Department of Environment, Health and Natural Resources
Division of Environmental Health
On-Site Wastewater Section

Sheet:
Property ID
Lot #:
File #:
Code:

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Applicant:
Address: Date Evaluated:
Proposed Facility: 4 Bdrm Design Flow (.1949): 480 gpd Property Size:
Location of Site: Property Recorded:
Water Supply: ☒ Public ☐ Individual ☐ Well ☐ Spring ☐ Other
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	.1941 Consistence Mineralogy	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS 2-5	0-16	G SL	VFR NS/NP					
		16-32	SBK C	FR SS/SP	10YR 7/2 @ 32"				PS .4
2		0-12	G SL	VFR NS/NP					
		12-30	SBK C	FR S/SP	10YR 7/2 @ 31"				PS .3
3		0-12	G SL	VFR NS/NP					
		12-31	SBK C	FR S/SP	10YR 7/2 @ 28"				PS .3
4		0-16	G SL	VFR NS/NP					
		16-26	SBK C	FR S/SP	10YR 7/2 @ 22"				PS/PS .1 drip

Description	Initial System	Repair System
Available Space (.1945)	✓	✓
System Type(s)	25% red	drip (no D/F)
Site LTAR	.3	.1

Other Factors (.1946):
Site Classification (.1948): PS
Evaluated By: CK
Others Present: —

FILE #

COMMENTS: _____

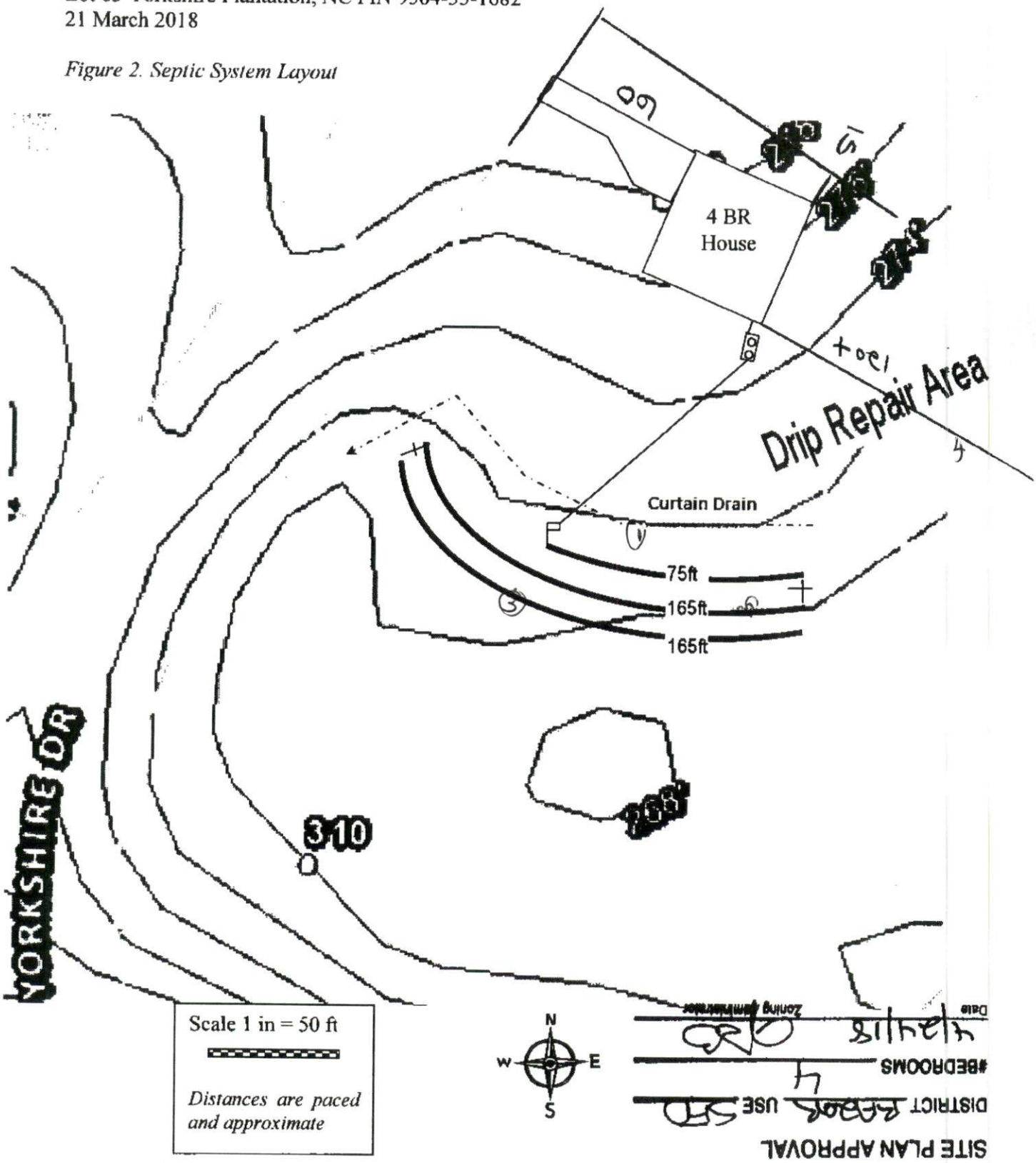
LANDSCAPE POSITIONS	GROUP	TEXTURES	.1955 LTAR	CONSISTENCE MOIST	WET
R-RIDGE	I	S-SAND	1.2 - 0.8		
S-SHOULDER SLOPE		LS-LOAMY SAND		VFR-VERY FRIABLE	NS-NON-STICKY
L-LINEAR SLOPE				FR-FRIABLE	SS-SLIGHTY STICKY
FS-FOOT SLOPE	II	SL-SANDY LOAM	0.8 - 0.6	FI-FIRM	S-STICKY
N-NOSE SLOPE		L-LOAM		VFI-VERY FIRM	VS-VERY STICKY
H-HEAD SLOPE				EFI-EXTREMELY FIRM	NP-NON-PLASTIC
CC-CONCLAVE SLOPE	III	SI-SILT	0.6 - 0.3		SP-SLIGHTLY STICKY
CV-CONVEX SLOPE		SIL-SILT LOAM			P-PLASTIC
T-TERRACE		CL-CLAY LOAM			VP-VERY PLASTIC
FP-FLOOD PLAN		SCL-SANDY CLAY LOAM			
	IV	SIC-SILTY CLAY	0.4 - 0.1		
		C-CLAY			
		SC-SANDY CLAY			

STRUCTURE	MINERALOGY
SG-SINGLE GRAIN	SLIGHTLY EXPANSIVE
M- MASSIVE	
CR-CRUMB	EXPANSIVE
GR-GRANULAR	
SBK-SUBANGULAR BLOCKY	
ABK-ANGULAR BLOCKY	
PL-PLATY	
PR-PRISMATIC	

Show profile locations and other site features (dimensions, references or benchmark, and North)

Soil Investigation and Septic System Design
Lot 64 Yorkshire Plantation; NC PIN 9564-45-6899
Lot 63 Yorkshire Plantation; NC PIN 9564-55-1682
21 March 2018

Figure 2. Septic System Layout



Soil Investigation and Septic System Design
Lot 64 Yorkshire Plantation; NC PIN 9564-45-6899
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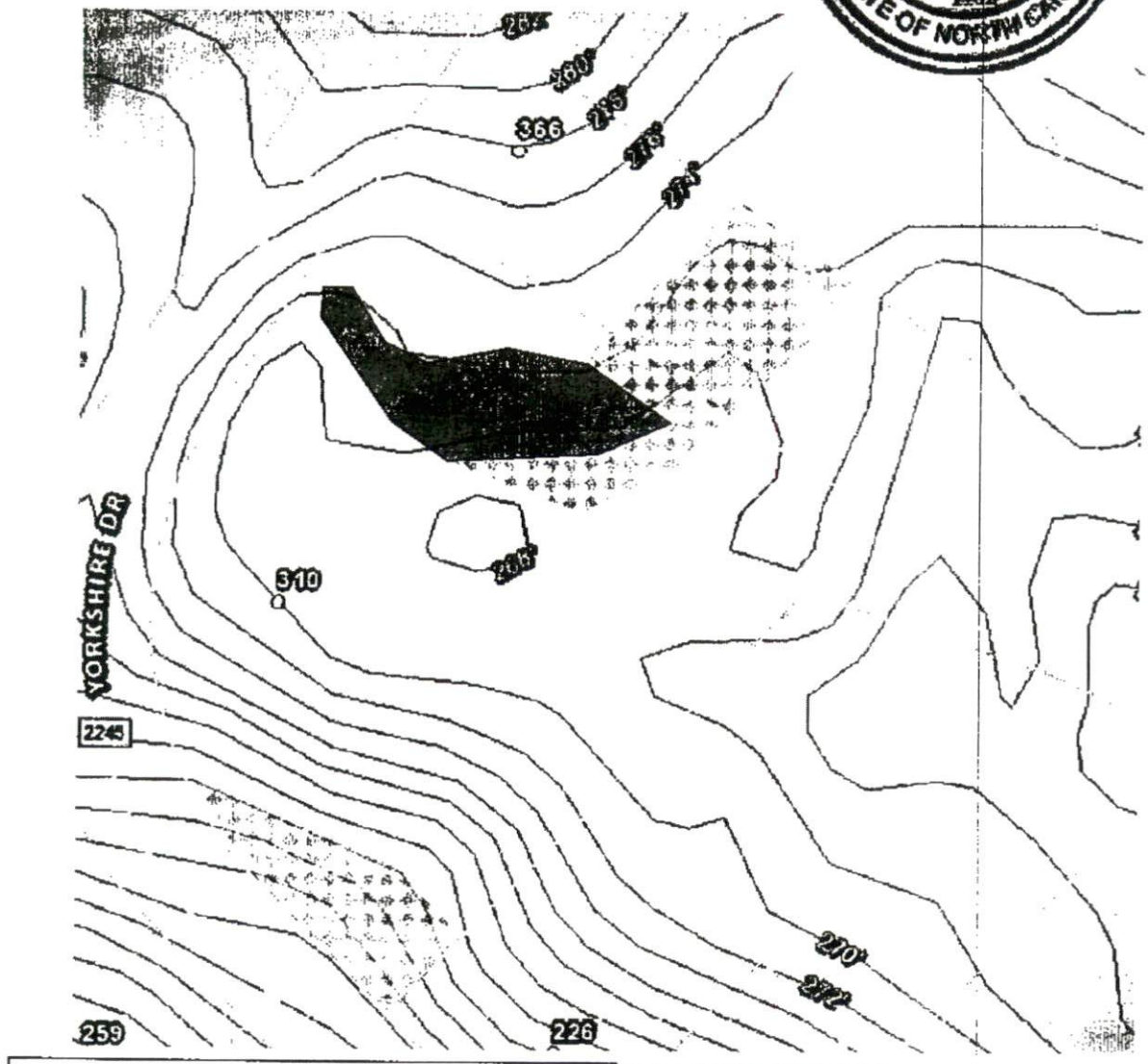
21 March 2018

LICENSED SOIL SCIENTIST
HAL OWEN
1102
STATE OF NORTH CAROLINA

Figure 1. Soil Map showing Septic Suitability



Soil Map Legend

Provisionally Suitable Soils

Provisionally Suitable Soils
For Innovative or Experimental Systems

Scale 1 in = 100 ft

Distances are paced and approximate

N
W E
S

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21 March 2018

Mr. Ted Brown
2927 Hillmon Grove Rd
Cameron, NC 28326

Reference: Soil Investigation and Septic System Design
Lot 64 Yorkshire Plantation; NC PIN 9564-45-6899
Lot 63 Yorkshire Plantation; NC PIN 9564-55-1682

Dear Mr. Brown,

A site investigation was conducted for the above referenced properties, which are located on the southeastern side of Yorkshire Drive in Harnett County, North Carolina. The purpose of the investigation was to determine the ability of these lots, when combined to form one lot, to support a subsurface sewage waste disposal system and 100% repair area for a typical four-bedroom home. Public water supplies will be utilized for this lot.

All ratings and determinations were made in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900". This report represents my professional opinion but does not guarantee or represent permit approval for any lot by the local Health Department. The permit you receive from the Health Department may contain some modifications or amendments to our submitted design. Please carefully review your permit and adhere to all prescribed requirements.

SOIL INVESTIGATION

The soils were evaluated under moist soil conditions through the advancing of auger borings. A portion of this lot was observed to be underlain by soils rated as provisionally suitable for modified or alternative subsurface sewage waste disposal (Figure 1). These soils were observed to be firm sandy clay loams to greater than 30 inches and will support long term acceptance rates of 0.4 gal/day/sqft.

A significant area of provisionally suitable soils for innovative or experimental systems was observed. These marginal soils are so rated due to limited usable soil depth to unsuitable layers. These soils are adequate to support subsurface drip systems installed with trench bottom depths at six inches below surface.

SEPTIC SYSTEM DESIGN

An initial septic system has been designed for a design flow of 480 gallons per day (Figure 2) utilizing a long term application rate of 0.4 gal/day/ft^2. Effluent will gravity flow to 405 feet of conventional drainline. Serial distribution will be used to distribute effluent to three variable length drainlines, with step-downs or drop boxes installed at the connections between the lines. The top two drainlines should be installed on contour with trench bottom depths at 18 inches below surface, and the bottom line should be installed on contour with trench bottom depths at 12 inches.

A curtain drain should be installed above the drainfield to divert water away from the system. The curtain drain will be about 155 feet long and should be installed at least 2.5 feet below surface.

Potential septic system drainlines have been demonstrated with various colored pin flags that are located on the lot. It is important that you do not disturb the septic system area. It is recommended that a staked line or protective fence be placed around the system prior to construction to eliminate any potential damage to the soil or the layout of the system.

The repair septic system is proposed as a subsurface drip system. The drainlines should be installed on contour with trench bottom depths at 6 inches below surface.

This report and the attached septic system design information will need to be submitted to the Harnett County Health Department for review and the permitting process. I appreciate the opportunity to provide this service and hope to be allowed to assist you again in the future. If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

Hal Owen

Hal Owen
Licensed Soil Scientist