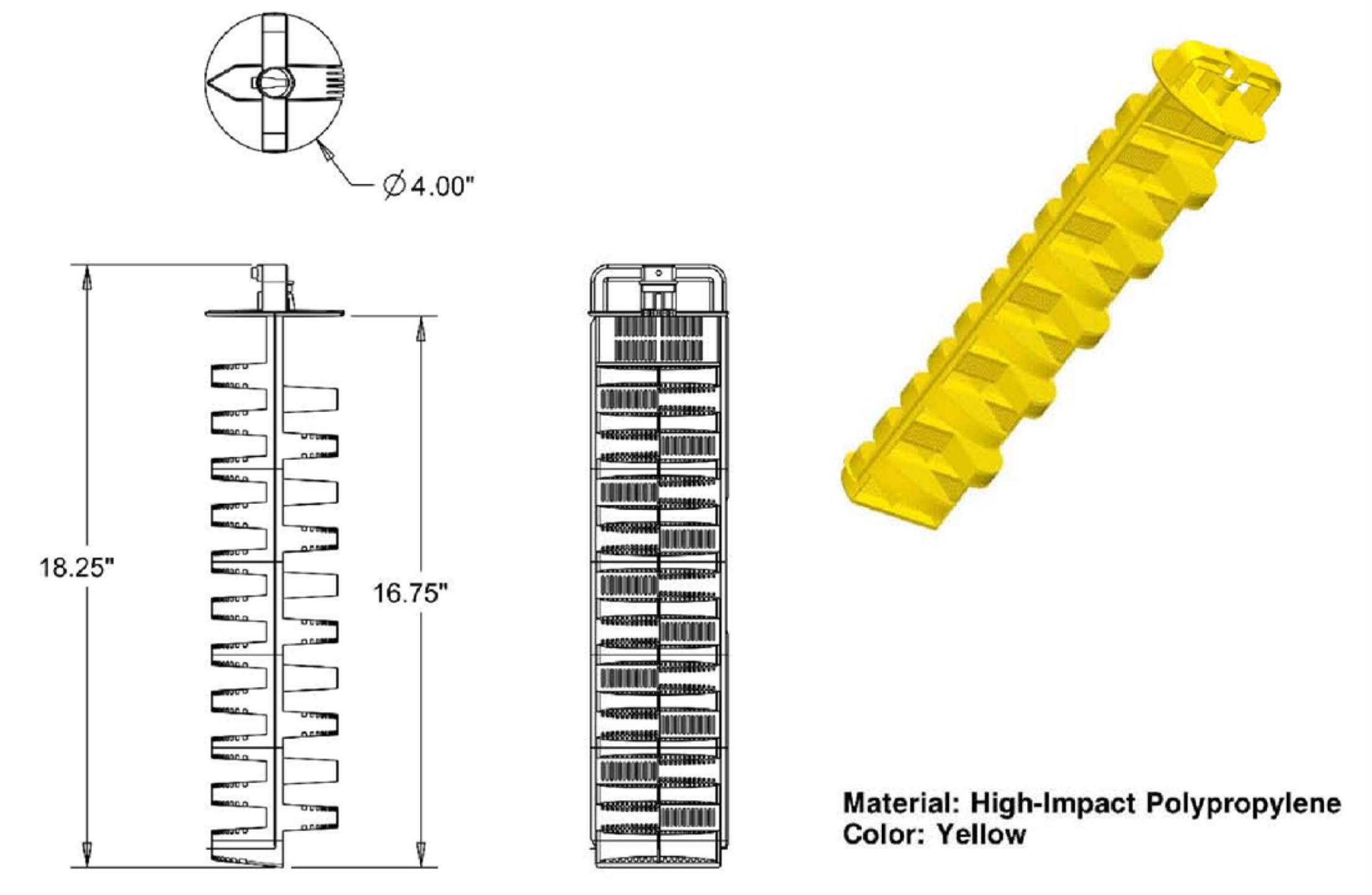
Note: For shallow cover applications, you must mound 12 inches of soil over the system before driving over it, and then grade it back to 6 inches upon completion.

2. It is best to mound several inches of soil over the finish grade to allow for settling. This also ensures that runoff water is diverted away from the system.

3. After the system is covered, the site should be seeded or sodded to prevent erosion.

Note: If the system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will show contractors where the site is located so they will not cross it with equipment or vehicles.

effluent filter to be installed in septi tank before delivery by Don Chapin Pre-Cast



Material: High-Impact Polypropylene
Color: Yellow

TUF-TITE®	**Drainage and Septic Products** Tuf-Tite, Inc. 1200 Flex Court Lake Zurich, Illinois 60047 TELEPHONE: 847.550.1011 TOLL FREE: 800.382.7009 FAX: 847.550.8004	**PART NAME:** 4" EFFLUENT FILTER **PART #:** EF-4

REVISIONS	
△1 1-3-2022 lot line adjustment	SRH
△2 May 25, 2022 County Comments	SRH

STEVEN R. HARTSELL
EXPIRES 12-31-2023
5979
Steven R. Hartsell

S.R. HARTSELL, R.E.H.S.
202 WATERFORD DRIVE
VACAVILLE, CA 95688
srhartsell@gmail.com (650) 888-2419

