

1.6 Acres out of Tract 168 Ida Straus Subdivision

**DESIGN SUMMARY**

Effluent from one 500 gallon tank will flow to a Clearstream 500 N aerobic treatment plant, through a Clearstream tablet chlorinator to a 750 gallon pump tank. A Clearstream P20, 1/2 HP pump discharges the "Class I" effluent to the surface through 3 Low angle nozzle heads. Spray area shall be graded and if necessary, swales installed to provide positive drainage away from the spray area to prevent ponding or pooling. The land owner shall be responsible to have the area sodded with St. Augustine or Zoysia grasses unless native grass is established and overseed with a winter Rye grass for periods when other grasses are dormant. The maximum inlet pressure for sprinklers shall be 40 pounds per square inch. Low angle nozzles (15 degrees or less in trajectory) shall be used in the sprinklers to keep the spray stream low and reduce aerosols. sprinkler operation shall be controlled by commercial irrigation timers set to spray between midnight and 5:00 a.m. Placement of the spray heads shall not be within ten (10) feet in the direction of the spray as to impede the spray area. Equipment specified in this design may be substituted for equipment of equivalent specifications

**SPRAYFIELD CALCULATIONS**

A 3 Bedroom 2000 Sq. Ft. Residence rated at 300 gallons/day, divided by the sewerage application rate (.041 gallons/foot, squared equals the required area of 7317 sq. ft.). The sprayfield is designed at 7317 sq. ft. Exceeding the maximum daily flow set forth in this document, negates the validity of this design. Grease, cigarette butts, sanitary napkins (personal hygiene products) and other non biodegradable products shall not be disposed of in this system.

**DESIGN PARAMETERS**

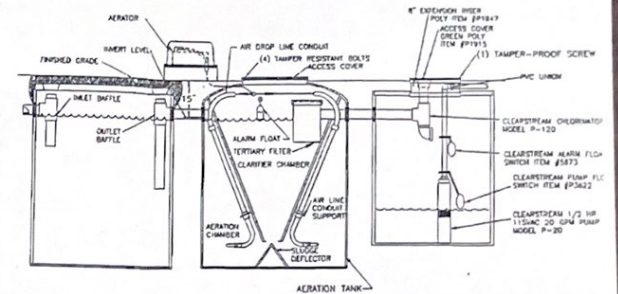
1. Estimated Daily Flow
2. Application Rate
3. Area Designed

300 gallons/day  
.041 gal/Sq. Ft./day  
7317 Sq. Ft.

**EQUIPMENT SPECIFICATIONS**

1. Pretreatment Tank
2. Aerobic Unit
3. Pump Tank
4. Pump
5. Chlorinator
6. Sprinklers
7. Timer

500 gallon  
Clearstream 500 N  
750 gallon  
Clearstream P-20, 1/2 HP  
Clearstream P-120  
Low angle nozzles 15 degree or less in trajectory  
24 Hr Timer installed  
W/ Equipment



**System Data**

Number of Bedrooms	Daily Flow in Gallons	Pump Tank Req'd Active Capacity	Loading Rate	Area Required Sq. Ft.
3	300	400	0.041	7317

**Pump Tank Specs**

Height in Inches	Height in Feet	Inside Diameter in Inches	Inside Radius in Feet	Volume in Cubic Ft.	Volume in Gallons
65.5	5.46	59.5	2.48	105.40	788.36
Gallons Per Inch	Pump Off Level in Inches	Pump On Level in Inches	Space in Inches	High Water Alarm in Inches	Active Capacity in Gallons
12.04	14	20	240.72	44.9	547.64
Required Reserve in Gallons	Actual Reserve in Gallons	Actual Reserve in Inches	Reserve Percent of Daily Flow		
100.00	248	21	83%		

Sprinkler Head Number	Radius in Feet	Degree of Spray	Area Sq. Ft. Covered
1	30	360	2827
2	30	360	2827
3	23	360	1662
Total			7317



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PROFESSIONAL SANITARIAN  
STATE LICENSE 2721

SCALE: 1" = 50'	DATE: 16 December 2002	DRAWN BY: KC	DRAWING: Youngcin.Skd
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Cindy Young 1.6 Acres out of Tract 168 Ida Straus Subdivision

County or Agency: Montgomery	Address: Lewis Road	Job Num: 120
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