

Pressure-dosed lateral trench:

Cross Section (not to scale)

GRADE

Drainrock is double-washed 3/4 to 2 1/2" size

Native soil backfill (12 inches min.)

Orifice shields

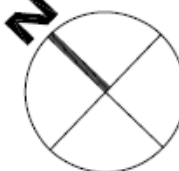
3 ft

2" drainrock covering pipe

1.50" PVC Pressure-dosed Lateral

18" rock below pipe

2 ft

- SITE PLAN PROVIDED BY R.I. ENGINEERING, INC.
-  1" = 30'
-
- PROJECT SCOPE & RATIONALE:**
- This project is to construct a new 4 BR residence to be served by pressure dosed trench w/ supplemental treatment septic system shown on these plans. The system is sized to allow addition of a 2 BR guest house in the future.
- A pressure dosed trench system with proprietary aerobic treatment was selected for the design due to high groundwater observed during the DEH wet weather testing period at 7 ft below grade in the soil profile test pits.

A.P.N. 776-17-007

12' WIDE DRIVEWAY WITH 3' SHOULDER PER COUNTY STANDARD

CONSTRUCT FIRE HYDRANT

PLACE RIP RAP AT ENDS OF CULVERT

FIRE DEPARTMENT TURNAROUND "D" PER SCCO STD CFMO-SD16

3'X15' LEVEL SPREADER TRENCH

MACHADO CREEK

3'X15' LEVEL SPREADER TRENCH

CONNECT DOWNSPOUT TO PERIMETER STORMDRAIN (TYP)

OUTLET DOWNSPOUT TO SPLASH BLOCK AND RIP RAP SWALE (TYP)

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100ft

100ft

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ELECTRICAL BUILDING PERMIT is REQUIRED.


ALL PVC is SCH 40
(solvent-welded, 150 psi rate)

This septic design plan uses the current proposed grading & drainage plan as the basis for the design.

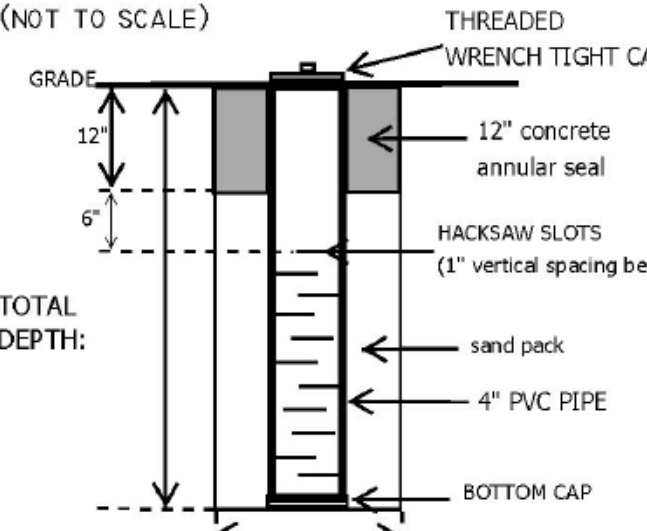
180 linear ft of DRAINFIELD (DF)
each side of DIVERTER
6 ft on center drainfield spacing

Note regarding setback:
Trees were removed from the DF areas. 26' & 27' Road cut is over 100 ft from DF area.
Possible Fill soil is over 100 ft from

INSTALLATION DETAIL: (3)

shown as: 

(NOT TO SCALE)



Labels in diagram:

- GRADE
- 12"
- 6"
- TOTAL DEPTH:
- THREADED WRENCH TIGHT CAP
- 12" concrete annular seal
- HACKSAW SLOTS (1" vertical spacing below)
- sand pack
- 4" PVC PIPE
- BOTTOM CAP
- 12"

1 inch = 10 ft enlargement of design plan view:

Offt **CONTROL/ALARM PANEL**
(Orenco VCOM2)
(audible & visual alarms)

P6, **P5**, **P4**, **P3**, **P2**, **P1** PERC PIPE

SP2, **T**, **T**, **T**, **T**, **T**

DF4 & 5 - 50' EACH

Elevations: 518, 517, 516, 515, 514, 513, 512, 511, 510, 509, 508, 507, 506, 505, 504, 503, 502, 501, 500, 499, 498, 497, 496, 495, 494, 493, 492, 491, 490, 489, 488, 487, 486, 485, 484, 483, 482, 481, 480, 479, 478, 477, 476, 475, 474, 473, 472, 471, 470, 469, 468, 467, 466, 465, 464, 463, 462, 461, 460, 459, 458, 457, 456, 455, 454, 453, 452, 451, 450, 449, 448, 447, 446, 445, 444, 443, 442, 441, 440, 439, 438, 437, 436, 435, 434, 433, 432, 431, 430, 429, 428, 427, 426, 425, 424, 423, 422, 421, 420, 419, 418, 417, 416, 415, 414, 413, 412, 411, 410, 409, 408, 407, 406, 405, 404, 403, 402, 401, 400, 399, 398, 397, 396, 395, 394, 393, 392, 391, 390, 389, 388, 387, 386, 385, 384, 383, 382, 381, 380, 379, 378, 377, 376, 375, 374, 373, 372, 371, 370, 369, 368, 367, 366, 365, 364, 363, 362, 361, 360, 359, 358, 357, 356, 355, 354, 353, 352, 351, 350, 349, 348, 347, 346, 345, 344, 343, 342, 341, 340, 339, 338, 337, 336, 335, 334, 333, 332, 331, 330, 329, 328, 327, 326, 325, 324, 323, 322, 321, 320, 319, 318, 317, 316, 315, 314, 313, 312, 311, 310, 309, 308, 307, 306, 305, 304, 303, 302, 301, 300, 299, 298, 297, 296, 295, 294, 293, 292, 291, 290, 289, 288, 287, 286, 285, 284, 283, 282, 281, 280, 279, 278, 277, 276, 275, 274, 273, 272, 271, 270, 269, 268, 267, 266, 265, 264, 263, 262, 261, 260, 259, 258, 257, 256, 255, 254, 253, 252, 251, 250, 249, 248, 247, 246, 245, 244, 243, 242, 241, 240, 239, 238, 237, 236, 235, 234, 233, 232, 231, 230, 229, 228, 227, 226, 225, 224, 223, 222, 221, 220, 219, 218, 217, 216, 215, 214, 213, 212, 211, 210, 209, 208, 207, 206, 205, 204, 203, 202, 201, 200, 199, 198, 197, 196, 195, 194, 193, 192, 191, 190, 189, 188, 187, 186, 185, 184, 183, 182, 181, 180, 179, 178, 177, 176, 175, 174, 173, 172, 171, 170, 169, 168, 167, 166, 165, 164, 163, 162, 161, 160, 159, 158, 157, 156, 155, 154, 153, 152, 151, 150, 149, 148, 147, 146, 145, 144, 143, 142, 141, 140, 139, 138, 137, 136, 135, 134, 133, 132, 131, 130, 129, 128, 127, 126, 125, 124, 123, 122, 121, 120, 119, 118, 117, 116, 115, 114, 113, 112, 111, 110, 109, 108, 107, 106, 105, 104, 103, 102, 101, 100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0

Dimensions: 18 ft, 10 ft, 6 ft o.c., 6 ft o.c., 6 ft o.c., 6 ft o.c., 10 ft, 14%

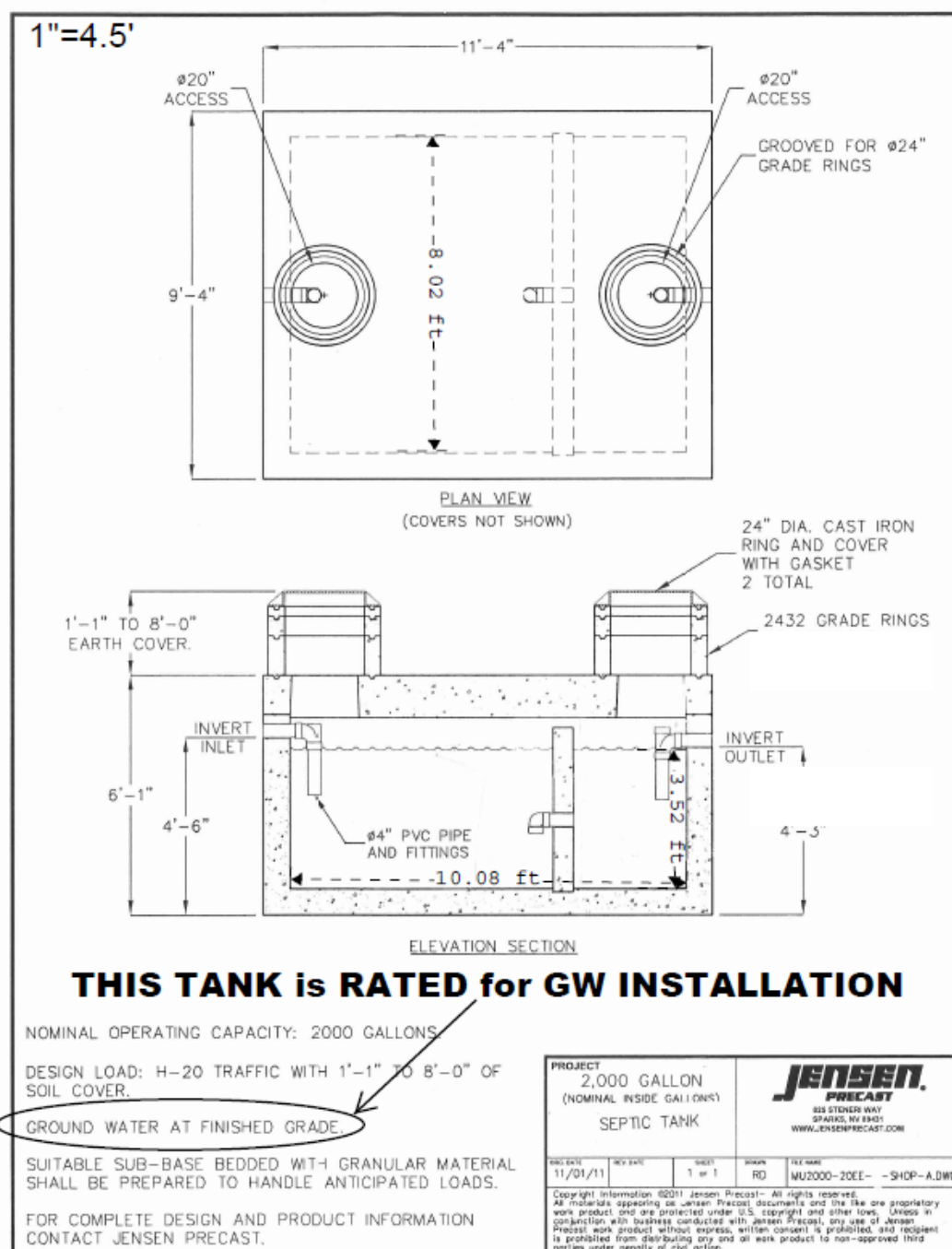
SEWERAGE SYSTEM
SANTA CLARA COUNTY
DEPARTMENT OF ENVIRONMENTAL SERVICES
Project Description:
New 4 bedroom 2,338sqft SFR

APPROVAL REQUIRED
— With existing system —
— Install/modify system per project description —
[Obtain a permit from ESD] New 2,000 gal septic; 2,000 gal pump; pressure trench at 4 sqft; app rate 1.2 gpd

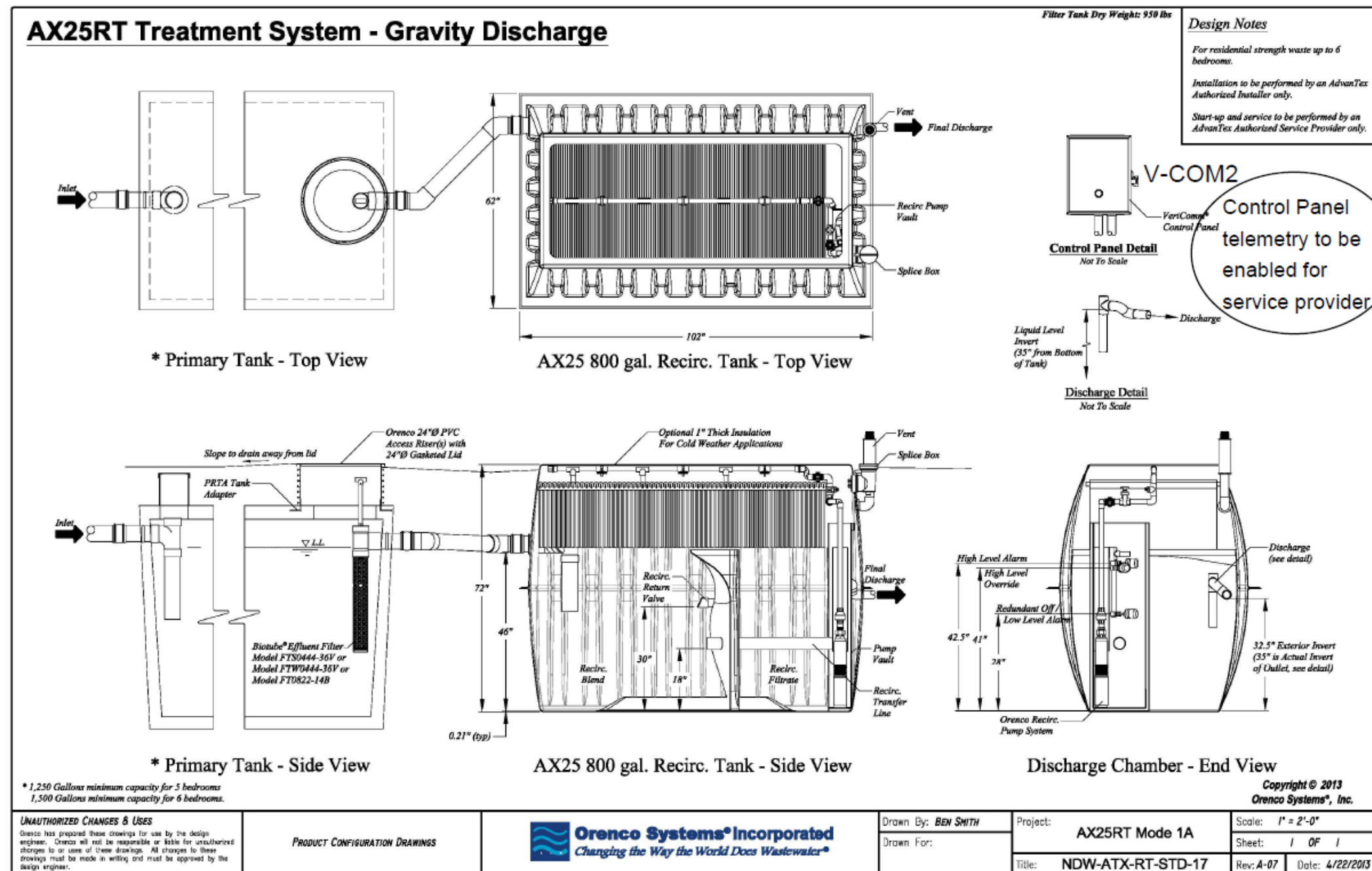
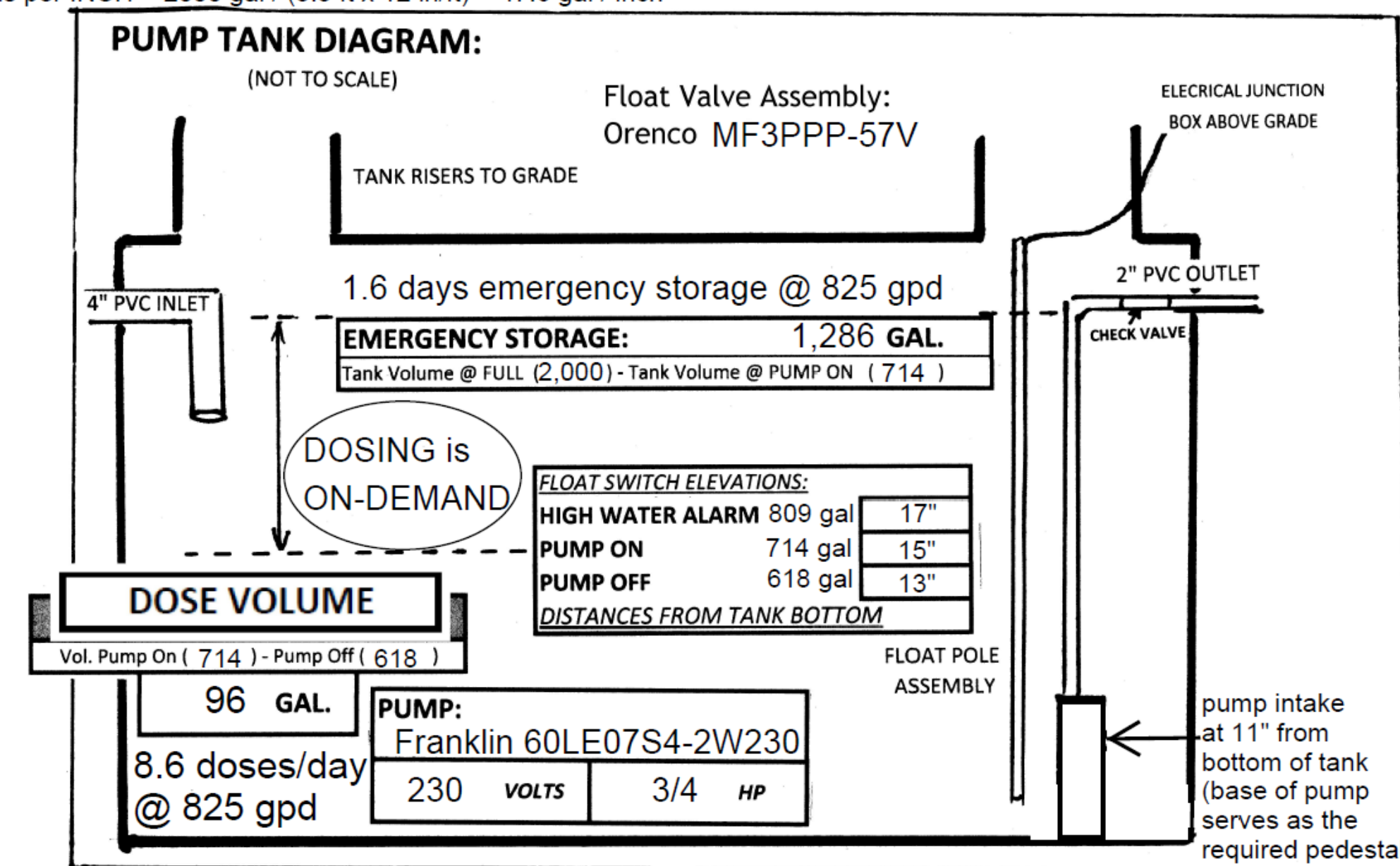
<p>Pressure-Dosed Trench w/ Treatment Septic System (To Serve Proposed 4 BR House & Future 2 BR ADU)</p>	<p>SITE PLAN</p>	<p>Property on Sleepy Valley Rd., Morgan Hill, CA 95037 APN 776-17-009 (SR0863377)</p>	<p>OWNER: Joseph Talamo 6715 Sorrel Way, Morgan Hill, CA 95037 Tel. 408-799-7389 Email: j.talamo@icloud.com</p>	<p>PLAN BY: Christopher Day, R.E.H.S. P.O. Box 26, Redwood City, CA 94064 Tel. 650-293-1045 Email: christopherdayr@aol.com</p>	<p>ORIG: 19 JAN 2020 REV 1: 29 APR 21 REV 2:</p>
<p>OWTS 1</p>	<p>COMMENDED Existing No. _____ plan (describe below) [environmental Health] AX25RT; 172°+172°=344° nd/suff</p>				

Tanks burial depth ~ 12"

PUMP TANK to
be cast w/
NO BAFFLE



TANK VOLUME: 2,000 gal
INTERIOR DIMENSIONS below OUTLET INVERT: 8 ft w x 3.5 ft h x 10 ft L
Gallons per INCH = 2000 gal / (3.5 ft x 12 in/ft) = 47.6 gal / inch



Pressure-dosed lateral trench: Cross Section (not to scale)

GRADE

Native soil backfill (12 inches min.)

Orifice shields

Filter Fabric

2" drainrock covering pipe

1.50" PVC Pressure-dosed Lateral

18" rock below pipe

2 ft

3 ft

(not to scale)

NO ORIFICE WITHIN 1 FT OF TRENCH ENDS.

adjusting valve

trench end

1.00 ft minimum

12 O'Clock orifices

3.00 ft

orifices 3 ft o.c.

3.00 ft

orifices 3 ft o.c.

1.00 ft minimum

purge valve

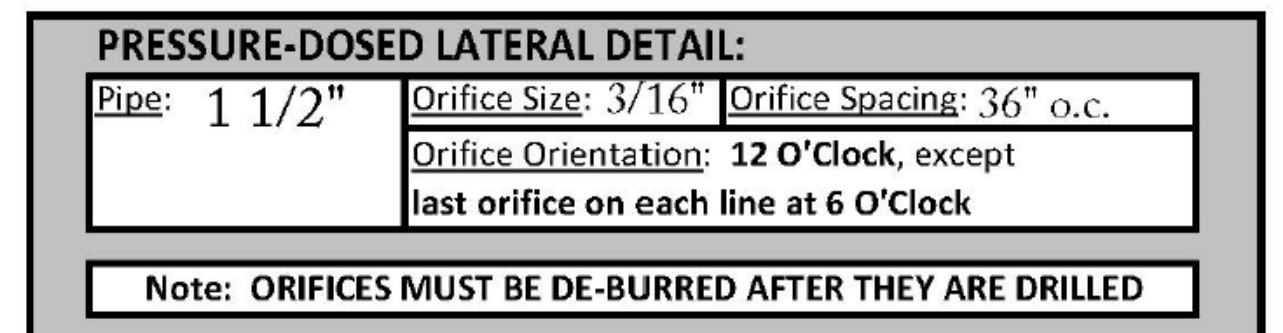
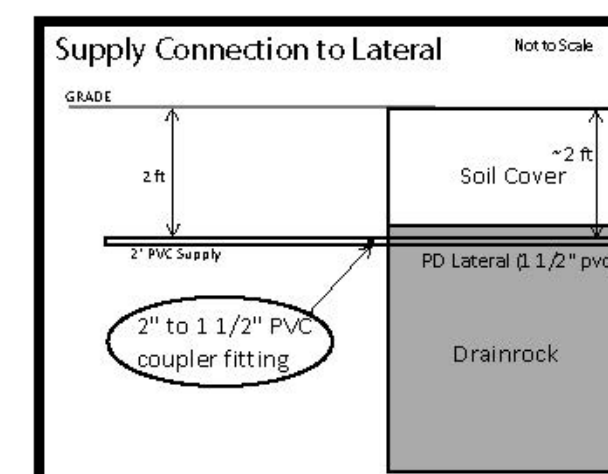
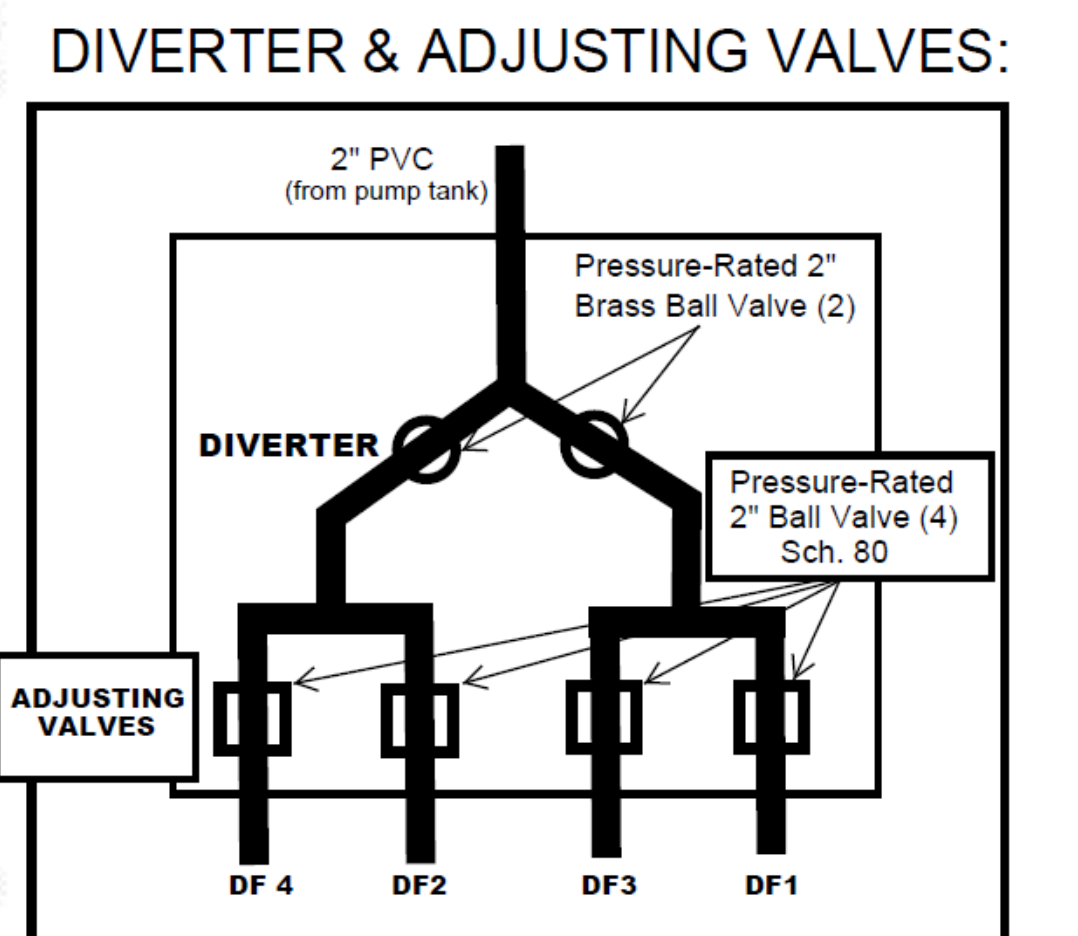
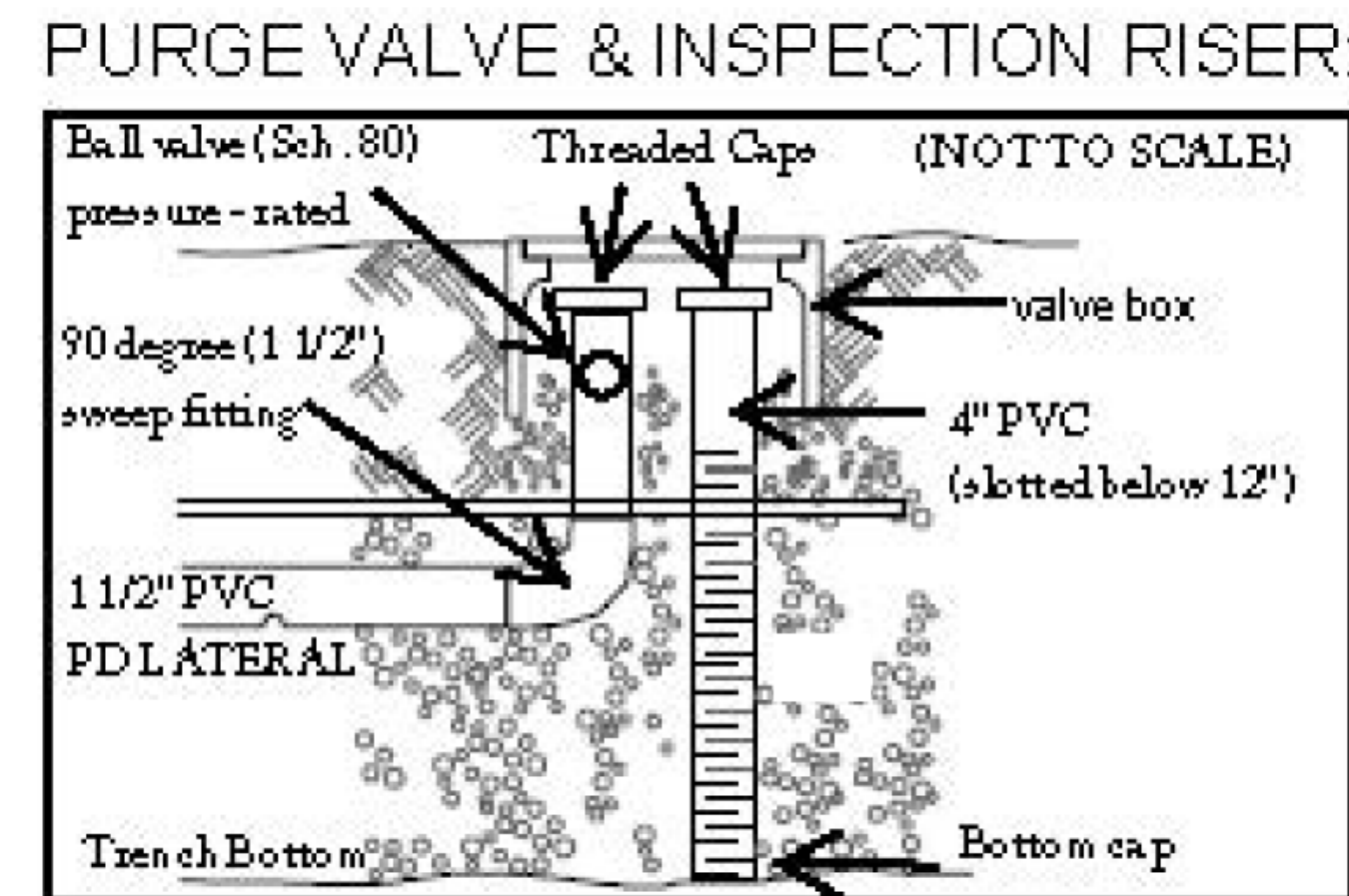
end of trench

6 O'Clock orifice

flow direction

House Finished Floor = 523.5 ft	Septic Tank Outlet = 514.6 ft	AX25RT Outlet = 512.9 ft
Septic Tank Inlet = 514.8 ft	AX25RT Inlet = 513.7 ft	Pump Tank Inlet = 512.7 ft
8.7 ft	0.9 ft	0.2 ft
Pipe Run = 170 ft, Slope = 5%	Pipe Run = 2 ft, Slope = 45%	Pipe Run = 2 ft, Slope = 1%

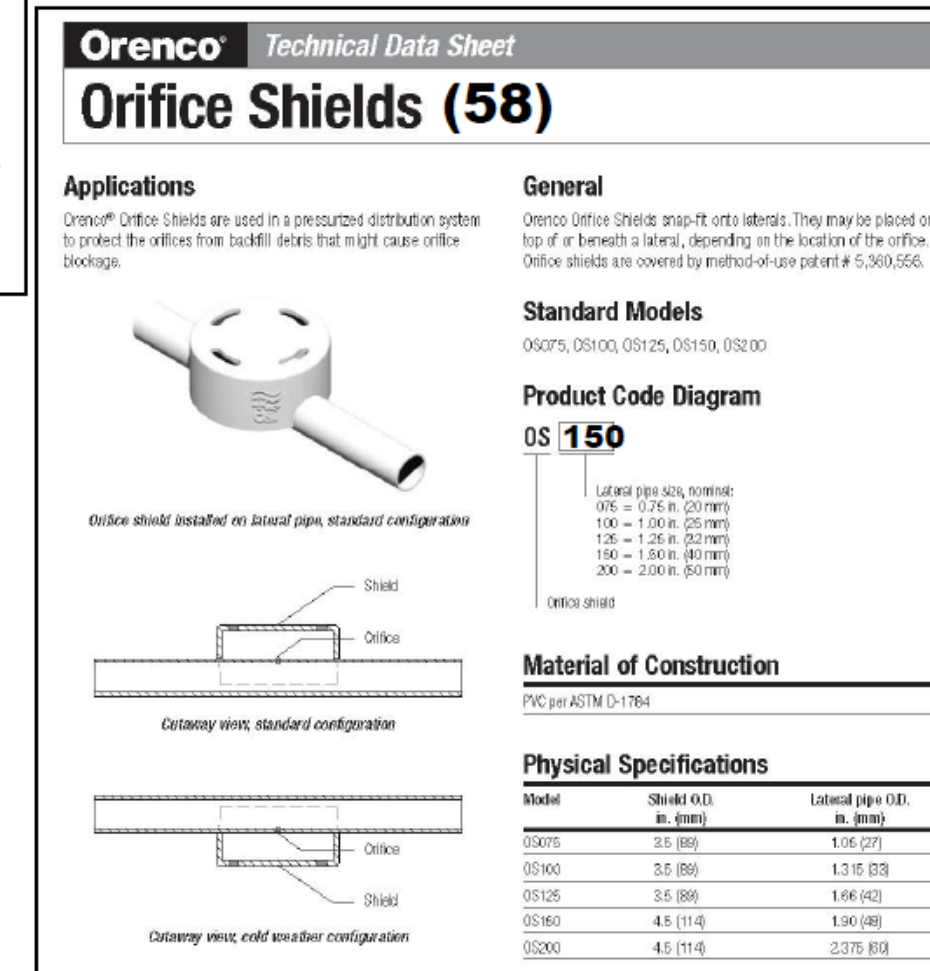
BURIAL DEPTHS: Septic Tank 12", AX25RT 2" above grade, Pump Tank 22"



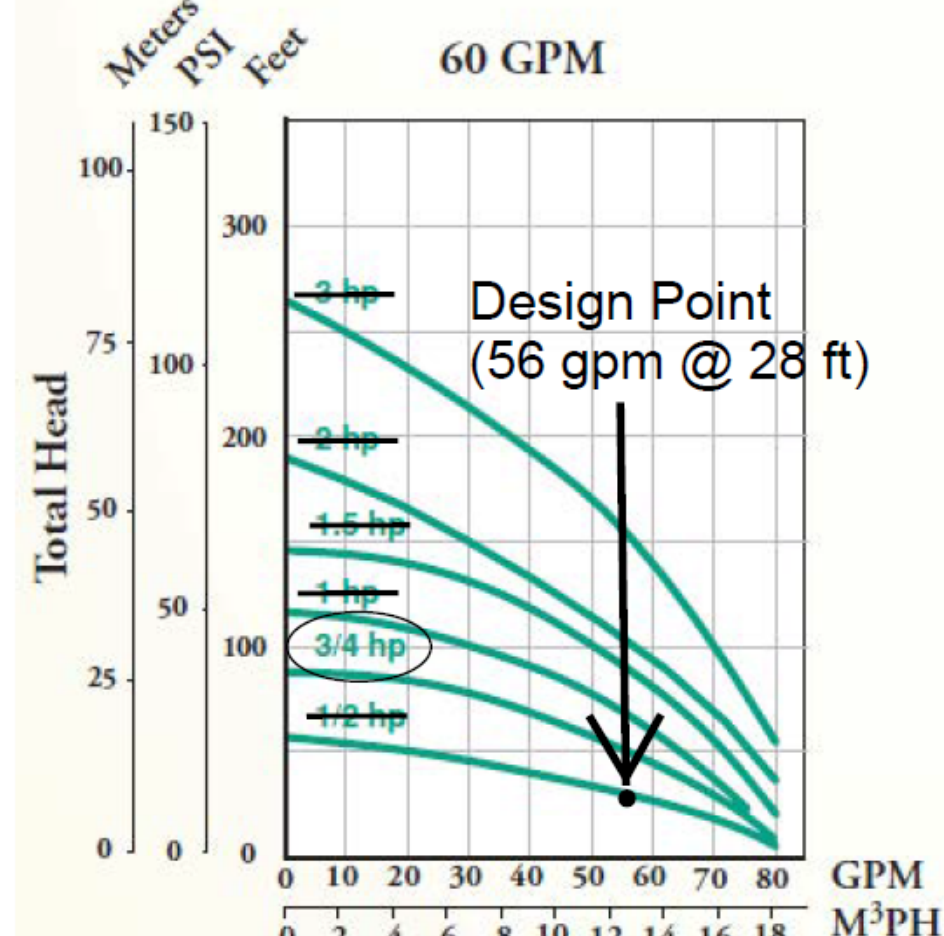
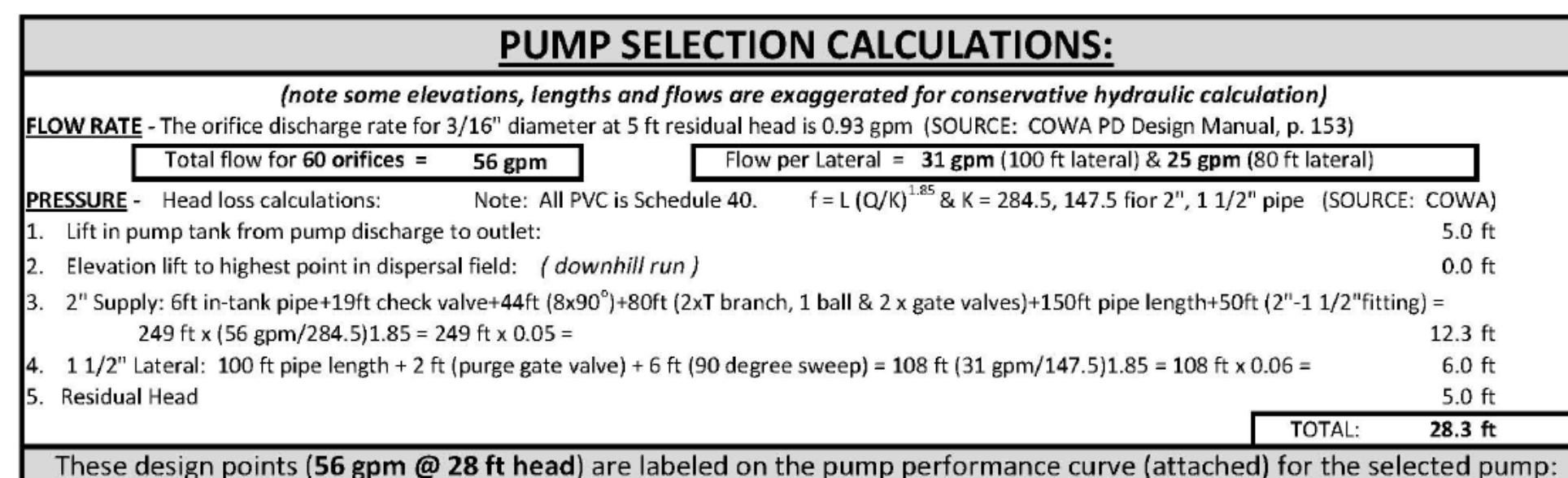
ORIFICES per LATERAL:	12 O'Clock position	6 O'Clock position	Total Orifices	Distance of 1st Orifice From Each Trench End
100 ft laterals:	32	1	33	24"
80 ft laterals:	26	1	27	18"