SEPTIC
SYSTEM
PLAN

PANGAN RESIDENCE
AUGUSTE CT
MILPITAS, CA 95035
APN 029 35 005

OCTOBER 2, 2018

SCALE AS NOTED

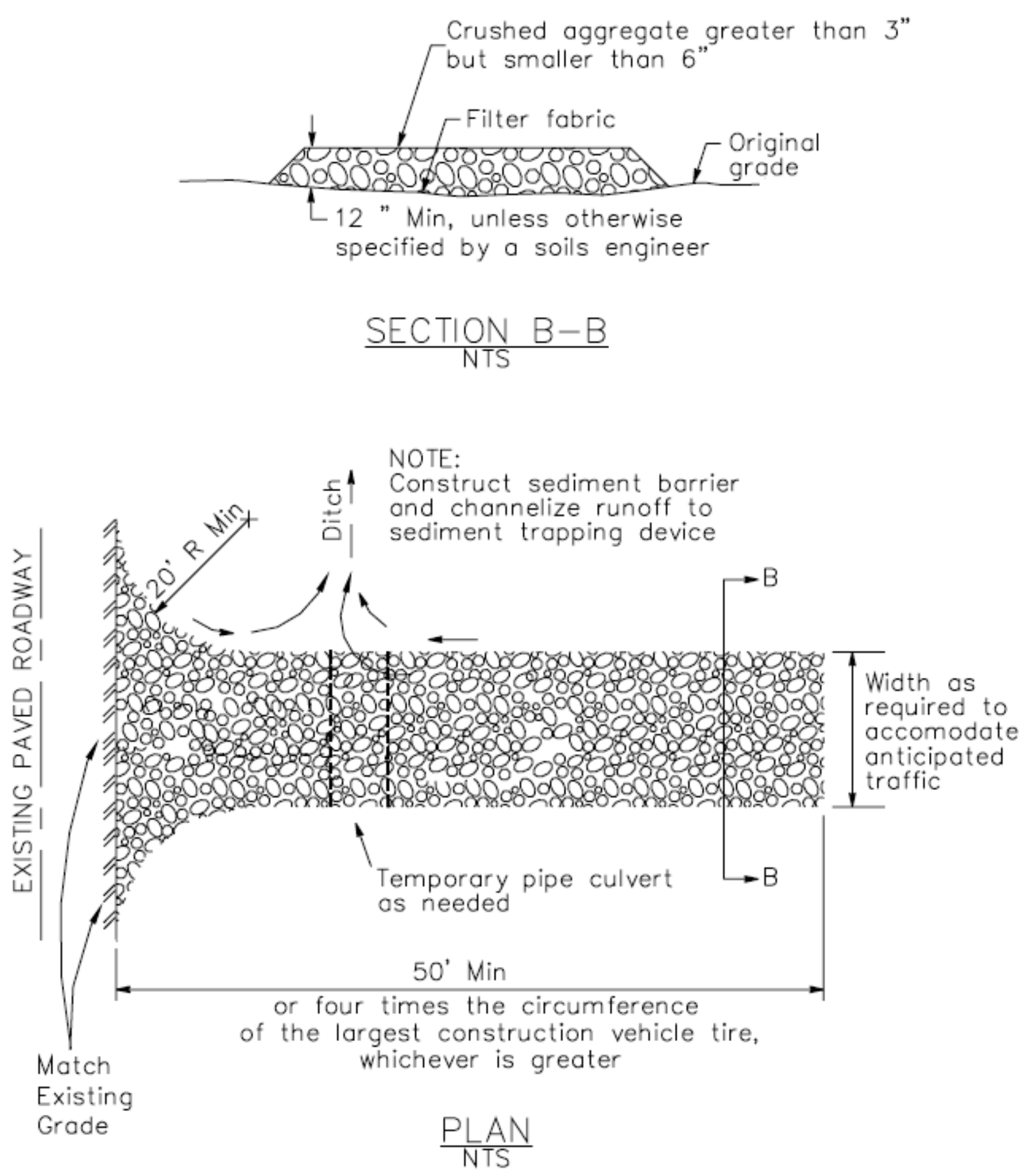
BY SRH

PAGE

ONSITE
TWO

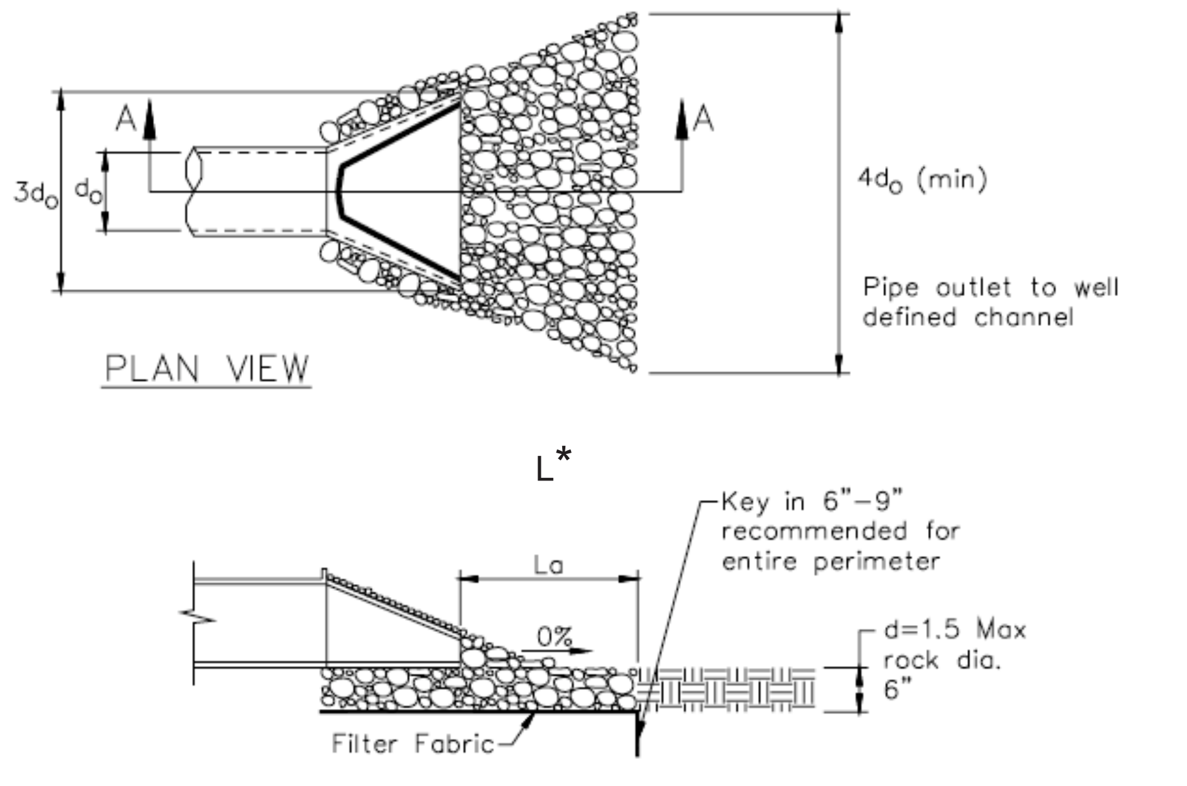
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



4 Velocity Dissipation Devices

CASQA Detail EC-10

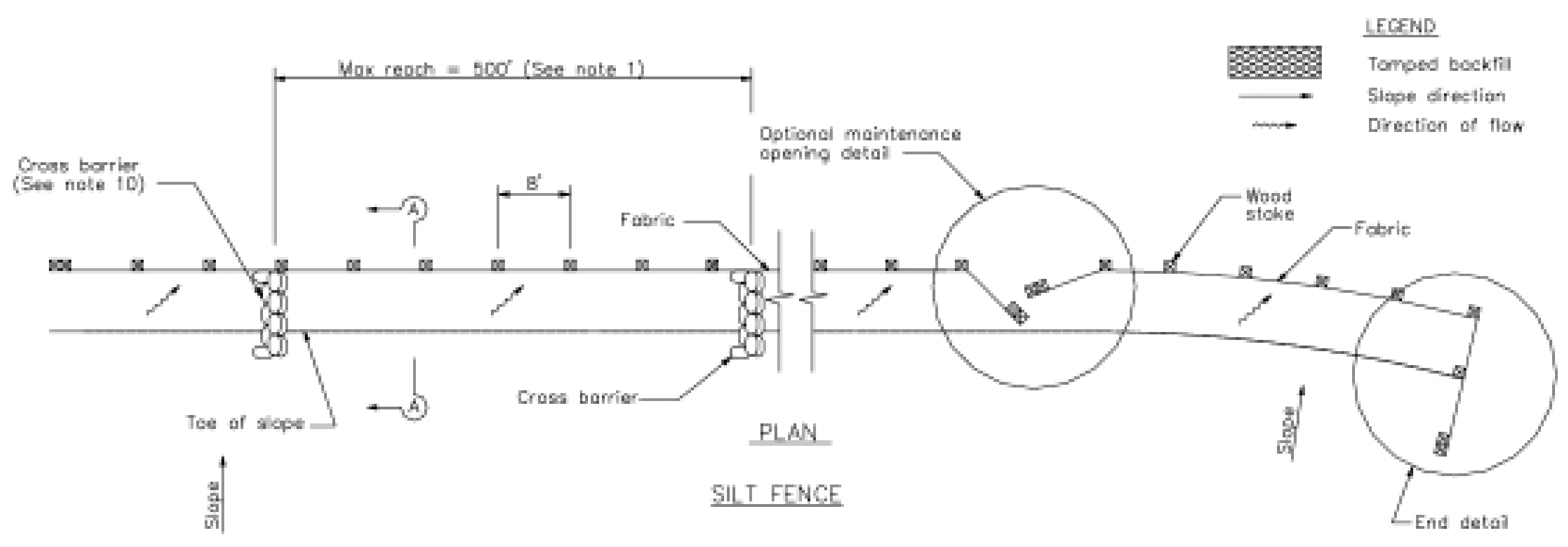


* Length per ABAG Design Standards

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

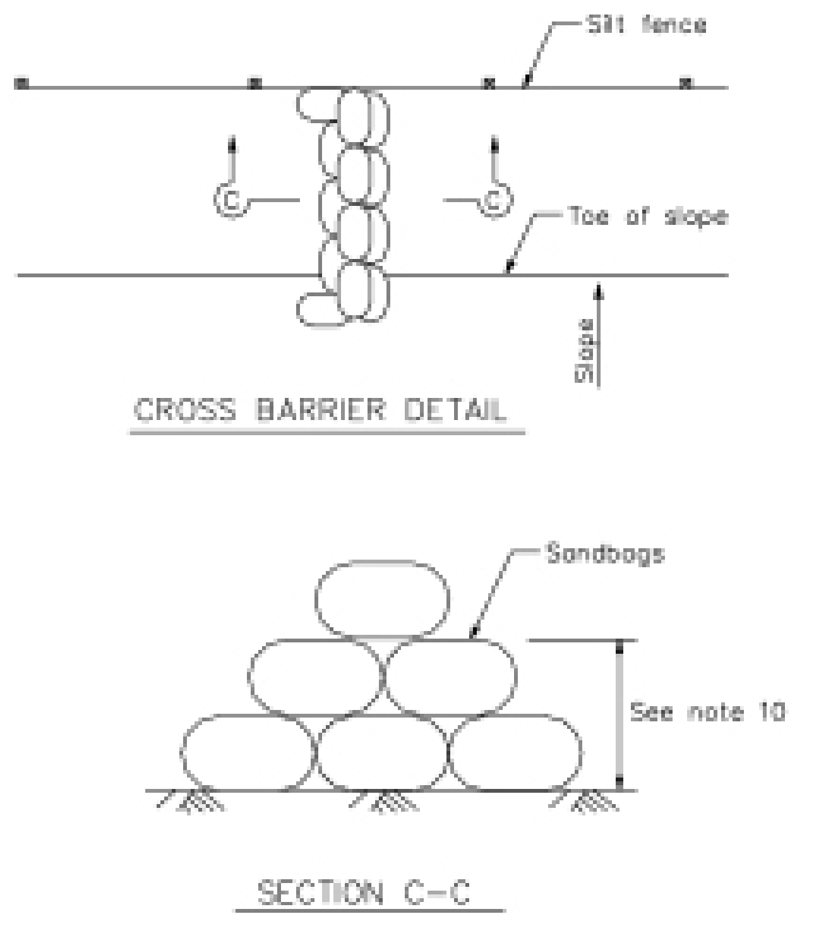
1 Silt Fence

CASQA Detail SE-1



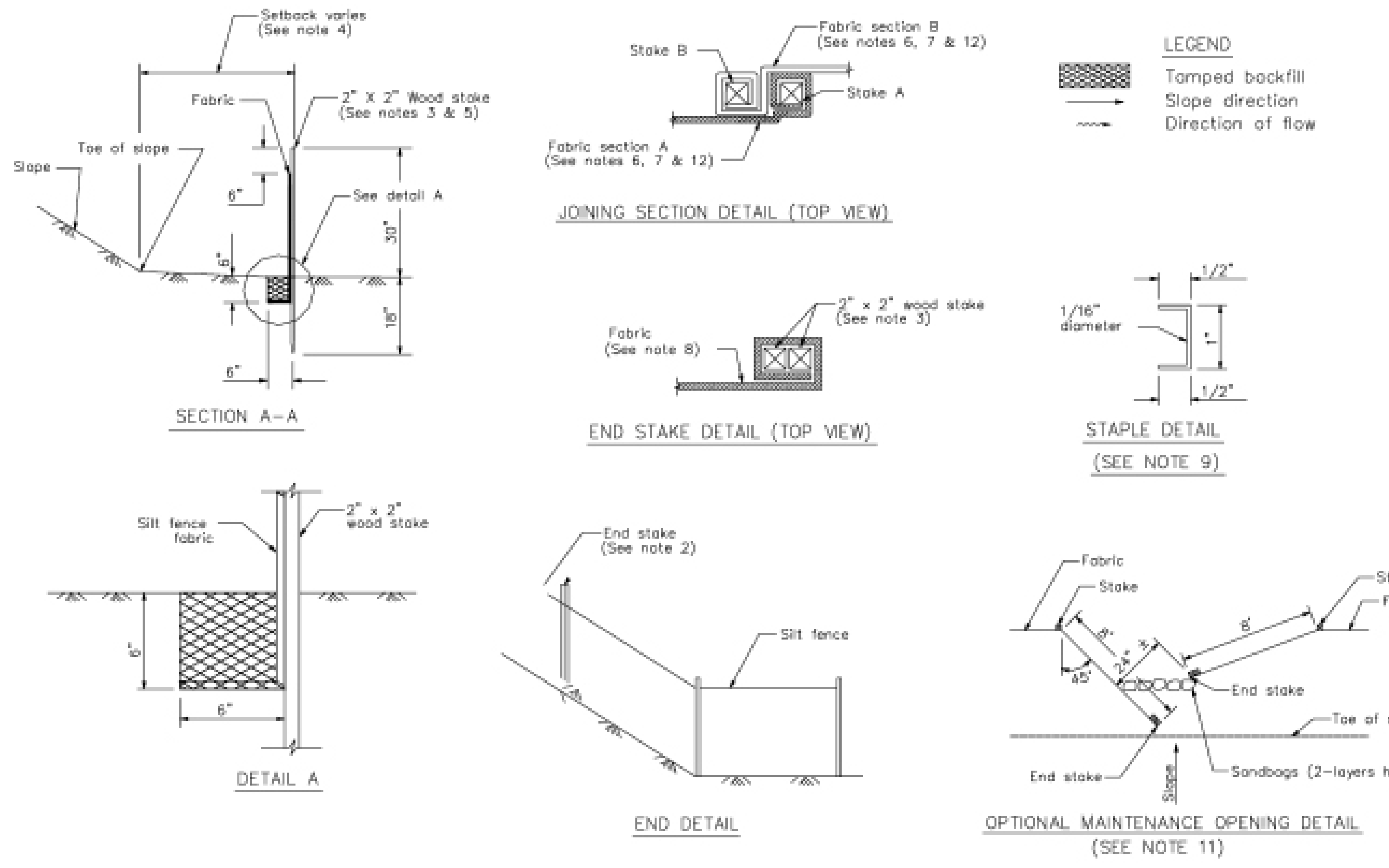
NOTES

1. Construct the length of each reach so that the change in base elevation along the reach does not exceed 1/3 the height of the linear barrier, in no case shall the reach length exceed 500'.
2. The last 8'–0" of fence shall be turned up slope.
3. Stake dimensions are nominal.
4. Dimension may vary to fit field condition.
5. Stakes shall be spaced at 8'–0" maximum and shall be positioned on downstream side of fence.
6. Stakes to overlap and fence fabric to fold around each stake one full turn. Secure fabric to stake with 4 staples.
7. Stakes shall be driven tightly together to prevent potential flow–through of sediment at joint. The tops of the stakes shall be secured with wire.
8. For end stake, fence fabric shall be folded around two stakes one full turn and secured with 4 staples.
9. Minimum 4 staples per stake. Dimensions shown are typical.
10. Cross barriers shall be a minimum of 1/3 and a maximum of 1/2 the height of the linear barrier.
11. Maintenance openings shall be constructed in a manner to ensure sediment remains behind silt fence.
12. Joining sections shall not be placed at sump locations.
13. Sandbag rows and layers shall be offset to eliminate gaps.



2 Silt Fence

CASQA Detail SE-1



STANDARD BEST MANAGEMENT PRACTICE NOTES

1. Solid and Demolition 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 C3) or latest.
2. Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. 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.
3. 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-13 to C-14) or latest.
4. Vehicle and Construction Equipment Service and Storage: An area shall be designated for the maintenance, where on-site 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 C9) or latest.
5. 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 secured 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.
6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted 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.
7. Pavement 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.
8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating 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.
9. Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers 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.
10. 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

1. 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-31 to B-33) 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 roles 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(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
2. 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.
3. 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 Plans 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.
4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
5. 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.
6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

