AP 316340

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

PERMIT # OSWP 2024-62711

PIN # 4721 -- 41 -- 0715

APPLICANT/OWNER: Soil & Forestry Services LLC

APPLICANT ADDRESS: 126 3rd Creek Rd, Statesville, NC 28677

SITE ADDRESS: 180 Powder Spring Drive, Statesville, NC 28677

PHONE: 980-223-2352

ALT. PHONE:

SITE DIRECTIONS: Old Mountain -> Monbo -> R Levi -> L Powder Spring

SAP CONTROLLED: ☑ YES ☐ NO

SUBDIVISION: Powder Spring Creek

SECTION: n/a

LOT # 11

LOT AREA: 1.008

DESIGN FLOW: 480 gpd

L.T.A.R.(Initial): 0.3

L.T.A.R (Repair): 0.3

Septic Tank existing (gal) STB Date

Pump Tank (gal) PT Date

Pump Make Model Serial #

Nitrification Fields 1 # Lines 2 + existing Linear Ft: 116 + ex

Trench Width 36 *Max. Trench Depth(Initial) 30 *Max. Trench Depth(Repair) 30 Gravel Depth n/a

* Measured on the downhill side of the trench

Effluent Standard: ☑ DSE ☐ HSE ☐ TS-I ☐ TS-II ☐ RCW ☐ NSF/ANSI 40

☑ New System ☐ Repair ☐ Expansion System Type: I (II) III IV V VI

System Description: 25% Reduction - IIb - existing + relocated

Repair System Description: 25% Reduction - IIb

Maintenance Agreement Required: ☐ YES ☑ NO

☑ GRAVITY ☐ PRESSURE

Usable Depth to LC (Initial): 56

☑ Residence No. Bedrooms 4

☐ Business No. Persons 8

☐ Other No. Employees

☐ Slab ☑ Crawl Space

☐ Basement w/plumbing ☐ Basement w/o plumbing

Usable Depth to LC (Repair): 56 *Limiting Condition*

Water Supply

☑ Private

☐ Public

☐ Community

Comments / Conditions: Remove existing footage as shown, install replacement footage as shown. Pool must be marked at time of install.

Do not pave, grade, drive, park, or bury utilties in drainfield.

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

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.

Had to cutoff more than estimated for pool. Bottom line is a 70 ft.

Top line is exactly 15ft from marked pool.

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:

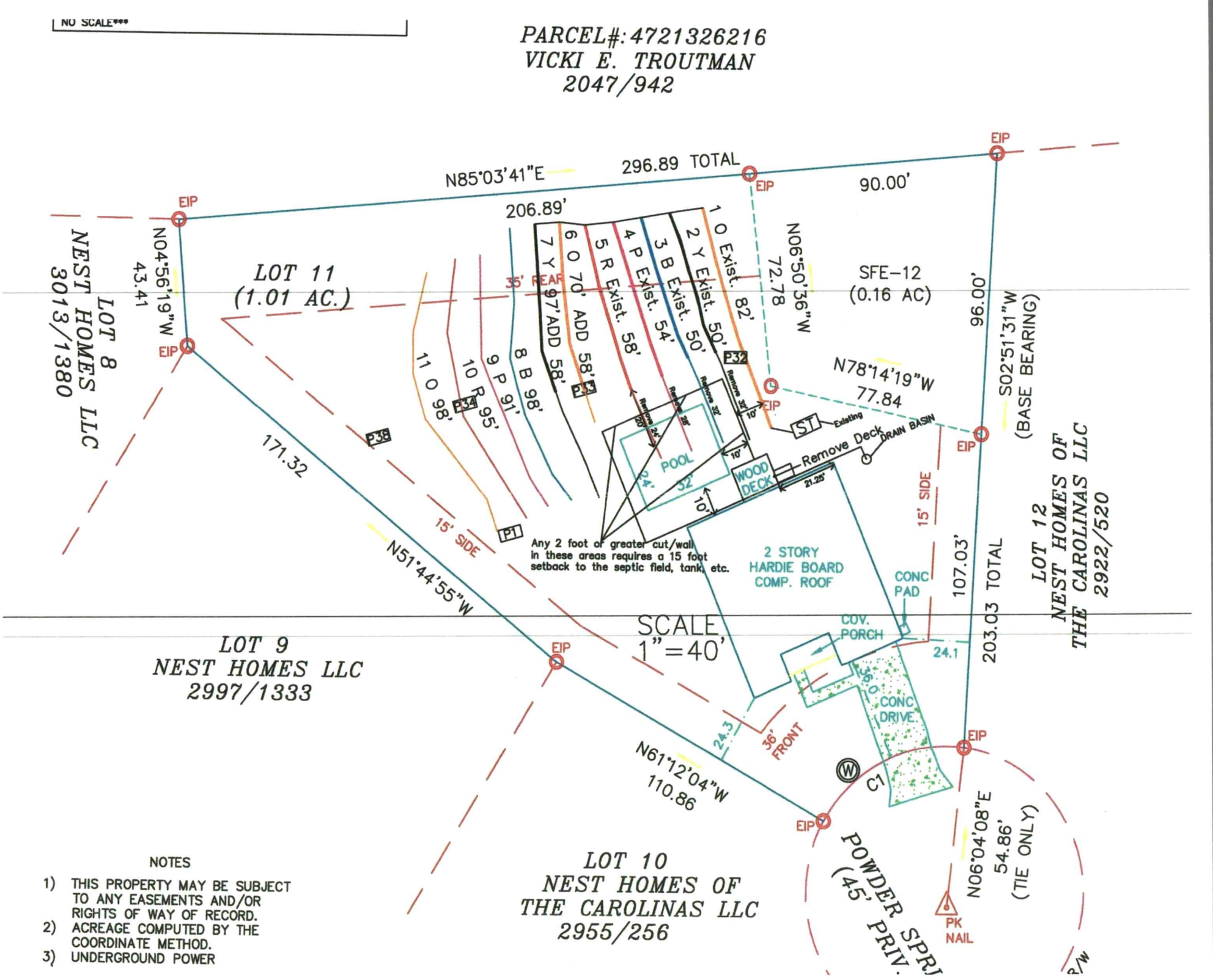
Installed by: Specialty Septic

IMPROVEMENT PERMIT by: D. Wieberg Date: 10/14/24

OPERATION PERMIT by: Met With Date: 11/22/24

AUTHORIZATION TO CONSTRUCT by: D. Wieberg Date: 10/14/24

Existing System Inspected by: Date:


NO SCALE***
PARCEL#:4721326216
VICKI E. TROUTMAN
2047/942
N85°03'41"E
296.89 TOTAL
206.89'
90.00'
EIP
N04°56'19"W
43.41
LOT 8
NEST HOMES LLC
3013/1380
LOT 11
(1.01 AC.)
35' REAR
N06°50'36"W
72.78
SFE-12
(0.16 AC)
96.00'
S02°51'31"W
(BASE BEARING)
N78°14'19"W
77.84
171.32
15' SIDE
N51°44'55"W
Any 2 foot of greater cut/wall in these areas requires a 15 foot setback to the septic field, tank, etc.
POOL
WOOD DECK
Remove Deck
DRAIN BASIN
ST
Existing
2 STORY
HARDIE BOARD
COMP. ROOF
CONC PAD
COV. PORCH
CONC DRIVE
107.03'
203.03 TOTAL
LOT 12
NEST HOMES OF
THE CAROLINAS LLC
2922/520
SCALE
1"=40'
LOT 9
NEST HOMES LLC
2997/1333
24.3
36' FRONT
N61°12'04"W
110.86
LOT 10
NEST HOMES OF
THE CAROLINAS LLC
2955/256
POWDER SPRI
(45' PRIV.
N06°04'08"E
54.86'
(TIE ONLY)
PK NAIL
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

Permit/File #: OSWP-2024-62711

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: 4721410715
Issued To: Michael & Kristi Phelix
Property Location: 180 Powder Spring Dr., Statesville NC 28677
Subdivision (if applicable): Powder Spring Creek Lot#: 11 Block: Section:
LSS Report Provided: Yes [X] No [ ]
If yes, name and license number of LSS: Samuel Ashley Rollans #1231
New [ ] Expansion [ ] System Relocation [X] Change of Use [ ]
Facility Type: 4 bedroom house
Number of bedrooms: 4 Number of Occupants: 8 Other:
Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater
Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3
Proposed Wastewater System Type*: IIb (ACCEPTED) GRAVITY (Initial) Pump Required: [ ] Yes [X] No [ ] May be required
Proposed Wastewater System Type*: IIb (ACCEPTED) GRAVITY (Repair) Pump Required: [ ] Yes [X] No [ ] May be required
Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII
Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW
Saprolite System (Initial): [ ] Yes [X] No Saprolite System (Repair): [X] Yes [ ] 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)*: 56-72" Usable Depth to LC (Repair)*: 56-72" * Limiting Condition
Max. Trench Depth (Initial)†: 30 Max. Trench Depth (Repair)†: 30 † Measured on the downhill side of the trench
Artificial Drainage Required: [ ] Yes [X] No If yes, please specify details:
Type of Water Supply: [X] Private well [ ] Public well [ ] Shared well [ ] 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:

Proposed septic areas are to remain undisturbed (no grading, no utilities installation)
Proposed septic areas should be fenced/protected from disturbance (vehicle traffic, debris, etc...)
See Design for any additional details

Licensed Soil Scientist Print Name: Samuel Ashley Rollans
Licensed Soil Scientist Signature: Samuel A Rollans Date: 9/23/2024

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-2024-62711

This Section for Local Health Department Use Only

Initial submittal received: 10/12/24 (*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: D. Wieberg Date: 10/14/24

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: 10/14/29

See attached site sketch

NCDHHS

Permit/File #: OSWP-2024-62711

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

County: Iredell

Pre-Construction Conference Required: [ ] Yes [X] No

PIN/Lot Identifier: 4721410715

Issued To: Michael & Kristi Phelix

Property Location: 180 Powder Spring Dr., Statesville NC 28677 Lot#11

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

Facility Type: 4 bedroom house

Number of bedrooms: 4 Number of Occupants: 8 Other:

[ ] New [ ] Expansion [ ] Repair [X] 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) IIb (ACCEPTED) GRAVITY (Repair)

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

Design Daily Flow: 480 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: [X] Private well [ ] Public well [ ] Shared well [ ] Municipal Supply [ ] Spring [ ] Other:

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 410 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft² Usable Depth to LC (Initial)*: 56-72" *Limiting condition

Soil Cover: 18 inches Slope Adjusted Maximum Trench/Bed Depth‡: 30 inches *‡ Measured on the downhill side of the trench*

Pump Tank Size (if applicable): N/A galllons 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:

Proposed septic areas are to remain undisturbed (no grading, no utilities installation)

Proposed septic areas should be fenced/protected from disturbance (vehicle traffic, debris, etc...)

See Design for any additional details

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: Samuel Ashley Rollans

AOWE/PE Signature:

Expiration Date: 9/23/2029

Date: 9/23/2024

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

See attached site sketch

NC ONSITE WASTEWATER EVALUATOR Certification Number 10027E

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-62711

This Section for Local Health Department Use Only

Initial submittal received: 10/12/24 (*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: D. Wieberg Date of Issuance: 10/14/24

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: 10/14/29

See attached site sketch

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 24-0078
September 19th, 2024

Kristi & Michael Phelix
Attn: *Kristi & Michael*
Email: k.mphelix@yahoo.com

RE: Soil & Site Evaluation for a 4 Bedroom Residence (System Relocation for Pool) at 180 Powder Spring Dr. (LOT 11), Statesville, NC 28677, PIN # (4721410715), Iredell County.

Mr. & Mrs. Phelix:

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 submittal to Iredell County Health Department.

Site Conditions

At the time of our evaluation there was an existing house and active drainfield on the property.Topography within the evaluated area was gently sloping near the house site and proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Don Allen & Associates Land Surveying. The client provided an Autocad File of the survey as a basemap. The proposed septic layout was located via measuring tape/GPS and used to produce the attached *Site Plan*. The client provided details about future pool. There is an existing 4 bedroom gravity Accepted system that must be modified with two new lines proposed to accommodate the pool.

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 five pit locations on the property flagged and located via GPS. Four of the five pits are located in the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18E "Wastewater Treatment & Dispersal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each pit. The existing house and proposed pool are illustrated on the *Site Plan*. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by tape measure and GPS. Detailed system & repair information is summarized in the following paragraph for this Lot.

180 Powder Spring Dr.Lot 11 (*See Attached Design*)
The existing septic and additional line layout for this lot (9' centers) yielded a total of 959 linear feet. The net septic layout after trimming for the proposed pool yielded 843 linear feet. The primary system is proposed as 410 linear feet of Accepted (25% Reduction) drainfield with gravity distribution. Trench depth (Low Side) is specified at 30 inches for the new trenches and existing depth on the previously installed trenches. The repair system is proposed as 400 linear feet of Accepted (25% Reduction) drainfield with gravity distribution. Trench depth (Low Side) is specified at 30 inches. There is 433 linear feet of repair available.***Note: The purpose of this septic design is to accommodate a pool is the backyard. Existing Septic Lines #2-5 are to be trimmed back to the specified lengths stated in the design. Lines # 6-7 will be added to the specified lengths stated in the design.**

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 18E .0202 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 Kristi Phelix
Signature _____ 9/30/24

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 at 180 Powder Spring Dr., Statesville NC28677 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,

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

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

9/23/2024

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

Re: Improvement Permit & CA Submittal for 180 Powder Spring Dr., Statesville NC (Lot #

Mr. Snow,

Attached please find sealed soil notes as well as site plans and design related data for a 4 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: Michael & Kristi Phelix

Signature: _____

Date: 9/30/24

"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."

