CALCULATIONS

Location WALDEN RIDGE SUBDIVISION

Project Number 01-1069

Lot No: Lot 60

No. of Bedrooms 4

Design Flow 480 $^{gal}/_{day}$

LTAR 0.25 $^{gal}/_{ft^2\ day}$

25% RED.? (YES OR NO) YES

Supply Line Length 20 ft.

Supply Line Volume 3.48 gal.

Required Feet of Line 480 ft.
Amount of Line from Layout 480 ft.

Gallons per Minute NA $^{gal}/_{min}$

Required Septic Tank Capacity 1000 gal.
Minimum Standard Tank Size 1000

Lateral Line Volume 313.44 gal.

Dosing Volume NA gal.

Note: Dosing Volume based on70% of lateral line volume

Tank Draw Down NA *Generic Draw Down of 21 gal.per in.*

Pump Run Time NA minutes

Elevation Head NA ft.
Pressure Head NA ft.
Friction Factor NA ft./100 ft. *(From the interpolater.)*
Friction Head NA ft.

Total Dynamic Head (+15%) NA ft.

FRICTION FACTOR
INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Gravity 25% Reduction
FOR WASTEWATER TREATMENT

Owner: IREDELL GROUP

Address: 109-C Williamson Road
Mooresville, NC 28115

Phone: 704-663-4050

County: Iredell

Location: Walden Ridge Subdivision Lot #60

Source of Wastewater Flow: 4 Bedroom Single Family Residence

Estimated Daily Wastewater Production: 480 gpd

System Flow: NA

Design Specifications

Drainfield Size: 480

Loading Rate: 0.25

Depth of Gravel in Trench: NA (25% reduction)

Gravel Size: NA (25% reduction)

Trench Depth: 36 in.

Trench Width: 36 in.

Septic Tank Size: 1000

Pump Tank Size: NA

Estimated Supply Line Length: 20

Supply Line Diameter: 3 in. SCH 40 PVC

Supply Line Volume: 3.48

Dosing Volume: NA

Supply Manifold: DROP BOX

Supply Manifold Length: NA

Supply Manifold Volume: N/A

Recommended Float Controls: NA

Recommended Control Panel: NA

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

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

WALDEN RIDGE SUBDIVISION LOT 60

DESIGN FLOW:	480
SOIL APPLICATION RATE:	0.25
TOTAL AREA TRENCH BOTTOM:	1440
TOTAL LATERAL LENGTH:	480
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	480
SUPPLY LINE LENGTH:	20
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	NA

WALDEN RIDGE LOT #60

Project #: 01-1069

LAYOUT FOR 4 BEDROOM HOME

March 24, 2006

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		N/A			100.00		
TANK		N/A	N/A				
HOUSE		N/A	N/A				
INSTR. 1			N/A				
1	ORANGE			N/A	N/A	54	54
2	BLUE			N/A	N/A	83	83
3	RED			N/A	N/A	115	115
4	PINK			N/A	N/A	122	122
5	***ORANGE***			***N/A***	***N/A***	***126***	***120***
6	***BLUE***			***N/A***	***N/A***	***127***	***120***
7	***RED***			***N/A***	***N/A***	***128***	***120***
8	***PINK***			***N/A***	***N/A***	***128***	***120***
					Total	**883**	**854**

* *System*	LINE LENGTH *480*	LTAR GPD/FT² *0.25*	SYSTEM TYPE *ACCEPT.*	SOIL LTAR GPD/FT² *0.25*	TRENCH SYSTEM *25% RED.*	DISTRIBUTION GRAVITY
Repair	374	0.25	*MOD.*	0.25	PPBPS	DISTRIBUTION LOW PRESSURE

Notes:

** TBM NOT REQUIRED

**All measures in feet

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

**BS, HI, and FS indicate rod readings