60 orifices each side of diverter valve.

Note that one of the 100 ft laterals is divided into two 50 ft lines.



Note that hydraulic considerations were not affected by the changes to the layout in this revision.



The design point is under the performance curve for the selected pump
Therefore, hydraulic requirements will be met.

Stainless Steel 1/2 - 1.5 HP Single-Phase Units						
Order No.	Model	GPM	HP	Volt	Wire	Wt.
96706015	60150754-2W320	60	3/4	230	2	22

<p>ANNUAL SEPTIC & PUMP TANKS INSPECTION REQUIRED:</p> <ul style="list-style-type: none"> Access risers & lids in good condition. Structural Integrity - probe interior walls/baffles, inlet/outlet T-pipes. Check Tuff-Tite effluent filter and clean if needed. Septic tank liquid level - should be at outlet invert in tank. Pump tank electrical & signal wires in good condition. Pump tank proper operation of float switches. 	<p>ON-SITE WATER TIGHTNESS TESTING (REQUIRED PRIOR TO SEPTIC TANK & PUMP TANK USE)</p> <ol style="list-style-type: none"> 1. FILL TANK TO TOP OF RISER 1 INCH FROM LID 2. LET TANK SIT FOR 1 HOUR 3. OBSERVE WATER LEVEL IN RISER BEFORE AND AFTER 1 HR PERIOD 4. IF LEVEL HAS FALLEN, INSPECT FOR LEAKS 5. REPAIR ANY LEAKS AND REPEAT TEST
<p>SEPTIC TANK SHALL BE PUMPED OUT WHENEVER SOLIDS or FLOATING MATERIAL EXCEED 30% OF TANK VOLUME OR ENCRUST ON INLET/OUTLET T'S.</p> <p>MINIMUM SEPTIC TANK PUMPING FREQUENCY IS 3 TO 5 YEARS.</p> <p>PUMP TANK to be pumped out when debris may encroach on pump intake.</p>	<p>Construction Inspections Required w/ Designer & DEH:</p> <ol style="list-style-type: none"> 1. Layout Inspection - All components staked or painted 2. Open Trench Inspection - Components in & Not covered 3. Septic, Pump & Treatment Tank Water Tight Testing 4. Hydraulics (squirt) and Alarms Tests 5. Final Inspection - All components covered.
<p>ONGOING MONITORING & REPORTING REQUIREMENTS: (must be performed by licensed professional or service provider)</p> <p>YEARS 1 - 4: Semi-annually // YEARS 5+ of operation: Annually</p> <ol style="list-style-type: none"> 1. Record wastewater flow based on water meter readings or other method 2. Measurement and recording of water levels in inspection wells. 3. Inspection of pump and valves operation, including squirt test. 4. Inspection of dispersal fields for seepage, erosion, etc. 	<p>Owner Responsibility for Alternative Type Septic System: Owner will acknowledge that the property is served by an alternative pressure-dosed trench type septic system requiring an ongoing service contract, maintenance, and an annual DEH operation permit.</p>
<p>MONITORING REPORT SHALL BE SIGNED BY LICENSED PROFESSIONAL AND SUBMITTED TO DEH IN ACCORDANCE WITH THE SYSTEMS DESIGNER REPORT</p>	

