

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

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Attached is an onsite wastewater septic design for a 4 bedroom residential home at Bells Crossing Subdivision lot 199 in Iredell County, NC.

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October 11, 2010

BELL CROSSING LOT 199
APPLICANT AND DESIGN SPECIFICATIONS

Applicant:	Bells Crossing, LLC
Phone:	
Address:	127B Promenade Dr. Mooresville, NC 28117
County:	704 361 1084
Location:	Bells Crossing LOT 199
Application for:	4 Bedroom Single Family Residence
Gallons per day:	480
Linear feet:	436
Loading Rate (gpd/ft.2):	0.275
Trench Depth:	36 in.
Trench Width:	36 in.
Septic Tank Size:	1000
Pump Tank Size:	N/A
Estimated Supply line Length/ft:	2
Supply Line Diameter:	3 in. SCH 40 PVC
Dosing volume:	ON DEMAND
Lateral line volume:	284.71
Supply Manifold:	SERIAL DISTRIBUTION
Manifold Length:	N/A
Manifold Volume:	N/A
Pressure Head:	N/A
Friction Head:	N/A
Elevation Head:	N/A
Friction factor:	N/A
TDH:	N/A
Pump Run:	N/A
Threaded Union:	N/A
Gate Valves:	N/A
Check Valves:	N/A
Anti-Siphon Hole:	N/A
Design flow:	**480**
Trench Bottom:	**1308**
Number of fields	**1**
Supply line length	**5**
Draw down:	**N/A**
Comments:	Soil suitability was used from existing permit.

*Pump tank draw down based on 21 gallons per inch. Draw down may vary depending on tank manufacturers.

BELLS CROSSING LOT 199

SYSTEM TYPE	**25% REDUCTION**
SYSTEM LTAR	**0.275 GPD/FTSQ**
SYSTEM LINE LENGTH	**436**
REPAIR TYPE	*LP PPBPS*
REPAIR LTAR	*0.275 GPD/FTSQ*
REPAIR LINE LENGTH	*391*

LINE #	FLAG COLOR	SHOT ELEVATION	LINE LENGTH
1	RED	3.50	55
2	ORANGE	4.00	70
3	BLUE	4.40	81
4	PINK	4.80	95
5	RED	5.60	90
6	***ORANGE***	***6.10***	***128***
7	***BLUE***	***6.70***	***108***
8	***PINK***	***7.40***	***88***
9	***YELLOW***	***8.20***	***68***
10	***RED***	***8.90***	***44***
		Total	**827**
TBM		***N/A***	
HOUSE CORNER		***N/A***	
TANK		***N/A***	