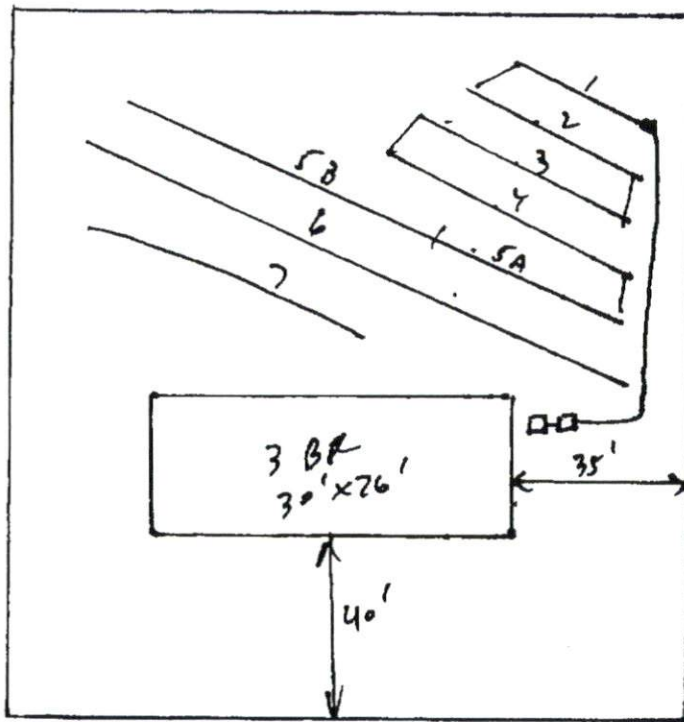


Southeastern Soil & Environmental Associates, Inc.

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

*Natures Crossroads
Lot 46
proposed septic*



SWEET BAY

1" = 40'

SOUTHEASTEN SOIL & ENVIRONMENTAL ASSOC, INC.

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

SUBDIVISION Nat Crosseds

LOT 46

INITIAL SYSTEM pump to approved 25% reduction

REPAIR pump to approved 25% reduction

DISTRIBUTION serial

DISTRIBUTION serial

BENCHMARK 100.0

LOCATION rear corner

NO. BEDROOMS 3

proposed UTR = 0.4 gpd/Ht²

<u>LINE</u>	<u>FLAG COLOR</u>	<u>ELEVATION</u>	<u>ACTUAL LENGTH</u>
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Initial

1	R	98.42	30'
2	W	97.92	43'
3	R	97.42	50'
4	B	96.92	60'
5A	W	96.08	52'
			<u>235</u>

5B	W	96.08	70'
6	F	95.25	125'
7	W	94.50	50'
			<u>245</u>

BY M EAKER

DATE 08/2010

* Install at grade with 6" cover

Typ Profile
 0-12 LS (VF, wpi)
 12-30 SCL (F, F, SCL)
 cr 2725"

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August 5, 2010

Mr. Oliver Tolksdorff
Harnett County Environmental Health
307 Cornelius Harnett Blvd.
Lillington, NC 27546

Re: Hydraulic conductivity (Ksat) analysis for pretreatment, Lot 46, Natures Crossroads,
Sweet Bay Drive, Harnett County, North Carolina

Dear Mr. Tolksdorff,

An evaluation of soil and hydraulic conductivity (Ksat) has been conducted, at the request of Pine Grove Development Corp. on the aforementioned property. The purpose of the investigation was to determine soil absorption rates for a proposed innovative/accepted septic system to serve as a repair for 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".

One compact constant head permeameter (CCHP) measurement was made to determine a Ksat rate at a depths of 24 inches. The Ksat measurement in the BC horizon was 0.79cm/hr (4.65 gpd/sq. ft.). Using 10% of this average (typical for systems without pretreatment), Ksat measurement equates to 0.465 gpd/sq.ft.

Our system is based on a proposed 0.40 gpd/sq. ft. which is less than the measured rate. This rate should allow for sufficient drainage from the proposed system.

Sincerely,



Mike Eaker
President

