

## General Construction Specifications

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY BAEZ GEOTECHNICAL GROUP; PROJECT NO. G184-02 AND DATED JUNE 11, 2021 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 SPECIFICATIONS. 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 CONTROL 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 (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 96-18).
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.

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, STAKED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM MEASUREMENT TO 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.
5. IN ACCORDANCE WITH THE CALIFORNIA PROFESSIONAL LAND SURVEYORS' ACT (BUSINESS AND PROFESSIONS CODE) CHAPTER 15 SECTIONS 8771 AND 8725.1, CALIFORNIA PENAL CODE 605, AND CALIFORNIA GOVERNMENT CODE 27581, ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING ROADWAY/STREET MONUMENT, PROPERTY CORNER, OR ANY OTHER PERMANENT SURVEYED MONUMENT AND/OR AS SHOWN ON THIS TENTATIVE MAP SHALL ENSURE THAT THE CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR OFFICE PRIOR TO DISTURBING SAID MONUMENTS. ALL DISTURBED OR DESTROYED MONUMENTS SHALL BE RESET AND FILED IN COMPLIANCE WITH SECTION 8771.

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 SUPERVISION OF CONSTRUCTION OF THE PROJECT OR THE CONTRACTOR 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 COMMENCEMENT OF THE BUILDING FOUNDATION.

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.

CONTRACTOR SHALL NOTIFY UTA (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, UNLESS 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.

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.

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, 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. WHEN 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. COMPACTION SHALL BE PLACED IN PLACES (1) AT A MINIMUM OF 1' TO 2' WITH 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. OF THE EXCAVATION, 5% OF THE 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.

EXCESS CUT TO BE SPREAD OVER CROP AND ORCHARD AREAS

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 SHALL 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 75,825 SF.
15. VOID 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.

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 DRILLPIKE OF THE TREE OR ABOVE THE TREE.
  - 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.

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..

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

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.

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.

3. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
4. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
5. 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.
6. 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.
7. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
8. 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.
9. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
10. 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.
11. 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.
12. A. 15 MILES PER HOUR (MPH) SPEED LIMIT
13. B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
14. 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 COMPLAINT HOTLINE OF 1-800-334-6367.
15. 10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
16. 11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDDED 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.
17. 12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SDB.
18. 13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. EROSION 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.
19. 14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEDED 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.
20. 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.
21. 16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.
22. 17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL MAINTAIN 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;
23. A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
24. B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
25. C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
26. 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.
27. 19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND SILT DISCHARGE ON A YEAR-ROUND 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 SPECIFIC AND SITUATIONALLY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

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 CASK621003-000 / QD. RZ-2009-0047 AND NPDES PERMIT CASK00004 / QD000001, 2013-2018.
2. DROPPED INLET SHALL MEET 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 ALONG CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
3. WHERE CURBLES ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DRAIN TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
4. THE LOCATION OF DRAINAGE CONNECTIONS, PROPOSED PROPERTY DITCHES SHALL PROVIDE FOR AN UNINTERRUPTED FLOW OF WATER TO ROADSIDE DITCHES.
5. THE COUNTRY SHALL INSURE UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

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 Δ.

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

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.



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 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) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERTED, 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.



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.

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.

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 \_\_\_\_\_ 69278  
R.C.E. NO.

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITEE OR 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 (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 \_\_\_\_\_ DARRELL K.H. WONG \_\_\_\_\_  
R.C.E. NO. 63958



1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.
2. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
3. CLEAR AND GRUB BUILDING PAD AND DRIVEWAY.
4. BUILDING PAD AND DRIVEWAY GRADING.
5. CONSTRUCT DRIVEWAY
6. CONSTRUCT BIORETENTION PONDS

1. CONSTRUCT DRIVEWAY APPROACH
2. FURNISH & INSTALL SEPTIC SYSTEM
3. FURNISH & INSTALL WATER AND FIRE PROTECTION SYSTEM

1	COVER SHEET
2	SITE PLAN
3-4	PRELIMINARY GRADING & DRAINAGE PLAN
5	NOTES, DETAILS & SECTIONS
6	EROSION CONTROL PLAN
BMP1&2	BEST MANAGEMENT PRACTICES

ENGINEER'S NAME: HANNA & BRUNETTI

ADDRESS: 7651 EIGLEBERRY STREET, GILROY CA 95020

PHONE NO. 408 842-2173

FAX NO. 408 842-3662

# PRELIMINARY GRADING & DRAINAGE PLAN

FOR THE  
DEVELOPMENT OF THE LANDS  
FOR APEX BAIT TECHNOLOGIES, INC.  
BURNETT & VISTA DE LOMAS AVENUE

A PARCEL OF LAND BEING A PART OF THE ORIGINAL J.M. TONEY TRACT  
FORMERLY OWNED BY JAMES A. CLAYTON & COMPANY  
IN THE RANCHO LA LAGUNA SECA

SANTA CLARA COUNTY, CALIFORNIA  
A.P.N.: 728-38-001

MARCH 2022			NO SCALE
Revision 1	Date	APN	Sheet
Revision 2	Date	728-38-001	1
Revision 3	Date	Co. File	of
		PLN21-222	8

JOB NO. 20058

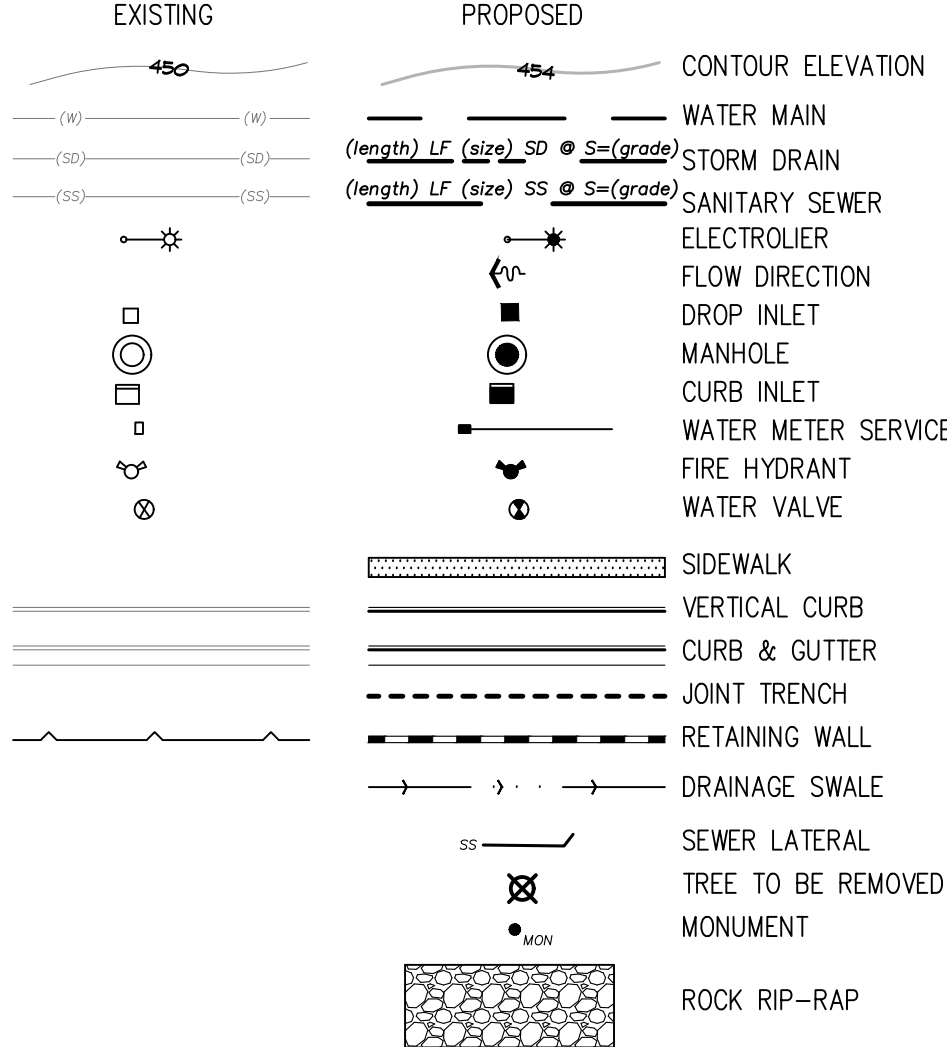


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ABBREVIATIONS

AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	P.S.E.	PUBLIC SERVICE EASEMENT
AB	AGGREGATE BASE	ER	END OF RETURN	P.S.D.E.	PRIVATE STORM DRAIN EASEMENT
AD	AREA DRAIN	ESMT	EASEMENT	P.S.S.E.	PRIVATE SANITARY SEWER EASEMENT
AGG	AGGREGATE	(E)	EXISTING	P.U.E.	PUBLIC UTILITY EASEMENT
BC	BEGINNING OF CURVE	EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION
BPD	BACKFLOW PREVENTER DEVICE	FF	FINISH FLOOR	PVC	POLYVINYL CHLORIDE PIPE
BLDG	BUILDING	FG	FINISH GRADE	R	RADIUS
BOC	BACK OF CURB	FH	FIRE HYDRANT	RCP	REINFORCED CONCRETE PIPE
BO	BLOW OFF	FL	FLOWLINE	R/W	RIGHT OF WAY
BOT	BOTTOM	60C	FACE OF CURB	RWL	RAINWATER LEADER
BOW	BACK OF WALK	GL	GAS LINE	S	SLOPE
BW	BOTTOM OF WALL	GM	GAS METER	SD	STORM DRAIN PIPE
BWF	BARBWIRE FENCE	GB	GRADE BREAK	SS	SANITARY SEWER PIPE
CATV	CABLE TELEVISION	GV	GUY WIRE FOR POLE	STM	STORM DRAIN MANHOLE
CB	CATCH BASIN	GS	GATE VALVE	SS MH	SANITARY SEWER MANHOLE
C&G	CURB & GUTTER	HDPE	HIGH DENSITY POLYETHYLENE	SP	SERVICE POLE
CI	CURB INLET	HMA	HOT MIX ASPHALT	STD	STANDARD
CL	CENTERLINE	HP	HIGH POINT	SQ	SQUARE
CMP	CORRUGATED METAL PIPE	INV	INVERT OF PIPE	SW	SIDEWALK
CMU	CONCRETE MASONRY UNIT	IP	IRON PIPE	T	TELEPHONE LINE
CO	CLEAN OUT	JP	JOINT POLE	TBM	TEMPORARY BENCHMARK
CONC.	CONCRETE	JT	JOINT TRENCH	TC	TOP OF CURB
CONST	CONSTRUCTION	LF	LINEAR FEET	TOM	TREATMENT CONTROL MEASURES
DDCV	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	LP	LOW POINT	TFC	TOP FACE OF CURB
DI	DROP INLET	MAX	MAXIMUM	TC	TOP OF GRATE
DIP	DUCTILE IRON PIPE	MIN	MINIMUM	TOB	TOP OF BANK
DMA	DRAINAGE MANAGEMENT AREA	N.I.C.	NOT IN CONTRACT	TOE	TOE OF BANK
DS	DOWNSPOUT	(N)	NEW	TW	TOP OF WALL
DWY	DRIVEWAY	OHU	OVERHEAD UTILITY	TYP	TYPICAL
E	ELECTRIC LINE	(P)	PROPOSED	W	WATER LINE
EC	END OF CURVE	PB	PULL BOX	WM	WATER METER
EG	EXISTING GRADE	PCC	PORTLAND CONCRETE CEMENT	WV	WATER VALVE
ELEV	ELEVATION	PRC	POINT REVERSE CURVE		

LEGEND



BENCHMARK:

BENCHMARK ID: BM954  
ELEVATION: 340.23 FEET (NAVD88)  
ORGANIZATION: SANTA CLARA VALLEY WATER DISTRICT

DESCRIPTION:

USGS BRASS DISK "A 177"; ALONG UNITED PACIFIC RAILROAD TRACKS; AT 0.2 MILES NORTHWESTERLY FROM TILTON AVENUE; ON TOP OF CONCRETE HEADWALL WHICH IS 1.2 FEET WIDE AND 14 FEET LONG; OVER CULVERT CONSISTING OF TWO 18 INCHES DIAMETER EACH CORRUGATED METAL PIPES; DISK IS ALSO LOCATED AT 5.6 FEET SOUTHEASTERLY FROM THE NORTHWESTERLY END OF WALL. A DATE IS STAMPED ON CONCRETE TOP OF WALL OVER EACH OF TWO 18 INCH DIAMETER PIPES "1932" AND "1938"; DISK IS 79.5 FEET NORTHWESTERLY FROM TRAFFIC SIGNAL STEEL POST; 34.5 FEET NORTHWESTERLY FROM A 24 INCH DIAMETER BLACK WALNUT; 70 FEET SOUTHWESTERLY FROM CENTERLINE MONTEREY ROAD; 28.5 FEET NORTHEASTERLY FROM NORTHEASTERLY RAIL FOR UPRR TRACKS. CITY OF SAN JOSE.

BASIS OF BEARINGS:

THE BEARINGS SHOWN ON THESE PLANS ARE BASED ON THE CENTERLINE OF "VISTA DE LOMAS" WITH A BEARING OF SOUTH 66° 30' 00" EAST AS SHOWN IN THE RECORD OF SURVEY BOOK 321 OF MAPS AT PAGE 23 ON APRIL 19th, 1973. RECORDS OF SANTA CLARA COUNTY.

FLOOD ZONE STATEMENT:

FLOOD INSURANCE RATE MAP  
COMMUNITY PANEL NUMBER: 060337 06085C0441H  
MAP REVISED: MAY 18, 2009

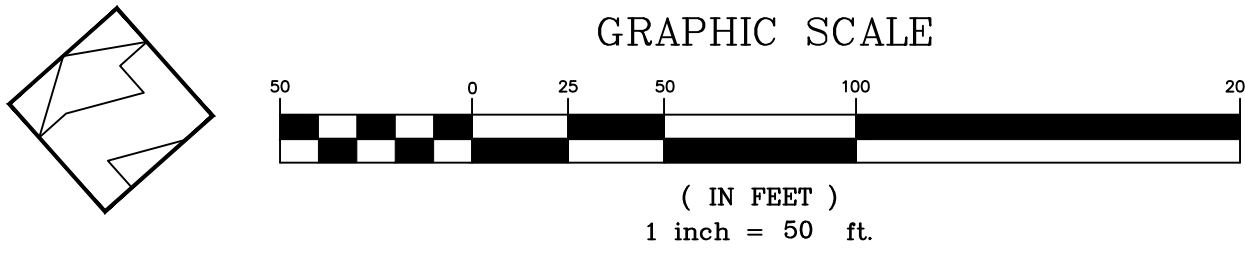
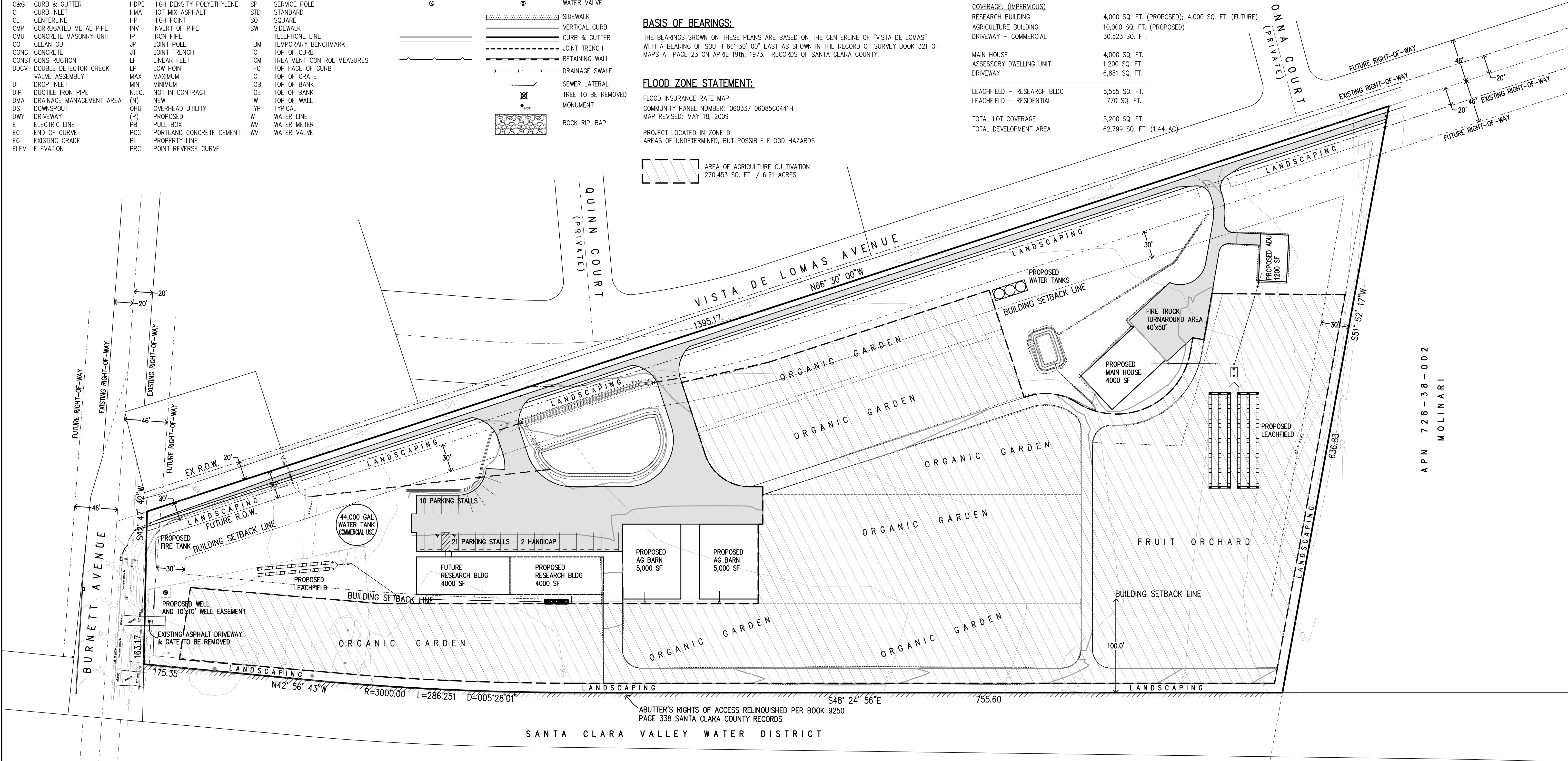
PROJECT LOCATED IN ZONE D  
AREAS OF UNDETERMINED, BUT POSSIBLE FLOOD HAZARDS

AREA OF AGRICULTURE CULTIVATION  
270,453 SQ. FT. / 6.21 ACRES

PROJECT SUMMARY

ASSESSOR'S PARCEL NUMBER	728-38-001
SITE AREA	488,745 SQ. FT. / 11.22 ACRES
ZONING	A-40A
LAND USE	AGRICULTURE
PARKING STALLS (1 STALL/350 SF + 1 PER EMPLOYEE)	(PROVIDED) 31 STANDARD STALLS (9'x20') 2 HANDICAP STALLS 33 TOTAL STALLS
COVERAGE: (IMPERVIOUS)	
RESEARCH BUILDING	4,000 SQ. FT. (PROPOSED); 4,000 SQ. FT. (FUTURE)
AGRICULTURE BUILDING	10,000 SQ. FT. (PROPOSED)
DRIVEWAY - COMMERCIAL	30,523 SQ. FT.
MAIN HOUSE	4,000 SQ. FT.
ASSESSORY DWELLING UNIT	1,200 SQ. FT.
DRIVEWAY	6,851 SQ. FT.
LEACHFIELD - RESEARCH BLDG	5,555 SQ. FT.
LEACHFIELD - RESIDENTIAL	770 SQ. FT.
TOTAL LOT COVERAGE	5,200 SQ. FT.
TOTAL DEVELOPMENT AREA	62,799 SQ. FT. (1.44 AC)

TABLE OF PROPOSED PERVIOUS AND IMPERVIOUS AREAS				
TOTAL SITE AREA: 488,745 SF	TOTAL SITE AREA DISTURBED: 110,584 SF (INCLUDING CLEARING, GRADING OR EXCAVATING)			
IMPERVIOUS AREA	EXISTING AREA (SF)	PROPOSED AREA (SF)		TOTAL AREA POST-PROJECT (SF)
		REPLACED	NEW	
	0	0	56,474 SF	56,474 SF
TOTAL NEW & REPLACED IMPERVIOUS AREA		56,474 SF		
PERVIOUS AREA	432,271 SF	0	0	432,271 SF



PRELIMINARY PLANS  
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE  
REFER TO ENCROACHMENT AND/OR  
CONSTRUCTION PERMIT AND PLAN  
COVER SHEET FOR SPECIAL  
CONDITIONS AND PERMIT NUMBERS

PLAN #  
SHEET

REVISIONS:			DATE: MARCH 2022 HORIZ. SCALE: 1"=50' VERT. SCALE: NONE DESIGNED BY: AM CHECKED BY: DRAWN BY: TM.	date: 22 Hanna - Brunetti Amanda Joy Musy-Verdel R.C.E. # 69278 REGISTERED PROFESSIONAL ENGINEER AMANDA JOY MUSY-VERDEL NO. 69278 CIVIL STATE OF CALIFORNIA	REFERENCES	Site Plan Lands of Apex Bait Technologies, Inc. - Burnett & Vista de Lomas Avenue - apn 728-38-001 UNINCORPORATED MARCH 2022	SANTA CLARA COUNTY CALIFORNIA	SHEET 2 OF 8 JOB NO. 20058
DATE	DESCRIPTION	BY:						

PLAN # OF SHEET

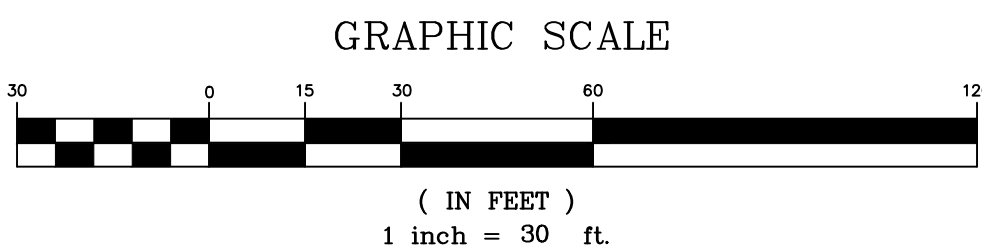
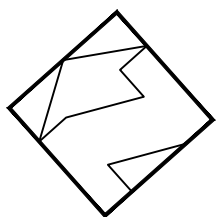
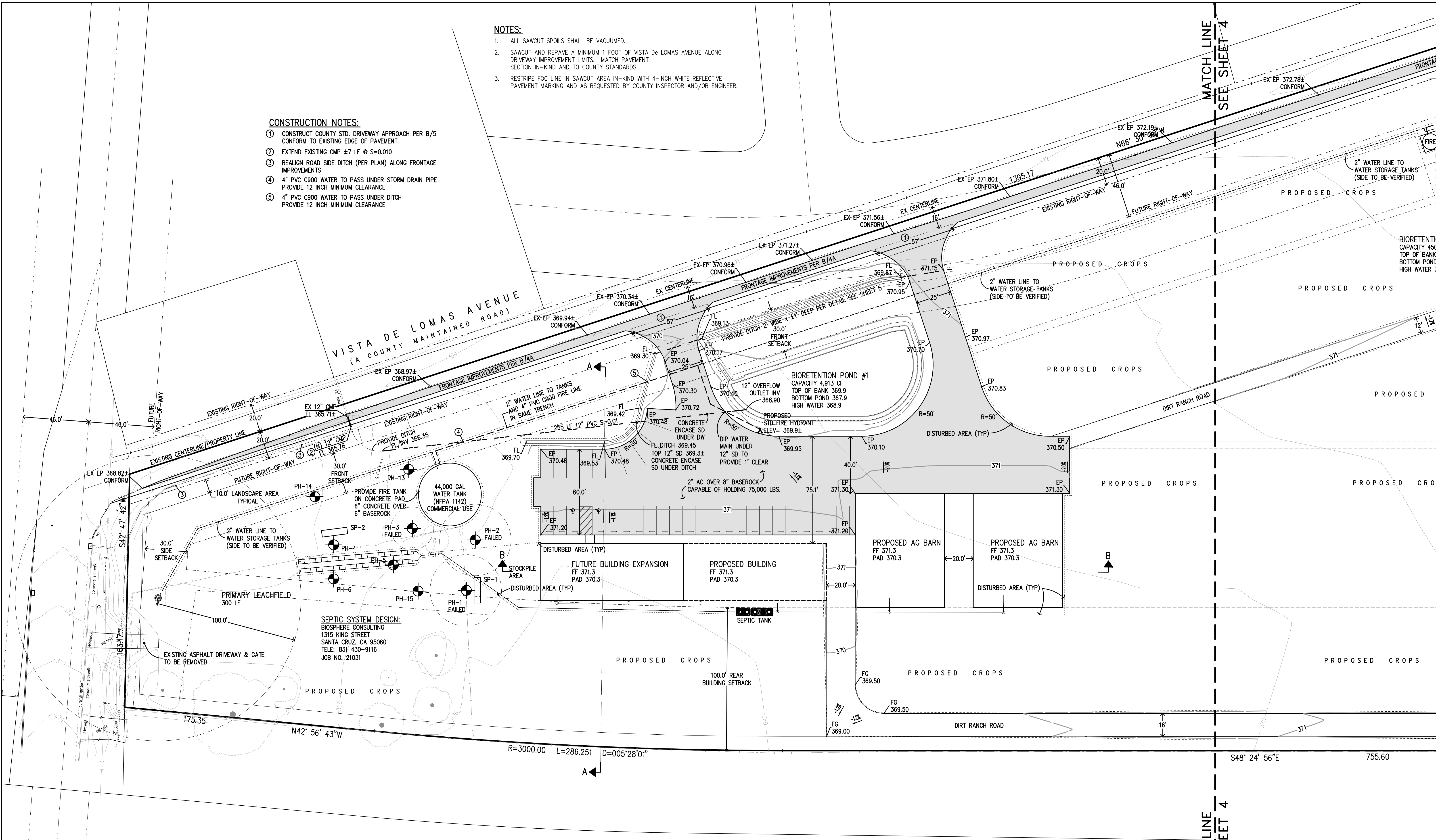
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#### NOTES:

1. ALL SAWCUT SPOILS SHALL BE VACUUMED.
2. SAWCUT AND REPAVE A MINIMUM 1 FOOT OF VISTA DE LOMAS AVENUE ALONG DRIVEWAY IMPROVEMENT LIMITS. MATCH PAVEMENT SECTION IN-KIND AND TO COUNTY STANDARDS.
3. RESTRIPE FOG LINE IN SAWCUT AREA IN-KIND WITH 4-INCH WHITE REFLECTIVE PAVEMENT MARKING AND AS REQUESTED BY COUNTY INSPECTOR AND/OR ENGINEER.

