ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 x3456 Mooresville Office (704) 660-3625

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

BLDR-2024-46468

PERMIT : OSWP 2024-45730

PIN # 4870-30-5989

APPLICANT/OWNER: Grant Winchester APPLICANT ADDRESS: 2113 Wright Rd Indian Trail NC 28079

SITE ADDRESS: 118 Galliner Rd Harmony NC 28634 PHONE: 980-223-8352 ALT. PHONE 704-993-0572

SITE DIRECTIONS: 77 → N21 → L Galliner → lot on R

SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Harmony Park SECTION: N/A LOT # 3 LOT AREA: 1.03 DESIGN FLOW: 360 L.T.A.R.(Initial): 0.25 L.T.A.R (Repair): 0.25

Septic Tank	1000 (gal)	STB 760	Date 4-5-2024	☒ New System	☐ Repair	☐ Expansion	System Type: I II (III) IV V VI	☒ Residence	No. Bedrooms 3
Pump Tank	(gal)	PT	Date	System Description: 25% Reduction				☐ Business	No. Persons 6
Pump Make	Model		Serial #	Repair System Description: LPVPPBPS				☐ Other	No. Employees
# Nitrification Fields	1 # Lines 6		Linear Ft 364	Maintenance Agreement Required:	☐ YES	☒ NO		☐ Slab	☒ Crawl Space
Trench Width 36	*Max. Trench Depth(Initial) 20		*Max. Trench Depth(Repair) 30	Gravel Depth N/A	☒ GRAVITY	☐ PRESSURE		☐ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☐ Private ☒ Public ☐ Community

* Measured on the downhill side of the trench Effluent Standard: ☒ DSE ☐ HSE ☐ TS-I ☐ TS-II ☐ RCW ☐ NSF/ANSI 40 Usable Depth to LC (Initial): 56" Usable Depth to LC (Repair): 52-56" *Limiting Condition*

Comments / Conditions: Do not pave, grade, drive, park, or bury utilities in drain field. Divert drainage.

INITIAL SITE SKETCH

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

Ashley Rollans SFS

LSS# 1231

Construction authorization issued pursuant to: G.S. 130A-335(a2) & (a5)

AOWE# 10027E

AS BUILT SKETCH

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your time.

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: online signature Date:

IMPROVEMENT PERMIT by: D. Wiebers Date: 1/31/24

AUTHORIZATION TO CONSTRUCT by: D. Wiebers Date: 1/31/24

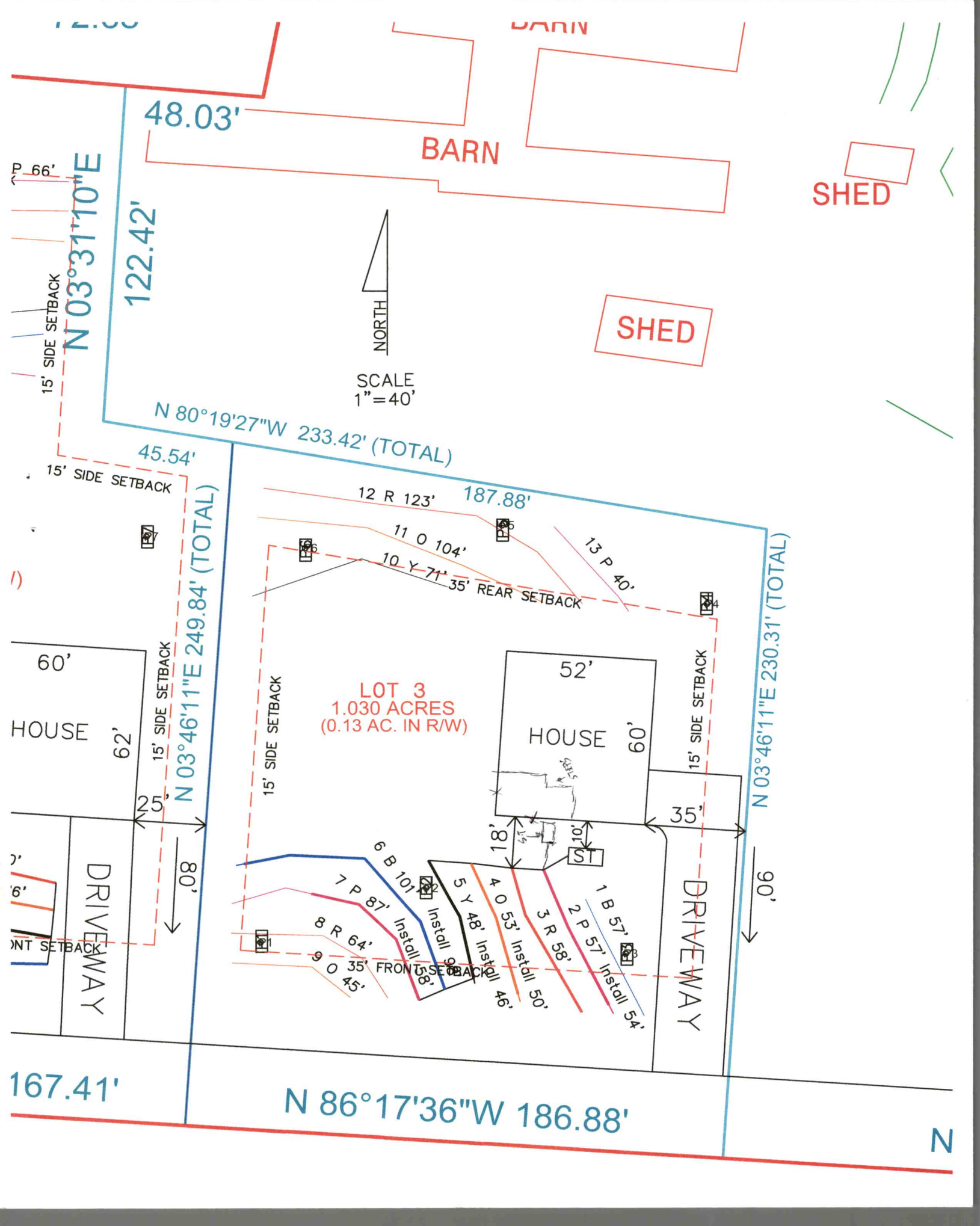
Installed by: STUTTS GRADING

OPERATION PERMIT by: B Wyatt C. White Date: 5-29-2024

Existing System Inspected by: Date:

Item	Date	Initials
Drain Lines Checked		
Tanks Checked		
Pressure Manifold or Valve Box Checked		
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Needed? Y / N		
Comments:		

Repairs Only	
	State Code
Failing System Code	
Type of Distribution	G or P
Type of Failure/Malfunction	
Primary Cause of Failure/Malfunction	
Age of System? _____	
Initial or Repair? _____	


BARN
48.03'
BARN
SHED
SHED
N 03°31'10"E
122.42'
NORTH
SCALE
1"=40'
15' SIDE SETBACK
N 80°19'27"W 233.42' (TOTAL)
45.54'
15' SIDE SETBACK
N 03°46'11"E 249.84' (TOTAL)
12 R 123'
187.88'
11 O 104'
13 P 40'
10 Y 71'
35' REAR SETBACK
LOT 3
1.030 ACRES
(0.13 AC. IN R/W)
15' SIDE SETBACK
15' SIDE SETBACK
N 03°46'11"E 230.31' (TOTAL)
60'
HOUSE
62'
52'
HOUSE
60'
25'
35'
18'
10'
ST
DRIVEWAY
DRIVEWAY
6 B 101'
7 P 87'
8 R 64'
9 O 35'
Install 98'
5 Y 48'
Install 46'
4 O 53'
Install 50'
3 R 58'
2 P 57'
Install 54'
1 B 57'
FRONT SETBACK
167.41'
N 86°17'36"W 186.88'
N

Permit/File #: oswp-2024-45730

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; [X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] Fee $ _____

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

County: Iredell

PIN/Lot Identifier: 4870305989

Issued To: Grant Winchester // Bluewave Customer Builders Inc

Property Location: 118 Galliher Rd, Harmony NC 28634

Subdivision (if applicable): Farmony Park Lot#: 3 Block: _____ Section: _____

LSS Report Provided: Yes [X] No [ ]

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

New [X] Expansion [ ] System Relocation [ ] Change of Use [ ]

Facility Type: 3 bedroom house

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

Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater

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

Proposed Wastewater System Type*: IIb (ACCEPTED) GRAVITY (Initial) Pump Required: [ ] Yes [X] No [ ] May be required

Proposed Wastewater System Type*: IIIe (VPPBPS 8') LPP (Repair) Pump Required: [X] Yes [ ] No [ ] May be required

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Saprolite System (Initial): [ ] Yes [X] No Saprolite System (Repair): [ ] Yes [X] No

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

Usable Depth to LC (Initial)*: 56 Usable Depth to LC (Repair)*: 52-56" ** Limiting Condition*

Max. Trench Depth (Initial)ǂ: 20 Max. Trench Depth (Repair)ǂ: 30 *ǂ Measured on the downhill side of the trench*

Artificial Drainage Required: [ ] Yes [X] No If yes, please specify details: _____

Type of Water Supply: [ ] Private well [ ] Public well [ ] Shared well [X] Municipal Supply [ ] Spring [ ] Other: _____

Drainfield location meets requirements of Rule .0508: Yes [X] No [ ] Drainfield location meets requirements of Rule .0601: Yes [X] No [ ]

Permit valid for: [X] 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: Ashley Rollans

Licensed Soil Scientist Signature: Samuel A Hatten Date: 1/25/2024

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

Permit/File #: OSWP-2024-45730

This Section for Local Health Department Use Only

Initial submittal received: 1/31/24 (*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: D. Wisberg Date: 1/31/24

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 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 15A NCAC 18E 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: 1/31/29

See attached site sketch

Permit/File #: oswp-2024-45730

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

County: Iredell — Pre-Construction Conference Required: [X] Yes [ ] No

PIN/Lot Identifier: 4870305989

Issued To: Grant Winchester // Bluewave Customer Builders Inc

Property Location: 118 Galliher Rd, Harmony NC

AOWE/PE Plans/Evaluations Provided: Yes [X] No [ ] If yes, name and license number of AOWE/PE: Ashley Rollans #10027E

Facility Type: 3 bedroom house

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

[X] New [ ] Expansion [ ] Repair [ ] System Relocation [ ] Change of Use

Basement? [ ] Yes [X] No Basement Fixtures? [ ] Yes [ ] No

Crawl Space? [X] Yes [ ] No Slab Foundation? [ ] Yes [X] No

Type of Wastewater System* IIb (ACCEPTED) GRAVITY (Initial) IIIe (VPPBPS 8') LPP (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 360 GPD Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process WW

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? [ ] Yes [X] No
(if yes, please provide engineering documentation)

Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW

Type of Water Supply: [ ] Private well [ ] Public well [ ] Shared well [X] Municipal Supply [ ] Spring [ ] Other:

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 364 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.25 gpd/ft² Usable Depth to LC (Initial)*: 56 *Limiting condition

Soil Cover: 0 inches Slope Adjusted Maximum Trench/Bed Depth‡: 20 inches *‡ Measured on the downhill side of the trench*

Pump Tank Size (if applicable): N/A gallons Requires more than 1 pump? [ ] Yes [X] No

Pump Requirements: N/A ft. TDH vs. N/A GPM Grease Trap Size (if applicable): gallons

Distribution Method: [X] Serial [ ] D-Box or Parallel [ ] Pressure manifold(s) [ ] LPP [ ] Other

Artificial Drainage Required: Yes [ ] No [X] 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 [.0204(g)]: [ ] Yes [X] No Declaration of Restrictive Covenants: [ ] Yes [X] No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: [ ] Yes [X] No

Management Entity Required: Yes [ ] No [X] Minimum O&M Requirements:

Permit conditions:

See Design

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. *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 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print name: Ashley Rollans Expiration Date: 1/25/2029

AOWE/PE Signature: Ashley Rollans Date: 1/25/2024

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

See attached site sketch

NORTH CAROLINA ON-SITE WASTEWATER EVALUATOR Certification Number 10027E

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-4573C

This Section for Local Health Department Use Only

Initial submittal received: 1/31/24 (*Date*) by DW (*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: D. Wisberg Date of Issuance: 1/31/24

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: 1/31/29

See attached site sketch

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:

[X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):

[X] Accepted [ ] Conventional [ ] Innovative [ ] Other _____ [ ] Any

[X] New Construction [ ] Expansion [ ] System Relocation [ ] Change of Use [ ] Repair

[X] 5 Year Expiration Requested (site plan provided) [ ] Non-Expiring Permit Requested (plat provided, as defined in G.S. 130A-334(7a)

Requesting DHHS review? (systems >3000 GPD or IPWW) [ ] Yes [X] No

Applicant:	Ashley Rollans // Soil & Forestry Services, PA
Mailing Address:	PO Box 8572
City:	Statesville
State:	North Carolina
Zip:	28687
Phone #:	980-223-8352
Email:	sfsstatesvillenc@gmail.com

Owner:	Grant Winchester // Bluewave Customer Builders Inc
Mailing Address:	2113 Wright Rd
City:	Indian Trail
State:	North Carolina
Zip:	28079
Phone #:	704-993-0572
Email:	bluewavebuilds@gmail.com

If the answer to any of the following questions is "yes", applicant must attach supporting documentation.

[ ] Yes	[X] No	Does the site contain any jurisdictional wetlands?
[ ] Yes	[X] No	Is any wastewater going to be generated on the site other than domestic sewage?
[ ] Yes	[X] No	Is the site subject to approval by any other public agency?
[ ] Yes	[X] No	Are there any easements or right of ways on this property?

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 Improvement 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: Ashley A Rollans Date: 1/25/2024

Owner's Signature: [signature] Date: 1/25/24

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 24-0001
January 24th, 2024

Bluewave Custom Buidlers Inc
Attn: *Grant Winchester*
Email: bluewavebuilds@gmail.com

RE: Soil & Site Evaluation for a 3 Bedroom Residence at 118 Galliher Rd, 1.03 ac Parcel, PIN# 4870305989, Harmony, NC 28634, Iredell County, NC.

Grant:

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 wooded 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 Peak Surveying. The Surveyor provided an Autocad File of the survey as a basemap. The proposed septic layout was located via GPS & tape measure which was used to produce the attached *Site Plan*. The house envelope was pinned in the field by the builder. **Existing terraces must be removed to establish sheet flow across drainfield area.**

Methodology

We evaluated soil areas through the use of excavator pits. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with six pit locations on the property flagged and located via GPS. Four of the six excavator pits are located in the proposed septic layout (system & repair). 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 tape measure. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by GPS and tape measure. Detailed system & repair information is summarized in the following paragraph for this Lot.

118 Galliher Rd-Lot 3 PIN#4635396143 (*See Attached Design*)
The septic layout for this lot (9' centers) yielded a total of 908 linear feet of line. The primary system is proposed as 364 linear feet of Accepted (25% Reduction) drainfield with gravity distribution. Trench depth (Low Side) is specified at 20 inches. The repair system is proposed as 240 linear feet of Modified Conventional VPPBPS (50% Reduction) drainfield with low pressure distribution. Trench depth (Low Side) is specified at 30 inches. There is 554 linear feet available for repair. Some of the leftover repair is only suitable for shallow placed repair adjacent to the proposed primary system. The main VPPBPS repair designation is all behind the house (Lines 10 – 13).

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 Grant Winchester
Signature _____ 1/25/24

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 118 Galliher Rd-Lot 3 PIN#4870305989. 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

1/25/2024

Iredell County Environmental Health
Attn: Heath Snow
349 N Center Street
Statesville, NC 28677

Re: Improvement Permit & CA Submittal for 118 Galliher Rd, Harmony NC (Lot #3)

Mr. Snow

Attached please find sealed soil notes as well as site plans and design related data for a 3 bedroom ACCEPTED system using GRAVITY distribution.

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

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6)."

Owner/Applicant: Grant Winchester // Bluewave Customer Builders Inc

Signature: _____

Date: 1/25/24

"The LSS Evaluation is being submitted pursuant to and meets requirements of GS 130A-335(a2)." This Improvement Permit is issued pursuant to G.S. 130A-335(a2),(a3), and (a4) using the signed and sealed LSS evaluation attached here". "This AOWE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5)"

"This Construction Authorization is issued pursuant to G.S. 130A-335 (a2), and (a5) and (a6) using the signed and sealed plans or evaluations attached here."

Ashley Rollans, LSS

Signature: _____

Date: 1/25/2024 Seal:

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

10027E

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

sfsstatesvillenc@gmail.com
980-223-8352
PO Box 5872
Statesville NC 28687
SoilAndForestryServices.com

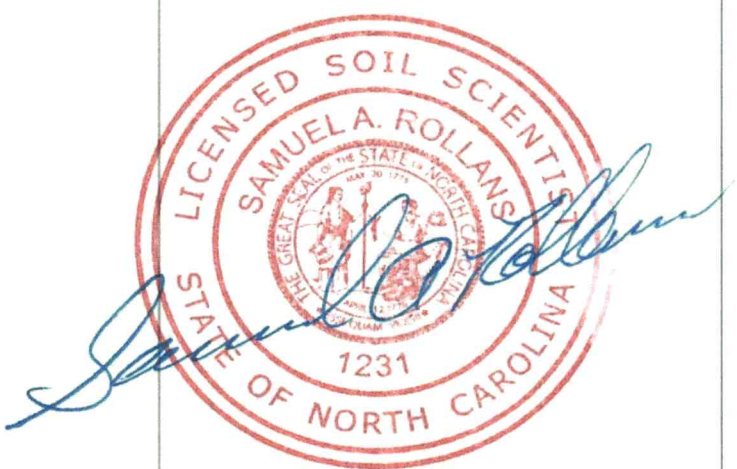
Project# 24-0001

Septic System Design for a 3 Bedroom House
ACCEPTED using GRAVITY distribution
Site location: 118 Galliher Rd, Harmony NC, Lot # 3

Contents **Page**

Information for the Installer ---------- 1
Design Specifications ---------- 2
Layout Specifications ---------- 3
Site Plan ---------- 4
Calculations ---------- 5
Soil Descriptions ---------- 6
Floor Plans ---------- 7

1/19/2024
Design By: Ashley Rollans



Page 1	INFORMATION FOR THE INSTALLER	Project #24-0001

ACCEPTED using GRAVITY distribution
Site location: 118 Galliher Rd, Harmony NC, Lot # 3

* **CALL 811 BEFORE DIGGING**
* 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 that must be considered along with all other considerations.
* 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
* 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.
* Elevations at pinflag locations should be checked by the installer prior to beginning
* Septic tank riser shall be a minimum of 6" above finished grade.

* **System specified as ACCEPTED type using GRAVITY distribution**
* **Repair specified as VPPBPS 8' type using LPP distribution**
* **System trench depth specified at 20"**
* **System trenches installed on 9' minimum; 36" wide trenches**
* **Installation does not require a soil cap**

Page 2	DESIGN SPECIFICATIONS	Project #24-0001

ACCEPTED using GRAVITY distribution
Site location: 118 Galliher Rd, Harmony NC, Lot # 3

Business (if applicable):	Bluewave Customer Builders Inc
Contact:	Grant Winchester
Phone:	704-993-0572
Email:	bluewavebuilds@gmail.com
County:	Iredell
Location:	118 Galliher Rd, Harmony NC 28634

Source of Wastewater Flow:	3	bedroom home
Estimated Daily Wastewater Production:	360	gpd
Drain field Size:	364	lf
Loading Rate:	0.25	$gpd/ft.^2$
Trench Depth:	20	in
Trench Width:	36	in
Soil Cap:	0	in
Septic Tank Size:	1000	gal

Page 3	LAYOUT SPECIFICATIONS	Project #24-0001

ACCEPTED using GRAVITY distribution
Site location: 118 Galliher Rd, Harmony NC, Lot # 3

Daily Flow (gpd) 360 **1/19/2024**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM INSTR. 1							
			SYSTEM				
2	PINK					57	54
3	RED					58	58
4	ORANGE					53	50
5	YELLOW					48	46
6	BLUE					101	98
7	PINK					87	58
			REPAIR				
1	BLUE					57	57
8	RED					64	64
9	ORANGE					45	45
10	YELLOW					71	71
11	ORANGE					104	104
12	RED					123	123
13	PINK					40	40

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH	SOIL CAP
SYSTEM	364	0.250	ACCEPTED	25%	GRAVITY	20	0
REPAIR	544	0.250	VPPBPS 8'	50%	LPP	30	0

Notes:
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

CALCULATIONS	Project #24-0001

ACCEPTED using GRAVITY distribution
Site location: 118 Galliher Rd, Harmony NC, Lot # 3

PROJECT INFO	Designer	Ashley Rollans
	Project #	24-0001
	Project MM YYYY	1/19/2024
	Project Location	118 Galliher Rd, Harmony NC
	Lot # (if applicable)	3
	Subdivision (if applicable)	Farmony Park
	Parcel #	4870305989
	Lot size (acres)	1.03
	Business (if applicable)	Bluewave Customer Builders Inc
	Name (Owner)	Grant Winchester
	Mailing Address (Owner)	2113 Wright Rd
	City (Owner)	Indian Trail
	State (Owner)	North Carolina
	Zip (Owner)	28079
	Phone (Owner)	704-993-0572
	Email (Owner)	bluewavebuilds@gmail.com
	County	Iredell
	Bedrooms	3
	Water Source	Municipal
	Foundation Type	Crawl Space
	Daily Flow	360
SYSTEM	System LTAR	0.25
	System Type	ACCEPTED
	System Distribution	GRAVITY
	System Trench Center Distance (feet)	9
	System Trench Width (inches)	36
	System Trench Depth (inches)	20
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	56
	Media Height (inches)	12
	Tank Size	1000
	Required Feet of Line (system)	360
	Designed Feet of Line (system)	364
REPAIR	Repair LTAR	0.25
	Repair Type	VPPBPS 8'
	Repair Distribution	LPP
	Repair Trench Center Distance (feet)	8
	Repair Trench Width (inches)	24
	Repair Trench Depth (inches)	30
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	52-56"
	Tank Size	1000
	Required Feet of Line (repair)	240
	Designed Feet of Line (repair)	544

Sheet 1 of 1
PROPERTY ID #: 4870305989
COUNTY: Iredell

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

OWNER: Bluewave Custom Builders INC
ADDRESS: 2113 Wright Rd Indian Trail NC 28079
PROPOSED FACILITY: 3BR Residence - 360 GPD
LOCATION OF SITE: 118 Galliher Rd Harmony NC 28634

APPLICATION DATE:
DATE EVALUATED: 1/3/2024
PROPERTY SIZE: 1.03
PROPERTY RECORDED: yes

WATER SUPPLY: ☐ Private ☐ Well ☐ Spring ☑ Other Public
EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

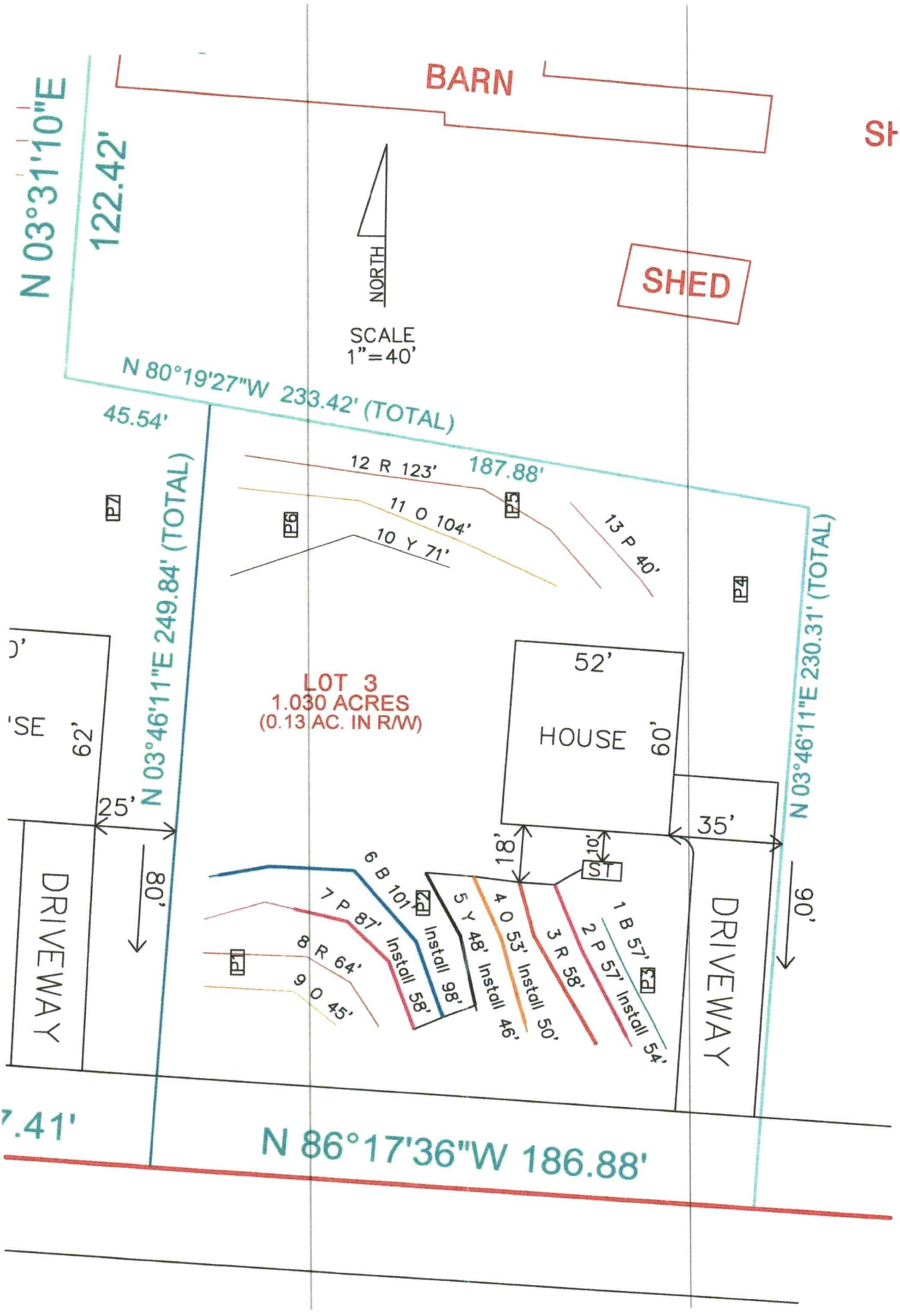
PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPR CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L/4%	0-10	BCL WFSBK	FR SS SP	few alto cFe depl@25" cFe depl chr2@35"	49		N/A	0.25
		10-27	RBC WMSBK	FR SS P					
		27-49	RC WMSBK/ABK						
2	L/6%	0-13	BSCL WFSBK	FR SS SP	fFe depl	56		N/A	0.25-0.275
		13-36	RBSC WFSBK	FR SS P					
		36-56	BRC WFSBK/ABK	FR SS P					
3	L/6%	0-6	RBCL WFSBK	FR SS SP	fsap/wh rock granite vein 10% csap	56		N/A	0.3
		6-32	BRC WMSBK/ABK	FR SS SP					
		32-56	RBCL WFSBK	FR SS SP					
4	L/8%	0-9	BCL WFSBK	FR SS SP	fsap/wh rock	46	PS	N/A	0.3-0.325
		9-30	BRC WMSBK/ABK	FR SS SP					
		30-46	RBCL WFSBK	FR SS SP					
		46-56	VAR L MASS	FR SS SP					
5	L/7%	0-9	BSCL WFSBK	FR SS SP	f-cFe depl 22-30"	52		N/A	0.25
		9-30	RBC WMSBK/ABK	FR SS P					
		30-52	BRC WMSBK/ABK	FR SS SP					
6	L/7%	0-6	RBCL WMSBK	FR SS SP	fsap	52		N/A	0.3
		6-22	BRC WMSBK	FR SS SP					
		22-52	BRCL WFSBK	FR SS SP					
7								N/A	
8								N/A	
9								N/A	
10								N/A	

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

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Types(s)	ACCEPTED W/GRAVITY	VPPBPS - W/LPP
Site LTAR	0.25	0.25

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

COMMENTS:


BARN
SHED
NORTH
SCALE
1"=40'
N 03°31'10"E
122.42'
N 80°19'27"W 233.42' (TOTAL)
45.54'
187.88'
N 03°46'11"E 249.84' (TOTAL)
N 03°46'11"E 230.31' (TOTAL)
LOT 3
1.030 ACRES
(0.13 AC. IN R/W)
HOUSE
52'
60'
35'
18'
10'
ST
90'
80'
25'
62'
DRIVEWAY
DRIVEWAY
12 R 123'
11 O 104'
10 Y 71'
13 P 40'
6 B 101'
7 P 87' Install 58'
8 R 64'
9 O 45'
5 Y 48' Install 98'
4 O 53' Install 46'
3 R 58' Install 50'
2 P 57' Install 54'
1 B 57'
P1
P2
P3
P4
P5
P6
P7
N 86°17'36"W 186.88'