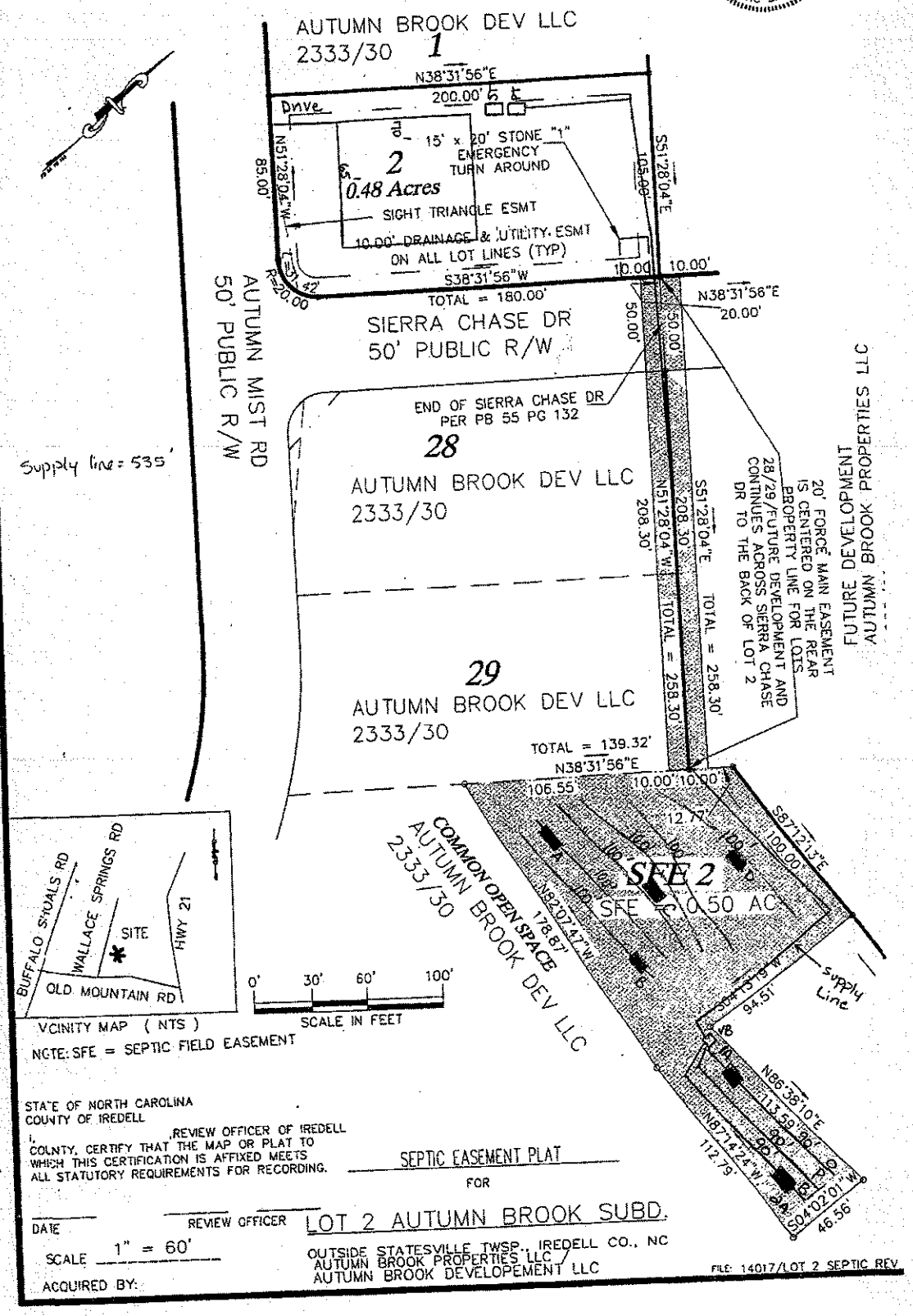
DOWELL & COMPANY, P.C.
ENGINEERING - SURVEYING - PLANNING
344 Rolling Hill Road Suite 103 - Mooresville, N.C. 28117
(704) 660-9697 (704) 664-5177 Fax Email: leland7896@aol.com

I, certify that this map was drawn under my supervision from an actual survey made under my supervision recorded in deed book 2333, page 30, and/or AND/OR DB 2333, PG 38 plat book 55, page 132, that the ratio of precision is 1':10,000, that this map was prepared in accordance with the General Statutes of North Carolina Chapter 89C my hand and seal on the 6, day of NOVEMBER, A.D. 20 15.

NORTH CAROLINA PROFESSIONAL LAND SURVEYOR DOUGLAS L. DOWELL JR. SEAL 35081

DOUGLAS L. DOWELL, JR., PLS L-3508



NOTE: SFE = SEPTIC FIELD EASEMENT

STATE OF NORTH CAROLINA
COUNTY OF IREDELL

I, REVIEW OFFICER OF IREDELL COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

DATE REVIEW OFFICER

SCALE 1" = 60'

ACQUIRED BY:

SEPTIC EASEMENT PLAT

FOR

LOT 2 AUTUMN BROOK SUBD.

OUTSIDE STATESVILLE TWSP., IREDELL CO., NC
AUTUMN BROOK PROPERTIES LLC
AUTUMN BROOK DEVELOPEMENT LLC

FILE: 14017/LOT 2 SEPTIC REV

Autumn Brook Lot 2 Fast Track Septic System Information

Number of Bedrooms	4
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.3
Primary System Type	**LP PPBPS**
No. Lines	3 (See Table)
Total Linear Feet	270
Trench Width	2' min.
Trench Spacing	8' min.
Trench Depth (low side)	36"
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	610' of 2" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	30 gpm
Elevation head	Approx. 6.0'
Pressure head	3.0'
Friction head	10.9'
20% Contingency	4.0'
Total Head	23.9'
Pump Requirements	30 gpm @ 23.9' of head To be designed by installer.
Maximum Dosing Volume	216 gal -2.2 doses/day @ design flow*
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 7.2 min.
Check Valve	No
Siphon Break hole	Yes
Repair System	**Subsurface Drip**
Total Linear Feet	8,500 SqFt+
Repair LTAR	0.1

***Before placement of cap block, one panel on each line near the center of the field should be**

observed filling to make certain that it does not overflow top chamber into air chambers of panel. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.

Table 1: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elev. (Ft.)	Panels	Holes	Hole Spacing	Hole Size (In.)
1	System	Orange	LPPPBPS	90 endfed	pumping	20	20	1 per panel	5/32"
2	System	Pink	LPPPBPS	90 endfed	down	20	20	1 per panel	5/32"
3	System	Blue	LPPPBPS	90 endfed	hill	20	20	1 per panel	5/32"
						Total: 60	Total: 60 (1 in each panel turned up)		
				Total System: 270'					
				Total Repair: xxx'					

Tank	Red	1000 gal (2 compartment)	
Pump Tank	Red	1000 gal.	
House	Blue		

Note: **System and repair on offsite SFE 2**
Use 2 ft trench width for installation of primary system
Installer/Surveyor should verify elevations prior to installation
Shave approximately 14 inches off the agricultural berm along lower edge of SFE to keep water from ponding over septic area. Install trenches 8 ft on center

Environment, Health, and Natural Resources
Environmental Health
Wastewater Section

HS ✓

Sheet:
Property ID:
Lot #: 2
File #:
AppID:

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner:
Address:
Applicant:
Proposed Facility: SFR Design Flow (.1949)
Date Evaluated: 10/16/15
Location of Site: Autumn Brook Lot 2 Easement
Property Size: 0.48/0.50
Property Recorded:
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1A	L 5-~10%	0-9	Mo GR SL	FR ns/np	Br				
		9-32	Mo SBK C	FR ss/sp	R				
		32-54	WK SBK C	FR ss/sp	R; C sap; sap vein 40-45"				0.3
2A	L 5-~10%	0-29	Mo GR SL	FR ns/np	Br				
		29-46	Mo SBK C	FR ss/sp	R				
		46-68	WK SBK C	FR ss/sp	R; F/C sap				0.3

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR		

Other Factors (.1946):
Soil Evaluation By:
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

* Remove ~14" of pit 2A when Smoothing out Aq. Berm

Project #:
Prop ID #:
County:

SOIL/SITE EVALUATION

HS ✓

Sheet:
Date Evaluated:

Owner or Client:
Proposed Facility: Design Flow:
Location of Site:
Soil Described By: Others Present:
Antecedent Moisture: Weather:

Property Size:
Site LTAR: Int. Rep.
Site Classification:

Water Supply: [ ] Public [ ] Community [ ] On-Site Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [ ] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY: Structure/ Texture	SOIL MORPHOLOGY: Consistence Mineralogy	PROFILE FACTORS: Inclusions	PROFILE FACTORS: Matrix Color	PROFILE FACTORS: Mottles	PROFILE FACTORS: Profile Notes (Restr Horiz, Soil Depth, Coarse Frag, etc...)	Profile Class & LTAR
pit 1 C	L ~10%	0-14	Mo GR SL	FR ns/np		Br			0.1 drip
		14-23	Mo/WK SBK C	FR ss/sp	C sap	R			
		23'	Cr/VFI SAP						
			18, 29, 16, 21, 29						
pit 2 D	L ~5%	0-33	Mo GR SL/WK SBK SL	FR ns/np		Br			0.3
		33-55	mo SBK C	FR ss/sp	F SAP	R			
3									
4									
5									
6									

COMMENTS:

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet:
Property ID: HS
Lot #:
File #:
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner:
Address:
Proposed Facility: Design Flow (.1949) 480
Location of Site: Lot 2 Autumn Brook

Applicant:
Date Evaluated: 7-30-15
Property Size:
Property Recorded:

Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [ ] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
(on Lot) 3 pit	LR ~2%	0-18	MoSBKC	FR SS/SP	R, F Sap				0.3
		18-42	WK SBK CL	FR SS/SP	R, C Sap				
		42-63	MA L/SL Sap	FR NS/NP	yel R				
(on Lot) 1 pit	L ~2%	0-4	Mo GR SL	FR NS/NP	Br				0.35
		4-21	MA SL Sap	Fi NS/NP	multi				
		21-64	MA L/SL Sap	FR NS/NP	multi				
H	L ~10%	0-22	MO SBK C	FR SS/SP	R				C.P
		22-38	WK SBK CL	FR SS/SP	R; C Sap				
		38-44	MA L/SL Sap	FR SS/SP	multi				
					Quartz vein	Rock at 21"			
E	~10%	0-6	MO GR SL	FR NS/NP	R				D 1.0
		6-22	MO SBK C	FR SS/SP	R				C 0.1
		22'	ROCK + VF SAP						

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR		

Other Factors (.1946):
Soil Evaluation By:
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present: