On-site Wastewater Section

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

OLHS

Property ID: _____
Lot #: _____
File #: _____
AppID: _____

Owner: N Turner
Address: Yadkin 951
Proposed Facility: Ind Design Flow (.1949) 150 gpd 4 employees
Location of Site: 124 Tarheel Rd

Applicant: _____
Date Evaluated: 9/22/14
Property Size: 1 acre
Property Recorded: ~1990 D

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	b. PROFILE FACTORS 1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Sapro Class	1944 Restr Horiz	Profile Class & LTAR
1	graded	0-29	wfsbk cl	fri ss-sphsp 1:1	NA		PF		0.3
		29-54	vwfsbk scl	fri fs-sphsp 1:1					
2		0-27	wfsbk cl	fri ss-sphsp 1:1			PF		0.3
		27-58	wfsbk scl	fri ss-sphsp "					
3		0-9	fill	Gravelly mix w/ some grass roots and pockets of			mHVR		0.3
		9-52	redoximorphic	fri ss-sphsp 1:1	Mottles at 9"				

Description	Initial System	Repair System
Available Space (.1945)	Septic 90	Rp
System Type(s)	conv	30% red
Site LTAR	0.3	0.3

Other Factors (.1946): _____
Soil Evaluation By: _____
Others Present: _____
Site Classification (.1948): Pro
Site Evaluation By: _____
Others Present: _____

LICENSED SOIL SCIENTIST SIDNEY C. JACOBS 1063 STATE OF NORTH CAROLINA

FAST TRACK
PRESSURE MANIFOLD 25% REDUCTION SEPTIC SYSTEM
FOR RELOCATING EXISTING REPAIR AREA
124 TARLTON ROAD
STATESVILLE NC 28687

Prepared for
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September 23, 2014



Toney C. Jacobs, LSS

Copy: Heath Snow, REHS
Iredell County Health Dept.
Statesville, NC 28687
704-902-0300

BACKGROUND

There is a pending sale of Lots 2 and 3 in this subdivision (Fig. 1). The buyer is requiring the relocation of the repair system for Lot 1 off of lot 2. I was able to locate both the existing lines (orange flags). The owner is not aware of any septic problems for this existing system since the 1990 installation. This permit is to relocate the repair system only.

DESIGN SPECIFICATIONS
124 Tarlton Road – Repair Only

Daily design flow	175 gpd. adjusted to 200 gpd for repair
Septic tank size	existing 1000 gal.
Pumping tank size	1000 gal. to be added if repair required
Initial system	200' to be added if repair required
Effluent loading rate, Initial system	approx. 0.3 gpd/ft^2
Total length and diameter of supply pipe	approx. 120ft. 2" sch 40 PVC
Number and length of laterals	2 total – 100' each
Flow water through the system	24gpm from 2 each ¾" sch 40 taps from 2" manifold
Trench depth	approx.. 30"
Pump tank for repair	7.0'
Elevation head	approx. 6.0' (to be verified by installer after tanks are set)
Pressure head	2.0'
Friction head	2.0'
20% contingency	1.5'
Total head	16.5'
Pump requirements	24.0 gpm at 16.5' of head; use Goulds WE03L pump, pump and compatible panel or equivalent
Dosing volume	100 gal. – 2.0 doses/day at design flow
Depth of water pumped per dose	calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump run per dose	approx. 4.2 min.
Check valve	yes
Siphon break hole	no
Effluent loading rate, Repair system	evaluated 0.3 gpd/ft^2 – this would be 167' of chamber. Designed 200' of 25% reduction, 2 x 100'
Design constraints	move down spout from gutter and improve ditch to front

DATE:

4715-18-9181
TRUE VINE MINISTRIES, INC.
1182-753
ZONED: GB

10' DRAINAGE & UTILITY EASEMENT
TYPICAL EACH LOT

IPS
S76°35'36"E
81.68'
EIP
S84°59'45"E
441.80'
PP
PP

10' SIDE MBSL
29.12'
125.45'
EXISTING ASPHALT PARKING
CONCRETE STORAGE AREA
79.95'
EXISTING 1 STORY METAL
124 TARLTON ROAD
CO
LOADING DOCK
FENCE
RETAINING WALL
GRAVEL AREA

N01°46'44"E
165.02'
20' REAR MBSL

LOT 1
81,602.41 sq. ft.
1.873 acres

30' FRONT MBSL

25.00'
10' SIDE MBSL
GRAVEL DRIVE
IPS
N88°13'16"W
315.67'
IPS
IP
10' SIDE MBSL
N21°07'45"W
60.92'
EXISTING NITRIFICATION SYSTEM
CONC.
42.53'
IPS N70°55'32"W
61.95'
IPS
N84°33'03"W
36.48'
S86°45'21"W
EIP
L4
S28°38'46"W
70.94'
ECM
S22°36'49"W
97.51'
30' FRONT MBSL
=814.97 R=5729.58
79°19'40"W 814.29'
20' SIDE MBSL
C1
C2
C3
3, 841, PG. 857