

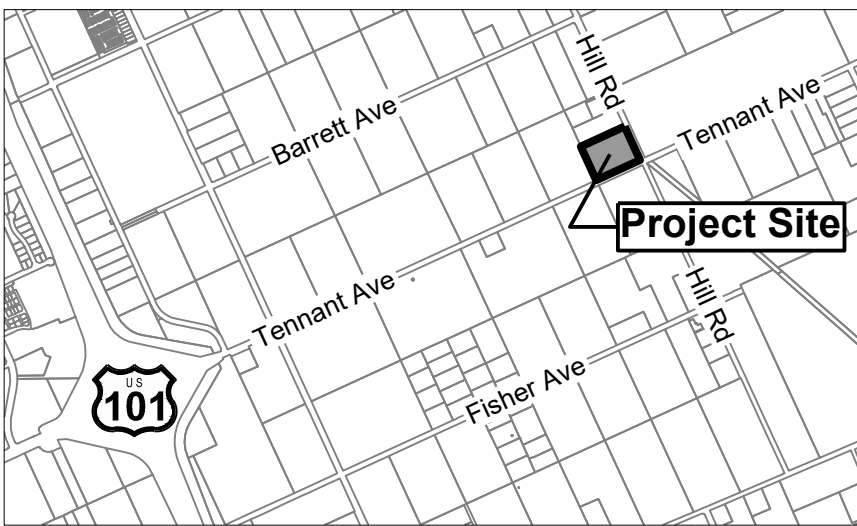
Earthwork Quantities					
	Cut	Fill	Net	Max Cut	Max Fill
Residence	168 cy	168 cy	Balanced	1.00'	1.00'
Attached Garage	12 cy	12 cy	Balanced	0.50'	0.50'
Detached Garage	0 cy	177 cy (fill)	177 cy (fill)	0.00'	0.75'
Accessory Driveway	12 cy	36 cy	24 cy (fill)	1.00'	1.25'
Motor Court Driveway	45 cy	2 cy	43 cy (cut)	1.00'	0.50'
Residence Driveway	79 cy	2 cy	77 cy (fill)	1.25'	0.50'
Stormwater Treatment	95 cy	0 cy	95 cy (cut)	3.00'	0.00'
Total	411 cy	397 cy	balanced		

Impervious Area Summary	
Proposed Residence	8,564 SF
Proposed Detached Garage	4,000 SF
Proposed Driveways	5,965 SF
Proposed Pavers	1,453 SF
Proposed Patios / Walkways	3,172 SF
Proposed Pool	1,528 SF
Total New Impervious Area	24,682 SF

Proposed Floor Area	
Proposed Residence	8,350 SF
Proposed Attached Garage	738 SF
Proposed Detached Garage	4,000 SF
Total Floor Area	13,088 SF

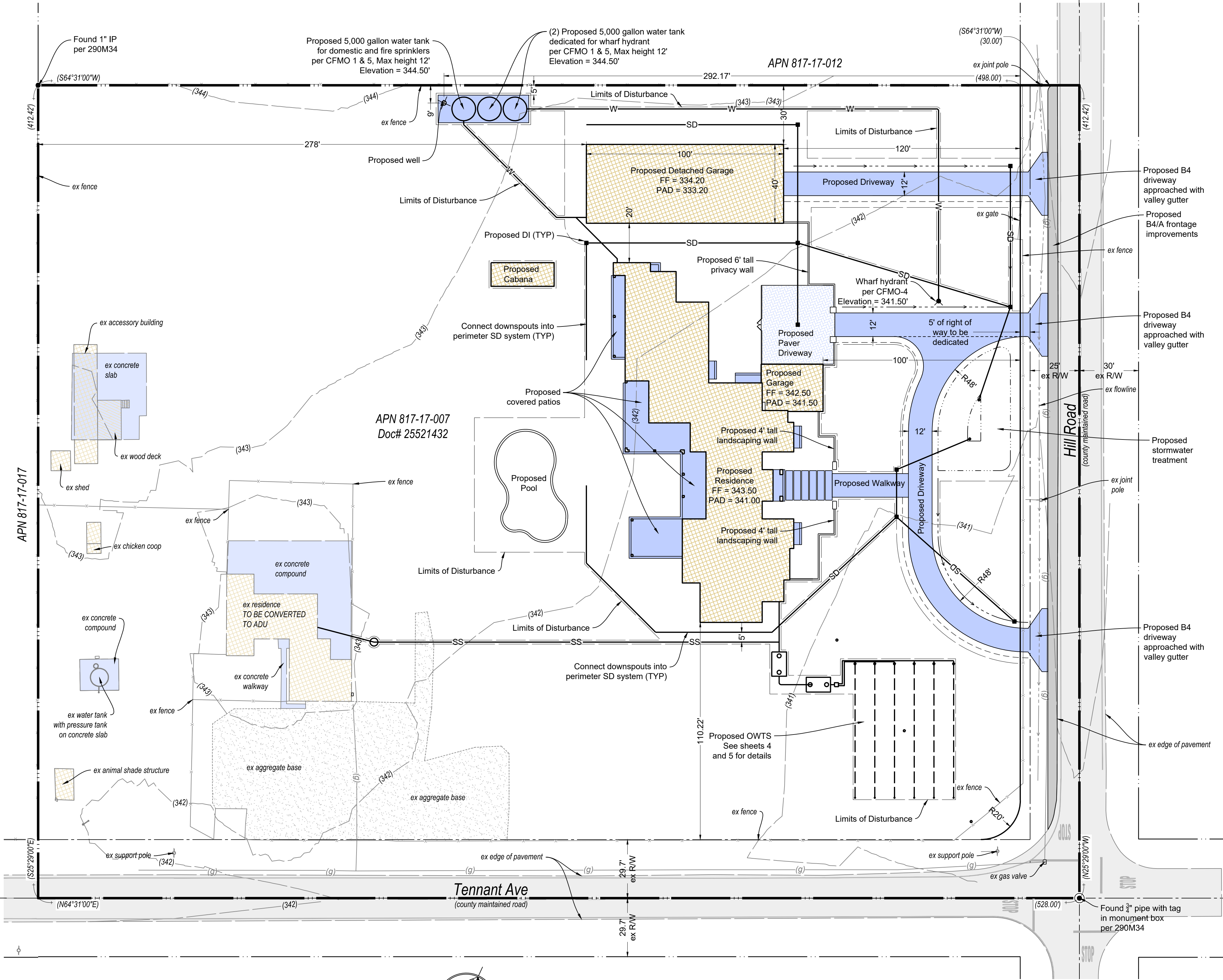
Tree Removal Summary		
#	Species	Size
1	None	

SLOPE CALCS:
 $S = \frac{1}{A} \times \frac{L}{100} = \frac{(1)(2957)(100)}{217,758} = 1.36\%$
S= SLOPE
L= CONTOUR INTERVAL
A= AREA IN SQUARE FEET



Vicinity Map

Area of Disturbance = 55,711 SF



Applicant/Owner:

Kevin Bueno
2035 Tennant Ave.
Morgan Hill, CA 95037

Engineer/Surveyor:

David L. Faria, PE 92432, PLS 9840
Faria Engineering & Surveying
1656 Cienega Road Unit 100
Hollister, CA 95023
(602) 515-7650
david@fariaengineering.com

Project Information:

APN: 814-17-007
Present Use: Agriculture Medium Scale
Present Zoning: A-20Ac
Existing Improvements: As Shown
Water: Central Coast
Gas & Electric: ex PGE
Gross Area: 5.0 ac

Boundary Note: Property lines shown on this plan are based on record data and boundary monuments measured to date. A title report was not provided for this survey. Easements shown, if any, are compiled from record maps and the current deed for the property. There may be additional easements that burden or benefit the subject property that would only be revealed on a title report.

Flood Zone: The property lies wholly in Zone D, areas in which flood hazards are undetermined, but possible, per FEMA Firm Panel 06085C0463H, effective May 18, 2009.

Basis of Bearings: The bearings shown on this map are based on the centerline of Hill Road as found monumented and recorded as North 25° 29' West, on that Parcel Map thereof recorded in Book 290 of Maps at Page 34, Santa Clara County Records.

Elevations: Elevations shown on this plan are based on field survey using GPS. (NAVD88).

Landscaping Information:

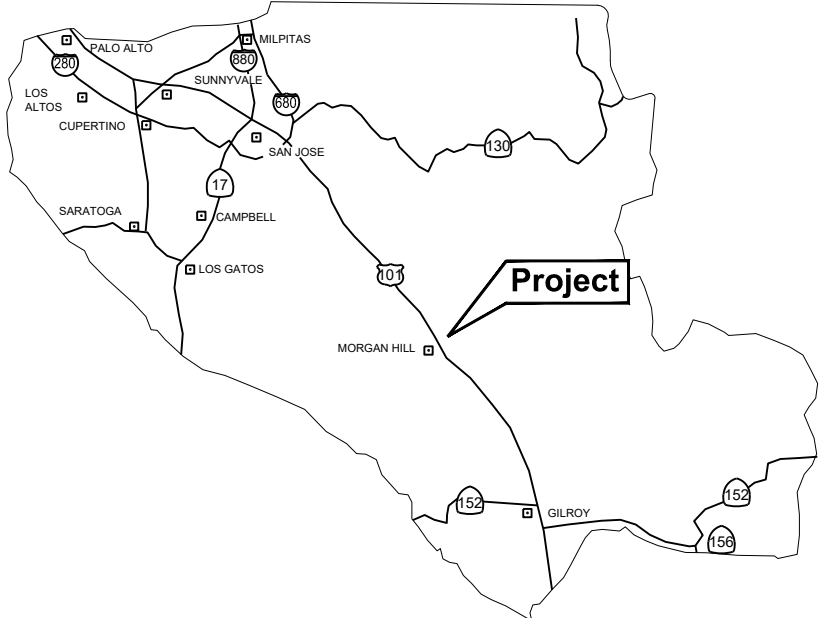
- No landscaping is proposed.
- All non improved disturbed areas are to be hydroseeded.

Fire Protection Information:

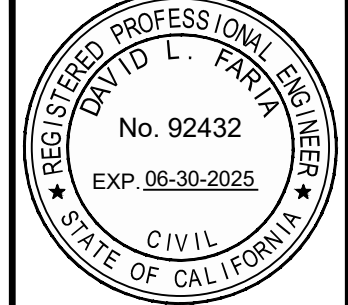
- Fire Protection Systems shall be a deferred submittal.
- Water to be supplied by the proposed well.
- A wharf hydrant and 10,000 gallons is proposed for fire protection.
- Existing residence does not have fire sprinklers.
- Property is located in the Local Response Area.
- Property to maintain defensible space at all times.
- Driveway width will be maintained at 12' minimum with a clear height of 13' 6".
- Existing driveway capable of supporting 75,000 lbs.
- All proposed driveways to be made of an all weather surface capable of supporting 75,000 lbs.
- All proposed driveways shall have a max. slope of 15%.

Structure	Occupancy Type	Construction Type	Size	Max. Height
Residence and Garage	R-3/U	V-B	9,088 SF	35 ft.
Accessory Structure	U	II-B	4,000 SF	35 ft.

Utility Note: Contractor to verify existing utility locations by contacting USA @ 811 or 800-642-2444



COUNTY LOCATION MAP

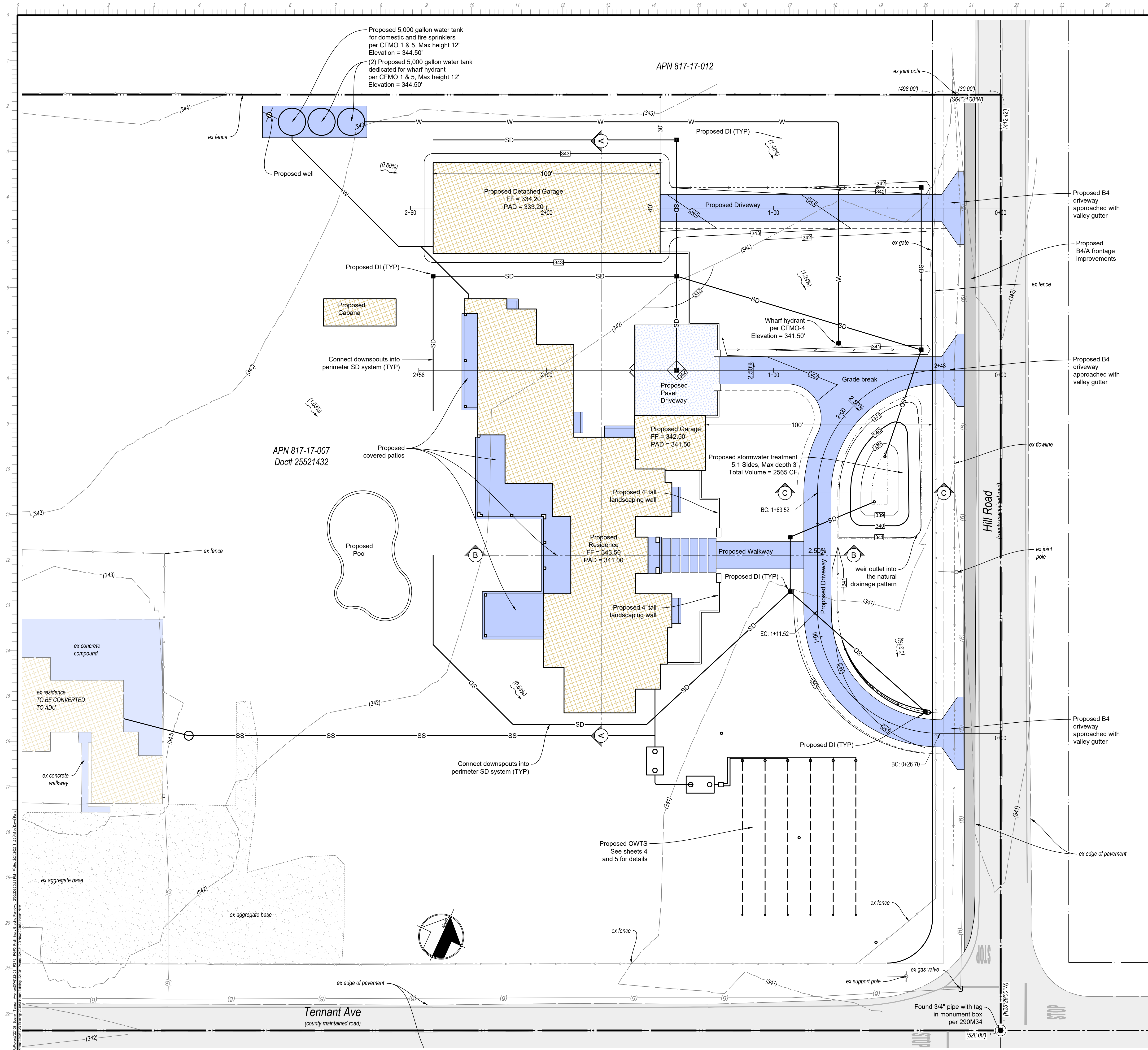


REVISIONS	BY
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FARIA ENGINEERING & SURVEYING
PLANNING • BUILDING • SEPTIC
6020 515-7650
david@fariaengineering.com

Bueno - Site Plan
Tennant Avenue - APN 817-17-007

DATE:	2/18/2025
SCALE:	1" = 30'
DRAWN BY:	DF
CHECKED BY:	DF
JOB NO.	224081
SHEET NO.	1
OF	5

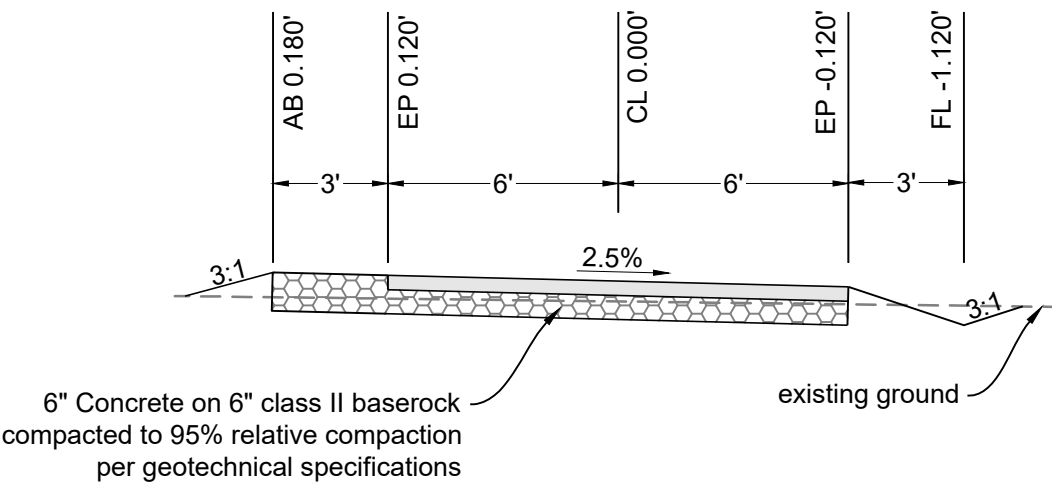


Drainage Notes

- 1. All culverts shall be made of high density polyethylene (HDPE), polyvinyl chloride (PVC), or reinforced concrete (RCP). All culverts shall have a smooth interior.
- 2. Inlets shall be made of concrete and have a smooth bottom.
- 3. All roof downsouts shall be connected to the storm drain system as shown and directed into the treatment area.
- 4. Paved surfaces adjacent to foundations shall be sloped away at a minimum of 2%. Un paved surfaces adjacent to foundations shall be sloped away at a minimum of 5%.
- 5. All non improved disturbed areas shall be hydro seeded with native vegetation.

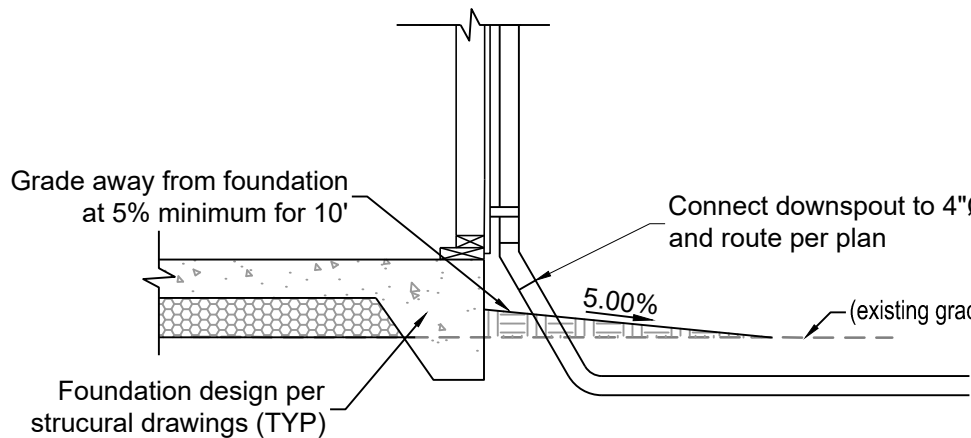
Drainage Calculation Notes

- 1. Project is required to meet tier 4 post construction performance requirements.
- 2. Retention of stormwater is required. The retention volume has been sized per the south county manual.
- 3. Infiltration treatment has been provided for stormwater treatment.
- 4. Peak flow mitigation will be accomplished with a weir outlet of the stormwater treatment area.
- 5. Post development peak flows have been reduced to meet pre development peak flows.
- 6. Stormwater will be discharged through the weir outlet into the natural drainage path of the property..



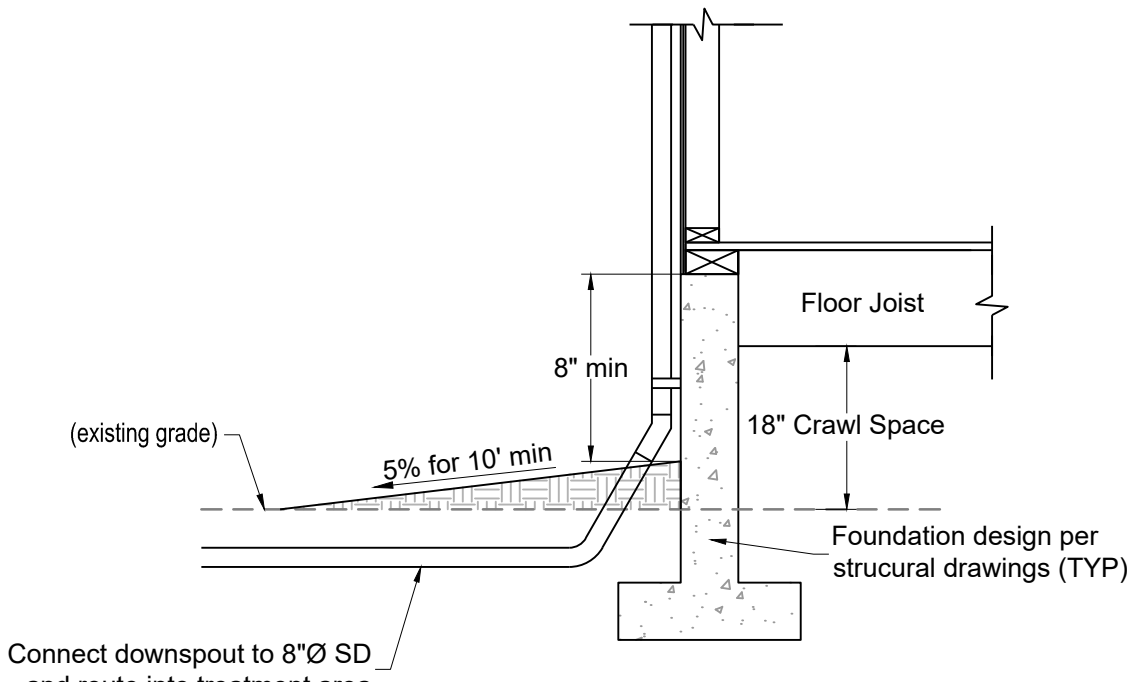
Typical Driveway Section

N.T.S.



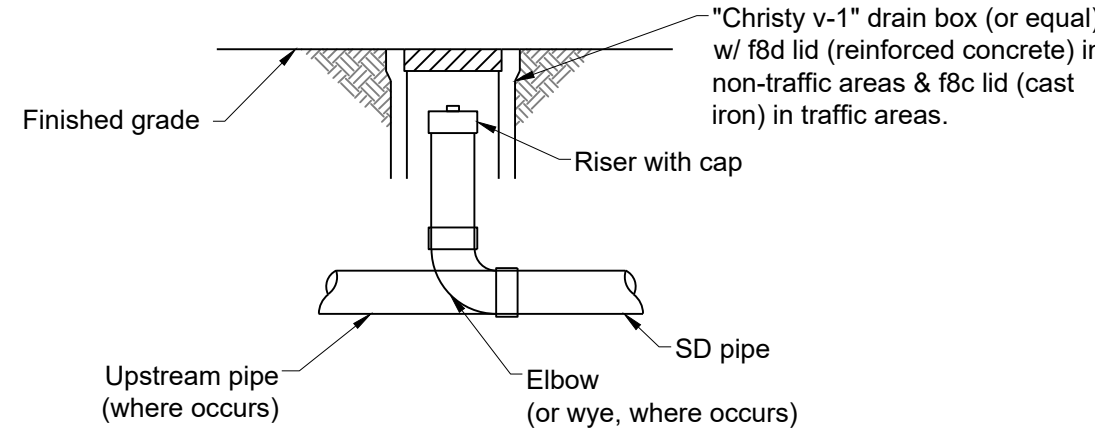
Accessory Structure Downspout Detail

N.T.S.



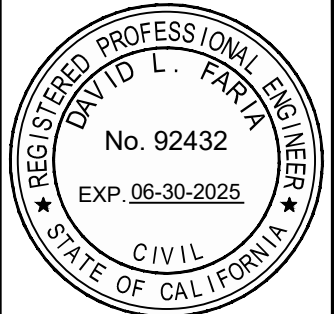
Foundation Grading & Downspout Detail

N.T.S.



Standard Clean-out Detail

N.T.S.



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Preliminary Grading Plan
Tennant Avenue - APN 817-17-007

DATE:	2/18/2025
SCALE:	1" = 20'
DRAWN BY:	DF
CHECKED BY:	DF
JOB NO.	224081
SHEET NO.	2
OF	5



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REVISIONS	BY
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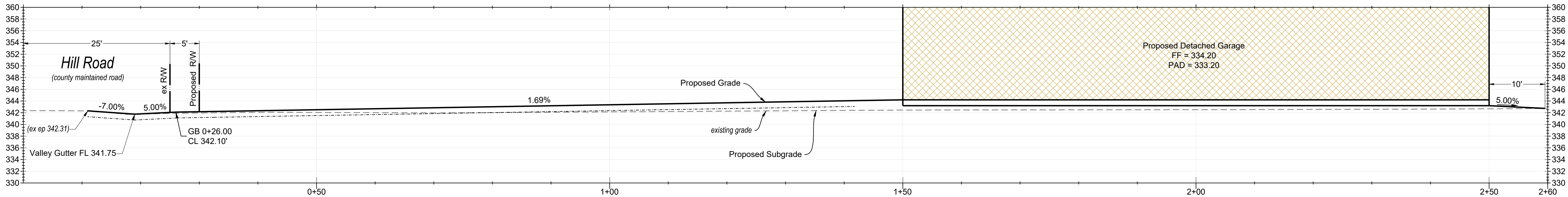
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600/515-1600
dave@fariaengineering.com

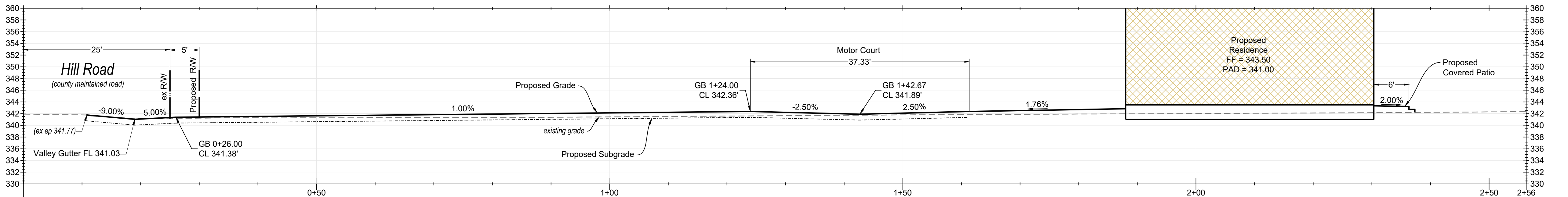
Profile, Sections, & Details

Tennant Avenue - APN 817-17-007

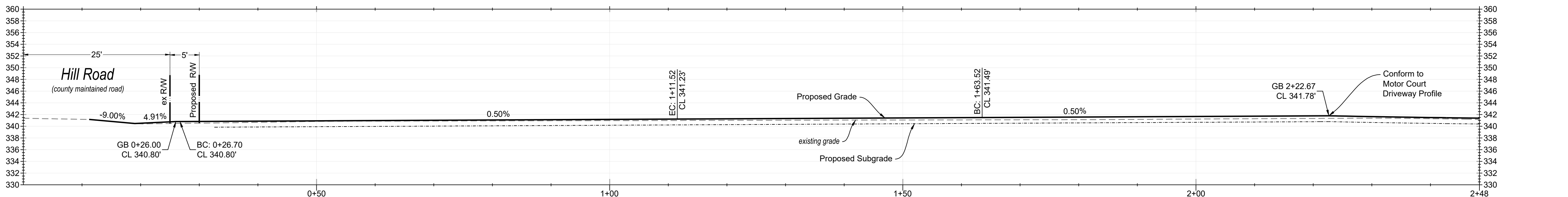
DATE:	2/18/2025
SCALE:	
DRAWN BY:	DF
CHECKED BY:	DF
JOB NO.	224081
SHEET NO.	3
OF	5



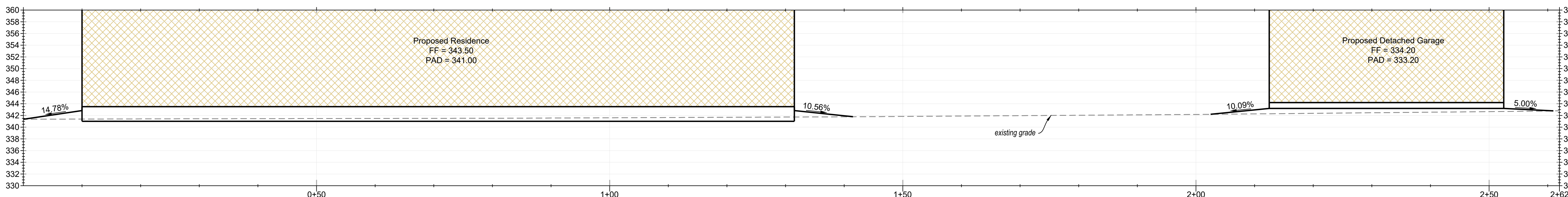
PROFILE: Accessory Struture Driveway
SCALE H: 1"=20' SCALE V: 1"=20'



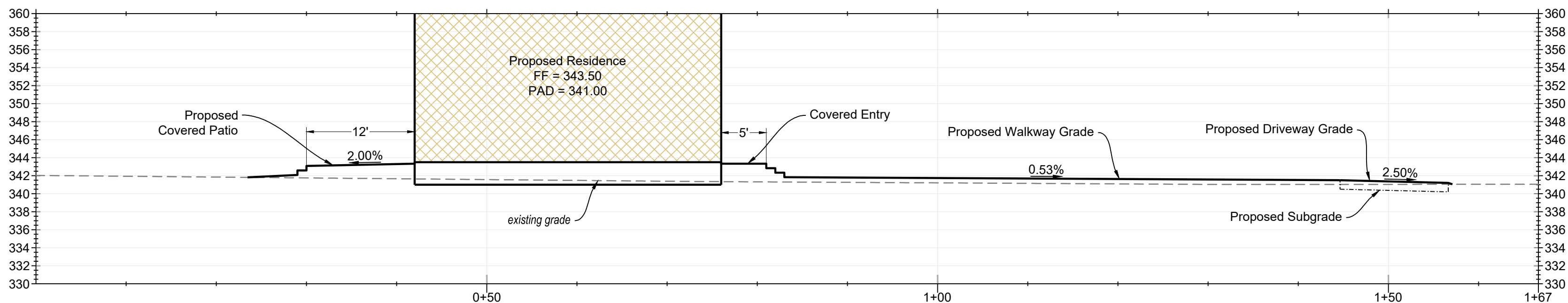
PROFILE: Motor Court Driveway
SCALE H: 1"=20' SCALE V: 1"=20'



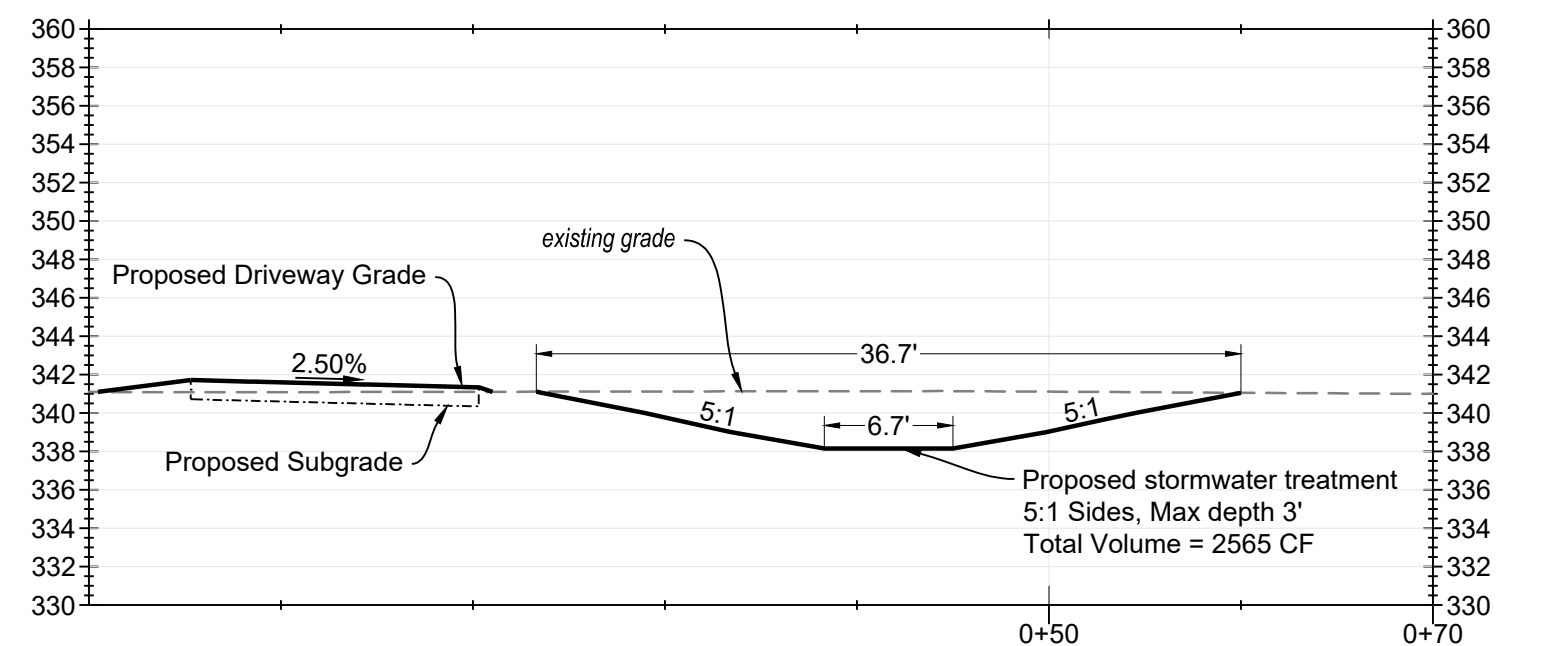
PROFILE: Residence Driveway
SCALE H: 1"=20' SCALE V: 1"=20'



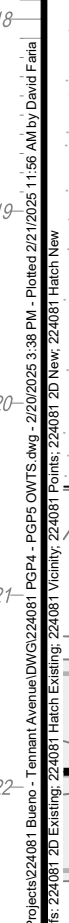
PROFILE: Section A-A
SCALE H: 1"=20' SCALE V: 1"=20'



PROFILE: Section B-B
SCALE H: 1"=20' SCALE V: 1"=20'



PROFILE: C-C
SCALE H: 1"=20' SCALE V: 1"=20'



The proposed onsite wastewater treatment system (OWTS) will serve a the proposed residence and ADU. The OWTS has been designed as a shallow pressure distribution system due to the high groundwater table. A hydrologic study for high groundwater was performed by Geoconsultants, Inc. and found the highest anticipated depth of groundwater to be 16 feet below the surface. The percolation tests were conducted at a depth of 6 feet below the surface. The percolation rate was 2 MPI. A conventional system would require a separation of 20 feet from the highest anticipated level of groundwater. Since the separation of the percolation test depth and the groundwater level is 10 feet, a conventional system would not meet the requirements for separation. A shallow pressure distribution system was selected to meet the required separation to the highest anticipated depth of groundwater.

Testing must be witnessed by a representative of the County Department of Environmental Health Services. Testing shall be done with the risers in place and the inlet and outlet pipes plugged. The tank shall be filled with water to a level of two (2) inches into the risers and monitored for a one (1) hour period with no measurable drop in the water level. Both tanks must be water tightness tested.

Proposed 6 Bedroom Single Family Residence + Existing 2Bedroom ADU

Adjusted Stabilized Percolation Rate

P1 = 1.26, P2 = 1.25, P3 = 1.01, P4 = 0.60, P5 = 0.52, P6 = 3.36

Adjusted Average Stabilized Percolation Rate P1 - P6 = 1.33 MPI

Wastewater Application Rate = 1.20 GPD/SQFT

1. Wastewater design flow = 975 GPD
2. Adjusted Stabilized percolation rate = 2 MPI
3. Wastewater application rate = 1.2 GPD/SQFT
4. Width of Trench = 24 Inches
5. Rock below perforated drain pipe = 12 inches
6. Infiltration area per linear foot = 4

$$975 \text{ GPD} / 1.2 * 4 = 204$$

Dispersal Field Required = 204 LF + 204 LF

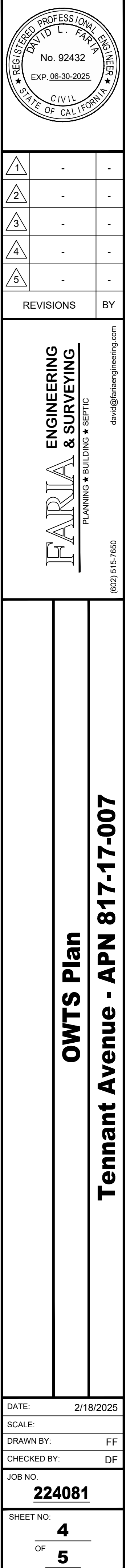
Construction Inspection. At a minimum, inspection of the shallow PD system installation should include the items listed below. This is in addition to inspection work required for a supplemental treatment system, if used. This is in addition to inspection work required for a supplemental treatment system, if used. Joint inspection by the designer, contractor, and DEH may be required.

- Pre-construction inspection where the construction staking or marking of the various system components is provided and construction procedures discussed;
- Water tightness of septic tank and dosing (pump) tank;
- Layout and excavation of dispersal trenches and piping;
- Drain rock material and placement;
- Piping installation and hydraulic ("squirt") test of the distribution system;
- Functioning and setting of all control devices; and
- Final inspection to verify that all construction elements are in conformance with the approved plans and specifications, all performance wells are installed; and erosion control has been completed.

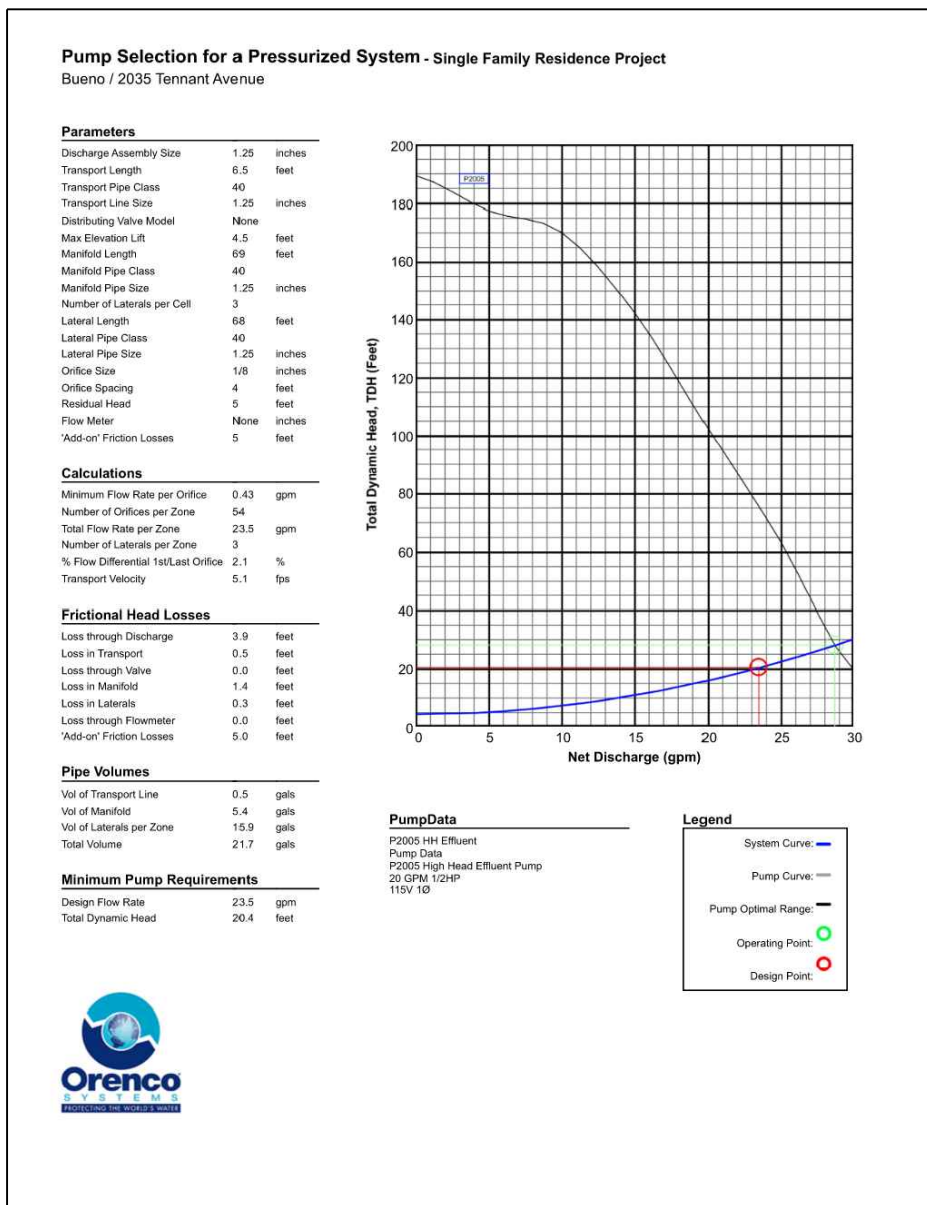
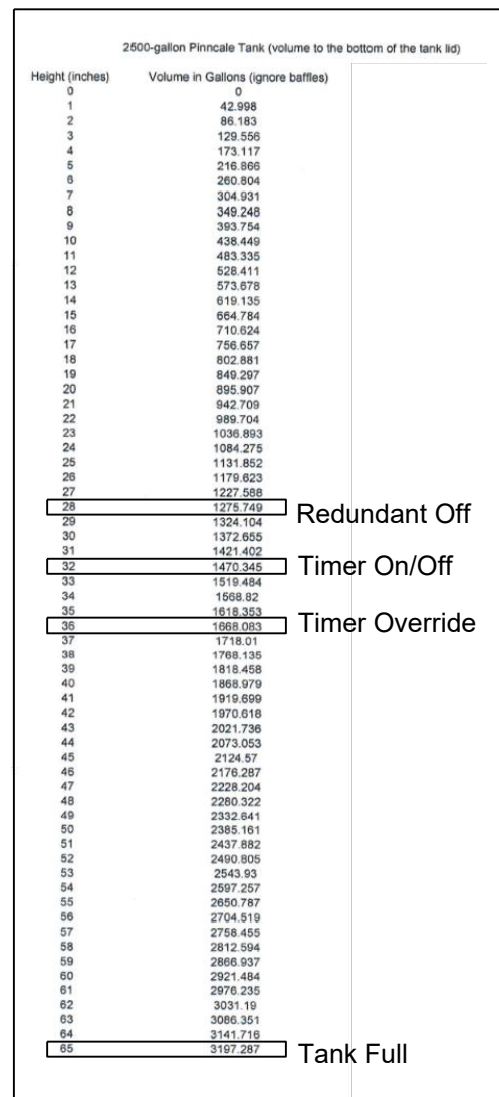
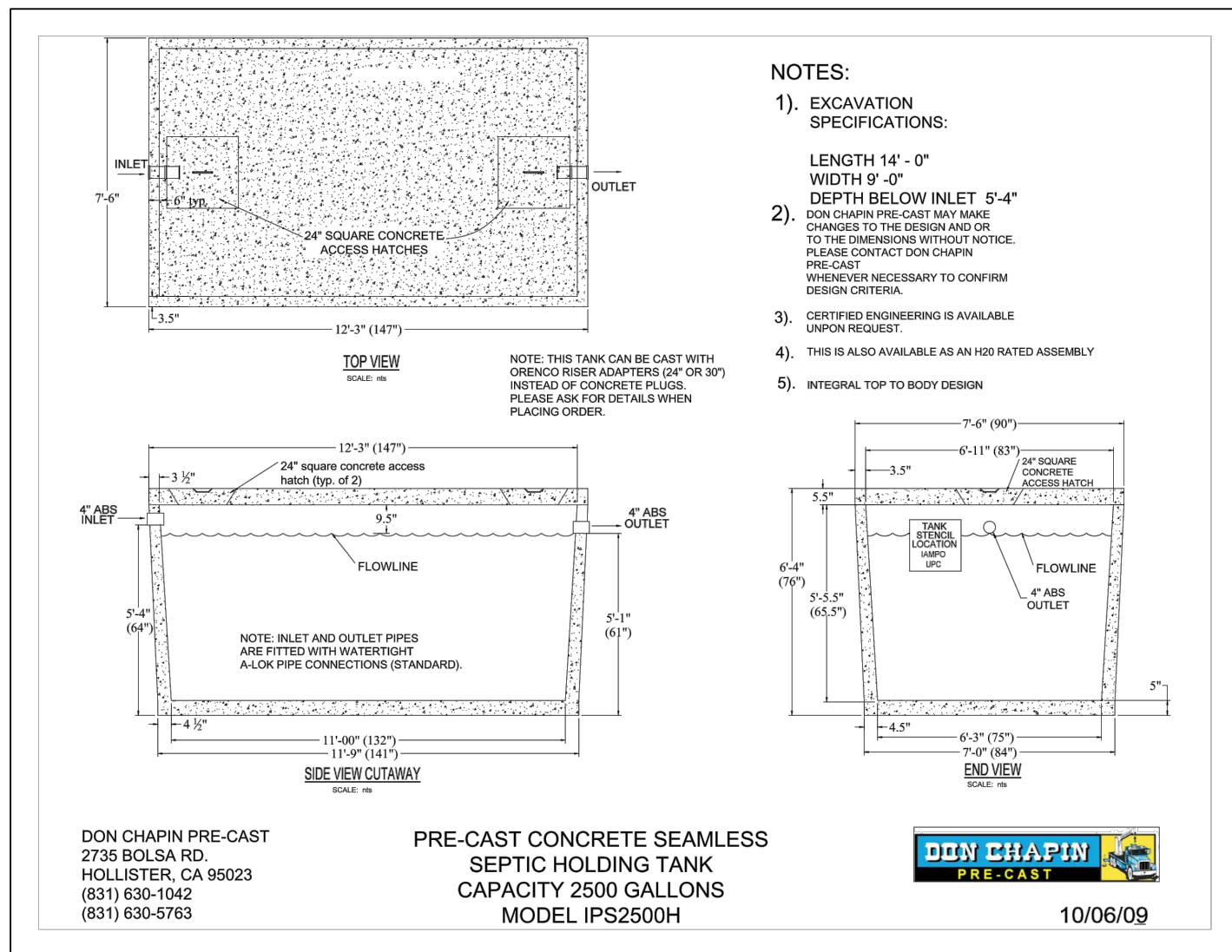
1. Install Chapin IPS 2500 gallon septic tank as shown. Install Orenco riser adapters and effluent filter cartridge Model PL-68 on outlet.
2. The manhole riser covers shall extend to the ground surface with bolt down lids.
3. The septic tank must pass the water tightness test required by DEH.
4. Install Chapin IPSH 2500 gallon pump tank. Install Orenco riser adapters.
5. The pump tank must pass the water tightness test required by DEH.
6. Install EasyPak 20 GPM pump package with MVP-S1DM control panel.
7. Install control panel on the side of the residence.
8. Install new sewage pump basin at ADU with included alarm panel.
9. Install 2" SCH 40 pressure line from ADU to new 2500 gallon septic tank.
10. All piping must be schedule 40 PVC tested for 150 psi and be solvent welded.
11. All piping must comply with the UPC.
12. Install concrete trench blocks at all sharp changes in direction.
13. Install 1 1/4" pressure line from the EasyPak to the diversion valve box as shown.
14. Connect each side of the diversion valve to the dispersal manifold as shown.
15. Install dual pressure dosed dispersal system of 204 linear feet on each side of the diversion valve as shown.
16. Attach Orenco Orifice Shields above each 1/8" orifice with the orifice facing upwards.
17. The first and last orifice shall be pointing down.
18. Install an inspection riser with gate valve at the end of each trench as shown.
19. Install three inspection wells at the locations shown.
20. No portion of the dispersal field shall be within 100 feet of a well.

Bueno, APN 817-17-007, 2035 Tennant Avenue, Morgan Hill		Bueno, APN 817-17-007, 2035 Tennant Avenue, Morgan Hill	
TEST PIT LOG		TEST PIT LOG	
Depth (feet)	Description	Depth (feet)	Description
	TP-1		TP-2
0 – 4.0	Clay, sandy, hard, but becoming friable below depth of 3.5 feet, dry, tan (GL-SG)	0 – 4.0	Clay, sandy, hard, but becoming friable below depth of about 3.5 feet, dry tan (GL-SG)
4.0 – 15.0	Gravel, sandy, with cobbles, and some clay matrix. Dense, but loose below depth of 8.9 feet, with increasing sand. Damp, but at depth of 11.5 feet, increasing moisture, with clay matrix becoming plastic, brown (GM-GC)	4.0 – 15.0	Gravel, sandy, with cobbles, and some clay matrix. Dense, but loose below depth of 7.0 feet, with increasing sand. Damp, but at depth of 12.0 feet, increasing moisture, with clay matrix becoming elastic. Small diameter boulders also noted at 12 feet in depth, brown (GM-GC)

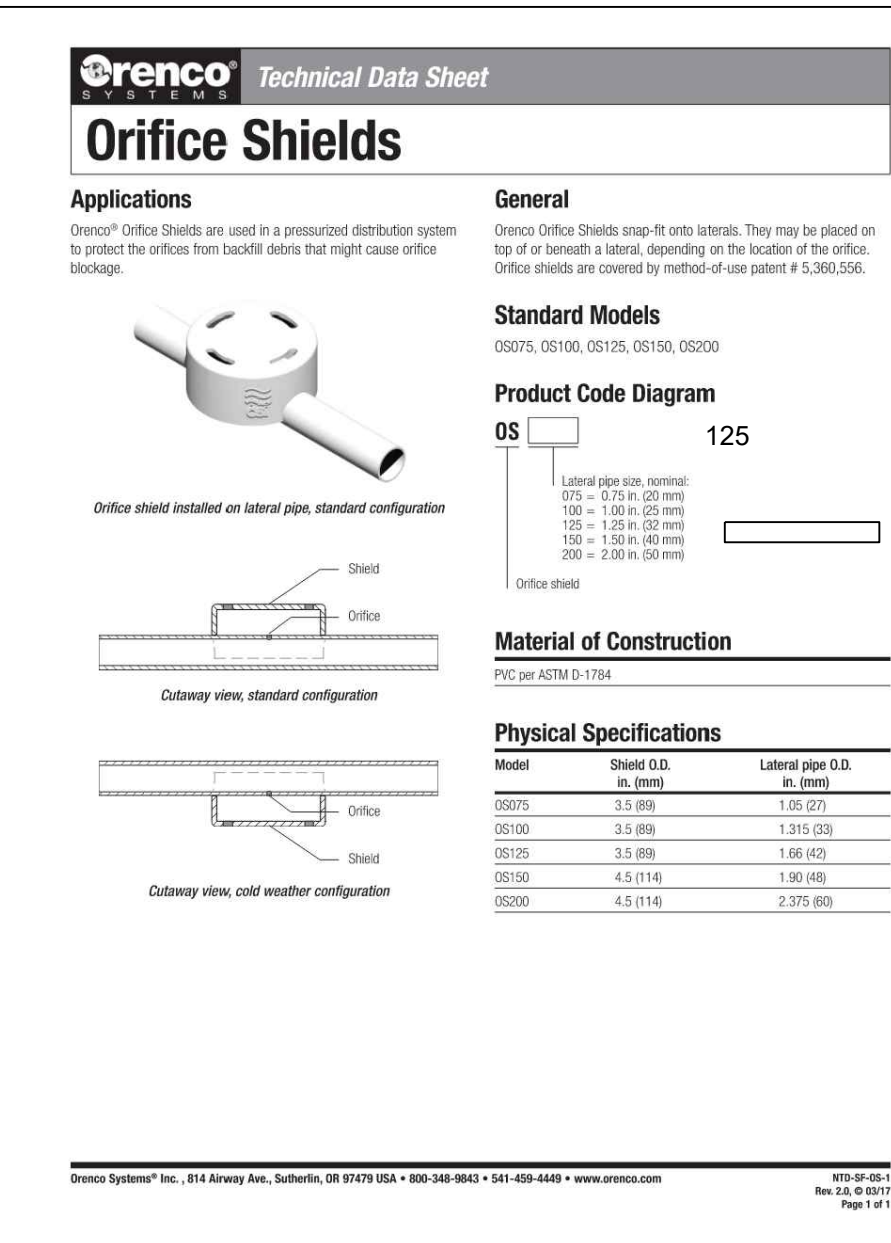
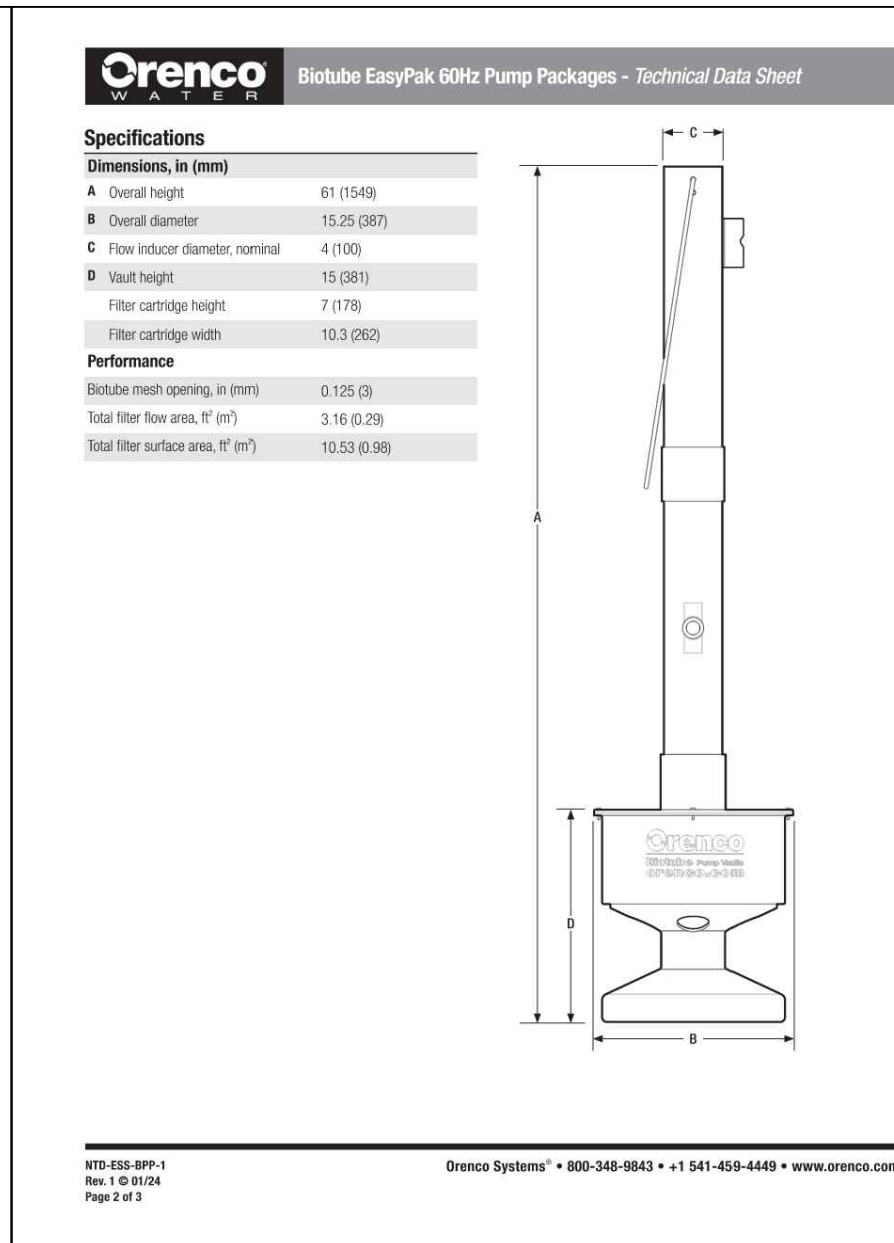
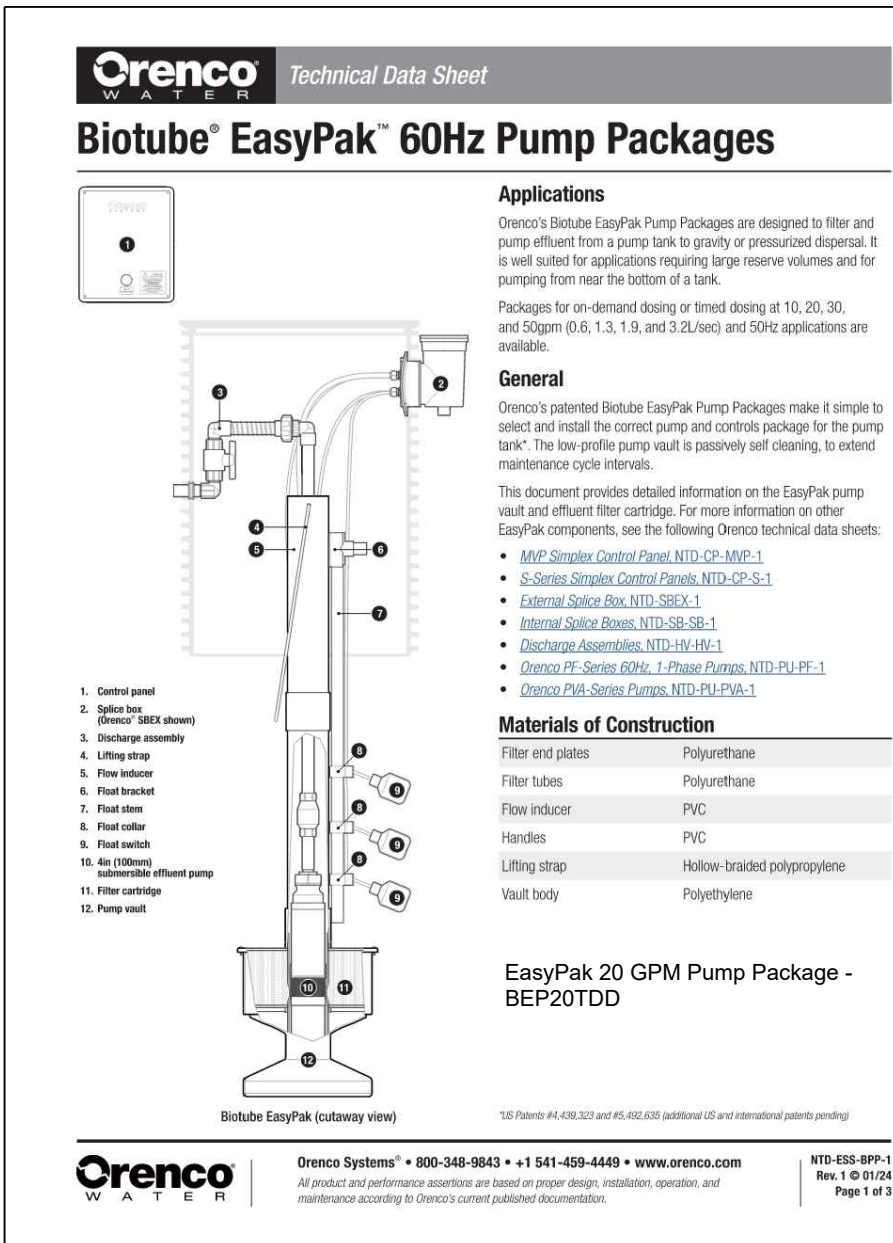
	Work	Frequency
Inspection	<ul style="list-style-type: none"> Conduct routine visual observations of disposal field and downslope area and surroundings for wet areas, pipe leaks or damage, soil erosion, drainage issues, animal vegetation, or other problems. Perform all inspections of pump and appurtenances (per O&M manual and Performance Evaluation Guidelines, Part 5 of this Manual). 	<ul style="list-style-type: none"> Every 6 to 12 months.
Maintenance	<ul style="list-style-type: none"> Purge laterals, squirt and balance. Exercise valves to ensure functionality. Perform all maintenance work as recommended by equipment manufacturer for any special valves or other components. Investigate and repair erosion, drainage or other disposal field problems, as needed. Investigate and perform distribution system corrective work, as required. Record work done. 	<ul style="list-style-type: none"> Distribution system maintenance annually. Other maintenance as required.
Water Monitoring & Sampling	<ul style="list-style-type: none"> Measure and record water levels in trench observation wells. Measure and record water levels in disposal field monitoring wells, as applicable, per permit requirements. Obtain and analyze water samples from monitoring wells, as applicable, per permit requirements. 	<ul style="list-style-type: none"> Measure trench water levels annually. Other monitoring according to permit conditions, as applicable.
Reporting	<ul style="list-style-type: none"> Report findings to DEH per permit requirements. Standard report to include dates, observation well and monitoring well readings and other data collected, work performed, corrective actions taken, and performance summary. Report public health/water quality emergency to DEH immediately. 	<ul style="list-style-type: none"> According to permit conditions, typically every 1 to 2 years, depending on system size, usage, history, location.



PUMP CURVE



PERFORMANCE MONITORING AND REPORTING REQUIREMENTS



(a) In addition to an installation permit, an operating permit is required for all alternative OWS, including those installed in connection with the repair or upgrade of existing OWS as well as those for new construction. General requirements pertaining to operating permits are as follows:

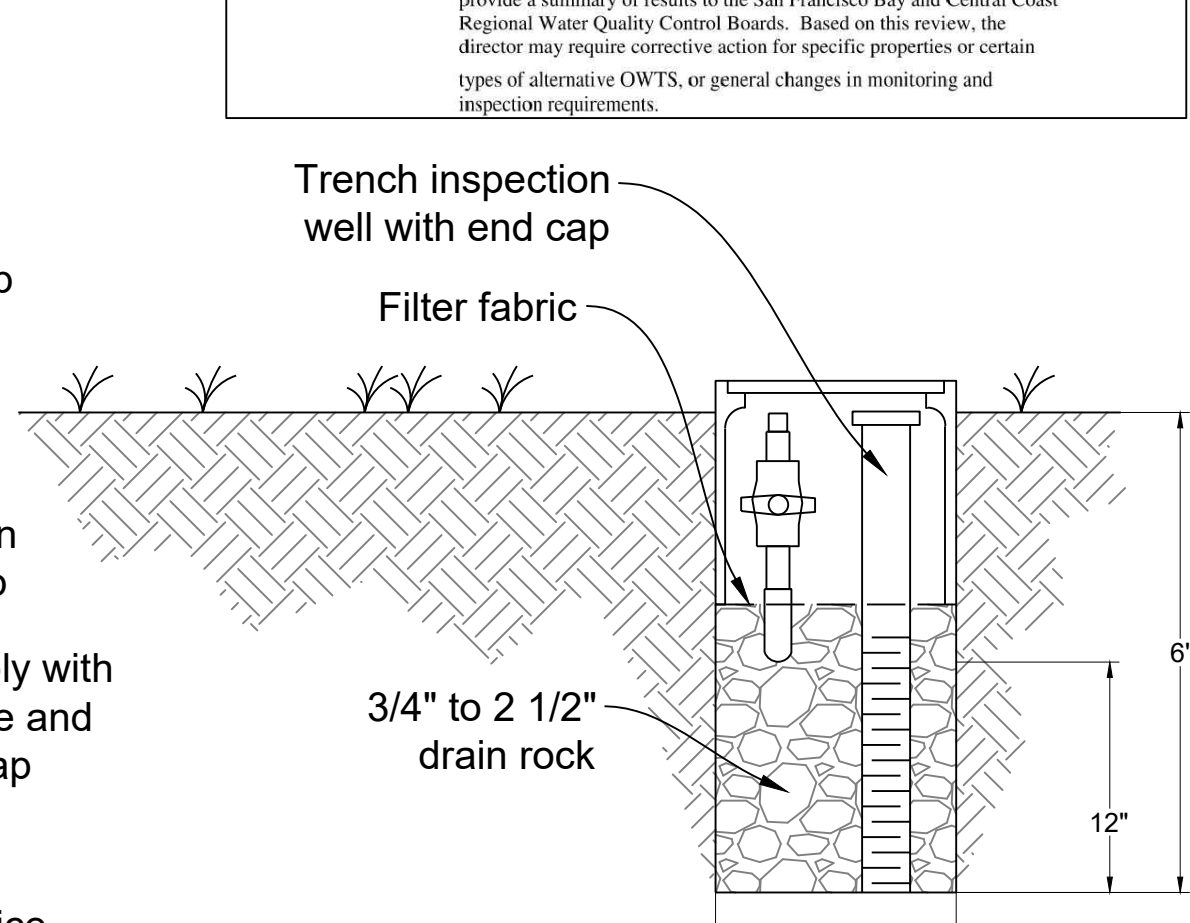
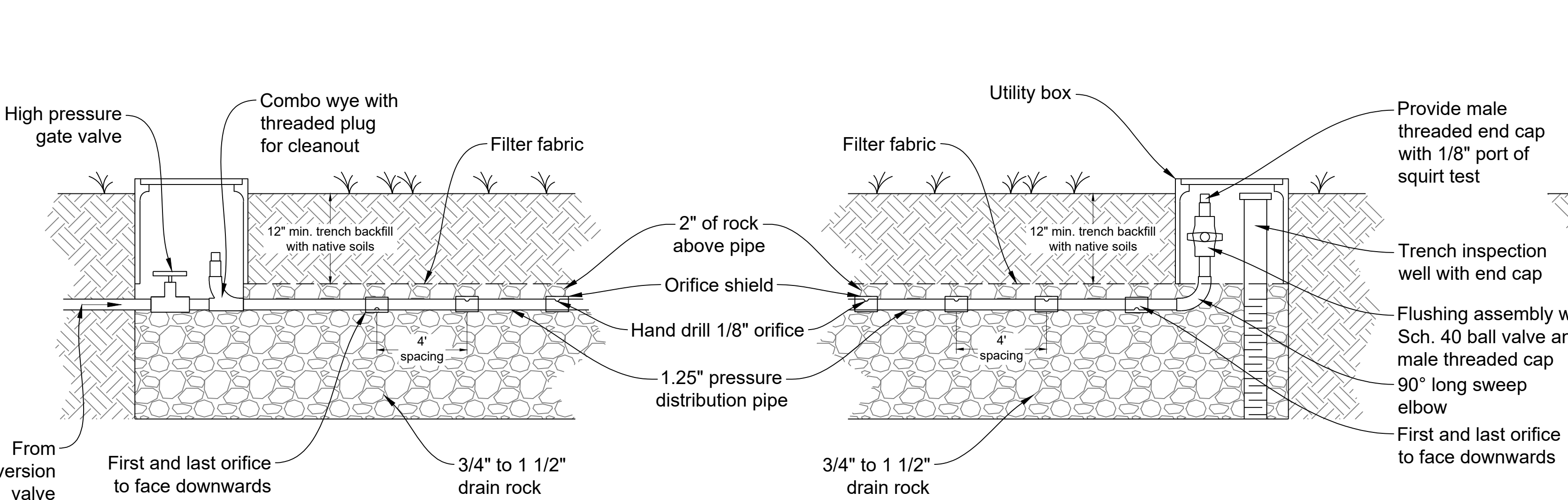
- (1) The operating permit will be issued by the director following:
 - (a) completion of construction of the alternative OWS(s); (b) satisfactory completion of the installation of the alternative OWS(s); and (c) payment of applicable fees. Operating permits are non-transferable.
- (2) After initial issuance, the operating permit is required to be renewed periodically, the standard renewal period being one year. The director may establish conditions allowing the time period between renewals to be extended for a period of up to one year in the record of favorable performance or other factors warranting a reduction in system oversight by DEH. Provisions for adjusting the timing of renewal periods are contained in the rules of the director in the *Onsite Systems Manual*. Operating permits must also be renewed at the time of change in property ownership.
- (3) Operating permits are intended to serve as the basis for verifying the performance of the alternative OWS(s) and for enforcing the governing maintenance. Permit conditions shall include monitoring and inspection requirements, permit duration, and other provisions as determined by the director. The director may suspend or revoke a permit as deemed appropriate by the director on a case-by-case basis.
- (4) Renewal of an operating permit requires: (a) payment of the applicable fees, upon receipt of notice from the director; and (b) submission of the records of required system inspection and monitoring.
- (5) Failure to pay the required fee or submit the specified monitoring and inspection information, or failure to undertake any required corrective work specified by the director may be cause for issuance of a non-compliance notice and for suspension or revocation of the operating permit by the director. The director may place a lien on the property for recovery of any associated abatement costs and unpaid fees.
- (6) A certified copy of the following shall be recorded against the property in the office of the County Recorder or Santa Clara County: (a) initial operating permit issued; and (b) notices of withdrawal of permit.

(a) A monitoring program will be established for each alternative OWTS as a condition of the operating permit at the time of permit issuance, and may be amended at the time of permit renewal. Said monitoring shall be performed to ensure that the alternative OWTS is functioning satisfactorily to protect

- (a) In accordance with guidelines in the *Osire System Manual*, and may also incorporate recommendations of the system designer, manufacturer, or third-party reviewer.
- (b) Monitoring requirements will vary depending upon the specific type of alternative OWSIS in accordance with guidelines in the *Osire Systems Manual*.
- (c) The required frequency of monitoring will be in accordance with guidelines in the *Osire Systems Manual*. Monitoring frequency may be increased if, in the opinion of the director, system problems are experienced.
- (d) Monitoring of alternative OWSIS shall be conducted by or under the supervision of one of the following:
 - (1) Registered Civil Engineer;
 - (2) Professional Geologist;
 - (3) Registered Environmental Health Specialist; or
 - (4) Other on-site wastewater maintenance provider registered with the Department of Environmental Health and meeting qualifications as established in the *Osire Systems Manual*. Registration shall entail:
 - (a) documentation of required qualifications;
 - (b) participation in annual training/review conducted by the director; and
 - (c) payment of an annual fee established by the Board of Supervisors.

Additionally, the director may require third-party or County monitoring of any alternative OWS where deemed necessary because of special circumstances, such as the complexity of the system or the sensitive nature of the site. The costs for such additional monitoring would be the responsibility of the owner. inspection and

- (e) Monitoring results shall be submitted to the director in accordance with reporting guidelines provided in the *Owate County Manual*. The monitoring shall be conducted in accordance with the requirements for the monitoring. Notwithstanding formal monitoring reports, the director shall be notified immediately of any system problems observed during system inspection and monitoring that threaten public health or water quality.
- (f) In addition to regular inspection and monitoring activities, post-seismic inspection and monitoring of OWTs located in areas of moderate to high seismic areas will be required in the event of an earthquake causing significant ground shaking in the region, as determined by the United States Geological Survey and the County. The director shall be responsible for issuing appropriate notices when such inspections are required; those inspections are to be conducted in accordance with the requirements set forth to the director. The purpose of such inspections will be to assess and document any damage to the OWTs and to implement corrective measures as needed, in accordance with the requirements set forth to be in accordance with provisions prescribed by the director, in consultation with the County geologist, and contained in the *Owate County Manual*.
- (g) The director will, from time-to-time, compile and review monitoring and inspection results for alternative OWTs and, at least every two years, will prepare a summary of results for the County Board of Commissioners and the Regional Water Quality Control Board. Based on this review, the director may require corrective action for specific properties or certain alternative OWTs, or general changes in monitoring and inspection requirements.



Trench Detail - End View

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