8705B

MECKLENBURG COUNTY
HEALTH DEPARTMENT

App#6156

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: 19521344
STREET ADDRESS: 6401 Northern Red Oak Dr.
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION NAME: Farrington Oaks
LOT #: 113 LOT SIZE (acres): .36011
TOWNSHIP:
● MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ● MINT HILL

4. BUILDING INFORMATION:

BUILDING TYPE:
● SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
● HOUSE ○ OTHER _____
HEATED SQUARE FOOTAGE: 3600
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 6
FOUNDATION TYPE:
○ CONCRETE SLAB ○ BASEMENT WITH PLUMBING
● CRAWL SPACE ○ BASEMENT 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: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ● MUNICIPAL ○ PRIVATE WELL ● PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. PROPOSED USE OF WELL: ● N/A ● IRRIGATION ○ POTABLE (DRINKING WATER) ● OTHER modified

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: 1 2 ___ ___ 3

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: True Homes
ADDRESS: 2649 Brehonridge Centre Dr.
CITY: Monroe
STATE: NC ZIP: 28110
WORK PHONE: 704-238-1229
MOBILE PHONE: _____
FAX: 910-401-1349
E-MAIL: MSturdivant@truehomesusa.com

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:

NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

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. MS. (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. A PROPOSED PLOT PLAN is required to be submitted with each application.

Property Owner's or Owner's Legal Representative Signature

4-17-13
Date

OFFICE USE ONLY

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

SEPTIC APPLICATION FEE RECEIVED: $ 250 DATE FEE RECEIVED: 4/23/13

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

APPLICATION PROCESSED BY: lwz

GWS FILE NUMBER ASSIGNED: 8705B

APPLICATION ID NUMBER ASSIGNED: 6156

COMMENTS:

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

Revised on: 12/15/10

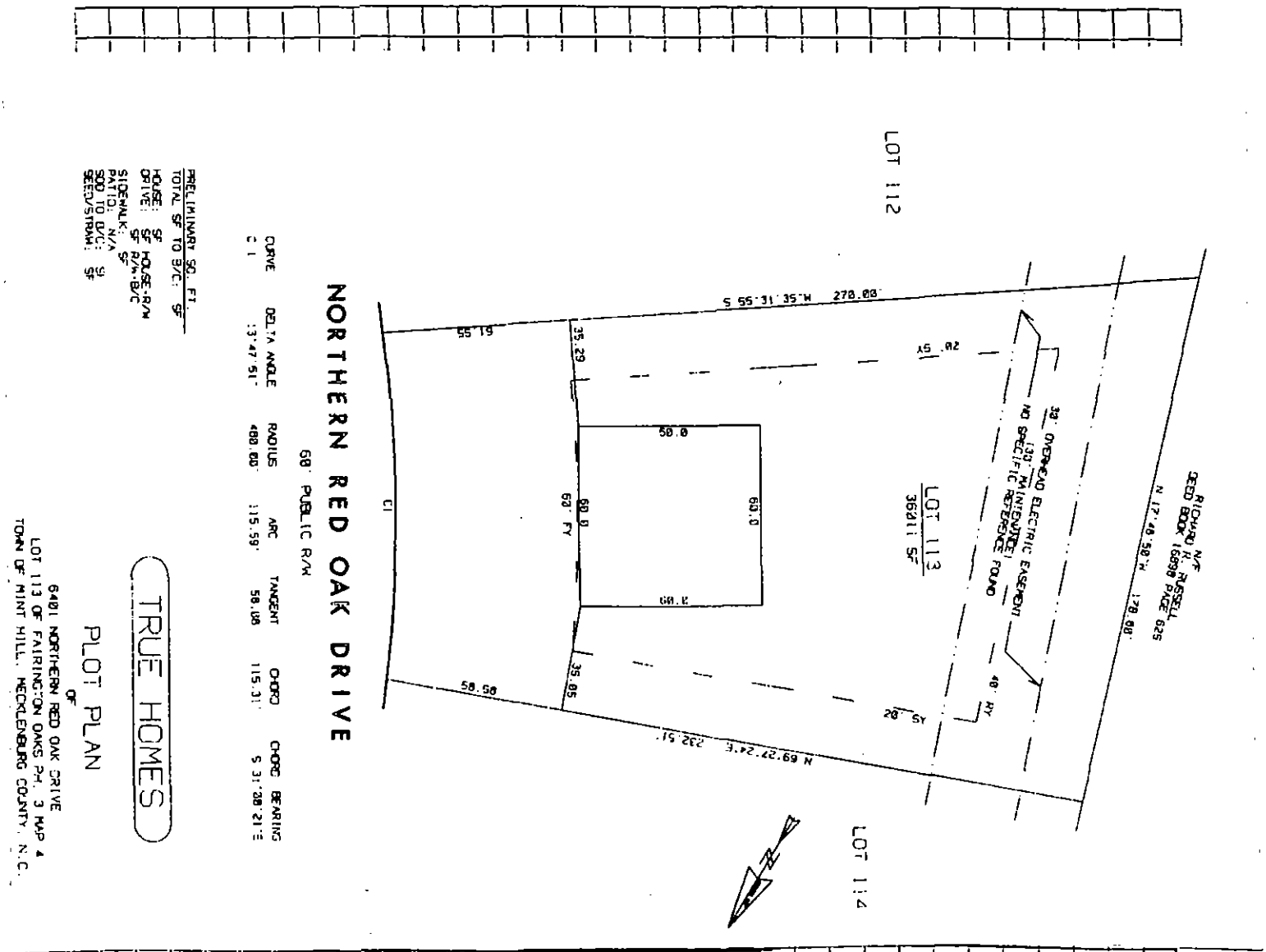
File #: _____

PROPOSED PLOT PLAN

A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

Street Address: 6401 Northern Red Oak Dr. Tax Parcel #: 19521344

Subdivision Name: Farrington Oaks Lot #: 113



Michelle Stansbury 4.17.13

Property Owner's or Owner's Legal Representative Signature — Date

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 #: 30006156 GWS File #: 8705B Tax Parcel #: 195-213-44

- 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):** 5/30/2018

Type of Installation: Residential - New System Lot Number: 113

Structure Type: HOUSE *Size (ft^2):* 3600 # Bedrooms: 4 # Occupants: 6

Building Foundation: Crawl Space Water Supply: Municipal

II. Initial System Type: PPBPS (gravity) **System Classification:** IIIe

Initial System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.275	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	873	Total Trench Length (ft):	291
Maximum Trench Depth (in):	36	Depth of Media (in):	N/A	Distribution Device:	Drop Boxes		

III. Repair System Type: PPBPS (gravity) **System Classification:** IIIe

Repair System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.275	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	873	Total Trench Length (ft):	291
Maximum Trench Depth (in):	36	Depth of Media (in):	N/A	Distribution Device:	Drop Boxes		

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: Philo Walker Owner/Legal Agent: Jackie Dracup
Print Name

Signature: Philo Walker REHS Signature:

Date Issued: 5/30/2013

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 #: 30006156 GWS File #: 8705B

IV. Permit Conditions/Comments:

- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- Flow from all gutters and downspouts shall be directed not to discharge water onto or across any part of the septic system.
- Foundation drains shall be constructed not to discharge water onto or across any part of the septic system.
- *The septic system shall be located at least 10 feet from any foundation drain.*

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- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Philo Walker
Signature: Philo Walker REHS
Date Issued: 5/30/2013

Owner/Legal Agent: Jackie Draup
Print Name
Signature: Jackie Draup

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 #: **30006156** GWS File #: **8705B** Tax Parcel #: **195-213-44**

- 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.

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Type of Installation: Residential - New System Lot Number: 113

Structure Type: HOUSE Size (ft^2): 3600 # Bedrooms: 4 # Occupants: 6

Building Foundation: Crawl Space Water Supply: Municipal

II. Initial System Type: PPBPS (gravity) **System Classification:** IIIe

Initial System Specifications:

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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: Philo Walker Owner/Legal Agent: _____
Print Name

Signature: Philo Walker REHS Signature: _____

Date Issued: 5/30/2013

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 #: **30006156** GWS File #: **8705B**

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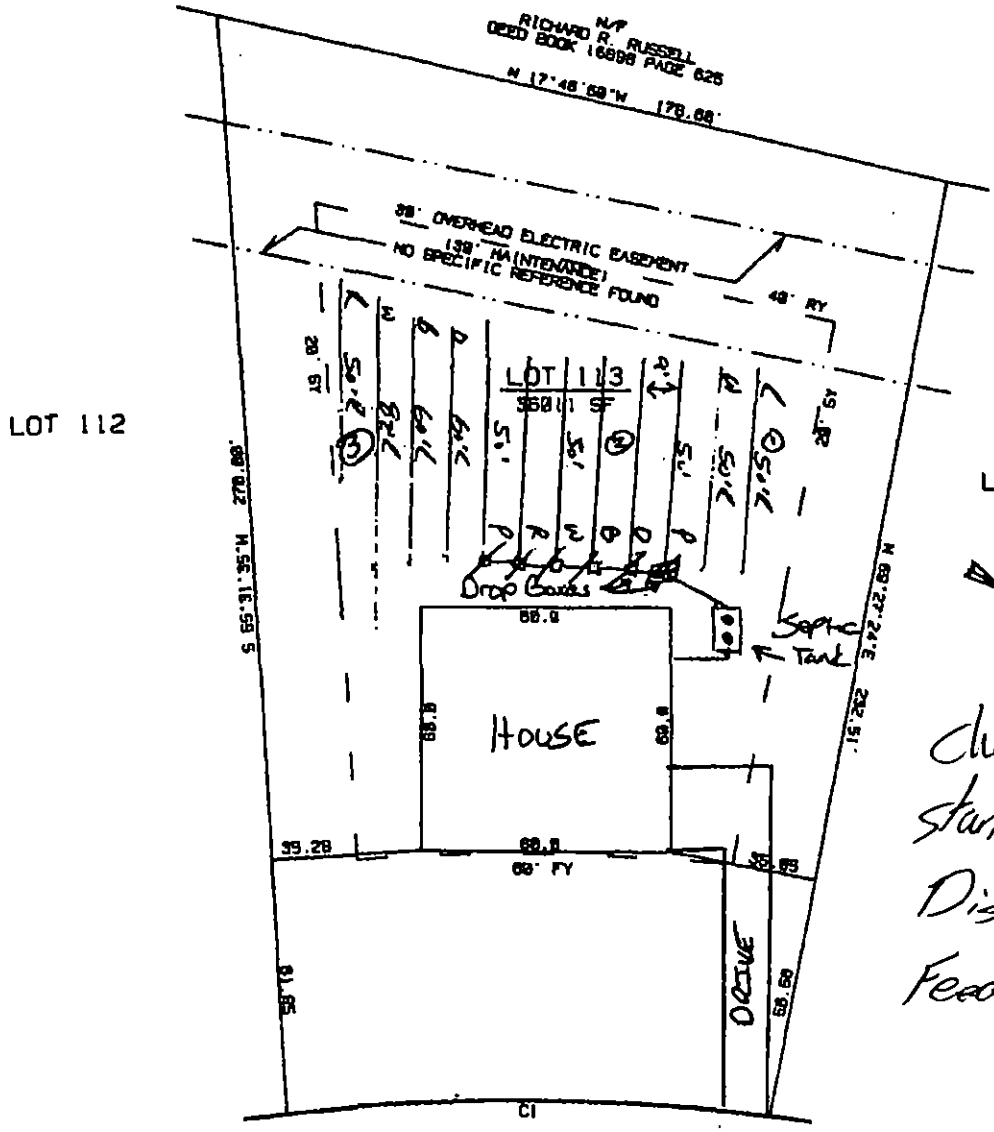
DENR Authorized Agent: Philo Walker

Signature: Philo Walker REHS

Date Issued: 5/30/2013

Owner/Legal Agent: _____
Print Name

Signature: _____



Change to standard Dist. Box Feed equal

NORTHERN RED OAK DRIVE

68' PUBLIC R/W

CURVE	DELTA ANGLE	RADIUS	ARC	TANGENT	CHORD	CHORD BEARING
C 1	13°47'51"	488.68'	119.59'	59.88'	119.31'	S 31°88'21"E

LOT 113 Septic Layout

PRELIMINARY 80. FT.
TOTAL SF TO B/C: SF

HOUSE: SF
DRIVE: SF HOUSE-R/W
SF R/W-B/C
SIDEWALK: SF
PATIO: N/A
SOD TO R/W: SF

TRUE HOMES

This is not a survey

Jacki

THOMPSON ENVIRONMENTAL CONSULTING, INC.
WATER • WASTEWATER • WETLANDS

February 5, 2014

Bradley Hallman
Mecklenburg County Groundwater and Wastewater Services
700 N. Tryon Street, Suite 211
Charlotte, NC 28202

Dear Mr. Hallman,

The purpose of this letter is to inform you that I have performed an inspection of the wastewater treatment and disposal system installed for Lot 113 in the Fairington Oaks subdivision. I am satisfied that the installation meets the intent of the original proposal submitted to your office.

Please feel free to call on me if you have any further questions or concerns regarding this project.

Sincerely,

Larry B. Thompson, Jr.

114 ORCHARD RIDGE ROAD• LOCUST, NC • 28097-8748
PHONE: 704-301-4881 • FAX: 704-888-1496
E-MAIL: LARRY@THOMPSONENV.COM
WEB: WWW.THOMPSONENV.COM

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 #: 8705B Permit #: 6156 Tax Parcel #: 195-213-44

Property Owner: True Homes

Job Location Address: 6401 Northern Red Oak

City: Charlotte State: NC Zip Code:

Operation Permit Issuance Date: 2/4/14 Contractor Name: Chris Stevens

Permitted Design Flow: 480 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: NA gallons

Effluent Pump Model: NA

SFR-338 - 11/21/13

Drainfield Installation ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 300 L. feet

# of Lines: 6 @ 50 feet

Depth of Media: NA inches (Type) PPBPS

Depth of Cover: 12"+ inches

Distribution Device: Dist. Box

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: 10'+ feet

Distance from Property Line: 10'+ feet

Distance from Water Supply Source: 10'+ feet

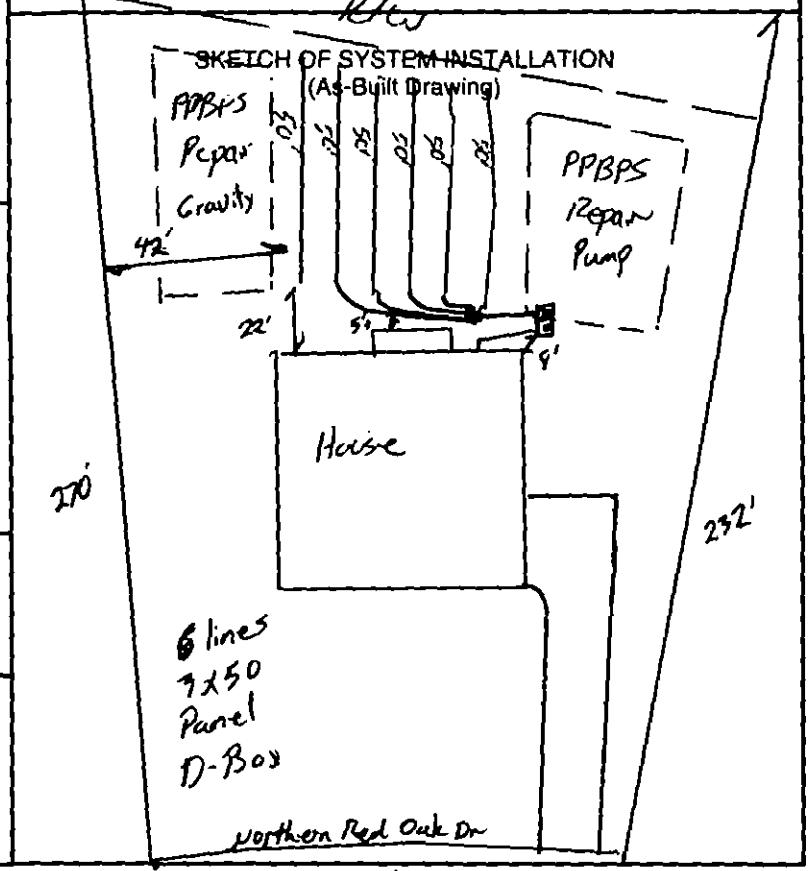
Inspection Dates

Tank(s) Inspected: 2/4/14

Excavation Inspected: 2/4/14

Pump & Controls Inspected: NA

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: IIa / G / NA / NA

DENR Authorized Agent: Bradley W. Hallman 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

