BLDR-2023-41027

ICHD - ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # OSWP-2023-40448

PIN # 4725-78-3059

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

APPLICANT / OWNER: Soil & Forestry Services LLC | APPLICANT ADDRESS: 126 3rd Creek Rd, Statesville, NC 28677

SITE ADDRESS: 122 BIRD HAVEN DR, STATESVILLE, NC 28625 | PHONE: 980-223-2352 | ALT. PHONE:

SITE DIRECTIONS: 90 -> R Monticello -> L Miller Farm -> R Dove Meadow -> R Bird Haven | SAP CONTROLLED: YES ☐ NO ☑

SUBDIVISION: Dove Meadow | SECTION: 2 | LOT #: 13 | LOT AREA: 0.818 | DESIGN FLOW: 360 | L.T.A.R.: 0.3

Septic Tank: 1000 (gal)	STB: 760	Date: 1-15-24	☒ New System ☐ Repair ☐ Expansion	System Type: III	☑ Residence	No. Bedrooms: 3	Water Supply: Municipal Water
Pump Tank: (gal)	PT:	Date:	System Description: 25% Reduction		☐ Business	No. Persons: 6	
Pump Make:	Model:	Serial #:	Repair System Description: 50% Reduction		☐ Other	No. Employees:	
# Nitrification Fields: 1	# Lines: 5	Linear Ft.: 302	Maintenance Agreement Required: ☐ YES ☑ NO		☑ Slab	☐ Crawl Space	
Trench Width: 36	Trench Bottom Depth (Low side): 30		Gravel Depth: 0	☑ GRAVITY ☐ PRESSURE	☐ Basement w/ Plumbing	☐ Basement w/o Plumbing	

Comments / Conditions: Do not pave, grade, drive, park, or bury utilities in drain field area. Install on contour, divert all drainage from drainfield areas.

INITIAL SITE SKETCH

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

Soil & Forestry Services - Ashley Rollans

LSS# 1231 / ADWE 10027E

AS BUILT SKETCH

Installed as Shown

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: DWiseberg Date: 11/8/23

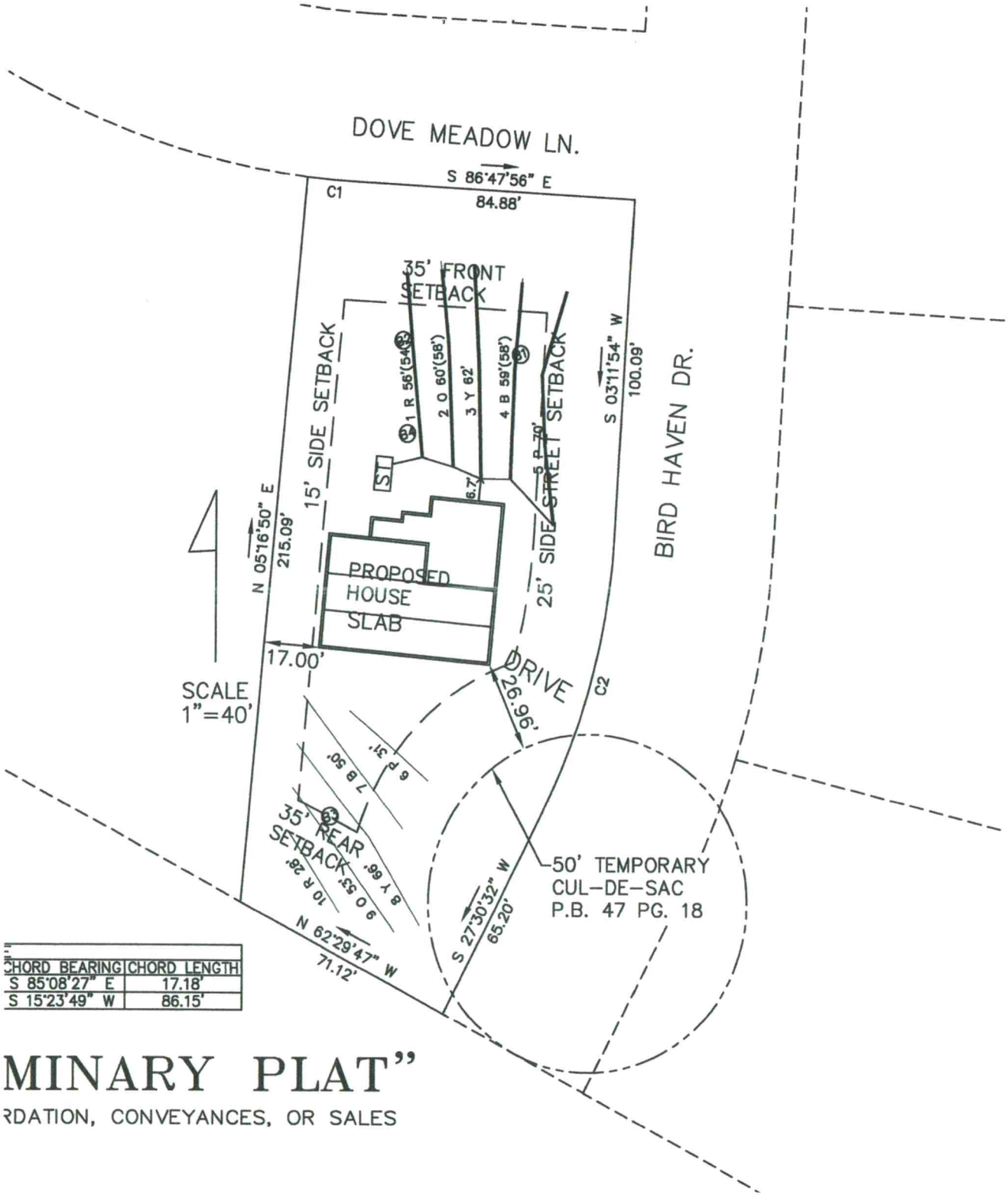
AUTHORIZATION TO CONSTRUCT by: DWiseberg Date: 11/8/23

Installed By: Steve Jordan

OPERATION PERMIT by: Sydney Holland Date: 3/4/24

Existing System Inspected By: Date:

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



CHORD BEARING	CHORD LENGTH
S 85°08'27" E	17.18'
S 15°23'49" W	86.15'

MINARY PLAT"

RDATION, CONVEYANCES, OR SALES

Permit #: OSWP-2023-40448

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Submittal Includes: ☑ (a2) Improvement Permit ☑ (a2) Construction Authorization ☐ Fee $_____

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

County: Iredell

PIN/Lot Identifier: 4725783059

Issued To: Aaron Bradley

Property Location: 122 Bird Haven Dr., Statesville NC 28625

Subdivision (if applicable) Dove Meadow Lot #: 13 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

If yes, name and license number of LSS: Samuel Ashley Rollins #1231

New ☑ Expansion ☐ System Relocation ☐ Change of Use ☐

Proposed Structure: 3 Bedroom Residential

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

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

Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3

Proposed Wastewater System Type*: Accepted 2506 - Gravity (Initial) Pump Required: ☐ Yes ☑ No ☐ May be required

Proposed Wastewater System Type*: PPBPS - Low Pressure (Repair) Pump Required: ☑ Yes ☐ No ☐ May be required

**Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)*

Saprolite System (initial): ☐ Yes ☑ No Saprolite System (repair): ☐ Yes ☑ No

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

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

Usable Soil Depth (Initial): 50" Usable Soil Depth (Repair): 50"

Max. Trench Depth (Initial)‡: 30" Max. Trench Depth (Repair)‡: 30" ***‡ Measured on the downhill side of the trench***

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

Type of Water Supply: ☐ Private well ☐ Public well ☐ Shared 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 Rollins

Licensed Soil Scientist Signature: Samuel A Rollins Date: 10/27/2023

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

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609
MAILING ADDRESS: 1632 Mail Service Center, Raleigh, NC 27699-1632
www.ncdhhs.gov • TEL: 919-707-5854 • FAX: 919-845-3972

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

Permit #: OSWP-2023-40448

This Section for Local Health Department Use Only

Initial submittal received: 11/7/23 *Date* by ONLINE *Initials*

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

☐ 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 Applicant on _____ *Date*

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: DWisberg Date: 11/8/23

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) 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 permit is subject to revocation if the site plan, plat, or the intended use changes. 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 the conditions of this permit.

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: 11/8/28

See attached site sketch

Permit #: DSWP 2023-40448

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

County: Iredell

PIN/Lot Identifier: 4725783059

Issued To: Aaron Bradley

Property Location: 122 Bird Haven Dr., Statesville NC 28625

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

Facility Type: 3 Bedroom Residential

☑ New ☐ Expansion ☐ Repair ☐ System Relocation ☐ Change of Use

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

Type of Wastewater System* Accepted 25% - Gravity (Initial) PPBPS - Low Pressure (Repair)

**Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)*

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
(if yes, please provide engineering documentation)

Installation Requirements/Conditions

Septic Tank Size: 1,000 gallons Total Trench/Bed Length: 302 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft²

Soil Cover: 6"min inches Slope Corrected Maximum Trench/Bed Depth‡: 30 inches ‡ ***Measured on the downhill side of the trench***

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

Pre-Construction Conference Required: Yes ☐ No ☑

Conditions: See design. * Slab & Plumbing Height Be Designed to Acheive Gravity Fall To THE SEPTIC TANK

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 Expiration Date: 5 years from HD signature

AOWE/PE Signature: Samuel Ashley Rollins Date: 10/27/2023

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

NC ONSITE WASTEWATER EVALUATOR Certification Number 10027E

See attached site sketch

Permit #: OSWP-2023-40448

This Section for Local Health Department Use Only

Initial submittal received: 11/7/23 (*Date*) by ONLINE (*Initials*)

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by 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, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization is determined to be:

☐ 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 Applicant on _____ (*Date*)

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: DWisberg Date of Issuance: 11/8/23

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) 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. 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 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: 11/8/28

See attached site sketch

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 23-0130
October 27th, 2023

Aaron Bradley
Attn: *Aaron Bradley*
Email: aaronbradley@fulfilledhope.com

RE: Soil & Site Evaluation for a 3 Bedroom Residence at 122 Bird Haven Dr.
0.81 ac Parcel, PIN# 4725783059, Statesville, NC 28625, Iredell County, NC.

Aaron:

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 mostly cleared on the property. Topography within the evaluated area was gently to moderate slope near the house site with moderate percentage of slope in the proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Nick Whitley. The Surveyor provided an Autocad File of the survey with the proposed house envelope as a basemap. The proposed septic layout was located via survey which was used to produce the attached *Site Plan*. The house envelope was pinned in the field by the surveyor.

Methodology

We evaluated soil areas through the use of auger borings. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with four boring locations on the property flagged and located via GPS. All four of the auger borings 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 boring. The house envelope was located via survey. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by survey and tape measure. Detailed system & repair information is summarized in the following paragraph for this Lot.

122 Bird Haven Dr.-Lot 13 PIN#4725783059 (*See Attached Design*)
The septic layout for this lot (9' centers) yielded a total of 535 linear feet of line. The primary system is proposed as 302 linear feet of Accepted (25% Reduction) drainfield with gravity distribution. Trench depth is specified at 30 inches. The repair system is proposed as 200 linear feet of Modified Conventional PPBPS (50% Reduction) drainfield with low pressure distribution. Trench depth is specified at 30 inches. There is 235 linear feet available for repair. **SLAB & PLUMBING HEIGHT MUST BE DESIGNED TO ACHIEVE GRAVITY FALL TO THE SEPTIC TANK.**

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 Aaron Bradley

Signature

11/1/23

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 for 122 Bird Haven Dr., Statesville NC 28625. 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, Required Statement for Local Health Department/NCDHHS*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Accepted Septic System with gravity dist. for a 3 bedroom single family residence at 122 Bird Haven Ln, Statesville 28625, Iredell County, NC. PIN#: (4725783059)

Contents: **Page**

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

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

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

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

Septic Application ---------- 7

IP Form---------- 8

CA Form---------- 9

Application for Services---------- 10

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

10/27/2023
Project #: 23-0130
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 25% reduction (Accepted) installation.
- Repair is specified as a 50% reduction (Modified Conv.) PPBPS w/ low pressure installation.

GRAVITY ACCEPTED SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Aaron Bradley
Address:	104 Chatfield Loop Statesville, NC 28677
Phone:	980-286-4963
County:	Iredell
Location:	122 Bird Haven Dr. Statesville, NC 28625
Source of Wastewater Flow:	3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	360
System Flow:	N/A

Design Specifications

Drainfield Size:	302	
Loading Rate (gpd/ft.^{2}):	0.3	
Depth of Gravel in Trench:	N/A	
Gravel Size:	N/A	
Trench Depth (Low Side):	30 in.	Repair Trench Bottom 30 in.
Trench Width:	36 in.	
Septic Tank Size:	1000	

Estimated Supply Line Length:	10
Supply Line Diameter:	4 in. SCH 40 PVC
Supply Line Volume:	6.53
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, PA

122 Bird Haven Dr.

ACCEPTED SYSTEM

DESIGN FLOW (gpd):	360
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	906
TOTAL LATERAL LENGTH:	302
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	300
SUPPLY LINE LENGTH:	10
TOTAL DYNAMIC HEAD:	N/A
MANIFOLD SIZE:	N/A
DOSING VOLUME:	N/A
PUMP TANK DRAW DOWN*:	N/A
SEPTIC TANK SIZE:	1000

Layout Specifications - 122 Bird Haven Dr.

Project #: 23-0130

LAYOUT FOR 3 BEDROOM HOME

10/27/2023

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
1	***RED***					***56***	***54***
2	***ORANGE***					***60***	***58***
3	***YELLOW***					***62***	***62***
4	***BLUE***					***59***	***58***
5	***PINK***					***70***	***70***
6	PINK					31	31
7	BLUE					50	50
8	YELLOW					66	66
9	ORANGE					53	53
10	RED					28	28
					Total	535	530

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	TRENCH DEPTH
**** System***	***302***	***0.300***	***ACCEPT.***	***0.300***	***25% RED***	***GRAVITY***	30"
Repair	233	0.300	MOD CONV.	0.300	PPBPS	LOW PRESSURE	30"

Notes: **All measures in feet

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

**Nitrification lines & house envelope were located by GPS.

CALCULATIONS

Location 122 Bird Haven Dr.
Statesville, NC 28625
Project Number 23-0130

Lot No: 13

No. of Bedrooms 3

Design Flow 360 $^{gal}/_{day}$

LTAR 0.300 $^{gal}/_{ft^2\ day}$

PPBPS? (YES OR NO) NO

Supply Line Length 10 ft.

Supply Line Volume 6.53 gal.

Required Feet of Line 300 ft.
Amount of Line from Layout 302 ft.

Gallons per Minute N/A $^{gal}/_{min}$

Required Septic Tank Capacity 1000 gal.
Septic Tank Size 1000 gal.

Panel Volume N/A gal.
# of Panels N/A
Dosing Volume N/A gal.

Tank Draw Down N/A

Pump Run Time

Elevation Head N/A ft.
Pressure Head N/A ft.
Friction Factor N/A ft./100 ft. *(From the interpolater.)*
Friction Head N/A ft.

Total Dynamic Head (+15%) N/A 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

Sheet 1 of 1
PROPERTY ID #: 4725783059
COUNTY: Iredell

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

OWNER: Aaron Bradley
ADDRESS: 104 Chatfield Loop Statesville NC 28677
PROPOSED FACILITY: 3 Bedroom Residential-360 GPD
LOCATION OF SITE: 122 Bird Haven Dr., Statesville NC 28625

APPLICATION DATE:
DATE EVALUATED: 10/24/2023
PROPERTY SIZE: 0.818
PROPERTY RECORDED: YES

WATER SUPPLY: ☐ Private ☐ Well ☐ Spring ☑ Other — Public water

EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut

TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPR CLASS	.1944 RESTR HORIZ	
1	L/6%	0-13 13-50	BSLGR RVWMSBK/ABK	FR SS SP FR SS SP		50"			PS 0.3
2	L/5%	0-8 8-33 33-50	BSLGR BRCWFSBK BRCLWFSBK	FR SS SP FR SS SP FR SS SP	FSAP FSCHIST/CSAP	50"			PS 0.3
3	L/7%	0-6 6-31 31-50	BSLGR RCWMSBK BRCLWFSBK	FR SS SP FR SS SP FR SS SP	F-CSAP	50"			PS 0.3
4	L/4%	0-12 12-18 18-50	DISTURBED BSLGR BSLGR BRCWFSBK	FR SS SP FR SS SP FR SS SP	FSAP	50"			PS 0.3
5									
6									
7									
8									
9									
10									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Types(s)	Accepted 25%-Gravity	PPBPS-Low Pressure
Site LTAR	0.3	0.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Ashley Rollans
OTHER(S) PRESENT: Chad Wagner

COMMENTS:

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5).
[hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for:
☑ (a2) Improvement Permit ☑ (a2) Construction Authorization ☐ (a2) Repair/Construction Authorization

Please check one of the following:
☑ New Construction ☐ Expansion ☐ System Relocation ☐ Change of Use ☐ Repair
☑ 5 Year Expiration Requested (site plan provided)
☐ Non-Expiring Permit Requested (plat provided, as defined in G.S. 130A-334(7a)

Property Owner Name: Aaron Bradley
Property Owner Mailing Address: 104 Chatfield Loop, Statesville NC 28677
Property Owner Phone Number: 980-296-4963
Property Owner Email Address: aaronbradley@fulfilledhope.com

Applicant Name: Aaron Bradley
Applicant Mailing Address: 104 Chatfield Loop, Statesville NC 28677
Applicant Phone Number: 980-296-4963
Applicant Email Address: aaronbradley@fulfilledhope.com

Does the property include, or is subject to, any of the following:
☐ Yes ☑ No Previously identified jurisdictional wetlands
☐ Yes ☑ No Existing or proposed easements, rights-of-way, encroachments, or other areas subject to legal restrictions
☐ Yes ☑ No Approval by other public agencies

A site plan or plat is required, **OR** the site sketch submitted from the LSS/AOWE, must include the following:
(A) existing and proposed facilities, structures, appurtenances, and wastewater systems
(B) proposed wastewater system showing setbacks to property line(s) or other fixed reference point(s)
(C) existing and proposed vehicular traffic areas
(D) existing and proposed water supplies, wells, springs, and water lines; and
(E) surface water, drainage features, and all existing and proposed artificial drainage, as applicable.

Requesting DHHS review: ☐ Yes ☑ No

I understand that the documentation and fees, as required in G.S. 130A-335(a2), (a3), (a5), and (a6), attached to this application are to be used to issue an Improvement Permit and/or Construction Authorization pursuant to G.S. 130A-335(a2),(a3), and (a5). I understand that authorized county and state officials are granted right of entry to the property indicated on this application to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that if the information in the application for an Improvements Permit and/or Construction Authorization is falsified, changed, or the site is altered, then the Improvement Permit and Construction Authorization shall become invalid.

Applicant Signature: Aaron Bradley Date: 11/1/23

Owner's Signature: Aaron Bradley Date: 11/1/23