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

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

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

File #: 6166B Permit #: 3172 Tax Parcel #: 139-033-32

Property Owner: Live Well Homes

Job Location Address: 9304 Stonebridge Wy

City: Charlotte State: NC Zip Code: 28227

**Operation Permit Issuance Date:** ~~4/17/15~~ 4/20/15 Contractor Name: RCS

Permitted Design Flow: _____ GPD Liquid Capacity of Dosing Tank: 1000 gallons

Liquid Capacity of Septic Tank: 1500 gallons Manufacture Jos STB112/PT71 Effluent Pump Model: Liberty 283 1/2hp

STB 8/4/09 PT 9/29/14

Drainfield Installation ☐ N/A

Trench Depth: 24-30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: _____ feet

# of Lines: 4 @ _____ feet

Depth of Media: NA inches (Type) IVa

Depth of Cover: 12" inches

Distribution Device: Press/Gate values

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' from water line feet

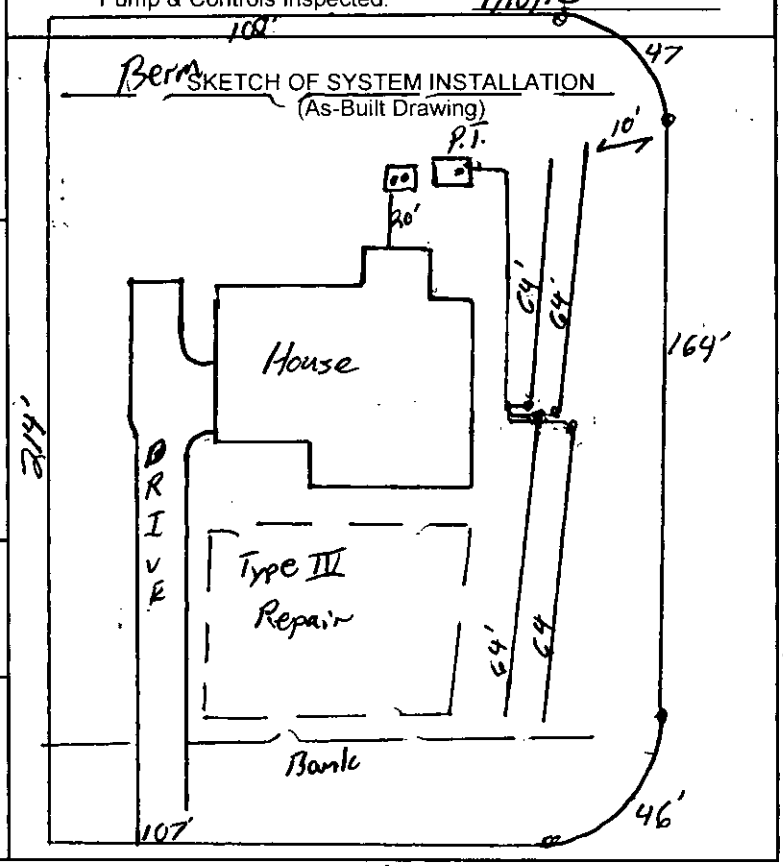
Inspection Dates

Tank(s) Inspected: 4/2/15

Excavation Inspected: 4/2/15

Pump & Controls Inspected: 4/10/15

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: PPBPS/P/NA/NA

DENR Authorized Agent: Bradley W. Hallman Signature: _____

16 x 4

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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 #: 6166B Permit #: 3172 Tax Parcel #: 139-033-32

Property Owner: Live Well Homes

Job Location Address: 9304 Stonebridge

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: _____

*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: Bradley W. Hallman Date: 4/20/15

Signature: _____

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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

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

Permit #: **30003172** GWS File #: **6166B** Tax Parcel #: **139-033-32**

- 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):** 2/1/2013

Type of Installation: Residential - New System Lot Number: 30

Structure Type: HOUSE Size ($ft^2$): 0 # Bedrooms: 4 # Occupants: 8

Building Foundation: Crawl Space Water Supply: Municipal

**II. Initial System Type:** PPBPS (pressurized) **System Classification:** IVa

Initial System Specifications:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Design Flow (gpd): | 480 | 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 ($ft^2$): | 801 | Total Trench Length (ft): | 267 |
| Maximum Trench Depth (in): | 31 | 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): | 480 | 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 ($ft^2$): | 800 | Total Trench Length (ft): | 267 |
| Maximum Trench Depth (in): | 31 | 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: _____
Print Name

Signature: _____ Signature: _____

Date Issued: 2/1/2008

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 #: **30003172** GWS File #: **6166B**

**IV. Permit Conditions/Comments:**

- This type of septic system requires an inspection once every 3 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.
- This type of septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- This Improvement Permit is being issued based on a supplemental soil investigation performed by staff from our office.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- 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.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.
- An effluent filter is required on the pump discharge pipe exiting the pump tank.
- Install according to plans on file submitted by Larry Thompson, 1/23/08. Maintenance contract with certified operator required before CO release.

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: 2/1/2008

Owner/Legal Agent: _____
Print Name

Signature: _____

# Supervisor/Administrative Professional Checklist

**New Septic** ☐ **New Well** ☐ **Use Existing** ☐ **Alteration** ☐ **Modified Plot Plan** ☐

**New Septic Fees Paid:**

IP ($250.00) pd _____ Initials/Date

CA ($200.00) lws 10/15/14 Initials/Date

OP ($200.00) lws 10/15/14 Initials/Date

(CA and OP fees need to be paid before a building permit can be issued)

**New Well Fee Paid:** $550.00 _____ Initials/Date

**Use Existing Fee Paid:** $100.00 _____ Initials/Date

**Alteration Fee Paid:** $300.00 (Total) $200 (If use existing was paid)_____ Initials/Date

**Modified Plot Plan Fee Paid:** $100.00 _____ Initials/Date

Floor plans need to be submitted and reviewed before CA can be issued. ☐ Reviewed ☑ SAM 10/22/14
OK TO ISSUE CA

This site is served by septic and well. Verify each is complete before final hold is released. ☐

Septic file completed. ☐ _____ Well file completed. ☐ _____

Send permit for signature. ☑ Signature received. ☐ _____

This septic system requires a certified operator contract before final hold is released. ☑

Certified operator contract is on file. ☑ SAM 4/2/15

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

# Septic System Pre-Construction Meeting Checklist

File # 6166B App # 3172 Tax Parcel # 139-033-32

Property Owner: Livewell Homes

Job Location Address: 8525 Carly Ln (L.

City: Charlotte State: NC Zip Code: 28227

1. Does System design match facility, flow & wastewater characteristics?

   ☑ YES ☐ NO

   Comments: _____

2. Is there sufficient available space for the septic systems initial and repair areas?

   ☑ YES ☐ NO

   Comments: _____

   _____

3. Can the septic system be installed per the permit conditions and drawing on file?

   ☑ YES ☐ NO

   Comments: _____

   _____

* If "NO" is checked for any of the above the existing permit may need to be revoked.

Permission is hereby given to ☐ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge meeting all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. System shall not be installed while soils are in wet condition.

Bradley W. Hallman 3/26/15

Authorized Agent Date

_____

Others Present

THOMPSON ENVIRONMENTAL CONSULTING, INC.
*WATER ♦ WASTEWATER ♦ WETLANDS*

April 13, 2015

Bradley Hallman, REHS
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 30 in the Stonebridge 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.

PO BOX 541 • MIDLAND, NC • 28107-0541
PHONE: 704-301-4881 • FAX: 206-350-8895
E-MAIL: LARRY@THOMPSONENV.COM
WEB: WWW.THOMPSONENV.COM

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

Panel Block lpp

THIS AGREEMENT is made and entered into this 9 day of April, 2015 by and between Livewell Homes, Inc. (hereinafter the "Owner") and R.C.S., Inc. , Joe R. Hudson (hereinafter the "Contractor").

WITNESSETH

WHEREAS, the Owner owns or controls the property upon which a ground absorption sewage treatment (hereinafter the "system") is installed, such system being designated a Type lpp system under the Rules for Sanitary Sewage Collection, Treatment and Disposal found at 15A N.C. Admin. Code 18A.1900 et seq.; and

WHEREAS, 15A N.C. Admin.Code 18A.1961 requires a contract to be executed between the system owner and a management entity prior to the issuance of an Operation Permit for said system: and

WHEREAS, 15A N.C. Admin. Code 18A.1961 requires that a condition of the Operation Permit for said system be that a properly executed contract between the system owner and a management entity shall be in effect for as long as the system is in use; and

WHEREAS, the Contractor is a management entity of a type authorized by 15A N.C. Admin. Code 18A.1961 to manage a Type lpp system.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and promises contained in this Agreement, it is hereby agreed by and between the Owner and the Contractor as stipulated below.

1. The Contractor's Obligations. The Contractor shall perform the following services on the Owner's system located at 8525 Carley Lane W. Lot 30 Mint Hill, NC 28227 Stonebridge

a. The Contractor shall inspect the system at least at the frequency required in Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type lpp system.

b. The Contractor shall perform th following routine maintenance proccdures in accordance with the conditions of the Operation Permit:

(1) ( from the operation permit)
(2)
(3)

c. The Contractor shall report the results of its inspections to the local health department at the frequency specified in Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type lpp system.

d. If an inspection indicates the need for system repairs, the Contractor shall notify the local health department within 48 hours of the inspection.

e. The Contractor shall notify the Owner of needed repairs which are outside of the scope of routine maintenance described in subparagraph (b) above. The Contractor shall perform necessary repairs to the system at the request of the Owner and shall be entitled to payment therefor at the

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

Contractor's normal charge for services and materials.

f. The Contractor shall employ of shall contract with a certified operator(s) if required by Table V(b) of 15A N.C. Admin. Code 18A.1961(b) for a Type Ipp System.

g. The Contractor shall respond to a request for a nonscheduled service or maintenance call within 24-48 hours after receipt of such request depending on the urgency of the request.

2. The Owner's Obligations.

a. The Owner shall pay to the Contractor the sum of $ 200.00 per year for periodic inspections, routine maintenance procedures and periodic reports. The annual fee may be amended upon sixty(60) days advance notice to the Owner but may not be increased more than 20 percent per year. The Owner shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of nonscheduled service or maintenance calls. All fees are due and payable within thirty (30) days shall accrue interest from the due date until paid at a rate of 15 percent per month.

b. Within 10 days of receipt of notice of needed repairs pursuant to paragraph 1.e. above, the Owner shall request the Contractor to complete needed repairs or shall provide to the Contractor evidence that the needed repairs were satisfactorily completed by another entity.

c. The Owner shall provide the Contractor with such access to the system as is reasonably necessary for the Contractor to comply with the terms of this Agreement.

3. Term. This Agreement shall remain in effect until terminated.

a. Automatic Termination.
This agreement shall automatically terminate if the Operation Permit for the system is revoked and all appeals of the revocation are exhausted or time for taking an appeal; has passed.

b. Termination by Mutual Cousent.
The Parties may mutually agree to terminate this Agreement by giving written notice of termination by mutual consent to the local health department thirty (30) days in advance of the date of termination.

c. Termination by the Owner.
The Owner may terminate this Agreement by giving notice to the Contractor and to the local health department thirty (30) days in advance to the date of termination.

d. Termination by the Contractor.
(1.) The Contractor may terminate this Agreement for cause by giving written notice of intent to terminate this Agreement to the Owner and to the local health department thirty (30) days is advance of the date of termination. Cause shall be defined as:

(a) failure to remit payment for any bill for services performed under

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

and in accordance with this Agreement if said bill is not is not paid within thirty (30) days of receipt by the Owner of the bill. If said bill is paid after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect: or

(b) failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs the system were completed by another entity within 10 days of receipt of notice of needed repairs pursuant to paragraph I.e. above. If said authorization to complete needed repairs or evidence of completion of said repairs is provided after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect;

(c) failure of the Owner to allow the Contractor such access to the system as is reasonably necessary in order for the Contractor to comply with the terms of this Agreement.

(2) The Contractor may not terminate this Agreement without cause, but may assign its rights and duties under this Agreement as provided in paragraph 4, below.

4. Assignment.

a. Assignment by the Owner. The Owner shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owner shall also notify any purchaser of the property on which the system is located of the existence of this Agreement and shall assign all tights and duties under this Agreement to said purchaser.

b. Assignment by the Contractor. The Contractor may assign its rights and duties under this Agreement to another management entity which is qualified pursuant to 15A NC Admin. Code 18A.1961 to manage a Type Ipp system upon thirty (30) days written notice to the Owner and to the local health department.

5. Use of Subcontractors. The Contractor may subcontract with such manufacturers, suppliers and contractors as it deems desirable to perform any of the Contractor's duties under this Agreement. The Contractor shall at all times remain responsible for the performance of and payment for all work performed by all subcontractors.

6. Representations. The Parties represent to each other that each has the power, authority and legal right to enter into and perform its obligations as set forth in this Agreement.

7. Regulatory Amendments. References in this Agreement to sections of the Administrative Code shall include such rules as they may be amended in the future.

8. No Implied Waiver. The waiver by either Party of a default or a breach by the other Party of any provision of this Agreement shall not operate or be construed to operate as a waiver of any subsequent default or breach. The failure at any time of either Party to enforce any provision of this Agreement (a) shall not be construed to be a waiver of such provisions, or of any other provision; and (b) shall not in any way affect the validity of this Agreement, or any part of this Agreement, or the right of either

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

Party thereafter to enforce each and every provision of this Agreement.

9. Notice. Every notice required under this Agreement shall be in writing and shall be deemed sufficiently given if delivered in person or sent by certified or registered mail, return receipt requested, postage prepaid to the Party to be notified and addressed as follows:

To the Owner: LiveWell Homes, INC
601 Springcrest Drive
Fort Mill, S.C. 29715

To the Contractor:
R.C.S. ,Inc.
Joe R. Hudson
PO Box 708
Monroe, NC 28111

To the Local Health Department:
Mecklenburg County Groundwater & Waste Water Services
700 N. Tryon St., Suite 211
Charlotte, N.C. 28202

The date of any Notice shall be the date of personal delivery or the date shown on the return receipt as the date of delivery of attempted delivery, as the case may be. Changes in the respective addresses to which notice may be directed may be made form time to time by either Party by notice to the other party/

10. Place of Agreement. This Agreement and any questions concerning its validity, construction or performance shall be governed by the laws of the State of North Carolina, notwithstanding the place of execution, or the order in which the signatures of the Parties are affixed.

11. Entire Agreement and Amendment. This Agreement supersedes all prior negotiations, agreements and understandings between the Parties with respect to the subject matter hereof. To be effective, any amendment or modification to this Agreement must be in writing and must be signed by the Parties.

12. Solvability. In the event that any provision of this Agreement shall, for any reason, be determined to be invalid, illegal or unenforceable in any respect, the Parties shall negotiate in good faith and agree to such amendments, modifications or supplements of or to this Agreement of such other appropriate actions as shall to the maximum extent practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such action, remain in full force and effect.

IN TESTIMONY WHEREOF, the Parties hereto have executed this Agreement in duplicate originals, one of which is retained by each of the Parties, the day and year first above written.

STATE OF NORTH CAROLINA
COUNTY OF Mecklenburg

Owner

Attest: Brad Cardwell

Contractor

Attest:

# Residential Subsurface Wastewater Treatment and Disposal System Design

for

**Lot 30 – Stonebridge at Mint Hill**
**8525 Carly Lane West**
**Mint Hill, North Carolina**

Tax Parcel # 139-033-32
Mecklenburg County File # 6166B
January 23, 2008

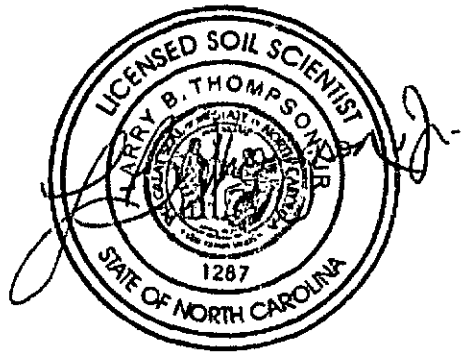
**GWS Septic System Design Review** — Approved ☐ Disapproved ☐

GWS File #: 6166B

Design Review: [signature] 1-24-08

Field Review: [signature] 1-31-08

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




**Prepared for:**

NVR, Inc.
10815 David Taylor Drive, Ste. 100
Charlotte, NC 28262

**Prepared by:**

Larry Thompson, RS, PWS, LSS
Thompson Environmental Consulting, Inc.
114 Orchard Ridge Road
Locust, NC 27278
Phone: 704-301-4881
Fax: 704-888-1496
larry@thompsonenv.com




CC: Mr. David Cornelius, RS
Mecklenburg County Environmental Health

Check box if you have filed a CERTIFICATE OF ASSUMED NAME

Date Business Began: 10-1-08 ☑

☐ Limited Liability Company

☐ Corporation

Check box if you are filing this application for the first time

Name of Business: Jessica Lynn Photography

Name of Owner: Jessica Lynn Smith

## Details

The following proposal is submitted to the Mecklenburg County Health Department (MCHD), Ground Water Section, to help assist the county in the issuance of an Improvement Permit and Construction Authorization for a 4-bedroom residence served by a municipal water supply on Lot 30 of the Stonebridge at Mint Hill Subdivision.

Based upon an investigation by Thompson Environmental Consulting, Inc. (TEC), it was determined that Lot 30 would be considered "Unsuitable" under the *Laws and Rules for Sewage Treatment, and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section). There is, however, a sufficient amount of "Suitable" Group IV soils located on the property which would allow for the installation of a shallow placed Type IV pressure dosed prefabricated porous block panel system (PPBPS) for a 4-bedroom residence (initial and repair). It is the desire of the owner that the MCHD consider issuing an Improvement Permit, based upon the following proposal.

Location

The subject property is located in Stonebridge Subdivision (Lot 30 – 8525 Carly Lane West) in the town of Mint Hill, North Carolina. From NC 51, travel south on NC 218 approximately 0.9 mile, turn left onto SR 3109 (Bartlett Road). Stonebridge is the first subdivision on the right after crossing the I-485 overpass. Turn right onto Stonebridge Way and right onto Carly Lane West – Lot 30 is the first lot 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,* June 2006.

*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.

*Design and Installation of Low Pressure Pipe Wastewater Treatment Systems;* by Craig Cogger, Bobby Carlisle; Dennis Osborne and Ed Holland. Published by UNC Sea Grant College Pub. UNC-SC-82-03, May 1982.

## Plans and Specifications

Septic Tank

- The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1500 gallons in capacity.
- The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
- 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.

Pump Tank

- The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1000 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
- The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
- The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4X rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
- The pump tank shall have a properly functioning high water alarm incorporated into the control panel. The alarm circuit shall be supplied separate from any pump overload and short circuit devices. The alarm shall be both audible and visible by the system users.
- The float switch for the high water alarm should be mounted at a location slightly above the "pump on" elevation for the pump float control switch. The high water alarm float switch shall not be set more than 3 inches above this elevation.
- Pump float(s) shall be mounted so that the effluent at the end of a pump cycle is above the top of the effluent pump. The septic contractor must determine pump draw down and set the float switch accordingly.
- Float switch tie downs must be made of a corrosion resistant material (do not use electrical tape or metal hose clamps to secure these switches). Floats should be mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).

- The pump must be placed on two 4-inch concrete blocks to allow for some settling of solid particulates within the pump tank.

Pump Tank Effluent

- The pump discharge piping shall be fitted with a pressure effluent filter. The filter must be equivalent to the GAG Sim Tech Filter, Boyne City, Michigan, 49712, telephone: 1-888-999-3290. This device provides a very high degree of filtration and is highly recommended.

Pipe and Fittings

- All discharge piping, supply lines, valves and disconnects should be made of PVC and pressure rated.
- All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
- The supply line from the pump tank to the pressure manifold shall be 2 inch Schedule 40 PVC (approximate length of supply line is 45 feet).
- The lateral distribution lines shall be 1¼ inch Schedule 40 PVC. Holes in the laterals should be drilled on site and at the 12 o'clock position (one hole per panel). Lateral hole size is 5/32 of an inch.
- There shall be a threaded PVC union above each pump to facilitate easy removal of the pumps for maintenance or replacement.
- The end of each lateral is to be provided with a "turn up", contained within a turf/gate valve box, that provides above ground access for periodic clean out and pressure head adjustment.

Valve Box

- The control valves (gate valves) for each lateral distribution line shall be contained within one manifold box/vault of adequate size. The box should be placed upon a gravel base.
- The supply manifold conveys effluent from the pump to the lateral distribution lines.
- The supply manifold should be constructed by connecting a series of (2) 2" x 2" x 1 ¼" tees to the 2 inch supply line.

Backfill

- Backfill sand shall be a 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).

Drain Field Installation

- The drain field has been previously laid out on-site utilizing metal stemmed flags. Once this area has been approved by the MCHD, 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 MCHD and the system designer for a preconstruction conference at which time the drain field area will be re-verified.
- Under no circumstances shall any construction take place within the drain field 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 MCHD should be contacted for permission to proceed with the installation.
- The specified system is a Type IVa, pressure dosed, 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.
- The initial drain field consists of four (4) lateral trenches 3 feet wide by 68 feet in length.
- 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.
- The maximum trench depth for this system shall be 31 inches. Each trench shall be placed on a minimum of 9 foot on centers. Additional soil cover may be required.
- Once trenches are dug, the side walls shall be raked and a light dusting of lime applied.
- 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.
- 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.*
- 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 1¼ inch Schedule 40 PVC laterals 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.
- The end of each lateral should be fitted with a short turn up topped by a threaded female coupling with cap. Each turn up must be fitted with a turf/gate valve box with lid fitted flush to finished grade.

- Once the lateral has been installed and 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 MCHD.

Proper Operation Check

- After all components of the waste water disposal system have been installed and connected, the system shall be checked for proper operation.
- With the electrical power turned off, fill the pump tank with water until the liquid rises to a level high enough to activate the high water alarm float. Turn on the electrical power. The alarm, alarm light and pump should activate at this time. Turn off the electrical power once these checks have been performed and prepare to set the head pressure at the valve box.

Pressure Head Adjustment (2 FT.) PER DESIGNER.

- The pressure head must be adjusted to match the design specifications. The pressure head is measured by the height of the liquid coming from the turn ups at the end of each lateral when the pump is running (utilizing stand pipes).
- Prepare a length of pipe (stand pipe), cut to the desired head pressure height and fitted with a threaded adapter that will screw into the turn up couplings at the end of each lateral. Thread the stand pipes into each lateral and then turn the power on to the pump, allowing the water to rise within the stand pipes. Adjust the gate valves within the supply manifold box to achieve the specified head pressure (liquid height in the stand pipes should equal the design head pressure).
- Once the pressure head has been adjusted, allow the pump to run through the remainder of the cycle. The pump float switch will automatically turn the pump off if it is operating properly. Make sure that the effluent pump is completely submerged in the remaining water, making adjustments to the float switch(es) as needed. This completes the checks for proper operation of the pump, alarm and float switches.
- At this point, the standpipes may be removed and replaced with the threaded turn up caps.

Final Landscaping

- The drainfield shall be shaped to shed rainwater and be free from low spots.
- 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.

Utility Conflicts

- The builder and property owner must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground

(3 PT.) TEX PERIMETR.

utilities can negatively impact the installation and, in some cases, cause irreparable damage. If there are any questions regarding preferred routes, contact the MCHD as soon as possible. Irrigation systems should not be placed in the drain field area.

## Maintenance

Operation and Maintenance

The designed system is classified as a Type IVa wastewater treatment and disposal system and will require ongoing maintenance. State regulations require that a system of this type be managed by a person certified (Certified Subsurface System Operator) by the North Carolina Department of Environment and Natural Resources to operate subsurface wastewater systems (Section .1961 Maintenance of Sewage Systems). A "Maintenance Contract" between the system owner and a Certified Operator will be required by the MCHD prior to the issuance of a final system approval or Operation Permit.

- The minimum inspection/maintenance and reporting frequency for a Type IVa system is twice a year by the Certified Operator. The local health department is required to inspect the system once every three years.
- The septic and pump tanks shall be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 1/3 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. Regardless, the Certified Operator will be able to advise when it is necessary to pump out tank solids.
- Pressure head for laterals should be checked and adjusted semi-annually, flushing with clean water as necessary to remove any accumulated solids.
- The effluent filters should be inspected semi-annually. When it becomes necessary to clean the effluent filters, the filters should be removed and the accumulated debris washed back into the septic or pump tank – not onto the lawn.
- All piping and valves should be inspected semi-annually for damage and corrections/repairs made immediately.
- The pump and float controls/switches should be inspected semi-annually to assure proper operation
- The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.
- Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Suggestions to the Homeowner

- As previously mentioned, if you plan to use a garbage disposal in your home you should plan to have your septic and pump tanks cleaned out annually. The ground up garbage adds large amounts of solids into a septic tank that tend to degrade at a very slow rate.

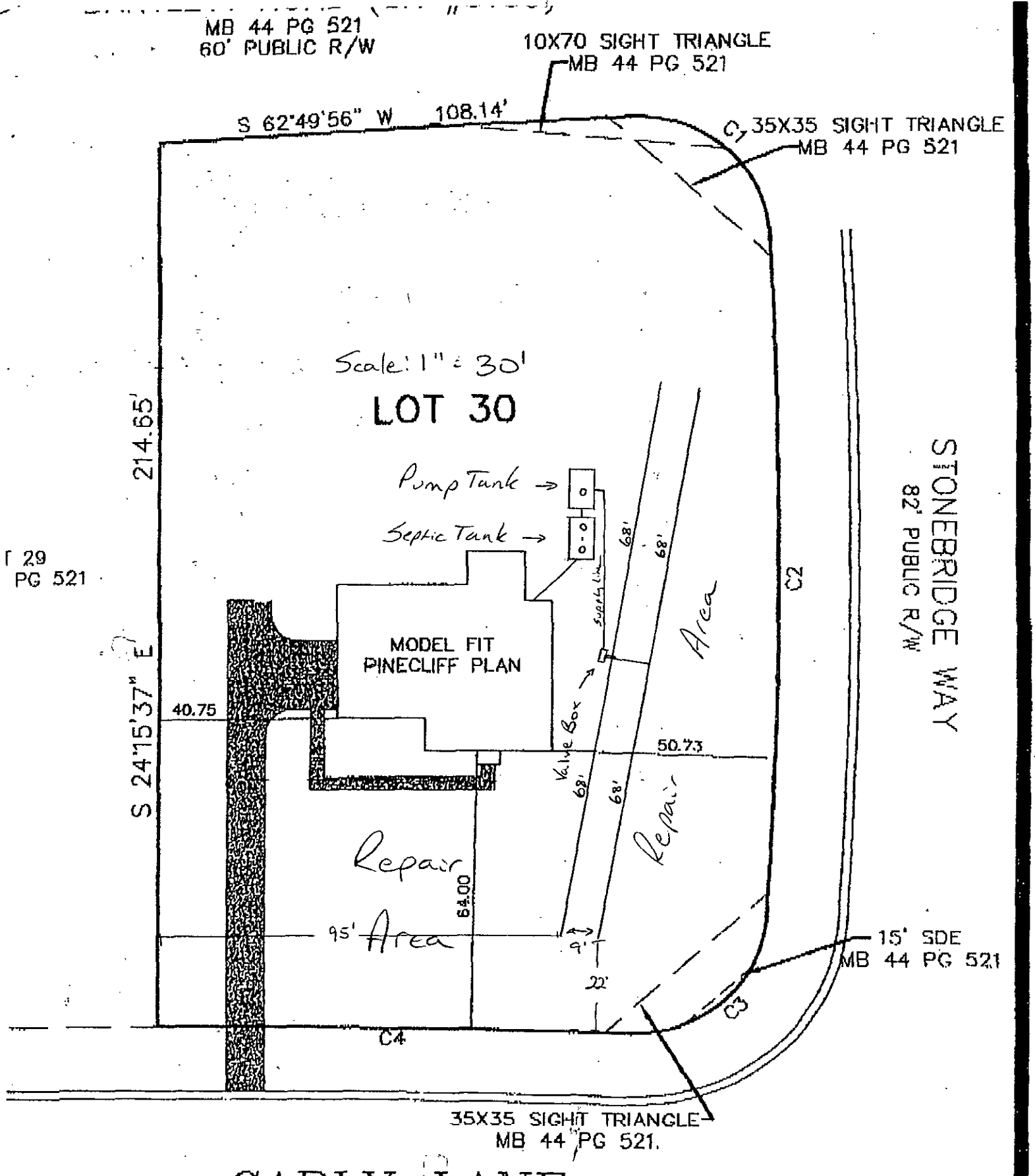
- Grease, cooking oils, coffee grounds and non-degradable solids (disposable diapers, cigarettes and solid paper wastes) should never be put into a septic tank.
- Used motor oil or any oily liquids should not be disposed of in a septic tank.
- Be aware of the amount of water that you are using in your 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.
- Run dishwashers and washing machines only when you have a full load.
- Use liquid detergents. Powdered detergents have binding agents in them that tend to solidify in the wastewater disposal system.
- Repair leaky faucets and toilets. Small drips equal large volumes of water over time and can over burden your drain field.
- 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.
- Finally, taking good care of your septic system will help to assure that you experience years of trouble free service at a relatively low cost. On-site wastewater treatment and disposal is still the most environmentally friendly method of treating residential/commercial waste and you should keep your system in use for as long as it is properly functioning! If you have additional questions, please feel free to contact your system designer or the MCHD.

## Design Specifics ✓ TCT

| | |
|---|---|
| Daily Design Flow: | 480 GPD – 4 bedroom house |
| Septic Tank Size: | 1500 gallons (2 compartments) |
| Pump Tank Size: | 1000 gallons |
| Effluent Loading Rate: | Design = 0.3 GPD per sq. ft.<br>(50 % reduction for the PPBPS) |
| Supply Length and Diameter: | Approx. 45 ft. of 2 in. SCH 40 |
| Number and Size of Laterals: | (4) 1 ¼ inch x 68 feet long |
| Hole Size: | 5/32 inch |
| Hole Spacing: | 1 per panel = 64 total |
| Number of Panels: | 64 |
| Dosing Volume: | 230.40 gallons per dose |
| Flow Rate Through System: | 26.24 gallons per minute |
| Elevation Head: | 6 feet (may vary, please see note at the bottom of this page) |
| Pressure Head: | 2 feet |
| Pump Requirements: | 28.24 GPM at 8 Feet TDH<br>(2 GPM added for vapor lock) |
| Depth of Water Pumped: | 10.97" check with individual tank manufacturer (1 cu. Ft. of water equals 7.5 gal.) |
| Pump Run: | 8.78 minutes |
| Check Valve: | Yes |
| Vapor Lock Hole: | Yes |

* Please note that supply line and elevation head measurements are approximate. It is the contractor's responsibility to confirm these values based upon the actual house and plumbing location. If there is a discrepancy, contact the system designer prior to beginning construction.

| PPBPS Design Worksheet | | |




| VE TABLE | | |
|---|---|---|
| CHORD | BEARING | DELTA |
| 42.48 | N72°05'45"W | 90°08'41" |

ESTIMATED SIDEWALK
AREA = 187 SQ.FT.±

ESTIMATED DRIVEWAY
AREA = 1321 SQ.FT.±

FEE: 200.00
DATE:10/27/2014

**MECKLENBURG COUNTY**
**GROUNDWATER & WASTEWATER SERVICES**

**FILE NUMBER:** 6166B

**PERMIT NUMBER:** 30003172

**PARCEL NUMBER:** 13903332

**JOB LOCATION INFORMATION**

**ADDRESS:** 8525 CARLY LN WEST

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

**ISSUED TO:** Livewell Homes

**CONSTRUCTION AUTHORIZATION ISSUANCE DATE:** 2/1/2008

## CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30003172, 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: 2/1/2013

| | | | | |
|---|---|---|---|---|
| 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: 3/26/15

OP issued date: 4/20/15

Review performed by: KR SDM

Date performed: 2-8-08 4-21-15

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 #: **30003172** GWS File #: **6166B** Tax Parcel #: **139-033-32**

- 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):** 2/1/2013

Type of Installation: Residential - New System Lot Number: 30

Structure Type: HOUSE Size ($ft^2$): 0 # Bedrooms: 4 # Occupants: 8

Building Foundation: Crawl Space Water Supply: Municipal

**II. Initial System Type:** PPBPS (pressurized) **System Classification:** IVa

Initial System Specifications:

Design Flow (gpd): 480 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 ($ft^2$): 801 Total Trench Length (ft): 267

Maximum Trench Depth (in): 31 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): 480 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 ($ft^2$): 800 Total Trench Length (ft): 267

Maximum Trench Depth (in): 31 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: _____
Print Name

Signature: _____ Signature: _____

Date Issued: 2/1/2008

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 #: **30003172** GWS File #: **6166B**

**IV. Permit Conditions/Comments:**

- This type of septic system requires an inspection once every 3 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.
- This type of septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- This Improvement Permit is being issued based on a supplemental soil investigation performed by staff from our office.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- 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.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.
- An effluent filter is required on the pump discharge pipe exiting the pump tank.
- Install according to plans on file submitted by Larry Thompson, 1/23/08. Maintenance contract with certified operator required before CO release.

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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- This IMPROVEMENT PERMIT is transferable.

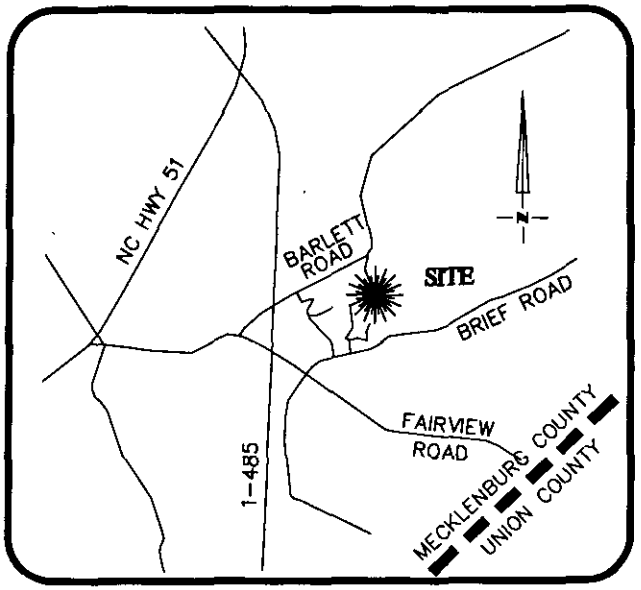
DENR Authorized Agent: David Cornelius

Signature: _____

Date Issued: 2/1/2008

Owner/Legal Agent: _____
Print Name

Signature: _____




**VICINITY MAP**
Not To Scale

NOTE:
1. BUILDER ASSUMES RESPONSIBILITY FOR GRADING LOT AND/OR DESIGNING STEPS, PORCHES, DECKS, ETC. AS NECESSARY TO PREVENT ENCROACHMENT INTO SETBACKS.
2. HOUSE DIMENSIONS AND OPTIONS SHOULD BE VERIFIED WITH CONTRACTOR PRIOR TO CONSTRUCTION.
3. SETBACKS/ EASEMENTS SHOULD BE VERIFIED WITH DEVELOPER AND LOCAL OFFICIALS PRIOR TO CONSTRUCTION.
4. THIS IS A CONCEPTUAL DRAWING AND CONTENTS SHOWN HEREON ARE SUBJECT TO CHANGE UPON FINAL CONSTRUCTION.

REVISIONS

| REV. # | DATE | COMMENT |
|---|---|---|
| REV. 1 | 10/6/14 | SHIFTED BACK 5' |
| REV. 1 | 10/13/14 | SHIFTED LEFT 5' |

| CURVE | BEARING | CHORD | LENGTH | RADIUS |
|---|---|---|---|---|
| C1 | N72°05'45"W | 42.48 | 47.20 | 30.00 |
| C2 | N23°59'34"W | 164.84 | 164.92 | 1558.57 |
| C3 | N23°08'51"E | 41.76 | 46.19 | 30.00 |
| C4 | S66°31'39"W | 107.98 | 107.98 | 4308.80 |

STONEPEARL EAST

60' PUBLIC R/W

THIS PROPERTY MAY BE SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD OR IMPLIED

THIS DRAWING DOES NOT REFLECT AS-BUILT INFORMATION

**PRELIMINARY PLAT**
**NOT FOR RECORDATION, CONVEYANCES, OR SALES.**

40 0 40
SCALE: 1" = 40'


**EASTOVER**
**LAND SURVEYING COMPANY, P.A.**
LAND SURVEYORS - PLANNERS - (C-1833)
600 TOWNE CENTRE BOULEVARD, SUITE #309
PINEVILLE, NORTH CAROLINA 28134
PHONE (704) 927-8080
FAX (704) 889-0105


# HOUSE LOCATION PLOT PLAN

FOR

LOT 30, STONEBRIDGE, PHASE 1 MAP 1
Town of Mint Hill, Mecklenburg County, North Carolina

PROPERTY OF: LIVEWELL HOMES

MAP BOOK 44 PAGE 327 DEED REFERENCE

DRAWN BY: ERG

DATE: SEPTEMBER 30, 2014

# CARLY LANE

60' PUBLIC R/W

| VE TABLE | | |
|---|---|---|
| CHORD | BEARING | DELTA |
| 42.48 | N79°05'45"W | 00°08'41" |

ESTIMATED SIDEWALK
AREA = 187 SQ.FT.±

ESTIMATED DRIVEWAY
AREA = 1321 SQ.FT.±

*MECKLENBURG COUNTY*
*LAND USE AND ENVIRONMENTAL SERVICES*
*Payment Receipt*

**Receipt Information**

| | | | |
|---|---|---|---|
| **Date:** | 10/15/14 | **Amount:** | 200.00 |
| **Receipt #:** | 91124 | **Tendered:** | 200.00 |
| **Check / Auth #:** | VISA 025816 | **Returned:** | 200.00 |
| **Received By:** | SADERLW | | |

**Account Information**

**Account #:** 200000
**Contractor:** CARDWELL BRADLEY
**Attn:**
**Address:**
**Address:**
**City/State/Zip:** ,

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0734 | Septic Construction Authorization<br>9703 STONEBRIDGE WAY | | 1 | 200.00 | 200.00 |

**Outstanding Balances**

| Month-To-Date | Prior Month | 30 Days | 60 Days | 90 Days | Balance |
|---|---|---|---|---|---|
| 80.00 | | 587.40 | | 2,049.65 | |

# *MECKLENBURG COUNTY*
# *LAND USE AND ENVIRONMENTAL SERVICES*
## *Payment Receipt*

**Receipt Information**

| | | | |
|---|---|---|---|
| **Date:** | 10/15/14 | **Amount:** | 200.00 |
| **Receipt #:** | 91123 | **Tendered:** | 200.00 |
| **Check / Auth #:** | VISA 025816 | **Returned:** | 0.00 |
| **Received By:** | SADERLW | | |

**Account Information**

**Account #:** 200000
**Contractor:** CARDWELL BRADLEY
**Attn:**
**Address:**
**Address:**
***City/State/Zip:*** ,

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0703 | Septic Operational Permit<br>9703 STONEBRIDGE WAY | | 1 | 200.00 | 200.00 |

**Outstanding Balances**

| Month-To-Date | Prior Month | 30 Days | 60 Days | 90 Days | Balance |
|---|---|---|---|---|---|
| 80.00 | | 587.40 | | 2,049.65 | |




9703 STONEBRIDGE WAY

1/9/2008

duponbj

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

# MECKLENBURG COUNTY
## Health Department

November 10, 2005

Ryan Homes
10815 David Taylor Drive, Suite 100
Charlotte, NC 28227

Re: Application for improvement permit for
Property Site: Carly Lane West, Stonebridge Subdivision, Lot 30
Health Department file number: **6166B**

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on **November 9, 2005** evaluated the above-referenced property at the site designated on the plat that accompanied your improvement permit application. According to your application the site is to serve a four-bedroom residence, with a design wastewater flow of 480 gallons per day. The evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 and related statutes and Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule .1900 and related rules.

Based on the criteria set out in Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rules .1940 through .1948, the evaluation indicated that the site is **UNSUITABLE for** a ground absorption sewage system. Therefore, your request for an improvement permit is **DENIED.** A copy of the site evaluation is enclosed. The site is unsuitable based on the following:

- ☐ Unsuitable soil topography and/or landscape position (Rule .1940)
- ☐ Unsuitable soil characteristics (structure or clay mineralogy) (Rule .1941)
- ☐ Unsuitable soil wetness condition (Rule .1942)
- ☐ Unsuitable soil depth (Rule .1943)
- ☐ Presence of restrictive horizon (Rule .1944)
- ☒ Insufficient space for septic system and repair area (Rule .1945)
- ☐ Unsuitable for meeting required setbacks (Rule .1950)
- ☐ Other (Rule .1946)

These severe soil or site limitations could cause premature system failure, leading to the discharge of untreated sewage on the ground surface, into surface waters, directly to ground water or inside your structure.

The site evaluation included consideration of possible site modifications, and modified, innovative or alternative systems. However, the Health Department has determined that none of the above options will overcome the severe conditions on this site. A possible option might be a system designed to dispose of sewage to another area of suitable soil or off-site to additional property.

For the reasons set out above, the property is currently classified **UNSUITABLE,** and an improvement permit shall not be issued for this site in accordance with Rule .1948 (c).

However, the site classified as **UNSUITABLE** may be classified as **PROVISIONALLY SUITABLE** if written documentation is provided that meets the requirements of Rule .1948(d). A copy of this rule is enclosed. You may hire a consultant to assist you if you wish to try to develop a plan under which your site could be reclassified as **PROVISIONALLY SUITABLE.**

You have a right to an informal review of this decision. You may request an informal review by the soil scientist or environmental health supervisor at the local health department. You may also request an informal review by the
N. C. Department of Environment and Natural Resources regional soil specialist. A request for informal review must be made in writing to the local health department.

You also have a right to a formal appeal of this decision. To pursue a formal appeal, you must file a petition for a contested case hearing with the Office of Administrative Hearings, 6714 Mail Center, Raleigh, NC 27699-6714. To get a copy of a petition form, you may write the Office of Administrative Hearings or call the office at (919) 733-0926 or from the OAH web site at www.oah.state.nc.us/form.htm. The petition for a contested case hearing must be filed in accordance with the provision of North Carolina General Statutes 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B. N. C. General Statue 130A-335(g) provides that your hearing would be held in the county where your property is located.

Please note: If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is **November 9, 2005**. Meeting the 30-day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you might request. Do not wait for the outcome of any informal review if you wish to file a formal appeal.

If you file a petition for a contested case hearing with the Office of Administrative Hearings, you are required by law (N.C. General Statute 150B-23) to send a copy of your petition to the North Carolina Department of Environment and Natural Resources. Send the copy to: Office of General Counsel, N. C. Department of Environment and Natural Resources, 1601 Mail Service Center, Raleigh, NC. 27699-1601. Do **NOT** send the copy of the petition to your local health department. Sending a copy of your petition to the local health department will **NOT** satisfy the legal requirement in N.C. General Statute 150B-23 that you send a copy to the Office of General Counsel, NCDENR.

You may call or write the local health department if you need any additional information or assistance.

Sincerely,

J. Andrew Walker, R.S.
Authorized Agent - DENR

Encl: (2)

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

Sheet: 1 of 2
Property ID: 139-032-25
Lot #: 30
File #: 6166B
Code: 2

# SOIL/SITE EVALUATION
# for ON-SITE WASTEWATER SYSTEM

Owner: Ryan Homes
Applicant: Kenny Owens
Address: 10815 David Taylor Drive, Suite 100, Charlotte, NC 28227
Date Evaluated: 5/12/2006
Proposed Facility: Residence
Design Flow (.1949): 600 gpd
Property Size: .69a
Location of Site: Carly Lane West
Property Recorded:
Water Supply: [ x ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] 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 | OTHER PROFILE FACTORS .1942 Soil Wetness/ Color | .1943 Soil Depth (IN.) | .1956 Sapro Class | .1944 Restr Horiz | Profile Class & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1P | LS,8 | 0-4 | GR/SCL | FR/SS/SP/SEXP | >48" TO SOIL WETNESS | 30 | U | NA | U |
| | | 4-30 | SBK/C | FI/S/P/SEXP | | | | | NA |
| | | 30-48 | SAP/SCL | MASSIVE | | | | | |
| | | | | | | | | | |
| 2P | " | 0-9 | GR/SCL | FR/SS/SP/SEXP | " | 48+ | NA | " | PS, IV |
| | | 9-48 | SBK/C | FI/S/P/SEXP | | | | | .3 GPD/FT$^2$ |
| | | | | | | | | | |
| 3P | " | 0-3 | GR/SCL | FR/SS/SP/SEXP | " | " | " | " | " |
| | | 3-48 | SBK/C | FI/S/P/SEXP | | | | | |
| | | | | | | | | | |
| 4P | " | 0-8 | GR/SCL | FR/SS/SP/SEXP | " | " | " | " | " |
| | | 8-48 | SBK/C | FI/S/P/SEXP | | | | | |
| | | | | | | | | | |
| 5P | " | 0-8 | GR/SCL | FR/SS/SP/SEXP | " | 30 | U | " | U |
| | | 8-30 | SBK/C | FI/S/P/SEXP | | | | | NA |
| | | 30-48 | SAP/SCL | MASSIVE | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

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

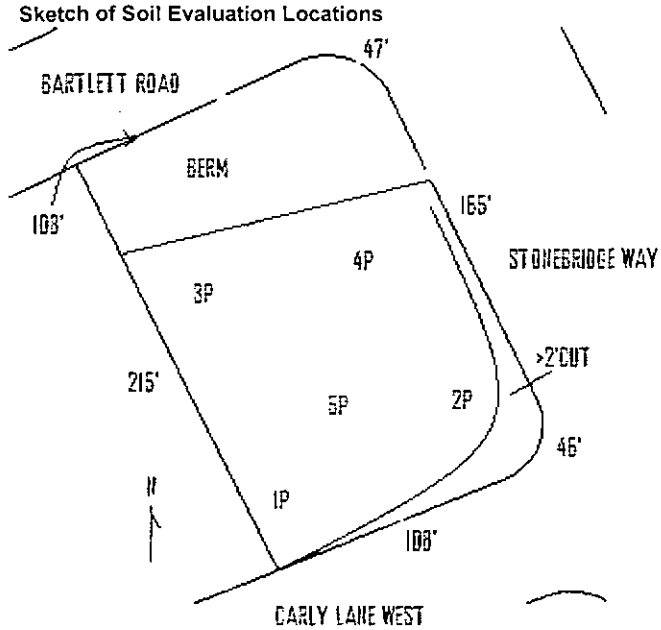
Other Factors (.1946):
Site Classification (.1948): Unsuitable
Evaluated By: Chris Sherrill, RS, LSS 5/12/06
Others Present: Kim Stanley

**COMMENTS: 100% Repair Area**

| 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-Food 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 2
Property ID: PO 139-032-25
Lot #: 30
File #: 6166B
Code: 2

ACS

# SOIL/SITE EVALUATION
# for ON-SITE WASTEWATER SYSTEM

Owner: Ryan Homes
Applicant: Kenny Owens
Address: 10815 David Taylor Drive, Suite 100, Charlotte, N. C. 28227
Date Evaluated: 10/19/05
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: .69a
Location of Site: Carly Lane West
Property Recorded:
Water Supply: [ x ] Public [ ] Individual [ ] 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 | OTHER PROFILE FACTORS 1942 Soil Wetness/ Color | 1943 Soil Depth (IN) | 1956 Sapro Class | 1944 Restr Horiz | Profile Class & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LS, 6 | 0-7 | GR/SCL | FR/SEXP/SS/SP | >48" TO SOIL WETNESS | 48 | N/A | NONE | PS, IV |
| | | 7-48 | SBK/C | FI/SEXP/S/P | | | | | .3GPD/FT$^2$ |
| 2 | " | 0-4 | GR/CL | FR/SEXP/SS/SP | " | " | " | " | " |
| | | 4-48 | SBK/C | FI/SEXP/S/P | | | | | |
| 3 | LS, 8 | 0-3 | GR/CL | FR/SEXP/SS/SP | " | " | " | " | " |
| | | 3-40 | SBK/ABK/C | FI/SEXP/S/P | | | | | |
| | | 40-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 4 | " | 0-5 | GR/CL | " | >43" TO SOIL WETNESS | 43 | " | " | PS, IV |
| | | 5-43 | SBK/ABK/C | FI/SEXP/S/P | | | | | .275 GPD/FT$^2$ |
| | | | | | | | | | |

| Description | Initial System | Repair System |
|---|---|---|
| Available Space (.1945) | US | US |
| System Type(s) | | |
| Site LTAR | .3GPD/FT$^2$ | .3GPD/FT$^2$ |

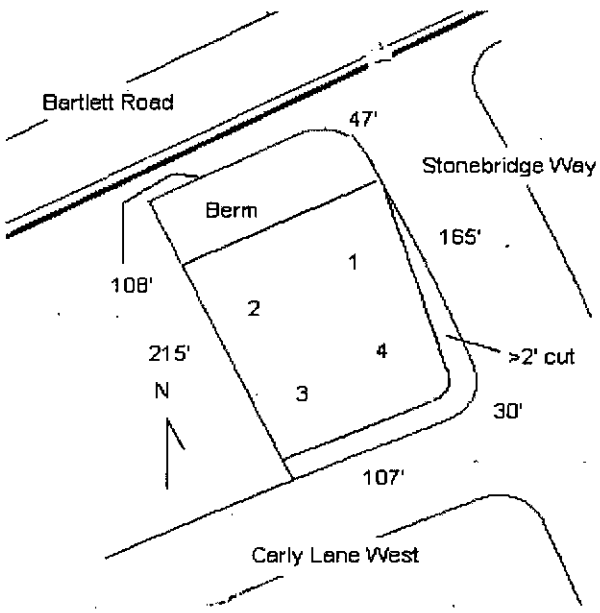
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 10/20/2005, W. R. Marlin
Others Present:

**COMMENTS:**
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-Food 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 | | |
| FP-Flood Plain | | 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**



*MECKLENBURG COUNTY*
*LAND USE AND ENVIRONMENTAL SERVICES*
*Payment Receipt*

**Receipt Information**

| | | | |
|---|---|---|---|
| **Date:** | 09/28/05 | **Amount:** | 3,000.00 |
| **Receipt #:** | 37205 | **Tendered:** | 0.00 |
| **Check / Auth #:** | CHECK 2569 | **Returned:** | 0.00 |
| **Received By:** | WALKEVA | | |

**Account Information**

**Account #:** 200000
**Contractor:** RYAN HOMES
**Attn:**
**Address:** 10815 DAVID TAYLOR DR., SU 100
**Address:**
**City/State/Zip:** CHARLOTTE, NC 28227

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0701 | Improvment Permit App-Residen<br>STONEBRIGE LOT 25-47 | | 1 | 3,000.00 | 3,000.00 |

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

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

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

Sheet: 1 of 2
Property ID: PO 139-032-25
Lot #: 30
File #: 6166B
Code: 2

ACS

# SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Ryan Homes
Address: 10815 David Taylor Drive, Suite 100, Charlotte, N. C. 28227
Proposed Facility: Residence  Design Flow (.1949): 600gpd
Location of Site: Carly Lane West
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Kenny Owens
Date Evaluated: 10/19/05
Property Size: .69a
Property Recorded:

| 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 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LS, 6 | 0-7 | GR/SCL | FR/SEXP/SS/SP | >48" TO SOIL WETNESS | 48 | N/A | NONE | PS, IV |
| | | 7-48 | SBK/C | FI/SEXP/S/P | | | | | .3GPD/FT$^2$ |
| 2 | " | 0-4 | GR/CL | FR/SEXP/SS/SP | " | " | " | " | " |
| | | 4-48 | SBK/C | FI/SEXP/S/P | | | | | |
| 3 | LS, 8 | 0-3 | GR/CL | FR/SEXP/SS/SP | " | " | " | " | " |
| | | 3-40 | SBK/ABK/C | FI/SEXP/S/P | | | | | |
| | | 40-48 | SBK/CL | FR/SEXP/SS/SP | | | | | |
| 4 | " | 0-5 | GR/CL | " | >43" TO SOIL WETNESS | 43 | " | " | PS, IV |
| | | 5-43 | SBK/ABK/C | FI/SEXP/S/P | | | | | .275 GPD/FT$^2$ |

| Description | Initial System | Repair System |
|---|---|---|
| Available Space (.1945) | US | US |
| System Type(s) | | |
| Site LTAR | .3GPD/FT$^2$ | .3GPD/FT$^2$ |

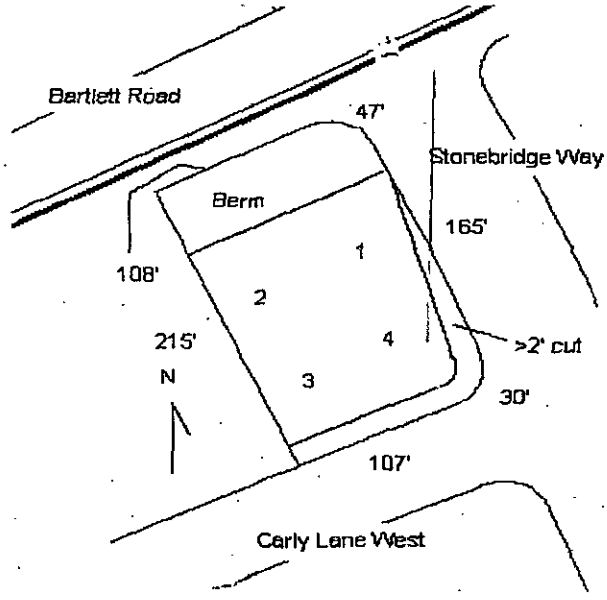
Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 10/20/2005. W. R. Marlin
Others Present:

**COMMENTS:**
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-Food 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 | | |
| FP-Flood Plain | | 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**



#3172

GWS – RES. APP 07/05

SEPTIC FEE: $400.00
DATE: 9/28/05
CK# 2209H
Y.W.

**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 # 6166B

WELL FEE:
DATE:
CK#

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

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

**JOB LOCATION INFORMATION:**

TAX/PARCEL #: 139-03-225 PO
STREET ADDRESS: CARLY LAKE WEST
CITY:
STATE: NC ZIP:
SUBDIVISION OR MOBILE HOME PARK NAME: STONEBRIDGE SUB
LOT #: #30
TOWNSHIP:

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

**BUILDING INFORMATION:**

TYPE OF BUILDING:

- ☐ SINGLE MOBILE HOME (S)
- ☐ DOUBLE WIDE (D)
- ☑ HOUSE (H)
- ☐ MODULAR HOME (M)
- ☐ MULTIPLE FAMILY (U)
- ☐ OTHER

HEATED SQUARE FOOTAGE:
NUMBER OF BEDROOMS: 4-5
NUMBER OF OCCUPANTS: 6

FOUNDATION FOR RESIDENCE:

- ☑ CONCRETE SLAB
- ☐ CRAWLSPACE
- ☐ BASEMENT WITH PLUMBING
- ☐ 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:**

☑ 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: RYAN HOMES
ADDRESS: 10815 David Taylor Dr, SUITE 100
CITY: Charlotte
STATE: NC. ZIP: 28227
HOME PHONE: ——— WORK PHONE: 704-548-3534
MOBILE PHONE: ——— FAX: 704-503-4516

**LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:**

NAME: KENNY OWENS
ADDRESS: 6206 BIRKDALE VALLEY DR. Apt 515
CITY: CHARLOTTE
STATE: NC ZIP: 28277
HOME PHONE: ——— WORK PHONE: 704-540-0771
MOBILE PHONE: 704-502-5582 FAX: 704-544-8834

**WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?**
**WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?**

*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.

9-21-05

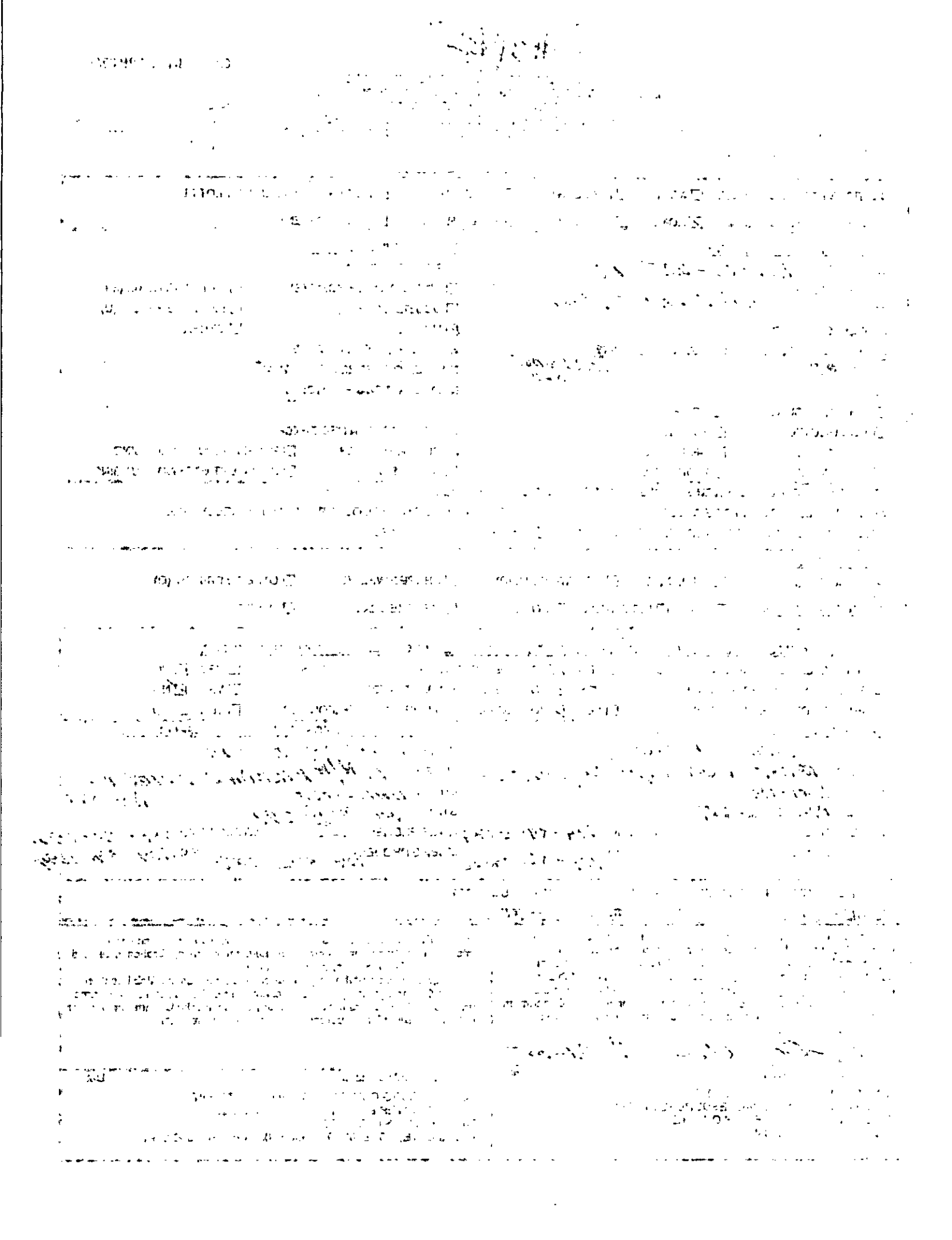
Owner's/Agent's Signature Date

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

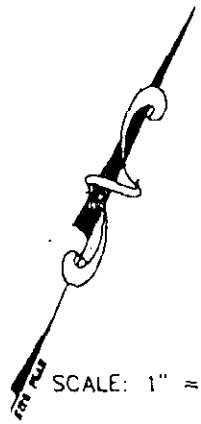


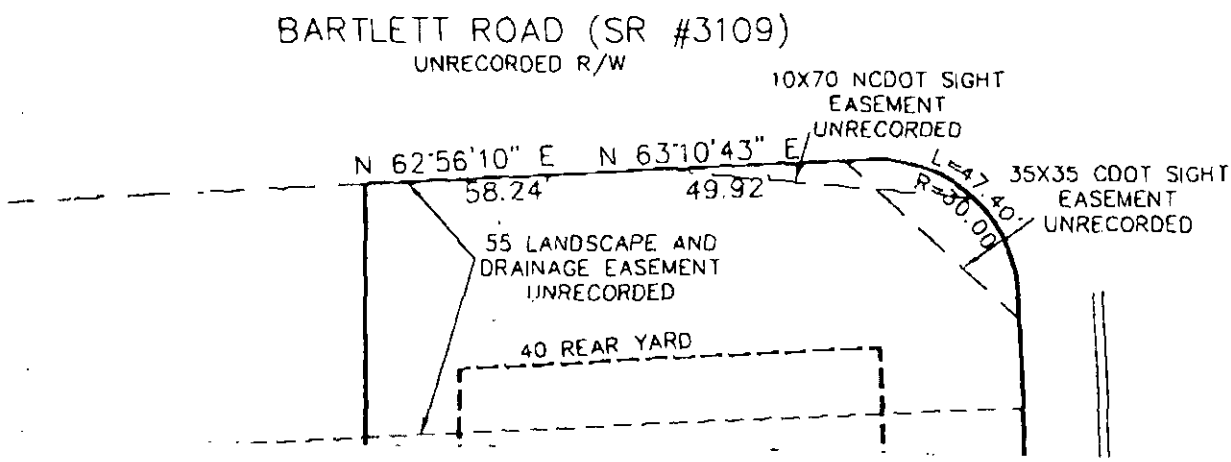
# PROPOSED MODEL FIT

**MODEL FIT ONLY
NOT TO BE USED
FOR CONSTRUCTION
OR STAKING**

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190



Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 6166 B  WASPS App #: 3172

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: 5<br>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 ☐ |

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

Sheet: 1 of 2
Property ID: 139-032-25
Lot #: 30
File #: 6166B
Code: 2

# SOIL/SITE EVALUATION
# for ON-SITE WASTEWATER SYSTEM

Owner: Ryan Homes
Applicant: Kenny Owens
Address: 10815 David Taylor Drive, Suite 100, Charlotte, NC 28227
Date Evaluated: 5/12/2006
Proposed Facility: Residence
Design Flow (.1949): 600 gpd
Property Size: .69a
Location of Site: Carly Lane West
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

| PROFILE # | SOIL MORPHOLOGY 1941 | | | | OTHER PROFILE FACTORS | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1940 Landscape Position/ Slope% | Horizon Depth (IN) | 1941 Structure/ Texture | 1941 Consistence Mineralogy | 1942 Soil Wetness/ Color | 1943 Soil Depth (IN) | 1956 Sapro Class | 1944 Restr Horiz | Profile Class & LTAR |
| 1P | LS,8 | 0-4 | GR/SCL | FR/SS/SP/SEXP | >48" TO SOIL WETNESS | 30 | U | NA | U |
| | | 4-30 | SBK/C | FI/S/P/SEXP | | | | | NA |
| | | 30-48 | SAP/SCL | MASSIVE | | | | | |
| | | | | | | | | | |
| 2P | " | 0-9 | GR/SCL | FR/SS/SP/SEXP | " | 48+ | NA | " | PS, IV |
| | | 9-48 | SBK/C | FI/S/P/SEXP | | | | | .3 GPD/FT$^2$ |
| | | | | | | | | | |
| 3P | " | 0-3 | GR/SCL | FR/SS/SP/SEXP | " | " | " | " | " |
| | | 3-48 | SBK/C | FI/S/P/SEXP | | | | | |
| | | | | | | | | | |
| 4P | " | 0-8 | GR/SCL | FR/SS/SP/SEXP | " | " | " | " | " |
| | | 8-48 | SBK/C | FI/S/P/SEXP | | | | | |
| | | | | | | | | | |
| 5P | " | 0-8 | GR/SCL | FR/SS/SP/SEXP | " | 30 | U | " | U |
| | | 8-30 | SBK/C | FI/S/P/SEXP | | | | | NA |
| | | 30-48 | SAP/SCL | MASSIVE | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

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

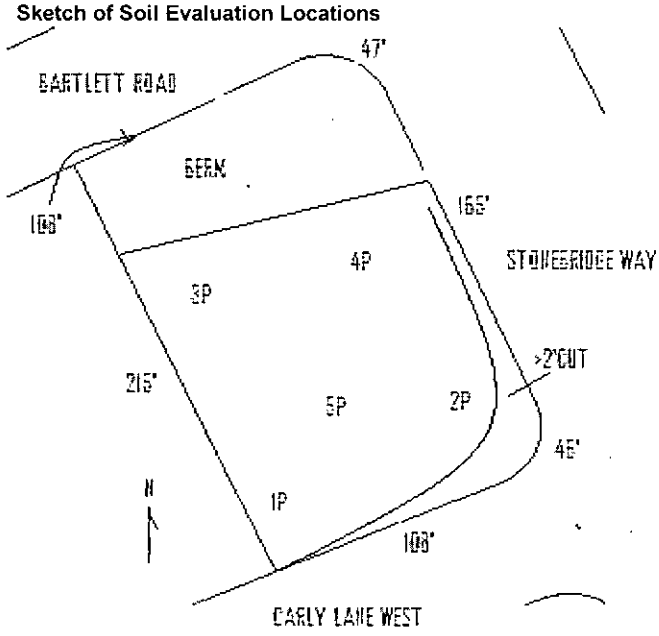
Other Factors (.1946):
Site Classification (.1948): Unsuitable
Evaluated By: Chris Sherrill, RS, LSS 5/12/06
Others Present: Kim Stanley
Site Evaluation By: David Cornelius, RS

