TOPO NOTE

TOPOGRAPHY SURVEY CONDUCTED BY ADOBE ASSOCIATES, INC.
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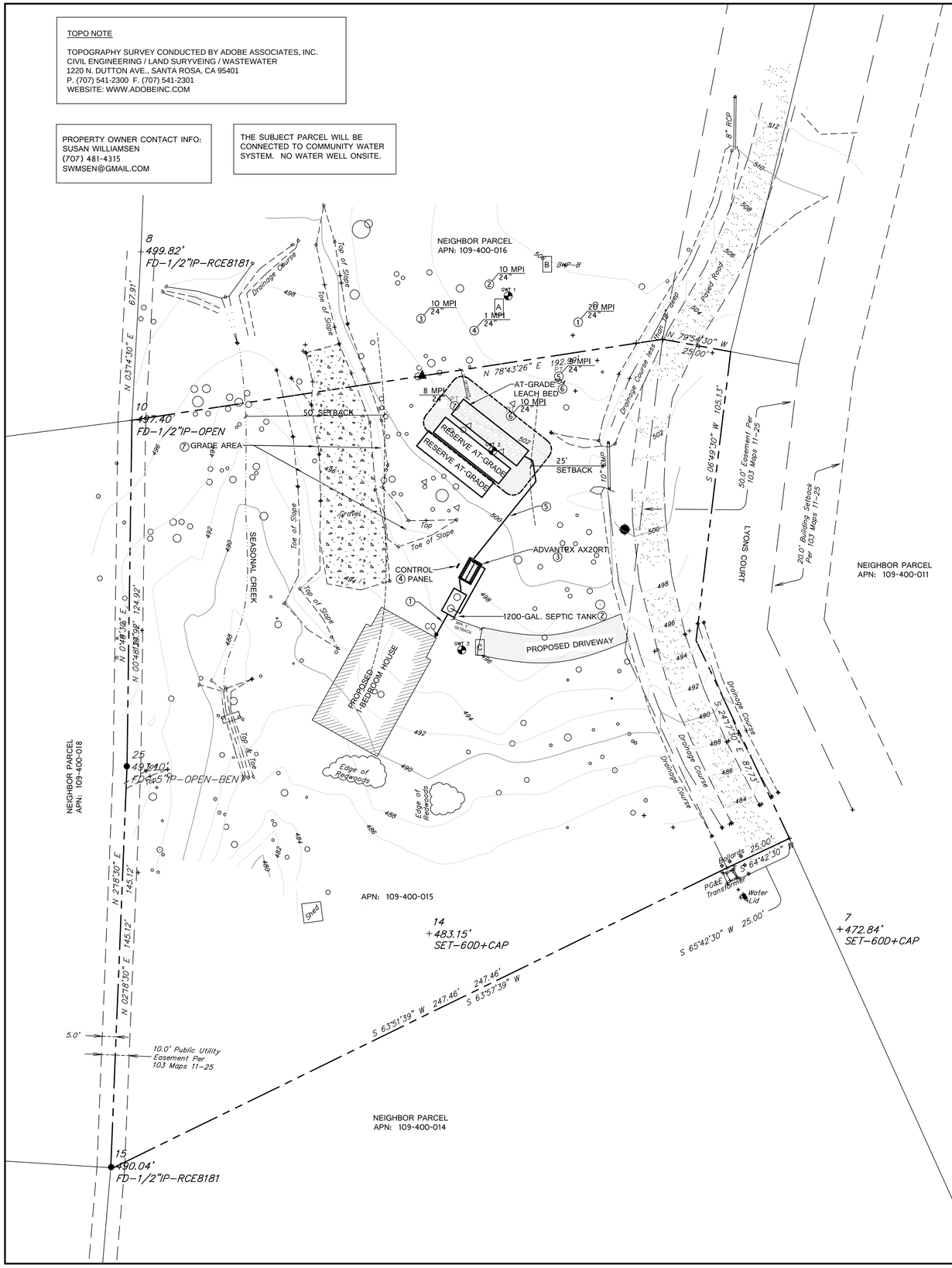
THE SUBJECT PARCEL WILL BE CONNECTED TO COMMUNITY WATER SYSTEM. NO WATER WELL ONSITE.



KEY NOTES:

① INSTALL 4" ABS SCH 40 GRAVITY SEWER LINE WITH TWO-WAY CLEAN. SEWER LINE SHOULD HAVE A MINIMUM OF 1/8" PER FOOT DROP IN SLOPE.

② INSTALL 1,200-GALLON CONCRETE SEPTIC TANK (IAPMO APPROVED). SEE DETAIL ON SHEET 5.

③ INSTALL AN ADVANTEX AX20-RT, MODE 3B (SEE DETAIL SHEET 5).

④ INSTALL A ORENCO VERICOMM CONTROL PANEL WITH DOSE COUNTER. SET PUMP TO DOSE 30 GALLONS. (SEE DETAIL SHEET 5).

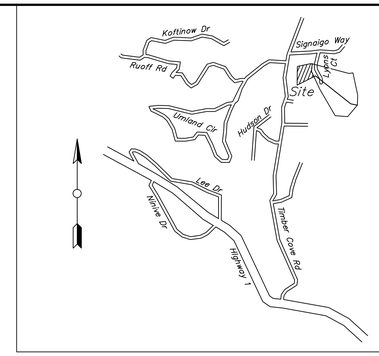
⑤ INSTALL 1.25" Ø SCH 40 PVC SUPPLY PRESSURE SEWER LINE

⑥ INSTALL AN AT-GRADE LEACH BED (SEE ILLUSTRATION ON SHEET 2 AND INSTALLATION GUIDELINE ON SHEET 3).

⑦ GRADE TO 30% SLOPE WITH LESS THAN 50 CUBIC YARD OF SOIL. iF MORE THAN 50 CUBIC YARD OF SOIL IS ADDED, THEN IT WILL NEED A GRADING PERMIT.

LEGEND

① 20 MPI 24"	PERCOLATION HOLE
C	SOIL PROFILE HOLE
GWT 3	WET WEATHER GROUNDWATER HOLE
△	PERFORMANCE WELL
CO	CLEANOUT - TWO WAYS
	APPROXIMATE BOUNDARY LINE
○	TRUNK OF TREE



VICINITY MAP

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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AT-GRADE SYSTEM WITH PRETREATMENT UNIT

DRAWN: TN

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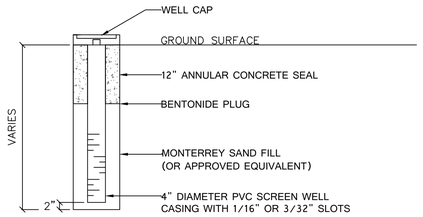
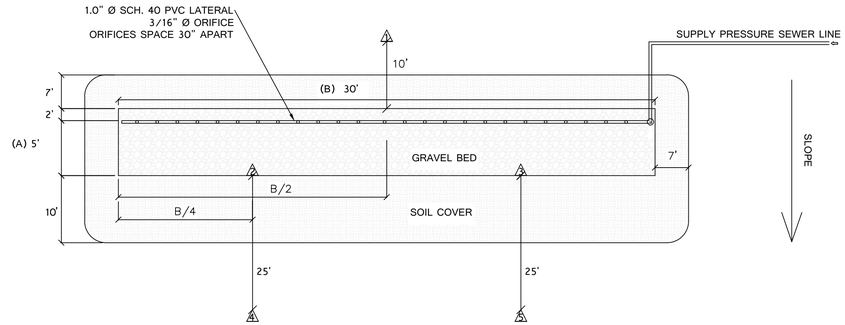
SHEET 1 of 5

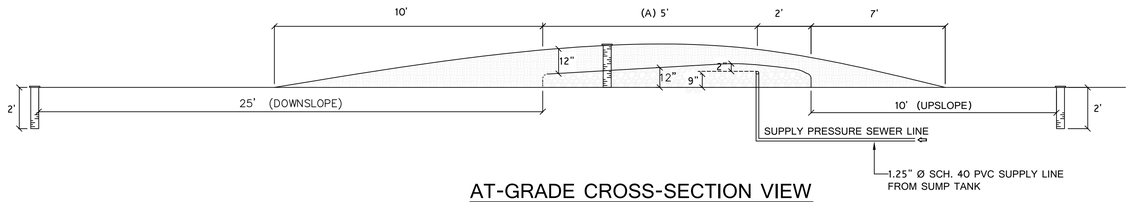


△ WELL #	LOCATION AND DEPTH
1	10 FEET UPSLOPE FROM UPSLOPE GRAVEL BED EXTEND 24 INCHES BELOW ORIGINAL GROUND SURFACE
2, 3	DOWN SLOPE TOE OF GRAVEL BED EXTEND TO THE GRAVEL SOIL INTERFACE THE SLOTTED/SCREEN CASING OF THE WELL SHALL EXTEND THROUGH THE ENTIRE DEPTH OF THE GRAVEL AND THE GRAVEL (INSTEAD OF SAND) SHALL BE PLACED IN THE ANNULUS BETWEEN THE CASING AND THE BOREHOLE.
4, 5	25 FEET DOWNSLOPE FROM DOWNSLOPE GRAVEL BED EXTEND 24 INCHES BELOW ORIGINAL GROUND SURFACE

PERFORMANCE WELL DETAIL
N.T.S.



AT-GRADE PLAN VIEW
N.T.S.



AT-GRADE CROSS-SECTION VIEW
N.T.S.

SEWER LINE CROSS-SECTION (NONSTANDARD)

PURGE VALVE SIDE VIEW
N.T.S.

LATERAL SPECIFICATION:

1.0" Ø SCH. 40 PVC LATERAL
3/16" Ø ORIFICE
ORIFICES SPACE 30" APART
60" SQUIRT HEIGHT

DISTRIBUTION DETAIL
N.T.S.

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SETBACK REQUIREMENTS FOR NONSTANDARD DISPOSAL SYSTEM

HORIZONTAL MINIMUM DISTANCE FROM:	SEPTIC TANK	NON STANDARD SYSTEM (MOUND, AT-GRADE, PD, DRIP)
1. BUILDINGS OR STRUCTURES:		
UPGRADIENT	5 FEET	10 FEET
LATERALLY	5 FEET	10 FEET
DOWNGRADIENT	5 FEET	25 FEET
2. PROPERTY LINES AND/OR EASEMENT:		
UPGRADIENT	5 FEET	10 FEET
LATERALLY	5 FEET	10 FEET
DOWNGRADIENT	5 FEET	25 FEET
3. WATER SUPPLY WELLS AND SPRINGS	50 FEET (NOTE 1)	100 FEET
4. PUBLIC WATER SUPPLY WELLS:		
DISPERSAL DEPTH LESS THAN OR EQUAL TO 10 FT.	50 FEET (NOTE 1)	150 FEET
DISPERSAL DEPTH GREATER THAN TO 10 FT.	50 FEET (NOTE 1)	200 FEET
5. PUBLIC WATER SUPPLY SURFACE INTAKE:		
LESS THAN 1200 FEET TO OWTS	50 FEET (NOTE 1)	400 FEET
LESS THAN 2500 FEET TO OWTS	50 FEET (NOTE 1)	200 FEET
6. PERENNIALLY FLOWING STREAMS (AS MEASURED FROM EDGE OF WATERBODY'S NATURAL OR LEVIED BANK)	50 FEET	100 FEET
7. EPHEMERAL STEAMS/WATER BODIES (AS MEASURED FROM THE EDGE OF WATERCOURSE) AND	25 FEET	50 FEET
8. DRAINAGE WAYS GREATER THAN 18 INCHES IN DEPTH	25 FEET	50 FEET
9. DRAINAGE WAYS LESS THAN OR EQUAL TO 18 INCHES IN DEPTH	15 FEET	25 FEET
10. INTERCEPT DRAIN - PERFORATED:		
UPGRADIENT	15 FEET	15 FEET
LATERALLY	25 FEET	50 FEET
DOWNGRADIENT	25 FEET	50 FEET
11. NON-PERFORATED / SOLID DRAIN PIPES:		
UPGRADIENT	5 FEET	10 FEET
LATERALLY	10 FEET	15 FEET
DOWNGRADIENT	10 FEET	15 FEET
12. OCEAN, LAKE, POND, RESERVOIR (AS MEASURED FROM THE HIGH WATERLINE)	50 FEET	100 FEET
13. LARGE TREES	10 FEET	CONSIDERED ON A CASE BY CASE BASIS
14. DISPOSAL FIELD	5 FEET	------
15. DOMESTIC WATER PIPE*	5 FEET	5 FEET
16. PRESSURE PUBLIC WATER MAIN	5 FEET	10 FEET
17. DISTRIBUTION BOX	5 FEET	------
18. FILL AREAS	------	15 FEET
19. CUT BANKS (MANMADE EXCAVATION OF THE NATURAL TERRAIN GREATER THAN 3 FEET) NATURAL BLUFFS, SHARP CHANGE IN SLOPE		
SOIL OR GROUNDWATER DEPTH BELOW DISPOSAL AREA IS GREATER THAN OR EQUAL TO 5 FEET	25 FEET	25 FEET
SOIL OR GROUNDWATER DEPTH BELOW DISPERSAL AREA IS LESS THAN 5 FEET	25 FEET	50 FEET
20. TITLE 22 RECYCLED WATER DISPERSAL AREA	5 FEET	PER RWQCB REQUIREMENTS
21. SWIMMING POOLS (DOWNGRADIENT)	5 FEET	25 FEET

NOTE 1: SEPTIC TANK AND SUMP TANK SHALL BE WATERTIGHT.

NOTE * : BOTTOM OF WATER PIPE SHALL BE GREATER THAN OR EQUAL TO 12 INCHES ABOVE TOP OF SEWER/DRAIN LINE. WATER PIPE PLACED ON A SOLID SHELF EXCAVATED AT ONE SIDE OF THE COMMON TRENCH WITH A MINIMUM HORIZONTAL DISTANCE OF GREATER THAN OR EQUAL TO 12 INCHES (2007 CA PLUMBING CODE TABLE K-1)

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. UNDERGROUND SERVICE ALERT (U.S.A.) SHALL BE CALLED AT (800) 227-2600 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.

2. ALL OF THE LOCATIONS OF THE EXISTING UTILITIES SHOWN IN THE PLANS HAVE BEEN ESTABLISHED BY SITE VISIT, FILED SURVEY, OR OBTAINED FROM AVAILABLE RECORDS AND SHALL THEREFORE BE CONSIDERED APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS.

3. SEPTIC SYSTEM CAN BE CONSTRUCTED IF THE SOIL MOISTURE AT THE APPROPRIATE DEPTHS IS NOT SO HIGH AS TO HAVE THE SOIL SMEAR OR COMPACT DUE TO CONSTRUCTION ACTIVITIES.

