

MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 218 Queens Cove Rd., Queens Cove SD Lot 102
House Footprint: See attached
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Existing Well
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT2 (initial), 0.275 GPD/FT2 (repair)
Proposed System Type: 25% Reduction
Proposed Repair System Type: PPBPS
Distribution: Pressure Manifold
Flow per Tap: 5.48 GPM
Tap Size and Material: ½" SCH 80 (6 taps)
System Flow: 32.9 GPM
Dosing Volume: 175.9 gallons
Pump Run Time: 5.3 minutes
Elevation Head: 15.2'
Friction Head: 5.8'
Pressure Head: 2'
Total Dynamic Head: 23'
Supply Line Length: 235'
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 24-36"

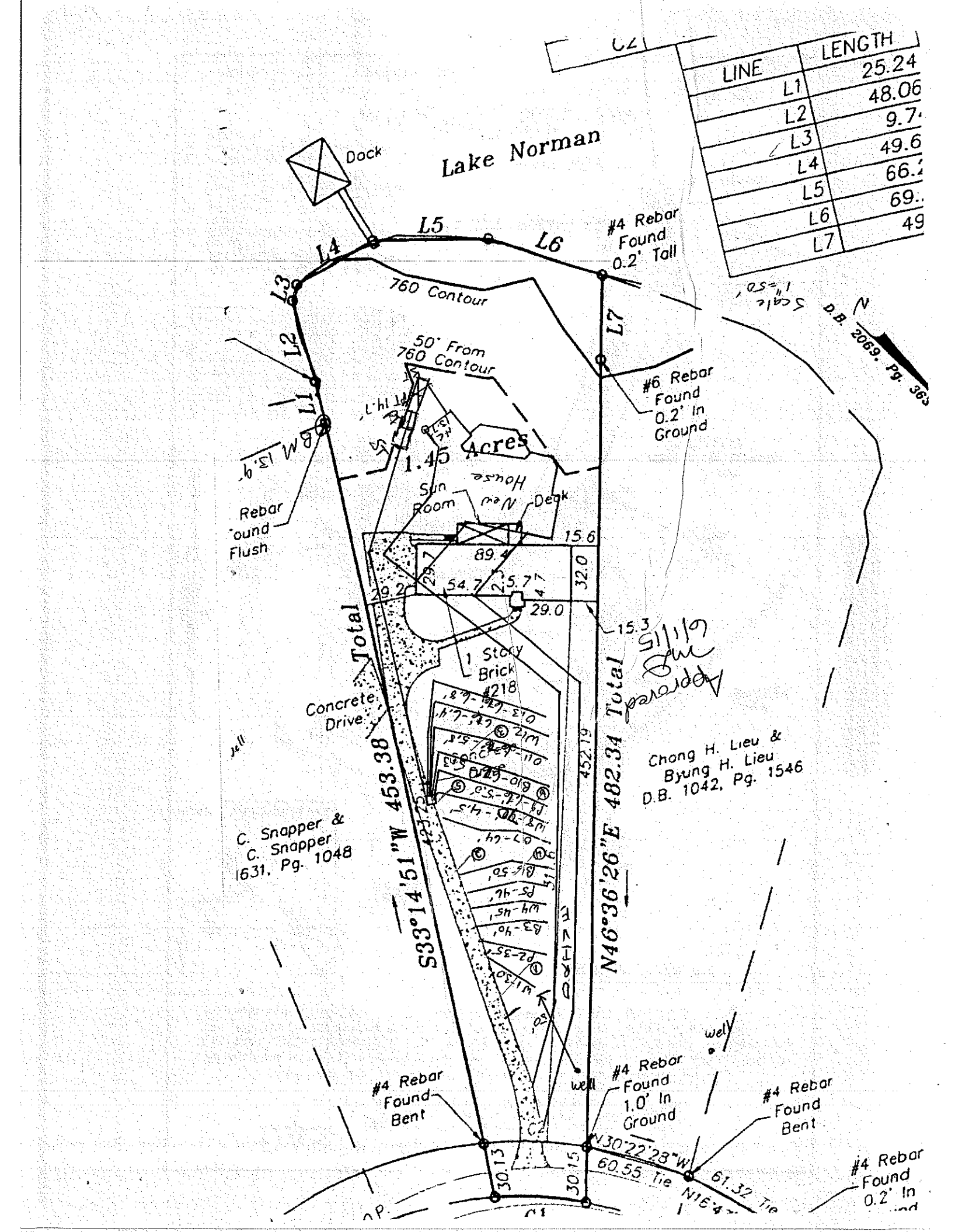
Line	Design Length	Actual Length	Elevation
White 1		30'	2.5'
Pink 2		35'	2.7'
Blue 3		40'	2.9'
White 4		45'	3.1'
Pink 5		46'	3.4'
Blue 6		50'	3.6'
Orange 7		64'	4.1'
White 8	**67'**	**89'**	**4.5'**
Pink 9	**67'**	**94'**	**5.0'**
Blue 10	**67'**	**98'**	**5.3'**
Orange 11	**67'**	**99'**	**5.8'**

Approved
MA
1/14/15

Line	Design Length	Actual Length	Elevation
White 12	67'	98'	6.4'
Orange 13	67'	75'	6.8'

Initial System: 402' **Repair System:** 310'
Pump Tank: 14.7' **House Corner:** 13.7' **Benchmark:** 13.9'

Comments:
The water line from the existing well will need to be rerouted to be 10' from the septic area. The existing septic will be abandoned. The existing driveway will be removed and a new driveway built.



LINE	LENGTH
L1	25.24
L2	48.06
L3	9.7
L4	49.6
L5	66.2
L6	69..
L7	49

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

PROPERTY ID #: 4645254134
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: Blankenship Family Trust _____ APPLICATION DATE _____
ADDRESS: 2020 6th St., South Naples, FL _____ DATE EVALUATED: _____
PROPOSED FACILITY: _4 bdrm_____ PROPOSED DESIGN FLOW (.1949): _480 GPD_____ PROPERTY SIZE: _1.46 AC_____
LOCATION OF SITE: Queens Cove SD Lot 102, 218 _____ PROPERTY RECORDED: _7/10/1980_____
WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

Approved MD 6/1/15

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LS 3% ✓	0-10	Br CL WSBK	FR SS SP	Few Mn	48"	N/A	N/A	PS 0.275
		10-43	R C SBK	FR SS SP					
		43-48	R CL WSBK	FR SS SP	No Mn				
2	LS 3% ✓	0-12	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		12-42	R C SBK	FR SS SP					
		42-48	R CL WSBK	FR SS SP					
3	LS 3% ✓	0-4	Br CL WSBK	FR SS SP	N/A	48"	F-C SAP	N/A	PS 0.3
		4-20	R C SBK	FR SS SP					
		20-48	R CL WSBK	FR SS SP					
4	LS 3% ✓	0-12	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		12-40	R C SBK	FR SS SP					
		40-48	R CL WSBK	FR SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1200 FT2	1134 FT2
System Type(s)	25% Reduction	PPBPS
Site LTAR	0.3	0.275

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): ___PS_____
EVALUATED BY: ____M A & Associates_____
OTHER(S) PRESENT: _____

COMMENTS: _____

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

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PROPERTY ID #: 4645254134
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5	LS 3%	0-4	Br CL WSBK	FR SS SP	N/A	48"	N/A	N/A	PS 0.3
		4-36	R C SBK	FR SS SP					
		36-48	R CL WSBK	FR SS SP					
6	LS 3%	0-5	Br CL WSBK	FR SS SP	N/A	48"		N/A	PS 0.3
		5-26	R C SBK	FR SS SP					
		26-48	R CL WSBK	FR SS SP			Few SAP		

COMMENTS: