AP 3116663

ICHD - ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # OSWP-2023-39408

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

PIN # 4721-31-8226

APPLICANT / OWNER: Soil & Forestry Services LLC APPLICANT ADDRESS: PO Box 5872 Statesville NC 28677

SITE ADDRESS: 113 SPRING VIEW LN, STATESVILLE, NC 28677 PHONE: 980-223-2352 ALT. PHONE:

SITE DIRECTIONS: Old Mountain -> L E Monbo -> R Levi -> L Powder Spring SAP CONTROLLED: YES ☑ NO ☐

SUBDIVISION: Powder Spring Creek SECTION: N/A LOT #: 5 LOT AREA: 0.934 DESIGN FLOW: 360 L.T.A.R.: 0.35

Septic Tank: (gal)	STB: 760	Date: 9-18-2023	☒ New System ☐ Repair ☐ Expansion	System Type: III	☑ Residence	No. Bedrooms: 3	Water Supply: Existing Well
Pump Tank: 1000 (gal)	PT: 363	Date: 10-2-2023	System Description: 25% Reduction		☐ Business	No. Persons: 6	
Pump Make: Zoeller	Model: N53	Serial #: 3K23029	Repair System Description: LPPBPS		☐ Other	No. Employees:	
# Nitrification Fields: 1	# Lines: 5	Linear Ft.: 270	Maintenance Agreement Required: ☐ YES ☑ NO		☐ Slab	☐ Crawl Space	
Trench Width: 36	Trench Bottom Depth [redacted] 36 MAX		Gravel Depth: 0	☐ GRAVITY ☑ PRESSURE	☐ Basement w/ Plumbing	☑ Basement w/o Plumbing	

Comments / Conditions: 2' Pressure Head, 6.3" drawdown DO NOT EXCEED 36" max trench bottom

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, LLC
Ashley Rollans

LSS# 1231 / AOWE: 10027E

AS BUILT SKETCH

11-14-2023 BCW
- TANKS
- MANIFOLD
- UPPER 3[redacted] DITCHES

Lines, manifold plumbing, 11/15/23 BW

MW 12/1/23 Pressure Head

Alarm MW 12/1/23

Electrical MW 12/1/23

Floats 12/1/23

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: D Meben Date: 11/8/23

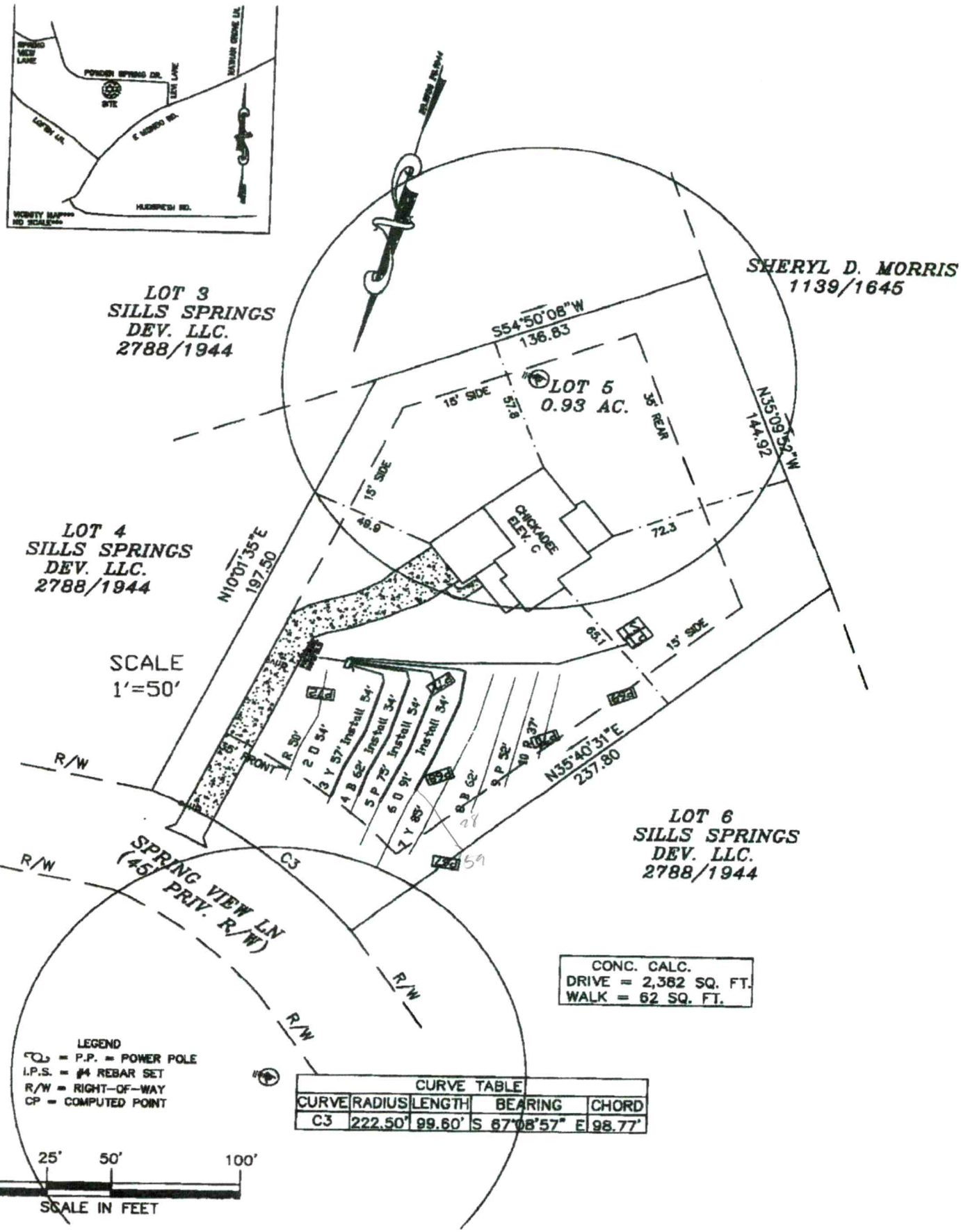
AUTHORIZATION TO CONSTRUCT by: D Meben Date: 11/8/23

Installed By: SPECIALTY SEPTIC

OPERATION PERMIT by: Date: 12/1/23

Existing System Inspected By: Date:

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


SHERYL D. MORRIS
1139/1645
LOT 3
SILLS SPRINGS
DEV. LLC.
2788/1944
S54°50'08"W
136.83
LOT 5
0.93 AC.
15' SIDE
57.8
35' REAR
N35°09'52"W
144.92
15' SIDE
49.9
CHICKADEE
ELEV. C
72.3
LOT 4
SILLS SPRINGS
DEV. LLC.
2788/1944
N11°01'35"E
197.50
SCALE
1'=50'
8.1
15' SIDE
R/W
15' FRONT
R 38'
2 D 54'
3 Y 57' Install 34'
4 B 62' Install 34'
5 P 75' Install 34'
6 O 91' Install 34'
7 Y 85'
8 B 62'
9 P 52'
10 B 37'
N35°40'31"E
237.80
LOT 6
SILLS SPRINGS
DEV. LLC.
2788/1944
R/W
SPRING VIEW LN
(45' PRIV. R/W)
C3
R/W
R/W
R/W
CONC. CALC.
DRIVE = 2,382 SQ. FT.
WALK = 62 SQ. FT.
LEGEND
P.P. = POWER POLE
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
CP = COMPUTED POINT
CURVE TABLE
CURVE | RADIUS | LENGTH | BEARING | CHORD
C3 | 222.50' | 99.60' | S 67°08'57" E | 98.77'
0' 25' 50' 100'
SCALE IN FEET

ICHD - ENVIRONMENTAL HEALTH DIVISION

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PERMIT # OSWP-2023-39408

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# Nitrification Fields: 1	# Lines: 5	Linear Ft.: 270	Maintenance Agreement Required: ☐ YES ☑ NO		☐ Slab	☐ Crawl Space	
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Soil & Forestry Services, LLC
Ashley Rollans

LSS# 1231 / AOWE: 10027E

AS BUILT SKETCH

11-14-2023 BCW
- TANKS
- MANIFOLD
- UPPER 4 DITCHES

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☐ 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. Meberg Date: 11/8/23

AUTHORIZATION TO CONSTRUCT by: D Meberg Date: 11/8/23

Installed By: SPECIALTY SEPTIC

OPERATION PERMIT by: Date:

Existing System Inspected By: Date:

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

Permit #: 2023-39409

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: 4702131822 6

Issued To: Nest Homes

Property Location: 113 Spring View Ln, Statesville NC 28677

Subdivision (if applicable) Powder Spring Lot #: 5 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

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

New ☑ Expansion ☐ System Relocation ☐ Change of Use ☐

Proposed Structure: 3 Bedroom Residence

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

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

Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): 0.35 Proposed LTAR (Repair): 0.35

Proposed Wastewater System Type*: Accepted 25% Red - Pressure Manifold (Initial) Pump Required: ☑ Yes ☐ No ☐ May be required

Proposed Wastewater System Type*: PPBPS - 60% Red - 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): 63-72" Usable Soil Depth (Repair): 63-72"

Max. Trench Depth (initial)*: 36" Max. Trench Depth (Repair)*: 36" [redacted]

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 Rollans

Licensed Soil Scientist Signature: Samuel A Rollans Date: 10/13/23

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

See attached site sketch

NCDHHS

Permit #: OSWP-2023-39408

This Section for Local Health Department Use Only

Initial submittal received: 11/2/23 (*Date*) by DW (*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: 11/7/23

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: 11/7/28

See attached site sketch

Permit #: OSWP-2023-39408

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

County: Iredell

PIN/Lot Identifier: 4721318226

Issued To: Nest Home

Property Location: 113 Spring View Lane, Statesville NC 28677

AOWE/PE Plans/Evaluations Provided: Yes ☑ No ☐ If yes, name and license number of AOWE/PE: Samuel Ashley Rollans 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% Red-Pressure Manifold (Initial) PPBPS - 50% Red - 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: 270 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.35 gpd/ft²

Soil Cover: 6" inches Slope Corrected Maximum Trench/Bed Depth*: 36 MAX. inches * ~~Measured on the down hill side of the trench~~

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

Pump Tank Size (if applicable): 1,000 gallons Requires more than 1 pump? ☐ Yes ☑ No

Pump Requirements: 28.87 TDH vs. 27.4 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.

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 Expiration Date: 5 years from HD signature

AOWE/PE Signature: Samuel A Rollans Date: 10/18/23

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

NCDHHS

Permit #: OSWP-2023-39408

This Section for Local Health Department Use Only

Initial submittal received: 11/2/23 (*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: 11/7/23

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: 11/7/28

See attached site sketch

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 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.
- 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.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as an Accepted 25% reduction installation w/Pressure Manifold.
- Repair is specified as a PPBPS installation with Low Pressure Distribution.
- Rake trench walls, lime sidewalls, install trenches 36" wide and have no more than 1/4" fall in 10 feet.

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Nest Homes
Address:	236 Raceway Drive (Suite 7) Mooresville, NC 28117
Phone:	704.202.1524
County:	Iredell
Location:	113 Spring View Lane Statesville, NC 28677
Source of Wastewater Flow:	3 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	360 gpd
System Flow:	27.4

Design Specifications

Drainfield Size:	270
Loading Rate:	0.35
Depth of Gravel in Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Trench Depth:	36 in. Repair Trench Depth 36 in.
Trench Width:	36 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	110
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	19.14
Dosing Volume:	132.23
Supply Manifold:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
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:	2.61
Elevation Head:	20.50
Total Dynamic Head:	28.87
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA.

113 Spring View Lane
PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	360
SOIL APPLICATION RATE:	0.35
TOTAL AREA TRENCH BOTTOM:	810
TOTAL LATERAL LENGTH:	270
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	257.1428571
SUPPLY LINE LENGTH:	110
TOTAL DYNAMIC HEAD:	28.87
MANIFOLD SIZE:	4 in.SCH 80 PVC
DOSING VOLUME:	132.23
PUMP TANK DRAW DOWN*:	6.3
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.*

Layout Specifications - Powder Spring Creek - Lot 5

Project #: 20-0059

LAYOUT FOR 3 BEDROOM HOME

October 13, 2023

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
PRESSURE	MANIFOLD				847.00		
HOUSE	Right Front				837.80		
PUMP TANK					831.50		
INSTR. 1							
1	RED					50	50
2	***ORANGE***					*54*	*54*
3	***YELLOW***					*57*	*54*
4	***BLUE***					*62*	*54*
5	***PINK***					*75*	*54*
6	***ORANGE***					*91*	*54*
7	YELLOW					85	85
8	BLUE					62	62
9	PINK					52	52
10	RED					37	37
					Total	625	556

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	MAX. TRENCH DEPTH
* *System*	*270*	*0.350*	*ACCEPT.*	*0.350*	*25% RED*	***PRESSURE MANIFOLD***	36"
Repair	355	0.350	MOD. CONV.	0.350	PPBPS	LOW PRESSURE	36"

Notes: **All measures in feet

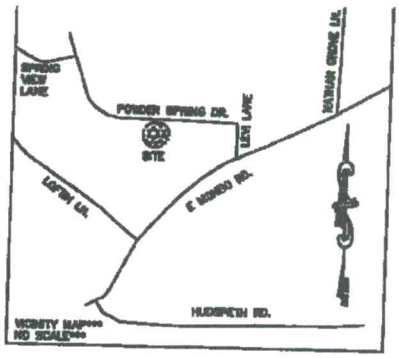
**Nitrification lines are demonstrated on contour via colored pin flags

**Nitrification lines were located by GPS & Tape Measure.

PRESSURE MANIFOLD TAPSHEET - Powder Spring Creek - Lot 5

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	Trench Area	Line LTAR
2	ORANGE		54	SCH 80 1/2	5.48	162	0.16
3	YELLOW		54	SCH 80 1/2	5.48	162	0.16
4	BLUE		54	SCH 80 1/2	5.48	162	0.16
5	PINK		54	SCH 80 1/2	5.48	162	0.16
6	ORANGE		54	SCH 80 1/2	5.48	162	0.16
	total	feet =	270	gal/min =	27.4		
			Des. Flow	360			
			Pump Run=	4.83			
			soil LTAR	0.35			
			LTAR +5%	0.3675			
			LTAR with ACCEPTED	0.466666667			
			LTAR with ACCEPTED + 5%	0.49			



LOT 3
SILLS SPRINGS
DEV. LLC.
2788/1944

SHERYL D. MORRIS
1139/1645

S54°50'08"W
136.83

LOT 5
0.93 AC.

15' SIDE

57.8

35' REAR

N35°09'52"W
144.92

15' SIDE

49.9

CHICKADEE
ELEV. C

72.3

LOT 4
SILLS SPRINGS
DEV. LLC.
2788/1944

N10°01'35"E
197.50

65.1

15' SIDE

SCALE
1'=50'

R/W

FRONT

R 30'

2 D 54'

3 Y 57' Install 54'

4 B 62' Install 54'

5 P 75' Install 54'

6 O 91' Install 54'

7 Y 85'

8 B 62'

9 P 52'

10 B 37'

N35°40'31"E
237.80

LOT 6
SILLS SPRINGS
DEV. LLC.
2788/1944

R/W

SPRING VIEW LN
(45' PRIV. R/W)

C3

R/W

R/W

R/W

CONC. CALC.
DRIVE = 2,382 SQ. FT.
WALK = 62 SQ. FT.

LEGEND
P.P. = POWER POLE
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
CP = COMPUTED POINT

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C3	222.50'	99.60'	S 67°08'57" E	98.77'

0' 25' 50' 100'

SCALE IN FEET

CALCULATIONS

Location	113 Spring View Lane Statesville, NC 28677	
Project Number	20-0059	
Lot No:	5	
No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.350	$^{gpd/ft^2}$
25% RED.? (YES OR NO)	YES	
Supply Line Length	110	ft.
Supply Line Volume	19.14	gal.
Required Feet of Line	257.1429	ft.
Amount of Line from Layout	270	ft.
Gallons per Minute	27.4	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	176.31	gal.
Dosing Volume	132.23	gal.

Note: Dosing Volume based on 75% of lateral line volume

Tank Draw Down	6.3	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	4.83	minutes
Elevation Head	20.5	ft.
Pressure Head	2	ft.
Friction Factor	2.37	ft./100 ft. *(From the interpolater.)*
Friction Head	2.61	ft.
Total Dynamic Head (+15%)	28.87	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

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet 1 of 2
PROPERTY ID #: 4924/1216
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Neat Homes (Buyer)
ADDRESS: 236 Freeway Dr. Suite T, Mooresville NC 28115
PROPOSED FACILITY: SFR - 3BR 2 bath PROPOSED DESIGN FLOW (.1949): 360
LOCATION OF SITE: Lot 5 Boulder Spring Creek Subdivision
WATER SUPPLY: ☑ Private ☐ Public ☑ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut

APPLICATION DATE
DATE EVALUATED: 2020
PROPERTY SIZE: 0.934 AC
PROPERTY RECORDED:
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1949 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
P 6 [redacted]	L/10%	0-10	BSCL w/SLK	Fr SS SP SLXP	C.SAN	39"	PS		PS .35-.4
		10-28	BRSCL w/SLK	Fr SS SP SLXP					
		28-39	BRSCL w/SLK	Fr SS SP SLXP					
		39-72	VAR CL MASS	Fr SS SP					
P 1.8 [redacted]	L/12%	0-5	BSCL w/SLK	Fr SS SP SLXP	Weather SAN	24"	PS		PS .4
		5-20	BRSCL w/SLK	Fr SS SP SLXP					
		20-42	VAR CL MASS	Fr SS SP					
P 6.9 [redacted]	L/12%	0-12	BSCL w/SLK	Fr SS SP SLXP		12"		12"	LN
		12-	Rock						
[redacted]	L/12%	0-7	BSCL w/SLK	Fr SS SP SLXP		24"	PS		PS .35-.4
		7-22	BRSCL w/SLK	Fr SS SP SLXP					
		22-60	VAR CL MASS	Fr SS SP SLXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted	PPAPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Chris Rollins
OTHER(S) PRESENT: Wendell Overby, David Wagner

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Sheet 2 of 2

PROPERTY ID #: 4724141216?
DATE OF EVALUATION: 2020
COUNTY: Iredell

Lot 5

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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 71	L/14%	0-4	SCSL wfsbk	Fr SS SP SExP	+Few SPO	34"	PS		PS .35-.4
		4-13	SCSL wmsbk/ABK	Fr SS SP SExP					
		13-34	SCSL wfsbk	Fr SS SP SExP	+Few fac.ssk Inclusions				
		34-69	UNKSL MASS	Fr SS SP					
P 72	L/12%	0-5	BCSL wfsbk	Fr SS SP SExP		21"	PS		+ .35 .4
		5-21	RCSL wfsbk	Fr SS SP SExP					
		21-63	UNKSL MASS	Fr SS SP					

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

COMMENTS:

DAS DON ALLEN & ASSOCIATES, P.A.
"Since 1971"
Commercial * Residential * Mortgage Surveys * Multi-Family
Construction Staking * Subdivision Design * Topographical
131 Crosslake Park Drive – Suite 102 * Mooresville * NC * 28117
(704) 664-7029 (704) 664-8041 Fax

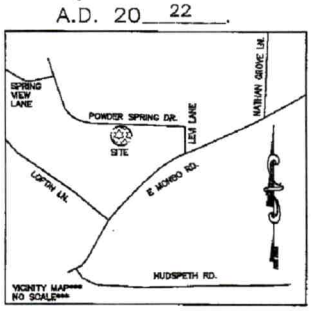
I, certify that this map was drawn under my supervision from an actual survey made under my supervision recorded in deed book 2788, page 1944, and/or plat book 72, page 108, that the ratio of precision is 1':10,000, that this map was prepared in accordance with the General Statutes of North Carolina Chapter 89C.

my hand and seal on the 28, day of APRIL,
A.D. 20 22.

WILLIAM M. ALLEN

NORTH CAROLINA PROFESSIONAL SEAL L-3499 LAND SURVEYOR WILLIAM M. ALLEN

REVISED 4/29/22
UPDATED SEPTIC/HOUSE PLACEMENT



CONC. CALC.
DRIVE = 2,382 SQ. FT.
WALK = 62 SQ. FT.

LEGEND
○ = P.P. = POWER POLE
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
CP = COMPUTED POINT

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C3	222.50'	99.60'	S 67°08'57" E	98.77'

NOTES
1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY OF RECORD.
2) ACREAGE COMPUTED BY THE COORDINATE METHOD.
3) UNDERGROUND POWER
4) NO GRID MONUMENT FOUND WITHIN 2000 FEET.

0' 25' 50' 100'
SCALE IN FEET

PLOT PLAN SURVEY

OF

113 SPRING VIEW LN
LOT 5 POWDER SPRINGS CREEK
FALLSTOWN TWSP., IREDELL CO., N.C.

SCALE 1" = 50'

ACQUIRED BY: NEST HOMES

FIELD BOOK:
FILE: POWDER SPRINGS CREEK 4 & 5
DC FILE:
TAX MAP NO: 4721318226.000

113 Spring View Lane *(See Attached Design)*

The septic layout for this lot (9' centers) yielded a total of 625 linear feet of line. The primary system is proposed as 270 linear feet of Accepted (25% Reduction) drainfield with pressure manifold distribution. Max. Trench depth is specified at 36 inches. The repair system is proposed as 172 linear feet of PPBPS (50% Reduction) drainfield with low pressure distribution. There is 355 linear feet available for repair. Trench depth is specified at 36 inches. (max.)

Session Law Requirements

An LSS Evaluation may be submitted in conjunction with a complete application to the LHD. 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 Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c)."

Owner

Date

* Print Name MATTHEW VARNEL
* Signature _____ 10/18/23

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 SL 2018-114 Section 11.(c)."

Disclaimer

This report reflects the findings of S&FS, PA. *This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).* Any site modifications that impact the proposed septic areas at 113 Spring View Lane, Statesville NC 28677 may nullify this design. 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*

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: Nest Homes
Property Owner Mailing Address: 236 Raceway Drive, Mooresville NC 28117
Property Owner Phone Number: 704.202.1524
Property Owner Email Address: mvarney@nesthomes.com

Applicant Name: Nest Homes
Applicant Mailing Address: 236 Raceway Drive, Mooresville NC 28117
Applicant Phone Number: 704.202.1524
Applicant Email Address: mvarney@nesthomes.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: _____ Date: 10/18/23

Owner's Signature: _____ Date: 10/18/23

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Accepted Septic System with Pressure Manifold distribution for a 3 bedroom single family residence at 113 Spring View Ln Statesville 28677, Iredell County, NC. PIN#: 4721318226.

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
Application	Online
IP Form	15
CA Form	16

LICENSED SOIL SCIENTIST
SAMUEL A. ROLLANS
1231
NORTH CAROLINA

October 13, 2023
Project No. 20-0059
Design By: Soil & Forestry Services of the Carolinas, PA