

Oct 20 06 02:07p

michael eaker

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p. 1

14431

Southeastern Soil & Environmental Associates, Inc.

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Adm
31222

June 9, 2006

Harnett Co. Health Dept.
PO Box 09
Lillington, NC 27546

Re: Hydraulic conductivity (Ksat) analysis for pretreatment (repair area), Lot 7, Alex Place Subdivision, Harnett County, North Carolina

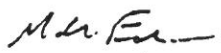
To whom it may concern,

An evaluation of soil and hydraulic conductivity (Ksat) has been conducted, at the request of the ~~Harnett~~ Harnett County Health Department, on the aforementioned property. The purpose of the investigation was to determine soil absorption rates for a proposed low pressure pipe (LPP) 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".

Two compact constant head permeameter (CCHP) measurements were made to determine a Ksat rate at depths of 24 and 32 inches. The Ksat measurements were in the Bt horizon and averaged 0.92 cm/hr [rates were 0.88 and 0.96 cm/hr]. 0.92 cm/hr equates to 5.39 gpd/sq.ft. Using 10% of this average (typical for systems without pretreatment), Ksat measurement equates to 0.539 gpd/sq.ft.

Our repair system is based on a proposed 0.45 gpd/sq. ft. which is considerably less than the measured rate. In fact, this rate is about 8+% of the measured rate and should allow for sufficient drainage from the proposed system.

Sincerely,



Mike Eaker
President



DEPARTMENT OF ENVIRONMENT
HEALTH AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

DATE EVALUATED: June, 2006
PROPERTY I.D. # _____
PROPERTY RECORDED _____

SITE/SOIL EVALUATION
FOR
ON-SITE WASTE WATER

APPLICANT: B. Stancil PHONE: _____ APPLICATION DATE: _____
ADDRESS: _____
COUNTY: Harrell PROPERTY SIZE: _____ PROPOSED FACILITY: 3 BR
LOCATION OF SITE: Alex Place lot 7
WATER SUPPLY: On-Site Well _____ Community _____ Public Other _____ EVALUATION BY: Auger Boring Pit _____ Cut _____

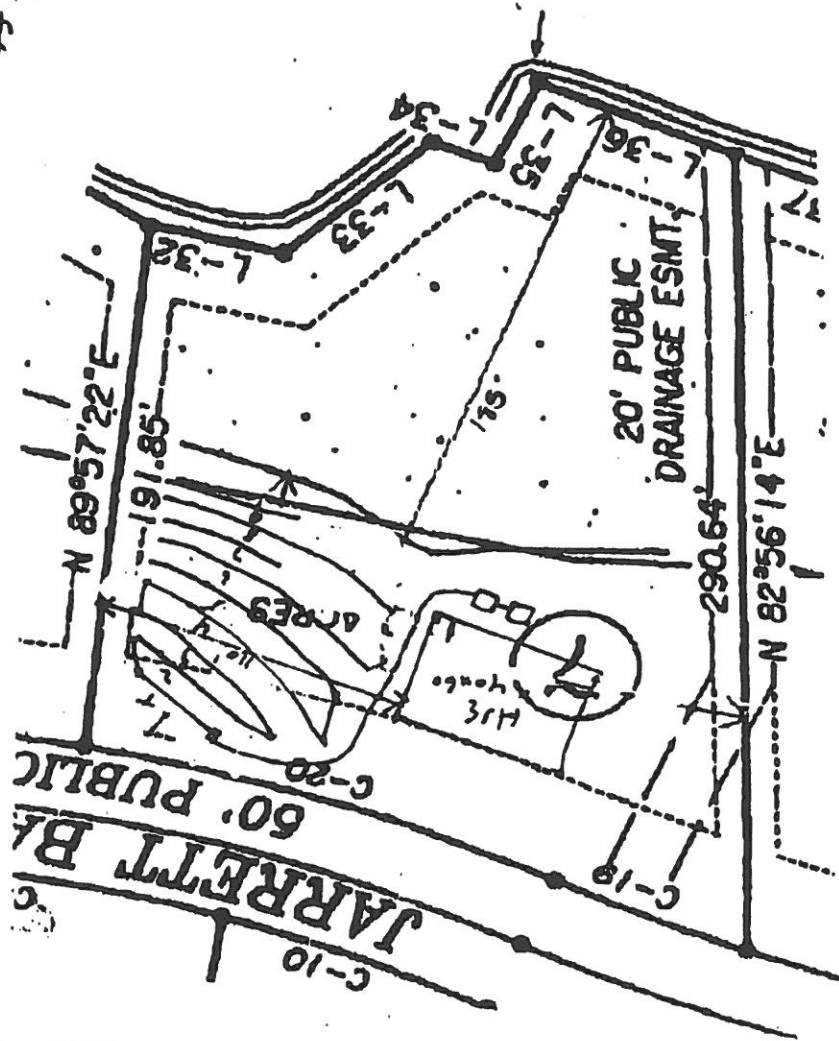
FACTORS		PROFILES																		
		Typical		1	2	3	4	5	6	7	8	9	10							
LANDSCAPE POSITION	.1940	LS	LS																	
SLOPE (%)	.1940	7%	7%																	
HORIZON 1 DEPTH		0-7	0-12																	
Texture Group	.1941(A)(1)	LS	LS																	
Consistence	.1941	Vf	Vf																	
Structure	.1941(A)(2)	n/c	n/c																	
Mineralogy	.1941(A)(3)	NEX	NEX																	
HORIZON 2 DEPTH		7-38+	12-42																	
Texture Group	.1941(A)(1)	S clay	S clay																	
Consistence	.1941	F	F																	
Structure	.1941(A)(2)	sbk	sbk																	
Mineralogy	.1941(A)(3)	SEx	SEx																	
HORIZON 3 DEPTH																				
Texture Group	.1941(A)(1)																			
Consistence	.1941																			
Structure	.1941(A)(2)																			
Mineralogy	.1941(A)(3)																			
HORIZON 4 DEPTH																				
Texture Group	.1941(A)(1)																			
Consistence	.1941																			
Structure	.1941(A)(2)																			
Mineralogy	.1941(A)(3)																			
SOIL WETNESS	.1942	>38	32"																	
RESTRICTIVE HORIZON	.1944	-	-																	
SAPROLITE	.1943/1956	-	-																	
CLASSIFICATION	.1948	PS	PS																	
LONG TERM ACCEPTANCE RATE	.1955	0.3	0.3																	

AVAILABLE SPACE (1945): _____ SITE LONG TERM ACCEPTANCE RATE: 0.3 (0.45 in repair w/ pretreat)
OTHER FACTORS (1946): _____ SYSTEM TYPE: _____
SITE CLASSIFICATION (1948): _____ OTHERS PRESENT: _____

EVALUATED BY: MEAKER
COMMENTS:
① IN INITIAL
② IN REPAIR

HOUSE SHOULD BE 110' MINIMUM
FLOW LEFT SIDELINE (FACING)
3 Bedrooms (MAX)

910 822 4240
4240



1" = 60' SCALE
Michael Builders
Lot 9 Alex Park

SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOC., INC.

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

SUBDIVISION ALEX PLACE LOT 7

INITIAL SYSTEM pump to innovative ^(25%) REPAIR SYSTEM pretreat to conv. (USE ATU FOR SETBACK)

BENCHMARK ELEV. 100.0 LOCATION Front corner 6/7

TYPE OF DISTRIBUTION pump to D-box (serial distribution)
proposed LTAR (initial) = 0.39 gpd/ft²
(repair) = 0.25 gpd/ft²

LINE	ELEVATION	LENGTH	FLAG COLOR
1	95.50	35	O
2	95.50	45	B
3	94.50	65	Y
4	93.50	78	O
5	92.58	77	B
		<u>300'</u>	
6	91.50	90'	O
7	90.75	95'	B
8	90.17	90'	Y
9	88.37	45'	B
		<u>270'</u>	

Initial {

Repair {

BY M ESKER DATE 06/2006

FLAG COLOR: Y = YELLOW R = RED W = WHITE B = BLUE O = ORANGE P = PINK

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Fax Cover Sheet

SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOCIATES, INC.
PO BOX 9321
FAYETTEVILLE, NC 28917
910 822 4540 PHONE
910 822 4540 FAX

Send to: BRADLEY STARNELL	From: MIKE EAKER
Attention:	DOB: 6/9/06
Office Location:	Office Location:
Fax Number:	Phone Number:

- Urgent
- Reply ASAP
- Please comment
- Please Review
- For your information

CC: OLIVER TUCKSDORFF
HARNETT Co. HEALTH

Total pages, including cover: **4**

Comments:

Alex PLACE (lot 7)

Attached design. I have met with Health Dept.

Only option is House 110' + from LEFT SIDE LINE (PACING)

You WILL NEED TO RE-ROUTE WATER FROM ROAD PIPE. THIS IS THE ONLY OPTION TO USE THIS LOT.

3 BR MAX.

You MUST SEND IN A REVISED PLOT PLAN SHOWING NEW HOUSE LOCATION