LD 10/25/07 Pass 3/11/08

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 72623 WASPS App #: 2589

Primary ES assigned to project: DC

Secondary ES assigned to project:

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☐

I. File Review:

Rule or Law				
	Permit Application			
.1937(d)	Is the Application complete	Yes ☑	No ☐	N/A ☐
.1937(d)	Is there a Site plan/Plat with application	Yes ☑	No ☐	N/A ☐
.1937(d)	Is the Facility shown?	Yes ☑	No ☐	N/A ☐
.1937(d)	Are appurtenances shown	Yes ☐	No ☐	N/A ☐
	Site Evaluation Information			
.1939 (a)(1)	Topography and Landscape Position Recorded?	Yes ☑	No ☐	N/A ☐
.1940 (a-g)	Slope % Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Texture Class Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Structure type Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Consistence Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Mineralogy Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(3)	Soil Wetness Condition Recorded?	Yes ☐	No ☐	N/A ☑
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered	Yes ☐	No ☐	N/A ☑
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	Yes ☐	No ☐	N/A ☑
.1939 (a)(6)	Sufficient Available Space Recorded?	Yes ☑	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?			
.1939(a)	Are the S/PS Profiles in system & in repair area?	Yes ☑	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: 8 Were sufficient auger borings made?	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR .3	Yes ☑	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Proposed System Type stated-Repair	Yes ☑	No ☐	N/A ☐
130A-336 (a)(3)	System location identifiable by setbacks - Initial	Yes ☑	No ☐	N/A ☐
.1937(g) .1945(b)	System components shown – Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Repair area shown	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Does System design match facility, flow & WWcharacteristics?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is System design consistent with soil/site conditions?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is the System located in the approved area?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Is the Design flow (gpd) indicated?	Yes ☑	No ☐	N/A ☐

130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench depth indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench width indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench length indicated?	Yes ☑	No ☐	N/A ☐
130A-336(a)(1)	Proposed/existing well shown?	Yes ☑	No ☐	N/A ☐
130A-336(a)(1)	Property line lengths shown?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	Yes ☑	No ☐	N/A ☐
	Operation Permit			
.1937(i)	System type as described in table V(a) of rule .1961	Yes ☑	No ☐	N/A ☐
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	Yes ☑	No ☐	N/A ☐

II. WASPS Review:

Construction authorization issued	Yes ☐	No ☐	N/A ☐
Installation approval issued	Yes ☐	No ☐	N/A ☐
Operation permit issued	Yes ☐	No ☐	N/A ☐
Other related documentation	Yes ☐	No ☐	N/A ☐

Items requiring correction/modification: _____

Comments:

IA issued date: 2208

OP issued date: 2210

Review performed by: IR

Date performed: 10.2507

FILE NUMBER: 7262B

SEPTIC FEE: 200.00
DATE: 8/3/07
CHK 1612

Revised On: January 3, 2007

APPLICATION NUMBER: 2589

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

WELL FEE: 400.00
DATE: 8/3/07
CHK 1612

1. **SEPTIC / TYPE APPLICATION:** ☐ NONE ☑ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ☐ NONE ☑ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 139-042-06
STREET ADDRESS: 8020 WILSON RIDGE LN
CITY: MINT HILL
STATE: NC ZIP: 28227
SUBDIVISION NAME: ARLINGTON HILLS
LOT #: 5 LOT SIZE (acres): 1.16
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: 4054
NUMBER OF BEDROOMS: ~~4/5~~ 5
NUMBER OF OCCUPANTS: 5
FOUNDATION TYPE:

☐ CONCRETE SLAB ☑ BASEMENT WITH PLUMBING
☑ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☐ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ☐ MUNICIPAL ☐ PUBLIC WELL ☑ PRIVATE WELL ☐ SHARED WELL ☐ SPRING
7. **PROPOSED USE OF WELL:** ☐ N/A ☐ IRRIGATION ☑ POTABLE ☐ GEOTHERMAL ☐ OTHER

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☑ 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 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

10. **PROPERTY OWNER:**

NAME: ARLINGTON HILLS OF MINT HILL LLC
ADDRESS: 7714 MATTHEWS MINT HILL RD
CITY: CHARLOTTE
STATE: NC ZIP: 28227
HOME PHONE: WORK PHONE: 704-248-5107
MOBILE PHONE: FAX: 704-545-8927

11. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: TOUCHSTONE HOMES, LLC
ADDRESS: 2016 WHITE BIRCH TRAIL
CITY: WEDDINGTON
STATE: NC ZIP: 28104
HOME PHONE: WORK PHONE:
MOBILE PHONE: 704-309-5542 FAX: 704-708-6683

12. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** 8/7/07
13. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** 8/15/07

14. **SEPTIC SYSTEM PERMIT APPLICATION SIGNATURE SECTION:**
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 60 months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

Property Owner's or Owner's Legal Representative Signature — Date 8/8/07

15. **WELL PERMIT APPLICATION SIGNATURE SECTION:**
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 12 months from the date of issuance.

Property Owner's or Owner's Legal Representative Signature — Date 8/8/07

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

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 10/26/07
Receipt #: 53355
Check / Auth #: CHARGE
Received By: CRAIGGY

Amount: 150.00
Tendered: 0.00
Returned: 0.00

Account Information

Account #: X37752
Contractor: TOUCHSTONE HOMES LTD
Attn:
Address: 2016 WHITE BURCH TRAIL
Address:
City/State/Zip: WEDDINGTON, NC 28104

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Auth for Waste Wtr Sys Constr 8020 WILSON RIDGE LN/FILE 7262B		1	150.00	150.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
150.00					

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	10/25/07	**Amount:**	150.00
Receipt #:	53369	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #:	X37752
Contractor:	TOUCHSTONE HOMES LTD
Attn:	
Address:	2016 WHITE BURCH TRAIL
Address:	
City/State/Zip:	WEDDINGTON, NC 28104

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Installation/Final Approval 8020 WILSON RIDGE LN/FILE 7262B		1	150.00	150.00

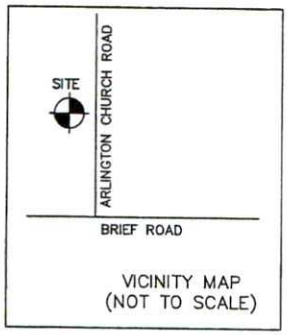
----------**Outstanding Balances**----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
300.00					

THIS IS TO CERTIFY THAT ON THE 14th DAY OF AUGUST ,2007 I SURVEYED THE PROPERTY SHOWN ON THIS PLAT, AND THAT THE TITLE LINES AND THE WALLS OF THE BUILDINGS, IF ANY, ARE SHOWN HEREON.

SIGNED _____
JOHN D. SKIDMORE III, NCPLS

'726 2B

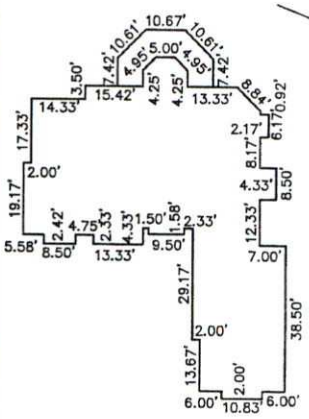


VICINITY MAP
(NOT TO SCALE)

NOTES:

- AREA BY COORDINATE METHOD
- ERROR OF CLOSURE 1:10,000
- THIS IS A SURVEY OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET
- THIS MAP IS NOT INTENDED TO MEET G.S. 47-30 AND IS NOT TO BE RECORDED AS A PLAT
- SUBJECT PROPERTY MAY BE SUBJECT TO RECORDED OR UNRECORDED EASEMENTS, RIGHT OF WAYS, SETBACKS AND/OR RESTRICTIVE COVENANTS NOT SHOWN HEREON
- IRON PINS AT ALL CORNERS UNLESS OTHERWISE NOTED





HOUSE DETAIL
NOT TO SCALE

CURVE TABLE				
CURVE	LENGTH	RADIUS	DIRECTION	CHORD
C1	41.83'	230.00'	N67°44'29"E	41.78'

PLOT PLAN

8020 WILSON RIDGE LANE
LOT 5
ARLINGTON HILLS
TOWN OF MINT HILL, MECKLENBURG COUNTY, NORTH CAROLINA

TO BE DEEDED TO: TOUCHSTONE HOMES

SCALE 1" = 60'	D.B. PG.
TAX No.	DRAWN BY: BDS
MAP BOOK 48 PAGE 707	DRAWING AH5

SKIDMORE SURVEYING, INC.
5343 HIGHWAY 74 WEST
MONROE, N.C.
704-289-4855

PROPOSED PLOT PLAN

1"=60'

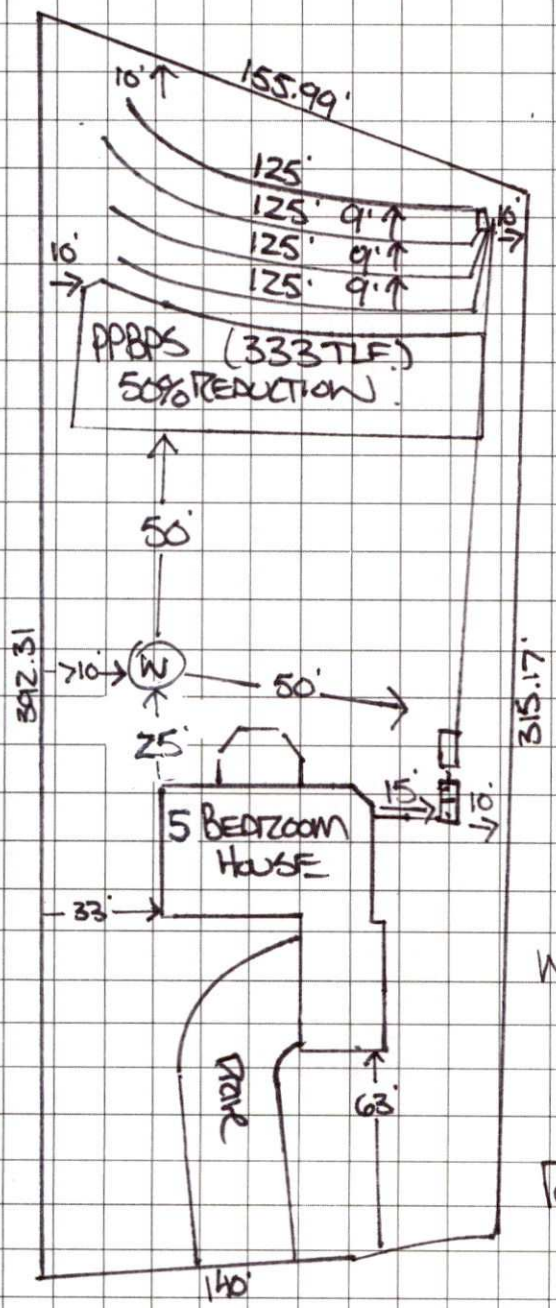
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5103

ARLINGTON HILLS LOT #5

FILE: 7262B

TC: 139-042-06

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.



SEPTIC SYSTEM DESIGN FOR A 5 BEDROOM.
600 GAL/DAY MAX
LTAR = 0.3 GPD/FT²

INNOVATIVE, 25% REDUCTION SYSTEM
TYPE IIIb/g.

INSTALL 4 LINES @ 125' ea.
- INSTALL ON CONTOUR & ON 9' CTRS

1500 GAL ST
1000 GAL PT
PRESSURE MANIFOLD.

SETBACKS: KEEP ALL PARTS OF SYSTEM
> 15' FROM HOUSE (BASEMENT)
> 10' FROM PROPERTY LINES
> 50' FROM WELL

WELL SETBACKS:
> 50' FROM SEPTIC
> 25' FROM HOUSE
> 10' FROM PROPERTY LINE

REPAIR AREA 50% REDUCTION
PPBPS = 333'

OWNER/AGENT SIGNATURE

DATE 10/25/07

APPROVAL DATE

RS

White - Health Department's Copy

Canary - E.H.S. Copy

Pink - Owner's Copy

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

Sheet: 1 of 3
Property ID: 139-042-06
Lot #: 5
File #: 7262B
AppID: 2589

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Arlington Hills of Mint Hill, LLC
Address: 7714 Matthews-Mint Hill Rd., Charlotte, NC 28227
Proposed Facility: Residence
Design Flow (.1949): ~~480 gpd~~ 600gpd
Location of Site: 8020 Wilson Ridge Ln
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Touchstone Homes Ltd
Date Evaluated: 8/29/07
Property Size: 1.16ac
Property Recorded:

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
1A	LS,10	0-3	GR/SCL	FR/SS/SP/SEXP	>31" TO SOIL WETNESS	31	N/A	NONE	US,IV
		3-25	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2
		25-31	SBK/CL	FR/S/P/SEXP					
		31+	M/SAP						
2A	"	0-4	GR/SCL	FR/SS/SP/SEXP	>24" TO SOIL WETNESS	24	"	"	US,IV
		4-24	SBK/C	FI/S/P/SEXP					.125 GPD/FT^2/LPP
		24+	M/SAP						
3A	"	0-6	GR/SCL	FR/SS/SP/SEXP	>33" TO SOIL WETNESS	33	"	"	US,IV
		6-33	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2
		33+	M/SAP						
4A	"	0-6	GR/SCL	FR/SS/SP/SEXP	>37" TO SOIL WETNESS	37	"	"	"
		6-37	SBK/C	FI/S/P/SEXP					
		37+	M/SAP						
					SITE LTAR				.3 GPD/FT^2

Description	Initial System	Repair System
Available Space (.1945)	*PS	PS
System Type(s)	IIIbg	Iva
Site LTAR	*0.3	0.3

Other Factors (.1946): Backhoe pits required to evaluate saprolite
Soil Evaluation By: Chris Sherrill, RS, LSS
Others Present: No
Site Classification (.1948): Provisionally Suitable
Site Evaluation By: David Cornelius

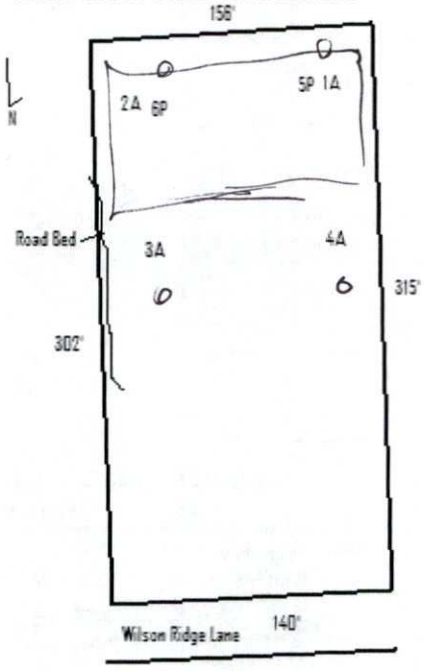
*PS and 0.3 based on backhoe pits

COMMENTS: 100% Repair Area Required

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



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

Sheet: 1 of 3
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File #: 7262B
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Evaluation Method: [x] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Touchstone Homes Ltd
Date Evaluated: 8/29/2007,10/23/07
Property Size: 1.16ac
Property Recorded:

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		24+	M/SAP						
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		6-33	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2
		33+	M/SAP						
4A	"	0-6	GR/SCL	FR/SS/SP/SEXP	>37" TO SOIL WETNESS	37	"	"	"
		6-37	SBK/C	FI/S/P/SEXP					
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HS-Head Slope			
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CV-Convex Slope		SICL-Silty Clay Loam	
T-Terrace			
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	IV	SC-Sandy Clay	0.4 - 0.1
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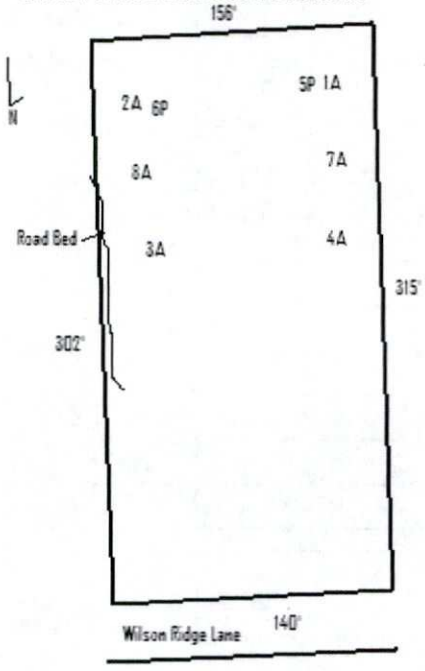
Structure
SG-Single Grain
M-Massive
CR-Crumb
GR-Granular
SBK-Subangular Blocky
ABK-Angular Blocky
PL-Platy
PR-Prismatic

Consistence Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

Consistence Wet
NS-Non-Sticky
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Sketch of Soil Evaluation Locations



SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
CONTINUED

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
5P	LS,10	0-6	GR/SCL	FR/SS/SP/SEXP	>55" TO SOIL WETNESS	50	S	NONE	PS,IV
		6-26	SBK/C	FI/S/P/SEXP					.325 GPD/FT^2
		26-50	SBK/SCL	FR/S/P/SEXP					
		50-55	M/SAP/SL	FR/SS/SP/SEXP					
6P	"	0-3	GR/SCL	FR/SS/SP/SEXP	"	20	US 20-30	"	PS,IV
		3-20	SBK/C	FI/S/P/SEXP			S 30-55		.3 GPD/FT^2
		20-30	M/SAP/SCL	FI/S/P/SEXP					
		30-55	M/SAP/SL	FR/SS/SP/SEXP					

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

Sheet: 1 of 3
Property ID: 139-042-06
Lot #: 5
File #: 7262B
AppID: 2589

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Arlington Hills of Mint Hill, LLC
Applicant: Touchstone Homes Ltd
Address: 7714 Matthews-Mint Hill Rd., Charlotte, NC 28227
Date Evaluated: 8/29/2007
Proposed Facility: Residence
Design Flow (.1949): 480 gpd
Property Size: 1.16ac
Location of Site: 8020 Wilson Ridge Ln
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [x] 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
1A	LS,10	0-3	GR/SCL	FR/SS/SP/SEXP	>31" TO SOIL WETNESS	31	N/A	NONE	US,IV
		3-25	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2
		25-31	SBK/CL	FR/S/P/SEXP					
		31+	M/SAP						
2A	"	0-4	GR/SCL	FR/SS/SP/SEXP	>24" TO SOIL WETNESS	24	"	"	US,IV
		4-24	SBK/C	FI/S/P/SEXP					.125 GPD/FT^2/LPP
		24+	M/SAP						
3A	"	0-6	GR/SCL	FR/SS/SP/SEXP	>33" TO SOIL WETNESS	33	"	"	US,IV
		6-33	SBK/C	FI/S/P/SEXP					.3 GPD/FT^2
		33+	M/SAP						
4A	"	0-6	GR/SCL	FR/SS/SP/SEXP	>37" TO SOIL WETNESS	37	"	"	"
		6-37	SBK/C	FI/S/P/SEXP					
		37+	M/SAP						
					SITE LTAR				.3 GPD/FT^2

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR		

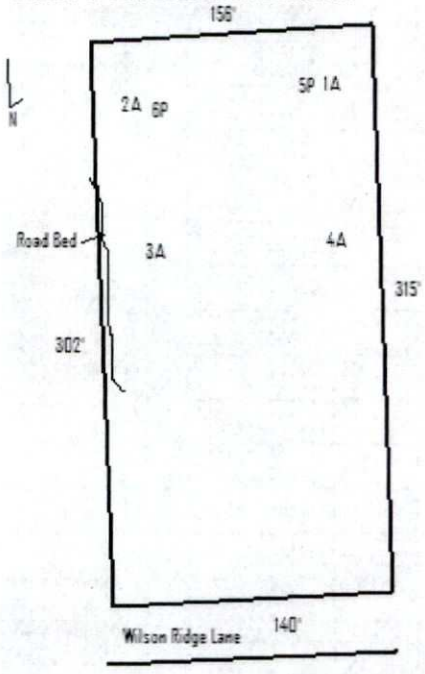
Other Factors (.1946): Backhoe pits required to evaluate saprolite
Soil Evaluation By: Chris Sherrill, RS, LSS
Others Present: No
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS: 100% Repair Area Required

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



SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
CONTINUED

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941		OTHER PROFILE FACTORS				Profile Class & LTAR
			.1941 Structure/ Texture	.1941 Consistence Mineralogy	.1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	
5P	LS,10	0-6	GR/SCL	FR/SS/SP/SEXP	>55" TO SOIL WETNESS	50	S	NONE	PS,IV
		6-26	SBK/C	FI/S/P/SEXP					.325 GPD/FT^2
		26-50	SBK/SCL	FR/S/P/SEXP					
		50-55	M/SAP/SL	FR/SS/SP/SEXP					
6P	"	0-3	GR/SCL	FR/SS/SP/SEXP	"	20	US 20-30	"	PS,IV
		3-20	SBK/C	FI/S/P/SEXP			S 30-55		.3 GPD/FT^2
		20-30	M/SAP/SCL	FI/S/P/SEXP					
		30-55	M/SAP/SL	FR/SS/SP/SEXP					

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

139-042-06

Permit #: **30002589** GWS File #: **7262B** Tax Parcel #: **139-041-13**

- 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):** 10/22/2012

Type of Installation: Residential - New System Lot Number: 5

Structure Type: HOUSE Size (ft^2): 4054 # Bedrooms: ~~4~~ 5 # Occupants: 5

Building Foundation: Basement With Plumbing Water Supply: Private Well

II. Initial System Type: Pump to Innovative **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd):	600	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1500	Total Trench Length (ft):	500
Maximum Trench Depth (in):	30	Depth of Media (in):	N/A	Distribution Device:	Pressure Manifold		

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd):	600	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	999	Total Trench Length (ft):	333
Maximum Trench Depth (in):	30	Depth of Media (in):	N/A	Distribution Device:	Pressure Manifold		

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: David Cornelius Owner/Legal Agent: Mark Witte

Signature: Signature:

Print Name

Date Issued: 10/22/2007

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NC DENR
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: **30002589** GWS File #: **7262B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.
- Trench bottom must be at 30", past unsuitable saprolite as indicated on backhoe pit soil report.

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: David Cornelius

Signature: _____

Date Issued: 10/22/2007

Owner/Legal Agent: MARK WITTE

Print Name

Signature: _____

FEE: 300.00

DATE: 10/25/2007

CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

MECKLENBURG COUNTY

GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 7262B

PERMIT NUMBER: 30002589

PARCEL NUMBER: 13904206

JOB LOCATION INFORMATION

ADDRESS: 8020 WILSON RIDGE LN

CITY: CHARLOTTE **STATE: NC** **ZIP:** 28227

ISSUED TO: ARLINGTON HILLS OF MINT HILL LLC

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 10/25/2007

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30002589, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN INSTALLATION APPROVAL MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH THE MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.
   *CONSTRUCTION AUTHORIZATION EXPIRATION DATE: 10/22/2012

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700 N. Tryon St., Suite 211 Charlotte, NC 28202
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NC DENR
Division of Environmental Health
On-Site Wastewater Section

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

File #: 72628 Permit #: _____ Tax Parcel #: 139-042-06

Property Owner: TOUCHSTONE HOMES

Job Location Address: 8020 WILSON RIDGE RD. LOT #5

City: CHARLOTTE State: NC Zip Code: 28227

Installation Approval Issuance Date: 2/20/08

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 3/20/08, 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: 600 GPD

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

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Drainfield Design ☐ N/A INNOVATIVE 25% REDUCTION

Trench Depth: 30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 500 feet

# of Lines: 4 @ 125 feet

Depth of Media: N/A inches (Type) IIIbog

Distribution Device: PRESSURE MANIFOLD

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 _____

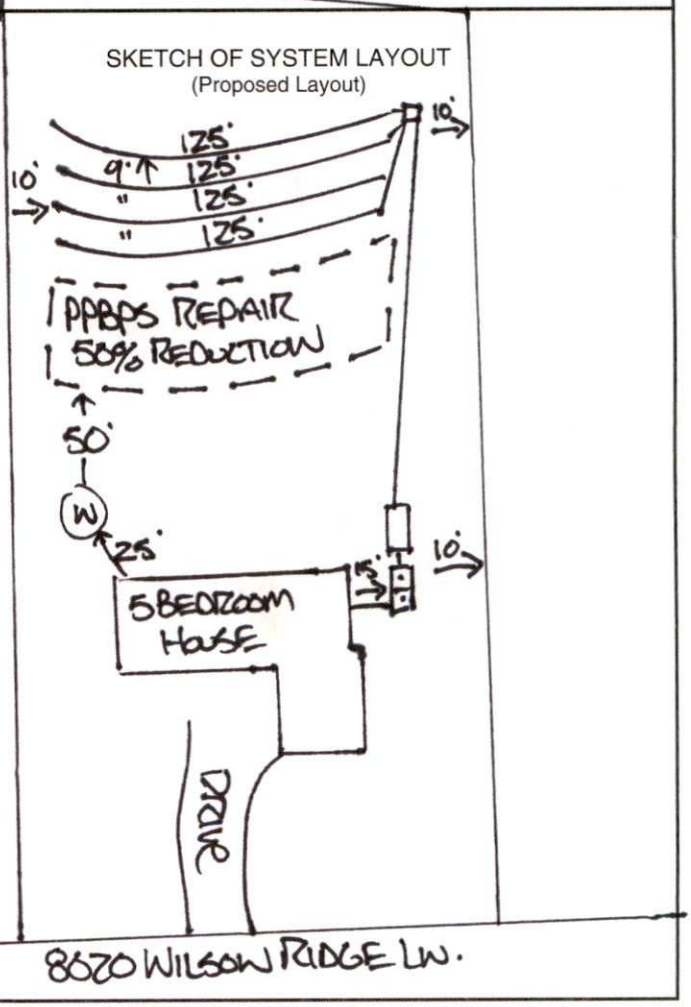
Minimum System Setbacks

Distance from Building Foundation: 15 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 750 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)



Comments: System Classification & Type: IIIbog, INNOVATIVE, 25% REDUCTION. INSTALL 4 LINES @ 125' ea. KEEP SYSTEM > 50' FROM PROPOSED WELL.

DENR Authorized Agent: DAVID CORNELIUS, RS Signature: David Cornelius, RS

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On-Site Wastewater Section

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

File #: 7262B Permit #: _____ Tax Parcel #: 139-042-06

Property Owner: TOUCHSTONE HOMES

Job Location Address: 8020 WILSON RIDGE RD. LOT #5

City: CHARLOTTE State: NC Zip Code: 28227

Operation Permit Issuance Date: 2/21/08 Contractor Name: WJ NORWOOD

Permitted Design Flow: 600 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Effluent Pump Model: LIBERTY 0.5 HP

Drainfield Installation ☐ N/A INNOVATIVE 25% REDUCTION CHAMBERS

Trench Depth: 30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 500 feet

# of Lines: 4 @ 125 feet

Depth of Media: N/A inches (Type) IIIb,g

Depth of Cover: 15 inches

Distribution Device: PRESSURE MANIFOLD

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: 15 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 750 feet

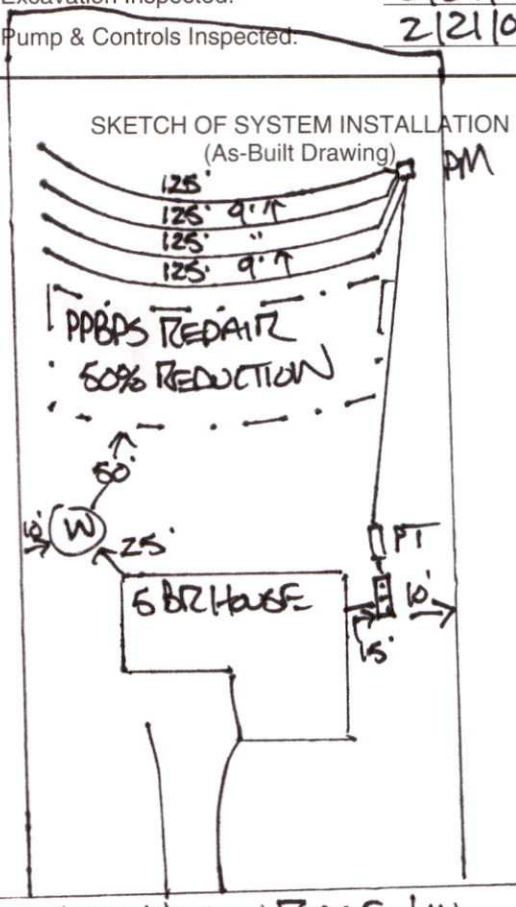
Inspection Dates

Tank(s) Inspected: 2/21/08

Excavation Inspected: 2/21/08

Pump & Controls Inspected: 2/21/08

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



8020 WILSON RIDGE LN.

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: IIIbg, INNOVATIVE, 25% REDUCTION, CHAMBERS.
4 LINES INSTALLED @ 125' ea. 750' FROM WELLS

DENR Authorized Agent: DAVID CORNELIUS, RS Signature: DAVID CORNELIUS, RS

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NC DENR
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On-Site Wastewater Section

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

File #: 7262B Permit #: _____ Tax Parcel #: 139-042-06

Property Owner: TOUCHSTONE HOMES

Job Location Address: 8020 WILSON RIDGE RD. LOT #5

City: CHARLOTTE State: NC Zip Code: 28227

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: IIIbg

*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:

_____

_____

_____

_____

DENR Authorized Agent: DAVID CORNELIUS, PE Date: 2/21/08

Signature: _____