FAST TRACK DESIGN INFORMATION

Lot 58 CARLYLE ROAD

Corinthian Builders

Iredell County, NC

S&EC, PA
Job # 5-1653s2
December 2005

Carlyle Road Lot 58

Project No. 5-1653s2

Layout for 3 bedroom home

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	Design Length
TBM		12.8			100.00		
INSTR. 1			112.80				
			Repair				
1	Blue			1.40	111.40	**57**	**57**
2	Yellow			2.70	110.10	**47**	**47**
3	Orange			3.40	109.40	**80**	**70**
8	Orange			5.70	107.10	**34**	**34**
					Total	**218**	**208**
			System				
4	Red			3.70	109.10	**80**	**75**
5	Pink			4.20	108.60	**80**	**75**
6	Blue			4.70	108.10	**77**	**75**
7	Yellow			5.30	107.50	**75**	**75**
					Total	**312**	**300**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	INNOVATIVE SYSTEM	DISTRIBUTION
System	300	0.30	INNOV	0.300	EZFLO	P. Manifold
Repair	208	0.30	PPBPS	0.300	N/A	LPP

Notes:

**TBM is assumed to be 100'; all measures in feet

** Each repair line utilizes a flow divider

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

**BS, HI, and FS indicate rod readings

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SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	flow/ft	gpd	Trench Area	Line LTAR
1	Red	109.1	**75**	SCH 40 1/2	**7.11**	**0.095**	90.00	225	**0.400**
2	Pink	108.6	**75**	SCH 40 1/2	**7.11**	**0.095**	90.00	225	**0.400**
3	Blue	108.1	**75**	SCH 40 1/2	**7.11**	**0.095**	90.00	225	**0.400**
4	Yellow	107.5	**75**	SCH 40 1/2	**7.11**	**0.095**	90.00	225	**0.400**

	total	**feet =**	**300**	**gal/min =**	**28.44**				
			Des. Flow	**360**					
			Pump Run=	**12.66**					
			soil LTAR	**0.30**					
			EZFLO LTAR	**0.40**					

CALCULATIONS

Location Carlyle Road Lot 58

Project Number 5-1653s2

Lot No: 58

No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\ day}$
EZ-Lay? (YES OR NO)	yes	
Supply Line Length	117	ft.
Supply Line Volume	20.358	gal.
Required Feet of Line	300	ft.
Amount of Line from Layout	300	ft.
Gallons per Minute	28.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	195.9	gal.
Dosing Volume	137.13	gal.

Note: . Dosing Volume based on 70% of the lateral line volume.

Tank Draw Down	6.5	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	4.82	minutes
Estimated Elevation Head	9.4	ft.
Pressure Head	2	ft.
Friction Factor	1.78	ft./100 ft. *(From the interpolater.)*
Friction Head	2.08	ft.
Total Dynamic Head (+15%)	15.50	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
40.67	3.13
45	3.77
48.14	4.28
50	4.58
57.11	5.89
58.47	6.14
60	6.42

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PANEL REPAIR

Line #	Color	# Panels	#holes panel	Line length	Hole size	Line Head	Line Flow
5	Blue	13	1	57	5/32	2.00	5.33
6	Yellow	11	1	47	5/32	2.50	5.06
7	Orange	16	1	70	5/32	3.00	8
8	Orange	8	1	34	5/32	3.50	4.32
	total	**48**	**48**	**208**			**22.71**

Pump requirements= Myers ME50 or county approved equivalent capable of delivering 18' of head at 23 gpm