



Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klumck, P.E., Director
Division of Water Quality

April 4, 2006

Mr. Jimmy Cook
PO Box 278
Angier, NC 27501-0278

Subject: Response to Request For 198 Clearfield Drive

Dear Mr. Cook,

As noted in our phone conversation, Mr. Brooks of 198 Clearfield Drive in Angier has permission to install a 1,000 gallon holding tank temporarily until a sewer collection system is accessible by the Town to the home owner. The written request received from the Town states that you are currently under contract with a local company to maintain any failing septic systems located in this subdivision. Please keep our office updated on the progress of the sewer extension. Please be reminded that an application and fee must be submitted to our office for the sewer extension to the subdivision. Please keep in mind that this is only a temporary approval and that all efforts should be made to add this home and others in this Subdivision to the Town's collection system as soon as possible.

If you have any further questions please contact me at (910)486-1541.

Sincerely,

Belinda S. Henson
Regional Supervisor
Surface Water Protection Section
Division of Water Quality

No. 7370 P. 2

HALOWEN & ASSOCIATES INC.

SOIL & ENVIRONMENTAL SCIENCES

P.O. Box 400, 266 Old Coats Road
Lillington, NC 27546-0400
Phone (910) 893-8743 / Fax (910) 893-3594
E-mail: halowen@earthlink.net

10 March 2006

Mr. Bryan McSwain
Department of Public Health
Harnett County Government Complex
307 Cornelius Harnett Boulevard
Lillington, NC 27546

Reference: Site Investigation and Septic System Design
Lot 13, Clearfield Estates

Dear Mr. McSwain,

A site investigation was conducted for the above referenced property located at 198 Clearfield Drive, Black River Township, Harnett County, North Carolina. The purpose of the investigation was to determine the ability of this lot to support a subsurface sewage waste disposal system and 100 % repair area for a typical three-bedroom home that has undergone construction and impacted previously permitted septic system areas. It is my understanding that public water supplies will be utilized for this home and are installed. A pressure manifold to three unequal length ultra-shallow innovative drainlines totaling 225 linear feet is the proposed design for the initial septic system. The repair system is proposed equally split between two areas that shall be distributed using a zone valve. Each field is proposed with 113 linear feet of innovative drainlines either using serial distribution or the use of drop boxes to connect the lines. All septic fields are proposed with a trench bottom depth of 12 inches below ground surface, requiring the addition of at least six inches of soil to completely cover the system.

Attached is the septic system layout and supporting information for this lot. I trust that this report provides all the information that you require at this time. If you have any questions or need additional information, please contact me at your convenience.

Sincerely,



Laura J. Fortner
Licensed Soil Scientist

Lot 13, Clearfield Estates

On-Site Wastewater Design Specifications

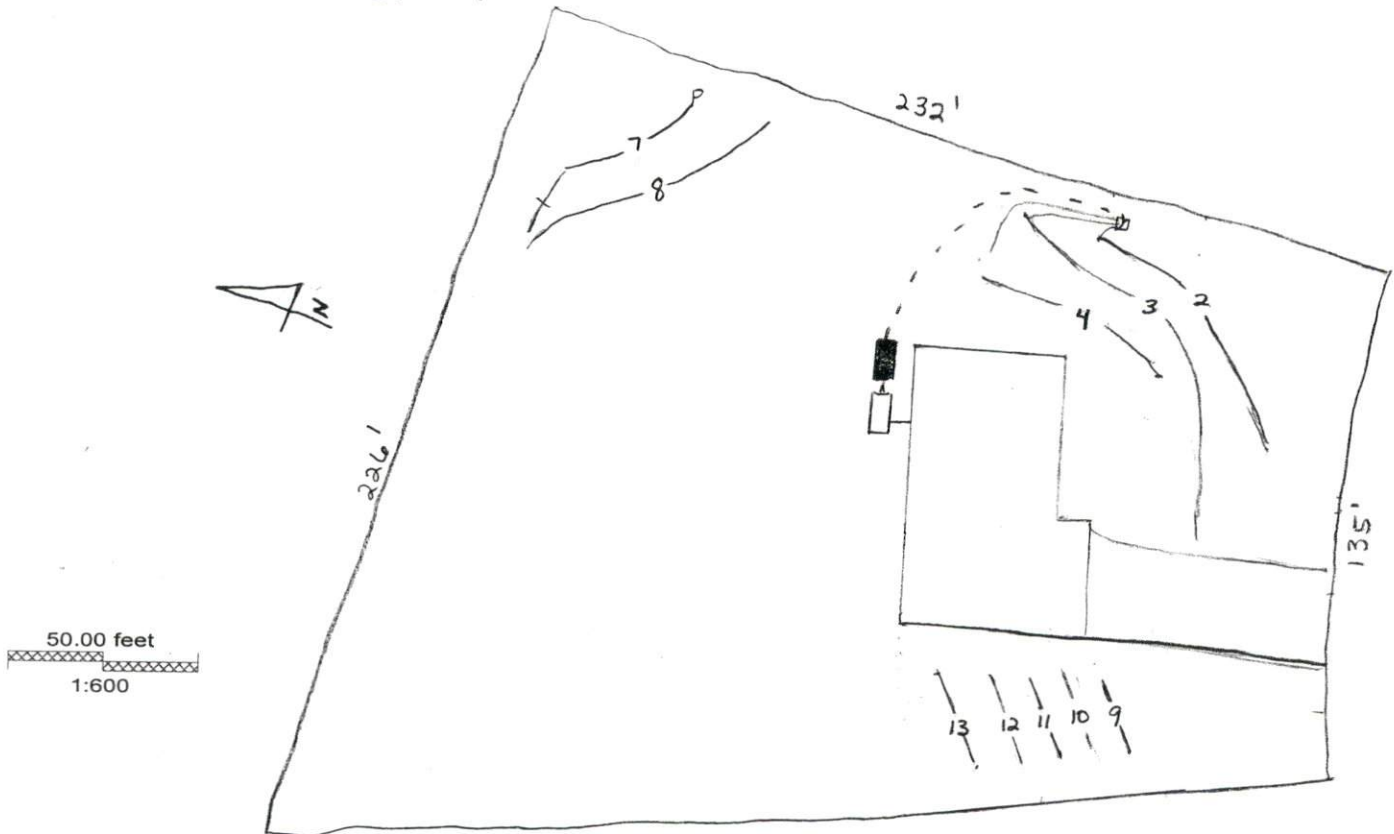
House Footprint: 48' x 76'
Bedrooms: 3 (Daily Flow 360 gallons)

Prepared By: LJF
Hal Owen & Associates, Inc.
Soil & Environmental Scientists
P.O. Box 400, 266 Old Coats Rd.
Lillington, NC 27546-0400
Phone: (910) 893-8743

Initial System: Pressure-Manifold Innovative (225-ft)
on contour at: 12 inches
Soil LTAR: 0.4 gpd/sqft
Repair System: Pump Innovative (2 x 113-ft) zone valve
on contour at: 12 inches
Soil LTAR: 0.4 gpd/sqft

LEGEND

☆	EIP	□	Septic Tank
⊥	Step-down	■	Pump Tank
⊙	Proposed Well	⊖	D-Box
⊗	Existing Well	⊞	Pressure Manifold



Lines flagged at site on 9-ft centers.

Initial/Repair	Line #	Color	Drainline Length(ft)	Measured Field Line Length (ft)	Relative Elevation (ft)
N/A	1	R	0	33	100.78
Initial	2	Y	70	82	100.38
Initial	3	B	100	112	99.56
Initial	4	W	55	55	98.87
N/A	5	R	0	34	98.58
N/A	6	R	0	24	100.38
Repair	7	W	40	40	100.01
Repair	8	B	73	73	99.38
Repair	9	R	20	20	99.19
Repair	10	B	22	22	98.39
Repair	11	Y	22	22	98.09
Repair	12	O	24	24	97.75
Repair	13	W	25	26	97.42
		Total:	451	567	EIP = 100

Pressure Manifold Design Criteria

Initial System

Line Number	Line Color	Elevation	Drainline Length(ft)	Tap Size/Schedule	Flow/tap (gpm)	gpd/ft	LTAR (gpd/sqft)
2	Y	100.38	70	1/2"sch 40	7.11	1.612	0.537
3	B	99.56	100	3/4"sch 80	10.10	1.602	0.534
4	W	98.87	55	1/2"sch 80	5.48	1.581	0.527

Total Drainline= 225 Total Flow= 22.69

Pressure Head (ft)= 2 Target LTAR= 0.533 gpd/sqft LTAR + 5% 0.56
 Daily Flow= 360 Total Flow (gpm)= 22.69 Daily PRT(min)= 15.87
 Dose Vol= 110.19 gallons w/ Pipe Vol @% 75 Dose PRT (min)= 4.86

MANIFOLD DIAGRAM:

