

Harnett County Department of Public Health Improvement Permit

A building permit cannot be issued with only an Improvement Permit

PROPERTY LOCATION: 650 Gardner Rd. (SR 1509)

ISSUED TO: John Roberts/Ground Truth Soil SUBDIVISION _____ LOT # _____

NEW REPAIR EXPANSION RELOCATION Site Improvements required prior to Construction Authorization Issuance:

Type of Structure: Ext. 3-BR DWMH

Proposed Wastewater System Type: 25% Reduction Sys.

Projected Daily Flow: 360 GPD RELOCATIONS FOR DOT

Number of bedrooms: 3 Number of Occupants: 6 max BY PASS

Basement Yes No

Pump Required: Yes No May be required based on final location and elevations of facilities

Type of Water Supply: Community Public Well Distance from well 50+ feet Permit valid for: Five years

Permit conditions: _____ No expiration

Authorized State Agent:  Date: 07/02/2021 SEE ATTACHED SITE SKETCH

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. 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.

Construction Authorization

(Required for Building Permit)

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

ISSUED TO: John Roberts/Ground Truth Soil PROPERTY LOCATION: 650 Gardner Rd. (SR 1509)

SUBDIVISION _____ LOT # _____

Facility Type: Ext. 3-BR DWMH New Expansion Repair relocation

Basement? Yes No Basement Fixtures? Yes No

Type of Wastewater System** 25% Reduction System (Initial) Wastewater Flow: 360 GPD

(See note below, if applicable)

25% Reduction System (Repair)

Installation Requirements/Conditions Number of trenches 1

Septic Tank Size 1000 gallons Exact length of each trench 258 (min) feet Trench Spacing: 9 Feet on Center

Pump Tank Size _____ gallons Trenches shall be installed on contour at a Soil Cover: 8 inches

Maximum Trench Depth of: 20 inches (Maximum soil cover shall not exceed

(Trench bottoms shall be level to +/-1/4" 36" above the trench bottom)

in all directions)

Pump Requirements: _____ ft. TDH vs. _____ GPM Aggregate Depth: NA inches below pipe

NA inches above pipe

Conditions: Proposal by Ground Truth Soil Consulting, PLLC NA inches total

WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA.

NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.

**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 Signature: _____ Date: _____

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is 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. SEE ATTACHED SITE SKETCH

Authorized State Agent:  Date: 07/02/2021

Andrew Corbin Construction Authorization Expiration Date: 07/02/2026

Harnett County Department of Public Health Site Sketch

Property Location: 650 Gardner Rd. (SR 1509)

Issued To: John Roberts/Ground Truth Soil Subdivision _____ Lot # _____

Authorized State Agent: [Signature] Date: 07/02/2021

- * PROPOSAL BY GROUND TRUTH SOIL CONSULTING, PLLC
- * EXT TANK SHALL BE PUMPED, CRUSHED, AND BACKFILLED ON SITE
- * SUPPLY LINE RUNS UNDER PARKING PAD. SUPPLY LINE SHALL BE CASSED IN DUCTILE IRON OR DOT EQUIVALENT IN MEANS SUBJECT TO TRAFFIC



TO GARDNER RD (SR 1509)

* RELOCATION *
FOR DOT
BYPASS

This drawing is for illustrative purposes only. System installation must meet all pertinent laws, rules, and regulations.

Residential Subsurface Wastewater Treatment and Disposal System Proposal

Property:
650 Gardner Rd
Angier, NC
PIN: 0673-60-0899.000
Harnett County, NC
Ground Truth Job # 21-147

Prepared For:

Belinda Williams
650 Gardner Rd
Angier, NC

Prepared By:



Ground Truth Soil Consulting, PLLC
1302 Roberts Road
Newport, NC 28570
(252) 725-1320

June 11, 2021


John C. Roberts



INTRODUCTION & SITE DESCRIPTION

A Soil & Site Evaluation was performed for the tract located at 650 Gardner Rd, Angier, NC (PIN: 0673-60-0899.000). Ground Truth Soil Consulting, PLLC (Ground Truth) was retained to prepare a proposal for an on-site wastewater treatment and disposal system that would allow for the construction of a 3-bedroom home (360 GPD). The lot was evaluated in accordance with North Carolina statutes for waste disposal ("Laws and Rules for Sewage Treatment and Disposal Systems", amended December 6, 2018").

The NCDOT project R5705A is proposed to impact the existing septic tank and drainfield. A relocation permit is requested to relocate the septic tank and septic drainfield.

The field survey was conducted in May and June 2021 by John C. Roberts, LSS. Soil borings were advanced via a hand auger and evaluated under moist conditions using procedures listed in the *Field book for Describing and Sampling Soils, Version 3.0*. Soil color was determined using a Munsell Soil Color Chart. Observations of the landscape as well as soil properties (depth, texture, structure, soil wetness, restrictive horizons, etc.) were recorded. It was determined sufficient amount of Provisionally Suitable Group III soils are available within the project area for installation of a Gravity-Flow Conventional System initial system for a 3-bedroom system. Sufficient area of Provisionally Suitable soils also exists to support a Gravity-Flow repair system.

LOCATION

The lot is located at 650 Gardner Road in Angier, NC.

PLANS AND SPECIFICATIONS

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1,000 gallons in capacity (at minimum).
2. The septic tank shall be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tanks have had time to properly cure and are free of cracks or other structural deficiencies.

B. Pipes and Fittings

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. The supply line will be approximately 90 feet long from the septic tank to the upper septic drainline.
4. Plumbing will need to be rerouted underneath the house from the exiting the front of the house to the rear of the house.

C. Distribution Method

1. Drainlines will be fed via serial distribution.

D. Drainfield Installation-Initial

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic.
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
2. The specified system is a gravity-flow system. Accepted Systems, Infiltrator Quick4 chambers or equivalent will be utilized. Drainlines shall be installed no deeper than 20 inches.
3. The drainfield consists of two (2) lateral trenches to be constructed 3-foot wide by 129 feet in length. Total drainline length is 258 feet.
5. The maximum trench depth for this system shall be 20 inches.
6. The laterals are to be installed keeping the individual trench bottoms level from beginning to end.
7. The trenches should be left open for the final inspection by the HCEH.

E. Final Landscaping

1. Final cover over the drainfield shall be at least 6 inches deep. If additional cover is needed, Group II (sandy loam) or Group III (sandy clay loam) soil shall be utilized.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.
3. The drainfield area should be planted with grass as soon as possible to prevent erosion. The soil should be limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

F. Utility Conflicts

1. The builder and property owner must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation. If there are any questions regarding preferred routes, contact the HCEH as soon as possible.
2. Lawn irrigation should not be placed over the drainfield area.

MAINTENANCE

G. In General

1. The owner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 25 percent of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When it becomes necessary to clean the effluent filter, the filter should be removed and the accumulated debris washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic tanks and septic drainfield.

DESIGN SPECIFICS

Initial System

Daily Design Flow:	360 GPD – 3-bedroom house
Septic Tank Size:	1,000 Gallons (minimum)
Effluent Loading Rate:	0.35 GPD per sq. ft.
Drainfield Type:	Accepted Systems Quick 4 Chambers or Equivalent
Distribution Method:	Distribution Box
Number of Drainlines:	(2) 3' Wide x 129' Long
Total Trench Length:	258 Linear Feet
Maximum Trench Depth:	20 inches
Final Cover Requirement:	6 Inches

Repair Specifics

Effluent Loading Rate:	0.35 GPD per sq. ft.
Drainfield Type:	Accepted Systems Quick 4 Chambers or Equivalent
Distribution Method:	Gravity
Total Trench Length:	(2) 3' Wide x 129' Long
Maximum Trench Depth:	20 Inches
Final Cover Requirement:	6 Inches



Ground Truth Soil Consulting, PLLC

650 Gardner Rd
Angier, NC 27501
PIN: 0673-60-0899.000

Soil and Site Evaluation

Harnett County

Scale:
0 40 80 ft

Figure 1
Date: June 2021
GT Job No. 21-147

