BLDR-2023-38241

# ICHD - ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # OSWP-2023-37774

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

PIN # 4736-93-1973

APPLICANT / OWNER: William Self APPLICANT ADDRESS: 504 Alexander St Statesville NC

SITE ADDRESS: 122 WHITETAIL RD, STATESVILLE, NC 28625 PHONE: 704-903-3202 ALT. PHONE:

SITE DIRECTIONS: N NC21 -> L Fort Dobbs -> R Cooper Farm -> L Whitetail -> lot on R SAP CONTROLLED: YES ☐ NO ☑

SUBDIVISION: N/A SECTION: N/A LOT #: N/A LOT AREA: 0.43 DESIGN FLOW: 360 L.T.A.R.: 0.3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Septic Tank: 1000 (gal) | STB: 760 | Date: 10/9/23 | ☒ New System ☐ Repair ☐ Expansion | System Type: III | ☑ Residence | No. Bedrooms: 3 | Water Supply: Other Public Water |
| Pump Tank: 1000 (gal) | PT: 363 | Date: 10/27/23 | System Description: 25% Reduction - PM | | ☐ Business | No. Persons: 6 | |
| Pump Make: | Model: | Serial #: | Repair System Description: %50 Reduction | | ☐ Other | No. Employees: | |
| # Nitrification Fields: 1 | # Lines: 4 | Linear Ft.: 312' | Maintenance Agreement Required: ☐ YES ☑ NO | | ☐ Slab | ☑ Crawl Space | |
| Trench Width: 36 | Trench Bottom Depth (Low side): 24 | | Gravel Depth: 0 | ☐ GRAVITY ☑ PRESSURE | ☐ Basement w/ Plumbing | ☐ Basement w/o Plumbing | |

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

INITIAL SITE SKETCH

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

Soil & Forestry Services

LSS# 1231 / 10027E

AS BUILT SKETCH

Installed as drawn

Tanks CW
Lines PM 12/8/23

BCW 2-8-2024
- ELECTIC
- FLOATS
- ALARM
- PRESSURE HEAD

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: william self Date:

IMPROVEMENT PERMIT by: D Webber Date: 10/4/23

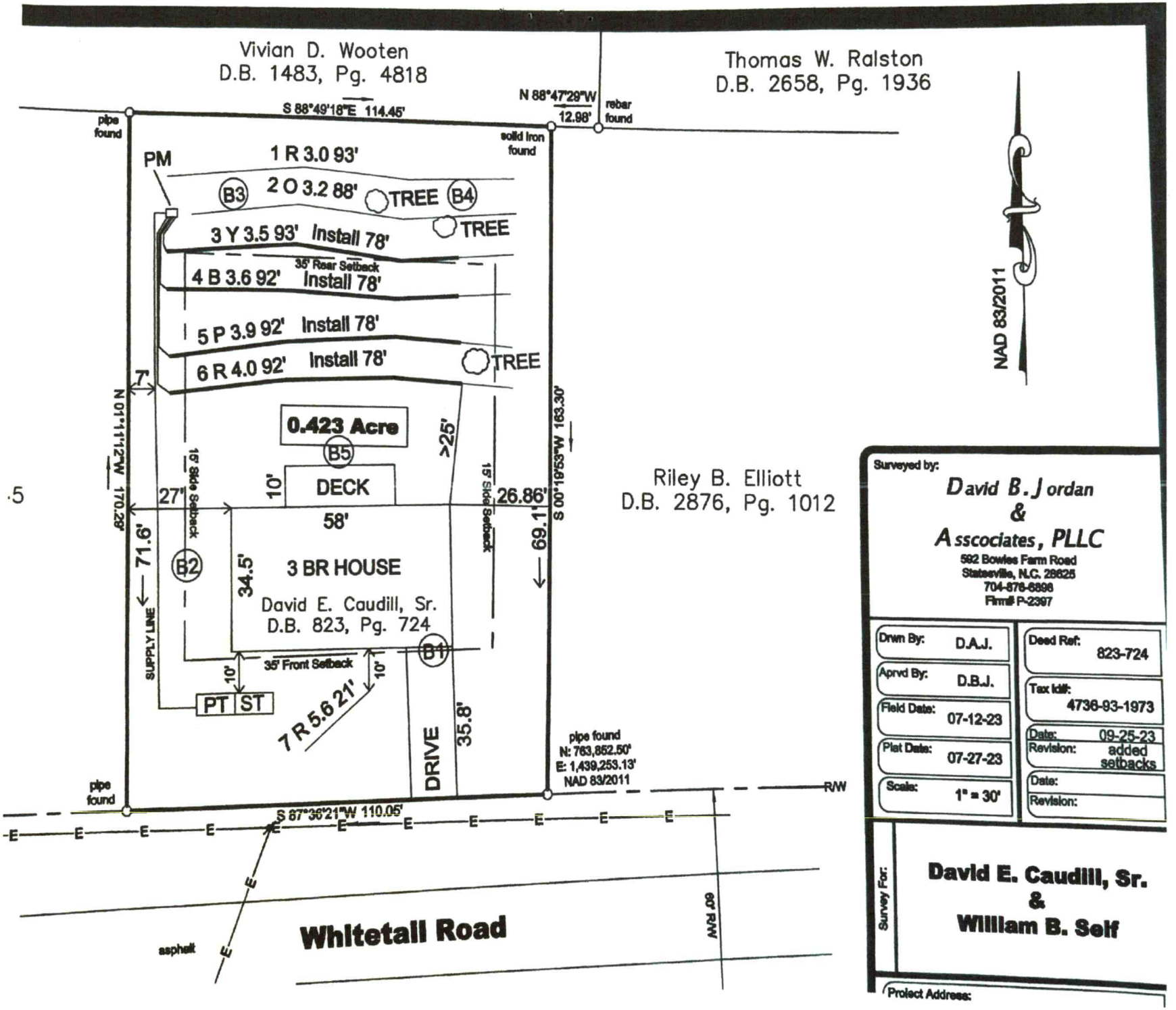
AUTHORIZATION TO CONSTRUCT by: D Webber Date: 10/4/23

Installed By: Williams Excavating

OPERATION PERMIT by: Bridget C. White Date: 2-8-2024

Existing System Inspected By: Date:

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


Vivian D. Wooten
D.B. 1483, Pg. 4818
Thomas W. Ralston
D.B. 2658, Pg. 1936
S 88°49'18"E 114.45'
N 88°47'29"W
12.98'
rebar found
pipe found
solid iron found
PM
1 R 3.0 93'
2 O 3.2 88'
TREE
B3
B4
3 Y 3.5 93' Install 78'
TREE
35' Rear Setback
4 B 3.6 92' Install 78'
5 P 3.9 92' Install 78'
6 R 4.0 92' Install 78'
TREE
7'
N 01°11'12"W 170.28'
0.423 Acre
B5
>25'
15' Side Setback
10'
DECK
27'
26.86'
S 00°19'53"W 163.30'
58'
71.6'
B2
34.5'
3 BR HOUSE
David E. Caudill, Sr.
D.B. 823, Pg. 724
69.1'
Riley B. Elliott
D.B. 2876, Pg. 1012
SUPPLY LINE
35' Front Setback
10'
10'
B1
PT
ST
7 R 5.6 21'
DRIVE
35.8'
pipe found
N: 763,852.50'
E: 1,439,253.13'
NAD 83/2011
R/W
pipe found
S 87°36'21"W 110.05'
Whitetail Road
asphalt
60' R/W
NAD 83/2011
Surveyed by:
David B. Jordan
&
Asscociates, PLLC
592 Bowles Farm Road
Statesville, N.C. 28625
704-876-6896
Firm# P-2397
Drwn By: D.A.J.
Aprvd By: D.B.J.
Field Date: 07-12-23
Plat Date: 07-27-23
Scale: 1" = 30'
Deed Ref: 823-724
Tax Id#: 4736-93-1973
Date: 09-25-23
Revision: added setbacks
Date:
Revision:
Survey For:
David E. Caudill, Sr.
&
William B. Self
Project Address:

# PRESSURE MANIFOLD SYSTEM
# FOR WASTEWATER TREATMENT

| | |
|---|---|
| **Owner/Applicant:** | Billy Self |
| **Address:** | 504 Alexander St.<br>Statesville, NC 28677 |
| **Phone:** | 704.903.3202 |
| **County:** | Iredell |
| **Location:** | 122 Whitetail Rd<br>Statesville, NC 28625 |
| **Source of Wastewater Flow:** | 3 Bedroom Single Family Residence |
| **Estimated Daily Wastewater Production:** | 360 gpd |
| **System Flow:** | 28.44 |

## Design Specifications

| | |
|---|---|
| **Drainfield Size:** | 312 |
| **Loading Rate:** | 0.3 |
| **Depth of Gravel in Trench:** | NA (25% reduction ) |
| **Gravel Size:** | NA (25% reduction ) |
| **Trench Depth (low side):** | 24 in. Repair Trench Depth 30 in. |
| **Trench Width:** | 36 in. |
| **Septic Tank Size:** | 1000 |
| **Pump Tank Size:** | 1000 |
| **Estimated Supply Line Length:** | 134 |
| **Supply Line Diameter:** | 2 in. SCH 40 PVC |
| **Supply Line Volume:** | 23.32 |
| **Dosing Volume:** | 142.62 |
| **Supply Manifold:** | 4 in. SCH 80 PVC |
| **Supply Manifold Length:** | 4 ft. (minimum) |
| **Supply Manifold Volume:** | N/A |
| **Recommended Float Controls:** | SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents |
| **Recommended Control Panel:** | SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel. |
| **Pressure Head:** | 2 ft. |
| **Friction Head:** | 2.39 |
| **Elevation Head:** | 6.60 |
| **Total Dynamic Head:** | 12.63 |
| **Threaded Union:** | In Tank |
| **Gate Valves:** | 1 in Tank<br>1 at Pressure Manifold |
| **Check Valves:** | In Tank |
| **Anti-Siphon Hole:** | NA |
| **Additional Comments:** | Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA. |

## 122 Whitetail Rd
## PRESSURE MANIFOLD DESIGN

| | |
|---|---|
| **DESIGN FLOW:** | 360 |
| **SOIL APPLICATION RATE:** | 0.3 |
| **TOTAL AREA TRENCH BOTTOM:** | 936 |
| **TOTAL LATERAL LENGTH:** | 312 |
| **NUMBER OF FIELDS:** | 1 |
| **LATERAL LENGTH REQUIRED PER FIELD:** | 300 |
| **SUPPLY LINE LENGTH:** | 134 |
| **TOTAL DYNAMIC HEAD:** | 12.63 |
| **MANIFOLD SIZE:** | 4 in.SCH 80 PVC |
| **DOSING VOLUME:** | 142.62 |
| **PUMP TANK DRAW DOWN*:** | 6.8 |
| **SEPTIC TANK SIZE:** | 1000 |
| **PUMP TANK SIZE:** | 1000 |

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

# Layout Specifications - 122 Whitetail Rd

Project #: 23-0095

LAYOUT FOR 3 BEDROOM HOME

September 25, 2023

| LINE # | FLAG COLOR | BS | HI | FS | ELEVATION | FLAGGED LINE LENGTH | DESIGN LINE LENGTH |
|---|---|---|---|---|---|---|---|
| TBM | (left rear pc) | 2.20 | 102.2 | | 100.00 | | |
| HOUSE | (right rear) | | | 4.70 | 97.50 | | |
| PUMP TANK | | | | 4.80 | 97.40 | | |
| INSTR. 1 | | | | | | | |
| 1 | RED | | | 3.00 | 99.20 | 93 | 93 |
| 2 | ORANGE | | | 3.20 | 99.00 | 88 | 88 |
| ***3*** | ***YELLOW*** | | | ***3.50*** | 98.70 | ***93*** | ***78*** |
| ***4*** | ***BLUE*** | | | ***3.60*** | 98.60 | ***92*** | ***78*** |
| ***5*** | ***PINK*** | | | ***3.90*** | 98.30 | ***92*** | ***78*** |
| ***6*** | ***RED*** | | | ***4.00*** | 98.20 | ***92*** | ***78*** |
| 7 | RED | | | 5.60 | 96.60 | 21 | 21 |
| | | | | | **Total** | 571 | 514 |

| | LINE LENGTH | LTAR GPD/FT2 | SYSTEM TYPE | SOIL LTAR GPD/FT2 | TRENCH SYSTEM | DISTRIBUTION | LOW SIDE TRENCH DEPTH |
|---|---|---|---|---|---|---|---|
| **** System*** | ***312*** | ***0.300*** | ***ACCEPT.*** | ***0.300*** | ***25% RED*** | ***PRESSURE MANIFOLD*** | 24" |
| Repair | 259 | 0.300 | MOD. CONV. | 0.300 | PPBPS | LOW PRESSURE | 30" |

Notes: **All measures in feet

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

**Nitrification lines were located by GPS.

# PRESSURE MANIFOLD TAPSHEET - 122 Whitetail Rd

## SYSTEM

| Line # | Color | Elevation | Length | Hole Size | Flow/Tap | Trench Area | Line LTAR |
|---|---|---|---|---|---|---|---|
| *3* | ***YELLOW*** | ***98.70*** | ***78*** | SCH 40 1/2 | **7.11** | 234 | 0.15 |
| *4* | ***BLUE*** | ***98.60*** | ***78*** | SCH 40 1/2 | **7.11** | 234 | 0.15 |
| *5* | ***PINK*** | ***98.30*** | ***78*** | SCH 40 1/2 | **7.11** | 234 | 0.15 |
| *6* | ***RED*** | ***98.20*** | ***78*** | SCH 40 1/2 | **7.11** | 234 | 0.15 |

| | | | | |
|---|---|---|---|---|
| **total** | **feet =** | **312** | **gal/min =** | **28.44** |
| | | **Des. Flow** | **360** | |
| | | **Pump Run=** | **5.01** | |
| | | **soil LTAR** | **0.3** | |
| | | **LTAR +5%** | **0.315** | |
| | | **LTAR with ACCEPTED** | **0.4** | |
| | | **LTAR with ACCEPTED + 5%** | **0.42** | |

## CALCULATIONS

Location 122 Whitetail Rd
Statesville, NC 28625
Project Number 22-0117

Lot No:

| | | |
|---|---|---|
| No. of Bedrooms | 3 | |
| Design Flow | 360 | $^{gal}/_{day}$ |
| LTAR | 0.300 | $^{gpd/ft^2}$ |
| 25% RED.? (YES OR NO) | YES | |
| Supply Line Length | 134 | ft. |
| Supply Line Volume | 23.316 | gal. |
| Required Feet of Line | 300 | ft. |
| Amount of Line from Layout | 312 | ft. |
| Gallons per Minute | 28.44 | $^{gal}/_{min}$ |
| Required Septic Tank Capacity | 1000 | gal. |
| Minimum Standard Tank Size | 1000 | |
| Lateral Line Volume | 203.736 | gal. |
| Dosing Volume | 142.62 | gal. |

*Note: Dosing Volume based on 70% of lateral line volume*

| | | |
|---|---|---|
| Tank Draw Down | 6.8 | *Generic Draw Down of 21 gal.per in.* |
| Pump Run Time | 5.01 | minutes |
| Elevation Head | 6.6 | ft. |
| Pressure Head | 2 | ft. |
| Friction Factor | 1.78 | ft./100 ft. *(From the interpolater.)* |
| Friction Head | 2.39 | ft. |
| Total Dynamic Head (+15%) | 12.63 | ft. |

FRICTION FACTOR
INTERPOLATER
2" SCH 40 PVC

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

Sheet 1 of 1

PROPERTY ID #: 4736931973

COUNTY: Iredell

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

OWNER: Billy Self

ADDRESS: 504 Alexander St., Statesville NC 28677

PROPOSED FACILITY: 3 BR Residence-360 GPD

LOCATION OF SITE: 122 Whitetail Rd Statesville NC 28625

APPLICATION DATE:

DATE EVALUATED: 7/19/2023

PROPERTY SIZE: 0.43

PROPERTY RECORDED: YES

WATER SUPPLY: ☐ Private ☐ Well ☐ Spring ☑ Other — County Water Per Client

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 | SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPR CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | L/5% | 0-6<br>6-38<br>38-48 | RBCWFSBK<br>RBCWMSBK<br>RBCLWFSBK | FRSSSP<br>FRSSSP<br>FRSSSP | | 48 | | | PS 0.3 |
| 2 | L/5% | 0-10<br>10-38<br>38-48 | BSCLWFSBK<br>BRCWMSBK<br>RBCLWFSBK | FRSSSP<br>FRSSSP<br>FRSSSP | | 48 | | | PS 0.3 |
| 3 | L/5% | 0-8<br>8-26<br>26-48 | BSCLWFSBK<br>RBCLWMSBK<br>RBCLWFSBK | FRSSSP<br>FRSSSP<br>FRSSSP | FEW SAP<br>F-C SAP | 48 | | | PS 0.3 |
| 4 | L/5% | 0-8<br>8-38<br>38-48 | BSLGR<br>BRCWMSBK<br>RBCLWFSBK | FRSSSP<br>FRSSSP<br>FRSSSP | F-C SAP | 48 | | | PS 0.3 |
| 5 | L/5% | 0-8<br>8-35<br>35-48 | BRCLWFSBK<br>BRCWMSBK<br>RBCLWFSBK | FRSSSP<br>FRSSSP<br>FRSSSP | FEW SAP | 48 | | | PS 0.3 |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

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

OTHER FACTORS (.1946):

SITE CLASSIFICATION (.1948): PS

EVALUATED BY: Ashley Rollans

OTHER(S) PRESENT: Chad Wagner & Mason Freeman

COMMENTS:

Permit #: _____

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

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

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

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

County: Iredell

PIN/Lot Identifier: 4736931973

Issued To: Billy Self

Property Location: 122 Whitetail Rd, Statesville NC 28625

Subdivision (if applicable)_____ Lot #: _____ Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

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

New ☑ Expansion ☐ System Relocation ☐ Change of Use ☐

Proposed Structure: 3 Bedroom Residential

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

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

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

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

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

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

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

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

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

Usable Soil Depth (Initial): 48" Usable Soil Depth (Repair): 48"

Max. Trench Depth (Initial)*: 24" Max. Trench Depth (Repair)*: 30" ***Measured on the downhill side of the trench***

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

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

Drainfield location meets requirements of Rule .1945: Yes ☑ No ☐ Drainfield location meets requirements of Rule .1950: Yes ☑ No ☐

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

Permit conditions: See design

Licensed Soil Scientist Print Name: Samuel Ashley Rollans

Licensed Soil Scientist Signature: Samuel Ashley Rollans Date: 9/25/23

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

***See attached site sketch***

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

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

NCDHHS

Permit #: OSWP-2023-37774

## *This Section for Local Health Department Use Only*

Initial submittal received: 10/1/23 (*Date*) by ONLINE (*Initials*)

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

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

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

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

The following items are missing:

_____

_____

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

State Authorized Agent: _____ Date: _____

---

☑ Complete

State Authorized Agent: DWisberg Date: 10/4/23

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

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

**Improvement Permit Expiration Date:** 10/4/28

***See attached site sketch***

Permit #: _____

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

County: Iredell

PIN/Lot Identifier: 4736931973

Issued To: Billy Self

Property Location: 122 Whitetail Rd, Statesville NC 28625

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

Facility Type: 3 Bedroom Residential

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

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

Type of Wastewater System* Accepted 25% Red. Pressure Manifold (Initial) Mod. Conventional - PPBPS - Low Pressure (Repair)

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

Design Daily Flow: 360 GPD Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process

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

**Installation Requirements/Conditions**

Septic Tank Size: 1,000 gallons Total Trench/Bed Length: 312 feet Trench/Bed Spacing: 9 feet on center

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

Soil Cover: 6" min inches Slope Corrected Maximum Trench/Bed Depth‡: 24 inches ‡ ***Measured on the downhill side of the trench***

Aggregate Depth: _____inches above pipe _____inches below pipe _____inches total

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

Pump Requirements: 12.63 ft. TDH vs 28.44 GPM Grease Trap Size (if applicable): _____ gallons

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

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

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

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

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

Declaration of Restrictive Covenants: ☐ Yes ☑ No

Pre-Construction Conference Required: Yes ☐ No ☑

Conditions: See design

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

AOWE/PE Print Name: Samuel Ashley Rollans Expiration Date: TBD By Local HD

AOWE/PE Signature: _____ Date: 9/25/23

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

NC ONSITE WASTEWATER EVALUATOR Certification Number 10027E

***See attached site sketch***

NCDHHS

Permit #: OSWP-2023-37774

## *This Section for Local Health Department Use Only*

Initial submittal received: 10/1/23 (*Date*) by ONLINE (*Initials*)

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

*When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.*

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

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

The following items are missing: _____

_____

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

State Authorized Agent: _____ Date: _____

---

☑ Complete

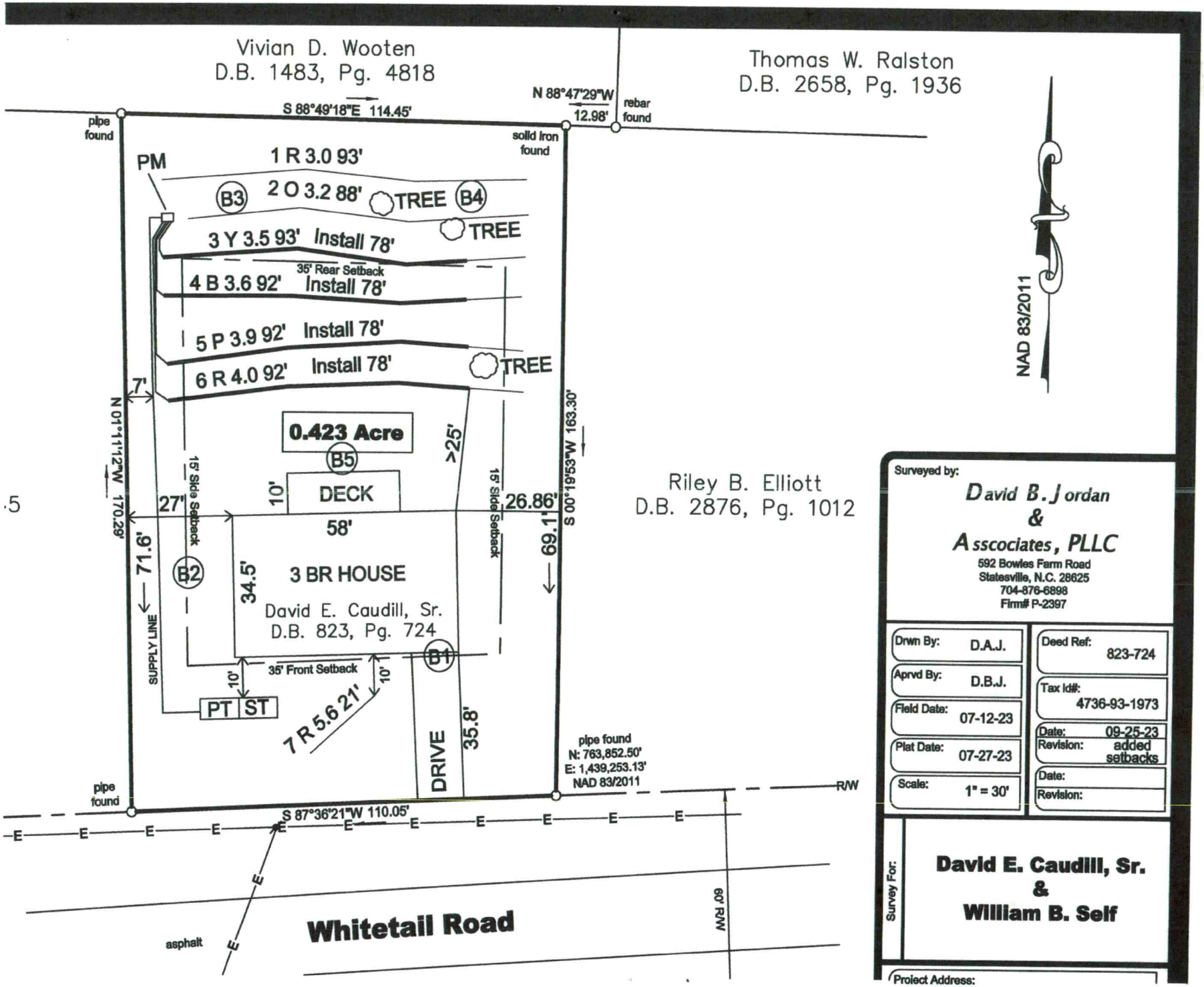
State Authorized Agent: DWisberg Date of Issuance: 10/4/23

**This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.**

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

**Construction Authorization Expiration Date:** 10/4/23

***See attached site sketch***




Surveyed by:

**David B. Jordan & Asscociates, PLLC**

592 Bowles Farm Road
Statesville, N.C. 28625
704-876-6898
Firm# P-2397

| | |
|---|---|
| Drwn By: D.A.J. | Deed Ref: 823-724 |
| Aprvd By: D.B.J. | Tax Id#: 4736-93-1973 |
| Field Date: 07-12-23 | Date: 09-25-23 |
| Plat Date: 07-27-23 | Revision: added setbacks |
| Scale: 1" = 30' | Date: |
| | Revision: |

Survey For:

**David E. Caudill, Sr. & William B. Self**

Project Address:

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 23-0095
September 25th, 2023

**Billy Self**
Attn: *Billy Self*
Email: wbself1@gmail.com

**RE: Soil & Site Evaluation for a 3 Bedroom Residence at 122 Whitetail Rd, 0.423 ac Parcel, PIN# 4736931973, Statesville, NC 28625 Iredell County, NC.**

Billy:

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 David B Jordon & Associates. 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.

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 five boring locations on the property flagged and located via GPS. Four of the five 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 survey. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by survey and tape measure. Detailed system & repair information is summarized in the following paragraph for this Lot.

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

**Attached is a proposed design for an Accepted (25% reduction) Septic System with Pressure Manifold distribution for a 3 bedroom single family residence at 122 Whitetail Rd, Statesville 28625, Iredell County, NC. PIN (4736931973).**

**Contents:**


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

**September 25, 2023**
**Project No. 23-0095**
**Design By: Soil & Forestry Services of the Carolinas, PA**

# INFORMATION FOR THE INSTALLER:

- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by DHHS, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as an Accepted 25% reduction installation w/Pressure Manifold.
- Repair is specified as a PPBPS installation with Low Pressure Distribution.
- Rake trench walls, lime sidewalls, install trenches 36" wide and have no more than 1/4" fall in 10 feet.