4. SEPTIC SYSTEM CANNOT BE CONSTRUCTED DURING OR AFTER A HEAVY RAIN.

5. INSTALLATION OF A CONTROL PANEL AND CONNECTING ELECTRICAL WIRE WILL REQUIRE AN ELECTRICAL PERMIT FROM THE COUNTY.

6. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION FROM THE COUNTY DISTRICT SEPTIC INSPECTOR. THE INSPECTION REQUEST IS TO BE CALLED IN THROUGH SELECTRON AT 565-3551. PLEASE NOTE THIS IS ONLY A REQUEST FOR AN INSPECTION, NOT A GUARANTEE. THE TANKS, SEWER LINE, MANIFOLD, LATERAL LEACH LINES, AND ANY OTHER WORKS SHALL BE LEFT OPEN (NO SOIL COVER) FOR THE INSPECTION. A TRANSIT SHOULD BE AT THE SITE TO CHECK THE LEVEL OF THE LATERAL LEACH LINES.

7. THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY OF ANY ADVERSE CONDITIONS DISCOVERED DURING CONSTRUCTION.

8. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING THE SAFETY OF PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL HOLD HARMLESS, INDEMNIFY, AND DEFEND THE COUNTY OF SONOMA AND THE DESIGNER WITH HER ASSISTANT OF ALL LIABILITY CLAIMS, LOSSES, OR DAMAGE ARISING OR ALLEGED TO ARISE FROM THE PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE SONOMA COUNTY STAFF, AND THE DESIGNER.

9. THE CONTRACTOR IS RESPONSIBLE FOR INSURING ALL CONSTRUCTION MEETS CODES.

10. THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, MATERIALS, SUPPLIES, AND EQUIPMENTS FOR THE CONSTRUCTION ON THIS PLAN.

11. THE BOUNDARY LINES ON THIS PARCEL ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

12. IT IS THE SOLE RESPONSIBILITY OF THE DEVELOPER OR CONTRACTOR OR OWNER TO OBTAIN ANY NECESSARY PERMIT TO START THE CONSTRUCTION.

13. ALL SITE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS, STAMPED BY THE COUNTY. ANY DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN OR VERBAL APPROVAL FROM THE DESIGNER.

14. THE DRAWING WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR WILL REVIEW THE DRAWING AND BRING ANY DISCREPANCIES TO THE DESIGNER PRIOR TO COMMENCING CONSTRUCTION WORK.

15. THE HOUSE AND ANY BUILDING WITH BATHROOM SHALL HAVE AN 1.6 GALLONS LOW FLUSH TOILET IN ALL BATHROOMS. WE RECOMMEND LOW FLOW FIXTURES IN THE HOUSE TO REDUCE SEWAGE WASTE FLOW.

16. HOMEOWNERS AND CONTRACTORS ARE PROHIBITED FROM PLACING UNACCEPTABLE PLANTS, SHRUBS TREES, ORNAMENTS, VEGETATIVE COVER, AND IRRIGATION SYSTEMS OVER THE SEPTIC SYSTEM.

17. DOWNSPOUT OF THE HOUSE'S ROOF DRAINAGE SHALL BE DIRECTED AWAY FROM THE SEPTIC TANK AND LEACH FIELD.

18. NO FOUNDATION, GRADE CUT OR FILL SHALL BE LOCATED WITHIN 50 FEET DOWNSLOPE OR LATERALLY TO THE LEACH FIELD AND RESERVE AREA AND 25 FEET TO THE SEPTIC TANK.

19. PROPOSED SEPTIC TANK, LEACH FIELD, AND RESERVE AREAS SHALL BE LEFT UNDISTURBED BEFORE AND AFTER THE SEPTIC SYSTEM INSTALLATION.

NONSTANDARD GENERAL CONSTRUCTION NOTES

1. THE PROPERTY OWNER SHALL HIRE A LICENSED A OR C-42 TYPE CONTRACTOR THAT HAVE THE EDUCATION, TRAINING, EXPERIENCE, AND ALL OF THE SPECIALTY EQUIPMENT REQUIRED TO PROPERLY INSTALL THE SEPTIC SYSTEM.

2. THE DESIGNER SHALL INSPECT THE SITE AND EVALUATE WEATHER CONDITIONS PRIOR TO CONSTRUCTION OF THE SYSTEM TO VERIFY DRY AND ACCEPTABLE SOIL AND THAT WEATHER CONDITIONS ARE SUITABLE TO BEGIN CONSTRUCTION. THE FOLLOWING IS PROCEDURE TO DETERMINE IF CONSTRUCTION CAN BEGIN:
   A. SELECT A HANDFUL OF SOIL FOR TESTING (ANY NON-SOIL MATERIAL, ROCKS, ROOTS, ETC. SHOULD BE REMOVED). DO NOT ADD MOISTURE OR LET DRY-OUT. SAMPLE SHOULD BE TAKEN AT THE DEPTH OF EXCAVATION (ABSORPTION AREA).
   B. ROLL THE SAMPLE BETWEEN THE PALMS (IN THE SHAPE OF A PENCIL/WORM SHAPE).
   C. CONTINUE ROLLING THE THREAD UNTIL IT REACHES AN UNIFORM DIAMETER OF 1/8 INCH IF POSSIBLE.
   D. IF THE SAMPLE DOES NOT REACH A DIAMETER OF 1/8 INCH, THE SOIL IS ABOVE THE PLASTIC LIMIT AND CONSTRUCTION CAN PROCEED.
   E. IF THE SAMPLE IS ROLLED INTO A DIAMETER EQUAL TO 1/8 INCH BEFORE BREAKING, THE SOIL IS TOO WET AND CONSTRUCTION SHOULD NOT OCCUR.

3. THE DESIGNER WILL VERIFY WITH THE CONTRACTOR THE PROPER STAKING OF THE SYSTEM PRIOR TO ANY CONSTRUCTION.

4. ALL MEETINGS AND INSPECTIONS SHALL BE SCHEDULE WITH THE DESIGNER A MINIMUM OF 48 HOURS IN ADVANCE AND SHALL INCLUDE AS A MINIMUM:

PRE-CONSTRUCTION: CHECK BY DESIGNER.
   A) SOIL MOISTURE AT THE APPROPRIATE DEPTHS IS NOT SO HIGH AS TO HAVE THE SOIL SMEAR OR COMPACT DUE TO CONSTRUCTION ACTIVITIES.
   B) IMMINENT WEATHER CONDITIONS APPEAR THEY WILL NOT CREATE UNSUITABLE SOIL MOISTURE CONDITIONS DURING THE COURSE OF CONSTRUCTION.
   C) LAYOUT AND STAKING OF THE PRIMARY SYSTEM BASAL AREA, DISTRIBUTION BED, AND THE RESERVE AREA BOUNDARY TO SUBSTANTIALLY CONFORM TO THE APPROVED CONSTRUCTION.
   D) THE SOURCE OF THE SOIL COVER MATERIAL SHALL BE DESIGNATED, AND A SAMPLE SHALL BE MADE AVAILABLE AND APPROVED BY THE DESIGNER PRIOR TO PLACEMENT.

INTERIM INSPECTION: JOINT INSPECTION FROM THE DESIGNER, COUNTY SEPTIC STAFF, AND CONTRACTOR PRIOR TO SOIL COVERING. THE INSPECTION WOULD INCLUDE:
   A) LINE AND GRADE OF ALL EXCAVATIONS, INCLUDING THE LENGTH AND LEVEL OF THE LEACH LINES, AND FILLS AS APPLICABLE.
   B) FUNCTION AND SETTING OF ANY CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO VALVES, SWITCHES, AND ALARMS.
   C) HYDRAULIC TESTING OF ANY PUMP AND DISTRIBUTION SYSTEM TO ASSURE THAT THE PUMP IS ADEQUATE FOR DESIGN FLOWS.
   D) ALL THE REMAINING ELEMENTS REQUIRED TO COMPLETE THE SYSTEM SHALL BE ON SITE AT THE TIME FOR VERIFICATION AND APPROVAL BY THE DESIGNER FOR CONFORMANCE WITH THE PLANS AND SPECIFICATIONS.

FINAL INSPECTION: JOINT INSPECTION FROM THE DESIGNER, COUNTY SEPTIC STAFF, AND CONTRACTOR AFTER SOIL COVER. THE INSPECTION SHALL INCLUDE:
   A) SOIL COVER AND MONITORING WELLS
   B) THE DESIGNER SHALL VERIFY THAT ALL CONSTRUCTION IS IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
   C) A FINAL LETTER FROM THE DESIGNER TO THE COUNTY WELL AND SEPTIC SECTION SHALL STATE THAT ALL CONSTRUCTION HAS BEEN COMPLETED, APPROVED,AND IS IN CONFORMANCE WITH ALL SPECIFICATIONS.
   D) AN ELECTRICAL PERMIT MUST BE APPLIED AT PRMD FOR THE PUMP AND ALARM SYSTEM AND GIVEN A FINAL APPROVAL PRIOR TO THE FINAL APPROVAL OF THE SEPTIC SYSTEM.

AT-GRADE CONSTRUCTION NOTES

1. THE USE OF WHEEL TYPE VEHICLES IS PROHIBITED.
   A) FOR THE PURPOSE OF RIPPING.
   B) WHEN DRIVING ON ANY AREAS THAT HAVE BEEN RIPPED.
   C) WHEN PLACING OR MOVING THE SOIL COVER.
   D) AT ANY TIME THAT THE SOIL CONDITIONS ARE WET, MOIST, OR SATURATED.

2. PLACEMENT OF THE PRESSURIZED TRANSMISSION LINE FROM THE SUMP TANK TO THE AT-GRADE MANIFOLD SHALL BE A MINIMUM OF 24 INCHES BELOW THE SURFACE OF THE MOUND.

3. SITE PREPARATION OF SOIL SURFACE TO A DEPTH OF 8 TO 12 INCHES.
   A) MOW EXCESSIVE VEGETATION.
      I. REMOVE TREES
      II. CUT AND GRIND STUMPS TO A DEPTH OF 12 INCHES.
   B) PERFORM INITIAL RIPPING PARALLEL TO THE CONTOURS OF THE GROUND AND ONLY WITHIN THE LIMITS OF THE GRAVEL BASE; RIPPERS SET 8 TO 10 INCHES APART. THE INTERFACE OF THE NATIVE SOIL AND THE AT-GRADE SOIL SHALL BE RIPPED AFTER THE GRAVEL HAS BEEN PLACED AND JUST PRIOR TO PLACEMENT OF THE AT-GRADE SOIL COVER.
   C) PROHIBIT ALL TRAFFIC ON ANY RIPPED SURFACES UNTIL THE FULL DEPTH OF GRAVEL BED OR COVER MATERIAL HAS BEEN PLACED.

4. GRAVEL BED
   A) TEMPORARY FORM BOARS ARE REQUIRED TO HOLD AGGREGATE IN PLACE TO CONSTRUCT THE GRAVEL BED.
   B) THE TEMPORARY FORM BOARDS SHALL BE REMOVED PRIOR TO PLACEMENT OF THE SOIL COVER.
   C) PLACE PERFORMANCE WELLS AS SPECIFIED IN THE PLAN.
   D) PLACE AGGREGATE (3/8 INCH DOUBLE WASHED PEA GRAVEL SIZE TO 2.0 INCH DOUBLE WASHED DRAIN ROCK) IN THE DESIGNATED AREA OF THE TILLED AREA TO THE APPROPRIATE DEPTH AS SPECIFIED ON THE PLAN. WORK FROM THE UPSLOPE SIDE AND AVOID COMPACTION ALONG THE DOWNSLOPE SIDE.

5. CONSTRUCT DISTRIBUTION NETWORK PRIOR TO COVER PLACEMENT.

6. PERFORM HYDRAULIC TEST AFTER THE DISTRIBUTION HAS BEEN COMPLETED.
   A) PUMP MUST BE ADEQUATE TO PROVIDE HYDRAULIC ORIFICE DISCHARGE OF A MINIMUM OF 60 INCHES UPWARD DISCHARGE. ORIFICES SHALL HAVE A PROTECTIVE SHIELD.
   B) DISTRIBUTION TO ALL LATERALS SHALL BE EQUAL.
   C) THIS TEST SHALL BE INSPECTED BY THE CONSULTANT AND THE PRMD REPRESENTATIVE.

7. PLACE SOIL COVER
   A) PLACE 2 INCHES (RESIDENTIAL) OR 3 INCHES (COMMERCIAL) AGGREGATE OVER THE DISTRIBUTION NETWORK.
   B) PLACE GEO-TEXTILE FABRIC OVER THE AGGREGATE. EXTEND ONLY TO THE EDGE OF THE AGGREGATE.
   C) CONDITION SOIL COVER WITH SUFFICIENT MOISTURE TO PERMIT TRACK ROLLING TO A FIRM COHESIVE SURFACE.
   D) RIP AREA TO BE COVERED WITH COVER SOIL.
   E) PLACE SOIL AGAINST THE FORM BOARDS BY TRACK ROLLING ONLY. REMOVE THE FORM BOARDS.
   F) PLACE SOIL OVER ENTIRE GRAVEL BED BY TRACK ROLLING AND GROOMING BY HAND. COMPLETE PROPER DRAINAGE WORK AND EROSION CONTROL MEASURES BEFORE FINAL INSPECTION. SEED AND MULCH.

8. ESTABLISH THE FINAL GRADE OF THE AT-GRADE BY TRACK ROLLING AND GROOMING BY HAND.

9. INSTALL PERFORMANCE WELLS AND DETAILS AS SHOWN ON THE PLANS.

EROSION CONTROL NOTES

1. PRIOR TO SEPTIC SYSTEM FINAL APPROVAL, ACCEPTABLE EROSION CONTROL MUST BE COMPLETED. THE INSTALLED LEACH FIELD SHALL BE SEEDED AND STRAWED FOR EROSION CONTROL.

2. THE PROPERTY OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND.

3. DUST CONTROL SHALL BE PROVIDED BY CONTRACTOR DURING ALL PHASES OF CONSTRUCTION. STORM DRAIN INLETS SHALL BE PROTECTED FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION IS COMPLETE.

4. ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY EROSIVE STORM WATER FLOW.

5. SOIL, MATERIAL STOCKPILES, AND FERTILIZING MATERIAL SHALL BE PROPERLY PROTECTED WITH PLASTIC COVERS OR EQUIVALENT BEST MANAGEMENT PRACTICES (BMP) TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.

6. SOLID WASTE, SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY OR AS NECESSARY. REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE COORDINATED BY THE CONTRACTOR.

7. A CONCRETE WASHOUT AREA SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER COUNTY WATERWAYS SUCH AS CREEKS OR STORM DRAINS. NO WASHOUT OF CONCRETE, MORTAR MIXERS, OR TRUCKS SHALL BE ALLOWED ON SOIL. CONCRETE WASTE SHALL BE PROPERLY DISPOSED.

8. PROPER APPLICATION, CLEANING, AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED DURING CONSTRUCTION ACTIVITIES TO PREVENT THE DISCHARGE OF POLLUTANTS.

9. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE, AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.

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REQUIRED FEATURES FOR THE SUMP

1. THE MINIMUM WORKING CAPACITY OF ALL SUMPS IS 300 GALLONS, INCLUDING:
   A. THE DESIGN DOSE VOLUME.
   B. A MINIMUM 200 GALLON ADDITIONAL STORAGE CAPACITY BETWEEN THE HIGH WATER ALARM AND INLET.
   C. THE MINIMUM WORKING CAPACITY OF SUMPS FOR NON-STANDARD OWTS IS 500 GALLONS OR 3 TIMES THE DESIGNED DOSE, WHICHEVER IS GREATER.
   D. ALTERNATIVE CONFIGURATIONS MAY BE APPROVED FOR SYSTEMS UTILIZING PRETREATMENT AND REPAIRS IF JUSTIFIED BY THE DESIGNER.

2. CONCRETE TANKS SHALL BE A MONOLITHIC CASTING OR JOINTS SEALED WITH APPROPRIATE SEALANTS.
   A. CONCRETE TANKS SHALL BE MADE OF SULFATE-RESISTING CEMENT, SPECIFICATION C 150, TYPE II OR HIGHLY SULFATE-RESISTING CEMENT, SPECIFICATION C 150, TYPE V OR COATED WITH AN ASPHALT EMULSION OR EQUIVALENT ON THE INSIDE.
   B. THE COATED INTERIOR SHALL BE ALLOWED TO DRY FOR AT LEAST 24 HOURS.
   C. ASPHALT EMULSION OR TAR SHALL NOT BE USED AS JOINT SEALANTS.

3. SUMP TANKS SHALL BE CONSTRUCTED OF SOLID DURABLE MATERIALS, WHICH ARE NOT SUBJECT TO EXCESSIVE CORROSION AND DEGRADATION IN THE PRESENCE OF DOMESTIC SEWAGE AND SHALL BE WATERTIGHT.
   A. THEY SHALL MEET THE IAPMO CONSTRUCTION STANDARDS FOR SEPTIC TANKS OF THE SAID MATERIAL (GLASS-FIBER-REINFORCED POLYESTER, POLYETHYLENE, SYNTHETIC FIBER REINFORCED).
   B. WOOD AND/OR METAL TANKS ARE NOT ALLOWED.

4. ALL SUMPS SHALL HAVE A RISER THAT EXTENDS TO AT LEAST 2 INCHES ABOVE THE FINISHED GRADE.
   A. RISERS SHALL BE SEALED WATERTIGHT TO THE SUMP CHAMBER WITH MATERIALS SUITED FOR THE SPECIFIC APPLICATION.
   B. WOOD RISERS ARE NOT ALLOWED.
   C. RISERS AND LIDS IN TRAFFIC AREAS SHALL BE TRAFFIC RATED AND MAY BE FLUSH WITH THE GROUND ELEVATION.

5. ALL PIPES AND/OR ELECTRICAL CONDUITS ENTERING THE SUMP TANK OR RISER SHALL BE SEALED TO MAKE THE PASSAGE GAS AND WATER TIGHT.
   A. IF THE PIPES AND/OR ELECTRICAL CONDUITS ENTER A SYNTHETIC TANK OR PLASTIC RISER, RUBBER GROMMETS SHALL BE USED
   B. NON-SHRINK GROUTS SHOULD BE USED WITH CONCRETE TANKS OR RISERS.

6. SUMPS ON DOWNHILL RUNS SHALL BE PLACED WITHIN 30 FEET OF THE LEACHFIELD, UNLESS GREATER DISTANCES ARE ALLOWED. WHEN PRACTICAL, SUMPS SHALL BE LOCATED AT A LOWER ELEVATION THAN THE LEACHFIELD.
   A. THE SUMP TANK LOCATION MUST BE ACCESSIBLE FOR A SEPTIC TANK PUMPER TO PUMP THE TANK.

7. A PRE-SCREENING DEVICE OR FILTER CAPABLE OF SCREENING SOLIDS IN MINIMUM 3/16 INCHES SIZE SHALL BE INSTALLED IN THE SEPTIC TANK OR SUMP CHAMBER TO ASSIST IN PREVENTING SUSPENDED SOLIDS FROM REACHING THE PUMP.

8. WASTEWATER SHALL EXIT THE SUMP ONLY THROUGH PUMP AND PRESSURE LINES. GRAVITY OVERFLOWS ARE PROHIBITED.

REQUIRED FEATURES OF THE PUMP ARE AS FOLLOWS:

1. FLOAT CONTROLS FOR THE PUMP AND AUDIO/VISUAL ALARM SHALL BE MOUNTED TO A SCHEDULE 40 PVC POLE, MOUNTED INSIDE A PUMP CHAMBER, WHICH CAN BE REMOVED FOR MAINTENANCE.

2. CONTROL FLOATS SHALL BE ATTACHED TO THE PVC POLE BY PLASTIC TIE STRAPS OR PLASTIC FLOAT COLLARS. A. STAINLESS STEEL STRAPS WILL NOT BE ACCEPTED.

3. THE PUMP SHALL BE MOUNTED A MINIMUM OF 4 INCHES ABOVE THE BOTTOM OF THE SUMP CHAMBER. A. IF APPLICABLE, NON-CORROSIVE MATERIALS SHALL BE USED TO SUPPORT THE PUMP.

4. FOR THE SITUATIONS WHERE A PUMP MUST BE INSTALLED IN THE SECOND CHAMBER OF THE SEPTIC TANK, THE PUMP SHALL BE PLACED IN A SCREENED PUMP VAULT WITHIN THE SECOND CHAMBER.
   A. MICRODOSING SHALL BE REQUIRED TO MINIMIZE SWINGS IN THE LIQUID LEVEL.

REQUIRED ELECTRICAL FEATURES ARE AS FOLLOWS

1. ALL MATERIALS, CONNECTIONS, AND SPECIFICATIONS SHALL MEET THE CALIFORNIA ELECTRIC CODE. A. IN ALL CASES IN WHICH A SUMP WITH A PUMP IS USED FOR AN OWTS, THE CONTRACTOR/OWNER SHALL OBTAIN AN ELECTRICAL PERMIT FROM PERMIT AUTHORITY OR CITY BUILDING DEPARTMENT HAVING JURISDICTION.

   B. THE PERMIT AUTHORITY SHALL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF ALL ELECTRICAL CODE REQUIREMENTS.

   C. DISCONNECTING MEANS (CONTROL PANEL OR DISCONNECTING SWITCH) SHALL BE LOCATED IN SIGHT FROM THE PUMP LOCATION PER THE COUNTY ADOPTED ELECTRICAL CODE.

2. THE ALARM SHALL BE EQUIPPED WITH: A. A LOUD (87 DECIBELS AT A 10-FOOT MINIMUM HORIZONTAL DISTANCE FROM THE ALARM LOCATION) AUDIO ALARM OPERATED BY A FLOAT SWITCH OR SWITCHES TO INDICATE AN "ALARM" SITUATION.
   B. A MINIMUM SIZED 7/8-INCH DIAMETER RED LIGHT SHALL BE MOUNTED ON THE FACE OF THE PANEL, WHICH SHALL GLOW AS LONG AS THE "ALARM" CONDITION EXISTS.
   C. A MOMENTARY "ALARM TEST/ALARM SILENCE" SWITCH TO TEST THE ALARM LIGHT AND HORN TO SIMULATE AN "ALARM" CONDITION AND TO SILENCE THE AUDIO ALARM HORN.

3. AN APPROVED LISTED MODEL OR TYPE OF FLOAT SWITCH SHALL BE USED TO ACTIVATE EACH PUMP. THE ALARM/CONTROL PANEL SHALL BE EQUIPPED WITH A MOTOR CONTACTOR FOR THE PUMP AND A PUMP HAND/OFF/AUTOMATIC SWITCH TO MANUALLY RUN THE PUMP BYPASSING THE CONTROL PANEL AUTOMATIC MODE AND TO TEST THE ALARM.

4. POWER SUPPLY TO EACH CIRCUIT BREAKER IN THE CONTROL PANEL SHALL BE FROM A SEPARATE DEDICATED CIRCUIT WITH CIRCUIT PROTECTION, OF EQUIVALENT OR HIGHER AMPERAGE RATING, AT THE POWER SUPPLY PANEL.
   A. THE ALARM/CONTROL PANEL SHALL BE EQUIPPED INTERNALLY WITH SEPARATE CIRCUIT PROTECTION FOR THE CONTROL AND PUMP CIRCUITRY.
      I. MULTIPLEX (MORE THAN 1 PUMP) SYSTEMS SHALL HAVE SEPARATE POWER SUPPLY CIRCUITS.
      II. SEPARATE CIRCUITS ARE REQUIRED FOR CONTROLS AND EACH PUMP.
      III. JOINT CIRCUITS MAY BE ACCEPTABLE FOR EXISTING SUMP/PUMP SYSTEMS THAT WERE INSTALLED PRIOR TO THIS REQUIREMENT IF FUSED PURSUANT TO THE CURRENT ELECTRICAL CODE.

   B. PUMP PROTECTION SHALL BE PROVIDED BY A THERMAL MAGNETIC CIRCUIT BREAKER FOR OVERLOAD PROTECTION.
      I. IF THE PUMP IS SINGLE-PHASE, THE MOTOR WINDINGS SHALL HAVE INTERNAL THERMAL OVERLOAD PROTECTION.
      II. IF THE PUMP IS 3-PHASE, THE CIRCUIT PROTECTION IN THE ALARM/CONTROL BOX SHALL BE EQUIPPED WITH AN ADJUSTABLE THERMAL OVERLOAD PROTECTION.

5. BELOW GRADE ELECTRICAL SPLICES SHALL BE PLACED IN A SONOMA COUNTY APPROVED PULL BOX INSTALLATION OR A SONOMA COUNTY APPROVED EXTERNAL SPLICE BOX WITH WATERPROOF SLICE CONNECTORS.
   A. TRAFFIC-RATED PULL BOXES SHALL BE USED IN TRAFFIC AND ADJACENT AREAS.

6. ELECTRICAL NON-METALLIC SPLICE BOXES MAY BE PLACED WITHIN THE SUMP CHAMBER FOR EXISTING SUMP/PUMP SYSTEMS THAT WERE INSTALLED PRIOR TO THIS REQUIREMENT. THEY SHALL BE GAS-TIGHT BOXES WITH WATERPROOF SPLICE CONNECTORS.

7. THE PUMP POWER LEAD AND THE FLOAT SWITCH CONTROL WIRES MAY RUN IN A COMMON CONDUIT. HIGH VOLTAGE AND LOW VOLTAGE CONDUCTORS SHALL BE RUN IN SEPARATE CONDUITS.
   A. ALL CORDS GOING INTO THE SUMP SHALL BE INDIVIDUALLY SEALED WITH NON-METALLIC GAS TIGHT FITTINGS IN EITHER THE RISER, JUNCTION BOX OR ALARM/CONTROL PANEL AS APPROPRIATE.
   B. METALLIC GAS TIGHT FITTINGS ARE NOT ALLOWED.
   C. ALL EXPOSED PVC CONDUIT SHALL BE SCHEDULE 80.

REQUIRED FEATURES FOR THE SUMP, CONTINUE:

8. THE CONTROL PANEL AND ITS CONTENTS SHALL BE UL LISTED.
   A. THE CONTROL PANEL SHALL BE PLACED IN AN EASILY ACCESSIBLE LOCATION.
   B. A NON-RESETTABLE DOSE COUNTER SHALL BE INSTALLED IN CONTROL BOXES UTILIZED FOR NON- STANDARD OWTS.
   C. IF A DOSE COUNTER IS NOT PROVIDED, A NON-RESETTABLE FLOW METER SHALL BE PROVIDED ON THE OUTGOING LINE TO THE DISPERSAL FIELD. ADDITIONALLY, SYSTEMS WITH FLUSH MODES SHALL BE EQUIPPED WITH A FLOW METER ON THE RETURN LINE. THE FLOW METER SHALL READ IN GALLONS PER MINUTE AND TOTAL GALLONS.
   D. THE CONTROL PANEL SHALL BE EQUIPPED SO SETTINGS CAN BE ADJUSTED MANUALLY ON-SITE.
   E. CONTROL BOXES THAT MUST BE OPENED TO VIEW THE DOSE COUNTER SHALL BE EQUIPPED WITH A CLEAR PLASTIC OR PYREX SAFETY SHIELD INSIDE THE CONTROL BOX.
   F. THE CONTROL BOX SHALL BE LABELED "CAUTION-ELECTRICAL HAZARD."
   G. THE DOSE SETTINGS (TIME OR GALLONS), CALCULATED DOSE VOLUME AND FLOAT SETTINGS SHALL BE POSTED ON THE INSIDE OF THE PANEL.

9. ALL EXTERIOR MOUNTED ALARM AND CONTROLLER ENCLOSURE SHALL BE NEMA TYPE 4. IF THE ALARM/CONTROLLER IS MOUNTED MORE THAN 75 FEET FROM ANY RESIDENCE OR COMMERCIAL STRUCTURE SERVED BY THE SYSTEM, A SEPARATE AUDIBLE/VISIBLE ALARM SHALL BE PROVIDED AT THE PRIMARY STRUCTURE CONNECTED TO THE OWTS.
   A. THE ENCLOSURE FOR THE REMOTE AND AUDIO/VISUAL ALARM SHALL BE NEMA TYPE 1 IF MOUNTED INDOORS.

REQUIRED FEATURES OF SEWAGE PIPING ARE AS FOLLOWS:

1. THE EFFLUENT LINE ENTERING THE SUMP SHALL BE MINIMUM OF 3 INCH DIAMETER, ABS SCH 40 OR PVC SCH 40, AND SHALL BE SEALED WITH A COUPLING INTEGRALLY CAST INTO THE TANK, A PROPERLY FIT NEOPRENE GROMMET OR WITH NON-SHRINK GROUT AS APPROPRIATE. A. THE EFFLUENT LINE SHALL BE TURNED DOWN WITH A SANITARY TEE FITTING AND DROP THAT EXTEND TO WITHIN 4 INCHES OF THE TANK FLOOR.

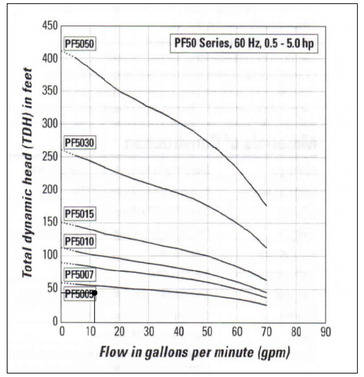
2. MINIMUM 1 INCH PVC SCHEDULE 40 FROM PUMP TO DISPERSAL FIELD IS REQUIRED WITH:
   A. A 1/8-INCH DIAMETER ANTI-SIPHON AND AIR VENT HOLE LOCATED BETWEEN THE PUMP AND CHECK VALVE ANGLED DOWN AND AWAY FROM THE FLOATS;
   B. PVC CHECK VALVE;
   C. PVC GATE OR BALL VALVE AND UNION(S).

3. BRASS TYPE FITTINGS, VALVES, AND PIPING ARE PROHIBITED IN SUMP CHAMBERS.
4. HIGH POINTS IN THE TRANSMISSION LINE AFTER THE SUMP MAY REQUIRE AN "AIR RELIEF VALVE" DEPENDING ON THE DESIGN SITUATION.

Design Calculation for an At-Grade System

= enter field

Project Address:	3000 Eastman Lane PET		
APN:	021-050-031		
Owner:			
No. of Bedrooms:		1	Bedrooms
Design Flow:		120	Gal/Day
Percolation Rate:		10	Min/Inch
(SAR) Soil Absorption Rate:		0.8	Gal/Sq Ft/Day
(LLR) Linear Loading Rate:		4	Gal/Lf/Day
Slope:		9	%
Required Gravel Area Check:	Design Flow ÷ SAR	150.00	Sq Ft
(A) Gravel Bed Width:	LLR ÷ SAR	5.00	Feet
		Use: 5	
(B) Gravel Bed Length:	Design Flow ÷ LLR	30.00	Feet
		Use: 30	
(F) Gravel Bed Height:	Residental= 0.75, Commercial = 1.08	0.75	Feet
(G) Top Soil Height at the Side:		1	Feet
(H) Top Soil Height at the Crown:		1	Feet
(U) Upslope Soil Width:		7	Feet
(E) Endslope soil Width:		7	feet
(D) Downslope Soil Width:		10	Feet
(L) Overall Length Gravel & Soil:	E + B + E	44	Feet
(W) Overall Width Gravel & Soil:	U + 2'+ A + D	24	Feet
Basal Area Required:	Design Flow ÷ SAR	150.00	Sq Ft
Basal Area Available:	B x A	150	Sq Ft



PUMP CURVE

PUMP SIZING = Enter Field

(A) Width of Gravel Bed			= 5	Feet
(B) Length of Gravel Bed			= 30	Feet
Total Length of Supply Line (From pump to manifold)			= 150	Feet
Supply Line diameter			= 1.25	Inches
Lateral Specification (End Feed):				
No. of Lateral Legs			= 1	
Length per Lateral Leg = B - 0.5'			= 29.5	Feet
Lateral Diameter			= 1	Inches
Spacing between laterals			= 0	Feet
Hole Diameter	(Select From 1/8, 3/16, or 1/4")	=	3/16"	
Hole Spacing			= 2.5	Feet
System Discharge: Pump to Leach Field (SDPL)				
Total Number of Holes =	*(Length per Lateral Leg X No. of Laterals) ÷ Hole Spacing*	=	11.80	Holes
Discharge Rate per Hole for 5' Distal Head @	3/16" Diameter hole	=	0.93	Gal/Min
Req. Discharge Rate =	Total No. Holes X Discharge Rate per Holes	=	**10.97**	Gal/Min
	(SDPL) , Use	=	**11**	Gal/Min
System Discharge: Single Longest Lateral (SDSL)				
Total Number of Holes =	Single Longest Lateral Leg ÷ Hole Spacing	=	11.80	Holes
Discharge Rate per Hole for 5' Distal Head @	3/16" Diameter hole	=	0.93	Gal/Min
Req. Discharge Rate =	Total No. Holes X Discharge Rate per Holes	=	10.97	Gal/Min
	(SDSL), Use	=	10.97	Gal/Min

Pump Sizing:

1. Elevation Head (in Feet) From Pump to D-box:
   510 Highest Elev. Point - 484 Pump Elev. = 26 Feet

2. Pressure Head (Squirt Height) = 5 Feet

3. Supply Line Friction Loss From 1.25 " Diameter Supply Line & Manifold:

	No. of Fitting		Equivalent Feet		
Gate Valve	1	X	0.9	= 0.9	Feet
Check Valve	1	X	11	= 11	Feet
Tee	2	X	7	= 14	Feet
90° Elbow	6	X	7	= 42	Feet
45° Elbow	4	X	3	= 12	Feet
Coupling/Quick Disconnect	1	X	1	= 1	Feet
			Total Friction Loss From Fitting =	80.90	Feet

Total length = Supply Line Length + Total Friction Loss From Fitting = 230.90 Feet
Friction Loss Per 100 feet of Pipe (From Chart) = 2.99 Feet
Supply Line Friction Loss = (Total Length) X (Friction Loss Per 100 feet of Pipe ÷ 100) = 6.90 Feet

4. Lateral Friction Loss From 1 " Diameter Lateral:

	No. of Fitting		Equivalent Feet		
Gate Valve	4	X	0.9	= 3.6	Feet
Check Valve	0	X	11	= 0	Feet
Tee	0	X	7	= 0	Feet
90° Elbow	4	X	7	= 28	Feet
45° Elbow	4	X	3	= 12	Feet
Coupling/Quick Disconnect	0	X	1	= 0	Feet
			Total Friction Loss From Fitting =	43.60	Feet

Total Lateral Length = length of Lateral Leg X No. Lateral Legs = 29.5
Total length = Total Lateral Length + Total Friction Loss From Fitting = 73.10 Feet
Friction Loss Per 100 feet of Pipe (From chart) ***Gal/Min = 10.97*** = 8.84 Feet
Lateral Line Friction Loss = (Total Length) X (Friction Loss Per 100 feet of Pipe ÷ 100) = 6.46 Feet

5. Total Dynamic Head = **44.37** Feet
   Elevation Head + Pressure Head + Supply Line Friction Loss + Lateral Friction Loss

Pump Must Discharge 11 Gallons Per Minutes Against A Head of 45 Feet
Recommended Pump: Orenco High Head Pump PF500511, 120 Volt, 0.5 HP

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22091 LYONS COURT
JENNER, CA 95450
APN: 109-400-015

AT-GRADE SYSTEM WITH PRETREATMENT UNIT

DRAWN: TN
CHECKED: TN
JOB NO:

No.	Revision

SCHEDULING / MEETINGS / INSPECTIONS

1. CONTRACTOR TO GIVE THE CONSULTANT 72 HOURS NOTICE FOR REVIEW OF THE SEPTIC SYSTEM.
2. THE COUNTY DISTRICT SPECIALIST MUST BE NOTIFIED ON A COUNTY WORKDAY, AT LEAST 48 HOURS IN ADVANCE OF THE DESIRED INSPECTION. THESE SHALL INCLUDE:
3. PRECONSTRUCTION: THE CONTRACTOR MUST STAKE OUT ALL THE PRIMARY DRIP LINES, AND THE DESIGNER MUST APPROVE THE STAKE OUT, PRIOR TO COMMENCE OF WORK.
4. INTERIM: JOINT INSPECTION FROM CONTRACTOR, DISTRICT SPECIALIST AND DESIGNER. CHECK LEACH LINES AND GRADE, FUNCTION & SETTING OF CONTROL PANEL, HYDRAULIC TEST OF PUMP, AND ANY OTHER ELEMENTS.
5. FINAL & START UP: THE DESIGN CONSULTANT, CONTRACTOR, SERVICE PROVIDER AND PERMITTING AGENCY REPRESENTATIVE MUST BE AT THE START-UP INSPECTION. THE #189 SEPTIC ELECTRICAL INSPECTION MUST BE COMPLETED BY THE BUILDING INSPECTOR PRIOR TO THE START-UP/FINAL INSPECTION BY SONOMA COUNTY WELL AND SEPTIC. CHECK SOIL COVER & PERFORMANCE WELLS. RUN AND CHECK OVERALL SEPTIC SYSTEM'S FUNCTIONS TO MAKE SURE IT'S WORKING ACCORDINGLY.

OPERATION PERMIT

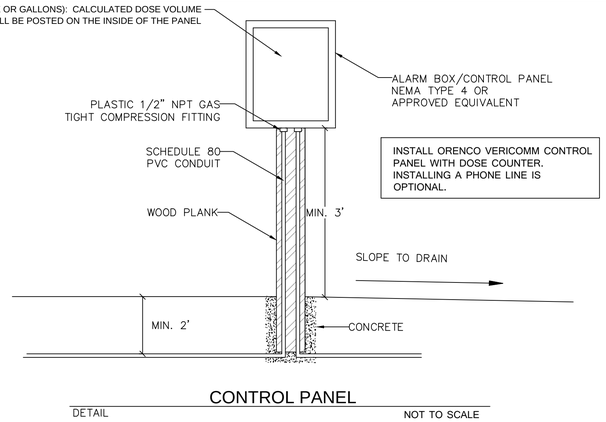
PROPERTY OWNER THAT HAS AT AT-GRADE SYSTEM WITH PRETREATMENT UNIT WOULD NEED TO OBTAIN AN OPERATION PERMIT (OPR) AT THE SONOMA COUNTY WELL AND SEPTIC SECTION, PRMD. THE OWNER WILL PAY AN ANNUAL FEE. THIS FEE MAY BE REDUCED IF THE SEPTIC SYSTEM IS MAINTAINED IN AN ACCEPTABLE MANNER AS DETERMINED BY THE COUNTY SEPTIC STAFF DURING A ROUTINE INSPECTION. THE WELL AND SEPTIC SECTION WILL SEND TO THE OWNER A MONITORING FORM TO BE FILLED OUT TWICE PER YEAR. PLEASE NOTE THAT FAILURE TO FILL OUT THE MONITORING FORM IN A TIMELY MANNER WILL REMOVE THE OPPORTUNITY TO GET A REDUCED FEE.

MONITORING

THE AT-GRADE SEPTIC SYSTEM WITH A PRETREATMENT UNIT WILL REQUIRE THE PROPERTY OWNER TO HIRE A SERVICE PROVIDER. A SERVICE PROVIDER IS AN REGISTERED ENVIRONMENTAL HEALTH SPECIALIST, REGISTERED CIVIL ENGINEER, OR ANY PERSON WHO IS LICENSED AS A "CERTIFIED ONSITE WASTEWATER SYSTEM INSPECTOR" OR OTHER EQUIVALENT LICENSE BY PASSING A STATE OR NATIONALLY ACCREDITED ONSITE WASTEWATER EXAM, CAPABLE OF OPERATING, MONITORING, AND MAINTAINING A SEPTIC SYSTEM. ONCE A SERVICE PROVIDER IS HIRED, THE AT-GRADE SEPTIC SYSTEM WITH A PRETREATMENT UNIT WILL BE REQUIRED TO HAVE A SERVICE PROVIDER FOR THE REMAINING LIFE OF THE SYSTEM.

ALL NON-STANDARD SYSTEMS (MOUND SYSTEM, AT-GRADE SYSTEM, PD SYSTEM, OR DRIP SYSTEM) WITH A TCOM/VCOM CONTROL PANELS MUST HAVE A QUALIFIED SERVICE PROVIDER FOR THE LIFE OF THE SYSTEM.

A COPY OF A SIGNED CONTRACT WITH THE APPROVED SERVICE PROVIDER AND A COMPLETED MAINTENANCE AND MONITORING INSPECTION REPORT SHALL BE SUBMITTED TO THE PERMIT AUTHORITY WITH AN APPLICATION FOR A CHANGE OF OWNERSHIP.



CONTROL PANEL

DETAIL NOT TO SCALE

E DETAIL ADVANTEX AX20RT TREATMENT SYSTEM- PUMP DISCHARGE MODE 3B (NDW-ATX-RT-STD-09) NOT-TO-SCALE

ADVANTEX TREATMENT UNIT INSTALLATION

1. INSTALLATION MANUAL CAN BE OBTAINED BY CALLING ORENCO SYSTEM, INC. AT 800-348-9843 OR 541-459-4449.

2. DO NOT INSTALL SPLICE BOX INSIDE SEPTIC TANK, SUMP TANK, NOR RISERS.

3. ORENCO EXTERNAL SPLICE BOX SBEX-1-4 CAN BE INSTALLED OUTSIDE THE TANK'S RISER.

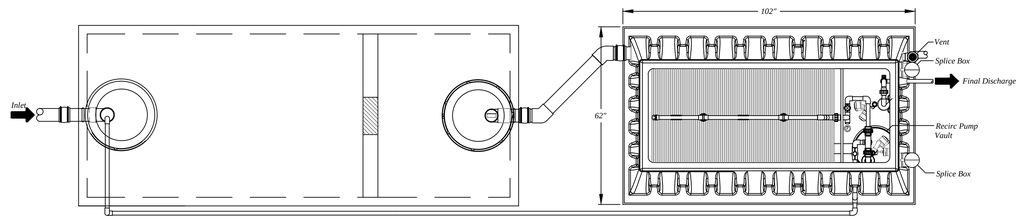
4. BACKWASH DISCHARGE FROM A SALT-TYPE WATER SOFTENER MUST NOT BE PLUMBED INTO AN ADVANTEX TREATMENT UNIT.

5. VERICOMM CONTROL PANEL MADE SPECIFICALLY FOR SONOMA COUNTY SHALL BE INSTALLED. CONTROL PANEL SHALL BE MOUNTED 36" MINIMUM ABOVE GROUND SURFACE.

6. USE A 5:1 RECIRCULATION RATIO BASED ON THE ACTUAL AVERAGE DAILY FLOW

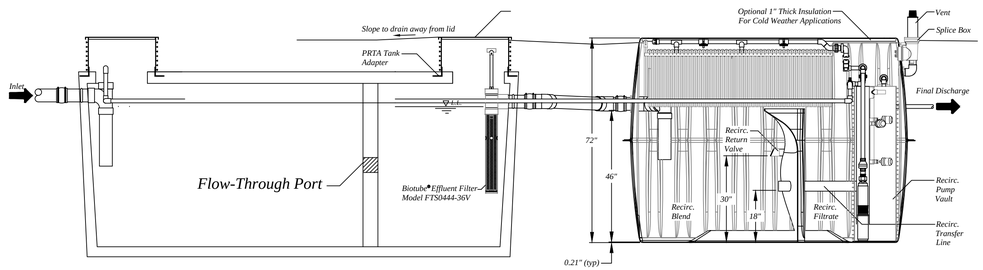
7. INSTALLATION TO BE PERFORMED BY AN ADVANTEX AUTHORIZED INSTALLER ONLY.

8. START-UP AND SERVICE TO BE PERFORMED BY AN ADVANTEX AUTHORIZED SERVICE PROVIDER ONLY.



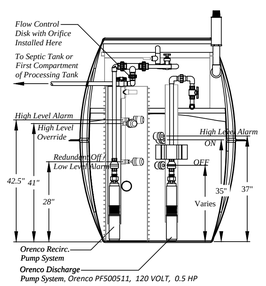
2000 gal. Septic Tank - Top View
Not To Scale

AX20 800 gal. Recirc. Tank - Top View



1200 gal. Septic Tank - Side View
Not To Scale

AX20 800 gal. Recirc. Tank - Side View



Discharge Chamber - End View

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