

10217 KERNS RD

01523112

7/1/08

marliwr

Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

EHS DJ

Reviewer KR

12408 County Permit Review Worksheet

Rule or Law	Permit Application	1	2	3	4	5	6	7	8	9	10
.1937(d)	Is the Application complete	✓									
.1937(d)	Is there a Site plan/Plat with application	✓									
.1937(d)	Is the Facilityshown?	✓									
.1937(d)	Are appurtenances shown	✓									
	Site Evaluation Information										
.1939 (a)(1)	Topography and Landscape Position Recorded?	✓									
.1940 (a-g)	Slope % Recorded?	✓									
.1939 (a)(2)	Texture Class Recorded?	✓									
.1939 (a)(2)	Structure type Recorded?	✓									
.1939 (a)(2)	Consistence Recorded?	✓									
.1939 (a)(3)	Mineralogy Recorded?	✓									
	Soil Wetness Condition Recorded?	✓									
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered?	✓									
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	✓									
.1939 (a)(6)	Sufficient Available Space Recorded?	✓									
.1937(m)	Are the Profile Locations Shown?	✓									
.1939(a) & .1945(b)	Are the S/PS Profiles in system & in repair area?	✓									
	Number of auger borings made:	✓									
	Were sufficient auger borings made?	✓									
.1939(d), .1955, .1956, .1957	LTAR	3									
	IP/CA										
G.S. 130A-336(a) & .1937(g)	Proposed System Type stated-Initial	✓									
.1945(b)	Proposed System Type stated-Repair	✓									
G.S. 130A-336(a)(3)	System location identifiable by setbacks - Initial	✓									
.1937(g) & .1945(b)	System components shown - Initial	✓									
.1945(b)	Repair area shown	✓									
.1937 (f)(g)	Does System design match facility, flow & WW characteristics?	✓									
.1937 (f)(g)	Is System design consistent with soil/site conditions?	✓									
.1937 (f)(g)	Is the System located in the approved area?	✓									
G.S. 130A-336(a)	Is the Design flow (gpd) indicated?	✓									
G.S. 130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	✓									
.1937(g)	Trench depth indicated?	✓									
.1937(g)	Trench width indicated?	✓									
.1937(g)	Trench length indicated?	✓									
G.S. 130A-336(a)(1)	Proposed/existing well shown?	✓									
G.S. 130A-336(a)(1)	Property line lengths shown?	✓									
G.S. 130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	✓									
	OP										
.1937(i)	System type as described in table V(a) of rule .1961	✓									
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	✓									

If system design is incorrect or inconsistent with site conditions, indicate why for each below

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 #: 12408 Permit #: 1483 Tax Parcel #: 015-231-12

Property Owner: CHARLES & PATRICIA COX

Job Location Address: 10217 KERNS ROAD

City: Huntersville State: NC Zip Code: 28078

Operation Permit Issuance Date: _____ Contractor Name: ROBBY RAY

Permitted Design Flow: 360 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: — gallons

Effluent Pump Model: —

Drainfield Installation ☐ N/A

Trench Depth: 30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 260 feet

# of Lines: 3 @ 8892.20 feet

Depth of Media: 12 inches (Type) INFILTRATOR

Depth of Cover: 12?8 inches

Distribution Device: DROP CHAMBERS

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: _____

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: 100' feet

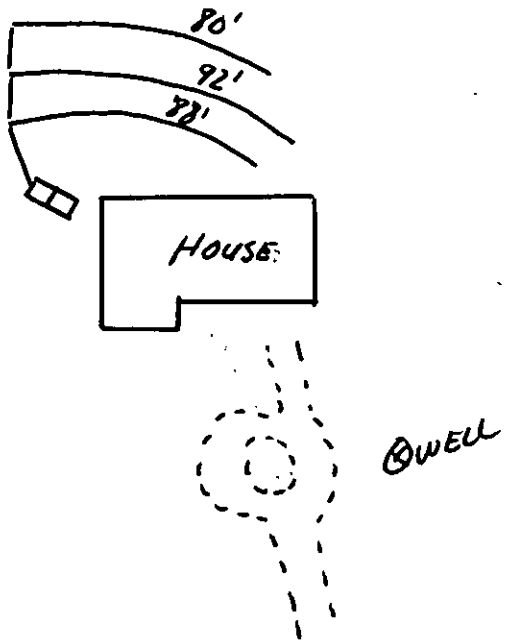
Inspection Dates

Tank(s) Inspected: 3/21/07

Excavation Inspected: 3/21/07

Pump & Controls Inspected: —

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



☒ 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: III g 35% Reduction System

NEED WARRANTY & LETTER BEFOR O.P. ISSUANCE

DENR Authorized Agent: Jeremy Michelone, R.S. Signature: Jeremy Michelone, R.S.

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 #: 12408 Permit #: 1483 Tax Parcel #: 015-231-12

Property Owner: Charles & Patricia Cox

Job Location Address: 10217 Kerns Road

City: Huntersville State: NC Zip Code: 28078

Installation Approval Issuance Date: 3/20/07

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 _____, 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: 360 GPD

Site LTAR: 0.3 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: — gallons

Drainfield Design ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: _____ feet

# of Lines: 3 @ 90, 90, 80 feet

Depth of Media: 12 inches (Type) 35% Red.

Distribution Device: Drop 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 _____

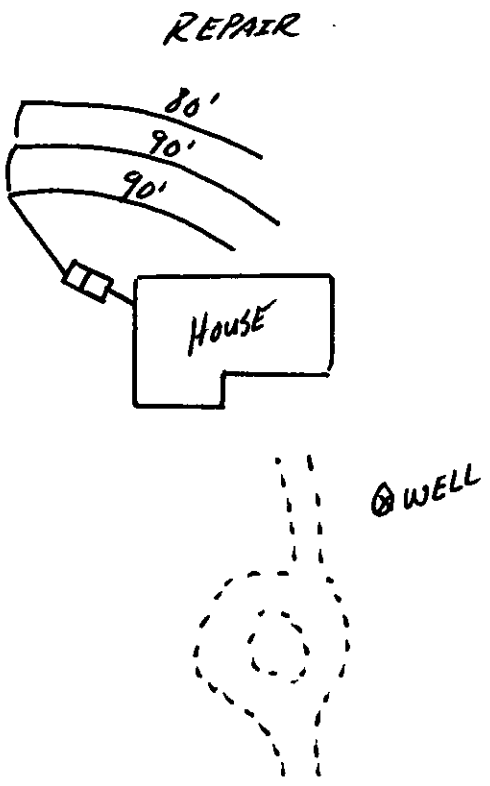
Minimum System Setbacks

Distance from Building Foundation: >5' feet

Distance from Property Line: >10' feet

Distance from Water Supply Source: >100' feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)



Comments: System Classification & Type: IIIg 35% Reduction System

Agreement w/ Homeowner to install 35% Reduction System with Warranty on file.

DENR Authorized Agent: Jeremy Micklow Signature: Jeremy Micklow, R.S.

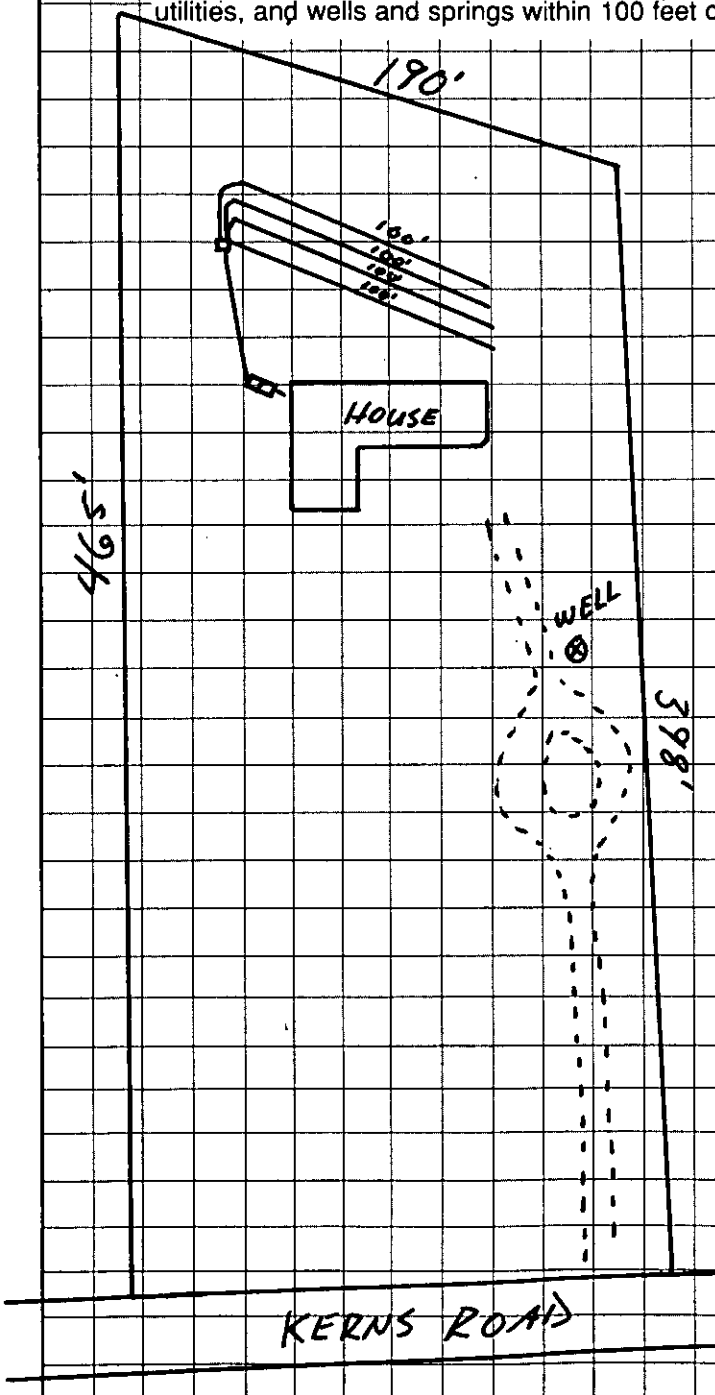
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5103

FILE: 12408

TC: 015-231-12

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.



COMMENTS:

- → THREE BEDROOM HOUSE
- → 1500 GALLON SEPTIC TANK
- → EXISTING STRUCTURES TO BE REMOVED
- → 4 LINES X 100' X 3' X 12" STONE
- → 400 TLF
- → 100% REPAIR NOT REQUIRED
- → TYPE II CONVENT TANK SYSTEM

OWNER/AGENT SIGNATURE

DATE 10-23-06

APPROVAL DATE Jerry Mink R.S. 10/20/06

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy

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

40 204915

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30001483** GWS File #: **12408** Tax Parcel #: **015-231-12**

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is **NOT** transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 10/20/2011

Type of Installation: Residential - New System Lot Number: 0

Structure Type: MODULAR HOME Size (ft^2): 1878 # Bedrooms: 3 # Occupants: 2

Building Foundation: Crawl Space Water Supply: Private Well

II. Initial System Type: Conventional **System Classification:** IIa

Initial System Specifications:

Design Flow (gpd):	360	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1200	Total Trench Length (ft):	400
Maximum Trench Depth (in):	30	Depth of Media (in):	12	Distribution Device:	Distribution Box		

III. Repair System Type: N/A **System Classification:** N/A

Repair System Specifications:

Design Flow (gpd):	0	LTAR (gpd/ft^2):	0.0	Septic Tank Size (gal):	0	Pump Tank Size (gal):	N/A
Trench Width (ft):	0	Trench Spacing (ft):	0	Absorption Area (ft^2):	0	Total Trench Length (ft):	0
Maximum Trench Depth (in):	0	Depth of Media (in):	0	Distribution Device:	N/A		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone, R.S.

Date Issued: 10/20/2006

Owner/Legal Agent: John Maslowka
Print Name

Signature:

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

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30001483** GWS File #: **12408**

IV. Permit Conditions/Comments:

- 100% repair area is not required for this property. However, the maximum feasible area shall be allocated for a repair area.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

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- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Jeremy Michelone

Signature: Jeremy Michelone, R.S

Date Issued: 10/20/2006

Owner/Legal Agent: John Maslanka
Print Name

Signature:

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

Sheet: 1 of 2
Property ID: 015-231- 12
Lot #:
File #: 12408
AppID: 1483
Code: 1

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Charles & Patricia cox
Applicant: Permits Unlimited
Address: 10217 Kerns Road, Huntersville, N. C. 28078
Date Evaluated: 10/6/06
Proposed Facility: Residence
Design Flow (.1949): 360gpd
Property Size: .5a inv.
Location of Site: 10217 Kerns Road
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] 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	LS, 8	0-6	GR/CL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48+	N/A	NONE	PS, IV
		6-48	SBK/C	FI/SEXP/S/P					.3GPD/FT^2
2	LS, 5	0-3	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		3-39	SBK/C	FI/SEXP/S/P					
		39-48	SBK/CL	FR/SEXP/SS/SP					
3	"	0-3	GR/CL	"	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
4	"	0-5	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		5-38	SBK/C	FI/SEXP/S/P					
		38-48	SBK/CL	FR/SEXP/SS/SP					
5	"	0-7	GR/CL	"	"	"	"	"	"
		7-48	SBK/C	FI/SEXP/S/P					

Description	Initial System	Repair System
Available Space (.1945)	PS	
System Type(s)	IIa	
Site LTAR	.3GPD/FT^2	

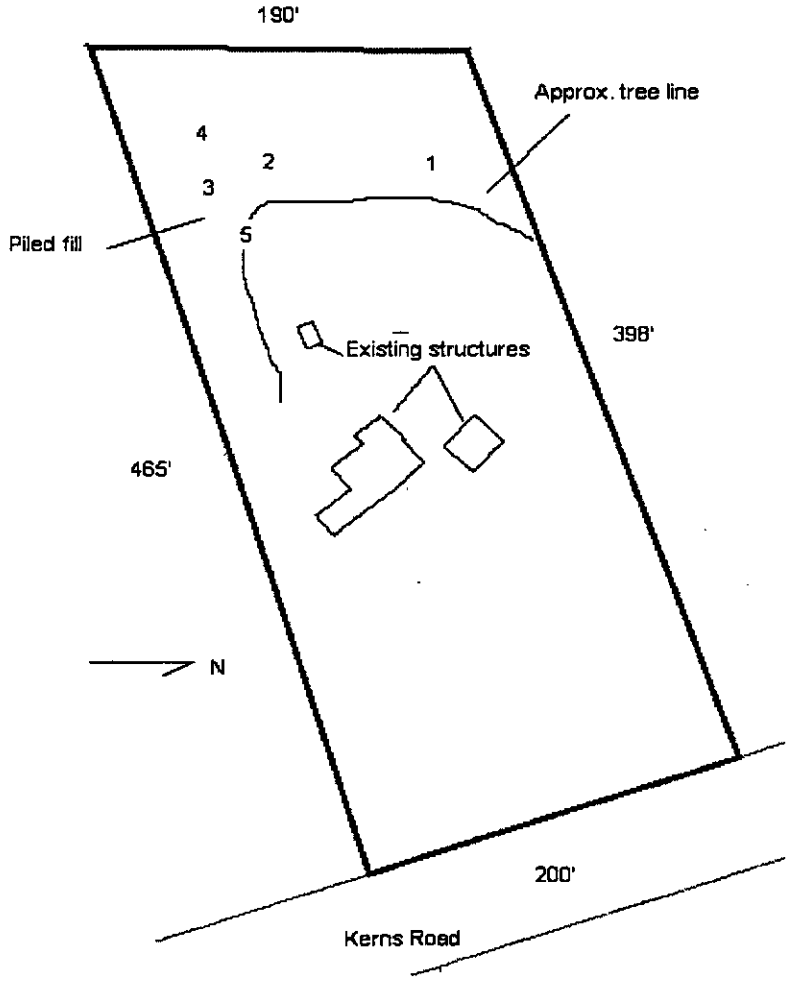
Other Factors (.1946):
Site Classification (.1948): PROVISIONALLY SUITABLE
Evaluated By: W. R. Marlin, LSS, 10/9/2006 W. R. Marlin
Others Present:

COMMENTS:
Does not appear to require 100% repair

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



#1483 12408

GWS – RES. APP 07/05

SEPTIC FEE: 500.00
DATE: 9/25/06
CRT [ ] OK 1337 NK A

PERMIT APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATION FOR ON-SITE WASTEWATER SYSTEM NEW WELL INSTALLATION OR REPAIR OF EXISTING WELL MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES

FILE # 12408

WELL FEE: _____
DATE: _____
CRT [ ]

SEPTIC / TYPE APPLICATION: ☐ NONE ☑ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFY PLOT PLAN

WELL / TYPE APPLICATION: ☐ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT Existing Well

JOB LOCATION INFORMATION:
TAX/PARCEL #: 01523112
STREET ADDRESS: 10217 Kerns Rd
CITY: Huntersville
STATE: NC ZIP: 28078
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #:
TOWNSHIP: Long Creek

☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☑ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☐ 7-MINT HILL

BUILDING INFORMATION:
TYPE OF BUILDING:
☐ SINGLE MOBILE HOME (S) ☑ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☐ HOUSE (H) ☐ OTHER
HEATED SQUARE FOOTAGE: 1898
NUMBER OF BEDROOMS: 3
NUMBER OF OCCUPANTS: 2+

FOUNDATION FOR RESIDENCE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☑ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:
NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☑ NO TYPE:

WATER SUPPLY: Existing
☐ MUNICIPAL (M) ☐ PUBLIC (C) ☑ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)
PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☑ POTABLE ☐ GEOTHERMAL ☐ OTHER

ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES	☑ NO	WELLS, SPRINGS, OR WATER LINES	☑ YES	☐ NO
EXISTING WASTEWATER SYSTEMS	☐ YES	☑ NO	DESIGNATED WETLANDS	☐ YES	☑ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES	☑ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES	☑ NO

PROPERTY OWNER:
NAME: Charles & Patricia COX
ADDRESS: 10217 Kerns Rd
CITY: Huntersville
STATE: NC ZIP: 28078
HOME PHONE: 704-875-2888 WORK PHONE:
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: Permits Unlimited - Amy Abernathy
ADDRESS: 2828 Queen City Dr Ste C
CITY: Charlotte
STATE: NC ZIP: 28208
HOME PHONE: WORK PHONE: 704-398-9350
MOBILE PHONE: FAX: 704-398-2723

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 9/22/78
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? Jan 07

*An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Amy Abernathy 9/14/06
Owner's/Agent's Signature Date

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT & NATURAL RESOURCES DIVISION
OF ENVIRONMENTAL HEALTH ON-SITE
WASTEWATER SECTION

*A Well Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature Date

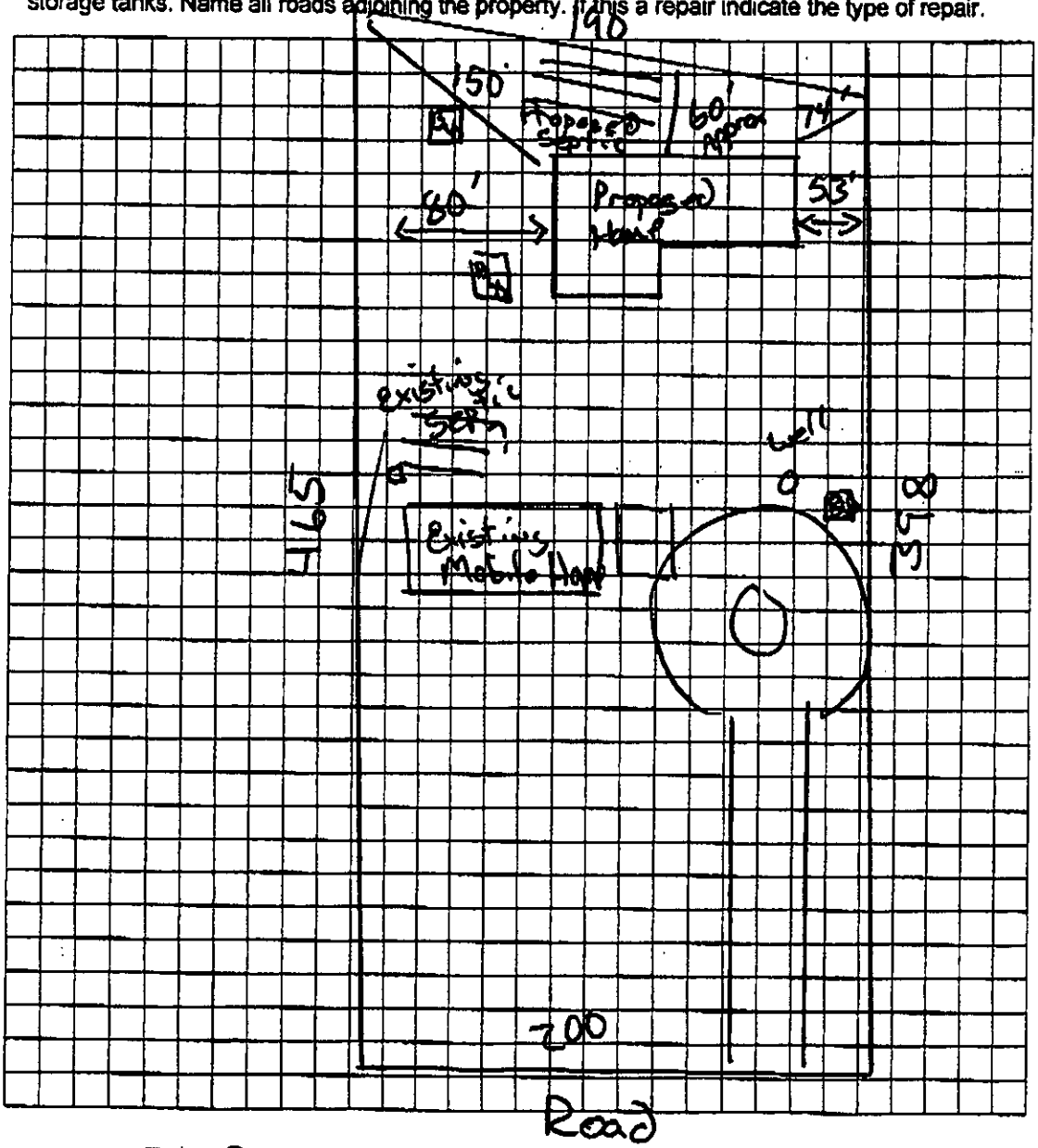
MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202 704-336-5103 / FAX: 704-336-6894

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

File #_____
Date_____

PROPOSED PLOT PLAN

A map showing existing and proposed property lines and easements with dimensions, the location of the single family residence, non-single family residence, or other facility, and appurtenances, the site for the proposed well, and the location of existing or proposed sewer lines and/or sewage disposal systems, surface water bodies, aboveground or underground storage tanks. Name all roads adjoining the property. If this a repair indicate the type of repair.



Owner/Agent Signature

Date 9-23-06

LBC 12/15/04

INFILTRATOR® SYSTEMS INC

Environmental Onsite Wastewater Solutions™

North Carolina
Five Year Limited Warranty
Approved Effective April 7, 2004

Infiltrator Systems Inc. (hereinafter "the Company") hereby extends, for a period of FIVE (5) YEARS, the following Limited Warranty to the system owner who acquires through an authorized Infiltrator Systems installer a new infiltrator nitrification trench system including each chamber, endplate, wedge, and other accessories manufactured by Infiltrator (herein after collectively the Units) located in the State of North Carolina. The Units are warranted to be free from defective materials and workmanship and to perform in accordance with the state performance requirements (15A NCAC 18A Section.1900) in effect on the date of installation. This Limited Warranty applies only to those Units with a trench length modification greater than a 25% reduction (greater than 21% reduction for Quick4 Units) as compared to the sizing standard for a conventional gravel trench as permitted by the State of North Carolina. This Limited Warranty is subject to the terms and conditions stated below.

I. WARRANTY ELIGIBILITY

The system owner is eligible for this Limited Warranty provided all of the terms and conditions of this Limited Warranty are strictly followed. The terms of this warranty shall transfer from the original system owner to subsequent system owners for the duration of this limited warranty. This Limited Warranty covers only the performance of the Units as manufactured and installed in accordance with the manufacturer's design specifications and current state regulatory approval.

II. CONDITIONS OF LIMITED WARRANTY

This Limited Warranty shall only apply if the Units are installed for use with domestic strength effluent and located in the State of North Carolina and all of the following terms and conditions are satisfied:

(i) The design and installation of the Units is according to all applicable plumbing and building codes, ordinances, requirements and regulations.
(ii) The design and installation of the Units is strictly according to the rules and regulations of the North Carolina state agency or state-authorized agency that is responsible for inspection and approval.
(iii) The design and installation of the Units is strictly according to all applicable permitting procedures for the Units adopted by the North Carolina state agency or state authorized agency that is responsible for inspection and approval.
(iv) The Units are subject to use permitted by the applicable North Carolina rules and regulations for on-site systems.
(v) Only an authorized Infiltrator installer shall perform the installation of the Units.

III. WHAT IS WARRANTED AND FOR HOW LONG

The Units are warranted for FIVE (5) YEARS from the date of issuance of the Certificate of Occupancy, or date of issuance of the Operation Permit, which ever is later.

If the Units fail within the five (5) year period of this Limited Warranty and all of the terms, conditions and requirements of this Limited Warranty have been met, the Company shall provide all materials and labor that may be necessary to provide a fully functional wastewater system at no cost to the Owner. This section shall not be construed to require that a manufacturer warrant an innovative wastewater system that is not properly sized to meet the design load required for a particular use, that is improperly installed, or that is improperly operated and maintained, in accordance with 15A NCAC 18A .1900 et. seq. Warranty repairs such as full replacement of the nitrification system , extension of the nitrification system or other repairs shall be completed pursuant to a repair Authorization to Construct to be issued by the local health department in accordance with Rule .1961(1).

A system failure is defined by North Carolina 15A NCAC 18A.1900 rules.

IV. WHAT IS NOT COVERED BY THIS LIMITED WARRANTY

1. The septic tank and all septic tank filters, unless required to make the system fully functional.
2. Effluent distribution box(es) and headers, unless required to make the system fully functional.
3. Improper installation.
4. Failure due to excessive use or improper use as defined by state rules for on-site wastewater systems, including, but not limited to, excessive water usage, improper grease disposal, or failure to remove septic tank solids (digested sludge).
5. Landscaping costs other than those specified by rule.
6. Failure due to improper sizing as defined by state rules.
7. Repair work performed prior to a claim or which is done without the Company's authorization.
8. This Limited Warranty does not extend to incidental, consequential, special, indirect or punitive damages.
9. Drain fields repaired or modified by an unauthorized Infiltrator installer.

V. THE COMPANY'S OBLIGATIONS:

No representative of the company has the authority to change this warranty in any manner whatsoever, or to extend this warranty. No warranty applies to any party other than the original system owner or subsequent system owner.

VI. OWNER'S OBLIGATION:

1. Must have signed and dated Operation Permit from the duly authorized representative of the North Carolina state agency or state authorized agency that is responsible for inspection and approval of the Units.
2. Must have a Warranty Certificate from an authorized Infiltrator installer.
3. The system owner must notify the company in writing at its corporate headquarters with 90 days of being notified by an authorized agent of the state that the system has failed. Notice shall be sent to Infiltrator Systems Inc., 6 Business Park Road, P.O. Box 768, Old Saybrook, CT 06475.
4. The system owner must have the septic tank solids (digested sludge) properly removed in accordance with state rules for on-site systems.

VII. DISCLAIMER AND LIMITATION ON IMPLIED WARRANTIES

ALL WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND THERE ARE NO OTHER WARRANTIES. ANY IMPLIED WARRANTIES OF MECHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, IMPOSED ON THE SALE OF THE UNITS TO THE NORTH CAROLINA SYSTEM OWNER, ARE, BY LAW, LIMITED TO FIVE (5) YEAR DURATION FOR THE UNITS AND THEIR CONSTITUENT PARTS, AND ARE SUBJECT TO THE TERMS AND CONDITIONS OF THIS LIMITED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO INCIDENTAL, CONSEQUENTIAL, SPECIAL, DIRECT OR INDIRECT DAMAGES, WHETHER ARISING IN CONTRACT OR TORT. THE COMPANY SHALL NOT BE LIABLE FOR LOSS OR DAMAGE TO PERSONAL PROPERTY, PENALTIES OR LIQUIDATED DAMAGES, LOSS OF PRODUCTION AND PROFITS, OVEHEAD COSTS, OR OTHER LOSS OR EXPENSE. SPECIFICALLY EXCLUDED ARE DAMAGE DUE TO WATER DAMAGE, ORDINARY WEAR AND TEAR, ALTERATION, ACCIDENT, MISUSE, ABUSE, OR NEGLECT; THE UNITS BE SUBJECTED TO STRESSES OR VEHICULAR TRAFFIC GREATER THAN THOSE PRESCRIBED IN THE INSTALLATION INSTRUCTIONS OR OPERATION INSTRUCTIONS; FAILURE TO MAINTAIN THE MINIMUM GROUND COVERS SET FORTH IN THE OPERATION INSTRUCTIONS; THE; SYSTEM FAILURES DETERMINED TO BE DUE TO NONCOMPLIANCE WITH THE ON-SITE WASTEWATER LAW OR RULES (130A-133, et.seq.; 15A NCAC 18A Section .1900) INCLUDING BUT NOT LIMITED TO IMPROPER SITING, EXCESSIVE WATER USAGE, IMPROPER GREASE DISPOSAL, PLACEMENT OF IMPROPER MATERIALS INTO THE SYSTEM, IMPROPER OPERATION OR IMPROPER MAINTANENCE; OR ANY OTHER EVENT NOT CAUSED BY THE COMPANY. THIS PERMIT SHALL BE VOID IF THE SYSTEM OWNER FAILS TO COMPLY WITH ALL OF THE TERMS SET FORTH IN SECTION II AND IV OF THIS WARRANTY.

FURTHERMORE, IN NO EVENT SHALL THE COMPANY BE RESPONSIBLE FOR ANY LOSS OR DAMAGE TO THE ORIGINAL OR SUBSEQUENT SYSTEM OWNER(S), THE UNITS, OR ANY THIRD PARTY RESULTING FROM SHIPMENT OF THE UNITS, OR FROM ANY PRODUCT LIABILITY CLAIMS OF THE ORIGINAL OR SUBSEQUENT SYSTEM OWNER(S) OR ANY THIRD PARTY.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, NORTH CAROLINA LAW MAY GIVE YOU CERTAIN SPECIFIC OTHER RIGHTS WHICH ARE NOT MENTIONED HEREIN.

VIII. TRANSFER OF WARRANTY

This warranty extends to the original system owner and each subsequent owner of the system during the term of this limited warranty.

IX. INSTALLER CERTIFICATION

"I acknowledge to the company and the system owner that the wastewater system and the Infiltrator have been installed in accordance with the installation instructions of the company, state wastewater laws and rules, the innovative wastewater system approval, the improvement permit and authorization to construct, and any conditions on the permit or authorization to construct, and other applicable laws and rules."

Patricia Cox
Physical Address of System Installation or Lot Number

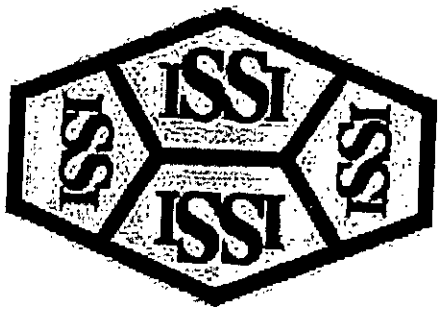
10217 Kerns Rd
Huntersville, NC. 28078

Bay's
Business Name of Installer

Renee Smith
Name of Person Signing (Print)

Signature

3-26-07
Date



Imaging Solutions and Services, Inc

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ISSI Operations Center Staff

INFILTRATOR SYSTEMS INC.

Environmental On-site Wastewater Solutions

North Carolina
Five Year Limited Warranty
Approved Effective April 2, 2001

Infiltrator Systems Inc. (hereinafter "the Company") hereby extends, for a period of FIVE (5) YEARS, the following Limited Warranty to the system owner who acquires through an authorized Infiltrator Systems installer a new infiltration/infiltration trench system including each chamber, endplate, sweep, and other accessories manufactured by Infiltrator (herein after collectively the Units) located in the State of North Carolina. The Units are warranted to be free from defective materials and workmanship and to perform in accordance with the state performance requirements (15A NCAC 18A Section .1930) in effect on the date of installation. This Limited Warranty applies only to those Units with a trench height modification greater than a 25% reduction (greater than 11" reduction for Quick4 Units) as compared to the sizing standard for a conventional gravel trench as permitted by the State of North Carolina. The Limited Warranty is subject to the terms and conditions stated below.

I. WARRANTY ELIGIBILITY

The system owner is eligible for this Limited Warranty provided all of the terms and conditions of this Limited Warranty are strictly followed. The terms of this warranty shall transfer from the original system owner to subsequent system owners for the duration of this limited warranty. This Limited Warranty covers only the performance of the Units as manufactured and installed in accordance with the manufacturer's design specifications and current state regulatory approval.

II. CONDITIONS OF LIMITED WARRANTY

This Limited Warranty shall only apply if the Units are installed for use with domestic strength effluent and located in the State of North Carolina and all of the following terms and conditions are satisfied:

(i) The design and installation of the Units is according to all applicable plumbing and building codes, ordinances, requirements and regulations.
(ii) The design and installation of the Units is strictly according to the rules and regulations of the North Carolina state agency or state-authorized agency that is responsible for inspection and approval.
(iii) The design and installation of the Units is strictly according to all applicable permitting procedures for the Units adopted by the North Carolina state agency or state authorized agency that is responsible for inspection and approval.
(iv) The Units are subject to use permitted by the applicable North Carolina rules and regulations for on-site systems.
(v) Only an authorized Infiltrator installer shall perform the installation of the Units.

III. WHAT IS WARRANTED AND FOR HOW LONG

The Units are warranted for FIVE (5) YEARS from the date of issuance of the Certificate of Occupancy, or date of issuance of the Operation Permit, whichever is later.

If the Units fail within the five (5) year period of this Limited Warranty and all of the terms, conditions and requirements of this Limited Warranty have been met, the Company shall provide all materials and labor that may be necessary to provide a fully functional wastewater system at no cost to the Owner. This section shall not be construed to require that a manufacturer warrant an innovative wastewater system that is not properly sized to meet the design flow required for a particular use, that is improperly installed, or that is improperly operated and maintained. In accordance with 15A NCAC 18A .1960 (c) (4) Warranty repairs such as full replacement of the nitrification system, extension of the nitrification system or other repairs shall be completed pursuant to a repair Authorization to Construct to be issued by the local health department in accordance with Rule .1961(1).

A system failure is defined by North Carolina 15A NCAC 15A.1960 rules.

IV. WHAT IS NOT COVERED BY THIS LIMITED WARRANTY

1. The septic tank and all septic tank filters, unless required to make the system fully functional.
2. Effluent distribution box(es) and headers, unless required to make the system fully functional.
3. Improper installation.
4. Failure due to excessive use or improper use as defined by state rules for on-site wastewater systems, *including*, but not limited to, excessive water usage, improper grease disposal, or failure to remove septic tank solids (digested sludge).
5. Landscaping costs other than those specified by rule.
6. Failure due to improper sizing as defined by state rules.
7. Repair work performed prior to a claim or which is done without the Company's authorization.
8. This Limited Warranty does not extend to incidental, consequential, special, indirect or punitive damages.
9. Drain fields repaired or modified by an unauthorized Infiltrator installer.

V. THE COMPANY'S OBLIGATIONS:

No representative of the company has the authority to change this warranty in any manner whatsoever, or to extend this warranty. No warranty applies to any party other than the original system owner or subsequent system owner.

VI. OWNER'S OBLIGATION:

1. Must have signed and dated Operation Permit from the duly authorized representative of the North Carolina state agency or state authorized agency that is responsible for inspection and approval of the Units.
2. Must have a Warranty Certificate from an authorized Infiltrator installer.
3. The system owner must notify the company in writing at its corporate headquarters with 90 days of being notified by an authorized agent of the state that the system has failed. Notice shall be sent to Infiltrator Systems Inc., 6 Business Park Road, P.O. Box 768, Old Saybrook, CT 06475.
4. The system owner must have the septic tank solids (digested sludge) pumped only removed in accordance with state rules for on-site systems.

VII. DISCLAIMER AND LIMITATION ON IMPLIED WARRANTIES

ALL WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND THERE ARE NO OTHER WARRANTIES, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IMPOSED ON THE SALE OF THE UNITS TO THE FIRST REGARDING A SYSTEM OWNER ARE BY LAW LIMITED TO ONE YEAR DURATION FOR THE UNITS AND THEIR CONSTITUENT PARTS, AND ARE SUBJECT TO THE TERMS AND CONDITIONS OF THIS LIMITED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO INCIDENTAL, CONSEQUENTIAL, SPECIAL, DIRECT OR INDIRECT DAMAGES, WHETHER ARISING IN CONTRACT OR TORT. THE COMPANY SHALL NOT BE LIABLE FOR LOSS OR DAMAGE TO PERSONAL PROPERTY, PENALTIES OR LIQUIDATED DAMAGES, LOSS OF PRODUCTION AND PROFITS, OVERHEAD COSTS, OR OTHER LOSS OR EXPENSE. SPECIFICALLY EXCLUDED ARE DAMAGE DUE TO WATER DAMAGE, ORDINARY WEAR AND TEAR, ALTERATION, ACCIDENT, ABUSE, MISUSE OR NEGLECT; FOR UNITS BE SUBJECTED TO STRESSES OR VEHICULAR TRAFFIC GREATER THAN THOSE PRESCRIBED IN THE INSTALLATION INSPECTION OR OPERATION INSTRUCTIONS. FAILURE TO MAINTAIN THE MINIMUM GROUND COVER SET FORTH IN THE OPERATION INSTRUCTIONS; THE SYSTEM FAILURE DETERMINED TO BE DUE TO NONCOMPLIANCE WITH THE ON-SITE WASTEWATER LAW OR RULES (15A-18A) where (15A NCAC 18A Section .1961(b)(1)(B)), BUT NOT LIMITED TO IMPROPER SITING, EXCESSIVE WATER USAGE, IMPROPER GREASE DISPOSAL, USE/DISPOSAL OF IMPROPER MATERIALS INTO THE SYSTEM, IMPROPER OPERATION OR IMPROPER MAINTENANCE, OR ANY OTHER EVENT NOT CAUSED BY THE COMPANY. THIS PERMIT SHALL BE VOID IF THE SYSTEM IS NOT INSTALLED TO COMPLY WITH ALL OF THE TERMS SET FORTH IN SECTION II AND IV OF THIS WARRANTY.

FURTHERMORE, IN NO EVENT SHALL THE COMPANY BE RESPONSIBLE FOR ANY LOSS OR DAMAGE TO THE ORIGINAL OR SUBSEQUENT SYSTEM OWNER OR ANY THIRD PARTY RESULTING FROM SHIPMENT OF THE UNITS, OR FROM ANY PRODUCT LIABILITY CLAIM OF THE ORIGINAL OR SUBSEQUENT SYSTEM OWNER OR ANY THIRD PARTY.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, NORTH CAROLINA LAW MAY GIVE YOU CERTAIN SPECIFIC STATE RIGHTS WHICH ARE NOT MENTIONED HEREIN.

VIII. TRANSFER OF WARRANTY

This warranty extends to the original system owner and each subsequent owner of the system during the term of this limited warranty.

IX. INSTALLER CERTIFICATION

"I acknowledge to the company and the system owner that the wastewater system and the Infiltrator have been installed in accordance with the installation instructions of the company, state wastewater laws and rules, the innovative wastewater system approval, the improvement permit and authorization to construct and any conditions on the permit or authorization to construct, and other applicable laws and rules."

Fabric Cox
Physical Address of System Installation or Lot Number
1027 Kerns Rd
Huntsville, NC. 28078

Business Name of Installer
Grace Smith
Name of Person Signing (Print)
Signature
3.27.07
Date

P.O. Box 768 • Old Saybrook, CT 06475 • 800-221-4436

White Copy: Department of Health — Yellow Copy: System Owner — Pink Copy: Infiltrator Systems Inc.

DIRECT BUILDERS, LLC

"Custom Builder Utilizing Modular Components"

Jeremy Michelone,

Please note that we have chosen to install a 35% reduction system on Patricia Cox's property at 10217 Kerns Drive, permit 3001483. It carries a five year warranty of which a copy is attached.

Thank ~~you~~ for your consideration in this matter.

3-27-07

John Maslonka
Direct Builders, LLC

3535 N. Hwy. 16 Denver, NC 28037 / Phone 704-483-3633 — Fax 704-483-7434
www.directbuildersnc.com