BCW

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625

PERMIT # OSWP-2023-13752

SEPTIC: IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4741-21-6536

APPLICANT / OWNER: NORTHLAKE DEVELOPERS LLC | APPLICANT ADDRESS: 110 Nautical Point Court, Mooresville, NC 28117

SITE ADDRESS: 141 TRELLIS LN, TROUTMAN, NC 28166 | PHONE: 9808294090 | ALT. PHONE:

SITE DIRECTIONS: Perth to Autumn Leaf to Trellis | SAP CONTROLLED: YES ☐ NO ☑

SUBDIVISION: Normandy Breaks | SECTION: 1 | LOT #: 16 | LOT AREA: .845 | DESIGN FLOW: 360 | L.T.A.R.: .25

Septic Tank: (gal) 1000	STB: 760	Date: 6/30/23	☑ New System ☐ Repair ☐ Expansion	System Type:	☑ Residence	No. Bedrooms: 3	Water Supply: New Well
Pump Tank: (gal) 1000	PT: 363	Date:	System Description: LPHPPBPS-50% Reduction		☐ Business	No. Persons: 6	
Pump Make: Zoeller	Model: BN1533	Serial #:	Repair System Description: LPHPPBPS-50% Reduction		☐ Other	No. Employees:	
# Nitrification Fields: 1	# Lines: 5	Linear Ft.: 240	Maintenance Agreement Required: ☑ YES ☐ NO		☐ Slab	☑ Crawl Space	
Trench Width: 36in	Trench Bottom Depth (Low side): 20in		Gravel Depth: -	☐ GRAVITY ☑ PRESSURE	☐ Basement w/ Plumbing	☐ Basement w/o Plumbing	

Comments / Conditions:

INITIAL SITE SKETCH

This permit is issued pursuant to G.S. 130A-335(a2), (a3) & (a4) using the signed and sealed LSS/LG Evaluation attached here, from:

Soil & Forestry Services of the Carolinas

LSS# 1231

AS BUILT SKETCH

Lines, tanks, 8/9/23 DW
CVB
Electrical
PH 9/26/23
Floats CW
Alarm
M.A. - SH 10/2/23

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION

☐ IMPROVEMENT PERMIT with plat valid without expiration. ☑ IMPROVEMENT PERMIT with site plan valid for 60 mos. ☑ AUTHORIZATION TO CONSTRUCT valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.

Owner / Applicant Signature: _____ Date: _____

IMPROVEMENT PERMIT by: Benjamin A. Batts Date: 1/26/2023

AUTHORIZATION TO CONSTRUCT by: Benjamin A. Batts Date: 1/26/2023.

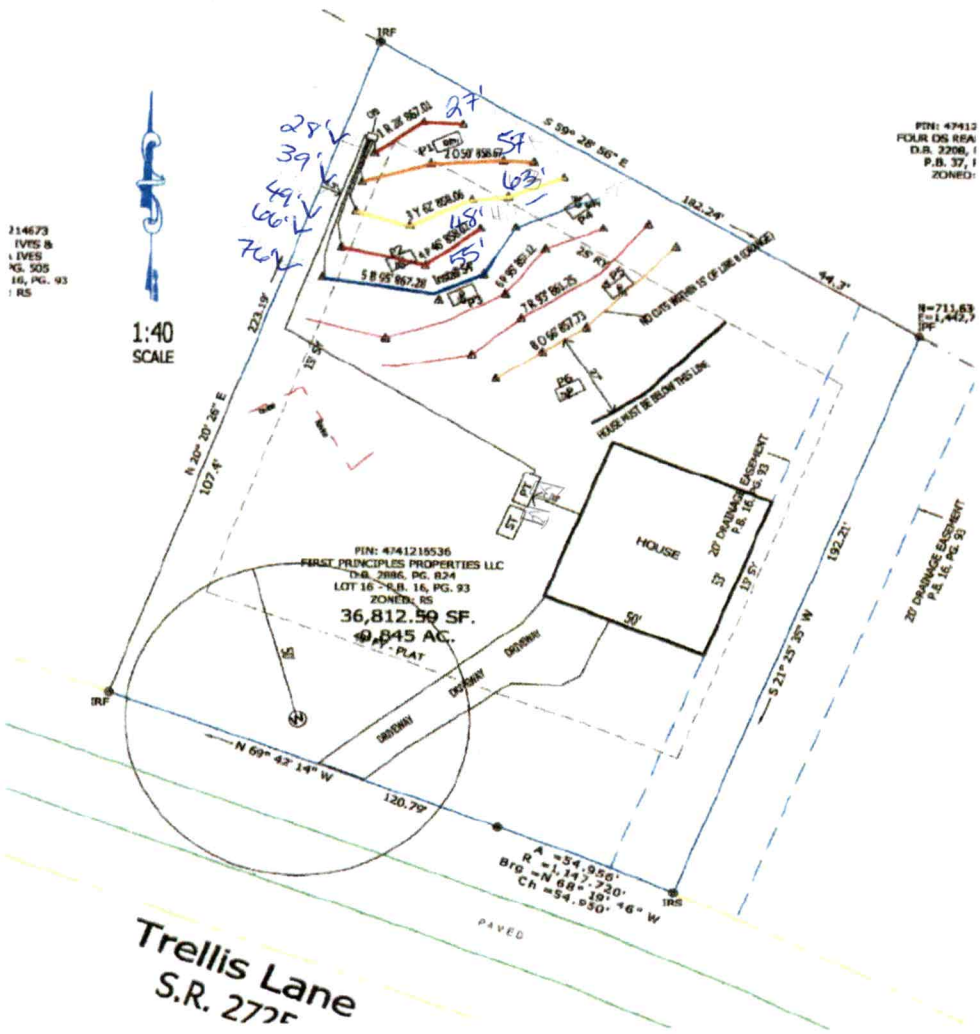
Installed By: AJ Remodeling

OPERATION PERMIT by: Sydney Tillman Date: 10/2/23

Existing System Inspected By: _____ Date: _____

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 BETWEEN 8am-9am the day the inspection is needed.

CVB box 10',
first line 13' (from property line)



County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 1/24/2023 (*Date*) by BB (*Initials*)

Permit Number: OSWP-2023-13752

G.S. 130A-335(a4) states the following: *'If a local health department fails to act on an application for an improvement permit submitted pursuant to subsection (a3) of the section within 10 business days of receipt of a complete application, the local health department shall issue the improvement permit.'*

In accordance with G.S. 130A-335(a3) the improvement permit application is:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

_____

_____

Copies of this were sent to the LSS and the Owner on _____ (*Date*)

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)

Copies of this were sent to the LSS and the Owner on _____ (*Date*)

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: Benjamin A Botts Date of Issuance: 1/26/2023

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2), (a3), and (a4) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: 1/26/2028

See attached site sketch

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 1/24/2023 (Date) by BB (Initials)

Permit Number: OSWP-2023-13752

G.S. 130A-335(a6) states the following: *'If a local health department fails to act on an application for a construction authorization submitted pursuant to subsection (a5) of the section within 10 business days of receipt of a complete application, the local health department shall issue the construction authorization.'*

In accordance with G.S. 130A-335(a5) the construction authorization application is:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

_____

Copies of this were sent to the AOWE/PE and the Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)

Copies of this were sent to the AOWE/PE and the Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: Benjamin H. Botts Date of Issuance: 1/26/2023.

This Construction Authorization is issued pursuant to G.S. 130A-335(a2), (a5), and (a6) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner. Final landscaping shall be constructed to divert water and establish vegetative cover.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: 1/26/2028

See attached site sketch

County: Iredell

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 4741216536

Issued To: NorthLake Developers, LLC

Property Location: 141 Trellishane Trail Troutman NC 28166

Subdivision: Normandy Breaks Lot #: 16 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

If yes, name and license number of LSS: Samuel Ashley Rollans #1731

New ☑ Repair ☐ Expansion ☐ System Relocation ☐

Proposed Structure: Residence

Proposed Wastewater System Type: HPPBPS (Initial) HPPBPS (Repair)

Fill System: ☐ Yes ☑ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area please provide a fill plan)

Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): 0.25 Proposed LTAR (Repair): 0.225

Design Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process

Number of bedrooms: 3 Number of Occupants: 6 Other: _____

Pump Required: ☑ Yes ☐ No ☐ May be required based upon final location and elevations of facilities

Artificial Drainage Required: ☐ Yes ☒ No If yes, please specify details: _____

Type of Water Supply: ☑ Private well ☐ Public well ☐ Municipal Supply ☐ Spring ☐ Other: _____

Drainfield location meets requirements of Rule .1945: Yes ☑ No ☐

Drainfield location meets requirements of Rule .1950: Yes ☑ No ☐

Permit valid for: ☑ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

See Design

Licensed Soil Scientist Print Name: Samuel Ashley Rollans

Licensed Soil Scientist Signature: Samuel A Rollans Date: 12/29/22

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch

County: Iredell

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 4741216536

Issued To: Northlake Developers, LLC

Property Location: 141 Trellis Lane Troutman NC 28166

AOWE/PE Plans/Evaluations Provided: Yes ☑ No ☐ If yes, name and license number of AOWE/PE: Samuel Ashley Rollans 10027E

Facility Type: Residence

☑ New ☐ Expansion ☐ Repair System Relocation ☐

Basement? ☐ Yes ☑ No Basement Fixtures? ☐ Yes ☑ No

Type of Wastewater System** HPPBPS (Initial) HPPBPS (Repair)

Design Daily Flow: 360 GPD Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes ☑ No

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 240 feet Trench/Bed Spacing: 9 feet on center

Drainfield square footage: 720 Trench/Bed Width: 36 inches LTAR: 0.25 gpd/ft²

Soil Cover: 6" inches min Slope Adjusted Maximum Trench/Bed Depth: 20 inches (Low side)

Aggregate Depth: _____inches above pipe _____inches below pipe _____inches total

Pump Tank Size (if applicable): 1000 gallons Requires more than 1 pump? ☐ Yes ☑ No

Pump Requirements: 32.16 ft. TDH vs. 22.71 GPM Grease Trap Size (if applicable): _____ gallons

Distribution Method: ☐ Serial ☐ D-Box or Parallel ☐ Pressure Manifold(s) ☑ LPP ☐ Other: _____

Artificial Drainage Required: Yes ☐ No ☑ If yes, please specify details: _____

Legal Agreements *(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)*

Multi-party Agreement Required [.1937(h)]: Yes ☐ No ☑

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: ☐ Yes ☑ No

Declaration of Restrictive Covenants: ☐ Yes ☑ No

****If applicable:**

I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Print Name: _____

Owner/Legal Representative Signature: _____ Date: _____

Pre-Construction Conference Required: Yes ☐ No ☑

Conditions: See Design

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

AOWE/PE Print Name: Samuel Ashley Rollans

AOWE/PE Signature: Samuel A Rollans Date: 12/28/22

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch

NC ON-SITE WASTEWATER EVALUATOR Certification Number 10027E

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an HPPBPS Septic System w/Low pressure distribution for a 3 bedroom single family residence on 141 Trellis Ln, (PIN# 4741216536), Troutman NC, 28166.

Contents: **Page**

Information for the Installer---------- 1

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4
- System Tapsheet---------- 5

Site Plan/System Plan---------- 6

Calculations---------- 7

Profile Descriptions---------- 8-9

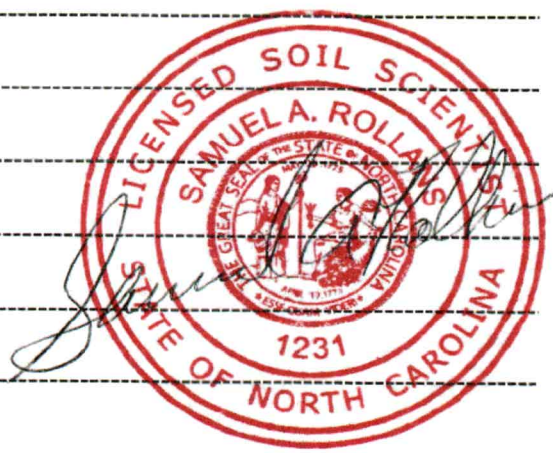
Septic Application---------- ONLINE

Agent Authorization---------- ONLINE

Green Sheet---------- ONLINE

Improvements Permit Form---------- 10

Construction Authorization Form---------- 11



November 28, 2022
Project #: 22-0073
Design By: Soil & Forestry Services of the Carolinas, PA

LP HPPBPS SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Northlake Developers, LLC
Current Address:	110 Nautical Point Ct. Mooresville, NC 28117
Phone:	980.829.4080
County:	Iredell
Location:	141 Trellis Lane Troutman, NC 28166
Source of Wastewater Flow:	3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	360 gpd
System Flow:	22.71 gpm

Design Specifications

Drainfield Size:	240
Loading Rate (gpd/ft.^{2}):	0.25
Depth of Gravel in Trench:	NA (PPBPS)
Gravel Size:	NA (PPBPS)
Trench Depth (LOW SIDE):	20 in., Repair 20 in. Trench Depth
Trench Width:	36 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	155
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	26.97
Dosing Volume:	198.00
Supply Manifold:	N/A
Supply Manifold Length:	N/A
Supply Manifold Volume:	N/A
Recommended Float Controls:	SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	1.97
Elevation Head:	24.00
Total Dynamic Head:	32.16
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA

141 Trellis Lane

LP HPPBPS

DESIGN FLOW (gpd):	360
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.25
TOTAL AREA TRENCH BOTTOM:	720
TOTAL LATERAL LENGTH:	240
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	240
SUPPLY LINE LENGTH:	155
TOTAL DYNAMIC HEAD:	32.16
MANIFOLD SIZE:	N/A
DOSING VOLUME:	198.00
PUMP TANK DRAW DOWN*:	9.4
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

141 Trellis Lane

Project #: 22-0073

LAYOUT FOR 3 BEDROOM HOME

November 28, 2022

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
HOUSE CNR	(LEFT REAR)				849.00		
P. TANK					849.00		
1	***RED***				***867.01***	***28***	***28***
2	***ORANGE***				***858.67***	***50***	***50***
3	***YELLOW***				***858.06***	***62***	***62***
4	***PINK***				***858.02***	***46***	***46***
5	***BLUE***				***857.28***	***95***	***54***
6	PINK				856.55	95	95
7	RED				855.25	93	93
8	ORANGE				854.73	66	66
					Total	**535**	**494**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION	TRENCH DEPTH (LOW SIDE)
**** System***	***240***	***0.250***	***MOD.***	***0.250***	***HPPBPS***	**LOW PRESSURE**	***20"***
Repair	295 Plus Extra on Line #5	0.225	MOD.	***0.225***	***HPPBPS***	LOW PRESSURE	***20"***

Notes:

