ROLLANS *SOIL & ENVIRONMENTAL SERVICES*

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Attached is a design proposal for a gravity PPBPS Septic System for a 3 bedroom single family residence on lot 6 of the Fairhaven Subdivision in Iredell County, North Carolina.

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August 22, 2005
Project No. 01-1099
Design By: Rollans Soil and Environmental Services

GRAVITY 3-BEDROOM SYSTEM
FOR WASTEWATER TREATMENT

Owner: Gray Wagner

Address: PO Box 62
Sherrills Ford, NC 28673
Phone: 828-478-9699
County: Iredell
Location: Fairhaven lot 6

Source of Wastewater Flow: 3 Bedroom Single Family Residence
Estimated Daily Wastewater Production: 360 gpd
System Flow: Gravity/On-Demand

Design Specifications

System Type: PPBPS
Drainfield Size: 200 Linear feet
Loading Rate: 0.3 gpd/ft.^{2}
Depth of Gravel in Trench: NA
Gravel Size: NA
Trench Depth: 36 in.
Trench Width: 24 in.
Septic Tank Size: 1000 min.
Pump Tank Size: NA

Estimated Supply Line Length: 15
Supply Line Diameter: 3 in. SCH 40 PVC
Supply Line Volume: NA
Dosing Volume: NA
Supply Manifold: NA
Supply Manifold Length: NA
Supply Manifold Volume: NA

Recommended Float Controls: NA

Recommended Control Panel:

Pressure Head: NA
Friction Head: NA
Elevation Head: NA
Total Dynamic Head: NA

Threaded Union: NA
Gate Valves: NA
NA
Check Valves: NA
Anti-Siphon Hole: NA

Recommended Pump: NA

NA
NA

Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services

Fairhaven LOT#5
DESIGN INFORMATION

DESIGN FLOW:	360
SOIL APPLICATION RATE:	0.3 gpd/ft.^{2}
TOTAL AREA TRENCH BOTTOM:	400sf
TOTAL LATERAL LENGTH:	200
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	200
DISTRIBUTION METHOD	d-box
SUPPLY LINE LENGTH:	15'
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1000min
PUMP TANK SIZE:	NA
RECOMMENDED PUMP:	NA

FAIRHAVEN LOT 6

Project #: 01-1128

LAYOUT FOR 3 BEDROOM HOME

August 22, 2005

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		0.5			100.00		
INSTR. 1			100.50				
HOUSE CNR				9.60	90.90		
S. TANK				9.60	90.90		
1	***RED***			***10.70***	***89.80***	***52***	***50***
2	***PINK***			***11.70***	***88.80***	***50***	***50***
3	***BLUE***			***12.70***	***87.80***	***50***	***50***
4	***ORANGE***			***14.00***	***86.50***	***50***	***50***
5	RED			15.70	84.80	60	60
6	PINK			17.10	83.40	60	60
7	BLUE			18.70	81.80	50	50
8	ORANGE			19.90	80.60	40	40
9	RED			21.50	79.00	40	40
					Total	**452**	**450**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	INNOVATIVE SYSTEM	DISTRIBUTION
****System***	***200***	***0.30***	***MOD.***	*0.30*	***PPBPS***	***GRAVITY***
Repair	250	0.30	*MOD.*	0.30	PPBPS	LOW PRESSURE

Notes:

** TBM located on EIP (see site plan)

**TBM is assumed to be 100'

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings