

MICHAEL ATHANAS & ASSOCIATES
NORTH CAROLINA LICENSED SOIL SCIENTEST
1999 CANDLEWICK DRIVE
FORT MILL, SOUTH CAROLINA 29715

Michael Athanas, NCLSS
E-mail: mathanas@comporium.net
Cell: 704-576-3887

Brady Freeman, RS
E-mail: bfree209@yahoo.com
Cell: 704-746-6497

Attached is an onsite wastewater septic design for a 4 bedroom residential home on lot 70 Pinnacle Shores in Iredell County, NC.

Contents:

	Page
Information for the Installer	1
Design Information	
Applicant and design specifications	2
Line Specifications	3
Site Plan/System Plan	4

March 30, 2011

PINNACLE SHORES LOT 70
APPLICANT AND DESIGN SPECIFICATIONS

Applicant:	JOSEPH KEIRY
Phone:	704-746-6497
Address:	2319 TATTERSALL DR. CHARLOTTE,NC 28210
County:	Iredell
Location:	PINNACLE SHORES LOT 70
Application for:	4 Bedroom Single Family Residence
Gallons per day:	480
Linear feet:	300
Loading Rate (gpd/ft.2):	~.275
Trench Depth:	36"
Trench Width:	24"
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply line Length/ft:	220
Supply Line Diameter:	2"
Dosing volume:	164.02
Lateral line volume:	244.80
Supply Manifold:	2"
Manifold Length:	N/A
Manifold Volume:	N/A
Pressure Head:	2
Friction Head:	3.40
Elevation Head:	30.20
Friction factor:	1.54 PER 100'
TDH:	40.94
Pump Run:	5.88
Threaded Union:	IN TANK
Gate Valves:	IN TANK
Check Valves:	IN TANK
Anti-Siphon Hole:	IN TANK
Design flow:	202.6
Trench Bottom FT/SQ:	900
Number of fields	1
Supply line length	220'
Draw down:	7.8
Comments:	Soil suitability was performed by Michael Athanas & Associates and Iredell County.

*Pump tank draw down based on 31 gallons per inch. Draw down may vary depending on tank manufacturers.

*Dosing volume base on 67% of lateral line volume.

PINNACLE SHORES LOT 70

SYSTEM TYPE	**PPBPS**
SYSTEM LTAR	**~0.275 GPD/FTSQ**
SYSTEM LINE LENGTH	**300**
REPAIR TYPE	*LP PPBPS*
REPAIR LTAR	*.25 GPD/FTSQ*
REPAIR LINE LENGTH	*327*

LINE #	FLAG COLOR	SHOT ELEVATION	LINE LENGTH
1	*PINK*	*3.30*	*75*
2	*BLUE*	*4.40*	*75*
3	*ORANGE*	*5.40*	*75*
4	*PINK*	*6.20*	*75*
5	BLUE	7.30	83
6	ORANGE	8.60	80
7	PINK	9.70	82
8	BLUE	10.40	82
		Total	**627**
TBM		*1.80*	
HOUSE CORNER		*12.20*	
TANK		*28.50*	

Need 320' Repair ~ 30'

LINE#	COLOR	LENGTH	# OF PANELS
1	*PINK*	*75*	17.31
2	*BLUE*	*75*	17.31
3	*ORANGE*	*75*	17.31
4	*PINK*	*75*	17.31
	TOTAL	300.00	68
HOLE SIZE	5/32"		
GALLONS PER MINUTE	27.88		