Inspections 308499

ICHD - ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # RELAY-2022-10009

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

PIN # 4659-56-3536

APPLICANT / OWNER: Sunset Homes LLC | APPLICANT ADDRESS: 19701 BETHEL CHURCH ROAD SUITE 103-167, CORNELIUS, NC 28031

SITE ADDRESS: 139 SHEEP PATH DR, MOORESVILLE, NC 28115 | PHONE: (704) 237-7301 | ALT. PHONE:

SITE DIRECTIONS: N 21 -> R Shepherd -> L Shepherds Bluff -> L Bluff Meadow -> L Sheep Path | SAP CONTROLLED: YES ☑ NO ☐

SUBDIVISION: Shepherds Bluff | SECTION: 5 | LOT #: 33 | LOT AREA: 0.524 | DESIGN FLOW: 360 | L.T.A.R.: 0.35

Septic Tank: 1000 (gal)	STB: 760	Date: 9/3/22	☒ New System ☐ Repair ☐ Expansion	System Type: III	☑ Residence	No. Bedrooms: 3	Water Supply: Existing Well
Pump Tank: (gal)	PT:	Date:	System Description: VPPBPS		☐ Business	No. Persons: 6	
Pump Make:	Model:	Serial #:	Repair System Description: LPPPBPS		☐ Other	No. Employees: 0	
# Nitrification Fields: 1	# Lines: 4	Linear Ft.: 172	Maintenance Agreement Required: ☐ YES ☑ NO		☐ Slab	☐ Crawl Space	
Trench Width: 24	Trench Bottom Depth (Low side): 40		Gravel Depth: 0	☑ GRAVITY ☐ PRESSURE	☑ Basement w/ Plumbing	☐ Basement w/o Plumbing	

Comments / Conditions: All parts of system must be 100' from the well and meet all other setbacks. Install on contour. Divert all drainage. Maintain 15' off ditch, stay under dd needer ditch.

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 A. Rollins

AOWE 10027E

AS BUILT SKETCH

Installed as Drawn

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: D. Weber Date: 11/28/22

AUTHORIZATION TO CONSTRUCT by: D. Weber Date: 11/28/22

Installed By: Abernathy Long Wilt

OPERATION PERMIT by: Date: 12/5/22

Existing System Inspected By: Date:

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

RECORDED OR
OR EASEMENTS

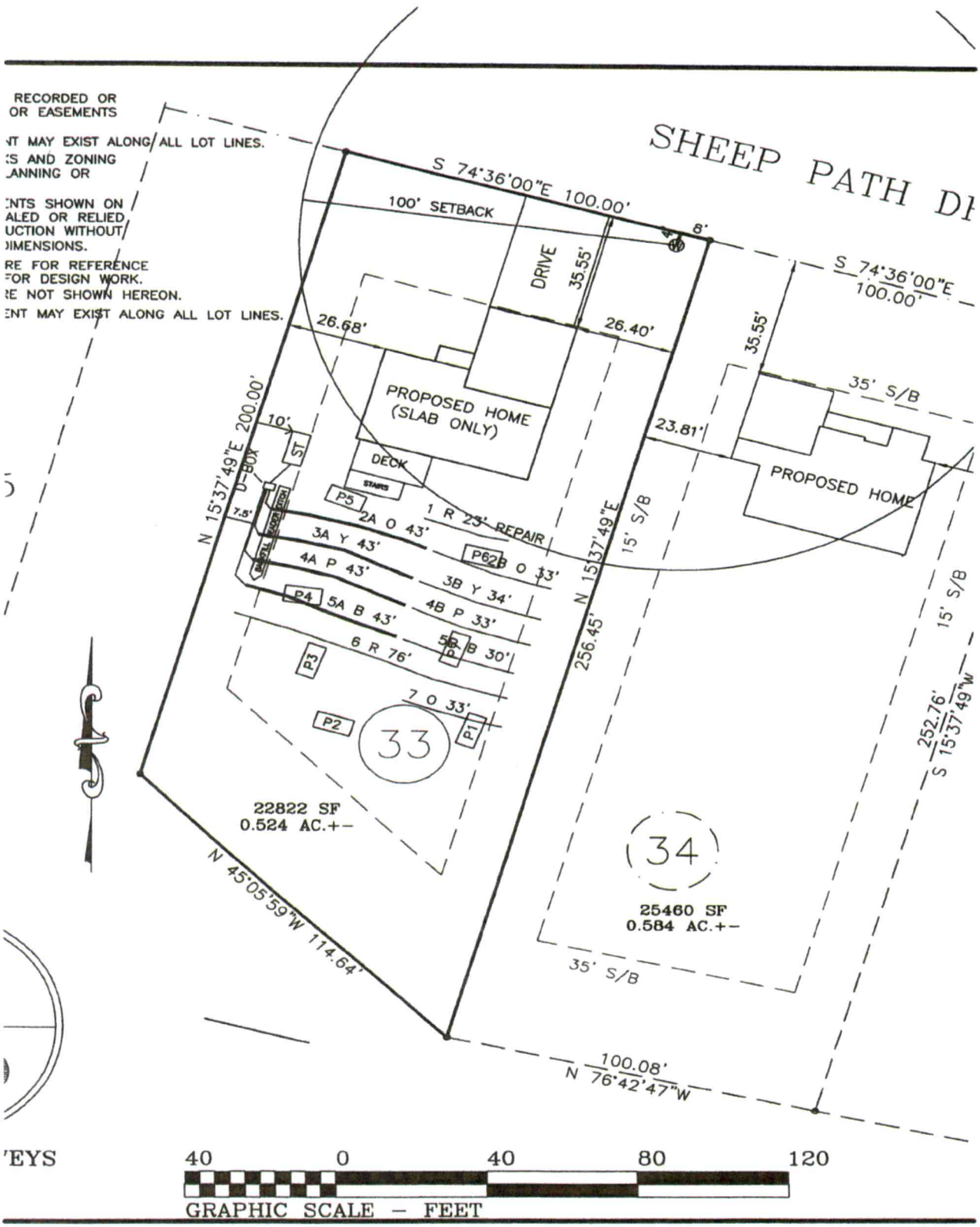
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FOR DESIGN WORK.
E NOT SHOWN HEREON.

ENT MAY EXIST ALONG ALL LOT LINES.



'EYS

County: Iredell

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

PIN/Lot Identifier: 4659563536

Issued To: Sunset Homes, LLC

Property Location: 139 Sheep Path Dr.

Subdivision: Shepherds Bluff Lot #: 33 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: Existing House Under Construction

Proposed Wastewater System Type: Mod. Conv. PPBPS (Initial) Mod Conv. PPBPS (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): 0.35 Proposed LTAR (Repair): 0.25

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:

Assign to Danielle Wieberg

Licensed Soil Scientist Print Name: Samuel Ashley Rollans

Licensed Soil Scientist Signature: Samuel A Rollans Date: 11/21/22

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

See attached site sketch

308499

County: Iredell

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

PIN/Lot Identifier: 4659563536

Issued To: Sunset Homes, LLC.

Property Location: 139 Sheep Path Dr.

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

Facility Type: Residence (Existing)

☑ New ☐ Expansion ☐ Repair System Relocation ☐

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

Type of Wastewater System** Mod. Conv (PPBPS) (Initial) Mod. Conv. (PPBPS) (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: 172 feet Trench/Bed Spacing: 8 feet on center

Drainfield square footage: (Existing) 374 Trench/Bed Width: 24 inches LTAR: 0.35 gpd/ft²

Soil Cover: 6 inches Min Slope Adjusted Maximum Trench/Bed Depth: 40 inches (Low Side)

Aggregate Depth: _____ inches above pipe _____ inches below pipe _____ inches total

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

Pump Requirements: _____ ft. TDH vs. _____ 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: Assign to Danielle Wieberg.

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 Rollins

AOWE/PE Signature: Samuel A. Rollins Date: 11/21/22

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

See attached site sketch

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 11/23/22 (Date) by DW (Initials)

Permit Number: RELAY - 2022-10009

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: D. Mebane Date of Issuance: 11/28/22

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: 11/28/32

See attached site sketch

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 11/23/22 (Date) by Online (Initials)

Permit Number: RELAY-2022-10009

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: D. McBerry Date of Issuance: 11/28/22

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: 11/28/27

See attached site sketch

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 20-0124
November 21st, 2021

Sunset Homes LLC
Attn: *Rich Wojtalik & Dan McNeil*
Email: sunsethomes.rich@gmail.com & sunsethomes.daniel@gmail.com

RE: Soil & Site Evaluation for a 3 Bedroom Residence (Slab) at 139 Sheep Path Dr., 0.52 ac Parcel, PIN# 4659563536, Mooresville, NC 28115, Iredell County, NC.

Mr. Wojtalik & McNeil:

At your request Soil & Forestry Services of the Carolinas (S&FS) has performed soil/site evaluations on parcel noted above.The Lot size is noted on the attached survey map & soil evaluation form. The purpose of our work was to identify soil areas with potential to support subsurface wastewater disposal systems and provide design details for Session Law submittals to Iredell County Health Department.

Site Conditions

At the time of our evaluation land cover on the property was cleared and house constructed. The septic tank was already set and header ditch was dug. Topography within the evaluated area was gently to moderate slope near the house site with gentle to moderate percentage of slope in the proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Don Allen Surveyors. The Surveyor provided an Autocad File of the survey with the proposed house envelope as a basemap. The new proposed septic layout was located via tape measures which were used to produce the attached *Site Plan*. The deck and stairs impacted the original layout but will not need modification.

Methodology

We evaluated soil areas through the use of backhoe pits. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with seven backhoe pit locations on the property flagged and located via GPS. Six of the seven backhoe pits are located in the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each pit and were submitted under the prior application. The existing house was established via survey and verified via tape measures. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by tape measure. Detailed system & repair information is summarized in the following paragraph for this Lot.

139 Sheep Path Dr.PIN 4659563536(*See Attached Design*)
The septic layout for this lot (8' centers) yielded a total of 434 linear feet of line. The primary system is proposed as 172' of Modified Conventional (50% Reduction) drainfield with gravity distribution. Trench depth (LOW SIDE) is specified at 40 inches. The repair system is proposed as 240' of Modified Conventional (50% Reduction) drainfield with low pressure distribution. Trench depth is specified at 30 inches. There is 262 linear feet of repair line available.

Session Law Requirements

All information needed to issue the IP must be submitted with the application. The application shall include all information described in 15A NCAC 18A .1937(d) and be accompanied by a signed and dated statement from the applicant (owner or owner's legal representative) that reads as follows:

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

Owner Date

Print Name Daniel McNeil
Signature 11/23/2022

The LSS evaluation shall include a statement bearing the LSS seal and signature that reads as follows:

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

Disclaimer
This report reflects the findings of S&FS, PA. *This LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2)."* Any site modifications that impact the proposed septic areas on the site may nullify this design. **This is a Saprolite System and the well must be installed where shown on the Site Plan. All parts of the system must be 100' from the well head.** System design requirements and site requirements shall be adhered to for installation and Operations Permits to be issued by the local Health Department. If you have questions regarding these requirements a Pre-Construction meeting should be scheduled to discuss. Please contact S&FS if you have any questions regarding this report or the attached information. S&FS also offers septic system inspection, wetland delineation and forestry services.

Sincerely,

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

S. Ashley Rollans, LSS
Attachment: *Septic Design*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Modified Conventional Septic System with gravity dist. for a 3 bedroom single family residence at 139 Sheep Path Dr., Lot 33, PIN#(4659563536) Mooresville 28115, Iredell County, NC.

Contents: **Page**

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

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4

Site Plan/System Plan---------- 5

Calculations---------- 6

Profile Descriptions---------- SUBMITTED

Zoning Permit & Receipt---------- SUBMITTED

Application---------- CLIENT

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

November 21, 2022
Project #: 20-0124
Design By: Soil & Forestry Services of the Carolinas, PA

INFORMATION FOR THE INSTALLER:

The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.

- Tanks shall be approved by NC DHHS, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as a gravity PPBPS installation.
- Repair is specified as a PPBPS with low pressure distribution installation.
- **100' Setback from well to any part of the system is required (Saprolite System).**
- **Backfill and tamp existing header ditch prior to installation.**

GRAVITY PPBPS SYSTEM FOR WASTEWATER TREATMENT

Applicant:	Sunset Homes LLC
Address:	19701 Bethel Church Rd #103-167 Cornelius, NC 28031
Phone:	704.785.6405
County:	Iredell
Location:	139 Sheep Path Drive Mooresville, NC 28115
Source of Wastewater Flow:	3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	360
System Flow:	N/A

Design Specifications

Drainfield Size:	172	
Loading Rate (gpd/ft.^{2}):	0.35	
Depth of Gravel in Trench:	N/A	
Gravel Size:	N/A	
Max.Trench Depth (LOW SIDE):	40 in.	Repair Trench Bottom 30 in.
Trench Width:	24 in.	
Septic Tank Size:	1000	
Estimated Supply Line Length:	8	
Supply Line Diameter:	4 in. SCH 40 PVC	
Supply Line Volume:	1.31	
Dosing Volume:	N/A	
Supply Manifold:	N/A	
Supply Manifold Length:	N/A	
Supply Manifold Volume:	N/A	
Recommended Float Controls:	N/A	
Recommended Control Panel:	N/A	
Pressure Head:	N/A	
Friction Head:	N/A	
Elevation Head:	N/A	
Total Dynamic Head:	N/A	
Threaded Union:	N/A	
Gate Valves:	N/A	
Check Valves:	N/A	
Anti-Siphon Hole:	N/A	
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas	

139 Sheep Path Drive

PPBPS SYSTEM

DESIGN FLOW (gpd):	360
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.35
TOTAL AREA TRENCH BOTTOM:	344
TOTAL LATERAL LENGTH:	172
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	172
SUPPLY LINE LENGTH:	8
TOTAL DYNAMIC HEAD:	N/A
MANIFOLD SIZE:	N/A
DOSING VOLUME:	N/A
PUMP TANK DRAW DOWN*:	N/A
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	N/A

Layout Specifications - 139 Sheep Path Drive-Lot 33

Project #: 20-0124

LAYOUT FOR 3 BEDROOM HOME 11/21/2022

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
1	RED					23	23
2A	***ORANGE***					***43***	***43***
2B	ORANGE					33	33
3A	***YELLOW***					***43***	***43***
3B	YELLOW					34	34
4A	***PINK***					***43***	***43***
4B	PINK					33	33
5A	***BLUE***					***43***	***43***
5B	BLUE					30	30
6	RED					76	76
7	ORANGE					33	33
					Total	434	434

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	LOW SIDE TRENCH DEPTH
**** System***	***172***	***0.350***	**MOD. CONV**	***0.350***	***PPBPS***	***GRAVITY***	40"
Repair	262	0.250	MOD. CONV	0.250	PPBPS	LOW PRESSURE	30"

Notes: **All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**Nitrification lines were survey located

GRAVITY PPBPS SPECIFICATIONS - 139 Sheep Path Dr.

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	# of Panels
2A	*ORANGE*	*N/A*	*43*	*N/A*	*N/A*	86	10
3A	*YELLOW*	*N/A*	*43*	*N/A*	*N/A*	86	10
4A	PINK	*N/A*	*43*	*N/A*	*N/A*	86	10
5A	BLUE	*N/A*	*43*	*N/A*	*N/A*	86	10
						344	40

total	feet =	172	gal/min =	N/A
		Des. Flow	360	
		Pump Run=	N/A	
		soil LTAR	0.35	
		LTAR +5%	0.3675	
		LTAR with mod.	0.7	
		LTAR with mod.. + 5%	0.735	