594A

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES 4637

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. SEPTIC / TYPE APPLICATION: ☐ N/A ☐ NEW SYSTEM ☐ ALTERATION ☒ REPAIR ☐ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ☐ N/A ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 217 271 01
STREET ADDRESS: 17401 McKee rd
CITY: Charlotte
STATE: NC ZIP: 28278
SUBDIVISION NAME:
LOT #: LOT SIZE (acres):
TOWNSHIP:
☒ 0-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☐ 1-CHARLOTTE ☐ 4-PINEVILLE ☐ 7-MINT HILL
☐ 2-DAVIDSON ☐ 5-MATTHEWS

4. BUILDING INFORMATION:
BUILDING TYPE:
☐ SINGLE MOBILE HOME ☐ MODULAR HOME
☐ DOUBLE WIDE ☐ MULTIPLE FAMILY
☑ HOUSE ☐ OTHER _____
HEATED SQUARE FOOTAGE: —
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS:
FOUNDATION TYPE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☑ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☐ N/A
NUMBER OF BEDROOMS TO BE ADDED: NA NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: NA

6. WATER SUPPLY: ☐ MUNICIPAL ☒ PRIVATE WELL ☐ PUBLIC WELL ☐ SHARED WELL ☐ OTHER _____

7. PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☐ POTABLE (DRINKING WATER) ☐ OTHER _____

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST DESIRED 5-LEAST DESIRED)*:
☐ N/A ☑ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. RANK: — — — — —

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	☑ YES	☐ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES	☑ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	☒ YES	☐ NO	JURISDICTIONAL WETLANDS	☐ YES	☑ NO
WELLS, SPRINGS, OR WATER LINES	☒ YES	☐ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	☐ YES	☑ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES	☑ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES	☑ NO
CHEMICAL/PETROLEUM STORAGE TANKS	☐ YES	☑ NO	KNOWN UNDERGROUND CONTAMINATION	☐ YES	☑ NO
WASTE STORAGE	☐ YES	☑ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	☐ YES	☑ NO

10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? — ☑ UNKNOWN

11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? — ☑ N/A

12. PROPERTY OWNER:
NAME: Larry and Heidi Rankin
ADDRESS: 17401 McKee rd
CITY: Charlotte
STATE: NC ZIP: 28278
HOME PHONE: 704-583-5915
WORK PHONE: 704-359-3492
MOBILE PHONE: 704-293-3073 or 704-516-7482
FAX:

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME:
ADDRESS:
CITY:
STATE: ZIP:
HOME PHONE:
WORK PHONE:
MOBILE PHONE:
FAX:

MECKLENBURG COUNTY -- GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6984

Revised on: 7/1/08

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

_____ (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below.

X Heidi G Rankin — Property Owner's or Owner's Legal Representative Signature

4/15/10 — Date

OFFICE USE ONLY

☐ SURVEY PLAT TO SCALE SUBMITTED ☐ SCALED SITE PLAN SUBMITTED ☐ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEES RECEIVED: $ NA DATE FEE RECEIVED: _____

WELL APPLICATION FEES RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: JC

OWS FILE NUMBER ASSIGNED: 594A

APPLICATION ID NUMBER ASSIGNED: 4637

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6984

Revised on: 7/1/08

ATTACHMENT

Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: 704-336-5103 Fax: 704-336-6894
http://groundwater.charmeck.org

Homeowner/Tenant Interview Form

Please fill out completely to aid in the evaluation of your failing septic system.

Name: Heidi Rankin Date: 4/15/10

Address: 17401 McKee rd Phone: 704-583-5915 (Home/Cell)
Charlotte, NC 28278 _____ (Work)

Email: hlrankin@yahoo.com

When was the septic system installed? _____ Permit/File #: _____

Who installed the septic system? _____

When was the septic tank last pumped? 3 mos

Who pumped the septic tank? Autrie Septic

How often have you had the tank pumped? 3 yrs

Where are the septic tank and drain field located on the property?

Briefly describe the problem you are experiencing with the septic system:

When did you first notice the problem? 3 years ago

Does the problem seem to be linked to certain events (heavy rains, doing laundry, guests staying over, etc.)?

Yes ☒ No ☐

Explain: Heavy rain

How many people are living in the house? 2 Adults 2 Teens 2 Children

How much water do you use each day (provide estimate in gallons)? _____

Is the property served by public water? Yes ☐ No ☒

If yes, on average how much is your monthly water bill? $_____

Do you have a dishwasher? Yes ☒ No ☐ How many times per week is it used? _____

Do you have a garbage disposal? Yes ☒ No ☐ How many times per week is it used? _____

Do you have a washing machine? Yes ☒ No ☐ How many times per week is it used? _____

Do you use "in tank" or "in bowl" toilet sanitizer products? Yes ☐ No ☒

Do you have a water softener unit or water treatment system installed? Yes ☐ No ☒

If yes, where does the system drain? _____

Are any household cleaning chemicals put down the drain? Yes ☐ No ☒

If yes, please indicate what types of chemicals: _____

Are any other types of chemicals (paints, solvents, oils, etc.) put down the drain? Yes ☐ No ☒

If yes, please indicate what types of chemicals: _____

Have any new water using fixtures been added in the house since the septic system was installed? Yes ☐ No ☒

If yes, please indicate what type of fixtures have been added: _____

Excluding sinks, showers, bathtubs, and toilets please list any other plumbing fixtures (spa, whirlpool, etc.) that are in the house:

_____

Do you have an in-ground irrigation system? Yes ☐ No ☒

If yes, how often is the system used during a one week period? _____

Has any site work been done at the property or to the house since you moved in? Examples include: gutter drains, swimming pool installation, basement remodel/finish, landscaping, paving of driveway, etc.

Please describe: NO

_____

_____

_____

Are there underground utilities located on the property? Yes ☐ No ☐

If yes, check ALL that apply: ☐ Power ☐ Phone ☐ Water ☐ Gas ☐ Cable TV

Nicole Rankin

Signature

594A

DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: ___

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Larry & Heidi Rankin — APPLICATION DATE 4/15/10
ADDRESS: 17401 McKee Rd — DATE EVALUATED: 4/15/10
PROPOSED FACILITY: ___ — PROPOSED DESIGN FLOW (.1949): 480 — PROPERTY SIZE: ___
LOCATION OF SITE: Same as above — PROPERTY RECORDED: ___
WATER SUPPLY: • Private • Public • (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	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LS	0-4	gr/c/l	Fr/sexp/ss/sp	48	48	NA	none	.3
		4-42	sbk/c	Fi/sexp/s/p					
		42-46	sbk/cl	Fr/sexp/ss/sp					
2									
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		PS
System Type(s)		III g
Site LTAR		.3

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: P Walker RS
OTHER(S) PRESENT: ___

COMMENTS: ___

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	NEXP (Non-expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			SEXP (Slightly Expansive)	M (Massive)
D (Drainage Way)					EXP (Expansive)	CR (Crumb)
DS (Debris Slump)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular)
FP (Flood Plain)		L (Loam)				SBK (Subangular Blocky)
FS (Foot Slope)						ABK (Angular Blocky)
H (Head Slope)	III	Si (Silt)	0.6 - 0.3	0.3 - 0.15		PL (Platy)
L (Linear Slope)		SiCL (Silty Clay Loam)				PR (Prismatic)
N (Nose Slope)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			**MOIST**	**WET**
S (Shoulder Slope)		SiL (Silt Loam)				
T (Terrace)					VFR (Very Friable)	NS (Non-sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SiC (Silty Clay)			FI (Firm)	S (Sticky)
		C (Clay)			VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		O (Organic)	None	None	EFI (Extremely Firm)	NP (Non-plastic)
						SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

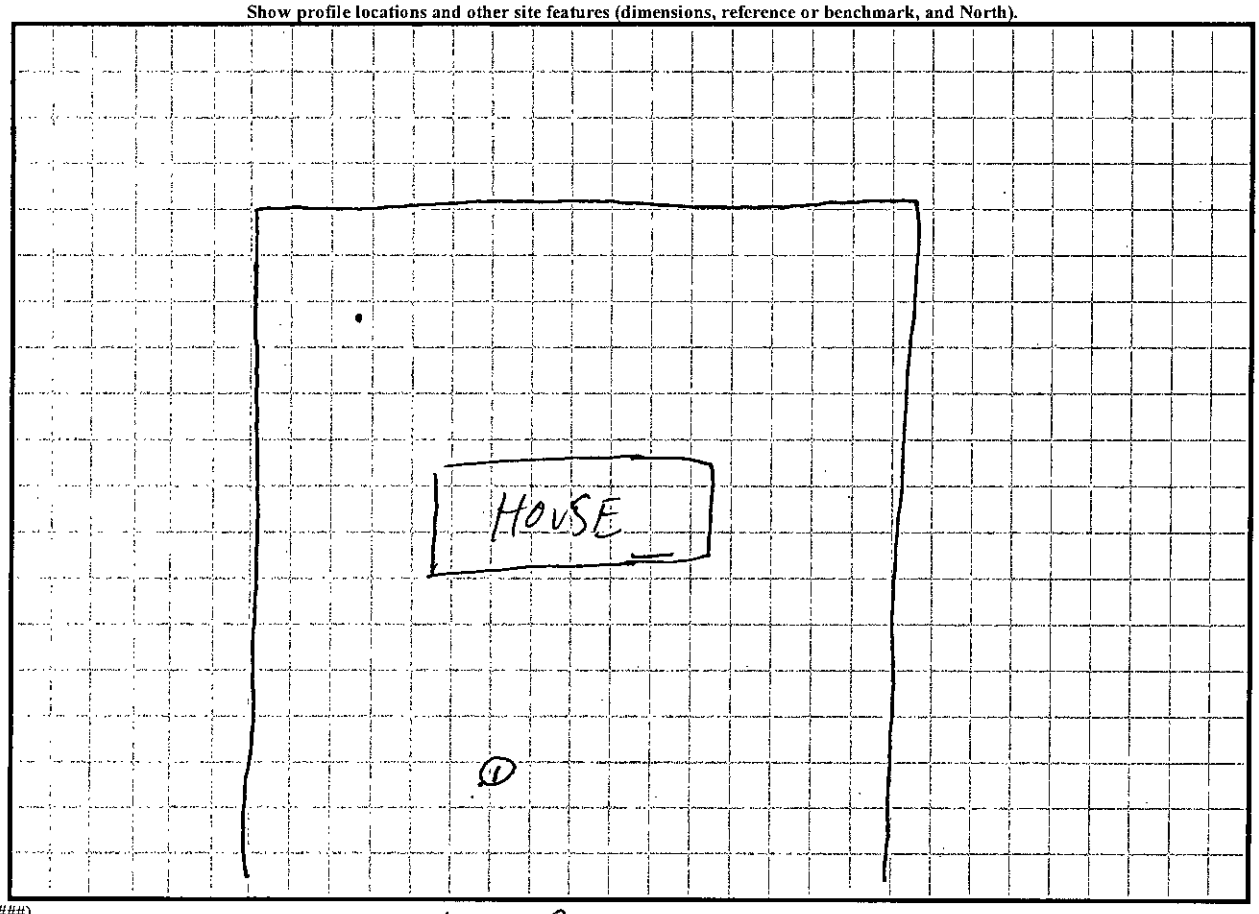
NOTES

HORIZON DEPTH	In inches below natural soil surface
DEPTH OF FILL	In inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S(suitable) or U(unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft^2

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



DENR (######)
Review (#####)

McKee Rd

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

INSTALLATION APPROVAL for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 594A Permit #: _____ Tax Parcel #: 217 271 01

Property Owner: Larry & Heidi Rankin

Job Location Address: 17401 McKee Rd

City: Charlotte State: NC Zip Code: 28278

Installation Approval Issuance Date: 4/15/10

Permission is hereby given to ☐ install ☐ alter ☑ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before 5/15/10, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 480 GPD

Site LTAR: .3 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: Existing gallons

Liquid Capacity of Dosing Tank: NA gallons

Drainfield Design ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 180 feet

# of Lines: 2 @ 90 feet

Depth of Media: 12 inches (Type) 25% Reduction

Distribution Device: D Box

Bed Design *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ *inches*

Bed Width: _____ feet

Total line length: _____ *feet*

# of Lines: _____ @ _____ feet

Depth of Media: _____ *inches (Type)* _____

Distribution Device: _____

Water Supply Source

☐ Municipal ☑ Private Well ☐ Community Well

☐ Other _____

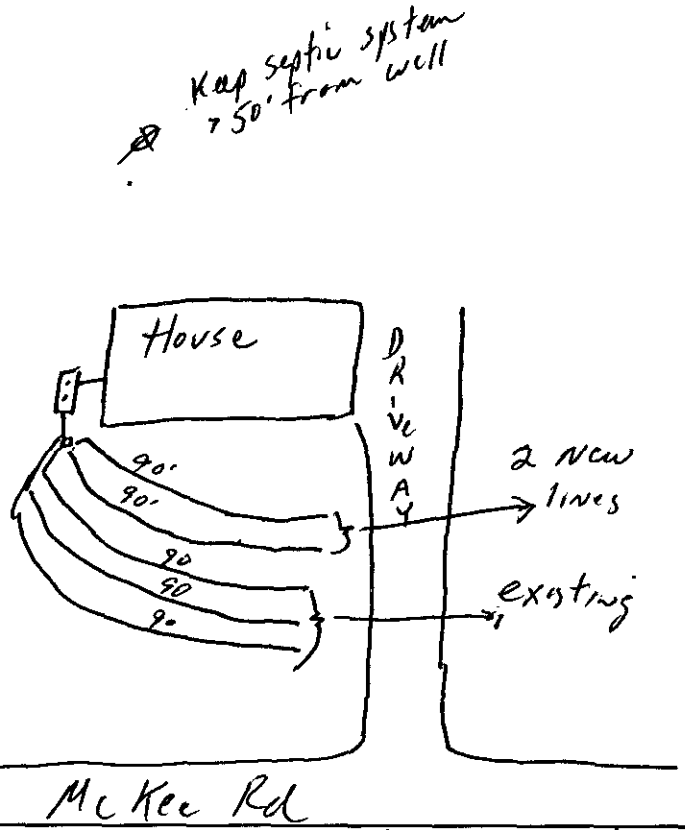
Minimum System Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 50 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)



Comments: System Classification & Type: Type IIIg Repair Install 2 lines @ 90' long @ 3' wd 25% Reduction System

DENR Authorized Agent: Philo Walker RS Signature: Philo Walker RS

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 594 A Permit #: _____ Tax Parcel #: 217 27101

Property Owner: Larry & Heidi Rankin

Job Location Address: 17401 McKee Rd

City: Charlotte State: NC Zip Code: 28278

Operation Permit Issuance Date: 4/19/10 Contractor Name: Steve Autry

Permitted Design Flow: 480 GPD Liquid Capacity of Dosing Tank: NA gallons

Liquid Capacity of Septic Tank: Existing gallons Effluent Pump Model: NA

Drainfield Installation ☐ N/A

Trench Depth: 30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 200 feet

# of Lines: 2 @ 90 & 110 feet

Depth of Media: 12 inches (Type) EZ Flow

Depth of Cover: 18 inches

Distribution Device: D Box

Inspection Dates

Tank(s) Inspected: existing

Excavation Inspected: 4/19/10

Pump & Controls Inspected: NA

Bed Installation *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

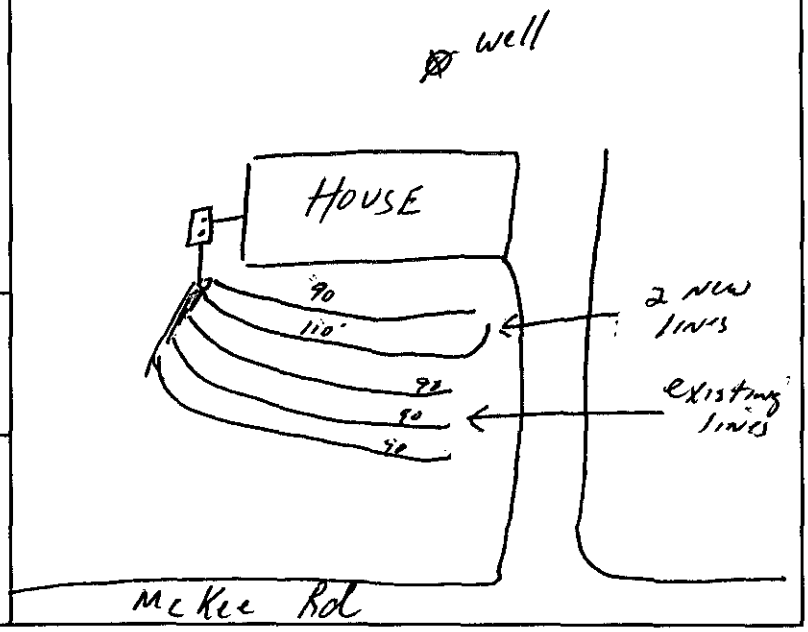
# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



Water Supply Source

☐ Municipal ☑ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: >50' feet

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☐ installed ☐ altered ☑ repaired ☑ as detailed in the plot above ☐ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and *Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation* Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: Type IIIG Gravity EZ Flow GTR, EZ1203H, G,

DENR Authorized Agent: Philo Walker RS Signature: Philo Walker RS

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 594A Permit #: _____ Tax Parcel #: 217 27101

Property Owner: Larry & Heidi Rankin

Job Location Address: 17401 McKee Rd

City: Charlotte State: NC Zip Code: 28278

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IIIg

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☐ No ☑

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☑ System does not require inspection by GWS on a routine frequency.

☐ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other: Repair E Z Flow

DENR Authorized Agent: Philo Walker RS Date: 4/19/10

Signature: Philo Walker RS