BLDR-2023-20999

ICHD - ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # OSWP-2023-19602

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

PIN # 4770-48-0969 ✓

APPLICANT / OWNER: Matt Gordon ✓ APPLICANT ADDRESS: 158 Mt Tabor Church Rd Cleveland NC

SITE ADDRESS: 158 MT TABOR RD, CLEVELAND, NC 27013 ✓ PHONE: ALT. PHONE:

SITE DIRECTIONS: SAP CONTROLLED: YES ☐ NO ☒

SUBDIVISION: Robert M McFarland Property ✓ SECTION: - LOT #: 3 ✓ LOT AREA: 5 DESIGN FLOW: 600 L.T.A.R.: .30

Septic Tank: (gal) 1500	STB: SHOAF	Date: 11/19/23	☐ New System ☐ Repair ☐ Expansion	System Type: III	☑ Residence	No. Bedrooms: 5	Water Supply: New Well
Pump Tank: (gal) -	PT: -	Date: -	System Description: County -25% Reduction		☐ Business	No. Persons: 10	
Pump Make: -	Model: -	Serial #: -	Repair System Description: - 25% Reduction.		☐ Other	No. Employees:	
# Nitrification Fields: 1	# Lines: 4	Linear Ft.: 500	Maintenance Agreement Required: ☐ YES ☑ NO		☐ Slab	☑ Crawl Space	
Trench Width: 36in	Trench Bottom Depth (Low side): 30in.		Gravel Depth: —	☑ GRAVITY ☐ PRESSURE	☐ Basement w/ Plumbing	☐ Basement w/o Plumbing	

Comments / Conditions:

INITIAL SITE SKETCH

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

Soil + Forestry Services of the Carolinas, PA

LSS# 1231

AS BUILT SKETCH

See attached as built - tank location moved, lines still flagged at install

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: Benjamin A Batts Date: 4/5/2023

AUTHORIZATION TO CONSTRUCT by: Benjamin A Batts Date: 4/5/2023

Installed By: Rowan Septic

OPERATION PERMIT by: Date: 2/19/24

Existing System Inspected By: Date:

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

MOUNT TABOR ROAD
S45°22'14"E
206.13'
N46°01'02"E
103.13'
L15
L16
CP
EIP @ 30.94'
31.38' (TO R/W)
S26°57'02"W
423.20' TOTAL
OVER HEAD POWER LINE
391.82'
IPS
31.49' (TO R/W)
PROPOSED DRIVEWAY
PROPOSED HOUSE
B1
B2
B3
B4
B5
B6
B7
B8
W
EIP
1 B 102'
2 P 120' (118)
3 R 138'
4 O 171' (142)
5 Y 178'
6 B 184'
7 R 192'
S26°57'02"W
690.06'
691.55'
NORTH
SCALE
1" = 60'

4 0 + 5 =

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 4/4/2023 (Date) by BB (Initials)

Permit Number: BLDR-2023-20999

G.S. 130A-335(a6) states the following: *'If a local health department fails to act on an application for a construction authorization submitted pursuant to subsection (a5) of the section within 10 business days of receipt of a complete application, the local health department shall issue the construction authorization.'*

In accordance with G.S. 130A-335(a5) the construction authorization application is:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

_____

Copies of this were sent to the AOWE/PE and the Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)

Copies of this were sent to the AOWE/PE and the Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: Benjamin A Bell Date of Issuance: 4-5-2023

This Construction Authorization is issued pursuant to G.S. 130A-335(a2), (a5), and (a6) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner. Final landscaping shall be constructed to divert water and establish vegetative cover.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: 4-5-2028

See attached site sketch

County: Iredell

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

PIN/Lot Identifier: 4770485096

Issued To: Matt Gordan

Property Location: 158 Mt. Tabor church Rd Cleveland NC 27013

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

Facility Type: 5 Bedroom

☒ New ☐ Expansion ☐ Repair System Relocation ☐

Basement? ☐ Yes ☒ No Basement Fixtures? ☐ Yes ☒ No

Type of Wastewater System** Accepted 25% Gravity (Initial) Accepted 25% Gravity (Repair)

Design Daily Flow: 600 GPD Wastewater Strength: ☒ domestic ☐ high strength ☐ industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes ☒ No

Installation Requirements/Conditions

Septic Tank Size: 1500 gallons Total Trench/Bed Length: 500 feet Trench/Bed Spacing: 9 feet on center

Drainfield square footage: 1500 Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft²

Soil Cover: ~6min inches Slope Adjusted Maximum Trench/Bed Depth: 30 inches LOW SIDE

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

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

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

Distribution Method: ☒ Serial ☐ D-Box or Parallel ☐ Pressure Manifold(s) ☐ LPP ☐ Other: _____

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

Legal Agreements *(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)*

Multi-party Agreement Required [.1937(h)]: Yes ☐ No ☒

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: ☐ Yes ☒ No

Declaration of Restrictive Covenants: ☐ Yes ☒ No

****If applicable:**

I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Print Name: Matthew Gordon

Owner/Legal Representative Signature: _____ Date: 4-4-23

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 Rollins

AOWE/PE Signature: Samuel A Rollins Date: 3/17/23

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

See attached site sketch

NC ONSITE WASTEWATER SYSTEM EVALUATOR Certification Number 10027E

County: Iredell

This Section for Local Health Department Use Only

Initial submittal received: 3/27/23 (Date) by BB (Initials)

Permit Number: OSWP-2023-19602

G.S. 130A-335(a4) states the following: *'If a local health department fails to act on an application for an improvement permit submitted pursuant to subsection (a3) of the section within 10 business days of receipt of a complete application, the local health department shall issue the improvement permit.'*

In accordance with G.S. 130A-335(a3) the improvement permit application is:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

Copies of this were sent to the LSS and the Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)

Copies of this were sent to the LSS and the Owner on _____ (Date)

State Authorized Agent: _____ Date: _____

☑ Complete

State Authorized Agent: Benjamin A. Botts Date of Issuance: 3/27/2023

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2), (a3), and (a4) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: 3/27/2028

See attached site sketch

County: Iredell

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

PIN/Lot Identifier: 4770480462

Issued To: Matt Gordan

Property Location: 158 Mt. Tabor church Rd Cleveland NC 27013

Subdivision: Robert M McFarland Property Lot #: 3 Block: _____ Section: _____

LSS Report Provided: Yes ☒ No ☐

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

New ☒ Repair ☐ Expansion ☐ System Relocation ☐

Proposed Structure: 5 Bedroom

Proposed Wastewater System Type: Accepted 25% gravity (Initial) Same (Repair)

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

Proposed Design Daily Flow: 600 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3

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

Number of bedrooms: 5 Number of Occupants: 10 Other: _____

Pump Required: ☐ Yes ☒ No ☐ May be required based upon final location and elevations of facilities

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

Type of Water Supply: ☒ Private well ☐ Public well ☐ Municipal Supply ☐ Spring ☐ Other: _____

Drainfield location meets requirements of Rule .1945: Yes ☒ No ☐

Drainfield location meets requirements of Rule .1950: Yes ☒ No ☐

Permit valid for: ☐ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

See design

Licensed Soil Scientist Print Name: Samuel Ashley Rollins

Licensed Soil Scientist Signature: Samuel A Rollins Date: 5/17/23

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

See attached site sketch

County: Iredell

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

PIN/Lot Identifier: 4770458096 64

Issued To: Matt Gordan

Property Location: 158 Mt. Taber church Rd Cleveland NC 27013

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

Facility Type: 5 Bedroom

☒ New ☐ Expansion ☐ Repair System Relocation ☐

Basement? ☐ Yes ☒ No Basement Fixtures? ☐ Yes ☒ No

Type of Wastewater System** Accepted 25% Gravity (Initial) Accepted 25% Gravity (Repair)

Design Daily Flow: 600 GPD Wastewater Strength: ☒ domestic ☐ high strength ☐ industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes ☒ No

Installation Requirements/Conditions

Septic Tank Size: 1500 gallons Total Trench/Bed Length: 500 feet Trench/Bed Spacing: 9 feet on center

Drainfield square footage: 1500 Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft²

Soil Cover: ~6min inches Slope Adjusted Maximum Trench/Bed Depth: 30 inches LOW SIDE

Aggregate Depth: _____inches above pipe _____inches below pipe _____inches total

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

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

Distribution Method: ☒ Serial ☐ D-Box or Parallel ☐ Pressure Manifold(s) ☐ LPP ☐ Other: _____

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

Legal Agreements *(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)*

Multi-party Agreement Required [.1937(h)]: Yes ☐ No ☒

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: ☐ Yes ☒ No

Declaration of Restrictive Covenants: ☐ Yes ☒ No

****If applicable:**

I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Print Name: _____

Owner/Legal Representative Signature: _____ Date: _____

Pre-Construction Conference Required: Yes ☐ No ☒

Conditions: 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 Rollins

AOWE/PE Signature: Samuel A Rollins Date: 3/17/23

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

See attached site sketch

NC ONSITE WASTEWATER EVALUATOR Certification Number 10027E

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 22-0084
March 16th, 2023

Matt Gordon
Attn: *Matt Gordon*
Email: Gordonmm@corning.com

RE: Soil & Site Evaluation for a 5 Bedroom Residence at 158 Mt. Tabor Rd., 5.0 ac Parcel, PIN# 4770480969, Cleveland, NC 27013, Iredell County, NC.

Mr. Gordon:

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

Site Conditions

At the time of our evaluation land cover on the property was mostly cleared/open on the property. Topography within the evaluated area was gentle slope near the house site with gentle percentage of slope in the proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Don Allen & Associate Surveyors. The Surveyor provided an Autocad File of the survey as a basemap. The proposed septic layout was located via GPS and tape measures which were used to produce the attached *Site Plan*. The house envelope was pinned in the field during our evaluation.

Methodology

We evaluated soil areas through the use of auger borings. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with three auger boring locations on the property flagged and located via GPS. Four of the eight auger borings are located in or adjacent to the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each boring. The house envelope was located via GPS. 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.

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Accepted Septic System with gravity dist. for a 5 bedroom single family residence at 158 Mt. Tabor RD, PIN#(4770480969) Cleveland 27013, Iredell County, NC.

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Agent Authorization	Online
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Construction Authorization Form	10

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

March 16, 2023
Project #: 22-0084
Design By: Soil & Forestry Services of the Carolinas, PA

158 Mount Tabor Road. PIN #4770480969 *(See Attached Design)*
The septic layout for this lot (9' centers) yielded a total of 1054 linear feet of line. The primary system is proposed as 500' of Accepted (25% Reduction) drainfield with gravity distribution. Trench depth (LOW SIDE) is specified at 30 inches. The repair system is proposed as 500' of Accepted (25% Reduction) drainfield with gravity distribution. Trench depth (LOW SIDE) is specified at 30 inches. There is 554 linear feet available for repair.

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

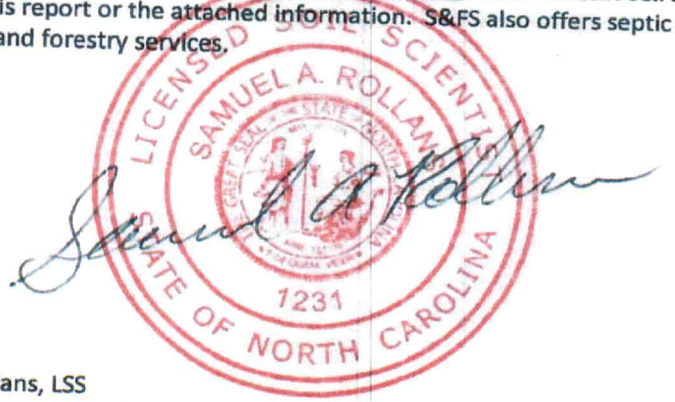
Print Name Matthew Gordon
Signature _____ 03/21/2023

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 158 Mount Tabor Road, Cleveland, NC 28013. 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*

INFORMATION FOR THE INSTALLER:

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

- Tanks shall be approved by NC DHHS, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as a gravity 25% reduction (Accepted) installation.
- Repair is specified as gravity 25% reduction (Accepted) installation.

GRAVITY ACCEPTED SYSTEM FOR WASTEWATER TREATMENT

Owner/Applicant:	Matt Gordon
Address:	1363 Mt. Tabor Rd
Phone:	336-408-1350
County:	Iredell
Location:	158 Mt.tabor Rd Cleavland NC 27013
Source of Wastewater Flow:	5 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	600
System Flow:	N/A

Design Specifications

Drainfield Size:	500	
Loading Rate (gpd/ft.^{2}):	0.3	
Depth of Gravel in Trench:	N/A	
Gravel Size:	N/A	
Trench Depth (LOW SIDE):	30 in.	Repair Trench Bottom 30 in.
Trench Width:	36 in.	
Septic Tank Size:	1500	

Estimated Supply Line Length:	23
Supply Line Diameter:	4 in. SCH 40 PVC
Supply Line Volume:	15.02
Dosing Volume:	N/A
Supply Manifold:	N/A
Supply Manifold Length:	N/A
Supply Manifold Volume:	N/A
Recommended Float Controls:	N/A
Recommended Control Panel:	N/A
Pressure Head:	N/A
Friction Head:	N/A
Elevation Head:	N/A
Total Dynamic Head:	N/A
Threaded Union:	N/A
Gate Valves:	N/A
Check Valves:	N/A
Anti-Siphon Hole:	N/A
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA

158 Mt.tabor Rd

ACCEPTED SYSTEM

DESIGN FLOW (gpd):	600
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	1500
TOTAL LATERAL LENGTH:	500
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	500
SUPPLY LINE LENGTH:	23
TOTAL DYNAMIC HEAD:	N/A
MANIFOLD SIZE:	N/A
DOSING VOLUME:	N/A
PUMP TANK DRAW DOWN*:	N/A
SEPTIC TANK SIZE:	1500

Layout Specifications - 158 Mt.Tabor

Project #: 22-0084

LAYOUT FOR 5 BEDROOM HOME

March 16, 2023

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
1	**BLUE**						
2	**PINK**					**102**	**102**
3	**RED**					**120**	**118**
4	***ORANGE***					**138**	**138**
5	YELLOW					***171***	***142***
6	BLUE					178	178
7	RED					184	184
						192	192
					Total	1085	1054

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION
**** System***	***500***	***0.300***	***ACCEPT.***	***0.300***	***25% RED***	***GRAVITY***
Repair	554	0.300	MOD. CONV.	0.300	***25% RED***	***GRAVITY***

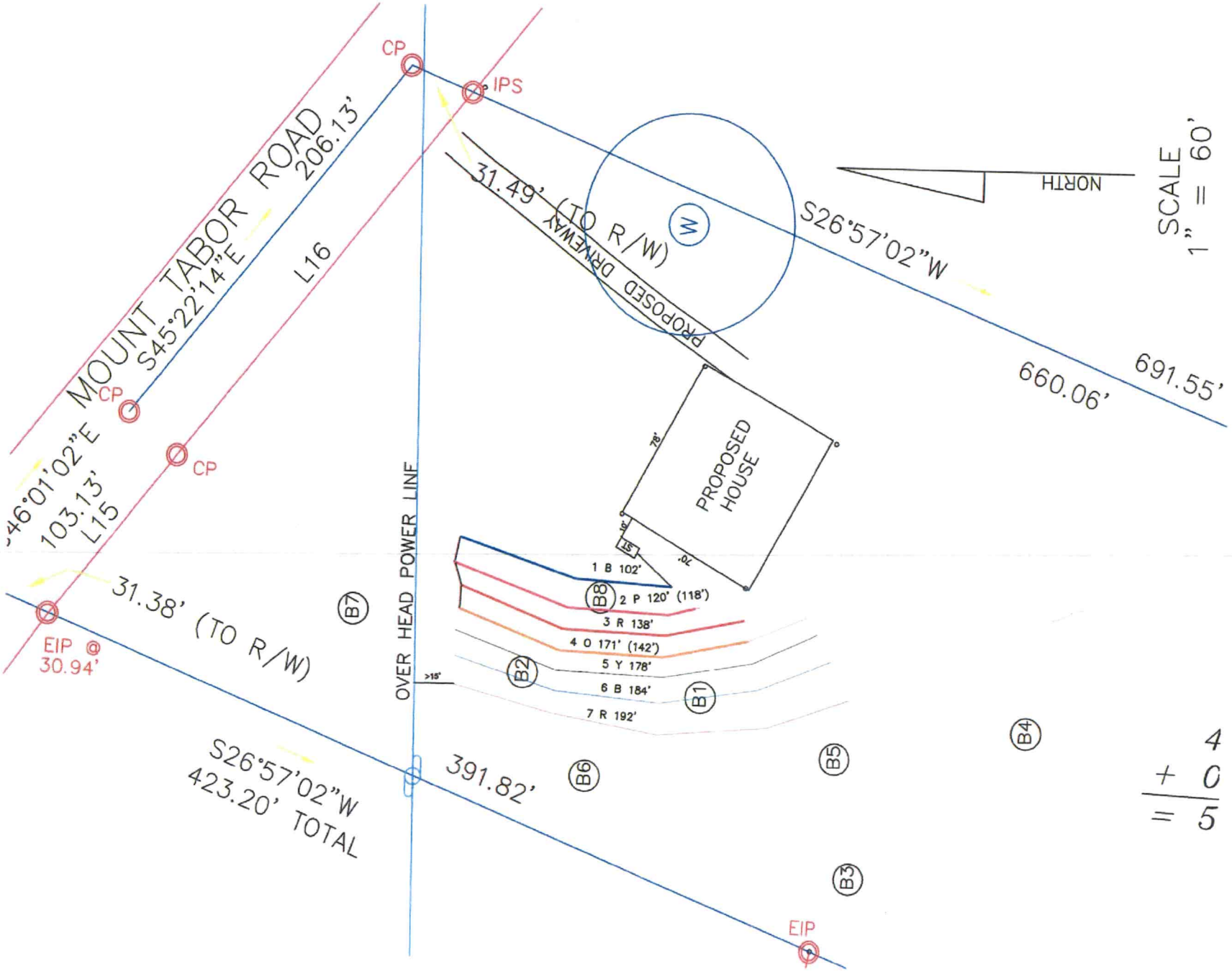
Notes:

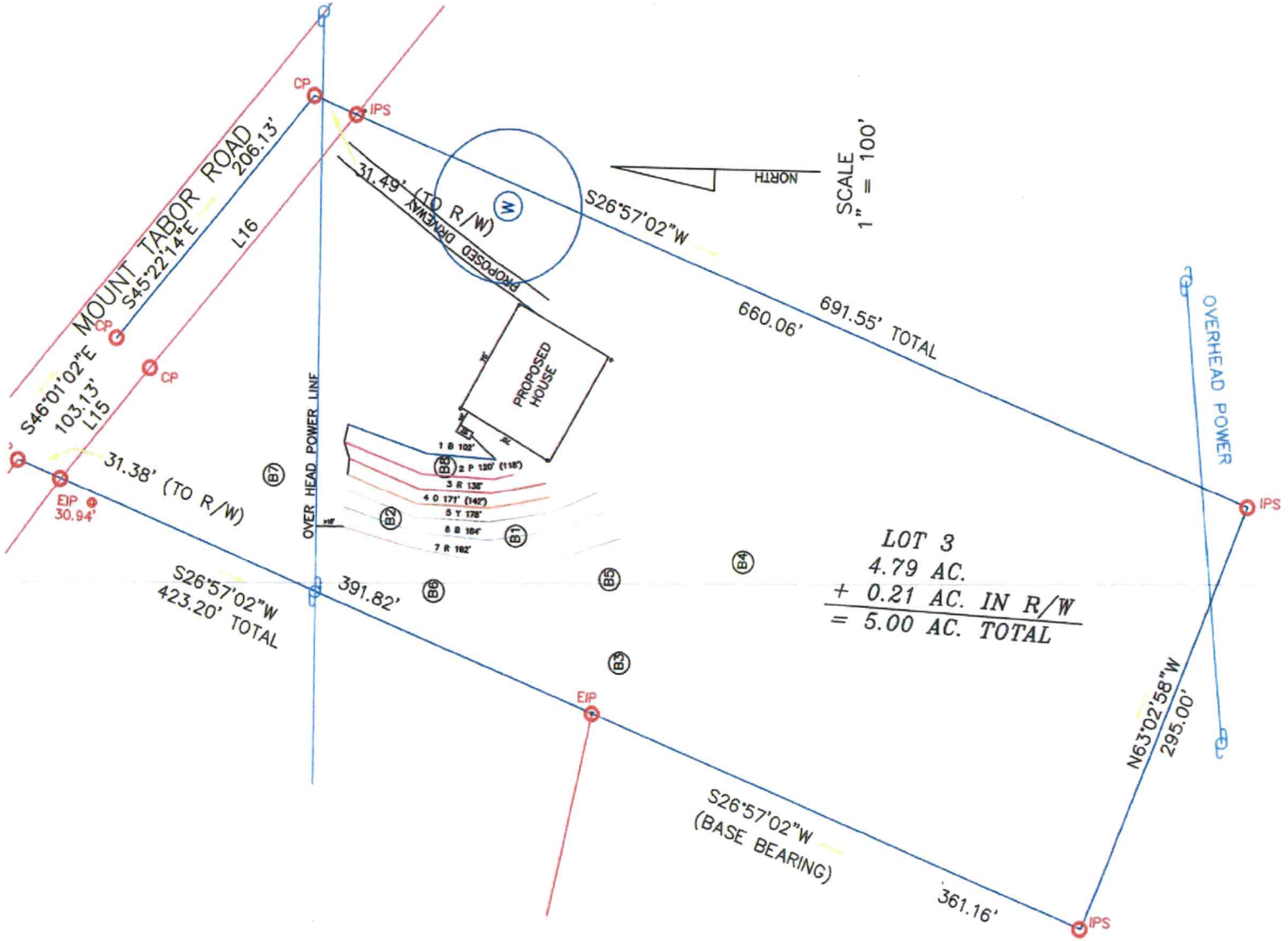
**All measures in feet

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

**Nitrification lines were located by tape measures & GPS.

**Property lines, corners & house were located by a Professional Land Surveyor.


MOUNT TABOR ROAD
206.13'
S45°22'14"E
L16
CP
CP
CP
IPS
-46°01'02"E
103.13'
L15
31.38' (TO R/W)
EIP @
30.94'
OVER HEAD POWER LINE
31.49' (TO R/W)
PROPOSED DRIVEWAY
W
S26°57'02"W
660.06'
691.55'
NORTH
SCALE
1" = 60'
PROPOSED
HOUSE
78'
70'
15'
1 B 102'
2 P 120' (118')
3 R 138'
4 O 171' (142')
5 Y 178'
6 B 184'
7 R 192'
B1
B2
B3
B4
B5
B6
B7
B8
>15'
S26°57'02"W
423.20' TOTAL
391.82'
EIP
4
+ 0
= 5


MOUNT TABOR ROAD
S45°22'14"E
206.13'
L16
CP
CP
CP
IPS
S46°01'02"E
103.13'
L15
31.38' (TO R/W)
EIP
30.94'
31.49' (TO R/W)
PROPOSED DRIVEWAY
S26°57'02"W
660.06'
691.55' TOTAL
NORTH
SCALE
1" = 100'
PROPOSED HOUSE
OVER HEAD POWER LINE
OVERHEAD POWER
IPS
LOT 3
4.79 AC.
+ 0.21 AC. IN R/W
= 5.00 AC. TOTAL
S26°57'02"W
423.20' TOTAL
391.82'
EIP
S26°57'02"W
(BASE BEARING)
361.16'
IPS
N63°02'58"W
295.00'

CALCULATIONS

Location 158 Mt.Tabor
Cleavland, NC 27013
Project Number 22-0084

Lot No: 3

No. of Bedrooms 5

Design Flow 600 $^{gal}/_{day}$

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

PPBPS? (YES OR NO) NO

Supply Line Length 23 ft.

Supply Line Volume 15.019 gal.

Required Feet of Line 500 ft.
Amount of Line from Layout 500 ft.

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

Required Septic Tank Capacity 1500 gal.
Septic Tank Size 1500 gal.

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

Tank Draw Down N/A

Pump Run Time

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

Total Dynamic Head (+15%) N/A ft.

FRICTION FACTOR
INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

RO63015A

Sheet 1 of 2
PROPERTY ID #: 4776480646
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Matt Gordon
ADDRESS:
PROPOSED FACILITY: 5-6 BR
LOCATION OF SITE: 164 Mt. Tabor Rd, Cleveland NC 27013
PROPOSED DESIGN FLOW (.1949): 600gpd
APPLICATION DATE
DATE EVALUATED: 6/30/22
PROPERTY SIZE: ± 5.0
PROPERTY RECORDED: 4/25

WATER SUPPLY: ☑ Private ☐ Public ☑ Well ☐ Spring ☐ Other
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 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
B 1	L/10%	0-7	BSL SR	FrSSSPSEXP	+ fsap/WR + c-msap	52	—	—	PS 0.325
		7-21	BRC wfsbk	" " " "					
		21-52	RBCl/sCl wfsbk	" " " "					
B 2	L/12%	0-6	BSL SR	FrSSSPSEXP	+ fsap/WR + c-msap	50	—	—	PS 0.325
		6-23	BRC wmsbk	" " " "					
		23-50	RBCl/sCl wfsbk	" " " "					
B 3	L/L/17%	0-5	BSL GR	Fr SS SPSEXP	+ Cl. @ 25@10"	12			UN
		5-18	BRC wmsbk	Fr SS SP					
B 4	L/9%	0-6	BSL SR	FrSSSPSEXP	+ fsap/WR + csap	52			PS 0.325
		6-27	BRC wmsbk/NK	FrSSSPSEXP					
		27-50	RBCl/sCl wfsbk	" " " "					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted 25%	Accepted 25%
Site LTAR	0.3	0.3

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

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

SOIL/SITE EVALUATION
(Continuation Sheet-Complete all field in full)

Sheet 2 of 2

PROPERTY ID #: 477480969
DATE OF EVALUATION: 6/30/22
COUNTY: Iredell

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	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5		0-6	BscLgr	FrSSSPSEXP					
B	L/9%	6-24	BRC wmsbk/ABk	" " " "	-fsap	52	-	-	0.325
		24-52	RBscl/cl wfsbk	" " " "	-Csap				
6		0-4	BSL Gr	Fr SS SP SEXP					
B	L/8%	4-10	BRC wmsbk/ABk	" "					
		10-20	RBSCL wfsbk	" "	-C.SAP	20	PS	-	0.4
		20-50	VAR SL MASS	" "					
7		0-1	BSL Gr	Fr SS SP SEXP					
B	L/8%	1-14	BRC wmsbk/ABK	" "					
		14-30	RBCL wfsbk	" "	-C SAP	30	PS	-	0.35+
		30-50	VAR SL. MASS	" "					
8		0-6	BscLwfsbk	FrSSSPSEXP					
B	L/6%	6-24	BRCwmsbk	" " " "	-fsap				
		24-50	RBscl wfsbk	" " " "	-Csap	50	-	-	0.3-0.325
9									0

COMMENTS: