

HTE# 14-5-33956RR

Harnett County Department of Public Health

28403

Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: Wym Construction PROPERTY LOCATION: Doc's Rd.
 NEW REPAIR EXPANSION SUBDIVISION Trotters Ridge LOT # 44
 Type of Structure: SFD 45x60 Site Improvements required prior to Construction Authorization Issuance:
 Proposed Wastewater System Type: Pump to 25% Reduction System
 Projected Daily Flow: 360 GPD
 Number of bedrooms: 3 Number of Occupants: 6 max
 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 _____ feet Permit valid for: Five years
 Permit conditions: _____ No expiration

Authorized State Agent: Bryan McLean, LEHS Date: 6/22/2015 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: Wym Construction PROPERTY LOCATION: Doc's Rd
 SUBDIVISION Trotters Ridge LOT # 44
 Facility Type: SFD New Expansion Repair
 Basement? Yes No Basement Fixtures? Yes No
 Type of Wastewater System** Pump to 25% Reduction System (Initial) Wastewater Flow: 360 GPD
 (See note below, if applicable
25% Reduction System (Repair)

Installation Requirements/Conditions

Septic Tank Size <u>1000</u> gallons	Number of trenches <u>1</u>	Exact length of each trench <u>300</u> feet	Trench Spacing: <u>9</u> Feet on Center
Pump Tank Size <u>1000</u> gallons	Trenches shall be installed on contour at a	Maximum Trench Depth of: <u>12 MAX</u> inches	Soil Cover: <u>6</u> inches
	(Trench bottoms shall be level to +1-1/4" in all directions)	(Maximum soil cover shall not exceed 36" above the trench bottom)	

Pump Requirements: _____ ft. TDH vs. _____ GPM _____ inches below pipe
 Aggregate Depth: _____ inches above pipe
 Conditions: Permit based on soil consultants proposal; see attached med for system layout _____ 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: Bryan McLean, LEHS Date: 6/22/2015
 Construction Authorization Expiration Date: 6/22/2020

Southeastern Soil & Environmental Associates, Inc.

P.O. Box 9321
Fayetteville, NC 28311
Phone/Fax (910) 822-4540
Email mike@southeasternsoil.com

April 20, 2015

Harnett County Health Dept.
307 Cornelius Harnett Blvd.
Lillington, NC 27546

Re: Hydraulic conductivity (Ksat) analysis for subsurface waste disposal system (repair area), Trotters Ridge Subdivision, Lot 44, Darley Ct., Harnett County, North Carolina

To whom it may concern,

An evaluation of soil and hydraulic conductivity (Ksat) has been conducted on the aforementioned property. The purpose of the investigation was to determine soil absorption rates for a proposed repair septic system to serve a 3 bedroom single family residence. All ratings and determinations were made in accordance with "Laws and Rules for Sanitary Sewage Collection, Treatment, and Disposal, 15A NCAC 18A .1900".

Soils in the proposed repair area consist of 12 to 16 inches of a very friable loamy sand underlain by a firm sandy clay loam to 24 inches. Below 24 inches is a firm sandy clay loam BC and C horizons [no evidence of soil wetness within 36 inches of the soil surface. Any mottling was considered relic of a mineral deposition].

One compact constant head permeameter (CCHP) measurement was made to determine a Ksat rate at a depth of 36 inches (C horizon). The measured Ksat rate was 0.17 cm/hr. This equates to 1.00 gpd/sq. ft. Using 30% of the lowest Ksat measured equates to 0.30 gpd/sq. ft. (acceptable allowance if using pretreatment).

The proposed repair system (ultra shallow conventional installed at grade with 6 inches of soil cover) is based on a 0.30 gpd/sq. ft. conventional application rate which is considerably less than the measured rate. The Ksat measured support a higher application rate if needed, however, for the purposes of this proposal we will use a more conservative figure.

SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOC., INC.

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

SUBDIVISION TRITERS ROSE

LOT 44

INITIAL SYSTEM APPROX 25% REDUCTION

REPAIR APPROX 25% REDUCTION w/ PRETREATMENT

DISTRIBUTION SERIAL

DISTRIBUTION SERIAL

BENCHMARK 1020

LOCATION RC 44/45

NO. BEDROOMS 3

PROPOSED LTAR 0.3 GPD/FT²

LINE	FLAG COLOR	ELEVATION	LENGTH (FT)
1	B	103.75	40'
2	O	102.92	50'
3	B	101.75	50'
4	O	100.75	60'
5	B	99.75	65'
6A	O	98.67	35'
			<u>320'</u>
6B	O	98.67	35'
7	B	97.75	80'
8	O	96.75	90'
9	B	95.67	10'
			<u>305'</u>

Initial system

BY M EAKER

DATE 04/2015

TYPICAL PROFILE

0-70 LS (VF. med)
20-25 SC (F. med)
25+ PM
EMBED AT 12"
ADD 6" COVER OVER SYSTEM
AS REQUIRED

HOUSE BOX 45' x 60' MAX

* CRITICAL THAT NO GRADING OR CUTTING OCCUR IN AREA OF SEPTIC DRAINFIELDS

* HOUSE MUST HAVE CRAWL SPACE

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TROTTERS RIDGE
LOT 44

PROPOSED SEPTIC
LAYOUT