****All septic lines, elevations and pits located via SURVEY**
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags

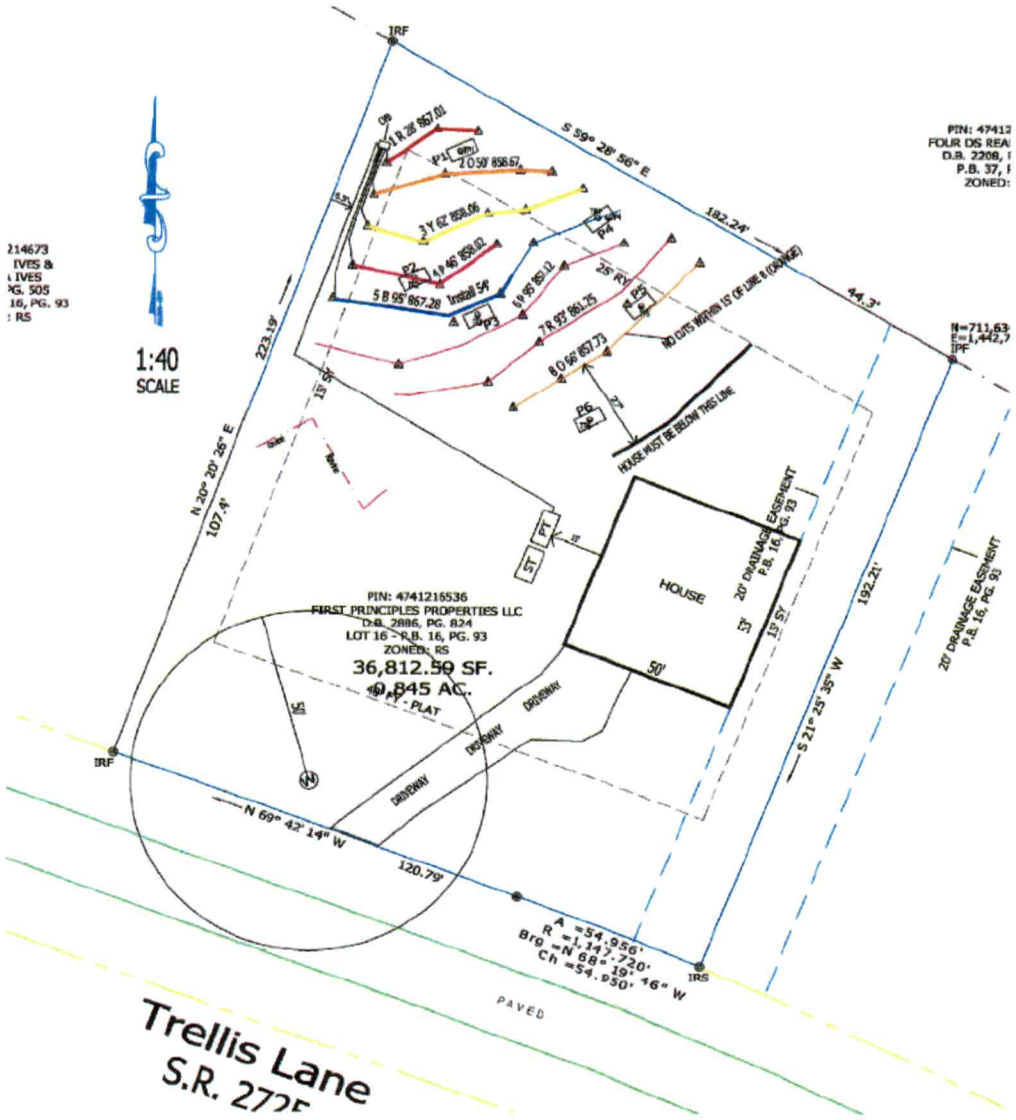
LP HPPBPS TAPSHEET -141 Trellis Lane

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
1	*RED*	*867.01*	*28*	*0.156*	*0.41*	*84*	*6*
2	*ORANGE*	*858.67*	*50*	*0.156*	*0.41*	*150*	*12*
3	*YELLOW*	*858.06*	*62*	*0.156*	*0.41*	*186*	*14*
4	*PINK*	*858.02*	*46*	*0.156*	*0.41*	*138*	*11*
5	*BLUE*	*857.28*	*54*	*0.156*	*0.41*	*162*	*12*
	total	feet =	240	gal/min =	22.71		55

Des. Flow	360
Pump Run=	8.78
soil LTAR	0.25
LTAR +5%	0.2625
LTAR with mod.	0.5
LTAR with mod.. + 5%	0.525

.156 equals 5/32 inch hole


1:40
SCALE
IRF
S 59° 28' 56" E
182.24'
44.3'
223.19'
N 20° 20' 26" E
107.4'
15' OR
PIN: 4741216536
FIRST PRINCIPLES PROPERTIES LLC
D.B. 2886, PG. 824
LOT 16 - P.B. 16, PG. 93
ZONED: RS
36,812.50 SF.
0.845 AC.
± - PLAT
HOUSE
20' DRAINAGE EASEMENT
P.B. 16, PG. 93
192.21'
S 21° 25' 35" W
50'
15'
5'
DRIVEWAY
N 69° 42' 14" W
120.79'
A =54.956'
R =1,147.720'
Brg =N 68° 19' 46" W
Ch =54.950'
IRS
PAVED
Trellis Lane
S.R. 2725

CALCULATIONS

Location	141 Trellis Lane Troutman, NC 28166	
Project Number	21-0064	
Lot No:	16	
No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.25	$^{gal}/_{ft^2\ day}$
PPBPS? (YES OR NO)	YES	
Supply Line Length	155	ft.
Supply Line Volume	26.97	gal.
Required Feet of Line	240	ft.
Amount of Line from Layout	240	ft.
Gallons per Minute	22.71	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Pump Tank Capacity	1000	gal.
Panel Volume	3.6	gal.
# of Panels	55	
Dosing Volume	198.00	gal.
	Note: Dosing Volume based on 100% of # of panels times 3.6 gal/panel	
Tank Draw Down	9.4	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	8.78	minutes
Elevation Head	24	ft.
Pressure Head	2	ft.
Friction Factor	1.27	ft./100 ft. *(From the interpolater.)*
Friction Head	1.97	ft.
Total Dynamic Head (+15%)	32.16	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

PROPERTY ID #: 4741216536
COUNTY: Iredell

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

OWNER: North Lake Developers LLC
ADDRESS: 110 Nautical Point Court, Mooresville, NC 28117
APPLICATION DATE
DATE EVALUATED: 5/25/22
PROPOSED FACILITY: 3BR
PROPOSED DESIGN FLOW (.1949): 300 gpd
PROPERTY SIZE: 1.06 AC
LOCATION OF SITE: 141 Trellis Lane, Troutman NC 28166
PROPERTY RECORDED: Yes
WATER SUPPLY: ☐ Private ☐ Public ☐ 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	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 1	L/5%	0-11	BCL wfsbk	Fr SS SP SE XP		67	—	—	PS 0.3
		11-32	BRC wmALK/sbk	Fr SS SP					
		32-67	RBCL/SCL wfsbk	Fr SS SP					
P 2	L/5%	0-12	Colluvium			67	—	—	PS 0.25
		12-30	BSCL wfsbk	Fr SS P	+Mg Concretions +Fe Depl. +Chroma 4 1-42"				
		30-43	RBSC wmsbk	Fr SSP					
		43-67	BRC wfsbk/Abk	Fr SS SP					
P 3	L/5% *Stump Hole one side of Pit	0-15	Colluvium			67	—	—	PS 0.25
		15-30	BSCL wfsbk	Fr SS SP	+few Mg Con.				
		30-43	RBSC wmsbk	Fr S P	+Common Mg. few Fe Depl.				
		43-67	BRC wmsbk	Fr S P	+C. Fe Depl 54"-55"				
P 4	L/5-10%	0-5	BSL Gr	Fr SS SP		67	—	—	PS 0.275
		5-10	RBSCL wfsbk	Fr SS SP					
		10-40	RC wmsbk/Abk	Fr SS SP					
		40-67	RBCL wfsbk	Fr SS SP	+few Fe Depl. @ 7-67" +few SAP Incl.				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	HPPBPS	HPPBPS
Site LTAR	0.25	0.25

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S. Ashley Sellars
OTHER(S) PRESENT: Chad Wagner, Mason Freeman

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

Sheet 2 of 2

PROPERTY ID #: Same

DATE OF EVALUATION: Same

COUNTY: Same

141 Trellis Lane

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P5	L/6%	0-15	BSCL wfsbk	Fr SS SP	+Few Fe Depl 34-35"	54	PS	—	PS 0.25
		15-44	BRC wmAbk/sbk	Fr SS SP	-Qtz 2's @ 42-45"				
		44-54	RBCL wmsbk/Abk	Fr SS SP					
		54-68	VARC. MASS	Fr SS SP					
P6	L/11%	0-5	Colluvium			48		—	PS 0.225
		5-15	BCL wfsbk	Fr SS SP					
		15-29	RBC/SC wmsbk	Fr SS P	+Fe Depl @ 24"				
		29-48	RBCL wfsbk	Fr SS P	+C. Fe Depl +Qtz 2's 36"				
		48-69	VAR SCL/L MASS	Fr SS SP	+C. Fe Depl +C. Qtz 2's 36"				

LICENSED SOIL SCIENTIST SAMUEL A. ROLLAND 1231 STATE OF NORTH CAROLINA

COMMENTS:

Updated February 2014