#### CONSTRUCTION NOTES:

- ① CONSTRUCT COUNTY STD. DRIVEWAY APPROACH PER B/5 CONFORM TO EXISTING EDGE OF PAVEMENT.
- ② EXTEND EXISTING CMP  $\pm 7$  LF @  $S=0.010$
- ③ REALIGN ROAD SIDE DITCH (PER PLAN) ALONG FRONTAGE IMPROVEMENTS
- ④ 4" PVC C900 WATER TO PASS UNDER STORM DRAIN PIPE PROVIDE 12 INCH MINIMUM CLEARANCE
- ⑤ 4" PVC C900 WATER TO PASS UNDER DITCH PROVIDE 12 INCH MINIMUM CLEARANCE



PRELIMINARY PLANS  
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE  
REFER TO ENCROACHMENT AND/OR  
CONSTRUCTION PERMIT AND PLAN  
COVER SHEET FOR SPECIAL  
CONDITIONS AND PERMIT NUMBERS

REVISIONS:		
DATE	DESCRIPTION	BY:

**HANNA-BRUNETTI**  
EST. 1990  
CIVIL ENGINEERS • LAND SURVEYORS  
CONSTRUCTION MANAGERS  
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA  
OFFICE (408) 842-2173 • FAX (408) 842-3662  
EMAIL: ENGINEERING@HANNABRUNETTI.COM

DATE: MARCH 2022  
HORIZ. SCALE: 1"=30'  
VERT. SCALE: NONE  
DESIGNED BY: AM  
CHECKED BY: TM  
DRAWN BY: TM

date: 3/22/22  
Hanna - Brunetti  
Amanda Joy Musy-Verdel  
R.C.E. # 69278



#### REFERENCES

UNINCORPORATED  
MARCH 2022

## Preliminary Grading & Drainage Plan

Lands of Apex Bait Technologies, Inc. - Burnett & Vista de Lomas Avenue - apn 728-38-001

SANTA CLARA COUNTY  
CALIFORNIA

SHEET  
**3**  
OF 8  
JOB NO.  
**20058**

APPLICANT: APEX BAIT TECHNOLOGIES, INC

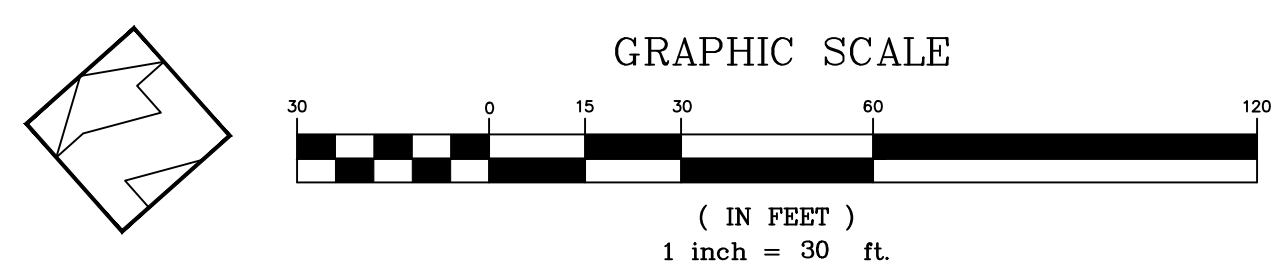
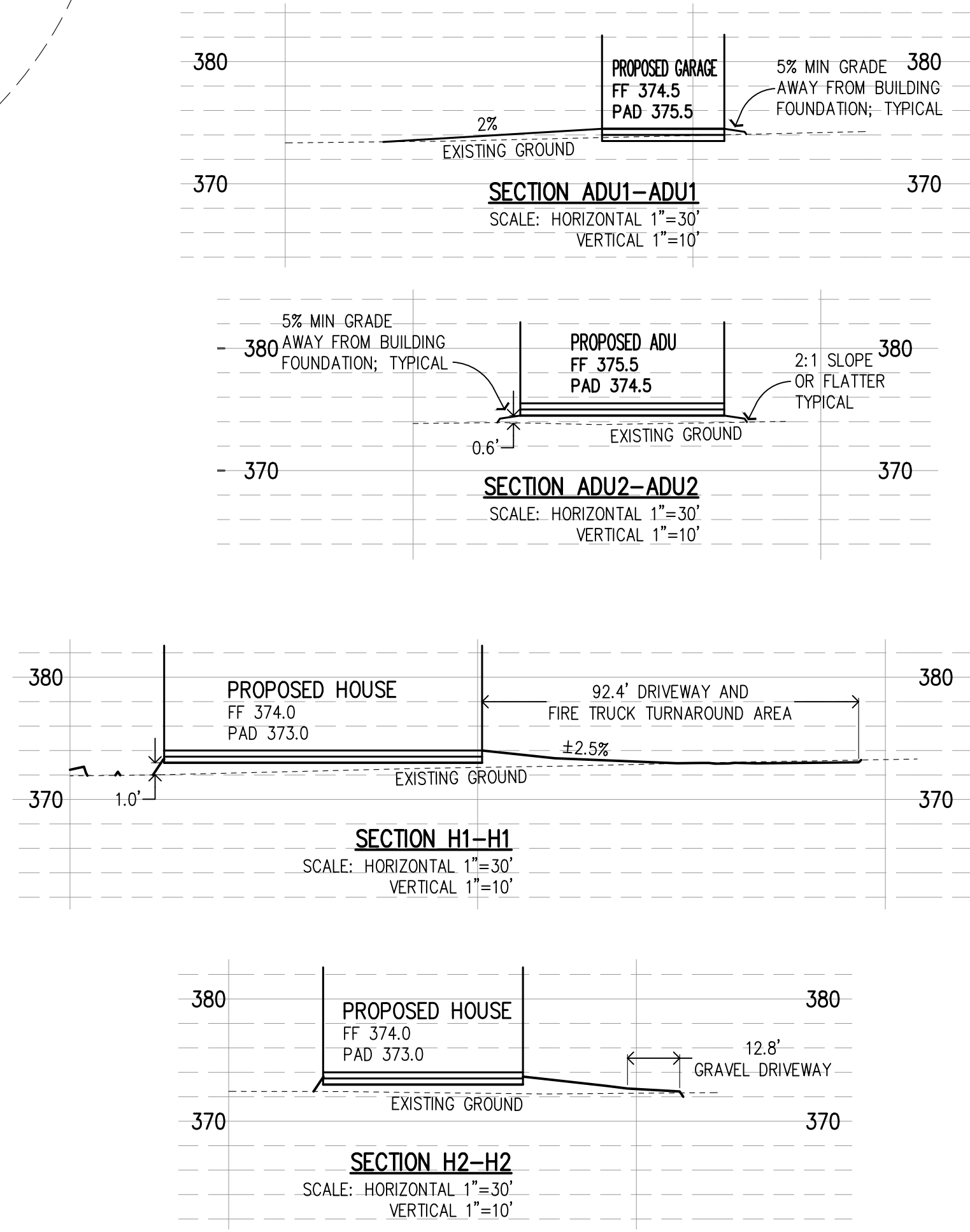
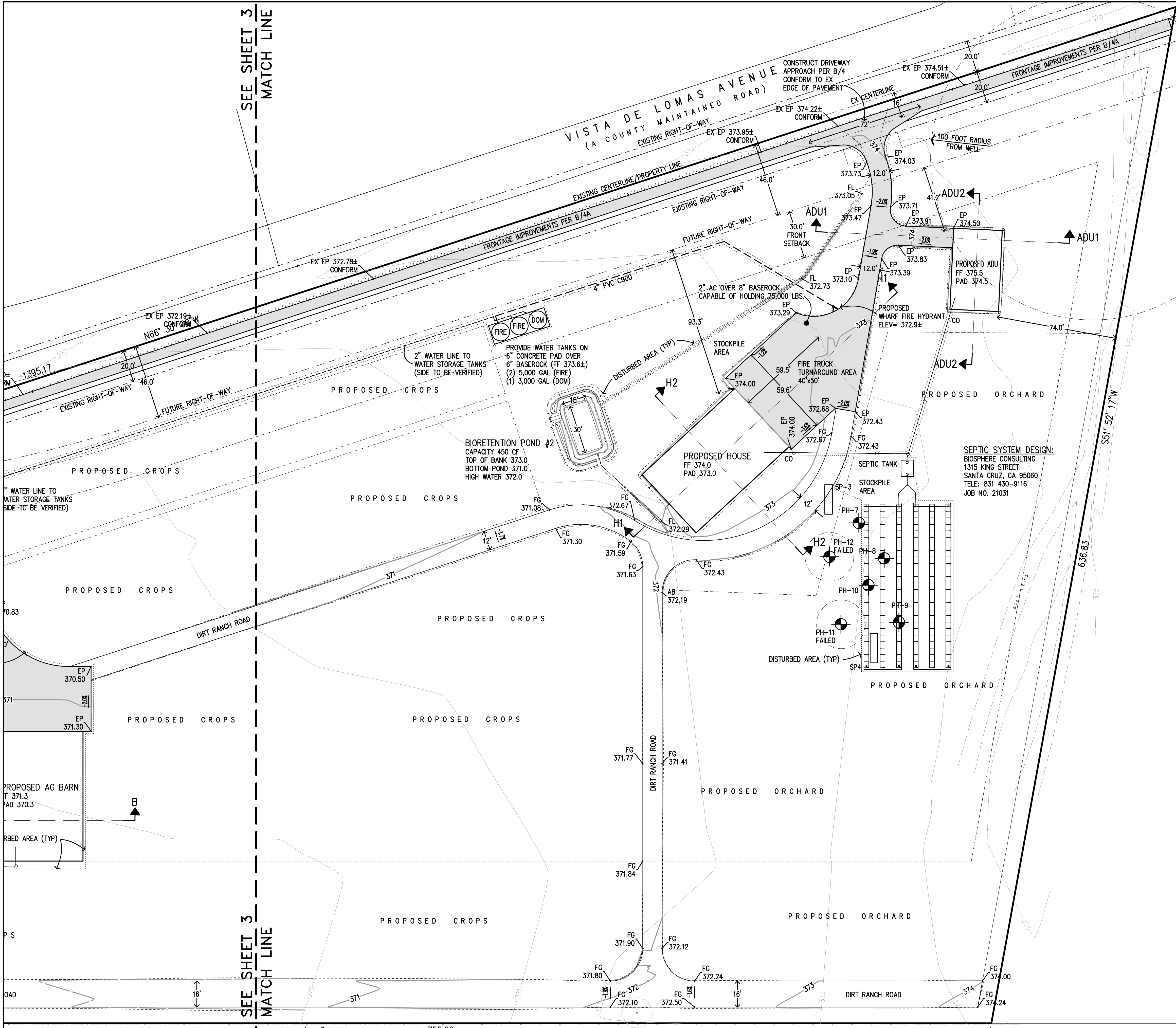
ROAD: BURNETT & VISTA DE LOMAS AVENUE

COUNTY FILE NO.: PLN21-222

JOB NO. 20058



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PRELIMINARY PLANS  
NOT FOR CONSTRUCTION

APPROVED FOR ISSUANCE  
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CONSTRUCTION PERMIT AND PLAN  
COVER SHEET FOR SPECIAL  
CONDITIONS AND PERMIT NUMBERS

REVISIONS:			DATE: MARCH 2022			date: 22 Hanna - Brunetti			REFERENCES			Preliminary Grading & Drainage Plan										SHEET	
DATE	DESCRIPTION	BY:	HANNABRUNETTI EST. 1990 CIVIL ENGINEERS • LAND SURVEYORS CONSTRUCTION MANAGERS 7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA OFFICE (408) 842-2173 • FAX (408) 842-3662 EMAIL: ENGINEERING@HANNABRUNETTI.COM			HORIZONTAL SCALE: 1"=30' VERT. SCALE: 1"=10'			Amanda Joy Musy-Verdel R.C.E. # 69278			Lands of Apex Bait Technologies, Inc. - Burnett & Vista de Lomas Avenue - apn 728-38-001										4	
						DESIGNED BY: AM			UNINCORPORATED MARCH 2022			SANTA CLARA COUNTY CALIFORNIA										JOB NO.	
						CHECKED BY: TM			STATE OF CALIFORNIA													20058	
						DRAWN BY: TM																	



1. THE LOCATION OF THE BUILDING PADS AND/OR FOUNDATIONS ARE TO BE ESTABLISHED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING. A LETTER SIGNED AND SEALED BY THAT AUTHORIZED PERSON, STATING THAT HE/SHE HAS LOCATED THE BUILDING CORNERS, AND THEIR LOCATIONS CONFORM TO COUNTY BUILDING SETBACK REQUIREMENTS PER THE APPROVED BUILDING PLANS IS REQUIRED TO BE SUBMITTED TO THE COUNTY ENGINEER.
2. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE GROUND WHICH ARE SHOWN TO BE REMOVED. ANY OTHER SUCH TREES ARE NOT 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.'
3. NO TREES ARE TO BE REMOVED
4. PRIOR TO GRADING COMPLETION AND RELEASE OF BOND, ALL GRADED AREAS SHALL BE RESEED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADED SLOPES AND REDUCE THE POTENTIAL FOR EROSION ON THE SUBJECT SITE.
5. BOTH DRAINFIELDS MUST BE STAKED AND STRUNG PRIOR TO APPROVAL OF THE SEPTIC DESIGN TO VERIFY THAT THE PROPOSED SEPTIC DESIGN WILL ACTUALLY FIT INTO THE PROPOSED LEACHFIELD AREA, AND CONFORM TO ALL REQUIRED SETBACKS.
6. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPRIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.
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. IN THE EVENT THAT ARCHEOLOGICAL FEATURES SHOULD BE DISCOVERED AT ANY TIME DURING THE GRADING, SCRAPING OR EXCAVATION, ALL WORK SHOULD BE HALTED IN THE VICINITY OF THE FIND AND AN ARCHAEOLOGIST SHOULD BE CONTACTED IMMEDIATELY TO EVALUATE THE DISCOVERED MATERIAL TO ASSESS ITS AREAL EXTENT, CONDITION, AND SCIENTIFIC SIGNIFICANCE. IF THE DISCOVERED MATERIAL IS DEEMED POTENTIALLY SIGNIFICANT, A QUALIFIED ARCHAEOLOGIST SHOULD MONITOR ANY SUBSEQUENT ACTIVITY IN THE PROXIMITY.
10. IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED, THE APPLICANT IS REQUIRED BY COUNTY ORDINANCE NO. B6-18 TO IMMEDIATELY NOTIFY THE COUNTY CORNER. UPON DETERMINATION BY THE COUNTY CORNER THAT THE REMAINS ARE NATIVE AMERICAN, THE CORNER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, PURSUANT TO SUBDIVISION (c) OF SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND THE COUNTY COORDINATOR OF INDIAN AFFAIRS. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY CHAPTER. IF ARTIFACTS ARE FOUND ON THE SITE A QUALIFIED ARCHAEOLOGIST SHALL BE CONTACTED ALONG WITH THE COUNTY PLANNING OFFICE. NO FURTHER DISTURBANCE OF THE ARTIFACTS MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY PLANNING OFFICE.
11. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
12. UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
13. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION.
14. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THIS PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO 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.
15. AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SPE IS REQUIRED TO BE INSTALLED THROUGHOUT THE STRUCTURE.
16. ALL NEW ON-SITE UTILITIES, MAINS AND SERVICES SHALL BE PLACED UNDERGROUND AND EXTENDED TO SERVE THE PROPOSED RESIDENCE.
17. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
18. ALL ROOF RUNOFF SHALL BE DIRECTED TO LANDSCAPED OR NATURAL AREAS AWAY FROM BUILDING FOUNDATIONS, TO ALLOW FOR STORM WATER INFILTRATION INTO THE SOIL AND SHEET FLOW.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

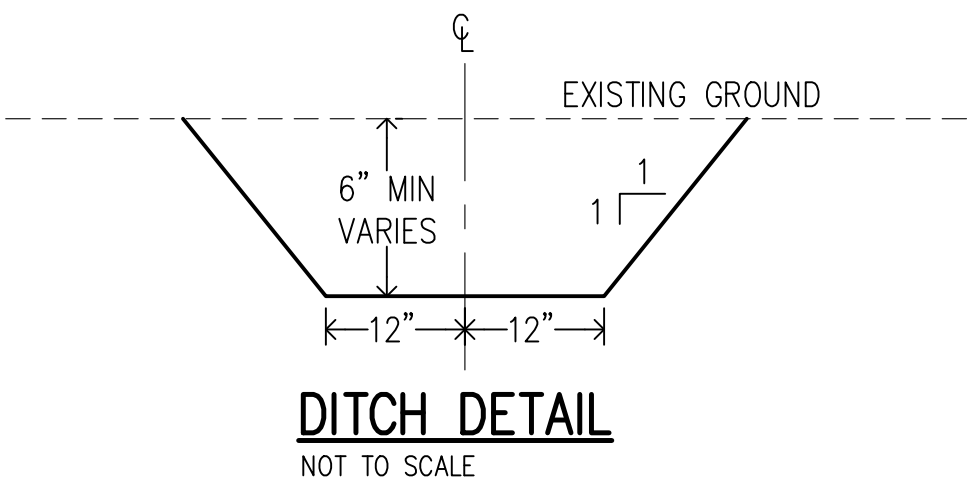
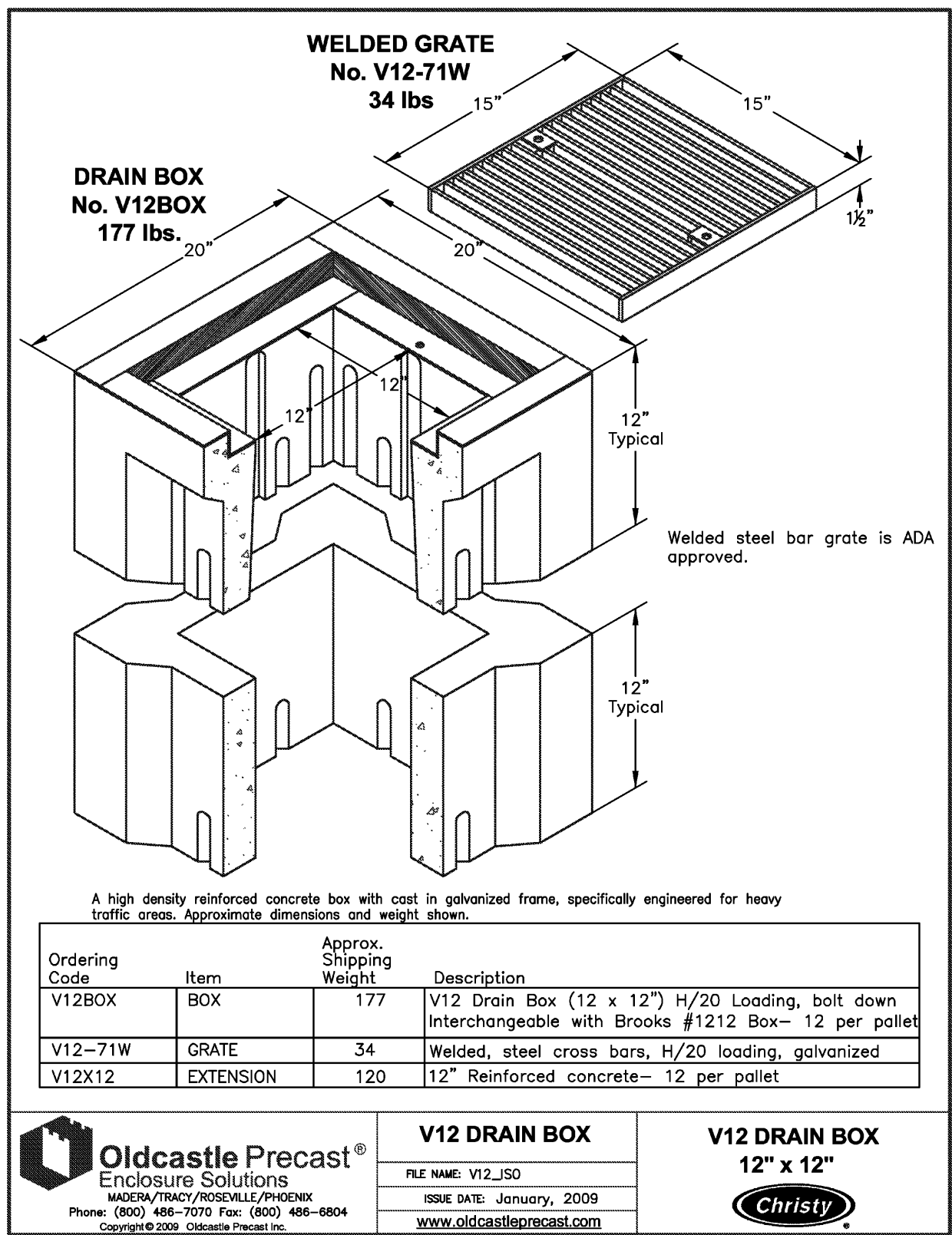
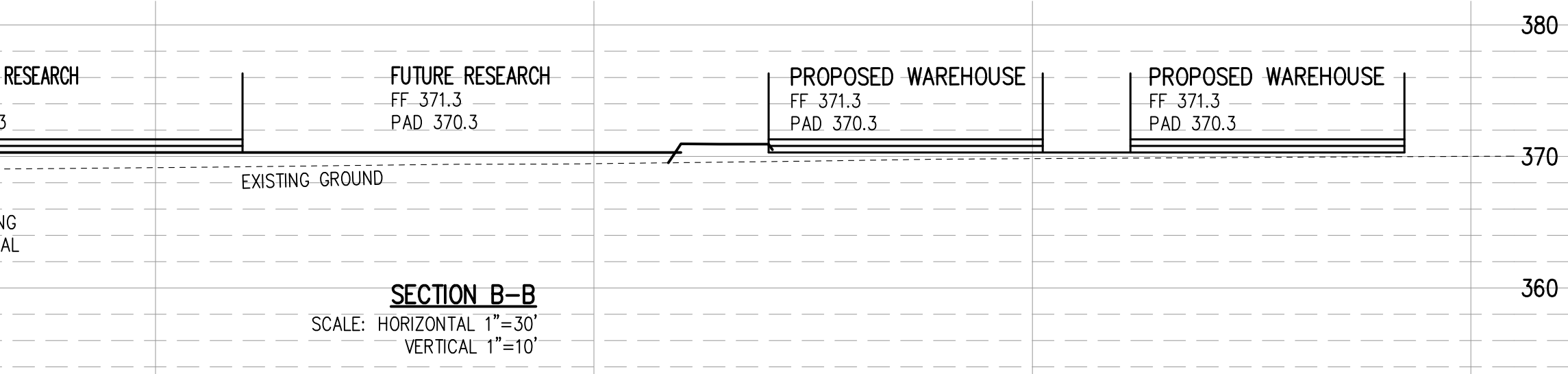
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKER'S DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

WHERE THE FIRM OF HANNA & BRUNETTI DOES NOT PROVIDE CONSTRUCTION STAKES, SAID FIRM WILL ASSUME NO RESPONSIBILITY WHATSOEVER FOR IMPROVEMENTS CONSTRUCTED THEREFROM.

CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION OF BUILDING PAD, THE STRUCTURAL SECTION OF FOUNDATION TO DETERMINE BUILDING PAD ELEVATION.

SEE SOILS REPORT AND/OR STRUCTURAL PLANS TO DETERMINE THE ELEVATION OF THE BUILDING FINISH FLOOR AND PAD.

EXCESS MATERIAL SHALL BE OFF-HAULED. IF LOCAL COUNTY A SEPERATED PERMIT SHALL BE REQUIRED.



APPROVED FOR ISSUANCE  
REFER TO ENCROACHMENT AND/OR  
CONSTRUCTION PERMIT AND PLAN  
COVER SHEET FOR SPECIAL  
CONDITIONS AND PERMIT NUMBERS

SHEET  
5  
OF 8  
JOB NO. 2005

Lands of Apex Bait Technologies, Inc. - Burnett & Vista de Lomas Avenue - apn 728-38-001

UNINCORPORATED  
MARCH 2022

SANTA CLARA COUNTY  
CALIFORNIA

**JOB NO. 20058**



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- EROSION CONTROL NOTES:**
- EROSION CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON; OCTOBER 15 THROUGH APRIL 15.
  - NO STORM WATER RUNOFF SHALL BE ALLOWED TO DRAIN INTO THE EXISTING AND/OR PROPOSED UNDERGROUND STORM SYSTEM UNTIL SUITABLE EROSION CONTROL MEASURES ARE FULLY IMPLEMENTED. NO STORM WATER RUNOFF SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM THAT IS NOT CLEAR, AND FREE OF SILTS.
  - A FIBER ROLL BARRIER PER "DETAIL SE-5" SHALL BE INSTALL ALONG THE PERIMETER OF THE PROJECT SITE. THE LOCATION OF THE FIBER ROLL ALONG THE PERIMETER SHALL BE ADJUSTED TO ELIMINATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. A FIBER ROLL SHALL ALSO BE REQUIRED AROUND THE PERIMETER OF ANY STOCKPILE OR OTHER SITE OF BARE, LOOSE EARTH.
  - ALL STORM DRAIN MANHOLES, CATCH BASINS, AND/OR DROP INLETS THAT ARE TO ACCEPT STORM WATER SHALL HAVE INLET PROTECTION MEASURES PER DETAIL SE-10. STORM WATER RUNOFF SHALL BE DIRECTED TO THESE INLETS ONLY. STORM DRAIN CATCH BASINS THAT ARE NOT COMPLETE, SHALL BE BLOCKED OFF COMPLETELY.
  - THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN SHALL BE PROVIDED TO THE COUNTY.
  - PRIOR TO GRADING, AN ENTRANCE SHALL BE CONSTRUCTED, CONSISTING OF A MINIMUM OF 50 LF OF DRAIN ROCK, 3" IN DIAMETER, PLACED OVER MIRAFI 500X (OR EQUAL) PER DETAIL TC-1. THE ENTRANCE SHALL CONFORM TO "CONSTRUCTION ENTRANCE DETAIL TC-1". THERE SHALL BE ONLY ONE ENTRANCE/EXIT POINT TO THE SITE DURING THE RAINY SEASON. THE LOCATION SHALL BE AS SHOWN ON THESE PLANS, OR AT A LOCATION APPROVED BY THE COUNTY.
  - ALL AREAS OF BARE, TURNED OR DISTURBED EARTH SHALL BE STABILIZED BY USE OF HYDROSEED PER THE TABLE BELOW.  
ALL STOCKPILES, AND/OR BORROW AREAS SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES SUCH AS A PERIMETER SILT FENCE, AND OTHER METHODS TO PREVENT ANY EROSION OR SILTS MIGRATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS, BUT ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE COUNTY INSPECTOR. THE STORM DRAIN SYSTEM SHALL MAINTAIN A FORM OF DRAIN INLET PROTECTION UNTIL COUNTY ACCEPTS THE FINAL STREET IMPROVEMENTS. THE DRAIN INLET PROTECTION SHALL BE MAINTAINED, EFFECTIVE AND SUBJECT TO COUNTY INSPECTOR'S APPROVAL.
  - ALL PAVED STREET, AND AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO ELIMINATE SEDIMENT LADEN RUNOFF FROM ENTERING THE STORM DRAIN SYSTEM.
  - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY DURING THE RAINY SEASON. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY END OF THE DAY. "TRAPPED SEDIMENT IN "SD INLETS" (AND OTHER EROSION CONTROL MEASURES) SHALL BE REMOVED TO MAINTAIN TRAP EFFICIENCY. REMOVED SEDIMENT SHALL BE DISPOSED BY SPREADING ON SITE, WHERE IT WILL NOT MIGRATE.
  - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM A FAILURE TO DO SO.
  - ALL DRAIN SWALES SHALL BE PER DETAIL EC-9.
  - INCOMPLETE GRADING SHALL NOT BE ALLOWED. CONTRATOR SHALL MAINATIN A DRAIN PATH AS SHOWN ON THIS PLAN. SAID DRAIN PATH SHALL BE MAINTAINED LINED DRAIN SWALES, AND INLET PROTECTION AT A MINIMUM.  
IF PONDING DOES OCCUR ON THE SITE AFTER GRADING, THE WATER MUST BE FREE AND CLEAR OF SEDIMENT PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM. THIS REQUIREMENT MAY NECESSITATE THE USE OF NATURAL AND/OR MECHANICAL DESILTING METHODS, SUBJECT TO APPROVAL BY THE COUNTY INSPECTOR.

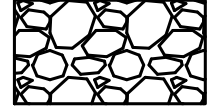
**EROSION CONTROL NOTES: (CONT)**

- IF THESE EROSION CONTROL MEASURE PROVE INADEQUATE, STRAW MULCH, TACKIFIER, AND ADDITIONAL HYDROSEEDING MAY BE REQUIRED.

HYDROSEED TABLE	
ITEM	LBS/ACRE
COMMON BARLEY	45
ANNUAL RYEGRASS	45
CRIMSON CLOVER	10
FERTILIZER 7-2-3	400
FIBER MULCH	2000
TACKIFIER	100

- ALL GRADING WORK BETWEEN OCTOBER 15th AND APRIL 15th IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.
- PROVIDE SHRUBS AND/OR TREES REQUIRED ON SLOPES GREATER THAN 15 FEET IN VERTICAL HEIGHT.
- THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL INSTALL AND MAINTAIN THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL WITHIN THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS, AND SEDIMENT CAUSED BY EROSION FROM CONSTRUCTION ACTIVITIES ENTERING THE STORM DRAIN SYSTEM, WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING PRACTICES APPLICABLE TO THE PUBLIC ROAD AND EXPRESSWAY FACILITIES:
  - REDUCTION 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 PUBLIC ROAD RIGHT OF WAY.
  - PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY
- THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER 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 MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY SHALL HAVE SEASONALLY APPROPRIATE BMP'S INSTALLED AND MAINTAINED AT ALL TIMES.

**LEGEND**



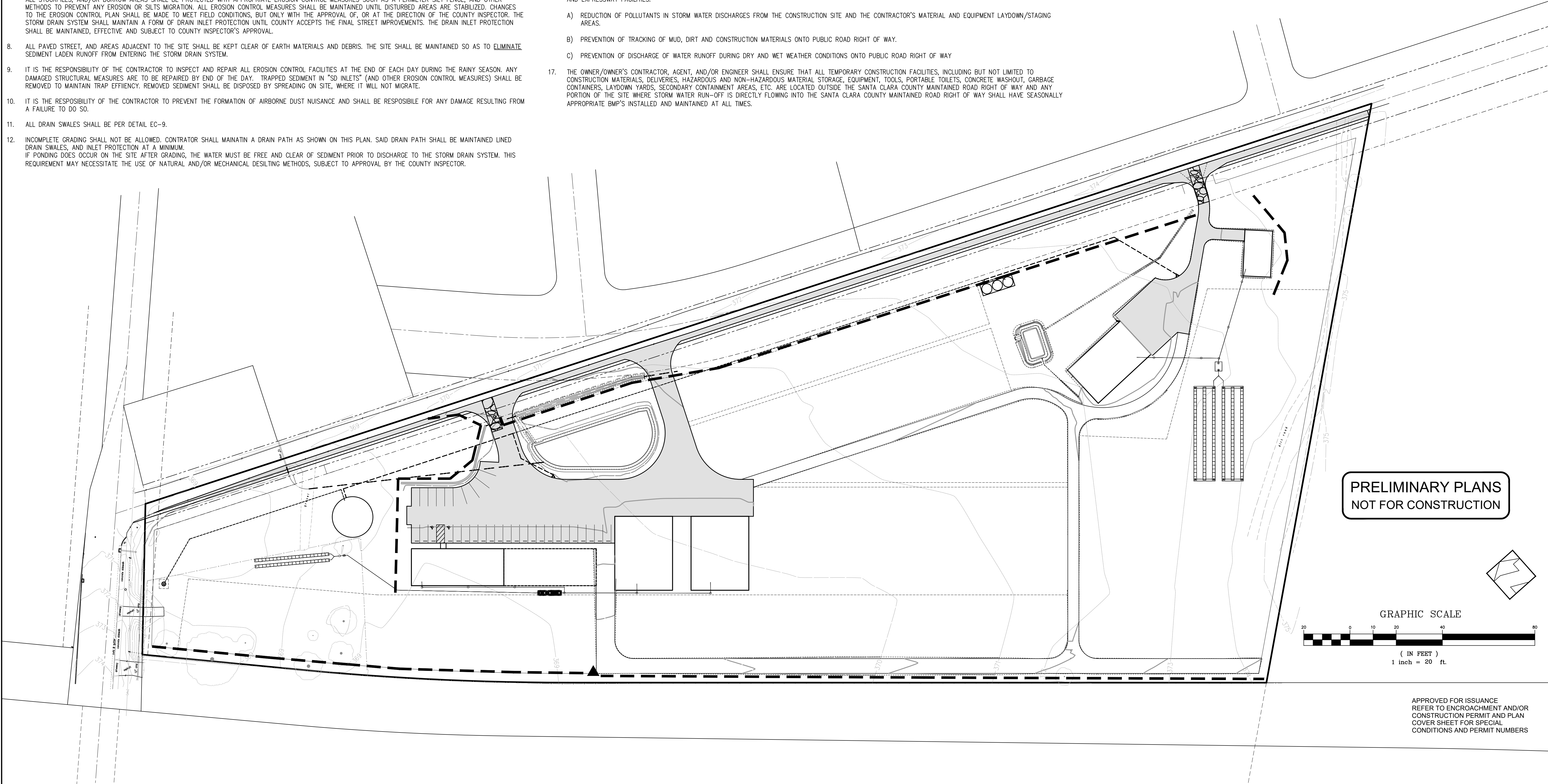
PROVIDE CONSTRUCTION ENTRANCE/EXIT  
PER DETAIL TC-1





PROVIDE FIBER ROLL SLOPE PROTECTION  
PER DETAIL SE-5



PROVIDE STORM DRAIN INLET PROTECTION  
PER DETAIL SE-10



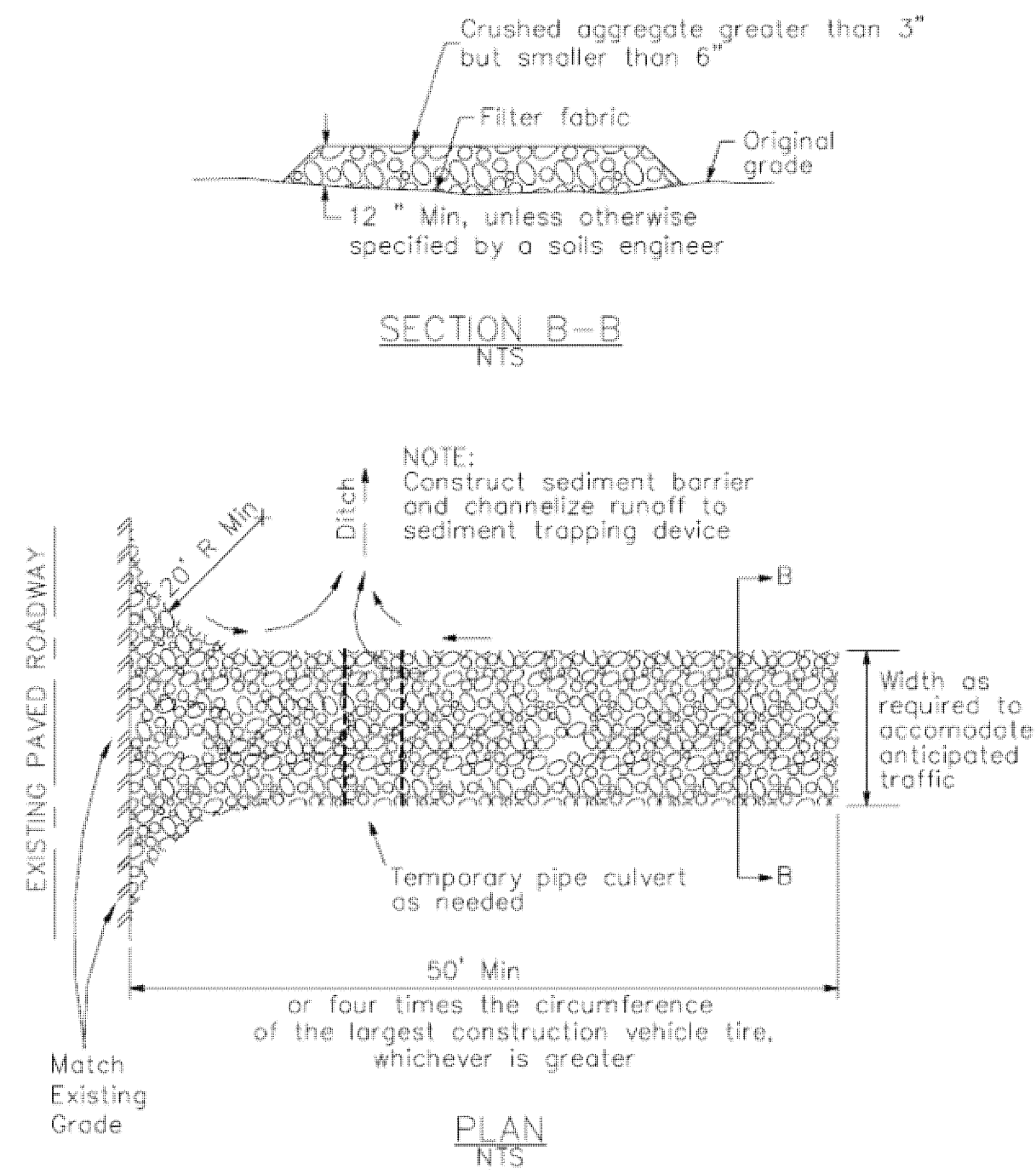
<b>REVISIONS:</b>			 <p><b>HANNA-BRUNETTI</b> EST. 1992 CIVIL ENGINEERS • LAND SURVEYORS CONSTRUCTION MANAGERS 7651 EGGLEBERRY STREET • GILROY • 95020 • CALIFORNIA OFFICE (408) 842-2173 • FAX (408) 842-3662 EMAIL: ENGINEERING@HANNABRUNETTI.COM</p>	DATE: MARCH 2022		<b>REFERENCES</b>	<h1>Erosion Control Plan</h1> <p>Lands of Apex Bait Technologies, Inc - Burnett &amp; Vista de Lomas Avenue - apn 728-38-001</p> <p>UNINCORPORATED MARCH 2022</p>	<p>SANTA CLARA COUNTY CALIFORNIA</p>	<p>APPROVED FOR ISSUANCE REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERS</p>	<p>SHEET <b>6</b> OF 8 JOB NO. <b>20058</b></p>	
DATE	DESCRIPTION	BY:		HORIZ. SCALE: 1"=50'							VERT. SCALE: NONE
				DESIGNED BY: AM							CHECKED BY:
				DRAWN BY: TM							



3

**Stabilized Construction Entrance/Exit**

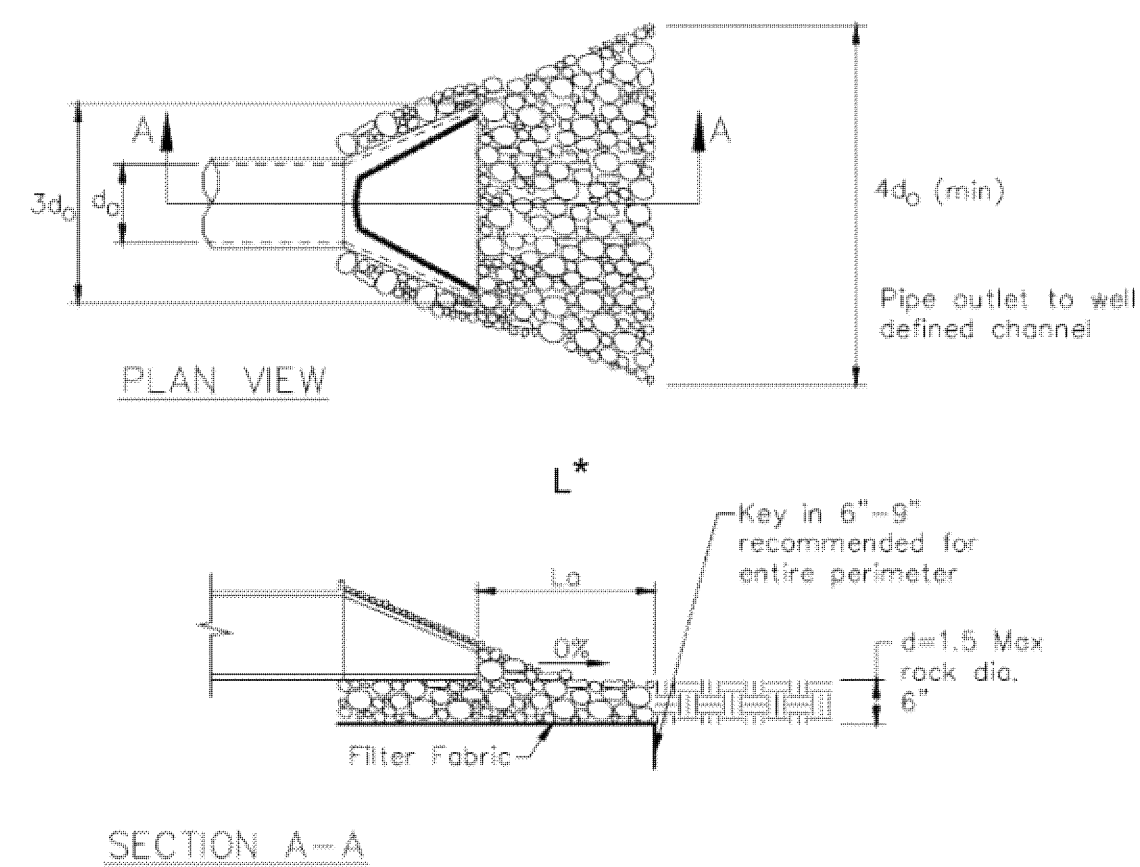
CASQA Detail TC-1



4

**Velocity Dissipation Devices**

CASQA Detail EC-10



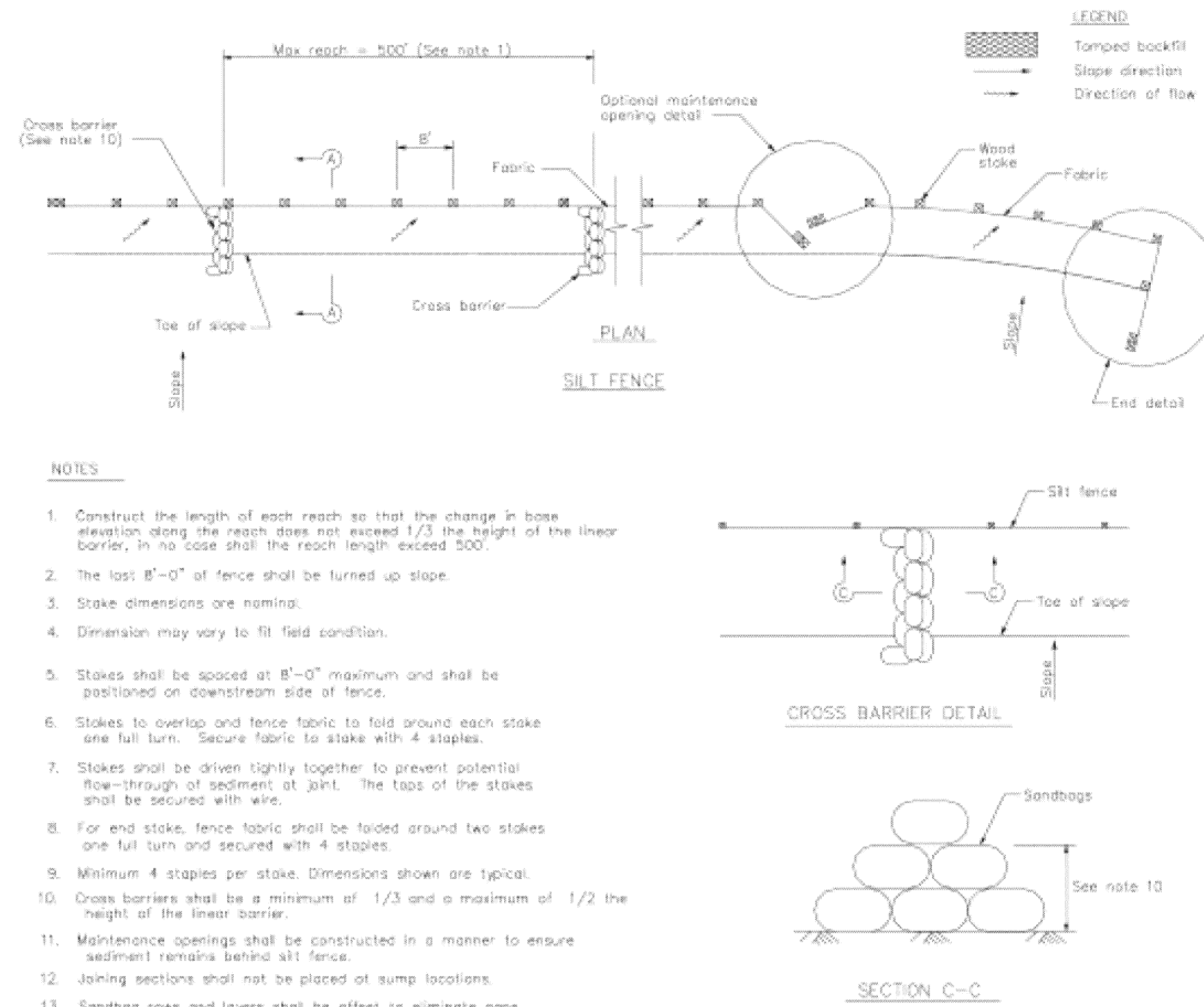
\* Length per ABAG Design Standards

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.  
Available from [www.cabmphandbooks.com](http://www.cabmphandbooks.com).

1

**Silt Fence**

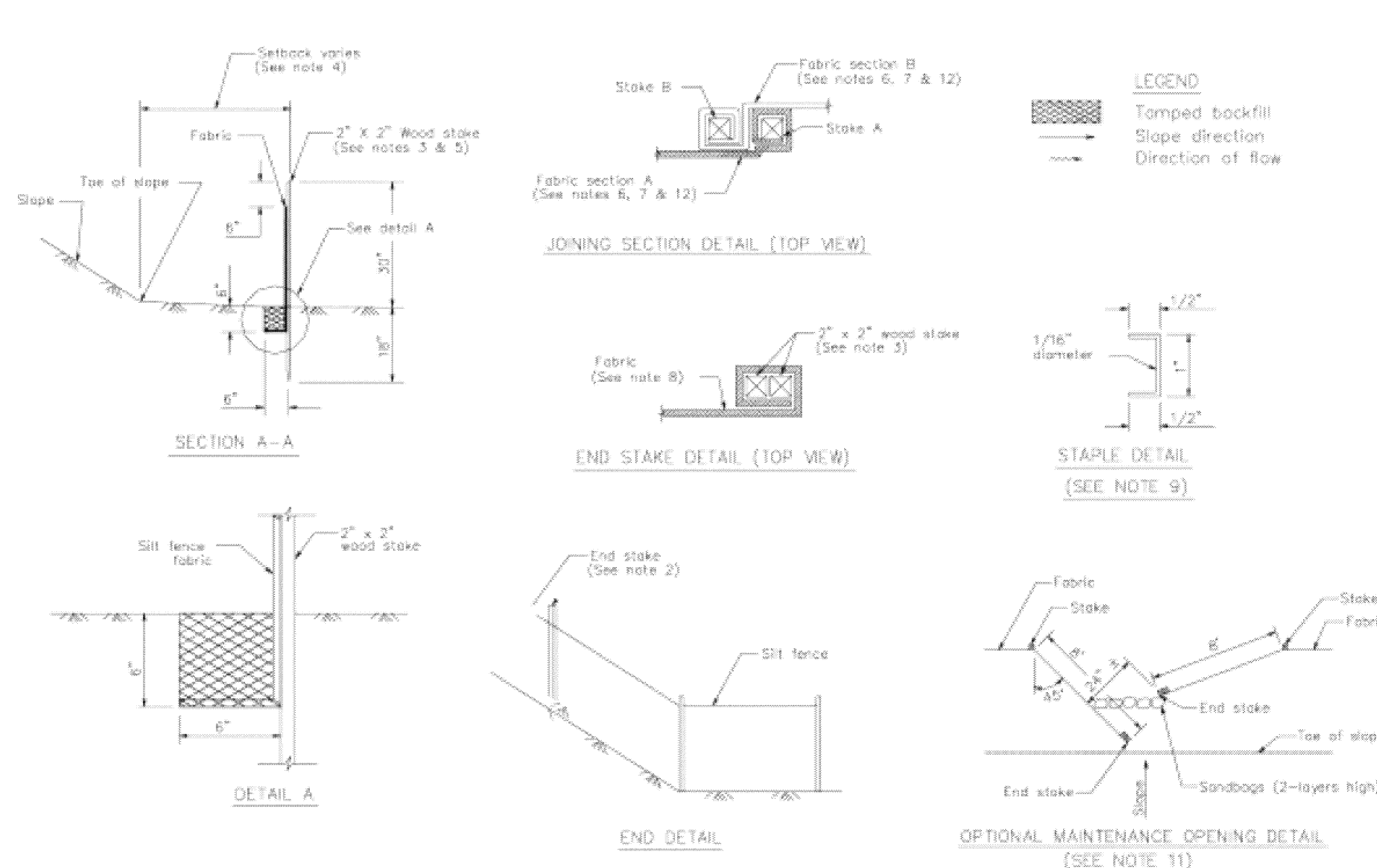
CASQA Detail SE-1



2

**Silt Fence**

CASQA Detail SE-1

**STANDARD BEST MANAGEMENT PRACTICE NOTES**

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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-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.

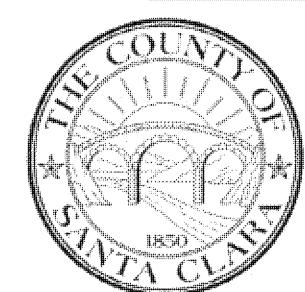
**Stockpiling:** Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures (tarps, straw bales, silt fences, etc.) to ensure silt does not leave the site or enter the storm drain system or neighboring 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 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.
- 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.
- 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.

GRADING &amp; DRAINAGE PLAN

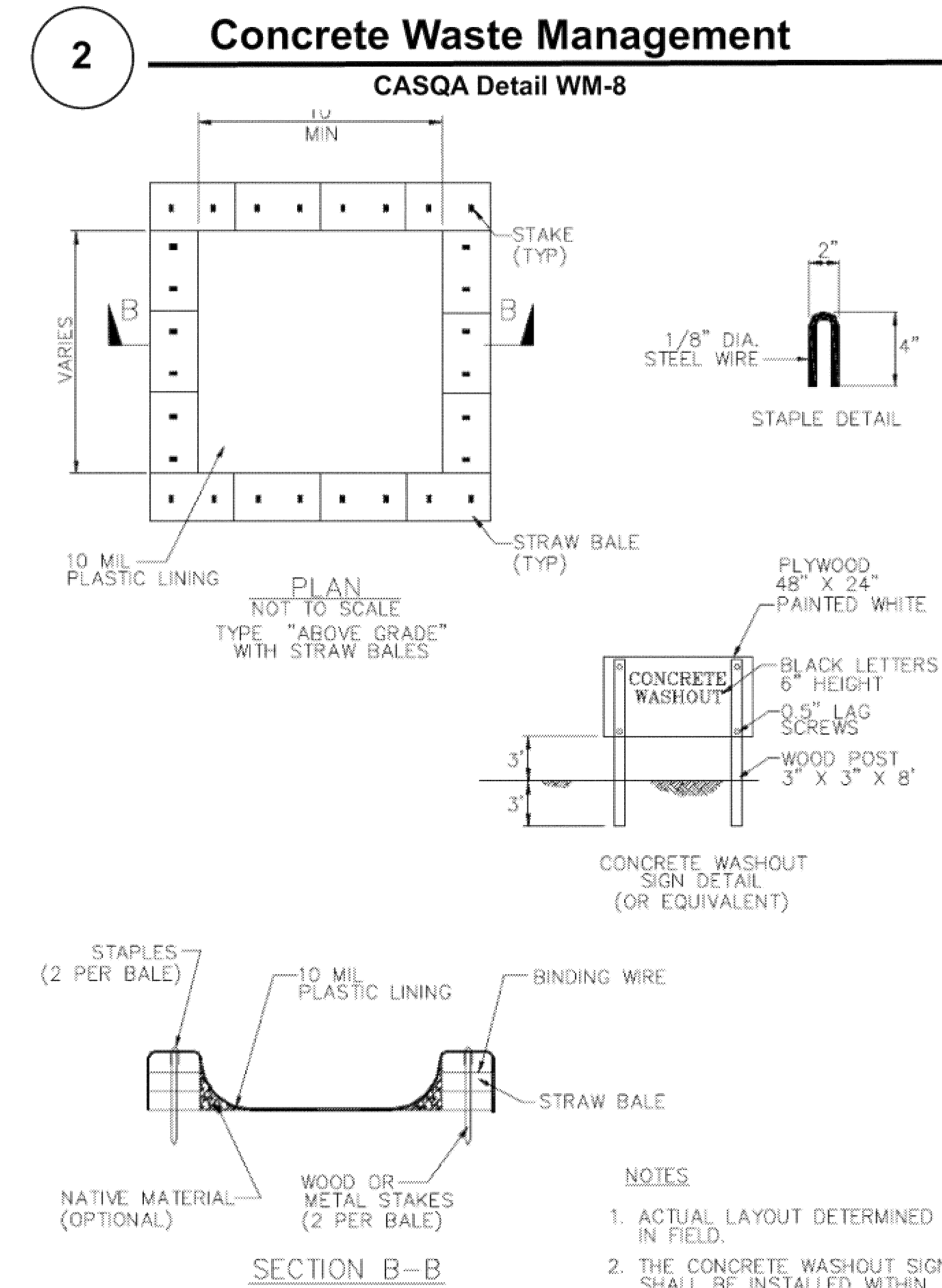
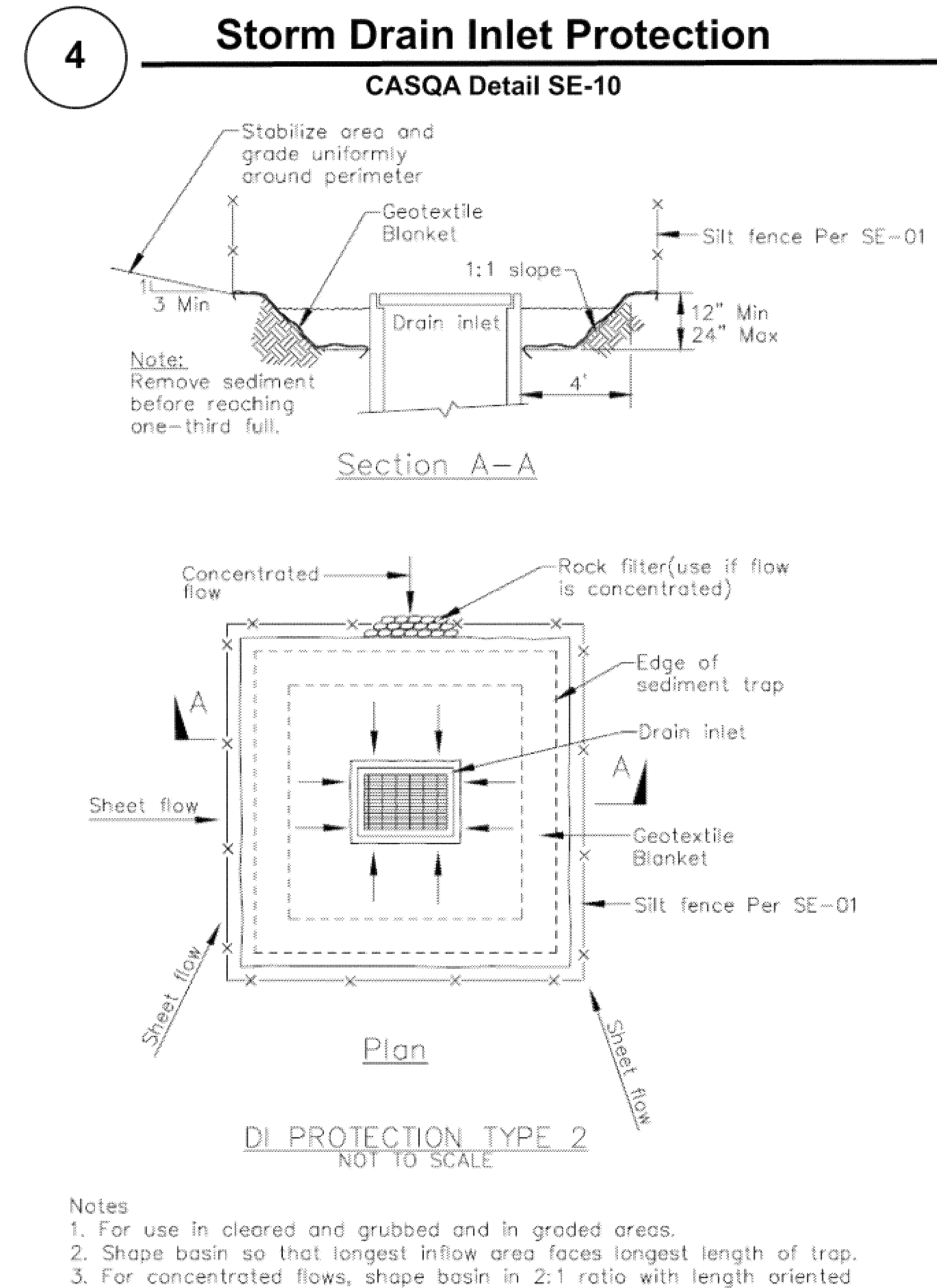
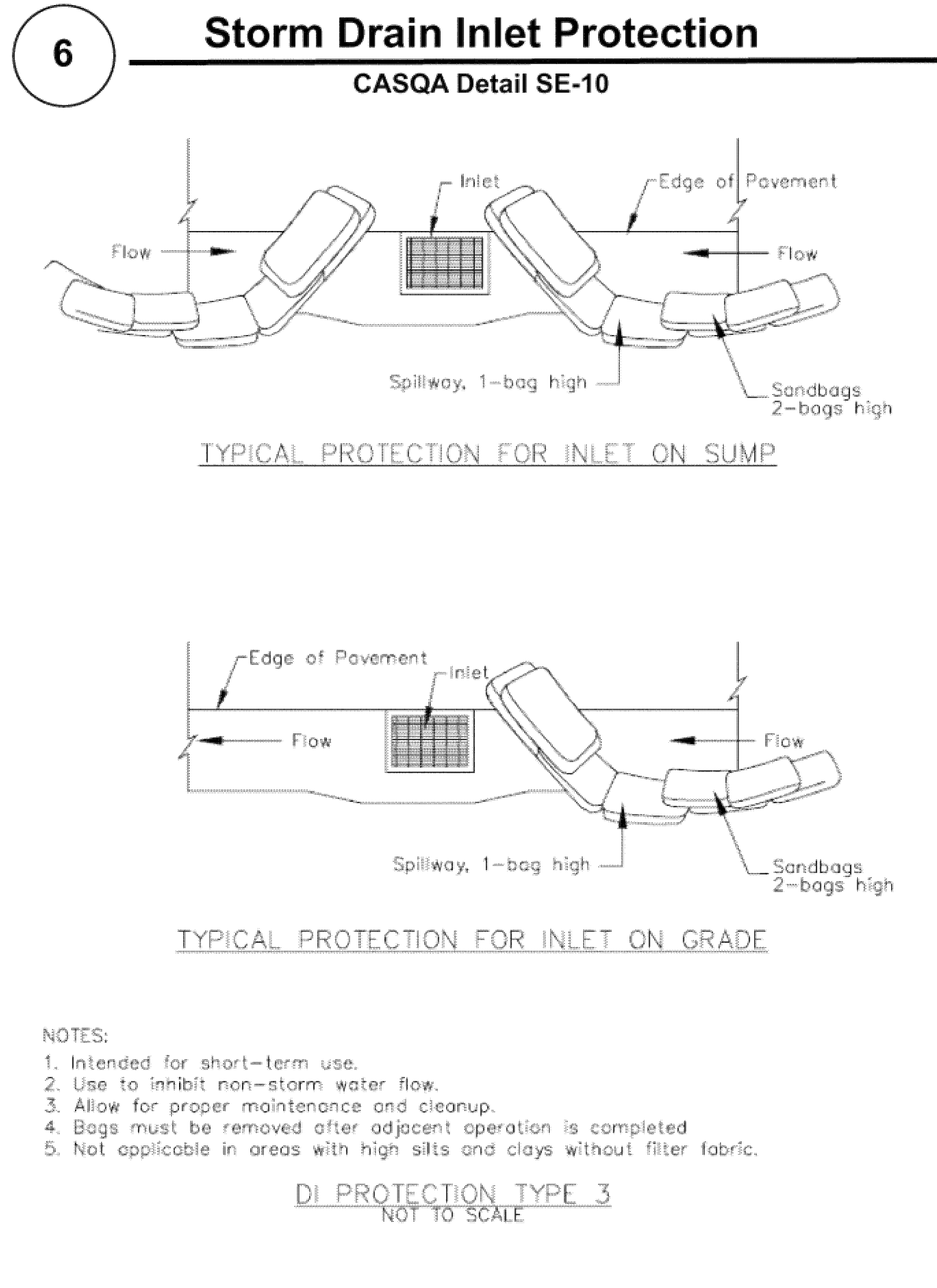
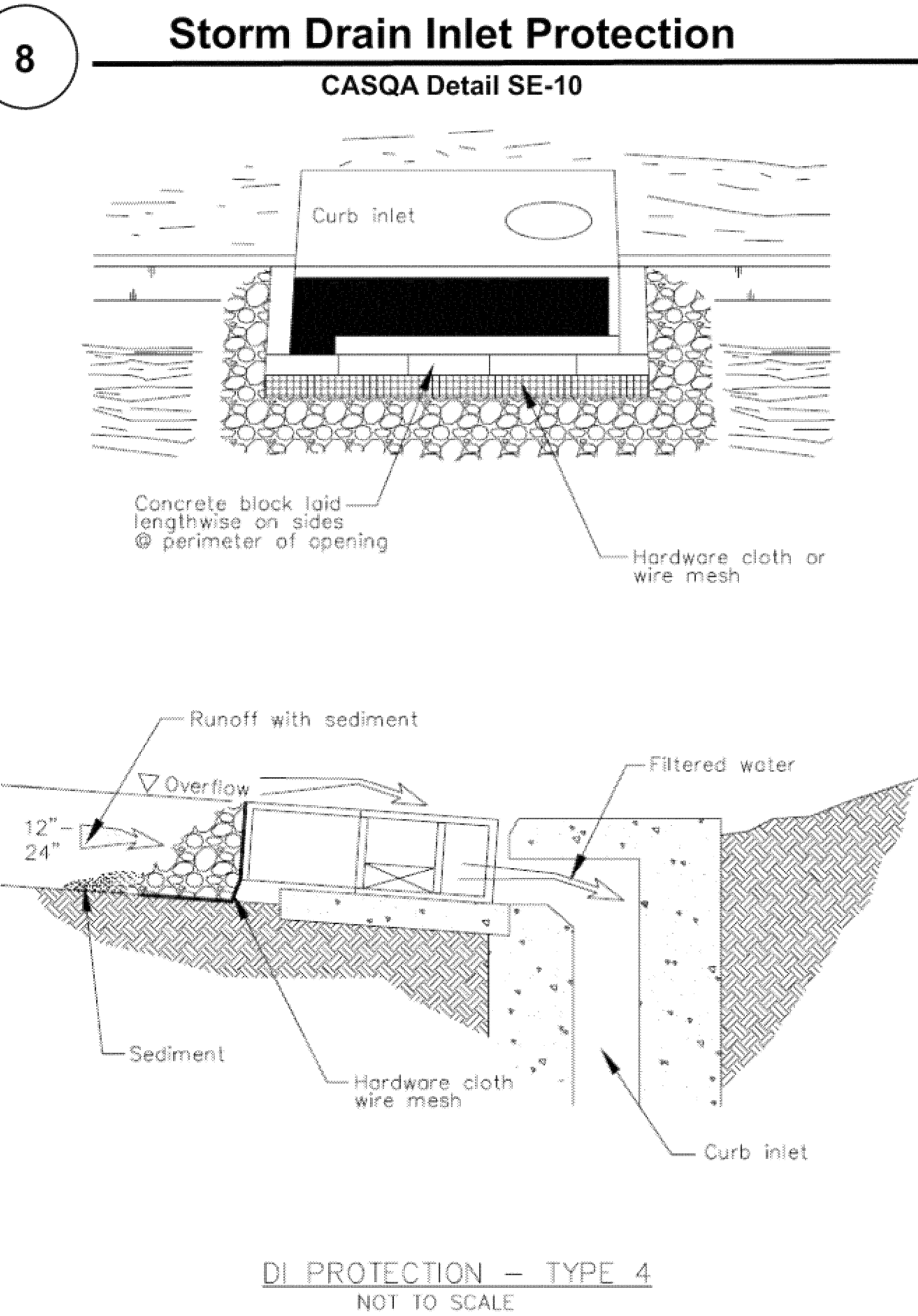
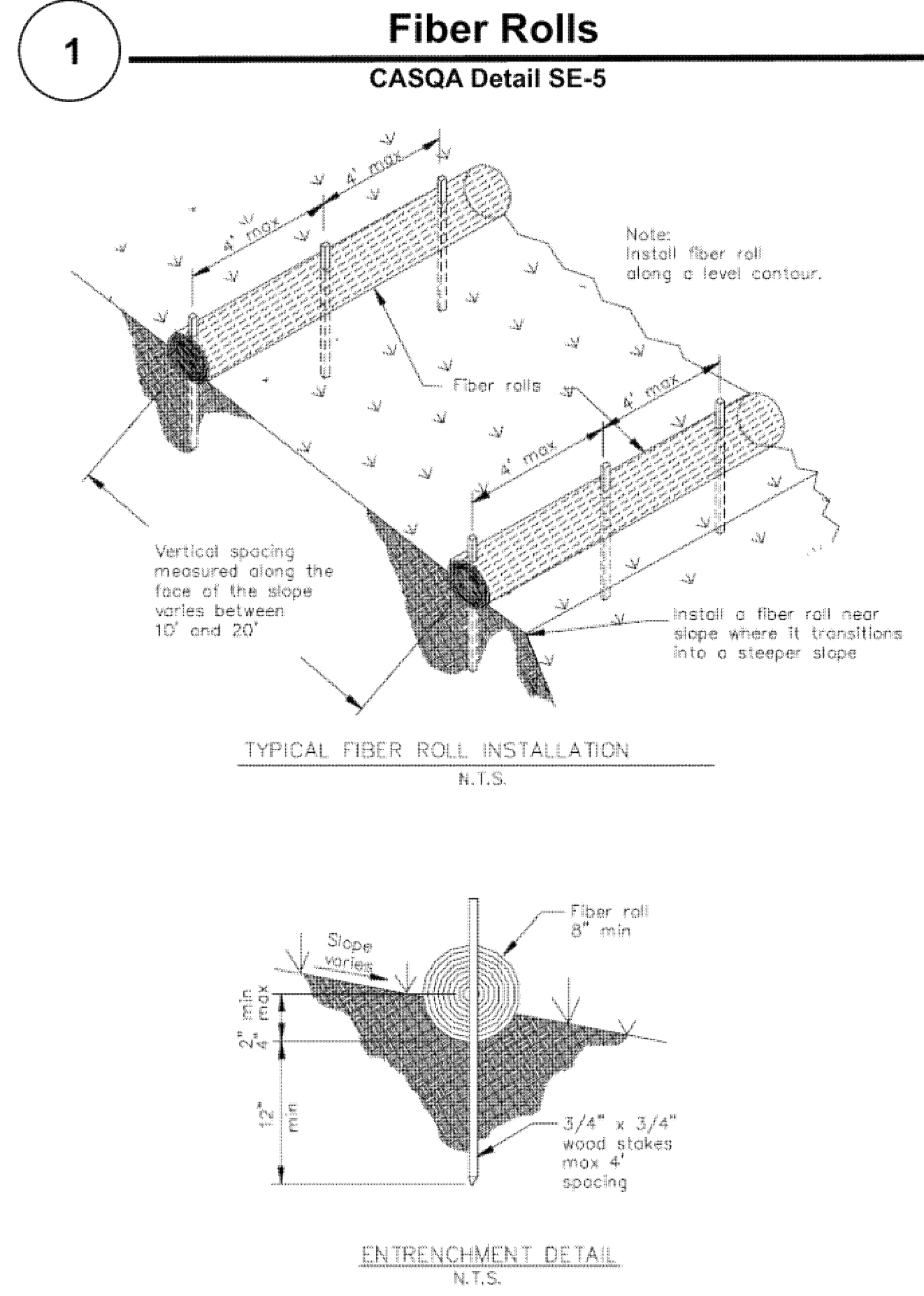
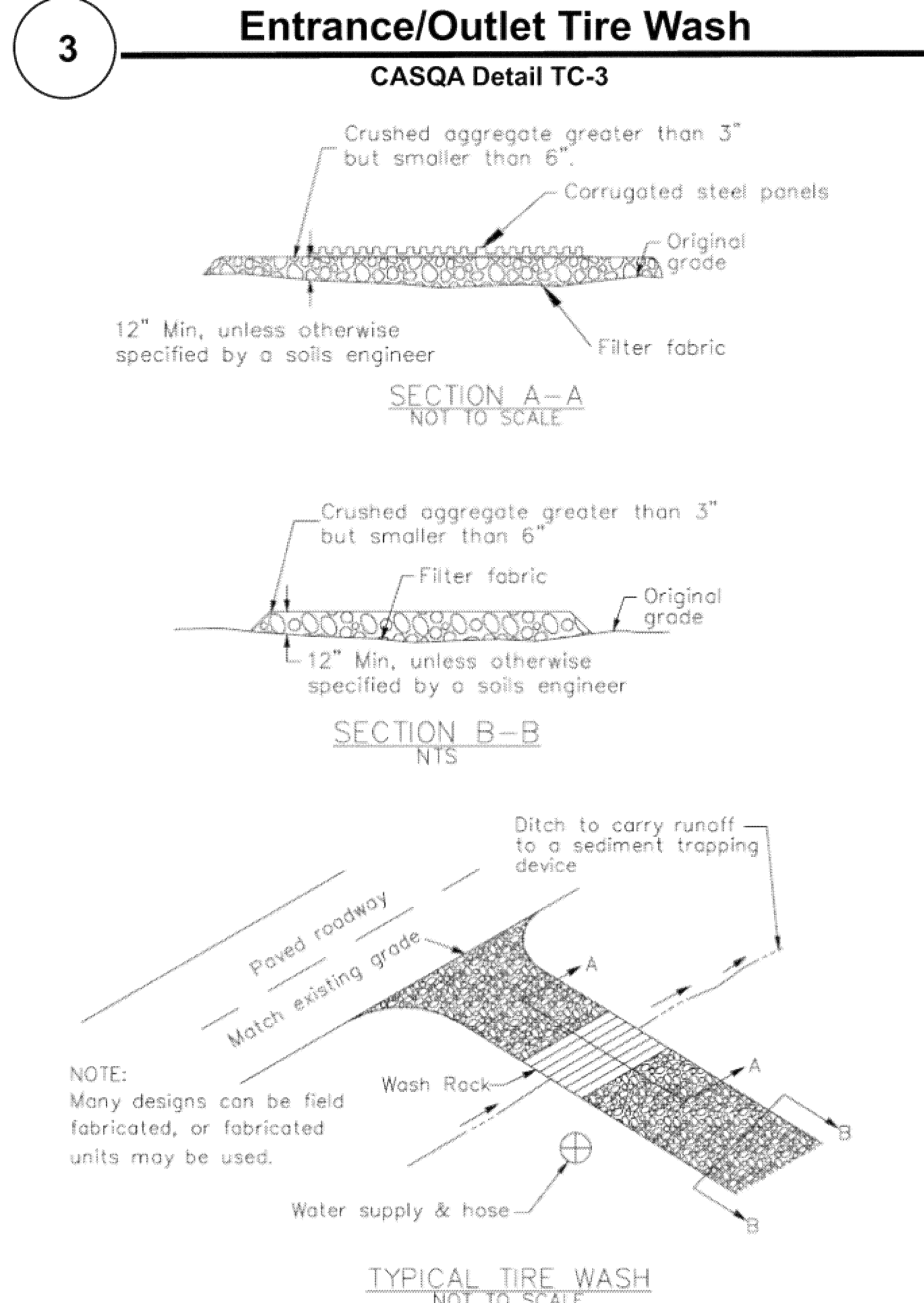
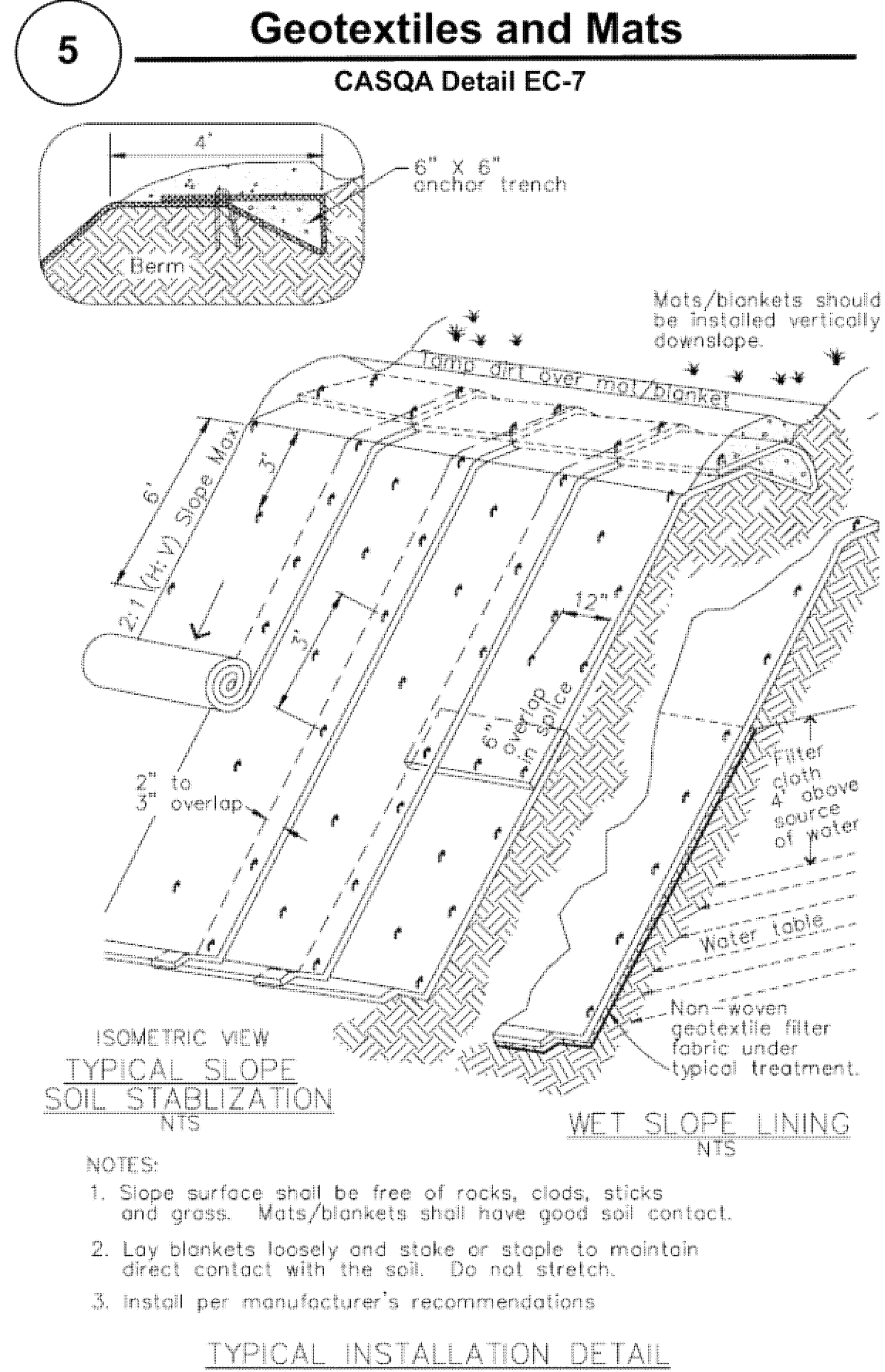
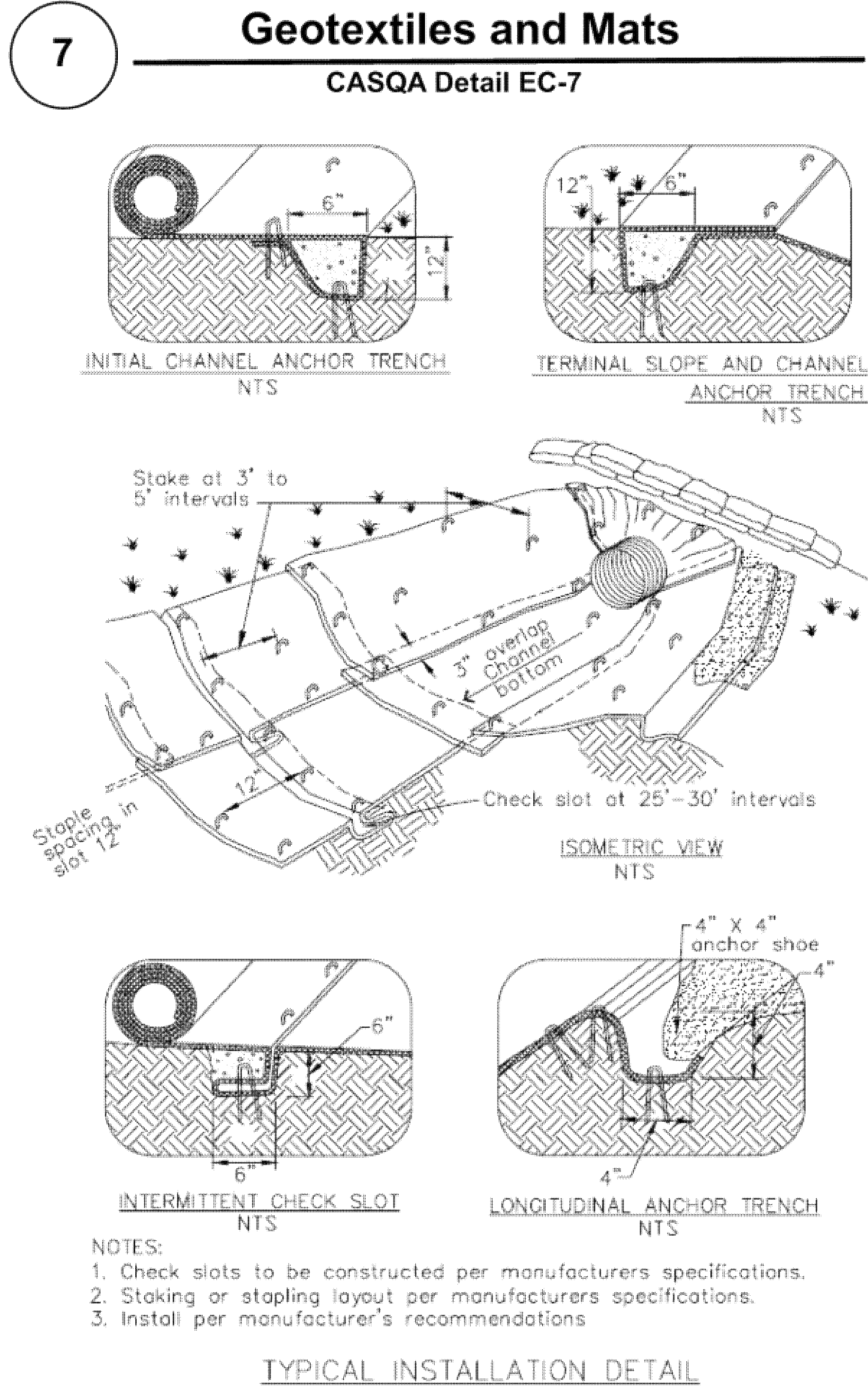
Project Information

FOR THE  
DEVELOPMENT OF THE LANDS  
FOR APEX BAIT TECHNOLOGIES, INC.  
BURNETT & VISTA DE LOMAS AVENUE  
A PARCEL OF LAND BEING A PART OF THE ORIGINAL J.M. TONEY TRACT  
FORMERLY OWNED BY JAMES A. CLAYTON & COMPANY  
IN THE RANCHO LA LAGUNA SECA  
SANTA CLARA COUNTY, CALIFORNIA  
A.P.N.: 728-38-001

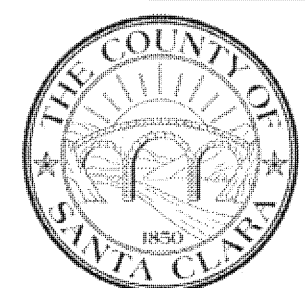


BMP-1



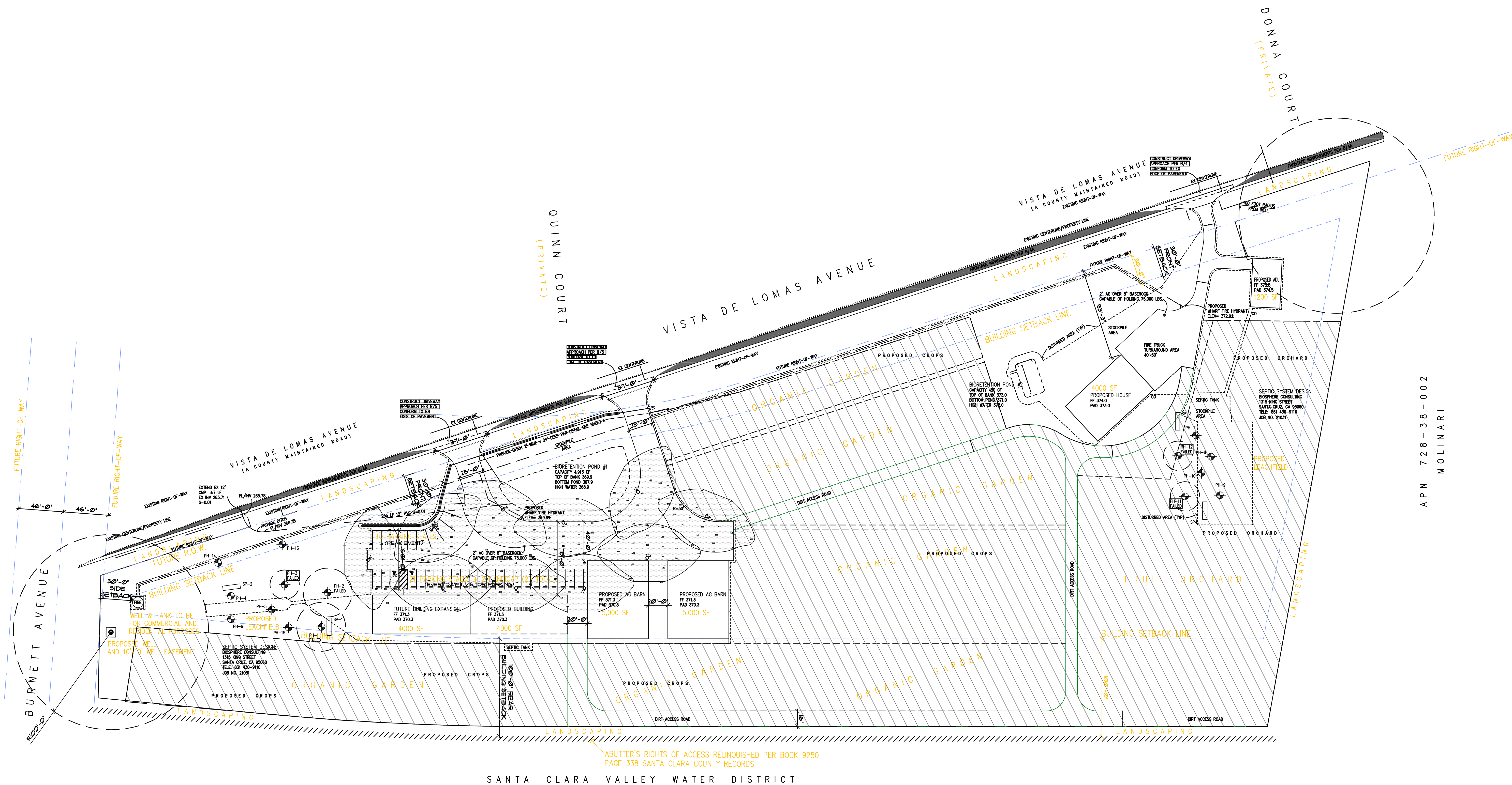


Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.  
Available from [www.cabmphandbooks.com](http://www.cabmphandbooks.com).



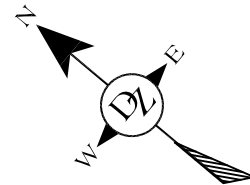


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# Parking Lot Lighting Plan

scale: 1"=50'-0"



PARKING REQUIREMENTS:			
RESEARCH/OFFICE BUILDING:	80000 SQ. FT. 1 SPACE PER	3500 SQ. FT. • 2285 SPACES	
WINE TASTING ATTENDEES:	100 MAXIMUM		
NUMBER OF EMPLOYEES:	10 MAXIMUM		
PARKING PROVIDED:	33 PARKING STALLS ARE BEING PROVIDED (INCLUDING 2 ADA STALLS)		

LUMINAIRE SCHEDULE				
PROJECT: APEX BAIT, MORGAN HILL				
SYMBOL	QUANTITY	ARRANGEMENT	DESCRIPTION	LAMPS
A	10	SINGLE	STERNBERG OMEGA 1521	LED

GENERAL NOTES:

THE EQUIVALENT OF ONE (1) FOOT CANDLE OF ILLUMINATION SHALL BE PROVIDED THROUGHOUT THE PARKING AREA.

ALL LIGHTING SHALL BE ON A TIME CLOCK OR PHOTO SENSOR SYSTEM.

PARKING LOT ILLUMINATION DEVICES SHALL BE LED AND FLAT LENSES.

ALL LIGHTING SHALL BE DESIGNED TO CONFINE DIRECT RAYS TO THE PREMISES. ANY SPILLOVER BEYOND THE PROPERTY LINE, EXCEPT ONTO PUBLIC THOROUGHFARES, SHALL BE AS APPROVED BY APPROVING AUTHORITY. ANY SPILLOVER ONTO PUBLIC THOROUGHFARES SHALL NOT CAUSE A HAZARD TO MOTORISTS.

NO./ DATE/ REVISION	
1	JAN 28, 2022 PLANNING REV

THESE PLANS ARE INTENDED ONLY FOR THE ORIGINAL SITE FOR WHICH THEY WERE DESIGNED AND ARE THE PROPERTY OF DAZ. NO PART OF THESE PLANS SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DAZ. ANY REUSE OR MODIFICATION OF THESE PLANS ON OTHER SITES IS PROHIBITED WITHOUT THE CONSENT OF DAZ. DAZ ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON, AND THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. DAZ DESIGN ASSOCIATES SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. DAZ DESIGN ASSOCIATES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.

**Design Associates, Inc.**  
A California Corporation  
18646 Sutter Blvd., Suite 500  
Morgan Hill, California 95037  
Phone: (408) 778-7045 Fax: (408) 778-7004  
Email: info@designai.com

DRAWING TITLE	Site Plan
JOB TITLE	Apex Bait
JOB ADDRESS	Vista De Lomas Avenue Morgan Hill, California

DATE	NOV. 24, 2021
SCALE	1"=50'-0"
PROJECT MANAGER	SCOTT ZAZULETA
DRAWN	SEZ
JOB NO.	D23221
SHEET	

A1



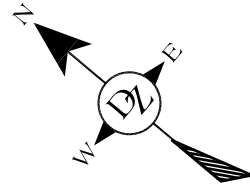







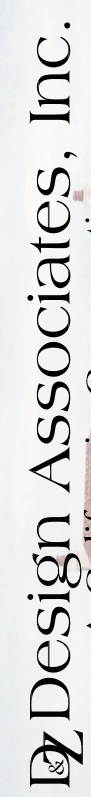
1130 sq. ft. private office  
1621 sq. ft. mezzanine

scale:  $1/4" = 1'-0"$



NO./ DATE/ REVISION
 JAN 28, 2022 PLANNING REV

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**Design Associates, Inc.**  
A California Corporation

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Phone: (408) 778-7005; Fax: (408) 778-7004  
e-mail: [dz.design@earthlink.com](mailto:dz.design@earthlink.com)

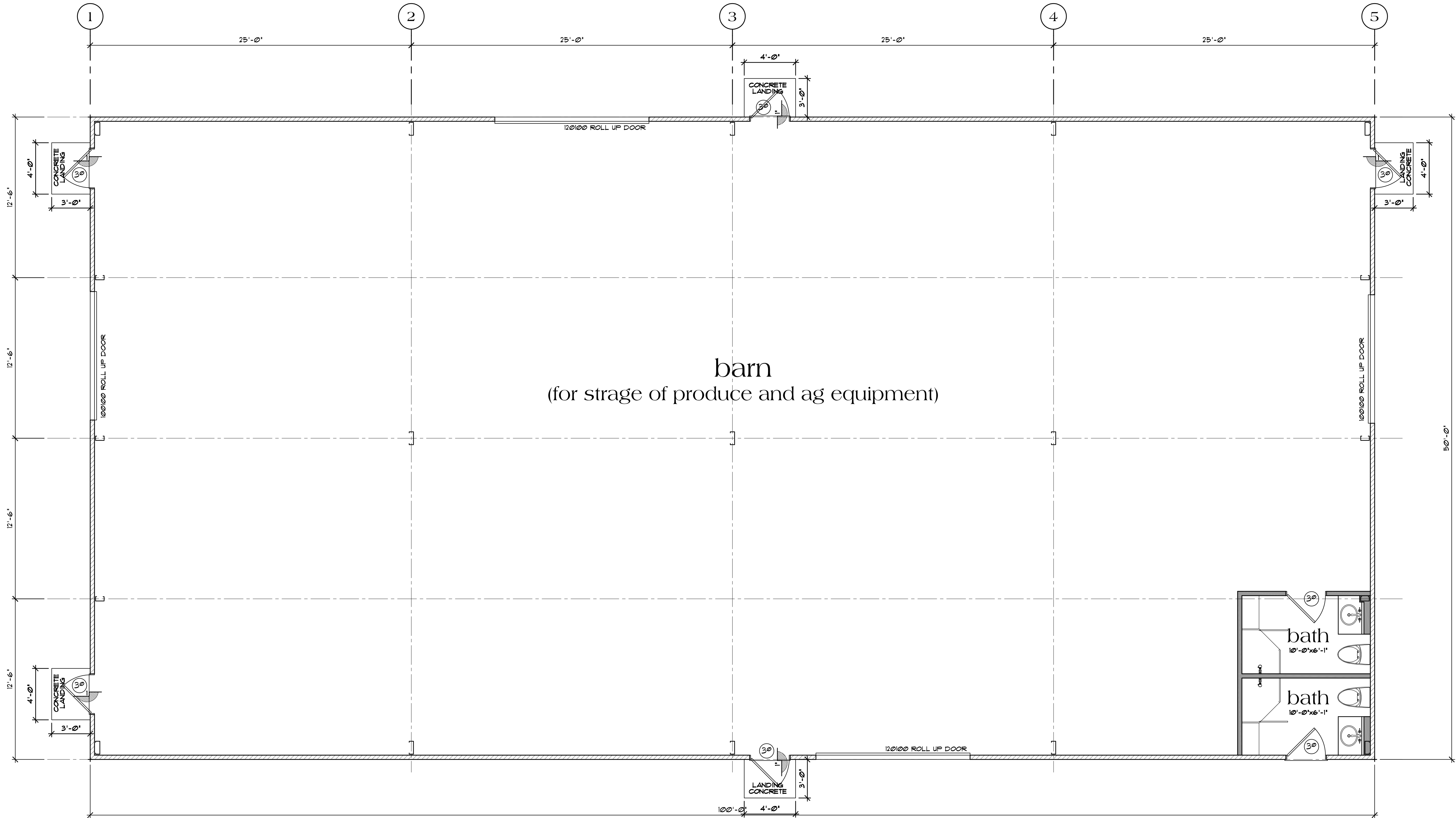
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JOB TITLE	Apex Bait
JOB ADDRESS	Vista De Lomas Avenue Morgan Hill, California

DATE	NOV. 24, 2021
SCALE	1/4" = 1' - 0"
PROJECT MANAGER	SCOTT ZAZUETA
DRAWN	SEZ
JOB NO.	DZ3221
SHEET	

## A2.2

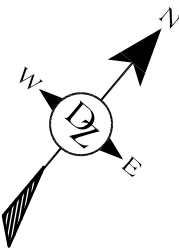


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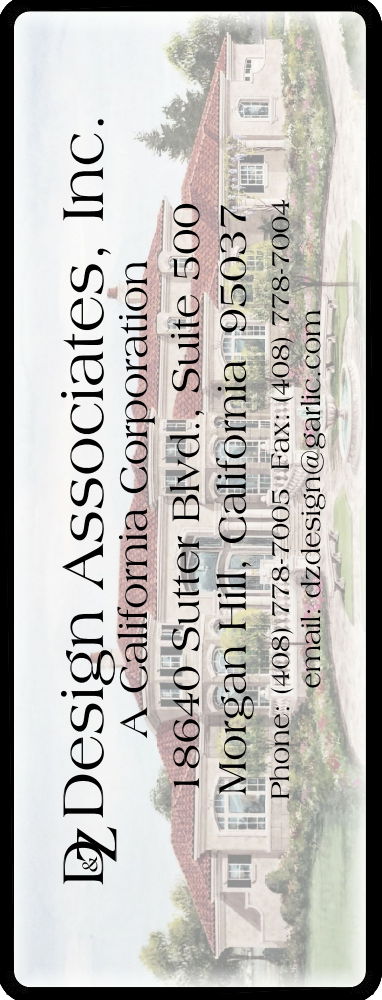
Proposed Barn Floor Plan  
5000 sq. ft.

scale: 1/4"=1'-0"



NO./ DATE/ REVISION
1 JAN 28, 2022 PLANNING REV

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DRAWING TITLE
Proposed Barn Floor Plan
JOB TITLE
Apex Bait
JOB ADDRESS
Vista De Lomas Avenue Morgan Hill, California

DATE
NOV. 24, 2021
SCALE
1/4"=1'-0"
PROJECT MANAGER
SCOTT ZAZULETA
DRAWN
SEZ
JOB NO.
DZ3221
SHEET

A2.3





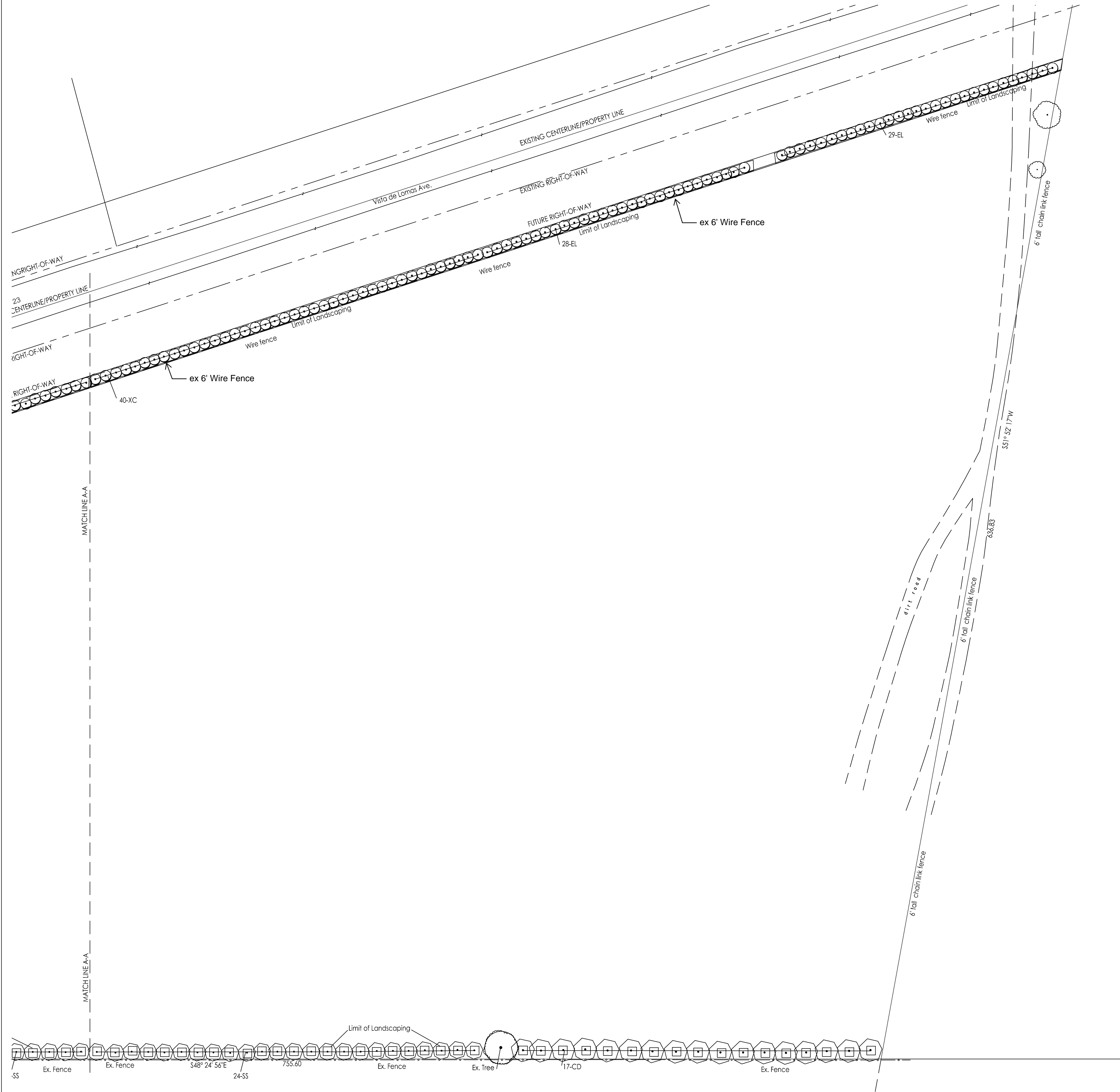




DATE	NOV. 24, 2021
SCALE	3/16" = 1' - 0"
PROJECT MANAGER	SCOTT ZAZUETA
DRAWN	SEZ
JOB NO.	DZ3221
SHEET	A3.2



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### Plant Legend

KEY	QTY	SIZE	WATER RATING	BOTANICAL NAME	COMMON NAME	MATURE SIZE
SCREEN TREES						
CD	40	5	LOW	Cedrus deodara	Deodar Cedar	fast to 80' tall
SS	51	5	HIGH	Sequoia sempervirens	Coast Redwood	50' to 100' tall
SCREEN SHRUBS						
EL	115	1	LOW	Elaeagnus pungens Fruitlandii	Silverberry	10-15' tall
XC	109	1	LOW	Xylosma congestum	Xylosma	8-10' tall
CC	20	1	LOW	Callistemon citrinus	Lemon Bottlebrush	10-15' tall

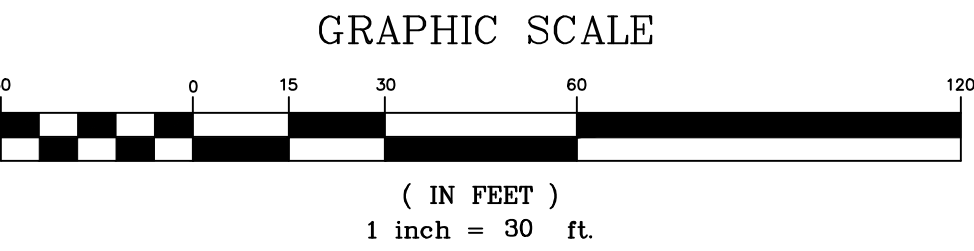
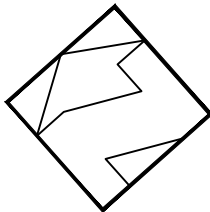
Plant quantities are for planning purposes only. Landscape installer to do own plant count and install all plants shown on the plans

### Plant Notes

- 1) See sheets L7 and L8 for Planting and Irrigation Details, and Specifications
  - 2) Exact location of plants on site to be adjusted so as to best coordinate with sprinkler head locations, lights, drainage features, and swales
  - 3) Use 3 inch deep walk on bark top dress mulch in all planting areas. Bid Mahogany dark brown Wonder mulch from Vision Recycling. Provide optional samples and prices to owner for different types of mulch. Options should be types of mulch that don't easily blow away and hold to slopes. Avoid using "Gorilla Hair" mulch if possible.
  - 4) Install plants for all plant circles shown on the plan even if they aren't labeled. Call for clarification.
  - 5) The plan is schematic. Don't install plants too close to edges of paving or buildings.
  - 6) As soon as is practical and you know the soil that will be used in the landscape areas, do a soil fertility test to determine soil fertilizer and preparation. See Landscape Specifications for Soil Fertility Test requirements. Give the soil lab a copy of the plant list so they can determine the best soil preparation for the particular plants and any plants that might have problems.
- Soil amendment recommendation should include soil prep. for plant pits only in locations under existing tree canopies where there will be no tilling of soil amendments into all of the soil so that the existing tree roots will not be damaged.

### Landscape Area Summary For Entire Site

DESCRIPTION	AREA (Sq.Ft.)	% of LANDSCAPE
1 Low Water Shrubs	8399	75%
2 Low Water Trees	1000	9%
3 High Water RWD Trees	1800	16%
TOTAL	11,199	100%
SUMMARY by WATER USE		
High Water Use	1800	15%
Medium Water Use	0	0%
Low Water Use	9,399	85%
TOTAL	11,199	100%



REVISIONS:		
DATE	DESCRIPTION	BY:
12/2/21	County comments	GL

GREGORY LEWIS

LANDSCAPE ARCHITECT

Lic.# 2176

736 Park Way, Santa Cruz, CA 95065

(831) 359-0960

lewislandscape@sbcglobal.net

DATE: 8/27/21

HORIZ. SCALE: HSCALE

VERT. SCALE: VSCALE

DESIGNED BY: GL

CHECKED BY: CHECKED

DRAWN BY: GL

REFERENCES

EXISTING LANDSCAPE PLAN

Dangsheng Liang & Jingrong Han - Burnett & Vista de Lomas Avenue - apr 728-38-001

UNINCORPORATED  
AUGUST 2021

SANTA CLARA COUNTY  
CALIFORNIA

JOB NO. 20058

SHEET

L1

OF \_

JOB NO. 20058

APPLICANT: APEX BAIT TECHNOLOGIES. INC

ROAD: BURNETT & VISTA DE LOMAS AVENUE

COUNTY FILE NO.: DEV21-2238

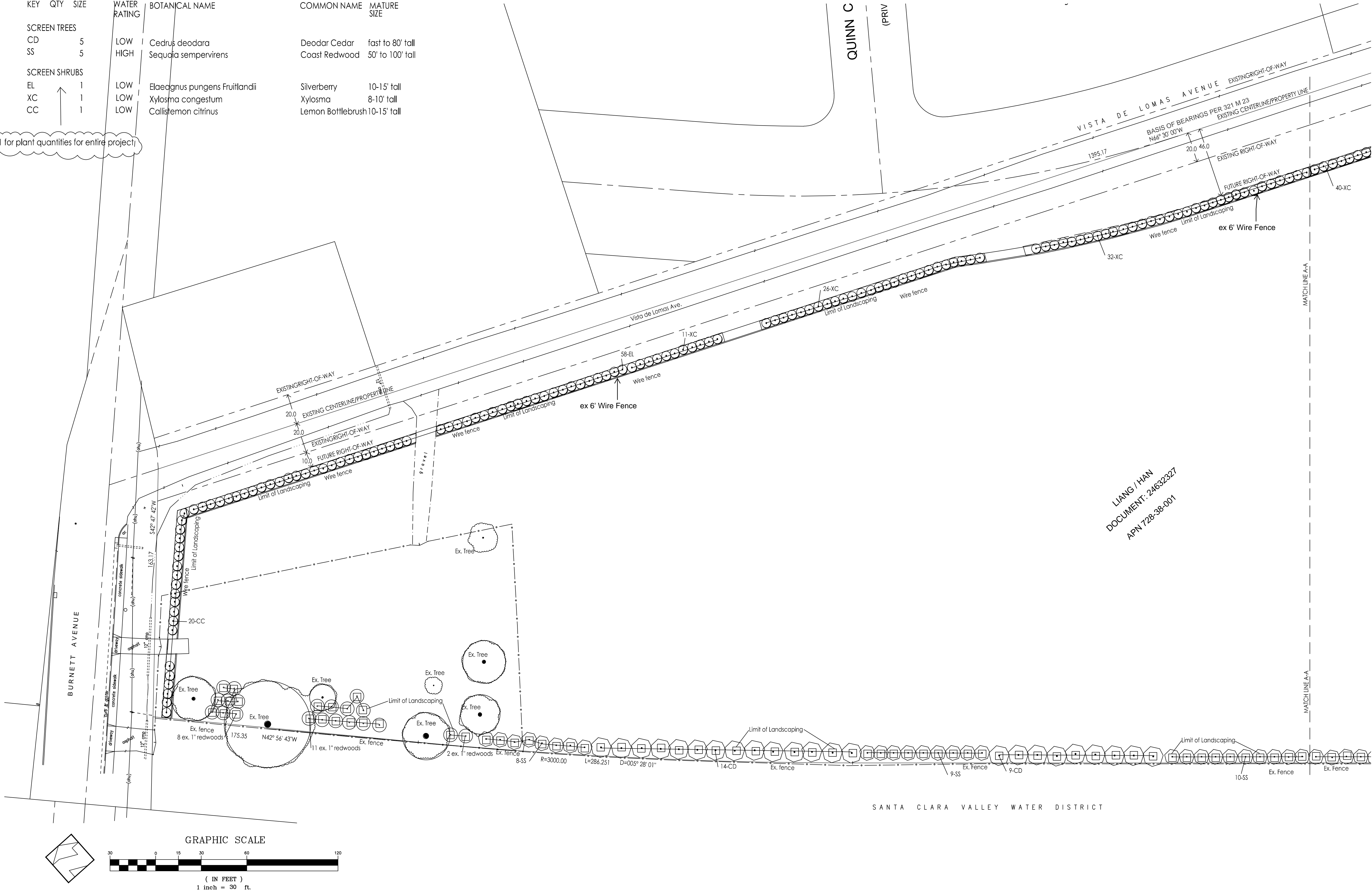
JOB NO. 20058



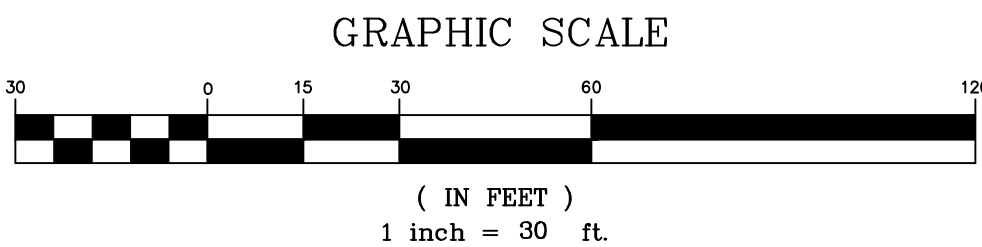
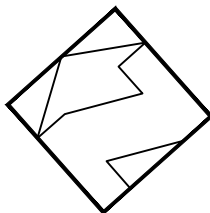
Plant Legend

KEY	QTY	SIZE	WATER RATING	BOTANICAL NAME	COMMON NAME	MATURE SIZE
SCREEN TREES						
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XC	1		LOW	Xylosma congestum	Xylosma	8-10' tall
CC	1		LOW	Callistemon citrinus	Lemon Bottlebrush	10-15' tall

See sheet L1 for plant quantities for entire project



LIANG / HAN  
DOCUMENT: 24632327  
APN 728-38-001



REVISIONS:		
DATE	DESCRIPTION	BY:
12/2/21	County comments	GL

<b>GREGORY LEWIS</b> LANDSCAPE ARCHITECT Lic.# 2176 736 Park Way, Santa Cruz, CA 95065 (831) 359-0960 lewislandscape@sbcglobal.net
---

DATE: 8/27/21
HORIZ. SCALE: HSCALE
VERT. SCALE: VSCALE
DESIGNED BY: GL
CHECKED BY: CHECKED
DRAWN BY: GL



REFERENCES

UNINCORPORATED  
AUGUST 2021

EXISTING LANDSCAPE PLAN  
Dangsheng Liang & Jingrong Han - Burnett & Vista de Lomas Avenue - apn 728-38-001

SANTA CLARA COUNTY  
CALIFORNIA

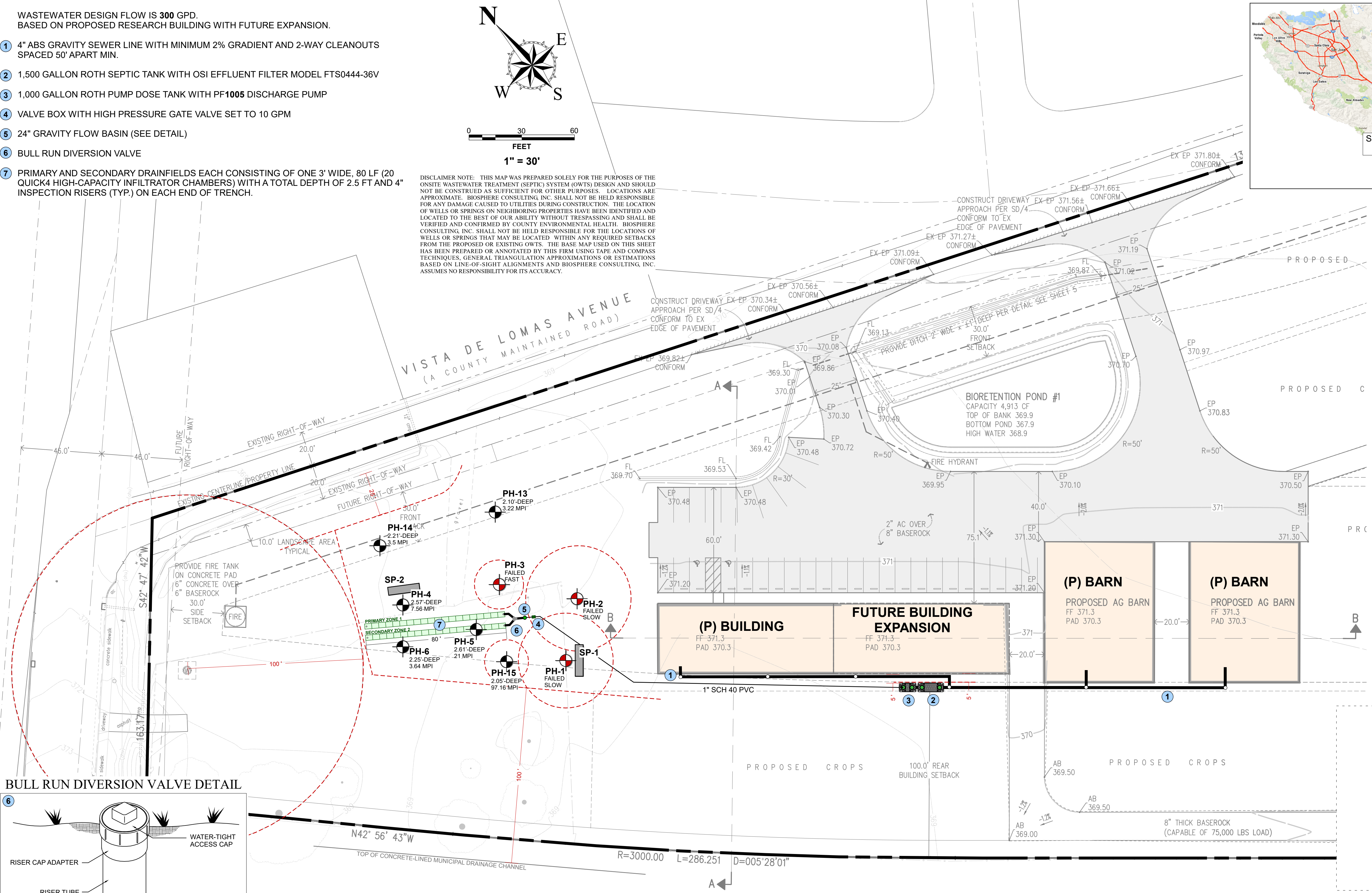
SHEET
L2
OF -
JOB NO. 20058



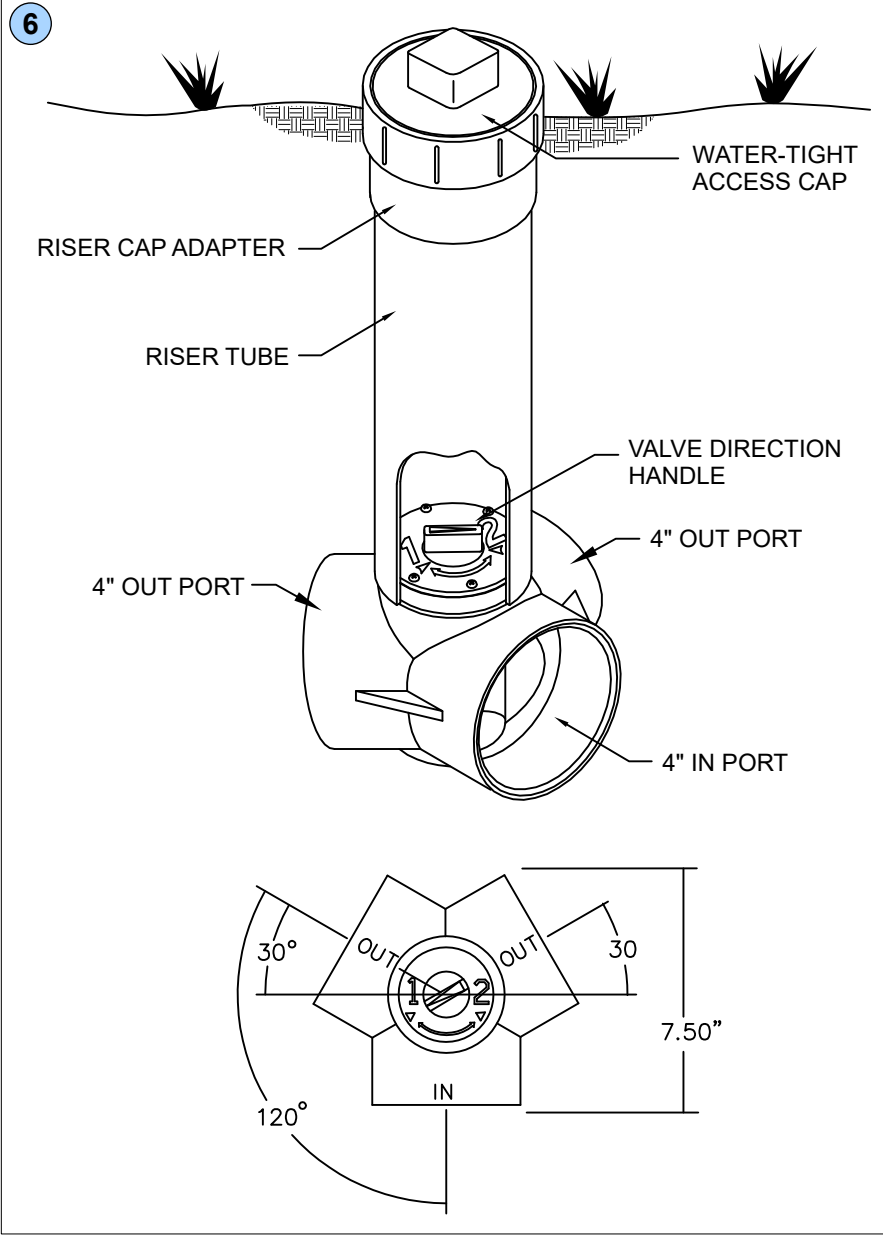
NOTES:  
WASTEWATER DESIGN FLOW IS 300 GPD.  
BASED ON PROPOSED RESEARCH BUILDING WITH FUTURE EXPANSION.

- 1 4" ABS GRAVITY SEWER LINE WITH MINIMUM 2% GRADIENT AND 2-WAY CLEANOUTS SPACED 50' APART MIN.
- 2 1,500 GALLON ROTH SEPTIC TANK WITH OSI EFFLUENT FILTER MODEL FTS0444-36V
- 3 1,000 GALLON ROTH PUMP DOSE TANK WITH PF1005 DISCHARGE PUMP
- 4 VALVE BOX WITH HIGH PRESSURE GATE VALVE SET TO 10 GPM
- 5 24" GRAVITY FLOW BASIN (SEE DETAIL)
- 6 BULL RUN DIVERSION VALVE
- 7 PRIMARY AND SECONDARY DRAINFIELDS EACH CONSISTING OF ONE 3' WIDE, 80 LF (20 QUICK4 HIGH-CAPACITY INFILTRATOR CHAMBERS) WITH A TOTAL DEPTH OF 2.5 FT AND 4" INSPECTION RISERS (TYP.) ON EACH END OF TRENCH.

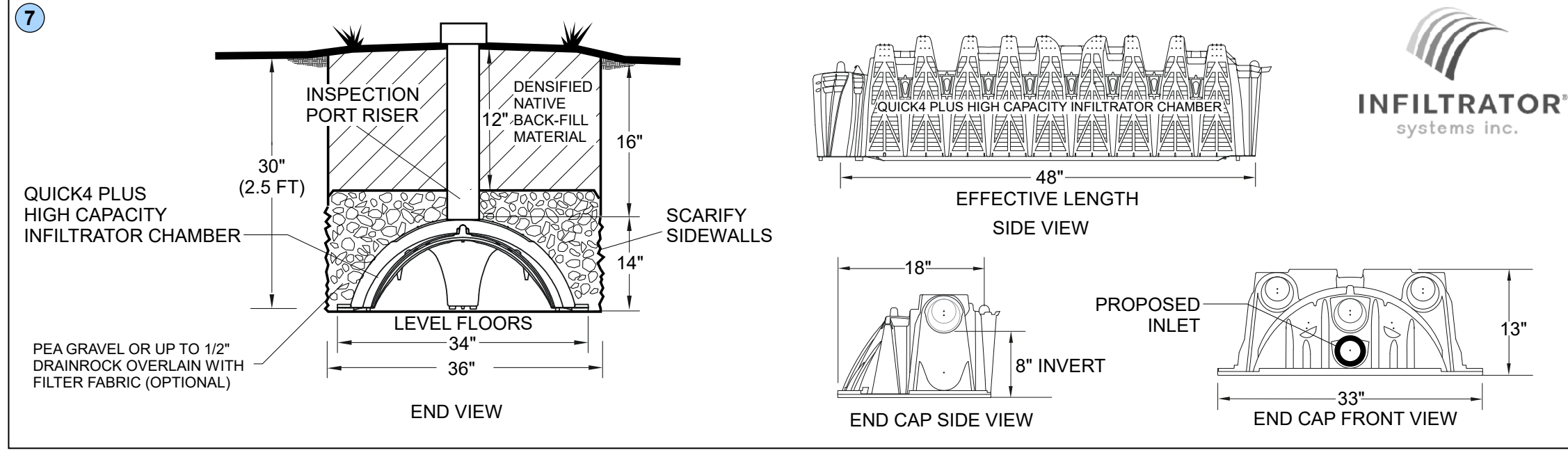
DISCLAIMER NOTE: THIS MAP WAS PREPARED SOLELY FOR THE PURPOSES OF THE ONSITE WASTEWATER TREATMENT (SEPTIC) SYSTEM (OWTS) DESIGN AND SHOULD NOT BE CONSTRUED AS SUFFICIENT FOR OTHER PURPOSES. LOCATIONS ARE APPROXIMATE. BIOSPHERE CONSULTING, INC. SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO UTILITIES DURING CONSTRUCTION. THE LOCATION OF WELLS OR SPRINGS ON NEIGHBORING PROPERTIES HAVE BEEN IDENTIFIED AND LOCATED TO THE BEST OF OUR ABILITY WITHOUT TRESPASSING AND SHALL BE VERIFIED AND CONFIRMED BY COUNTY ENVIRONMENTAL HEALTH. BIOSPHERE CONSULTING, INC. SHALL NOT BE HELD RESPONSIBLE FOR THE LOCATIONS OF WELLS OR SPRINGS THAT MAY BE LOCATED WITHIN ANY REQUIRED SETBACKS FROM THE PROPOSED OR EXISTING OWTS. THE BASE MAP USED ON THIS SHEET HAS BEEN PREPARED OR ANNOTATED BY THIS FIRM USING TAPE AND COMPASS TECHNIQUES, GENERAL TRIANGULATION APPROXIMATIONS OR ESTIMATIONS BASED ON LINE-OF-SIGHT ALIGNMENTS AND BIOSPHERE CONSULTING, INC. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



BULL RUN DIVERSION VALVE DETAIL



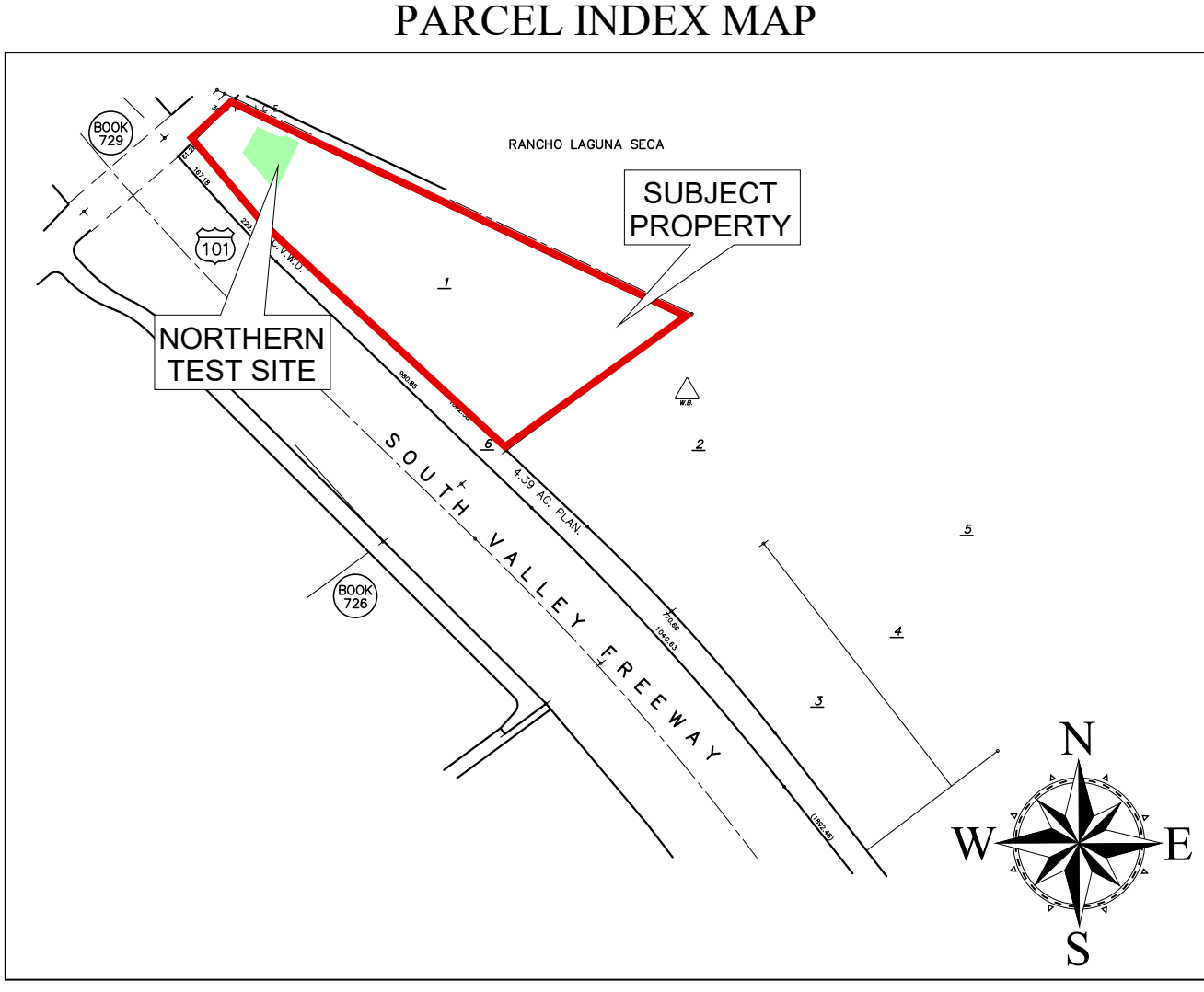
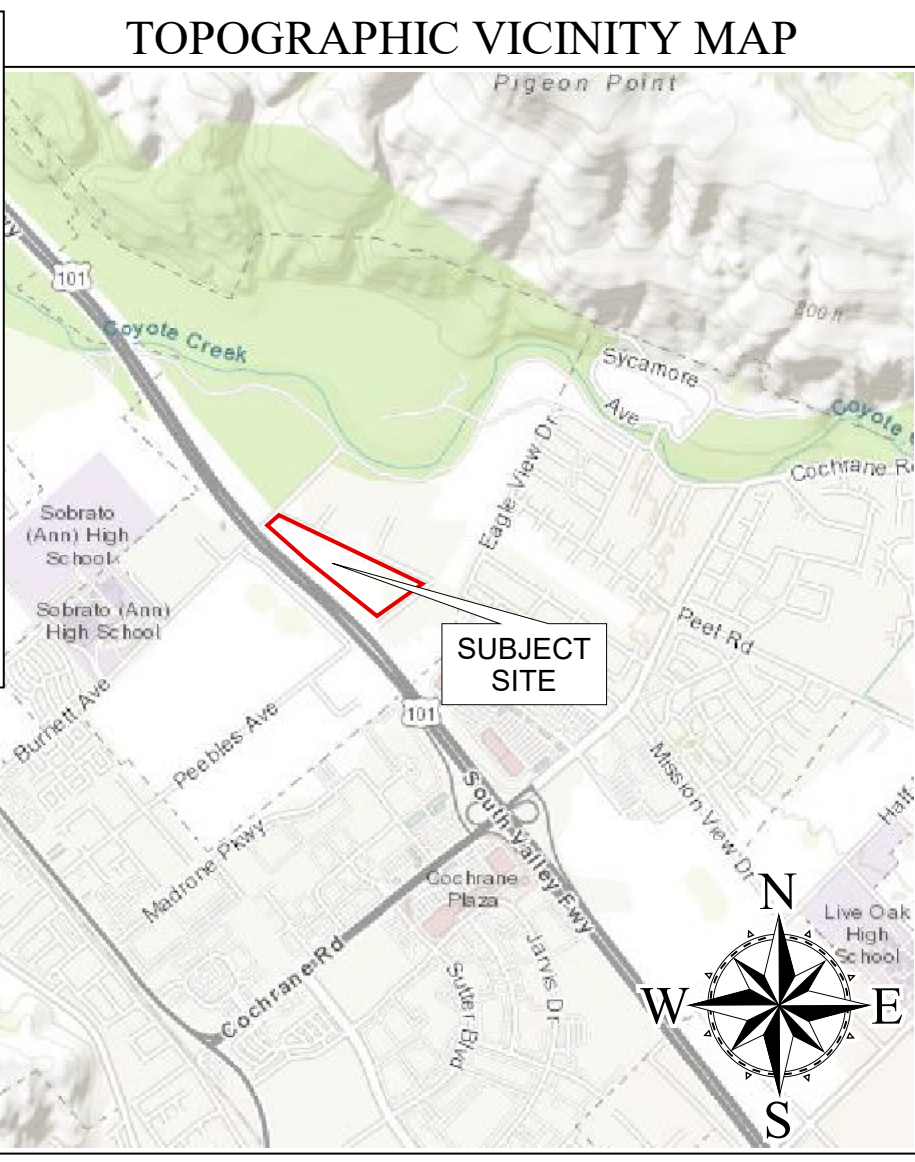
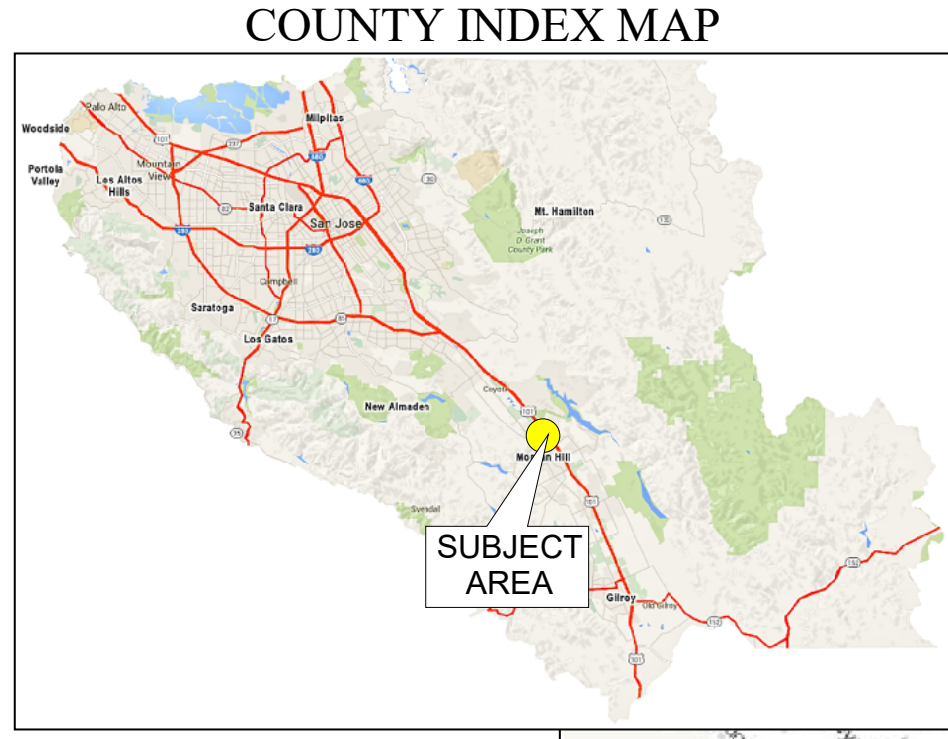
INFILTRATOR QUICK4 PLUS HIGH-CAPACITY SEPTIC DRAINFIELD TRENCH CONSTRUCTION DETAIL



NOTE: CONTRACTOR SHALL NOT USE PURPLE PIPE. USE OF PURPLE PIPE IS PROHIBITED PER COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH REGULATIONS. UNDERGROUND WARNING TAPE MAY BE INSTALLED BY CONTRACTOR (RECOMMENDED).

**IMPORTANT!** SPECIFIED WASTEWATER DRAINFIELD DISPERSAL AREAS SHALL BE FENCED OFF PRIOR TO ANY SITE DEVELOPMENT IN ORDER TO PROHIBIT ANY GRADING EQUIPMENT OR STAGING OF MATERIALS IN THESE AREAS. IT IS IMPORTANT THAT THE NATURAL SOIL CONDITIONS IN THESE AREAS BE PRESERVED FOR PROPER FUNCTION OF THE SHALLOW SOIL DISCHARGE SYSTEM. DO NOT ALLOW SOILS IN THESE AREAS TO BE COMPACTED. DO NOT ROUTE UTILITY TRENCHES THROUGH THE PROPOSED DRAINFIELDS. ALL STORMWATER LINES, INLETS/OUTLETS AND DRAINAGEWAYS SHALL MAINTAIN THE REQUIRED DEH SETBACKS TO THE PROPOSED DRAINFIELDS.

ALL BUILDING PLANS PREPARED FOR THE PROJECT SHOULD INCLUDE THIS NOTE.

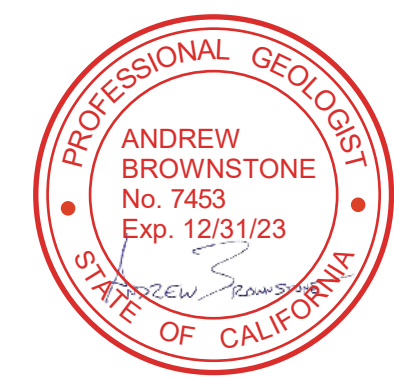


COUNTY E.H. ACCEPTANCE/APPROVAL STAMPS

**Biosphere Consulting**  
Incorporated  
Alternative Wastewater System Design  
1315 King Street  
Santa Cruz, CA 95060  
Tel: (831) 430-9116  
www.biosphere-consulting.com

- Site Evaluation & Mapping
- Soil Analysis & Percolation Testing
- New Development, Upgrade & Repairs
- Residential & Commercial

ONSITE WASTEWATER TREATMENT SYSTEM DESIGN PLAN				
Project Location:	Vista De Lomas Ave at Burnett Ave, Morgan Hill, CA (Santa Clara County)			
Property Owner:	Dangsheng Liang			
Mailing Address:	309 Laurelwood Rd, Santa Clara, CA 95054			
Owner Phone #:	(408) 969-0088			
Date:	02/08/22	By:	David Quinn / Andrew Brownstone	
REVISION:		Job No.:	21031	APN: 728-38-001



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PROJECT DESCRIPTION

A conventional pump up treatment system utilizing Quick4 Plus High-Capacity Infiltrator Chambers is proposed to serve a 4000 square foot research facility and potential future expansion of an additional 4000 square foot second facility. There will be a maximum of 10 employees on site. The research buildings intent is to study agricultural pests and pest control. Proposed research building will be located on Vista De Lomas Ave at Burnett Ave, Morgan Hill, CA.

- CONSTRAINTS & DESIGN CRITERIA
- The proposed system is designed to serve the two research buildings and agricultural employees with a design wastewater flow of 150 gallons per day (gpd) plus an additional 150 gallons per day (gpd) for future expansion per County DEH guidelines.
  - Soil profiles did not exhibit any evidence of seasonally high groundwater conditions. Based on two soil profiles observed in the proposed dispersal area, seasonally high groundwater is estimated to occur at greater than 14' below grade.
  - No wells, springs or watercourses are situated within 100' of the proposed Onsite Wastewater Treatment System (OWTS).

(P) RESEARCH BUILDING  
10 EMPLOYEES x 15 GPD/EMPLOYEE = 150 GPD  
150 GPD + 150 GPD (FUTURE USE) = 300 GPD  
AVG ADJ STABILIZED PERC RATE = 8 MPI  
8 MPI = 0.96 GPD/SF APPLICATION RATE

300 GPD ÷ 0.96 GPD/SF = 312.5 SF  
312.5 SF ÷ 4 SF/LF = 78.13 LF OF TRENCH REQUIRED  
80 LF = 20 INFILTRATOR CHAMBERS  
80 LF (20 CHAMBERS PRIMARY) + 80 LF (20 CHAMBERS SECONDARY)  
TOTAL: 160 LF / 40 QUICK4 PLUS HIGH-CAPACITY INFILTRATOR CHAMBERS

PRIMARY AND SECONDARY DRAINFIELDS, EACH CONSISTING OF ONE 3 FT-WIDE, 80 FT-LONG TRENCH COMPOSED OF 20 QUICK4 PLUS HIGH-CAPACITY INFILTRATOR CHAMBERS  
EACH TRENCH SHALL HAVE A TOTAL DEPTH OF 2.5 FEET (SEE DETAIL)  
TRENCHES SHALL BE SPACED 6 FT ON CENTER

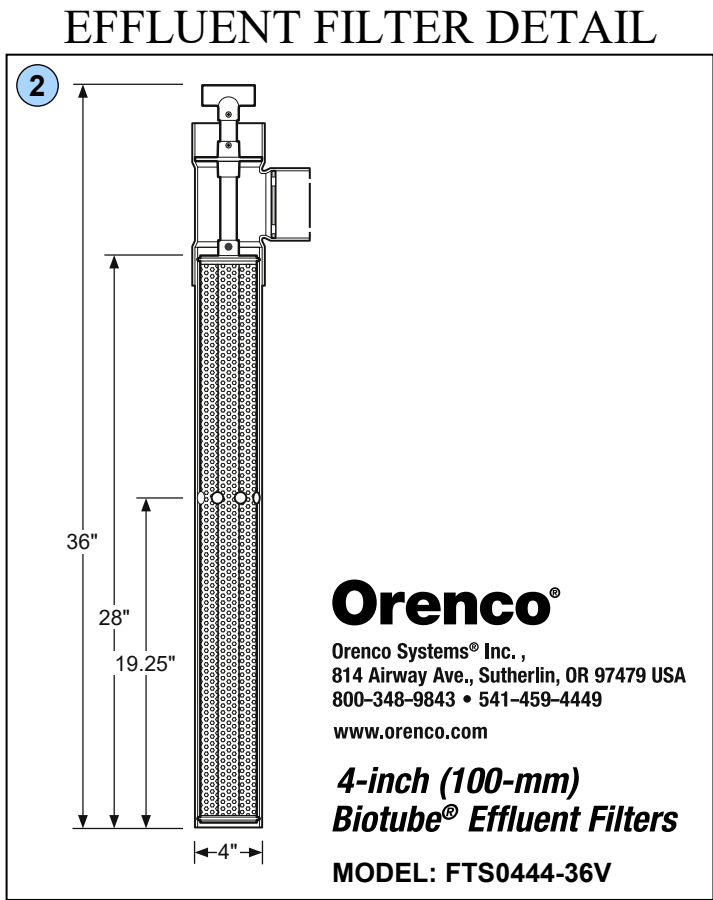
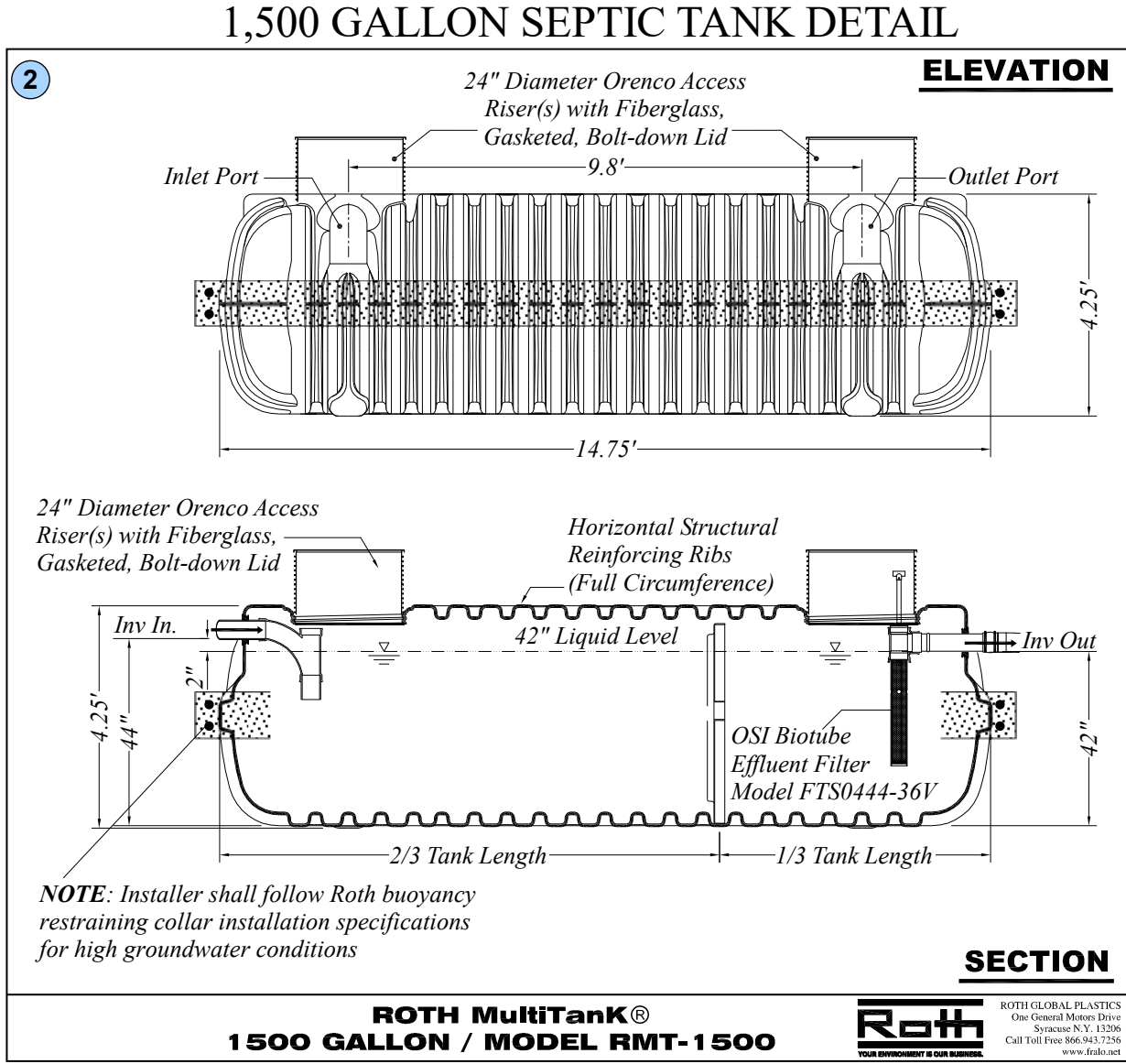
SPECIFICATIONS

1. Building Sewer Lines, & Proposed Processing Tank
- 1.1. A 4" ABS building sewer line shall be installed to convey all raw sewage from dwelling to the septic tank. All gravity sewer piping must maintain a minimum 2% continuous gradient. **All wastewater including graywater shall be discharged to the septic tank.**
  - 1.2. Locate a 2-way, 4" ABS cleanout fitting on the building sewer to facilitate snaking and line location.
  - 1.3. The septic tank shall be a 1,500 gallon, septic tank manufactured by Roth Global Plastics. The tank shall have 24" diameter OSI access risers with fiberglass, bolt-down lids (brown). The tank shall be installed according to the manufacturer's guidelines including anti-flotation specifications.
  - 1.4. The tank hole shall be excavated so that the tank sits level. Install the access risers with a watertight joint using the adhesives supplied by manufacturer. Access riser lids shall be brown unless otherwise requested.
  - 1.5. Install the tank inlet fitting with a watertight joint. Cap off or use a test plug on this fitting and fill the tank with clean water 2" above the joint between the riser and the tank top. Repair any leaks.
  - 1.6. Obtain a watertight tank inspection by DEH with 24 hours notice.
  - 1.7. Install an OSI Effluent Filter (Model: FTS0444-36V) at tank outlet.
2. Discharge Pump Tank and Filtrate Pumping
- 2.1. A 1,000 gallon Roth pump tank shall be installed adjacent to the septic tank.
  - 2.2. The pump tank shall be installed according to the manufacturer's instructions including anti-flotation specifications and be made watertight.
  - 2.3. Install the pump and float tree according to the instructions provided by manufacturer/dealer.
  - 2.4. A 1/2 hp OSI high head effluent pump (PF1005) is specified for pressurized dispersal discharge.
  - 2.5. The filtrate **transport pipe to dispersal system shall be 1.0" schedule 40 PVC.**
3. Effluent Distribution and Dispersal Trenches
- 3.1. A bull run valve shall be installed to divert effluent flow between the two proposed drainfields as shown on the plan.
  - 3.2. 4" ABS or SCH 40 PVC tightline shall be used to make gravity flow connections between the septic tank and the drainfield trenches. All gravity lines shall maintain a continuous 2% min. gradient.
  - 3.3. Primary and secondary drainfields shall each consist of a total of 20 Quick4 Plus High-Capacity Infiltrator Chambers.
  - 3.4. Trenches shall be spaced 6' on center and shall be installed with a total depth of 2.5 feet.
  - 3.5. Installer shall assure that surface drainage is directed away from the proposed septic tank and dispersal trenches.
4. Piping Schedule
- 4.1. All piping shall be installed to conform to requirements in the current California Plumbing Code.
  - 4.2. The house sewer pipe to the septic tank shall be constructed of 4" ABS and shall include a 2-way clean out fitting near dwelling as shown on the plan.

5. Installer Qualifications and Responsibilities
- 5.1. The system installer shall be licensed by the State of California, Department of Consumer Affairs, to install septic systems.
  - 5.2. All piping shall conform to the current edition of the California Plumbing Code.
  - 5.3. The installer shall be responsible for locating any property lines, underground utilities or piping. Any damage to these facilities shall be the responsibility of the installer.
  - 5.4. For tree setback requirements, refer to the Santa Clara County Ordinance C-16 Tree Preservation and Revision.
  - 5.5. The appropriate Environmental Health Office or Specialist must be notified by the installation contractor at least 48-hours prior to starting construction and for each required inspection: Main Office (1555 Berger Drive, Suite 300, San Jose) 408-918-3400 or South County Office (80 Highland Ave, San Martin) 408-918-3400
6. Site Clean up and Erosion Control Measures
- 6.1. All excavated areas shall be smoothed and all construction debris shall be removed from the site.
  - 6.2. All disturbed soils shall be seeded and mulched. Erosion Control Mix seed shall be used at the coverage recommended on the package for all disturbed soil.
  - 6.3. Straw shall be used to cover all disturbed soil.
  - 6.4. PER DIVISION C12, CHAPTER III OF THE COUNTY CODE (Sec. C12-513. Temporary erosion control.)  
"The permittee and any person(s) doing, causing or directing the grading shall install and maintain all precautionary measures necessary to protect adjacent watercourses and public or private property from damage by erosion, flooding, or deposition of mud or debris originating from the site. Precautionary measures must include provisions of properly designed erosion prevention and sediment control measures, so that downstream properties are not affected by upstream erosion or sediment transport by stormwater."

SYSTEM OPERATION AND MAINTENANCE

- The septic tank should be pumped when the total thickness of the scum and sludge layers in the inlet side of the tank is greater than 1/3 of total liquid level depth, typically about 2 feet.
- The effluent filter in the septic tank should be removed yearly and cleaned by hosing off into the inlet side of the septic tank. Less frequent cleanings may be acceptable.
- Grease and oils should not be put into the home drains.
- The septic tank is alive with microorganisms performing oxidation and reduction of the contents. Do not add any materials (paint thinner, paint, motor oil, unused medicine, cat litter, etc.) that may disrupt this process.
- DO NOT ROUTE WATER SOFTENER BACKFLUSH DISCHARGE TO TREATMENT SYSTEM! This discharge may be routed directly to an approved dispersal field.
- Repair all plumbing leaks (especially toilet leaks) promptly.
- Keep the area over the leach fields trimmed to prevent the growth of trees and shrubs. Do not construct anything or drive/park over the septic tanks or dispersal trenches.



PUMP SELECTION CHART

Parameters

Discharge Assembly Size	1.00	inches
Transport Length	231	feet
Transport Pipe Class	40	
Transport Line Size	1.00	inches
Distributing Valve Model	None	
Max Elevation Lift	6	feet
Design Flow Rate	8	gpm
Flow Meter	None	inches
Add-on Friction Losses	80	feet

Calculations

Transport Velocity	2.9	fps
--------------------	-----	-----

Frictional Head Losses

Loss through Discharge	2.9	feet
Loss in Transport	8.4	feet
Loss through Valve	0.0	feet
Loss through Flowmeter	0.0	feet
Add-on Friction Losses	80.0	feet

Pipe Volumes

Vol of Transport Line	10.4	gals
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Minimum Pump Requirements

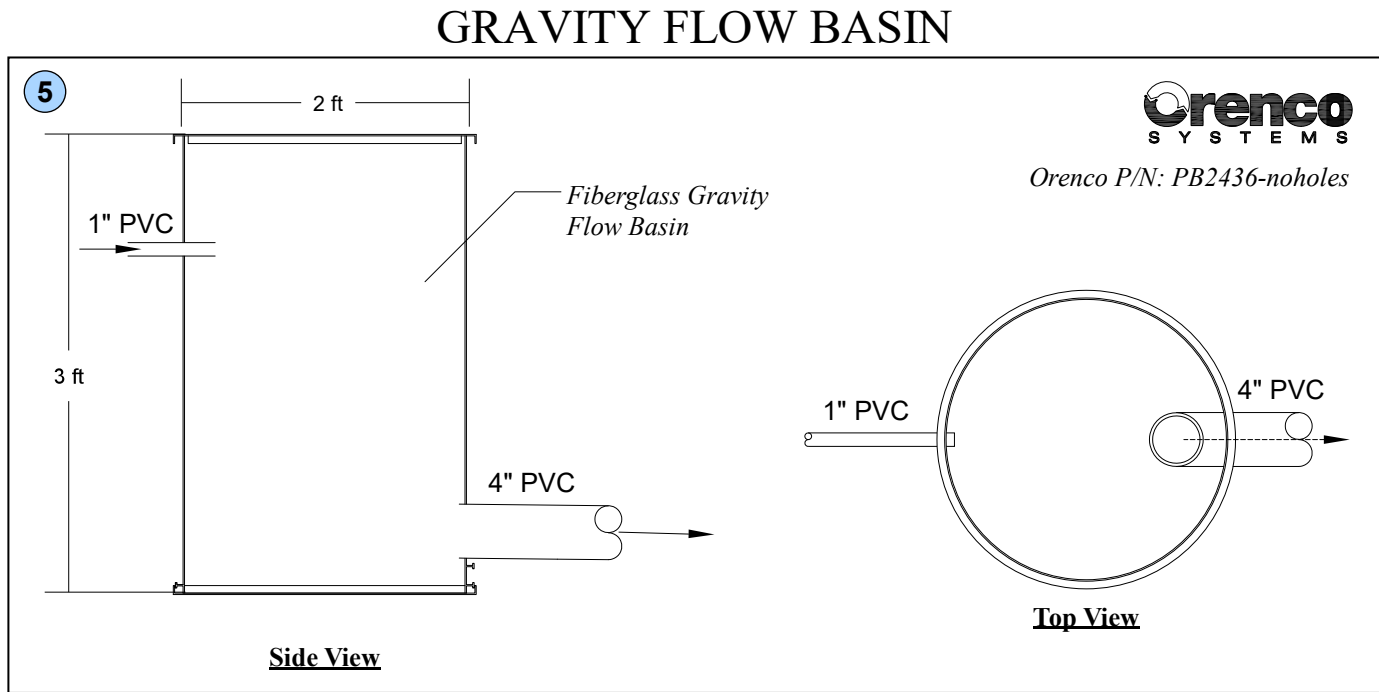
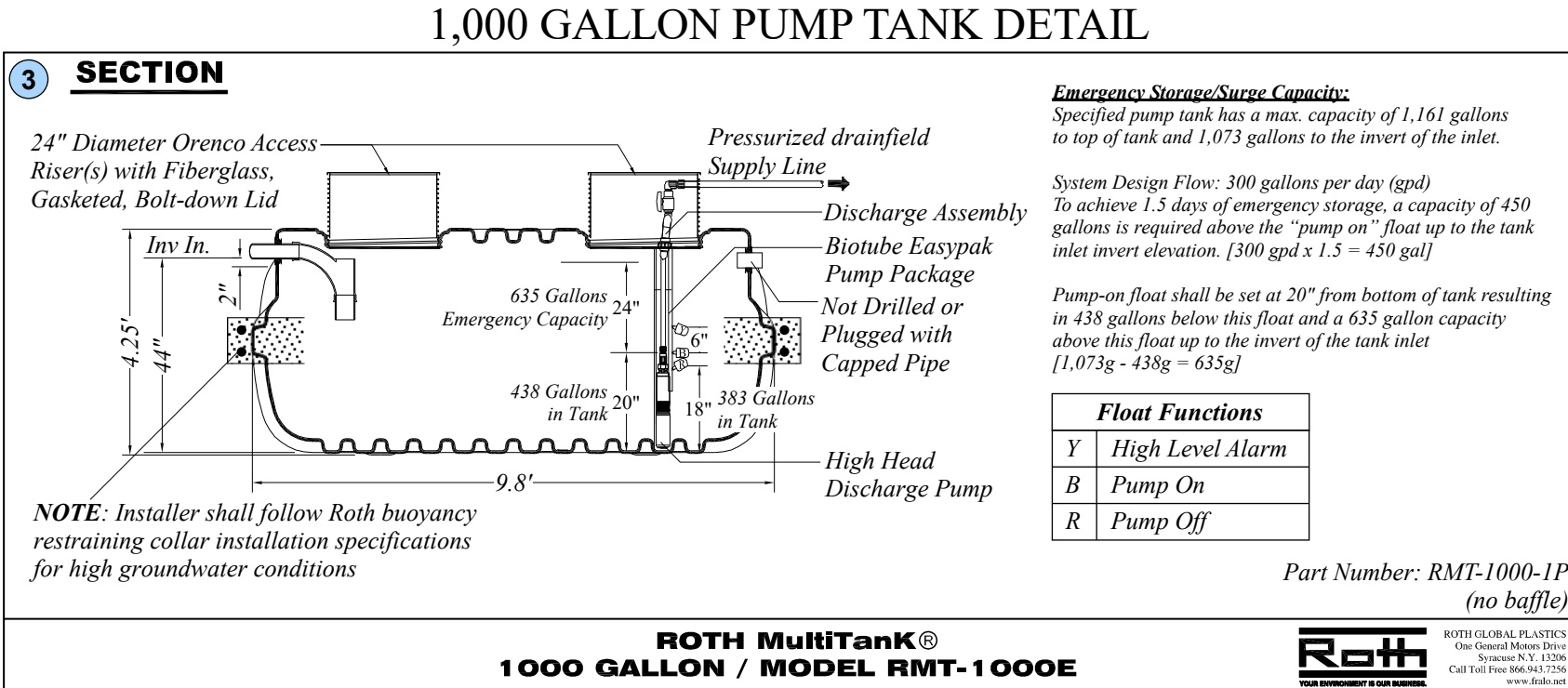
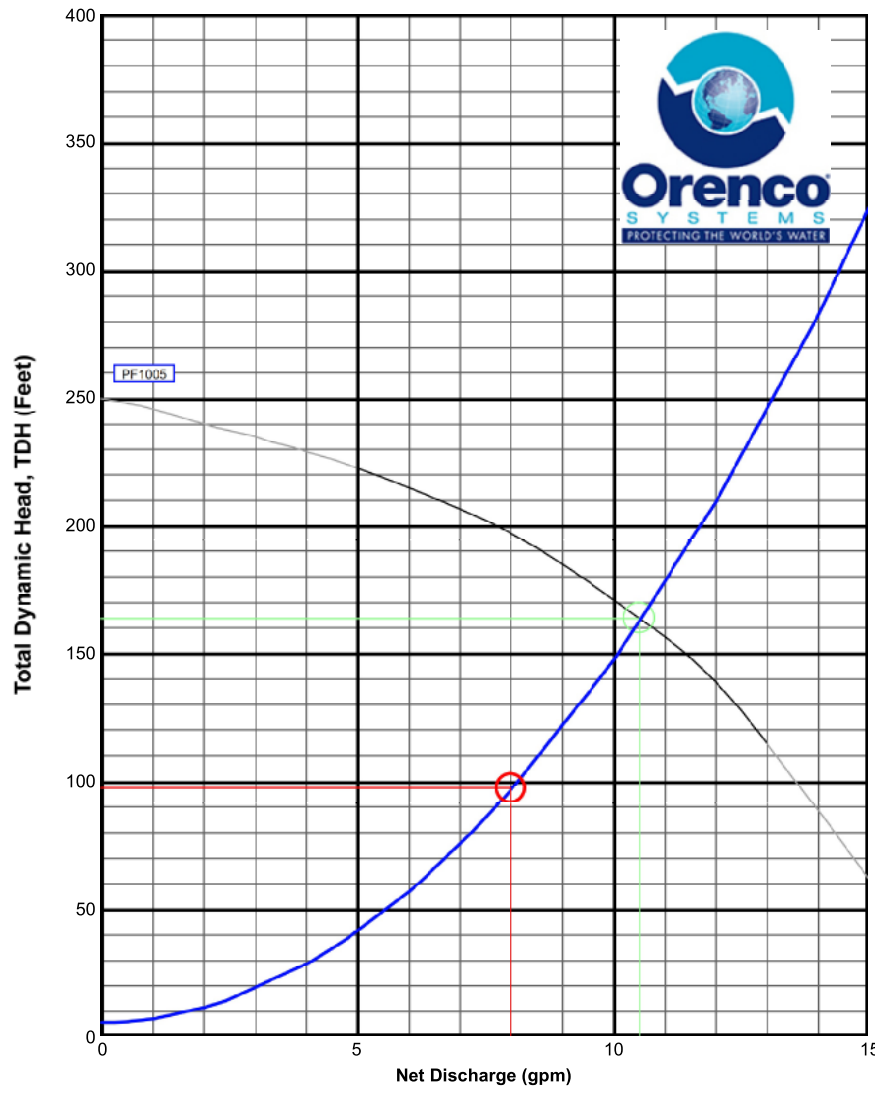
Design Flow Rate	8.0	gpm
Total Dynamic Head	97.3	feet

PumpData

PF 1005 High Head Effluent Pump	
10 GPM, 120HP	
115/230V 10/60Hz, 200V 30/60Hz	

Legend

- System Curve
- Pump Curves
- Pump Optimal Range
- Operating Point
- Design Point



SOIL PROFILE FIELD LOG

Job Number/Name: 21031- Apex Bait Location Vista De Lomas Ave APN 728-38-001

Date Soil Sampled: 8-4-21 Time AM Vegetation Grass (crop)

Elevation Slope Gradient ~Level Aspect N/A Geomorphic Surface Fluvial Terrace

Parent Material(s) Braided Stream/River Deposits Described by A.B.

GRAVITY LOG

LOG	Moisture	Structure	Pores	Mottles	Clay Films	Gravel	Roots	Consistence	Texture	Color	Horizon	Contacts
0	dry	moist	wet									
1	dry	moist	wet									
2	dry	moist	wet									
3	dry	moist	wet									
4	dry	moist	wet									
5	dry	moist	wet									
6	dry	moist	wet									
7	dry	moist	wet									
8	dry	moist	wet									
9	dry	moist	wet									
10	dry	moist	wet									
11	dry	moist	wet									
12	dry	moist	wet									
13	dry	moist	wet									
14	dry	moist	wet									

SOIL PROFILE FIELD LOG

Job Number/Name: 21031- Apex Bait Location Vista De Lomas Ave APN 728-38-001

Date Soil Sampled: 8-4-21 Time AM Vegetation Grass (crop)

Elevation Slope Gradient ~Level Aspect N/A Geomorphic Surface Fluvial Terrace

Parent Material(s) Fluvial Deposits Described by A.B.

GRAVITY LOG

LOG	Moisture	Structure	Pores	Mottles	Clay Films	Gravel	Roots	Consistence	Texture	Color	Horizon	Contacts
0	dry	moist	wet									
1	dry	moist	wet									
2	dry	moist	wet									
3	dry	moist	wet									
4	dry	moist	wet									
5	dry	moist	wet									
6	dry	moist	wet									
7	dry	moist	wet									
8	dry	moist	wet									
9	dry	moist	wet									
10	dry	moist	wet									
11	dry	moist	wet									
12	dry	moist	wet									
13	dry	moist	wet									
14	dry	moist	wet									

SOIL PERCOLATION SUMMARY TABLE -- 8/31/21

Percolation Hole (PH)	1	2	3	4	5	6
Depth	2.1'	2.2'	2.5'	2.4'	2.0'	2.2'
Stabilized MPI	2.30	2.50	5.40	15.00	69.40	2.60
Adjusted Stabilized MPI	3.22	3.50	7.56	21.00	97.16	3.64
Avg. Adj. Stabilized MPI	R <sub>2</sub> =(Σ R <sub>i</sub> )/ #Holes					7.78
# Bedrooms:	FOR OFFICE USE ONLY					TANK SIZE (Gal)
						Leach Line (Ft)

COUNTY E.H. ACCEPTANCE/APPROVAL STAMPS



- Site Evaluation & Mapping
- Soil Analysis & Percolation Testing
- New Development, Upgrade & Repairs
- Residential & Commercial

1315 King Street  
Santa Cruz, CA 95060  
Tel: (831) 430-9116

Alternative Wastewater System Design

ONSITE WASTEWATER TREATMENT SYSTEM  
DESIGN PLAN

Project Location:	Vista De Lomas Ave at Burnett Ave, Morgan Hill, CA	[Santa Clara County]
Property Owner:	Dangsheng Liang	
Mailing Address:	309 Laurewood Rd, Santa Clara, CA 95054	
Owner Phone #:	(408) 969-0088	
Date:	02/08/22	By: David Quinn / Andrew Brownstone
REVISION:		
Job No.:	21031	APN: 728-38-001

Sheet:

2 OF 2





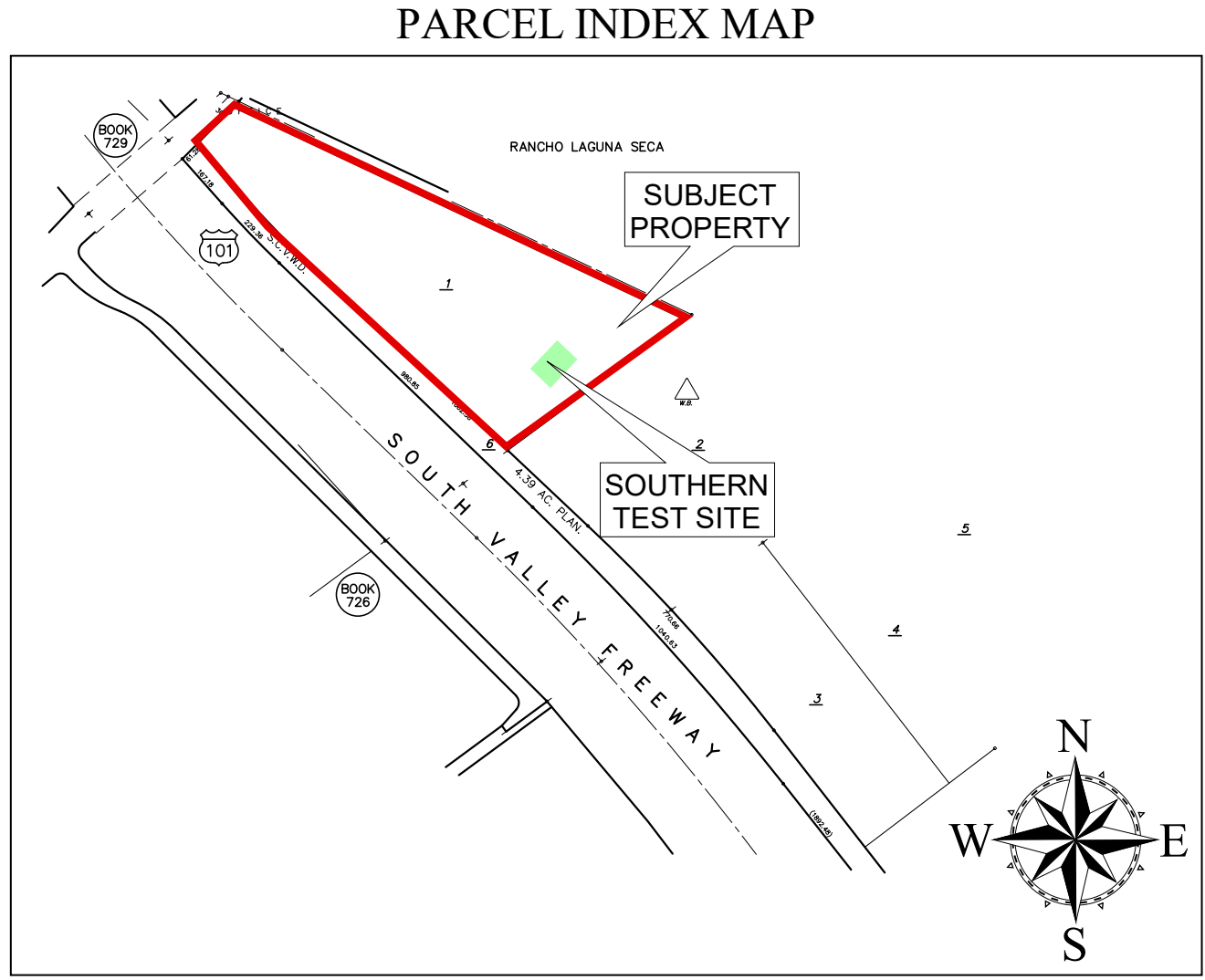
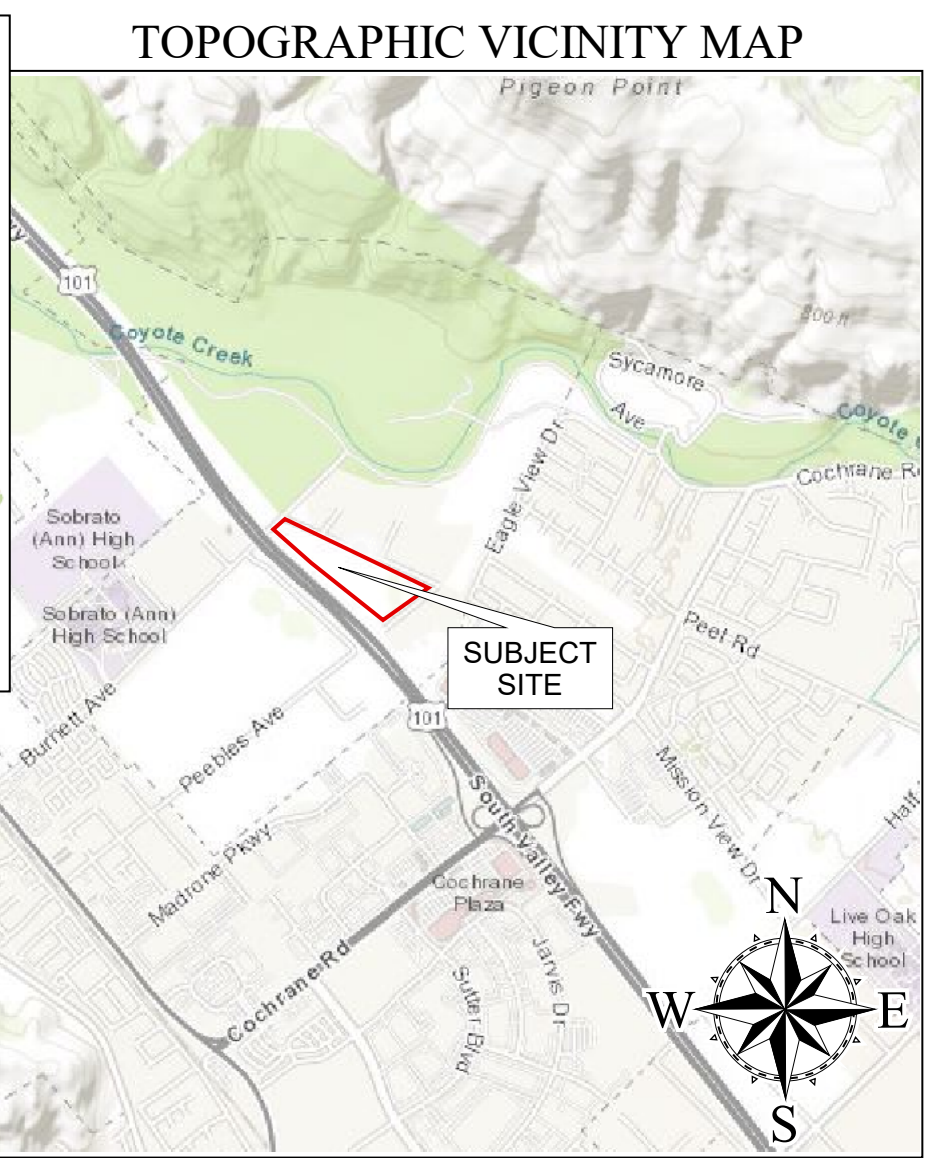
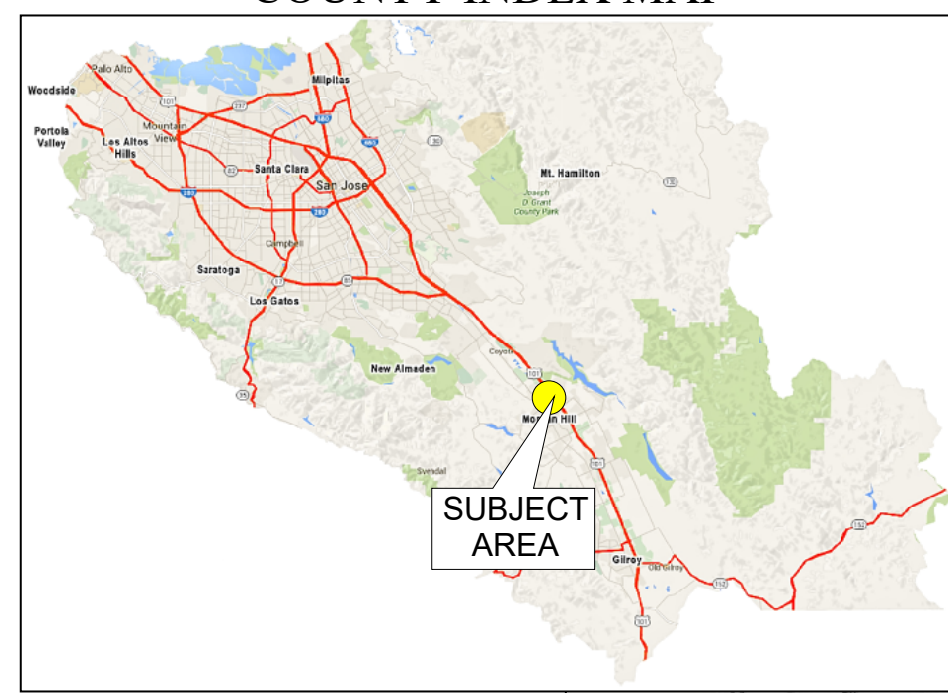
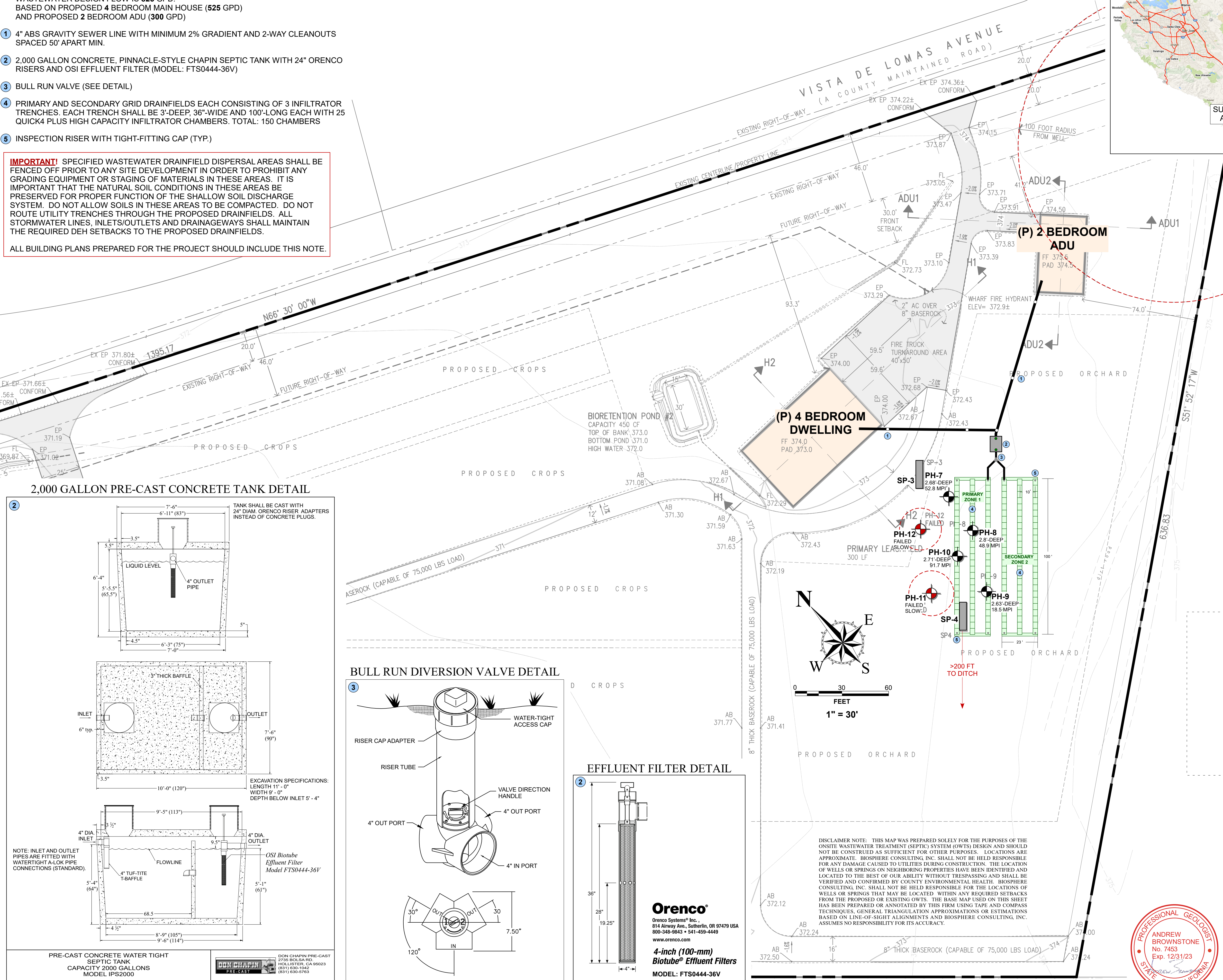
## NOTES:

WASTEWATER DESIGN FLOW IS 825 GPD.  
BASED ON PROPOSED 4 BEDROOM MAIN HOUSE (525 GPD)  
AND PROPOSED 2 BEDROOM ADU (300 GPD)

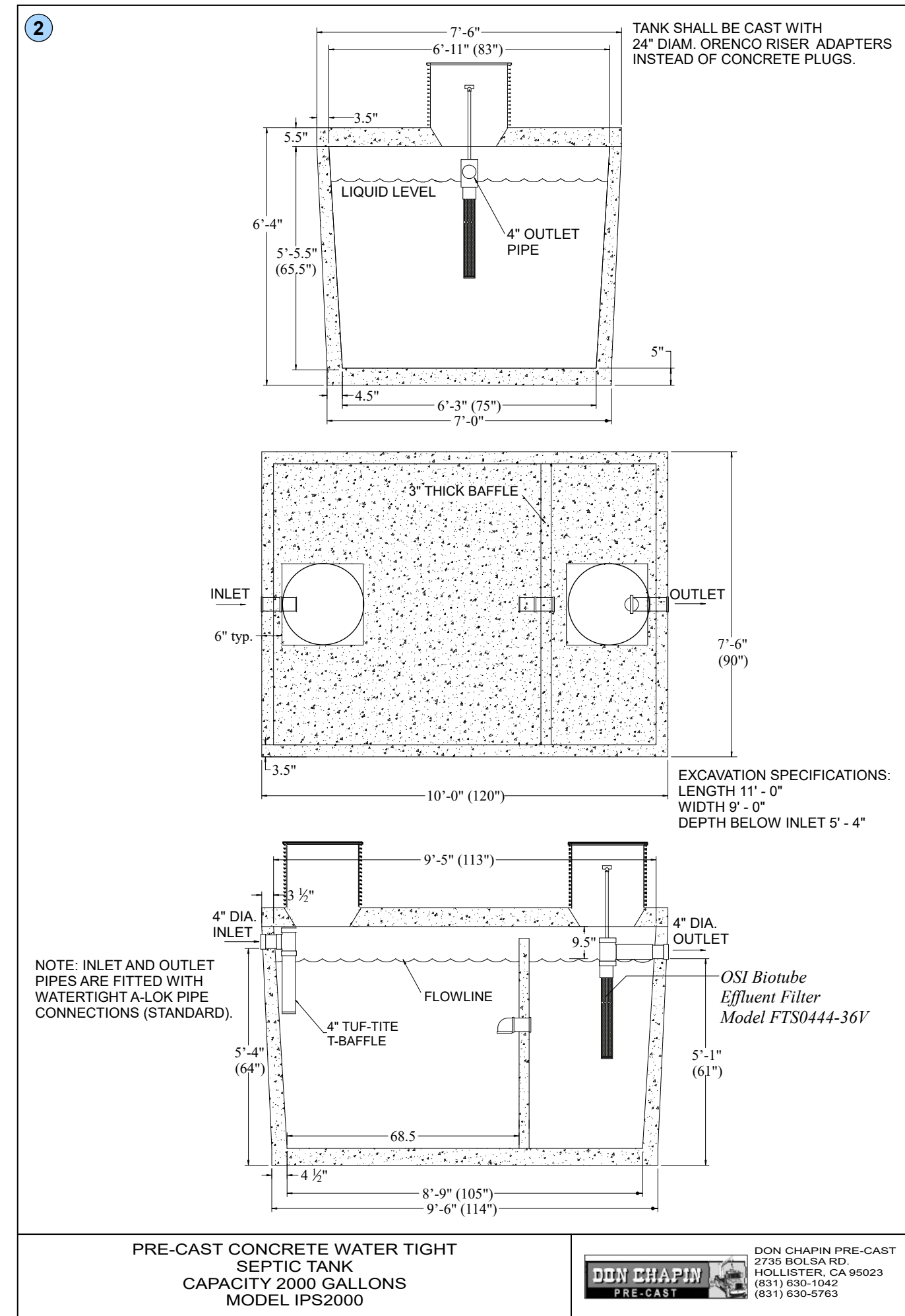
- 4" ABS GRAVITY SEWER LINE WITH MINIMUM 2% GRADIENT AND 2-WAY CLEANOUTS SPACED 50' APART MIN.
- 2,000 GALLON CONCRETE, PINNACLE-STYLE CHAPIN SEPTIC TANK WITH 24" ORENCO RISERS AND OSI EFFLUENT FILTER (MODEL: FTS0444-36V)
- BULL RUN VALVE (SEE DETAIL)
- PRIMARY AND SECONDARY GRID DRAINFIELDS EACH CONSISTING OF 3 INFILTRATOR TRENCHES. EACH TRENCH SHALL BE 3'-DEEP, 36"-WIDE AND 100'-LONG EACH WITH 25 QUICK4 PLUS HIGH CAPACITY INFILTRATOR CHAMBERS. TOTAL: 150 CHAMBERS
- INSPECTION RISER WITH TIGHT-FITTING CAP (TYP.)

**IMPORTANT!** SPECIFIED WASTEWATER DRAINFIELD DISPERSAL AREAS SHALL BE FENCED OFF PRIOR TO ANY SITE DEVELOPMENT IN ORDER TO PROHIBIT ANY GRADING EQUIPMENT OR STAGING OF MATERIALS IN THESE AREAS. IT IS IMPORTANT THAT THE NATURAL SOIL CONDITIONS IN THESE AREAS BE PRESERVED FOR PROPER FUNCTION OF THE SHALLOW SOIL DISCHARGE SYSTEM. DO NOT ALLOW SOILS IN THESE AREAS TO BE COMPACTED. DO NOT ROUTE UTILITY TRENCHES THROUGH THE PROPOSED DRAINFIELDS. ALL STORMWATER LINES, INLETS/OUTLETS AND DRAINAGEWAYS SHALL MAINTAIN THE REQUIRED DEH SETBACKS TO THE PROPOSED DRAINFIELDS.

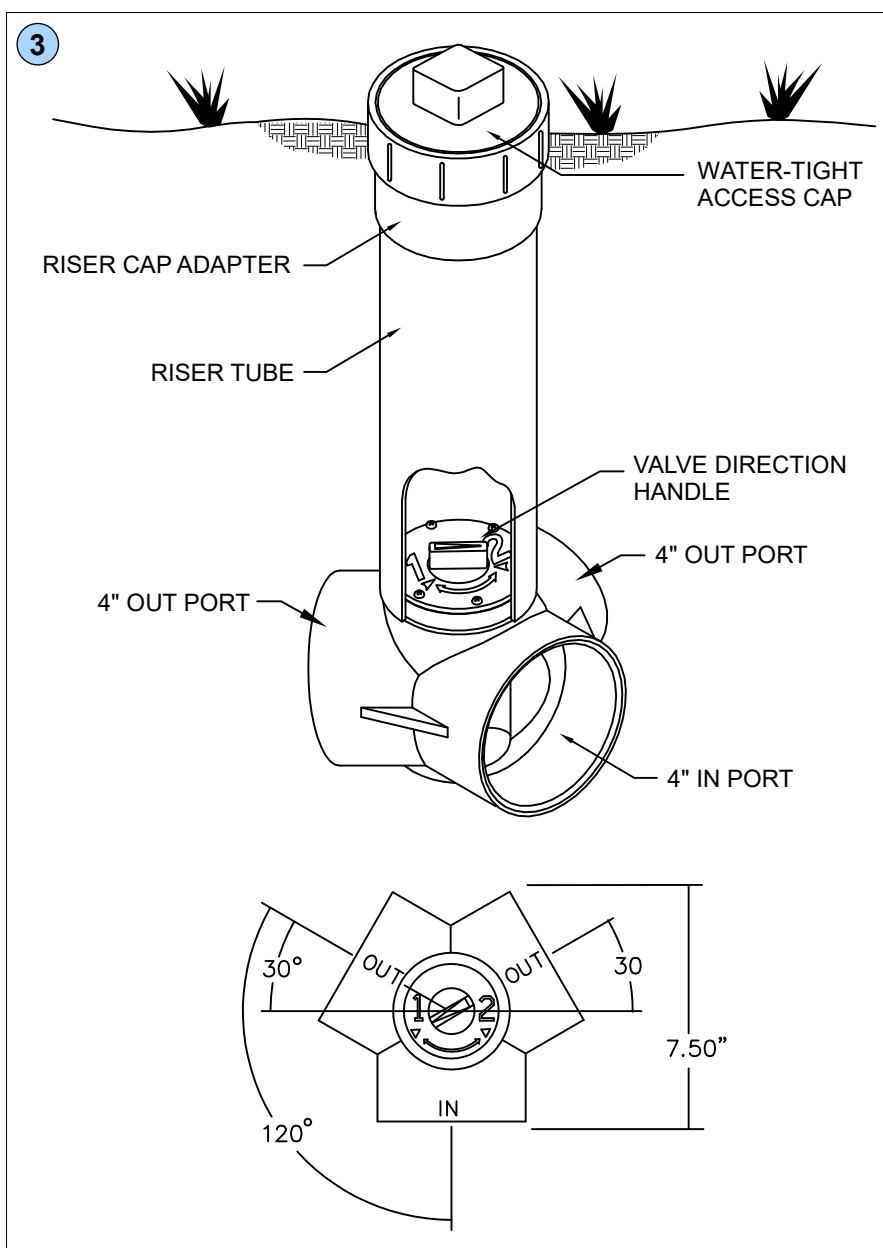
ALL BUILDING PLANS PREPARED FOR THE PROJECT SHOULD INCLUDE THIS NOTE.



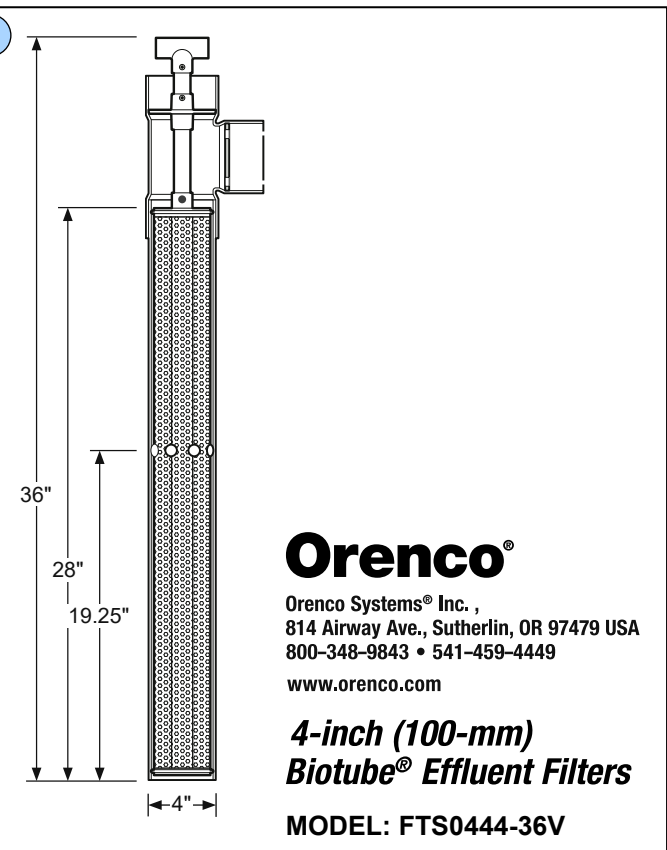
## 2,000 GALLON PRE-CAST CONCRETE TANK DETAIL



## BULL RUN DIVERSION VALVE DETAIL



## EFFLUENT FILTER DETAIL



## Orenco®

Orenco Systems® Inc.,  
814 Airway Ave., Sullerlin, OR 97479 USA  
800-368-8943 • 541-459-4440  
www.orenco.com

4-inch (100-mm)  
Biotube® Effluent Filters  
MODEL: FTS0444-36V

DISCLAIMER NOTE: THIS MAP WAS PREPARED SOLELY FOR THE PURPOSES OF THE ONSITE WASTEWATER TREATMENT (SEPTIC) SYSTEM (OWTS) DESIGN AND SHOULD NOT BE CONSTRUED AS SUFFICIENT FOR OTHER PURPOSES. LOCATIONS ARE APPROXIMATE. BIOSPHERE CONSULTING, INC. SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO UTILITIES DURING CONSTRUCTION. THE LOCATION OF WELLS OR SPRINGS ON NEIGHBORING PROPERTIES HAVE BEEN IDENTIFIED AND LOCATED TO THE BEST OF OUR ABILITY WITHOUT TRESPASSING AND SHALL BE VERIFIED AND CONFIRMED BY COUNTY ENVIRONMENTAL HEALTH. BIOSPHERE CONSULTING, INC. SHALL NOT BE HELD RESPONSIBLE FOR THE LOCATIONS OF WELLS OR SPRINGS THAT MAY BE LOCATED WITHIN ANY REQUIRED SETBACKS FROM THE PROPOSED OR EXISTING OWTS. THE BASE MAP USED ON THIS SHEET HAS BEEN PREPARED OR ANNOTATED BY THIS FIRM USING TAPE AND COMPASS TECHNIQUES, GENERAL TRIANGULATION APPROXIMATIONS OR ESTIMATIONS BASED ON LINE-OF-SIGHT ALIGNMENTS AND BIOSPHERE CONSULTING, INC. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



## COUNTY E.H. ACCEPTANCE/APPROVAL STAMPS



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Santa Cruz, CA 95060  
Tel: (831) 430-9116

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## Alternative Wastewater System Design

ONSITE WASTEWATER TREATMENT SYSTEM  
DESIGN PLAN

Project Location:	Vista De Lomas Ave at Burnett Ave, Morgan Hill, CA	(Santa Clara County)
Property Owner:	Dangsheng Liang	
Mailing Address:	309 Laurelwood Rd, Santa Clara, CA 95054	
Owner Phone #:	(408) 969-0088	email: dliang@spchat.com
Date:	02/04/22	By: David Quinn / Andrew Brownstone
REVISION:		
Job No.:	21031	APN: 728-38-001
Sheet:		1 OF 2



PROJECT DESCRIPTION

An onsite wastewater system specifying gravity-flow dispersal to a grid system drainfield with Infiltrator Quick4 Plus High-Capacity leaching chambers is proposed to serve a four bedroom single family dwelling and a two bedroom ADU to be constructed on Vista De Lomas Ave at Burnett Ave, Morgan Hill, Santa Clara County, CA.

- DESIGN CONSTRAINTS & CRITERIA
- The proposed septic tanks and drainfield system are sized to serve a 4 bedroom single family dwelling and a 2 bedroom ADU with a total combined design wastewater flow of 825 gallons of wastewater per day (gpd) based on guidelines outlined in the Santa Clara County Code.
  - Seasonal groundwater is estimated to be below 14' based on the results of the site evaluation and backhoe test-pits.
  - No wells, springs or watercourses are situated within 100' of the proposed Onsite Wastewater Treatment System.

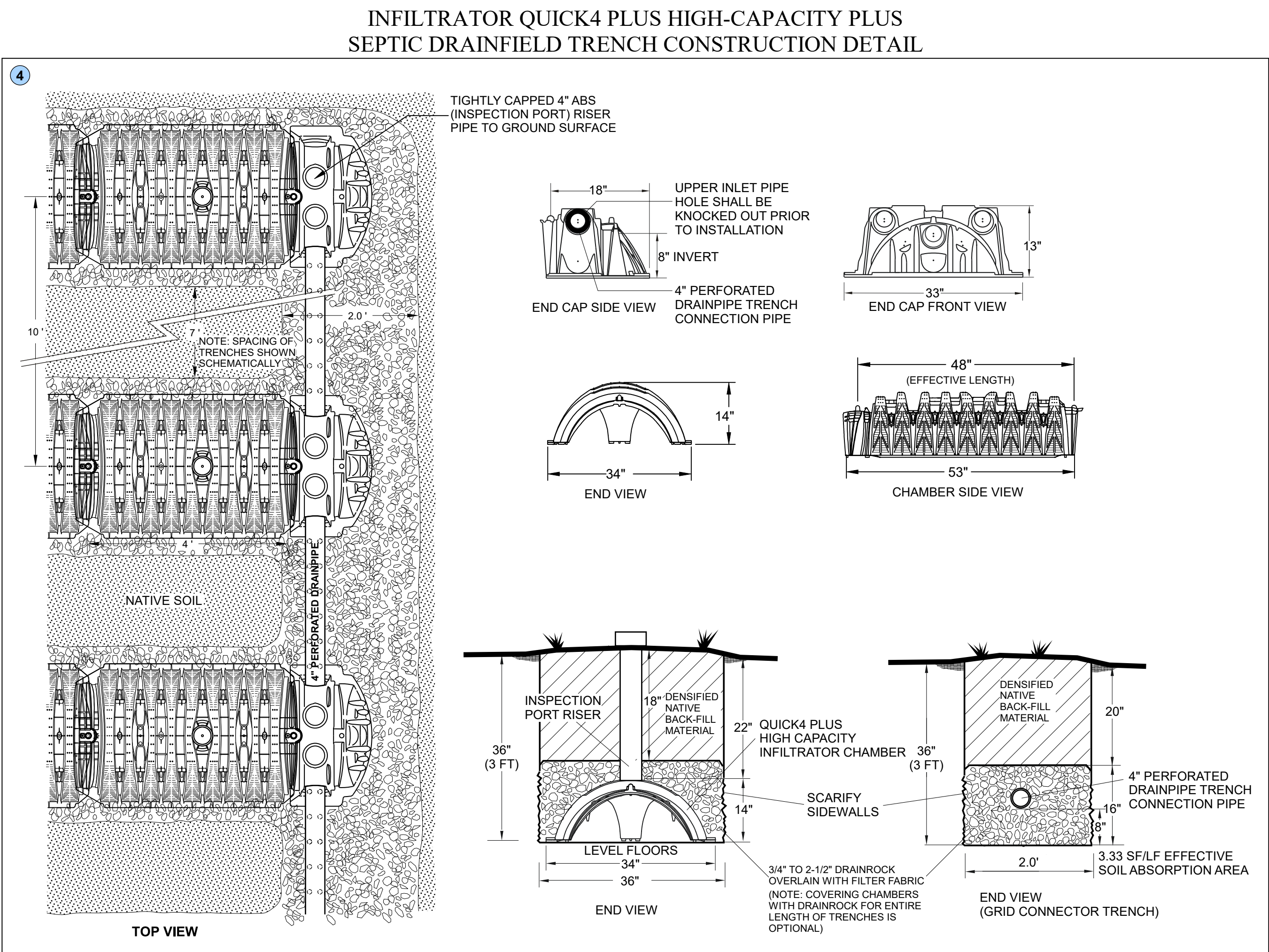
DRAINFIELD SIZING CALCULATIONS

(P) 4 BEDROOM HOUSE = 525 GPD  
(P) 2 BEDROOM ADU = 300 GPD  
TOTAL DESIGN FLOW = 825 GPD  
AVG ADJ STABILIZED PERC RATE = 53 MPI  
53 MPI = 0.40 GAL/SF APPLICATION RATE

825 GPD ÷ 0.40 GPD/SF = 2062.5 SF  
2062.5 SF ÷ 6.6 SF/LF = 313 LF OF TRENCH REQUIRED  
75 INFILTRATOR CHAMBERS = 300 LF  
CROSS-OVER END TRENCH CONNECTION CREDIT: 6 LF × 4 = 24 LF  
300 LF + 24 LF = 324 LF  
324 LF (PRIMARY) + 324 LF (SECONDARY) = 648 LF OF TRENCH  
75 INFILTRATORS (PRIMARY) + 75 INFILTRATORS (SECONDARY) = 150 INFILTRATORS TOTAL

- SPECIFICATIONS
1. Building Sewer, Septic Tank
- 1.1. New 4" ABS building sewer lines shall be installed to convey all raw sewage from the dwellings to the new septic tank. All gravity sewer piping must maintain a minimum 2% continuous gradient. **All wastewater including graywater shall be discharged to the septic tank.**
  - 1.2. Locate 2-way, 4" ABS cleanout fittings on the building sewer to facilitate snaking and for line location.
  - 1.3. One 2,000 gallon concrete, pinnacle-style Chapin Pre-Cast septic tank is specified. Tank shall have two 24" diameter, OSI access risers with fiberglass bolt-down lids (brown). Riser heights will be determined by tank burial depth (ideally 12" to 24"). Risers shall be installed 2" above finished grade. The tank shall be installed according to the manufacturer's guidelines.
  - 1.4. Install the access risers with a watertight joint using the adhesives supplied by the manufacturer. Access riser lids shall be brown unless otherwise requested.
  - 1.5. The tank hole shall be excavated so that the tank sits level.
  - 1.6. Install the tank inlet fitting with a watertight joint. Cap off or use a test plug on this fitting and fill the tank with clean water 2" above the joint between the riser and the tank top. Repair any leaks.
  - 1.7. Install an OSI Effluent Filter (Model: FTS0444-36V) at tank outlet.
2. Distribution Device & Gravity Flow Dispersal Trenches
- 2.1. A Bull Run Valve diversion valve shall be installed to divert the effluent flow between primary and secondary drainfields.
  - 2.2. 4" ABS or SCH 40 PVC tightline shall be used to make gravity flow connections between the septic tank and the drainfield trenches. All gravity lines shall with maintain a continuous 2% min. gradient.
  - 2.3. Dispersal trench bottoms shall be installed level and sidewalls scarified.
  - 2.4. Dispersal trenches shall each have a depth of 3 feet. Trenches shall be installed in the general location shown on the plan and shall be spaced 10' on center.
  - 2.5. Primary and secondary trench grid system fields are proposed. The grid fields shall each consist of 75 Quick 4 Plus High Capacity Infiltrator chambers.
  - 2.6. A 4" ABS inspection riser with tight cap shall be installed at corner ends of each grid and shall extend a minimum of 12" above grade or remain accessible by means of a 10" round valve box to grade.
3. Installer Qualifications and Responsibilities
- 3.1. The system installer shall be licensed by the State of California, Department of Consumer Affairs, to install septic systems.
  - 3.2. All piping shall conform to the current edition of the California Plumbing Code.
  - 3.3. The installer shall be responsible for locating any property lines, underground utilities or piping. Any damage to these facilities shall be the responsibility of the installer.
  - 3.4. The installer shall give at least 48 hours notice to County of Santa Clara Department Environmental Health Service for all inspections requested.
4. Site Clean up and Erosion Control Measures
- 4.1. All excavated areas shall be smoothed and all construction debris shall be removed from the site.
  - 4.2. All disturbed soils shall be seeded and mulched. Erosion Control Mix seed shall be used at the coverage recommended on the package for all disturbed soil.
  - 4.3. Straw shall be used to cover all disturbed soil.
  - 4.4. PER DIVISION C12, CHAPTER III OF THE COUNTY CODE (Sec. C12-513, Temporary erosion control.)  
"The permittee and any person(s) doing, causing or directing the grading shall install and maintain all precautionary measures necessary to protect adjacent watercourses and public or private property from damage by erosion, flooding, or deposition of mud or debris originating from the site. Precautionary measures must include provisions of properly designed erosion prevention and sediment control measures, so that downstream properties are not affected by upstream erosion or sediment transport by stormwater."

- SYSTEM OPERATION AND MAINTENANCE
- The septic tank should be pumped when the total thickness of the scum and sludge layers in the inlet side of the tank is greater than 1/3 of total liquid level depth, typically about 2 feet.
  - The effluent filter in the septic tank should be removed yearly and cleaned by hosing off into the inlet side of the septic tank. Less frequent cleanings may be acceptable.
  - Grease and oils should not be put into the home drains.
  - The septic tank is alive with microorganisms performing oxidation and reduction of the contents. Do not add any materials (paint thinner, paint, motor oil, unused medicine, cat litter, etc.) that may disrupt this process.
  - DO NOT ROUTE WATER SOFTENER BACKFLUSH DISCHARGE TO TREATMENT SYSTEM! This discharge may be routed directly to an approved dispersal field.
  - Repair all plumbing leaks (especially toilet leaks) promptly.
  - Keep the area over the leach fields trimmed to prevent the growth of trees and shrubs. Do not construct anything or drive/park over the septic tanks or dispersal trenches.



SOIL PROFILE FIELD LOG

Job Number/Name: 21031- Apex Bait Location: Vista De Lomas Ave APN 728-38-001

Date Soil Sampled: 8-4-21 Time: 12:05 PM Vegetation: Grass (crop)

Elevation: Slope Gradient: N/A Aspect: N/A Geomorphic Surface: Fluvial Terrace

Parent Material(s): Fluvial Deposits Described by: A.B.

LOG	Moisture	Structure	Pores	Mottles	Clay Films	Gravel	Roots	Consistence	Texture	Color	Horizon	Contacts
0	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
1	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
2	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
3	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
4	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
5	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
6	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
7	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
8	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
9	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
10	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
11	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
12	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
13	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
14	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct

SOIL PROFILE FIELD LOG

Job Number/Name: 21031- Apex Bait Location: Vista De Lomas Ave APN 728-38-001

Date Soil Sampled: 8-4-21 Time: 12:45 PM Vegetation: Grass (crop)

Elevation: Slope Gradient: N/A Aspect: N/A Geomorphic Surface: Fluvial Terrace

Parent Material(s): Fluvial Deposits Described by: A.B.

LOG	Moisture	Structure	Pores	Mottles	Clay Films	Gravel	Roots	Consistence	Texture	Color	Horizon	Contacts
0	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
1	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
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4	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
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6	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
7	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
8	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
9	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
10	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
11	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
12	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
13	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct
14	dry	gr	sf	lo	lo	lo	lo	dry	moist	wet	Munsell (moist)	distinct

SOIL PERCOLATION SUMMARY TABLE -- 8/6/21

Percolation Hole (PH)	7	8	9	10	11	12
Depth	2.68'	2.80'	2.63'	2.71'	2.60'	2.58'
Stabilized MPI	R	R	R	R	R	R
Adjusted Stabilized MPI	37.70	34.90	13.20	65.50	280.00	130.60
Avg. Adj. Stabilized MPI	52.78	48.86	18.48	91.70	350.00	182.84
# Bedrooms:	4	2	2	2	2	2
FOR OFFICE USE ONLY	TANK SIZE (gal)					
	Leach Line (ft)					

COUNTY E.H. ACCEPTANCE/APPROVAL STAMPS

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Alternative Wastewater System Design

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• Soil Analysis & Percolation Testing  
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ONSITE WASTEWATER TREATMENT SYSTEM DESIGN PLAN

Project Location: Vista De Lomas Ave at Burnett Ave, Morgan Hill, CA [Santa Clara County]

Property Owner: Dangsheng Liang

Mailing Address: 309 Laurelwood Rd, Santa Clara, CA 95054

Owner Phone #: (408) 969-0088

Date: 02/04/22 By: David Quinn / Andrew Brownstone

REVISION:

Job No.: 21031 APN: 728-38-001

2 OF 2