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

File #: 8705B Permit #: C156 Tax Parcel #: 195-213-44

Property Owner: True Homes

Job Location Address: 6401 Northern Red Oak

City: _____ State: _____ Zip Code: _____

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: IV gravity

*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: Brad Hallman Date: 2/4/14

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

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

File #: 8705 B Permit #: 6156 Tax Parcel #: 195-213-44

Property Owner: True Homes

Job Location Address: 6401 Northern Red Oak Dr. Lot 113

City: _____ State: _____ Zip Code: _____

Installation Approval Issuance Date: 1/22/14

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: 480 GPD

Site LTAR: .275 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: N/A gallons

Drainfield Design ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 300 feet

# of Lines: 6 @ 50 feet

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

Distribution Device: _____

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' min feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 10' min feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

- Install system per design consultant
- Do not alter or change without prior approval from consultant and MCHD

Comments: System Classification & Type: IV a

Switch from drop boxes to standard distribution box. Confirmed with consultant

DENR Authorized Agent: Bradley W. Hallman Signature: _____

FEE: 200.00
DATE: 1/28/2014

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

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 8705B

PERMIT NUMBER: 30006156

PARCEL NUMBER: 19521344

JOB LOCATION INFORMATION

ADDRESS: 6401 NORTHERN RED OAK DR

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

ISSUED TO: True Homes

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 5/30/2013

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30006156, 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: 5/30/2018

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

Sheet: 1 of 2
Property ID: 195-213-44
Lot #: 113
File #: 8705B
AppID: 6156

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: True Homes
Address: 2649 Brekonridge Centre Dr, Monroe, NC 28110
Proposed Facility: 4BR Home
Design Flow (.1949): 480 GPD
Location of Site: 6401 Northern Red Oak Dr, Mint Hill, NC 28227
Water Supply: [X] Public [ ] Individual [ ] Well
Evaluation Method: [X] Auger Boring [X] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Applicant: True Homes
Date Evaluated: 5/7/2013
Property Size: 36,011 SQ FT
Property Recorded: Unknown
[ ] Spring [ ] Other
[ ] Cut
[ ] 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	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Boring #1	LS 4%	0 - 3 3 - 51	wfgr L mmsbk C	SS SP FR SEXP S P FR SEXP	>51"	51	NA	S	YBR mottles from 46 - 51"	PS IV 0.3	36"
Pit #2	LS 6%	0 - 3 3 - 28 28 - 50	wfgr L mmsbk C wmsbk C	SS SP FR SEXP S P FR SEXP S P FR SEXP	>50"	50	NA	S	YBR mottles and and quartz gravel from 28 - 50"	PS IV 0.275	36"
Boring #3	LS 4%	0 - 14 14 - 38 38 - 50	wfsbk CL mmsbk C wmabk C	S SP FR SEXP S P FR SEXP S P FR SEXP	10 YR 7/1 @ 44"	50	NA	S	YBR mottles from 34 - 50"	PS IV 0.275	31"
Pit #4	LS 6%	0 - 3 3 - 32 32 - 50	wfgr L wmsbk C wfsbk C	SS SP FR SEXP S P FR SEXP SS SP FR SEXP	>50"	50	NA	S	YBR mottles from 20 - 32" quartz gravel from 32 - 50"	PS IV 0.275	36"
Pit #5	LS 5%	0 - 15 15 - 32 32 - 50	wfsbk CL mmsbk C wmabk C	S SP FR SEXP S P FR SEXP S P FR SEXP	10 YR 7/1 @46"	50	NA	S	YBR mottles from 20 - 32" water seeping into pit @ 40"	PS IV 0.275	32"
Pit #6	LS 5%	0 - 5 5 - 43 43 - 50	wfgr L mmsbk C wfsbk C	SS SP FR SEXP S P FR SEXP S P FR SEXP	>50"	50	NA	S	YBR mottles from 43 - 50" water seeping into pit @ 43"	PS IV 0.275	36"

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR (gpd/sq ft)	0.275	0.275

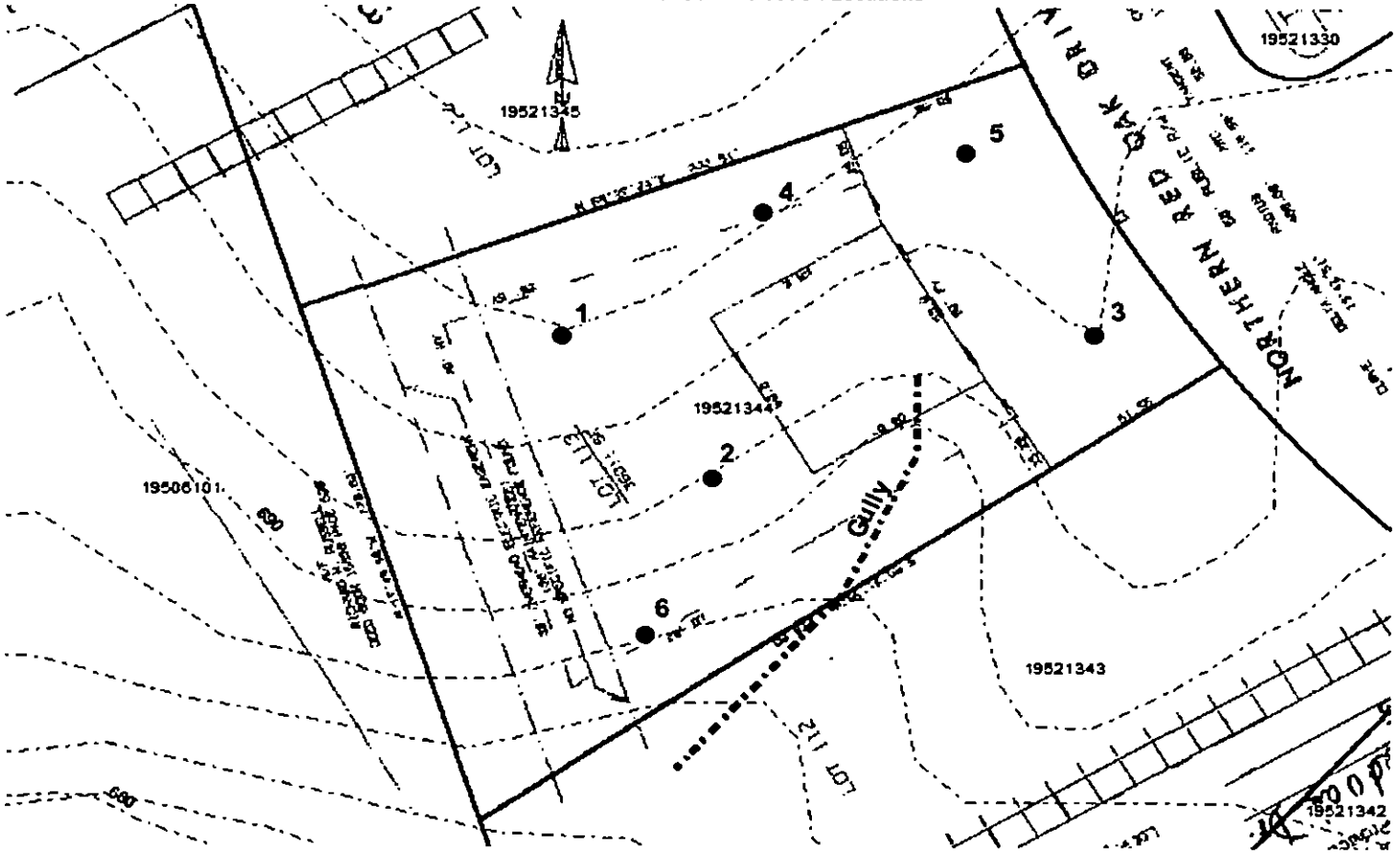
Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:

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		mass-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		**Structure Prefixes**
D-Drainage Way		SCL-Sandy Clay Loam		w-weak
		SiL-Silt Loam		m-moderate
				s-strong
				f-fine
	IV	SC-Sandy Clay	0.4 - 0.1	m-medium
		SiC-Silty Clay		c-coarse
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	SS-Slightly Sticky	SEXP-Slightly Expansive
FR-Friable	S-Sticky	EXP-Expansive
FI-Firm	VS-Very Sticky	
VFI-Very Firm	NP-Non-Plastic	**Classification**
EFI-Extremely Firm	SP-Slightly Plastic	US-Unsuitable
	P-Plastic	PS-Provisionally Suitable
	VP-Very Plastic	S-Suitable
		NA-Not Applicable

Sketch of Soil Evaluation Locations



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

Sheet: 1 of 2
Property ID: 195-213-44
Lot #: 113
File #: 8705B
AppID: 6156

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: True Homes
Address: 2649 Brekonridge Centre Dr, Monroe, NC 28110
Proposed Facility: 4BR Home
Design Flow (.1949): 480 GPD
Location of Site: 6401 Northern Red Oak Dr, Mint Hill, NC 28227
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

Applicant: True Homes
Date Evaluated: 5/7/2013
Property Size: 36,011 SQ FT
Property Recorded: Unknown

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	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Boring #1	LS 4%	0 - 3	wfgr L	SS SP FR SEXP					YBR mottles	PS IV	
		3 - 51	mmsbk C	S P FR SEXP	>51"	51	NA	S	from 46 - 51"	0.3	36"
Pit #2	LS 6%	0 - 3	wfgr L	SS SP FR SEXP					YBR mottles and		
		3 - 28	mmsbk C	S P FR SEXP	>50"	50	NA	S	and quartz gravel	PS IV	36"
		28 - 50	wmsbk C	S P FR SEXP					from 28 - 50"	0.275	
Boring #3	LS 4%	0 - 14	wfsbk CL	S SP FR SEXP							
		14 - 38	mmsbk C	S P FR SEXP	10 YR 7/1	50	NA	S	YBR mottles	PS IV	31"
		38 - 50	wmabk C	S P FR SEXP	@ 44"				from 34 - 50"	0.275	
Pit #4	LS 6%	0 - 3	wfgr L	SS SP FR SEXP					YBR mottles		
		3 - 32	wmsbk C	S P FR SEXP	>50"	50	NA	S	from 20 - 32"	PS IV	36"
		32 - 50	wfsbk C	SS SP FR SEXP					quartz gravel	0.275	
									from 32 - 50"		
Pit #5	LS 5%	0 - 15	wfsbk CL	S SP FR SEXP					YBR mottles		
		15 - 32	mmsbk C	S P FR SEXP	10 YR 7/1	50	NA	S	from 20 - 32"	PS IV	32"
		32 - 50	wmabk C	S P FR SEXP	@46"				water seeping into		
									pit @ 40"	0.275	
Pit #6	LS 5%	0 - 5	wfgr L	SS SP FR SEXP					YBR mottles		
		5 - 43	mmsbk C	S P FR SEXP	>50"	50	NA	S	from 43 - 50"	PS IV	36"
		43 - 50	wfsbk C	S P FR SEXP					water seeping into	0.275	
									pit @ 43"		

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR (gpd/sq ft)	0.275	0.275

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

COMMENTS:

Sheet: 2 of 2
File #: 8705B
AppID: 6156

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		mass-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		**Structure Prefixes**
D-Drainage Way		SCL-Sandy Clay Loam		w-weak
				m-moderate
		SiL-Silt Loam		s-strong
				f-fine
	IV	SC-Sandy Clay	0.4 - 0.1	m-medium
		SiC-Silty Clay		c-coarse
		C-Clay		

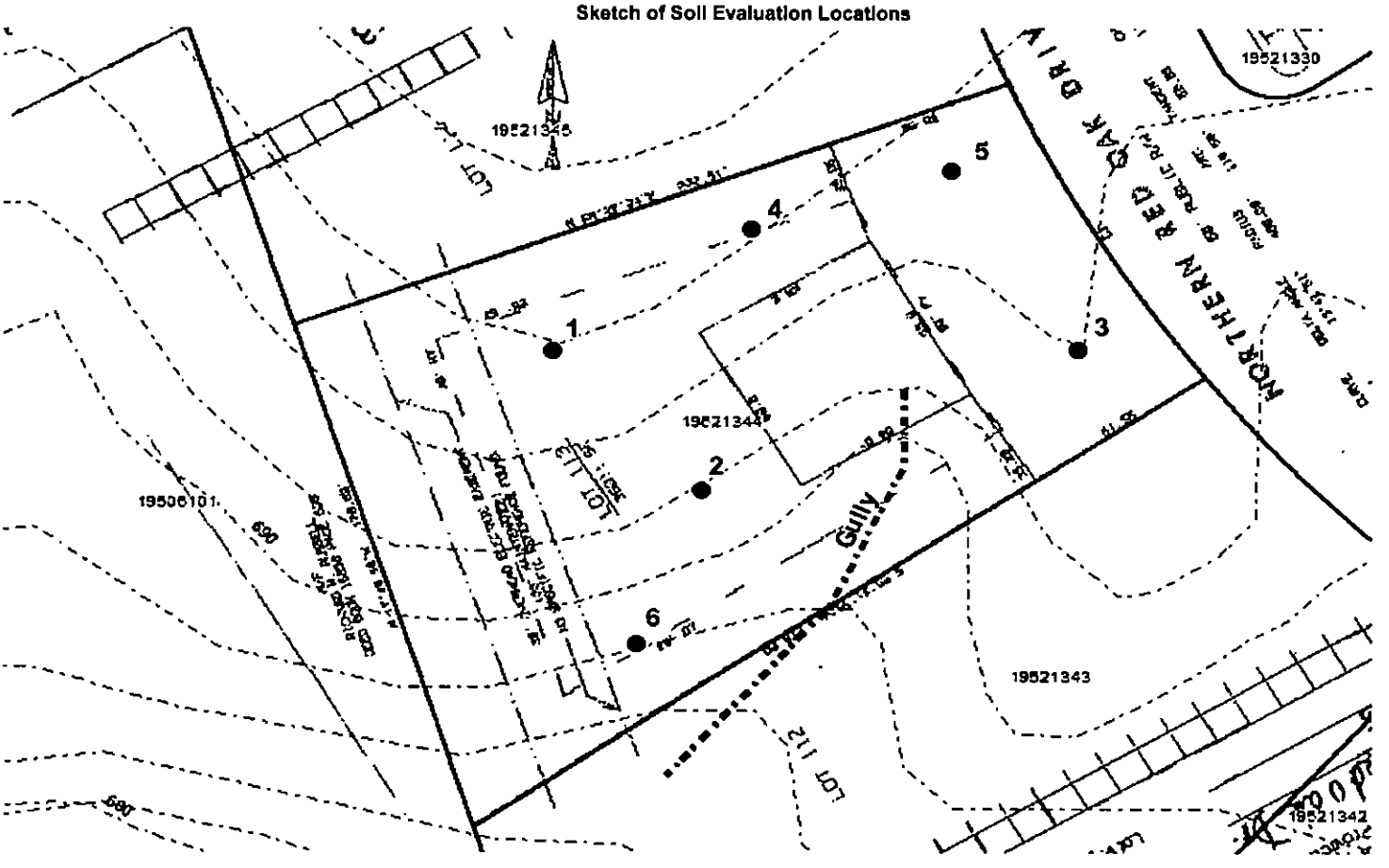
Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

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

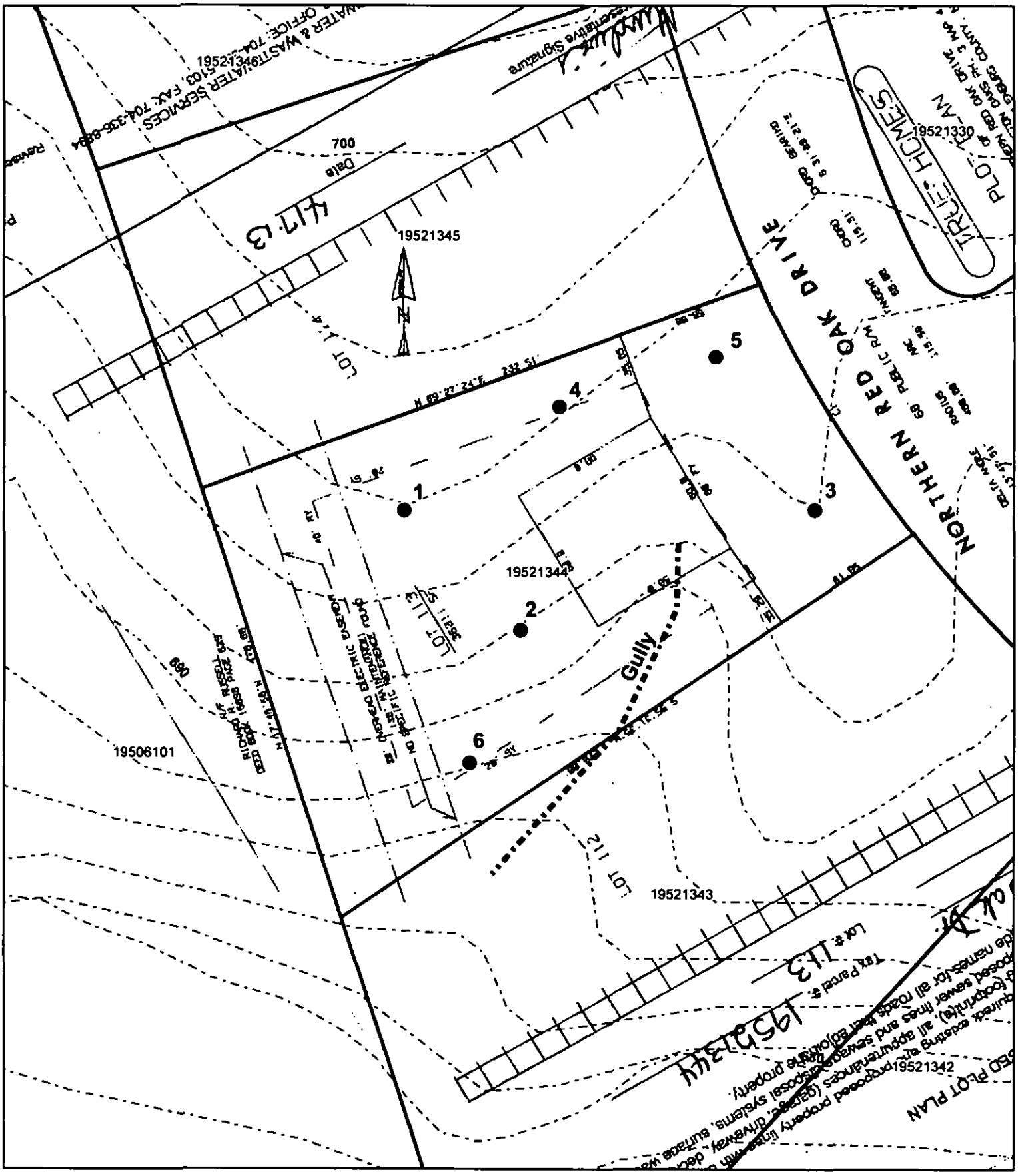
Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Classification
US-Unsuitable
PS-Provisionally Suitable
S-Suitable
NA-Not Applicable

Sketch of Soil Evaluation Locations



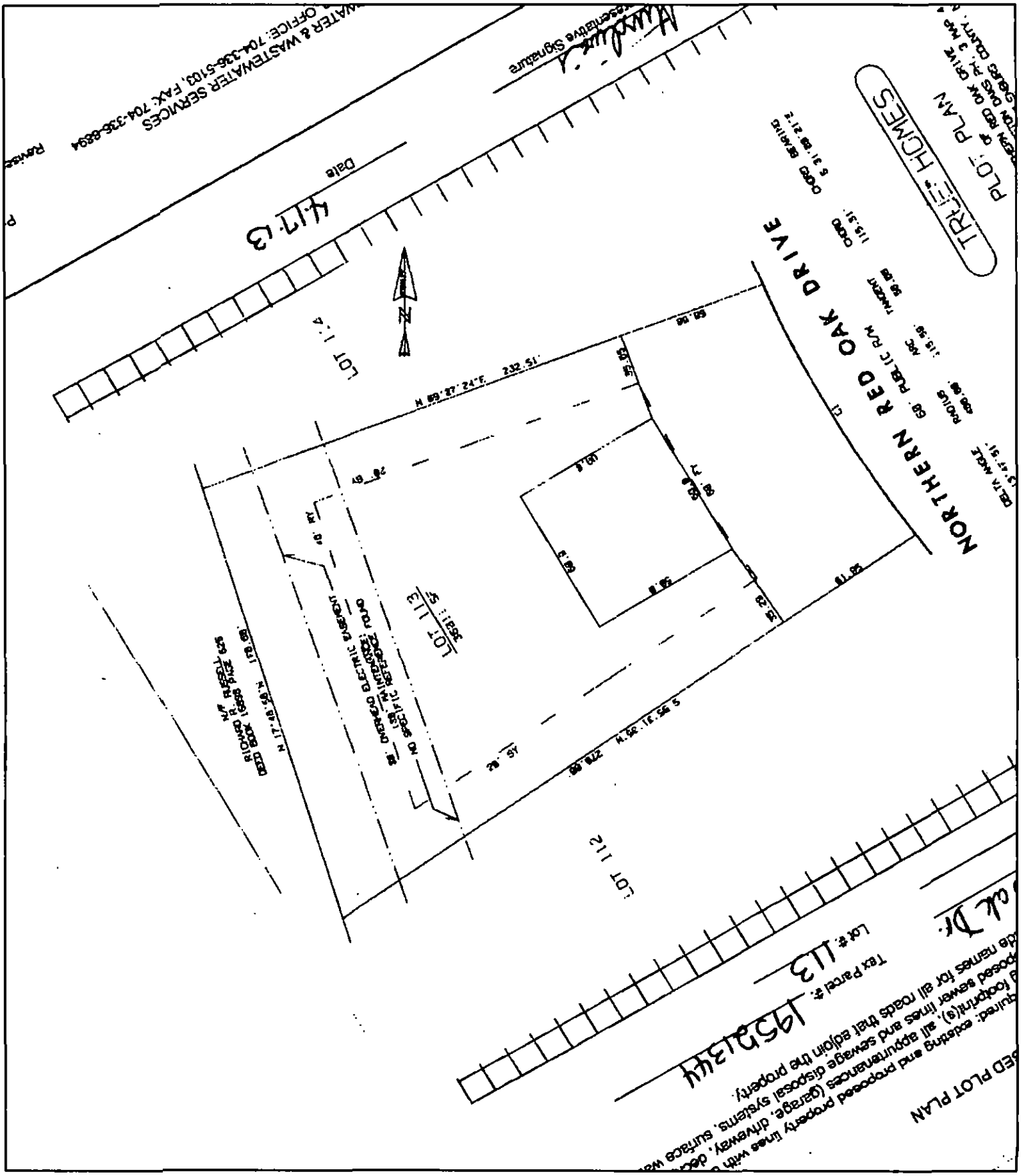
PARCEL #: 195-213-44
WASPS APPLICATION #: 6156



Map Created By: J. Presley
Map Created On: 05/08/2013

0 25 50 Feet

PARCEL #: 195-213-44
WASPS APPLICATION #: 6156



Map Created By: J. Presley
Map Created On: 05/08/2013

0 25 50
Feet

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

Sheet: 1 of 3
Property ID: 195-212-04
Lot #: 83
File #: 5641B
AppID: 6158

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: True Homes
Address: 2649 Brekonridge Centre Dr, Monroe, NC 28110
Proposed Facility: 4BR Home — Design Flow (.1949): 480 GPD
Location of Site: 13325 Fairington Oaks Dr, Mint Hill, NC 28227
Water Supply: [X] Public [ ] Individual [ ] Well
Evaluation Method: [X] Auger Boring [X] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Applicant: True Homes
Date Evaluated: 5/7/2013
Property Size: 1.214 ac
Property Recorded: Unknown
[ ] Spring [ ] Other
[ ] Cut
[ ] 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	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Pit #1	LS 8%	0 - 3	wfgr L	SS SP FR SEXP	10 YR 7/2 @ 43"	48	NA	PS	3 & 4 chroma mottles from 35 - 48" water seeping into pit @ 40"	PS IV 0.25	28"
		3 - 35	mmsbk C	S P FR SEXP							
		35 - 48	wmsbk C	S P FR SEXP							
Boring #2	LS 7%	0 - 4	wfgr L	SS SP FR SEXP	10 YR 7/2 @ 41"	48	NA	PS	3 & 4 chroma mottles from 34 - 48"	PS IV 0.25	26"
		3 - 34	mmsbk C	S P FR SEXP							
		34 - 48	wfsbk C	S P FR SEXP							
Pit #3	LS 10%	0 - 3	wfgr L	SS SP FR SEXP	10 YR 7/2 @ 29"	48	NA	PS	3 & 4 chroma mottles from 24 - 48"	PS IV 0.225	13" (Need Cover)
		3 - 28	mmsbk C	S P FR SEXP							
		28 - 48	wmsbk C	S P FR SEXP							
Pit #4	LS 8%	0 - 3	wfgr L	SS SP FR SEXP	10 YR 7/2 @ 44"	48	NA	PS	3 & 4 chroma mottles from 18 - 48" water seeping into pit @ 20"	PS IV 0.25	29"
		3 - 24	mmsbk C	S P FR SEXP							
		24 - 48	wmsbk C	S P FR SEXP							
Pit #5	LS 5%	0 - 13	wfsbk CL	SS SP FR SEXP	10 YR 7/2 @ 40"	48	NA	PS	3 & 4 chroma mottles from 36 - 48" water seeping into pit @ 36"	PS IV 0.25	26"
		13 - 36	mmsbk C	S P FR SEXP							
		36 - 48	wmabk C	S P FR SEXP							

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	IIIe	IIIe
Site LTAR (gpd/sq ft)	0.225	0.225

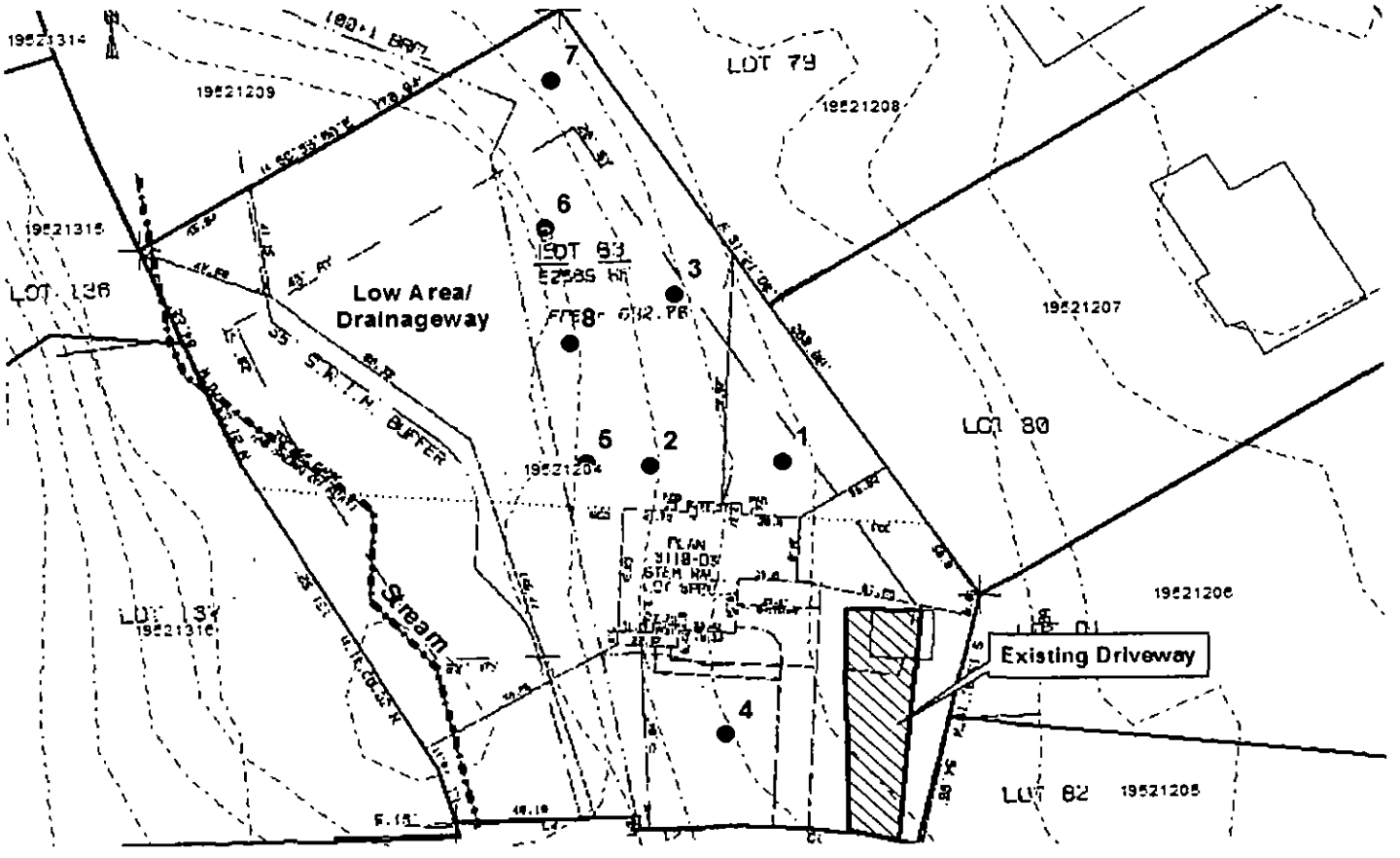
Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present:
Site Classification (.1948):PS
Site Evaluation By: Pete Walker REHS
Others Present:

COMMENTS:
Lots of lateral water flow into pits. Rain event 2 days before.

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		mass-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		CL-Clay Loam		**Structure Prefixes**
FP-Flood Plain		SCL-Sandy Clay Loam		w-weak
D-Drainage Way		SiL-Silt Loam		m-moderate
				s-strong
				f-fine
	IV	SC-Sandy Clay	0.4 - 0.1	m-medium
		SiC-Silty Clay		c-coarse
		C-Clay		

Consistence	Consistence	Mineralogy
Moist	**Wet**	SEXP-Slightly Expansive
VFR-Very Friable	SS-Slightly Sticky	EXP-Expansive
FR-Friable	S-Sticky	
FI-Firm	VS-Very Sticky	**Classification**
VFI-Very Firm	NP-Non-Plastic	US-Unsuitable
EFI-Extremely Firm	SP-Slightly Plastic	PS-Provisionally Suitable
	P-Plastic	S-Suitable
	VP-Very Plastic	NA-Not Applicable

Sketch of Soil Evaluation Locations



GWS Septic System Design Review

GWS File #: 8705B Approved ☐ Disapproved ☐

Design Review: ☑

Field Review: ☑

*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.

Residential Subsurface Wastewater Treatment and Disposal System Proposal

for

Fairington Oaks – Lot 113
Mint Hill, North Carolina

Tax Parcel # 195-213-44
MCGWS File # 8705B
May 20, 2013

Prepared for:

True Homes
2649 Brekonridge Centre Drive
Monroe, NC 28110
704-238-1229

LICENSED SOIL SCIENTIST
LARRY B. THOMPSON JR.
1287
STATE OF NORTH CAROLINA

Prepared by:

Larry Thompson, REHS, PWS, LSS
Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541
Phone: 704-301-4881
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larry@thompsonenv.com

NORTH CAROLINA
REGISTERED
SEAL
1208
ENVIRONMENTAL HEALTH SPECIALIST
LARRY B. THOMPSON JR.

cc: Mr. Philo Walker, REHS
Mecklenburg County Environmental Health

Details

True Homes has contracted with Thompson Environmental Consulting, Inc. (TEC) to develop a proposal for an on-site wastewater treatment and disposal system that would allow for the construction of a 4-bedroom single family residence served by a municipal water supply to be located at Lot 113 in the Fairington Oaks subdivision, Mint Hill, North Carolina.

Based upon an investigation performed by TEC it was determined that a sufficient amount of "Suitable" Group IV soils are available on this property for the installation of a gravity flow prefabricated porous block panel system (PPBPS). The proposed repair system would be a gravity flow PPBPS.

True Homes requests that Mecklenburg County Groundwater and Wastewater Services (MCGWS) consider issuing an Improvement Permit and Construction Authorization for a 4-bedroom residence to be located on Lot 113 based upon the following proposal.

Location

The subject property is located on Fairington Oaks Drive in Mint Hill, North Carolina. From downtown Charlotte, travel east on NC 24-27 approximately 10 miles. Turn left onto NC 51 and take a right onto Matthews-Mint Hill Road. Turn right onto Idlewild Road and left onto Thompson Road. Travel approximately 1.1 miles and turn left onto Fairington Oaks Drive and left onto Northern Red Oak Drive. Lot 113 is located on the right.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, August 2007.

Onsite Wastewater Treatment and Disposal Systems; EPA 625/R-00/008 Design Manual, February 2002.

Design, Installation and Maintenance of the T & J Panel Wastewater Treatment System; Sixth Edition, published by T & J Panel.

Primary Investigator's Credentials

NC Registered Sanitarian No. 1208
NC Licensed Soil Scientist No. 1287
Professional Wetland Scientist No. 1346
NC Subsurface Septic System Operator No. 22199
NC Grade IV Wastewater System Installer No. 1762
NC Certified Wastewater System Inspector No. 17621

Plans and Specifications

The following proposal is for a gravity flow PPBPS system that utilizes a ~~distribution box~~ drop boxes for flow equalization.

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1500 gallons in capacity.
2. The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

B. Pipes and Fittings

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.

C. Distribution Method

1. The drainfield will utilize a drop boxes to feed each drainline.

D. Backfill

1. Backfill sand shall be clean, washed, medium sand that is naturally occurring and falls within the gradation of ASTM C-33 specification (used in the ready mix industry and is readily available).

E. Drainfield Installation

1. The drainfield and the proposed septic tank location have been marked on-site utilizing metal stemmed flags. Once this area has been approved by the county, the property owner/builder should mark this area and isolate it as much as possible from construction traffic. Prior to the system installation, the septic contractor shall contact the county for a preconstruction conference at which time the drainfield area will be re-verified.
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition. If the installer has doubts as to whether or not the drain field area is dry enough to begin construction, the environmental health specialist for this area should be contacted for permission to proceed with the installation.
3. The specified system is a Type IIIe pre-fabricated permeable block panel system – specifically the 16 inch high panel system manufactured by T&J Panel

Wastewater Treatment System, Patent No. 4013559; telephone: 1-800-222-2577. The installer must follow the manufacturer's guidelines for installing the T&J Panel System and should request an installation manual from the manufacturer prior to beginning construction.

4. The initial drain field consists of six (6) lateral trenches, each being 3-feet wide by 50-feet in length.
5. It is essential that the lateral trenches be constructed on contour with the land, with each trench being excavated level from beginning to end. The use of a tripod mounted engineer's level is essential to assure that each trench is constructed as level as possible.
6. The maximum trench depth for this system shall be **36 inches**. Each trench shall be placed on a minimum of 9 foot on centers.
7. Once trenches are dug, the side walls shall be raked and a light dusting of lime applied.
8. Backfill the trench with 6 inches of sand and level to grade. Once leveled, place 1 x 4 or 6 inch boards on top of the sand the entire length of each trench. Once the grade boards have been set, the panels may be set into the trench. The panels should be placed 6 inches apart.
9. Once the panels have been set, line the top chamber of each panel with 10 – 12 pounds of clean particle sand (medium sand blasting sand). Coverage depth should be approximately 1 inch thick. *Please note that this sand is not the same material specified for backfill.*
10. Tar seal rope, or approved foam, should be placed in the "U" outs of each end of the panel to form seals. Once the tar rope is in place, the Schedule 40 PVC connectors can be added and the seal completed by the addition of more tar rope on the top and sides of the pipe. Now that the connection and seals are complete, a block cap is placed on each end of the panel so that all openings are covered.
11. Once the panels for each trench have been installed and the top of the panels closed, the trench is ready to be backfilled to the top with the sand used in the trench bottom. At this point, the trenches should be left open for the final inspection by the county environmental health specialist.

F. Final Landscaping

1. The drainfield shall be shaped to shed rainwater and be free from low spots.
2. The entire area of the drainfield should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

G. Utility Conflicts

1. The builder and property owner must take special care in planning for utilities (water, power, gas, telephone, cable lines, etc.). All utilities shall be kept clear of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation.

2. Water lines must be kept at least ten (10) feet from any portion of the septic system.
3. Irrigation systems should not be placed in the drain field area.

Maintenance

H. Operation and Maintenance

The designed system is classified as a Type IIIe wastewater treatment and disposal system and will require periodic maintenance.

1. The septic should be pumped/cleaned out when the solids within the tank reach an elevation that is equivalent to 25% of the volume of the tank. In some situations, the tanks may need to be pumped more frequently; for example, if you are using a garbage disposal, it is recommended that the septic and pump tanks be cleaned out annually (TEC recommends that a garbage disposal not be used with this system). At a minimum, the septic tank should be cleaned out every 3-5 years. A reputable septic contractor or certified septic inspector can help you establish a pumping frequency after you have been in the home for a few years.
2. The effluent filter should be inspected once per year. When it becomes necessary to clean the effluent filter, the filter should be removed and the accumulated debris washed back into the septic tank – not onto the lawn.
3. The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.
4. Divert surface water runoff away from the septic tank and drainfield area.

I. Suggestions to the Homeowner

1. As previously mentioned, a garbage disposal is not recommended. The ground up garbage adds large amounts of solids into a septic tank that tend to degrade at a very slow rate.
2. Grease, cooking oils, coffee grounds and non-degradable solids (disposable diapers, cigarettes and solid paper wastes) should never be put into a septic tank.
3. Used motor oil or any oily liquids should not be disposed of in a septic tank.
4. Be aware of the amount of water that you are using in your home. Water saving fixtures and devices can be installed on sinks, toilets and showers to reduce the volume of wastewater that you are sending to your drain field.
5. Run dishwashers and washing machines only when you have a full load.
6. Use liquid detergents. Powdered detergents have binding agents in them that tend to solidify in the wastewater disposal system.
7. Repair leaky faucets and toilets. Small drips equal large volumes of water over time and can over burden your drain field.
8. Do not use chemical additives in your system. Studies have indicated that they do not increase the biological activity that naturally occurs in the septic system and in some cases certain additives have been found to be detrimental to the life of a system.

Design Specifics

Daily Design Flow:	480 GPD – 4 bedroom house
Septic Tank Size:	1500 Gallons (2 compartments)
Effluent Loading Rate:	0.275 GPD per sq. ft. (50 % reduction for the PPBPS)
Distribution Method:	Drop Boxes
Number and Size of Drainlines:	(6) 3-Foot Wide x 50-Feet Long
Maximum Trench Depth:	36 Inches Deep
Drainline Spacing:	9 Foot on Centers
Total Length of Drainline:	300 Feet
Number of Panels per Line:	50 Feet = 11 Panels
Total Number of Panels:	66

Repair Specifics

Effluent Loading Rate:	0.275 GPD per sq. ft. (50 % reduction - PPBPS)
Number and Size of Drainlines:	(6) 3' Wide x 50' Long
Maximum Trench Depth:	36 Inches Deep
Drainline Spacing:	9 Foot on Centers
Total Length of Drainline:	300 Feet
Total Number of Panels:	66

* See septic layout for site locations and more details.

PPBPS Design Worksheet							File #:	8705B	
							Tax #:	195-213-44	
System Requirements							Address:	Fairington Oaks - Lot 113	
Design Flow	480	gpd						Charlotte, NC	
LTAR	0.275	gpd/ft.^2	*Design Rate - Not Assigned Rate				Consultant:	Larry Thompson	
Linear footage	582	ft. (conventional)					Phone:	704-301-4881	
Linear footage	291	ft. (50% Reduction)							
							Reviewed By:		
Design Layout							Date:		
Laterals	Length (ft)	# Panels							
Line # 1	50	11							
Line # 2	50	11							
Line # 3	50	11							
Line # 4	50	11							
Line # 5	50	11							
Line # 6	50	11							
Totals	**300**	**66**							
Absorption Area									
Length (ft)	Width (ft)	Area (ft^2)							
300	3	900							
Comments:									
1. Install system using 3 ft. wide trenches.									
2. Install drainlines on 9 ft. centers, level, and on contour.									
3. *100% repair area required for property* (Pressure-Dosed PPBPS).									

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541
704-301-4881

SHEET 1 OF 1

COUNTY: Mecklenburg
TAX ID: 195-213-44

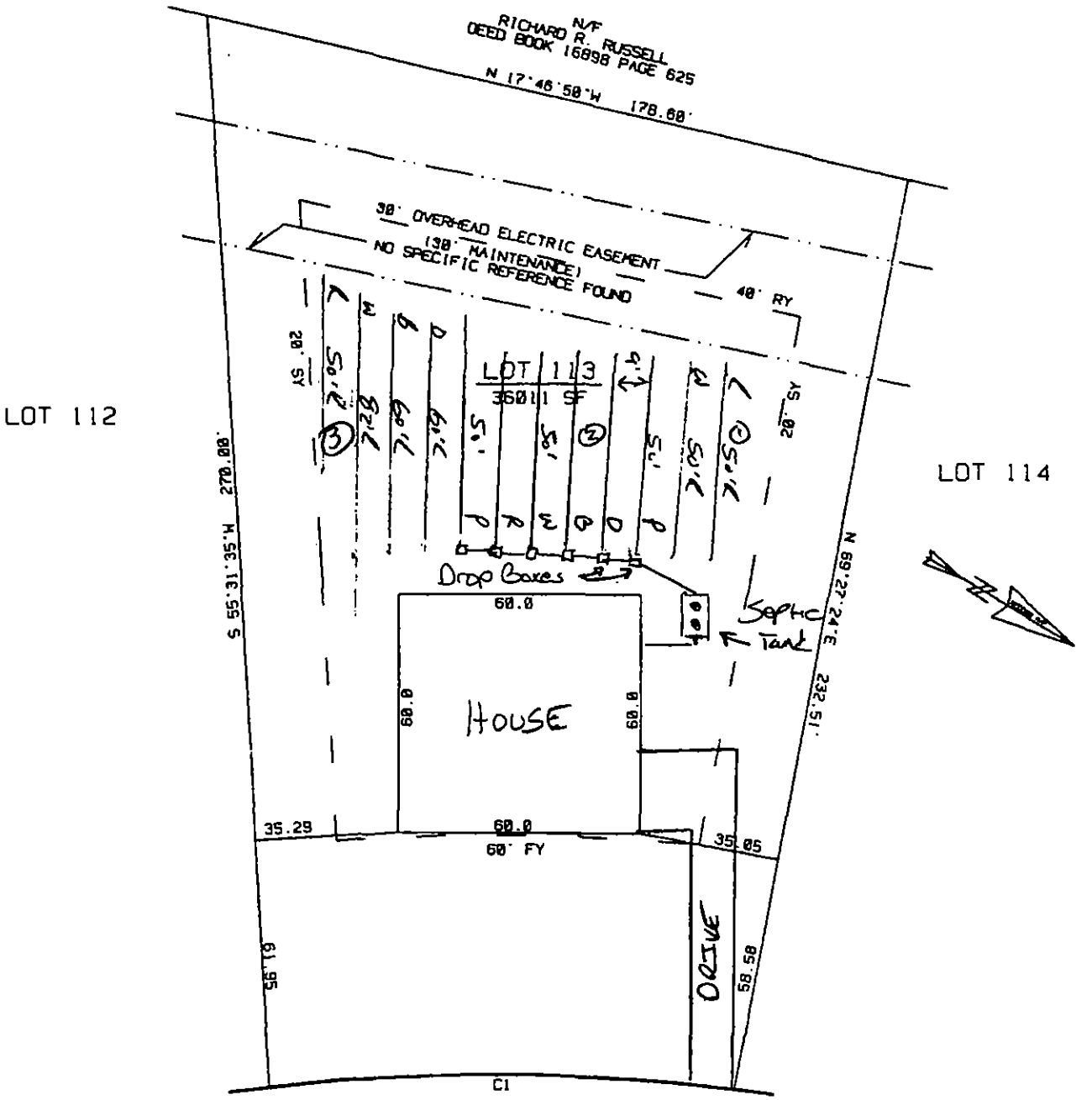
OWNER: True Homes
LOCATION: Fairington Oaks - Lot 113

DATE: May 11, 2013

PROFILES		SB-1	SB-2	SB-3							
LANDSCAPE POSITION	.1940	ls	ls	ls							
SLOPE (%)	.1940	4%	4%	4%							
HORIZON 1 DEPTH	.1943	0-4	0-6	0-5							
TEXTURE	.1941 (a)(1)	l	l	l							
CONSISTENCE	.1941	fr	fr	fr							
STRUCTURE	.1941 (a)(2)	gr	gr	gr							
CLAY MINERALOGY	.1941 (a)(3)	-	-	-							
HORIZON 2 DEPTH	.1943	4-48	6-48	5-48							
TEXTURE	.1941 (a)(1)	c	c	c							
CONSISTENCE	.1941	fi	fi	fi							
STRUCTURE	.1941 (a)(2)	sbk	sbk	sbk							
CLAY MINERALOGY	.1941 (a)(3)	se	se	se							
HORIZON 3 DEPTH	.1943										
TEXTURE	.1941 (a)(1)										
CONSISTENCE	.1941										
STRUCTURE	.1941 (a)(2)										
CLAY MINERALOGY	.1941 (a)(3)										
HORIZON 4 DEPTH	.1943										
TEXTURE	.1941 (a)(1)										
CONSISTENCE	.1941										
STRUCTURE	.1941 (a)(2)										
CLAY MINERALOGY	.1941 (a)(3)										
SOIL WETNESS	.1942										
RESTRICTIVE HORIZON	.1944										
SAPROLITE	.1943/.1956										
CLASSIFICATION	.1948	s	s	s							
L.T.A.R. (gpd/ft^2)	.1955	0.275	0.275	0.275							

OTHER FACTORS (.1946):		**SITE LTAR (gpd/ft^2):**	**0.275**
AVAILABLE SPACE (.1945):	provisionally suitable		
SITE CLASSIFICATION (.1948):	provisionally suitable	SYSTEM TYPE:	PPBPS
EVALUATED BY:	Larry Thompson	OTHERS PRESENT:	

COMMENTS:



NORTHERN RED OAK DRIVE

60' PUBLIC R/W

CURVE	DELTA ANGLE	RADIUS	ARC	TANGENT	CHORD	CHORD BEARING
C 1	13°47'51"	480.00'	115.59'	58.08'	115.31'	S 31°08'21"E

LOT 113 Septic Layout

PRELIMINARY SQ. FT.
TOTAL SF TO B/C: SF

HOUSE: SF
DRIVE: SF HOUSE-R/W
SF R/W-B/C
SIDEWALK: SF
PATIO: N/A
SOD TO B/C: SF

TRUE HOMES

* This is not a survey