Samuel Ashley Rollans

Signature: _____

Date: 9/23/2024 Seal:

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

[ ] New Construction [ ] Expansion [X] 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	P.O. Box 5872
City:	Statesville
State:	North Carolina
Zip:	28687
Phone #:	980-223-8382
Email:	sfsstatesvillenc@gmail.com

Owner:	Michael & Kristi Phelix
Mailing Address:	180 Powder Spring Dr.
City:	Statesville
State:	NC
Zip:	28677
Phone #:	704-658-6131
Email:	k.mphwliz@yahoo.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?
[X] Yes	[ ] 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 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: 9/23/2024

Owner's Signature: _____ Date: 9/30/24

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

P.O. Box 5872
Statesville NC 28687
980-223-8352
SoilAndForestryServices.com

Project# 24-0078

Septic System Design for a 4 Bedroom House
ACCEPTED using GRAVITY distribution
Site location: 180 Powder Spring Dr., Statesville NC, Lot # 11

Contents

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

Sep 2024
Design By: Ashley Rollans

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

INFORMATION FOR THE INSTALLER — **Project #24-0078**

ACCEPTED using GRAVITY distribution
Site location: 180 Powder Spring Dr., Statesville NC, Lot # 11

* **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 ACCEPTED type using GRAVITY distribution**
* **System trench depth specified at 30"**
* **System trenches installed on 9' minimum; 36" wide trenches**
* **Installation does not require a soil cap**

DESIGN SPECIFICATIONS **Project #24-0078**

ACCEPTED using GRAVITY distribution
Site location: 180 Powder Spring Dr., Statesville NC, Lot # 11

Business (if applicable):	N/A
Contact:	Michael & Kristi Phelix
Phone:	704-658-6131
Email:	k.mphwliz@yahoo.com
County:	Iredell
Location:	180 Powder Spring Dr., Statesville NC

Source of Wastewater Flow:	4	bedroom home
Estimated Daily Wastewater Production:	480	gpd
Drain field Size:	410	lf
Loading Rate:	0.3	gpd/ft.^{2}
Trench Depth:	30	in
Trench Width:	36	in
Soil Cap:	0	in
Septic Tank Size:	1000	gal

Page 3	LAYOUT SPECIFICATIONS	Project #24-0078

ACCEPTED using GRAVITY distribution
Site location: 180 Powder Spring Dr., Statesville NC, Lot # 11

Daily Flow (gpd) 480 **9/19/2024**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM INSTR. 1		0.0	100.0		100.0		
			SYSTEM				
1 Existing	Orange					82	82
2 Existing	Yellow					82	50
3 Existing	Blue					82	50
4 Existing	Pink					82	54
5 Existing	Red					82	58
6	Orange					70	58
7	Yellow					97	58
			REPAIR				
8	Blue					98	98
9	Pink					91	91
10	Red					95	95
11	Orange					98	98

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH	SOIL CAP
SYSTEM	410	0.300	ACCEPTED	25%	GRAVITY	30	0
REPAIR	433	0.300	ACCEPTED	25%	GRAVITY	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

SYSTEM FLOW — **Project #24-0078**

ACCEPTED using GRAVITY distribution
Site location: 180 Powder Spring Dr., Statesville NC, Lot # 11

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area
1 Existing	Orange		82	N/A	N/A	246
2 Existing	Yellow	Remove 32	50	N/A	N/A	150
3 Existing	Blue	Remove 32	50	N/A	N/A	150
4 Existing	Pink	Remove 28	54	N/A	N/A	162
5 Existing	Red	Remove 24	58	N/A	N/A	174
6	Orange	ADD	58	N/A	N/A	174
7	Yellow	ADD	58	N/A	N/A	174
						0
	total	**feet =**	**410**	**gal/min =**	**N/A**	

Design Flow	**480**
Soil LTAR	**0.3**
Accepted LTAR	**0.4**

* Drawing of new Pool.

CALCULATIONS	Project #24-0078
ACCEPTED using GRAVITY distribution **Site location: 180 Powder Spring Dr., Statesville NC, Lot # 11**	
PROJECT INFO	
Designer	Ashley Rollans
Project #	24-0078
Project MM YYYY	9/19/2024
County	Iredell
Project Location	180 Powder Spring Dr., Statesville NC
Lot # (if applicable)	11
Subdivision (if applicable)	Powder Spring Creek
Parcel #	4721410715
Lot size (acres)	1.01
Easement(s) on parcel?	Yes
Business (if applicable)	N/A
Name (Owner)	Michael & Kristi Phelix
Mailing Address (Owner)	180 Powder Spring Dr.
City (Owner)	Statesville
State (Owner)	NC
Zip (Owner)	28677
Phone (Owner)	704-658-6131
Email (Owner)	k.mphwliz@yahoo.com
Bedrooms	4
Water Source	Private Well
Foundation Type	Crawl Space
Daily Flow (gallons)	480
SYSTEM	
System LTAR	0.3
System Type	ACCEPTED
System Distribution	GRAVITY
System Trench Center Distance (feet)	9
System Trench Width (inches)	36
System Trench Depth (inches)	30
Soil Cap (inches)	0
Usable Soil Depth (inches)	56-72"
Media Height (inches)	12
Tank Size (gallons)	1000
Required Feet of Line (system)	400
Designed Feet of Line (system)	410
Saprolite system?	No
REPAIR	
Repair LTAR	0.3
Repair Type	ACCEPTED
Repair Distribution	GRAVITY
Repair Trench Center Distance (feet)	9
Repair Trench Width (inches)	36
Repair Trench Depth (inches)	30
Soil Cap (inches)	0
Usable Soil Depth (inches)	56-72"
Tank Size (gallons)	1000
Required Feet of Line (repair)	400
Designed Feet of Line (repair)	433
Saprolite system?	No

Sheet 1 of 1

PROPERTY ID #: 4721410715

COUNTY: Iredell

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

OWNER: Michael & Kristi Phelix

ADDRESS: 180 Powder Spring Dr Statesville NC 28677

PROPOSED FACILITY & Design Flow(.0400): 4 Bedroom Residential Home- 480 GPD (System Relocation for Pool)

LOCATION OF SITE: 180 Powder Spring Dr Statesville NC 28677

DATE EVALUATED: 12/1/20 & 7/18/24

PROPERTY SIZE: 1.01

PROPERTY RECORDED: Yes

Water supply setback 50 Feet

WATER SUPPLY: ☐ Public ☑ Single Family Well ☐ Shared Well ☐ Spring ☐ Other

EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut

TYPE OF WASTEWATER: ☑ Domestic ☐ High Strength ☐ IPWW

PROFILE #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPR CLASS	.0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR	.0502(d) SLOPE CORRECTION
33	L/12%	0-9	BRSCL WFSBK	FR SS SP SEXP	F-CSAP	65	S		S 0.3	4.32"
		9-35	BRC WMSBK/ABK	FR SS SP SEXP						
		35-65	RBCL WFSBK	FR SS SP SEXP						
		65-72	VAR SL MASS	FR SS SP SEXP						
34	L/12%	0-3	BCL WMSBK	FR SS SP SEXP	F-CSAP	55	S		S 0.3	4.32"
		3-27	RC WMSBK/ABK	FR SS SP SEXP						
		27-55	RBCL/SCL WFSBK	FR SS SP SEXP						
		55-62	VAR SL MASS	FR SS SP						
38	L/11%	0-5	BL GR	FR SS SP SEXP	F-CWH ROCK	14		14	UN	
		5-14	RBCL WMSBK/ABK	FR SS SP SEXP						
		14-30	CR							
1	L/12%	0-14	RBCL WFSBK	FR SS SP	CSAP	56			S 0.3	4.32"
		14-44	BRC WMSBK	FR SS SP						
		44-56	RBCL WFSBK	FR SS SP						
32	L/8%	0-9	BRSCL WFSBK	FR SS SP SEXP	f-csap	65	S		S 0.3	2.88"
		9-35	BRC WMSBK/ABK	FR SS SP SEXP						
		35-56	RBC WFSBK	FR SS SP SEXP						
		65-72	VAR SL MASS	FR SS SP SEXP						

