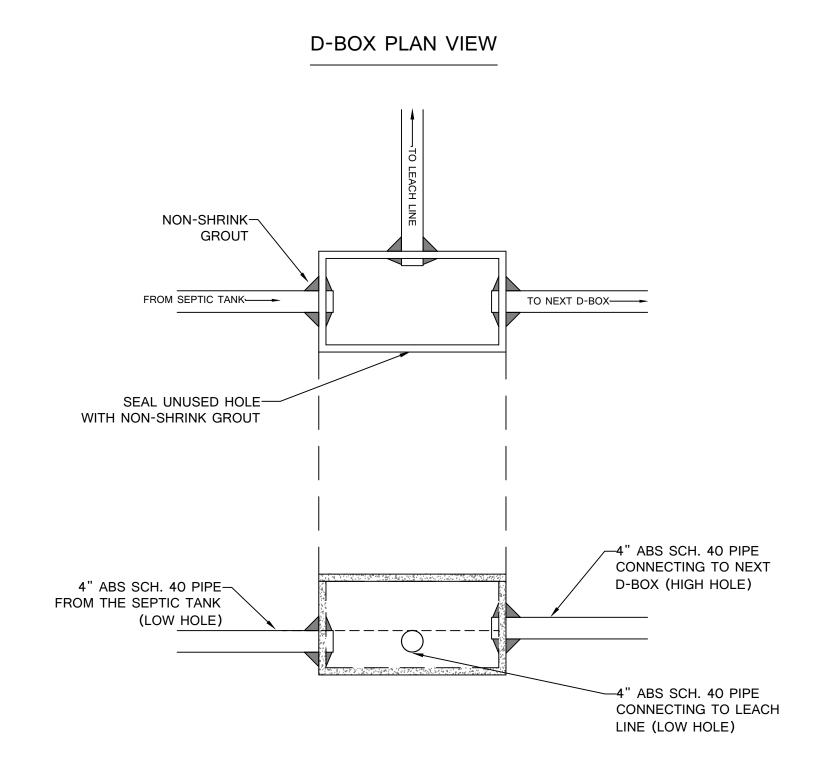


NATIVE SOIL OUTLET HOLE TO— NEXT D-BOX `─24" X .5" Ø GALVANIZED PIPE OR FILTER FABRIC SEAL UNUSED HOLE WITH-NON-SHRINK GROUT 4" HANCOR PERFORATED TRIPLE-WALL LEACH PIPE —CAP AT END OF LEACH LINE INLET HOLE FROM-SEPTIC TANK DISTRIBUTION BOX SHALL NOT—
BE PLACED IN OVER-EXCAVATED SOILS 4' LENGTH ABS SCH. 40 SOLID SEWER LINE

LEACH TRENCH CROSS-SECTION

¾"-2 ½" CLEAN GRAVEL

D-BOX AND LEACH TRENCH SIDE VIEW



D-BOX SIDEVIEW



95406 3640 ROBLAR ROAD PETALUMA, CA 94952 APN: 024-040-036

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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. LEACH LINES 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. THE FOLLOWING IS PROCEDURE TO DETERMINE IS CONSTRUCTION CAN REGIN.
- 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.
- 4. SEPTIC SYSTEM CANNOT BE CONSTRUCTED DURING OR AFTER A HEAVY RAIN.
- 5. THE CONTRACTOR SHALL CALL AT LEAST 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION FROM THE COUNTY DISTRICT SEPTIC INSPECTOR AND SEPTIC CONSULTANT. 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 SEPTIC TANK, SEWER LINE, D-BOXES, 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 LEACH LINES.
- 6. THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY OF ANY ADVERSE CONDITIONS DISCOVERED DURING CONSTRUCTION.
- 7. 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.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR INSURING ALL CONSTRUCTION MEETS CODES.
- 9. THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, MATERIALS, SUPPLIES, AND EQUIPMENTS FOR THE CONSTRUCTION ON THIS PLAN.
- 10. THE BOUNDARY LINES ON THIS PARCEL ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.
- 11. IT IS THE SOLE RESPONSIBILITY OF THE DEVELOPER OR CONTRACTOR OR OWNER TO OBTAIN ANY NECESSARY PERMIT TO START THE CONSTRUCTION.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. HOMEOWNERS AND CONTRACTORS ARE PROHIBITED FROM PLACING UNACCEPTABLE PLANTS, SHRUBS TREES, ORNAMENTS, VEGETATIVE COVER, AND IRRIGATION SYSTEMS OVER THE SYSTEM.
- 16. DOWNSPOUT OF THE HOUSE'S ROOF DRAINAGE SHALL BE DIRECTED AWAY FROM THE SEPTIC TANK AND LEACH FIELD.
- 17. 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.
- 18. PROPOSED SEPTIC TANK, LEACH FIELD, AND RESERVE AREAS SHALL BE LEFT UNDISTURBED BEFORE AND AFTER THE SEPTIC SYSTEM INSTALLATION.

DISTRIBUTION-BOXES (D-BOXES) AND LEACH LINES INSTALLATION

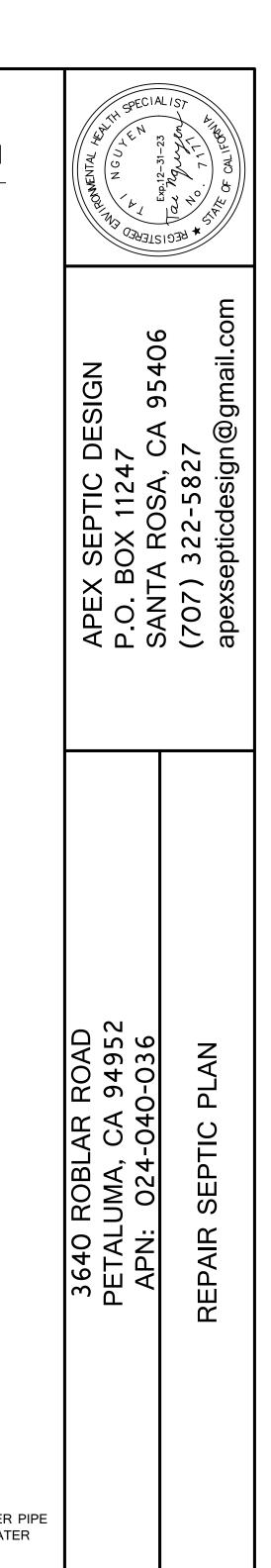
- 1. THE SEWER LINE BETWEEN THE HOUSE TO THE SEPTIC TANK AND SEPTIC TANK TO DISTRIBUTION BOX SHALL BE 4 INCHES DIAMETER ABS SCHEDULE 40 PIPE WITH A MINIMUM FALL OF 1/8" PER FOOT (1% SLOPE).
- 2. THERE SHALL BE ONE CONCRETE OR PLASTIC DISTRIBUTION BOX PER EACH LEACH LINE. THE DISTRIBUTION BOX SHALL NOT BE PLACED IN OVER-EXCAVATED SOILS.
- 3. DISTRIBUTION BOXES SHALL BE PLACED FOR SERIAL DISTRIBUTION OF WASTEWATER ON SLOPING GROUND.
- 4. DISTRIBUTION BOXES SHALL BE PLACED FOR EQUAL DISTRIBUTION OF WASTEWATER ON FLAT
- 5. THE SEWER LINE BETWEEN THE D-BOX AND LEACH LINE IS A 4 LINEAL FEET, 4 INCHES DIAMETER ABS SCHEDULE 40 PIPE.
- 6. THE TRENCH BOTTOM AND TOTAL LENGTH OF LEACH LINE SHALL BE LEVEL AND INSTALLED WITH THE AID OF A TRANSIT. LEACH LINES MUST FOLLOW THE SURFACE CONTOURS WITH MINOR VARIATION IN TRENCH DEPTH OF 3 INCHES PER 100 LINEAL FEET.
- 7. COMPACTED TRENCH SIDES ARE TO BE SCARIFIED TO A DEPTH OF 1 INCH AND THE LOOSE MATERIAL REMOVED BEFORE PLACING THE DRAIN ROCK IN THE TRENCH. SYSTEM INSTALLATION SHALL NOT BE ATTEMPTED DURING WINTER MONTHS WHEN THE POTENTIAL FOR SIDEWALL COMPACTION AND SMEARING CAN OCCUR.
- 8. THE DRAIN ROCK USED IN THE LEACH LINES SHALL BE CLEAN, DOUBLE WASHED, 3/4" TO 2 1/2" IN SIZE, AND EITHER COARSE AGGREGATE, CRUSHED ROCK, OR WASHED RIVER GRAVEL FROM AN APPROVAL SOURCE.
- 9. THE PERFORATED PIPE (LEACH LINE) IS TO BE 4 INCHES (INSIDE DIAMETER) APPROVED PLASTIC OR OTHER APPROVED MATERIAL. PERFORATIONS SHALL BE 5/8" < IN SIZE AND THE PIPE PLACED PERFORATIONS DOWN IN THE TRENCH WITH THE PIPE LAID LEVEL WITH THE AID OF A TRANSIT.
- 10. 2 INCHES OF LEVELED DRAIN ROCK SHALL BE PLACED OVER THE TOP OF THE PERFORATED PIPE
- 11. METAL DETECTION MARKINGS, A 2 FOOT X 1/2 INCH GALVANIZED PIPE OR REBAR, SHALL BE INSTALLED FLUSH AND VERTICAL AT EACH DISTRIBUTION BOX AND IN A VERTICAL POSITION AGAINST THE TRENCH WALL AT THE END OF THE LEACH LINE, AND ALSO IN THE MIDDLE OF LEACH LINE THAT IS LONGER THAN 50 FEET. THE PIPE OR REBAR SHALL NOT BE PLACED AT A DEPTH GREATER THAN 24 INCHES.
- 12. THE DISTRIBUTION BOX SHALL BE PLACED IN NATIVE SOILS AT THE APPROPRIATE DEPTH. A MINIMUM OF TWELVE (12) INCHES OF BACKFILL SHALL BE PLACED ABOVE THE DISTRIBUTION BOX OR EXTENDED TO GRADE WITH A RISER. THE DISTRIBUTION BOX SHALL NOT BE PLACED IN OVER-EXCAVATED SOILS.
- 13. CONSTRUCTION AND PAVING OVER LEACHING SYSTEM AND REPLACEMENT AREA IS PROHIBITED.
- 14. FILTER FABRIC (MIRAFI 140N), OR OTHER APPROVED MATERIAL MUST BE PLACED OVER THE DRAIN ROCK PRIOR TO BACKFILL TO PREVENT INFILTRATION OF SOIL.
- 15. LEACH LINES AND GRAVEL SHALL BE COVERED WITH SOIL AND MOUNTED FOR SETTLING.
- 16. THE LEACH FIELD SHALL BE SEEDED AND STRAWED FOR EROSION CONTROL.
- 17. CONSTRUCTION AND PAVING OVER LEACH FIELDS AND REPLACEMENT AREAS IS PROHIBITED.
- 18. HOMEOWNERS AND CONTRACTORS ARE PROHIBITED FROM PLACING UNACCEPTABLE PLANTS, SHRUBS TREES, ORNAMENTS, VEGETATIVE COVER, AND IRRIGATION SYSTEMS OVER THE SEPTIC SYSTEM

SETBACK REQUIREMENTS FOR STANDARD DISPOSAL SYSTEM

HOR	IZONTAL MINIMUM DISTANCE FROM:	SEPTIC TANK	STANDARD SYSTEM
1.	BUILDINGS OR STRUCTURES: UPGRADIENT LATERALLY DOWNGRADIENT		8 FEET 8 FEET 8 FEET
2.	PROPERTY LINES AND/OR EASEMENT: UPGRADIENT LATERALLY DOWNGRADIENT	5 FEET 5 FEET 5 FEET	5 FEET 5 FEET 5 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. DISPERSAL DEPTH GREATER THAN TO 10 FT.	50 FEET (NOTE 1) 50 FEET (NOTE 1)	150 FEET 200 FEET
5.	PUBLIC WATER SUPPLY SURFACE INTAKE: LESS THAN 1200 FEET TO OWTS LESS THAN 2500 FEET TO OWTS	50 FEET (NOTE 1) 50 FEET (NOTE 1)	
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	15 FEET
10.	INTERCEPT DRAIN - PERFORATED: UPGRADIENT LATERALLY DOWNGRADIENT	15 FEET 25 FEET 25 FEET	15 FEET 50 FEET 50 FEET
11.	NON-PERFORATED / SOLID DRAIN PIPES: UPGRADIENT LATERALLY DOWNGRADIENT	5 FEET 10 FEET 10 FEET	10 FEET 15 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 BAS
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	4 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 DISPOSA AREA IS GREATER THAN OR EQUAL TO 5 FEET	L 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	8 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)



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