

**NOTES:**  
**600 GAL. / DAY AQUAROBIC MINI-PLANT™ AND FILTER BED SYSTEM ON TOP OF 12" OF 120 MINUTES / INCH SOIL TO LIMITING ZONE. (SAMPLE DRAWING)**

**FILTER BED TOP SURFACE = 600 GAL./DAY AT 4 GAL./SQ.FT./DAY = 150 SQ.FT. AREA ACTUAL = 12'- 6" X 12'- 6" = 156.25 SQ.FT.**

**TOTAL RECOMMENDED CONTACT AND MANTEL AREA: 54'-6" X 54'-6" = 2,970 SQ.FT. AREA 2,970 SQ.FT. DIVIDED BY 600 GAL. = 0.20 GAL./SQ.FT./DAY APPLICATION RATE.**

**FILL TO LEVEL AREA TYPE III SOIL = 365 CU. YARDS  
 CONCRETE SAND 12" DEEP = 3,249 CU.FT. = 121 CU.YARDS  
 3/8" CLEAN PEA GRAVEL = 3,874 CU.FT. = 144 CU. YARDS  
 TOP SOIL ON TOP OF TOTAL BED AREA = 134 CU.YARDS**

**PERC. 120 + MIN./ INCH USE FORMULA:  $A = \frac{Q \times T}{25}$**

**A = AREA  
 Q = QUANTITY OF WASTEWATER / DAY.  
 T = PERC. TIME IMMEDIATELY BELOW SAND LAYER**

**TOTAL AREA =  $\frac{600 \times 120}{25} = 2,880$  SQ. FT. REQUIRED**

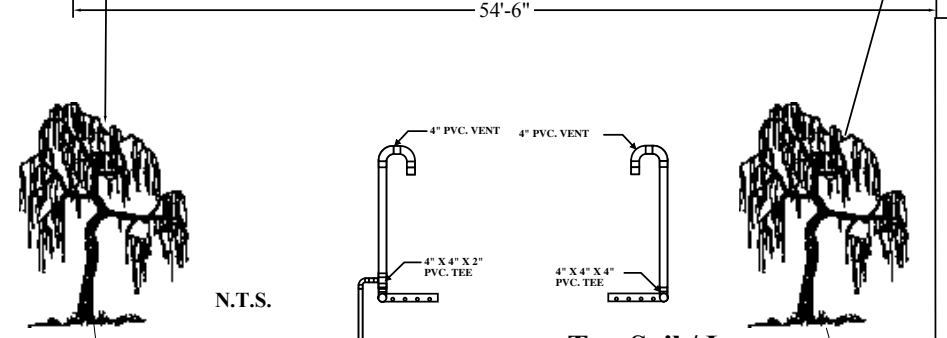
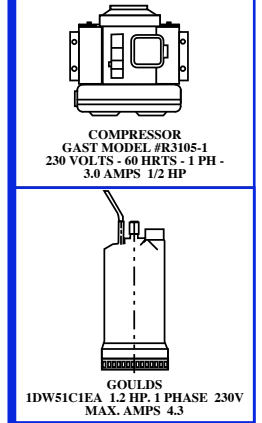
**600 GAL. / DAY X 120 MIN. / INCH = 72,000  
 72,000 / 25 = 2,880 SQ. FT. AREA OF CONTACT & MANTEL (SAND AREA)**

**RECOMMENDED MINIMUM 54'- 6" X 54'- 6" = 2,970 SQ.FT**

**PERK ABOVE 120 REQUIRED A DOUBLE RING INFILTROMETER TEST**

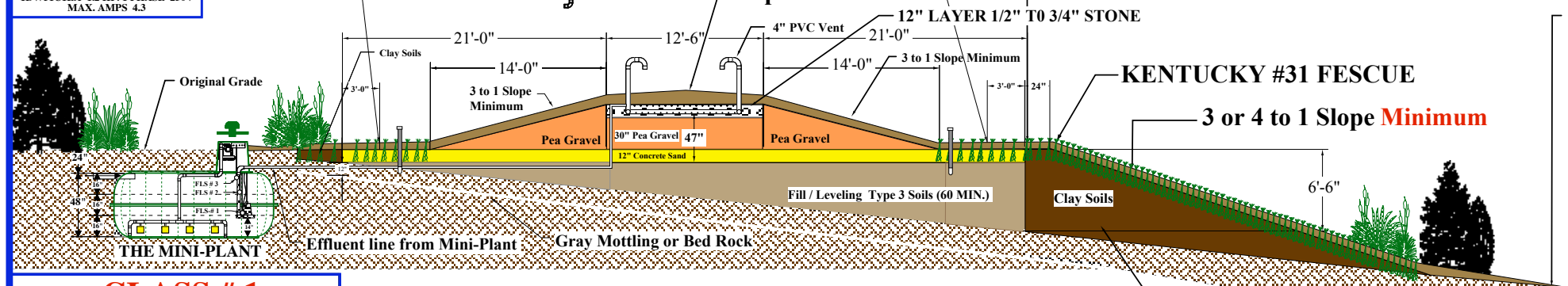
**THE PLANTING OF THE WATER LOVING TREES AND KENTUCKY 31 TALL FESCUE GRASSES OVER THE TOTAL AREA INCLUDING THE FILL MATERIAL THAT OVERLAPS THE CONTACT AREA IS PART OF THE TOTAL AQUAROBIC INTERNATIONAL, INC. MINI-PLANT & FILTER BED SYSTEM.**

**WE RECOMMEND HYDRO SEEDING THE TOTAL AREA INCLUDING 3 OR 4 TO 1 SLOPES**



The Sand Layer Shall be Surrounded by a Clay BURM

If Clay is not available, Bentonite shall mix into type III Soil and used to create a BURM. This BURM must be around all 4 sides of the Mantle area from the Original Ground level up to the Sand Level. The Suitability of the Clay Material and/or the application of the Bentonite Shall be approved by Aquarobic International



Original Grade

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**AQUAROBIC®**  
 INTERNATIONAL, INC.  
 5800 Prillaman Switch Rd. Ferrum, Virginia, USA. 24088  
 1-800-927-8304  
 E. Mail: Dan@aquarobicinternational.com  
 Phone: (540) 365-0154 / Fax: (540) 365-0155  
 Web Page: <http://www.aquarobicinternational.com>

Scale: N.T.S. Mini-Plant Model: F54291- -230V By: D. E. Pavon

**CLASS # 1**

REMOVAL EFFICIENCIES  
 BASED ON AVERAGE OF VALUES  
 11 APRIL 1993 -- 28 OCTOBER 1993

	INFLUENT AVERAGE	EFFLUENT AVERAGE	REDUCTION	PERCENT REDUCTION
BIOCHEMICAL OXYGEN DEMAND MG/L	170	7	163	95.8 %
SUSPENDED SOLIDS MG/L	200	11	189	94.5 %

**THE AQUAROBIC INTERNATIONAL, INC.  
 SAMPLE FILTER BED SYSTEM  
 120 MIN/INCH SOIL AND 6% SLOPE  
 WITH A MINIMUM 47" SEPARATION TO RESTRICTION**

NOTES:  
 THE CONCEPT HEREIN DISCLOSED IS PROPRIETARY WITH AQUAROBIC INTERNATIONAL, INC. AND MAY NOT BE REPRODUCED OR USED WITHOUT PRIOR WRITTEN AUTHORIZATION.

**THE MINI-PLANT AND FILTER BED SYSTEM  
 600 GPD. FOR 120 MINUTE SOIL  
 SAMPLE DRAWING**

Drawing # 42104-3456 Date: 12 / 30 / 2009