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

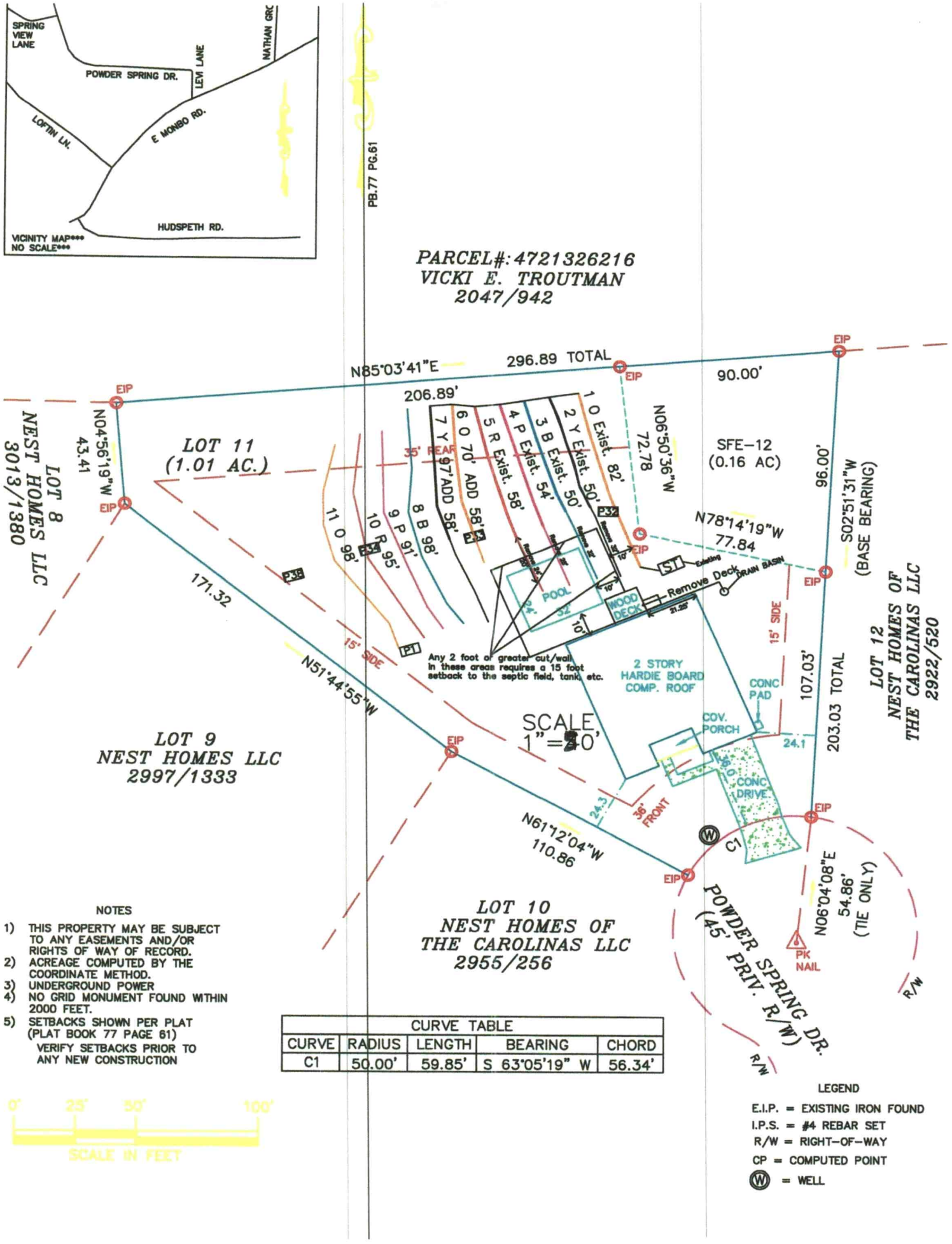
DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.508)	Suitable	Suitable
System Types(s)	Accepted 25%-Gravity	Accepted 25%-Gravity
Site LTAR	0.3	0.3
Maximum Trench Depth	30"	30"

SITE CLASSIFICATION (.509): Suitable

EVALUATED BY: Ashley Rollans

OTHER(S) PRESENT: Chad Wagner

COMMENTS:



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.
5) SETBACKS SHOWN PER PLAT (PLAT BOOK 77 PAGE 61)
   VERIFY SETBACKS PRIOR TO ANY NEW CONSTRUCTION

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C1	50.00'	59.85'	S 63°05'19" W	56.34'

0' 25' 50' 100'
SCALE IN FEET

LEGEND

E.I.P. = EXISTING IRON FOUND
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
CP = COMPUTED POINT
Ⓦ = WELL