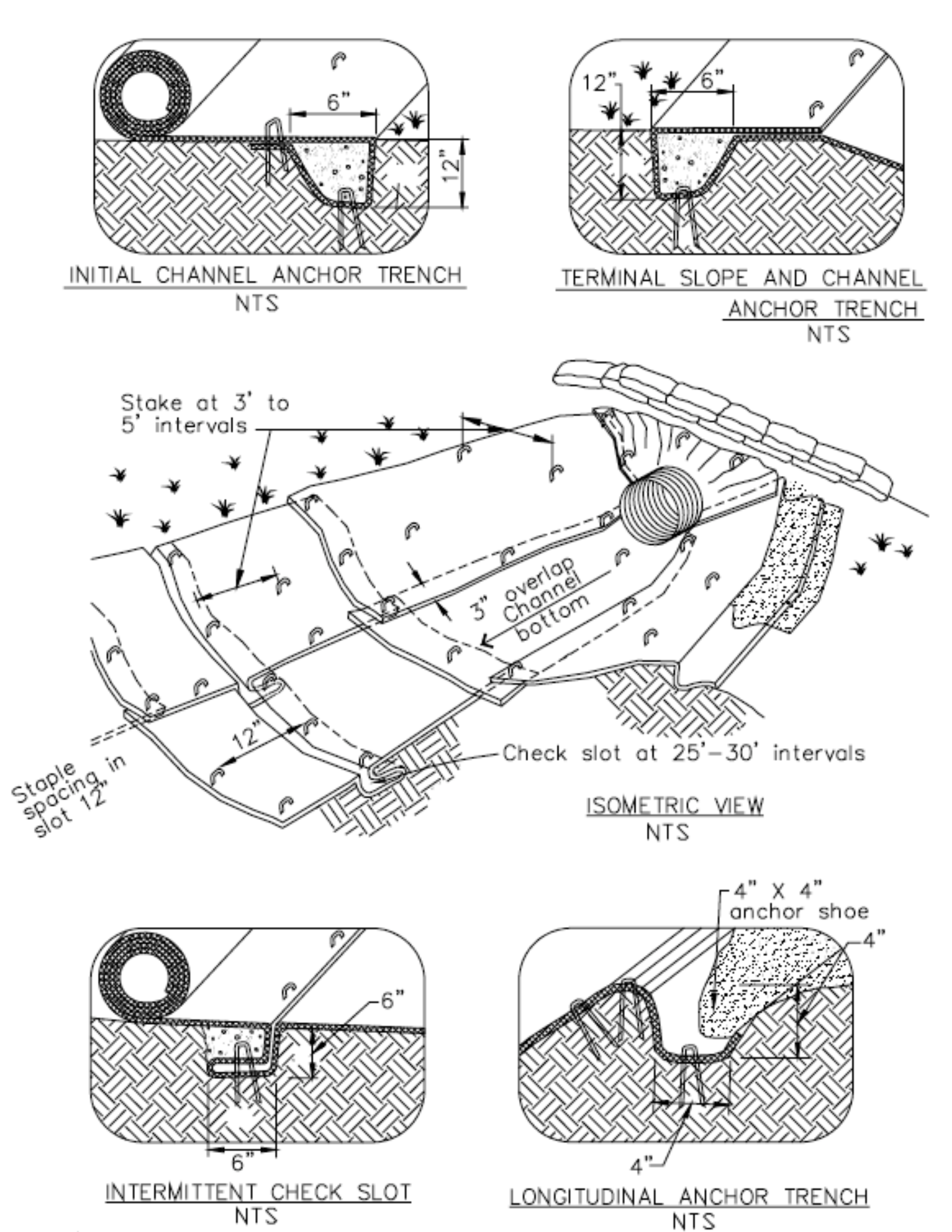
Project Information

Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

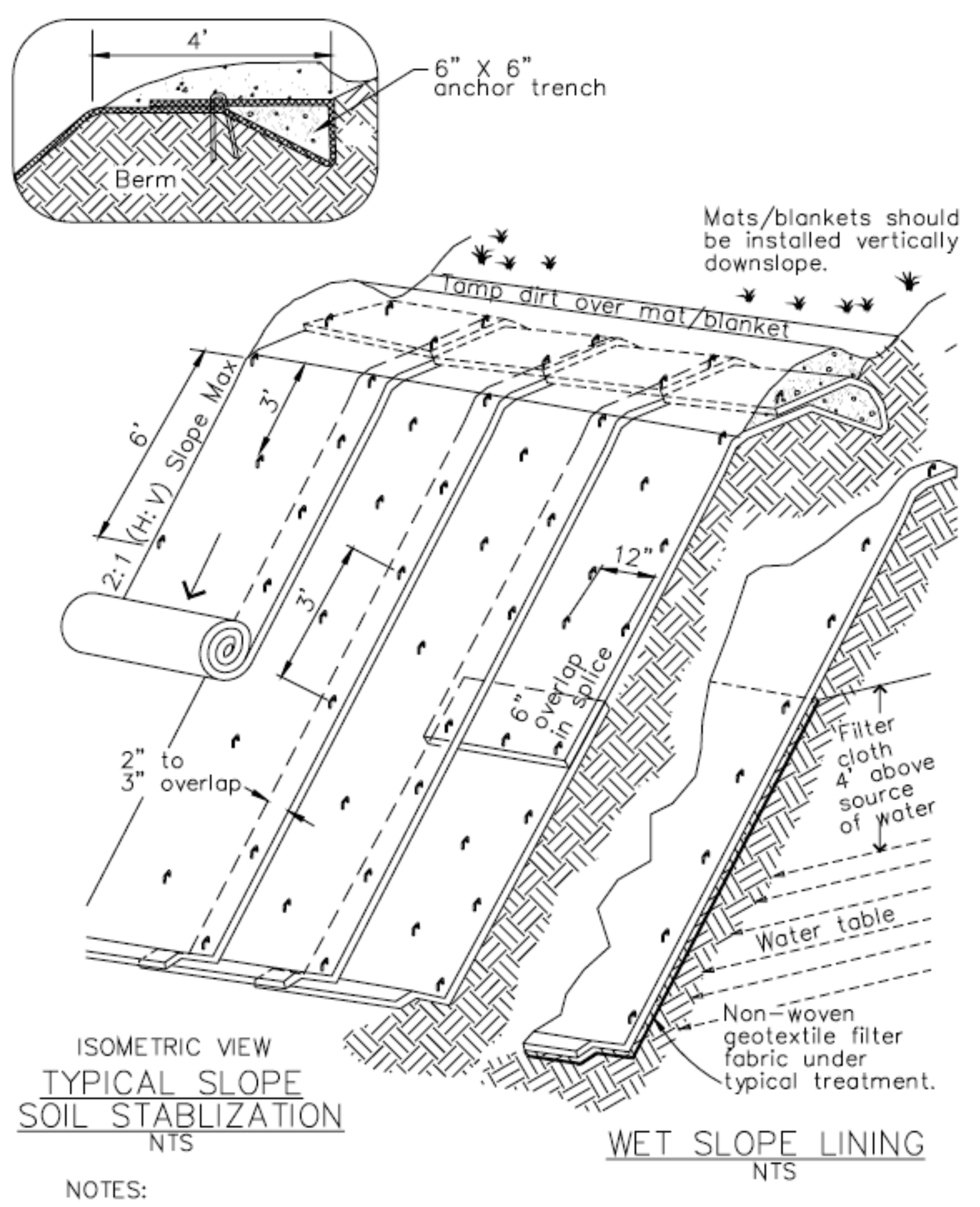


NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

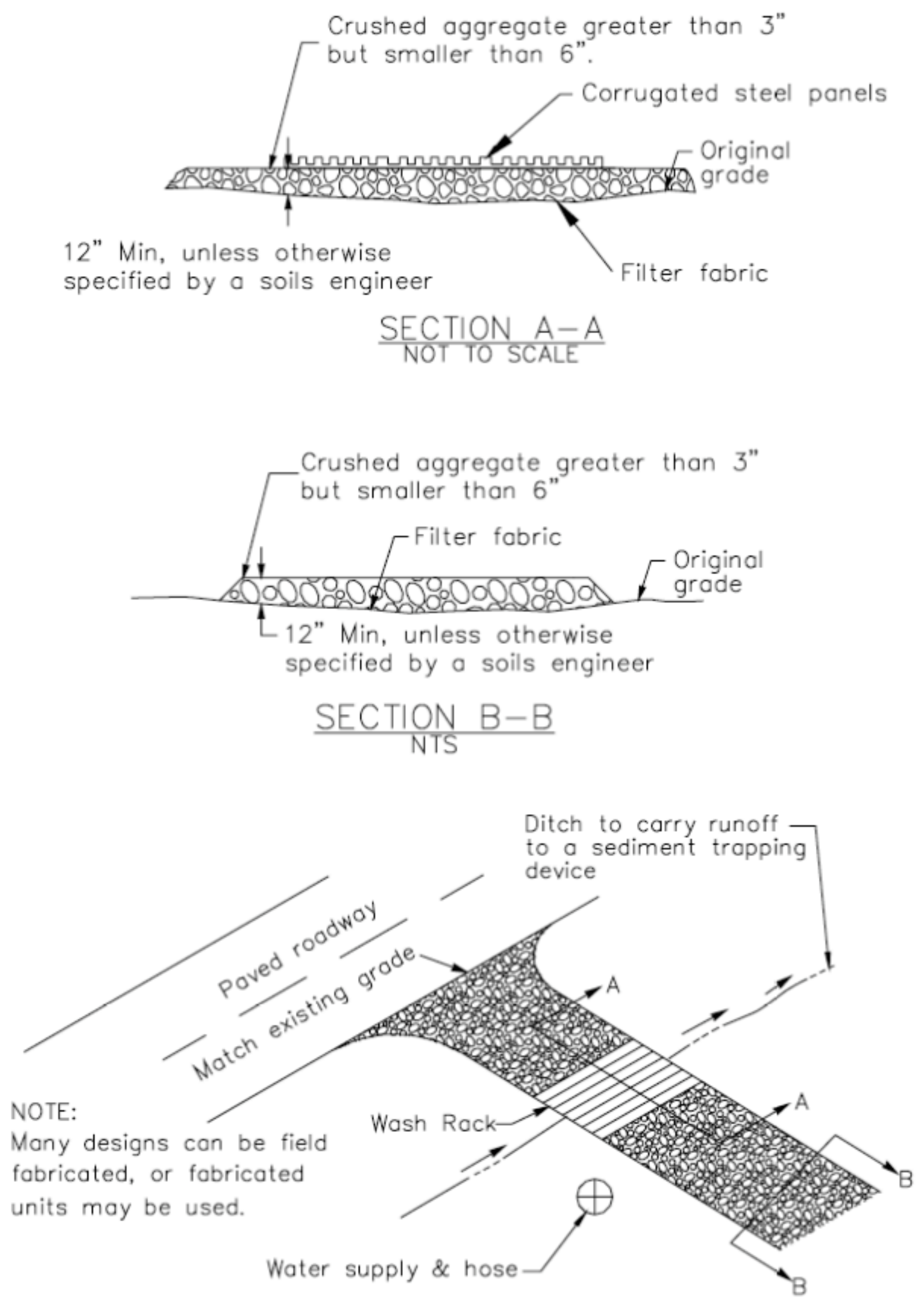


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

3 Entrance/Outlet Tire Wash

CASQA Detail TC-3

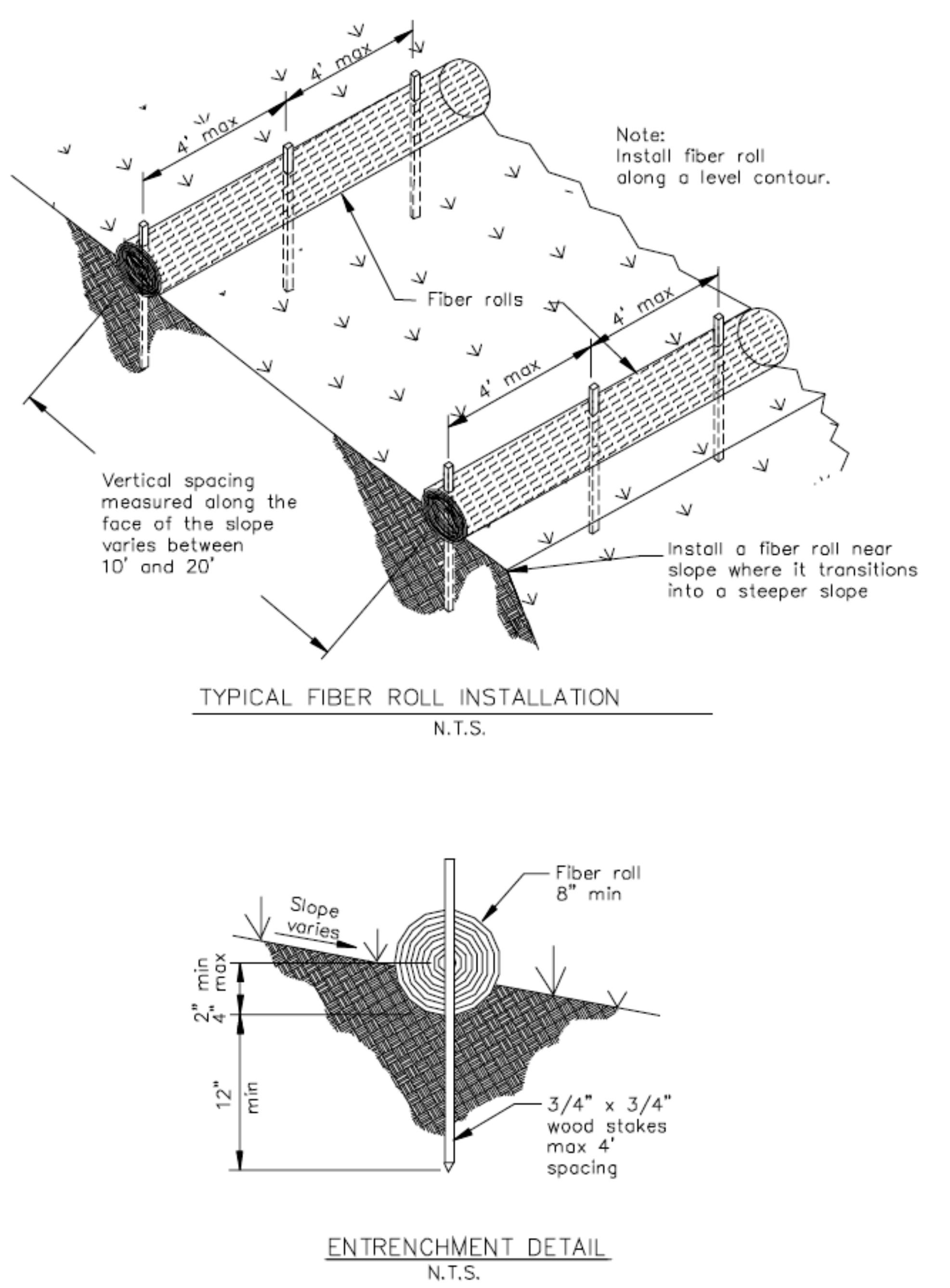


NOTE:
Many designs can be field fabricated, or fabricated units may be used.

TYPICAL TIRE WASH
NOT TO SCALE

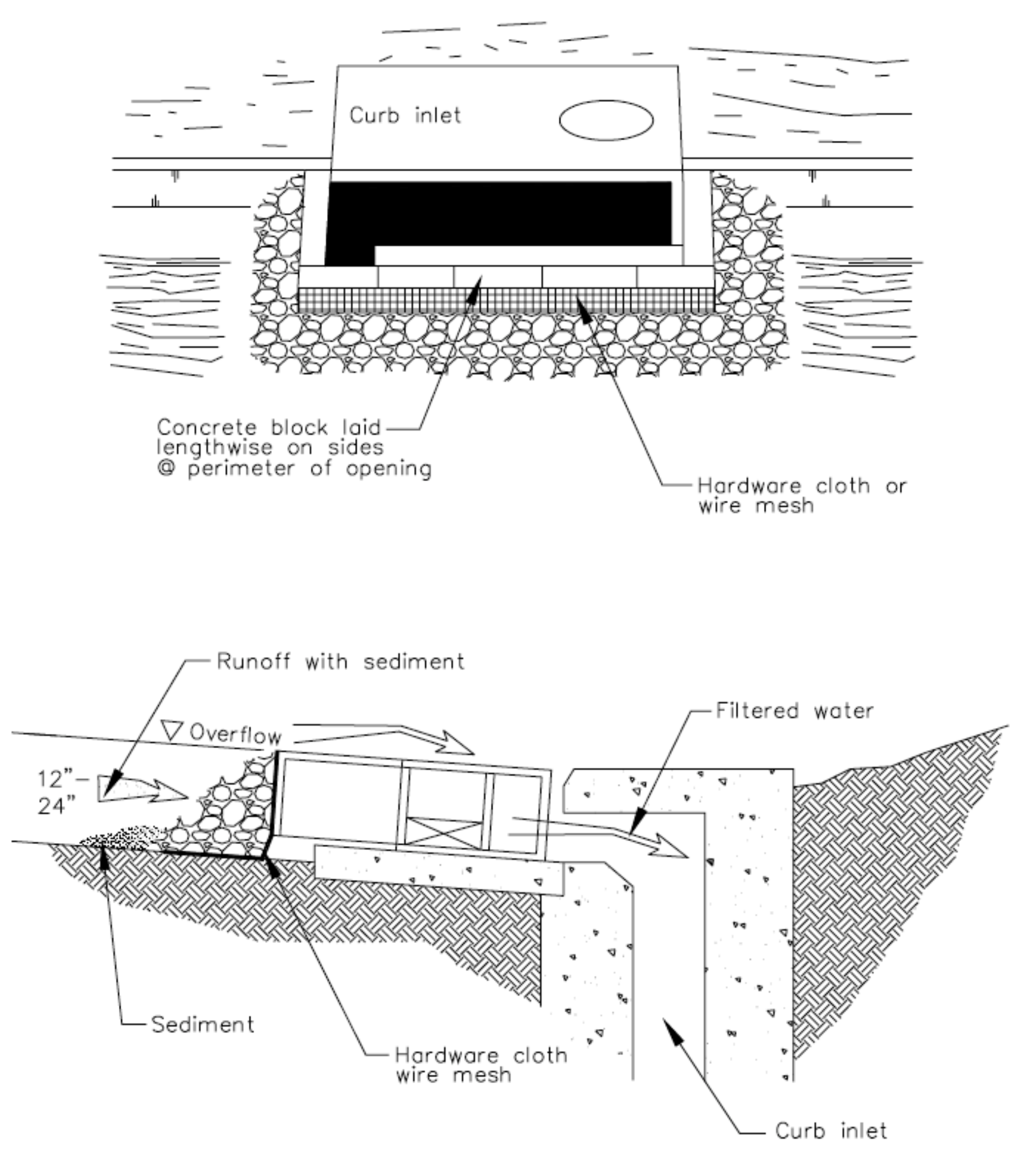
1 Fiber Rolls

CASQA Detail SE-5



8 Storm Drain Inlet Protection

CASQA Detail SE-10

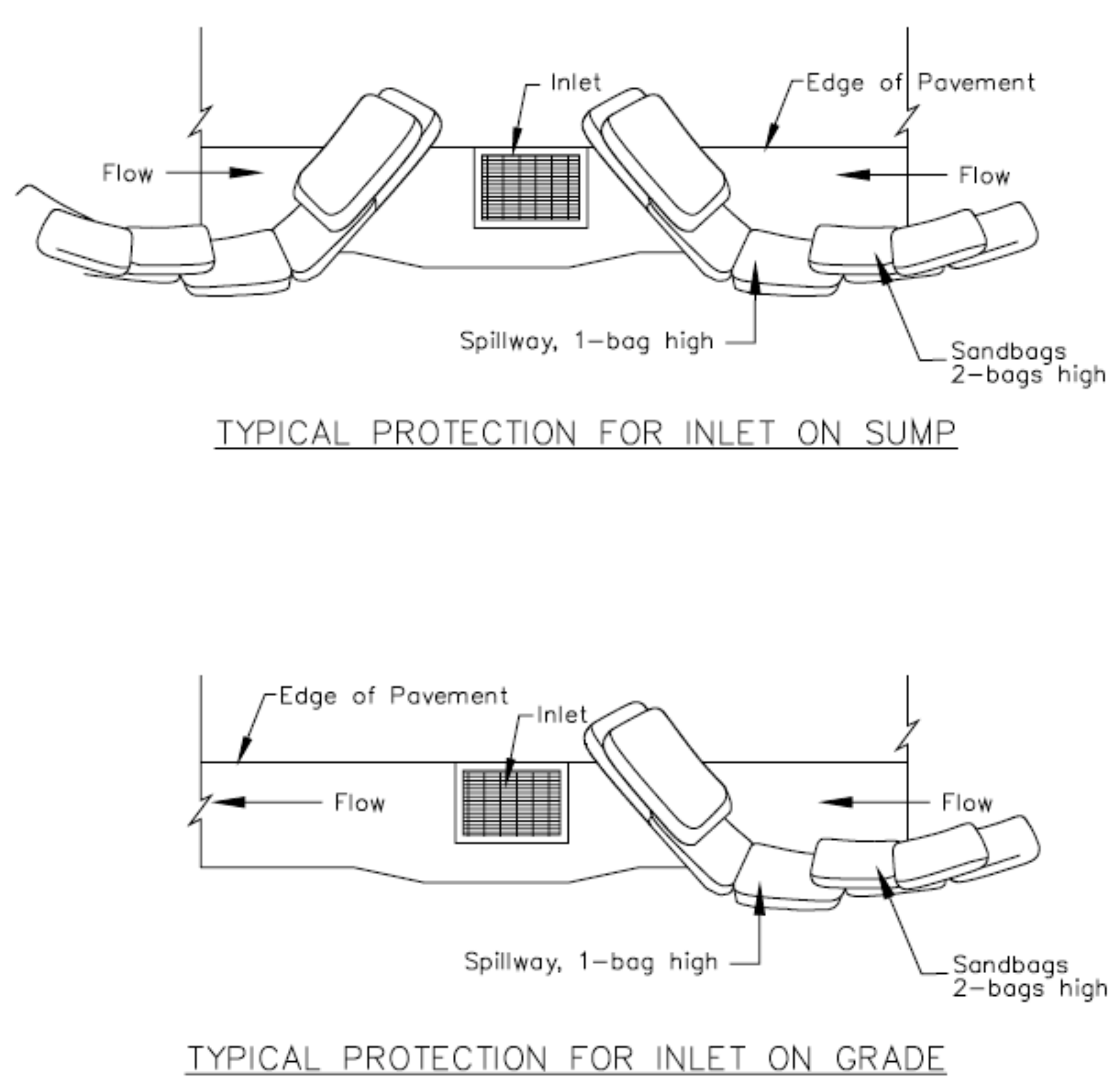


DI PROTECTION – TYPE 4
NOT TO SCALE

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

6 Storm Drain Inlet Protection

CASQA Detail SE-10



TYPICAL PROTECTION FOR INLET ON SUMP

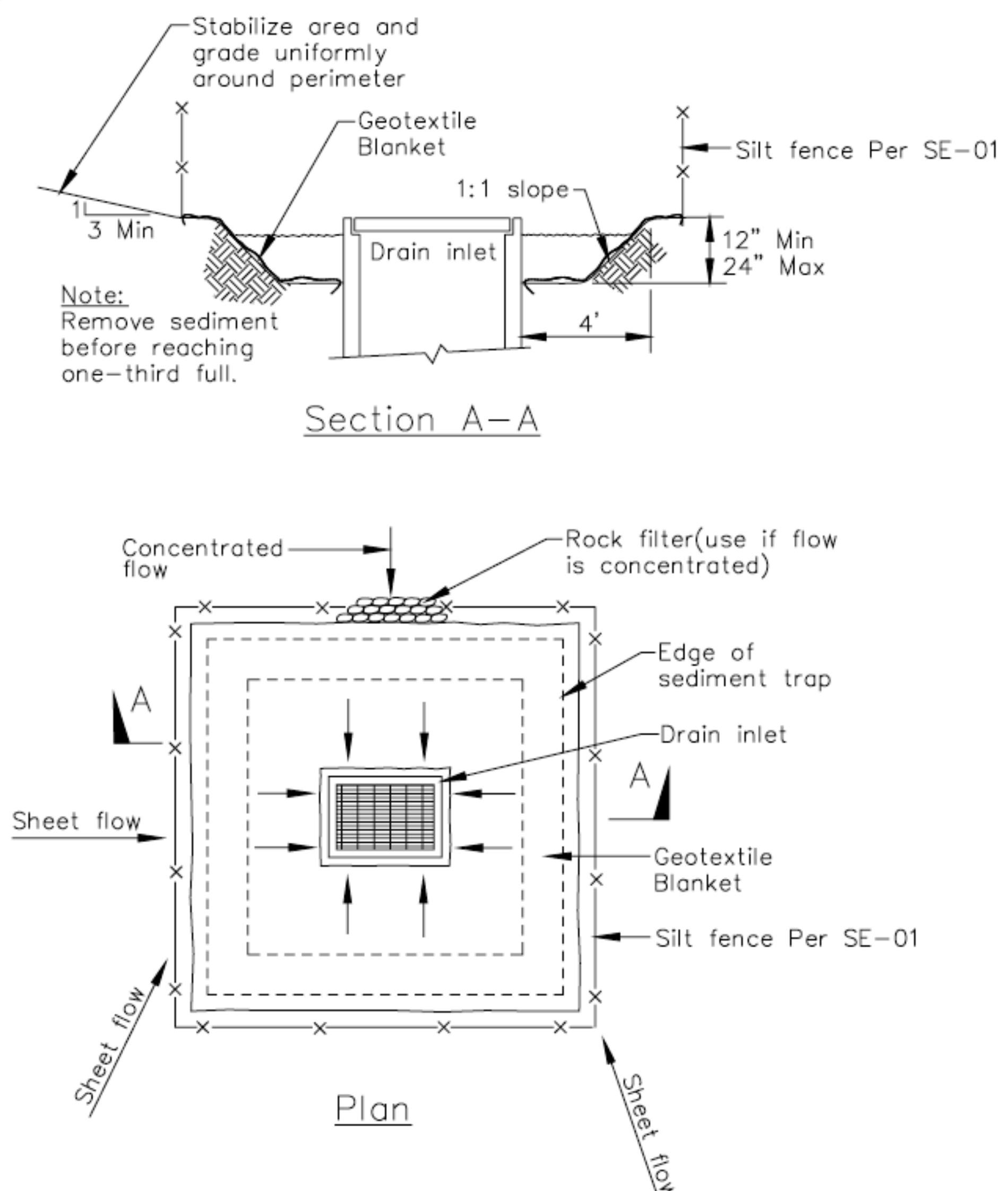
TYPICAL PROTECTION FOR INLET ON GRADE

NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

CASQA Detail SE-10

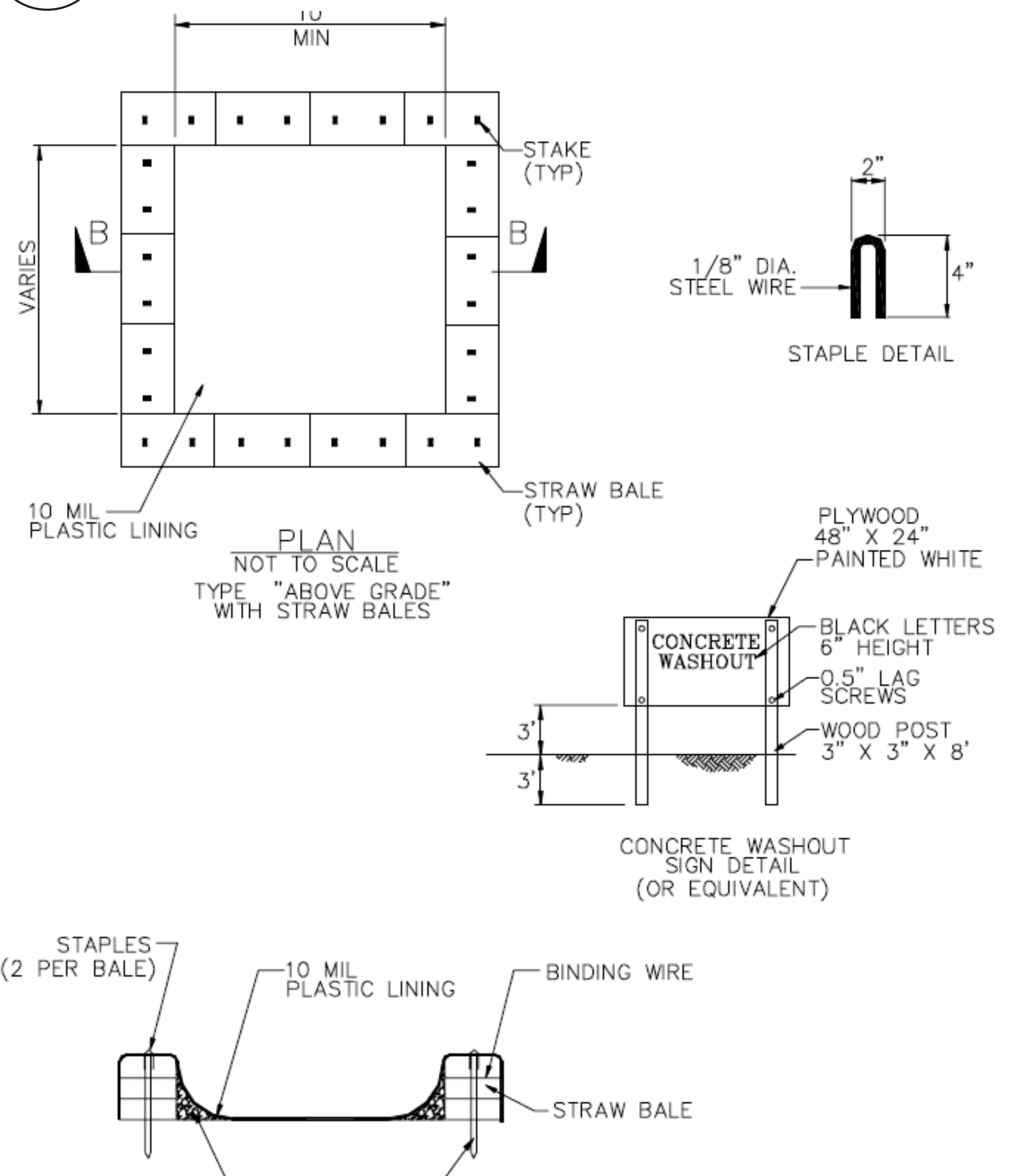


DI PROTECTION TYPE 2
NOT TO SCALE

Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

2 Concrete Waste Management

CASQA Detail WM-8



NOTES
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

Project Information

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

BMP-2