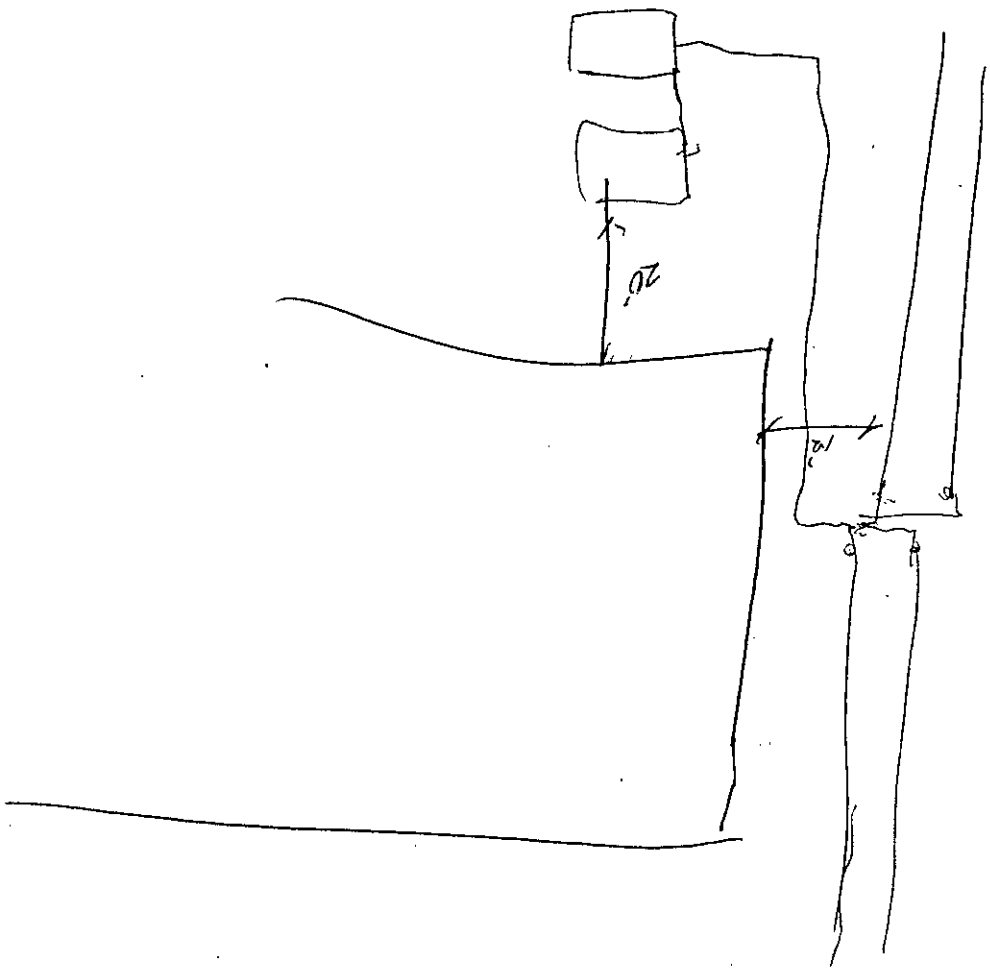
**COMMENTS: 100% Repair Area**

| 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-Food 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 | | |
| FP-Flood Plain | | 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**



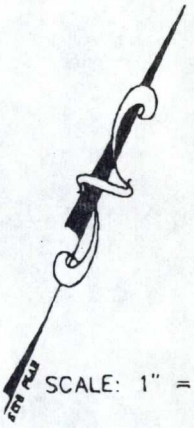

20'

# PROPOSED MODEL FIT

**MODEL FIT ONLY
NOT TO BE USED
FOR CONSTRUCTION
OR STAKING**

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190




BARTLETT ROAD (SR #3109)
UNRECORDED R/W

10X70 NCDOT SIGHT EASEMENT UNRECORDED

N 62°56'10" E 58.24'

N 63°10'43" E 49.92'

L=47.40'
R=30.00'

35X35 CDOT SIGHT EASEMENT UNRECORDED

55 LANDSCAPE AND DRAINAGE EASEMENT UNRECORDED

40 REAR YARD

LOT 30

215.59'

S 24°15'37" E

20 SIDE YARD

30 SIDE YARD

LOT 29
UNRECORDED

59.00

40.80

12.00

4.00

22.00

15.00

36.00

(DIMENSIONS DO NOT REFLECT BRICK)

L=165.19'
R=1558.57

STONEBRIDGE WAY
UNRECORDED R/W

29.50

12.58

2.00

10.83

2.00

12.29

30.00

12.00

20.29

60 MBL

84.43

15' SDE UNRECORDED

L=46.19'
R=30.00'

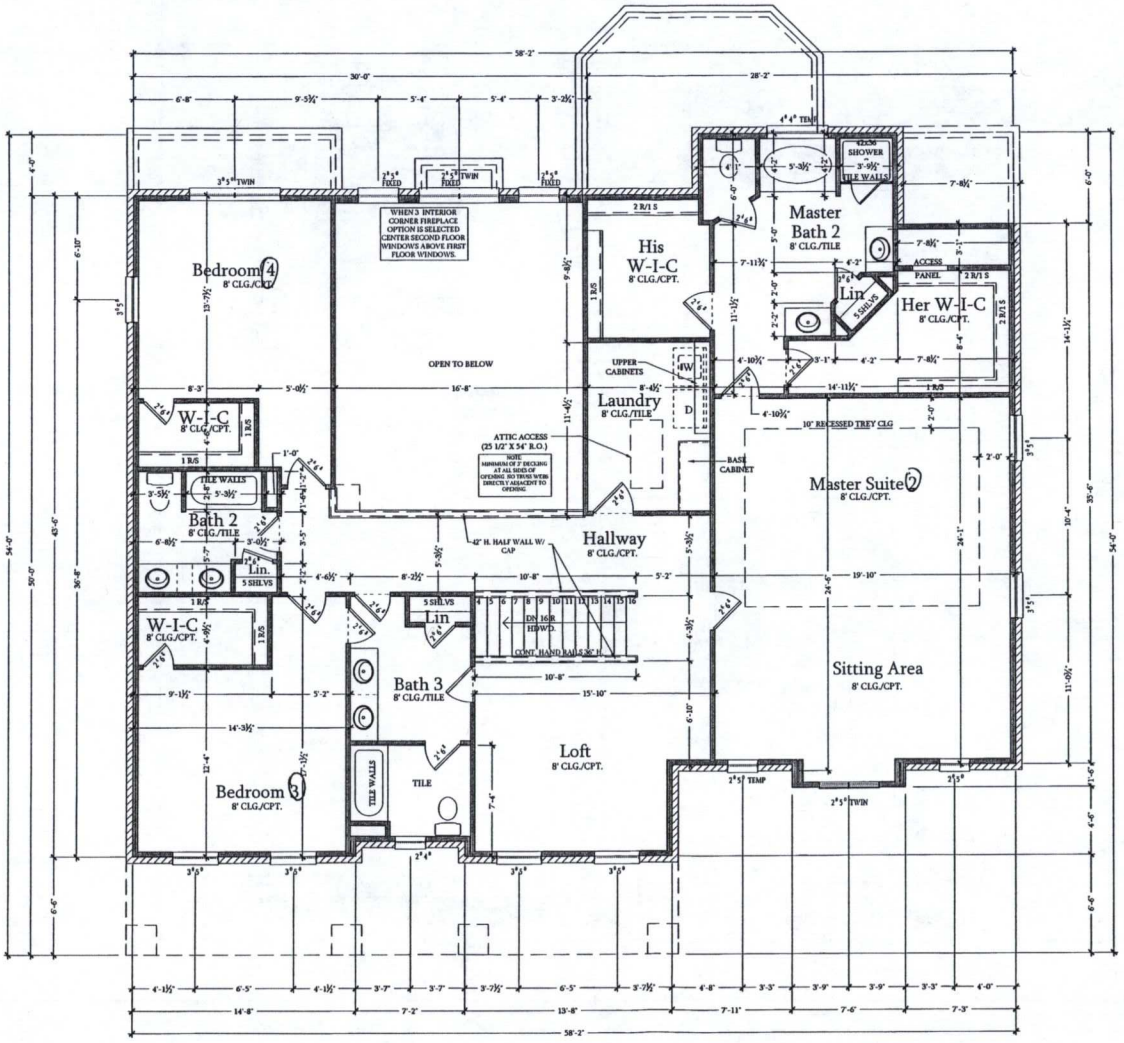
L=107.99'
R=4308.80

35X35 CDOT SIGHT EASEMENT UNRECORDED

CARLY LANE WEST
UNRECORDED R/W

NOTE: ALL LOT INFORMATION
TAKEN FROM UNAPPROVED SITE

ESTIMATED DRIVEWAY




SECOND FLOOR PLAN

SCALE: 1/8"=1'-0"

DO NOT SCALE DRAWINGS
For Dimensions not shown contact plan coordinator for clarification

| revisions: | |
|---|---|
| date: | revised by: |
| - | - |

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## GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS.
2. DO NOT SCALE DIMENSIONS FROM PRINTS. USE DIMENSIONS GIVEN OR CONSULT DESIGNER FOR FURTHER CLARIFICATION.
3. PROVIDE WINDOW FALL PREVENTION PER IRBC 2012 SECTION R612
4. PROVIDE NOT LESS THAN 5/8" TYPE X GYP. BOARD OR EQUIV. PER SECTION & TABLE R302.6 DWELLING/GARAGE SEPARATION OF THE IRBC 2012
5. SEE ELEVATION SHEETS FOR WINDOW HEADER HEIGHT.
6. ALL ANGLED WALLS ARE AT 45 DEGREES UNLESS NOTED OTHERWISE.
7. WALL OPENINGS TO BE GYP. BOARD RETURN U.N.O.
8. SEE DETAIL SHEET FOR ARCHED & SHEET ROCK OPENING DETAILS.
9. SEE FIRST FLOOR FRAMING AND/OR ROOF FRAMING SHEETS FOR BEAM SIZE/LOCATION AND HEADER SCHEDULE.
10. VERIFY INTERIOR BEARING WALL LOCATION WITH TRUSS ENGINEERING PROVIDED BY TRUSS MANUFACTURER.

## WALL & SYMBOL LEGEND

- TYP. FRAME WALL
- INTERIOR BEARING WALL
- HALF WALL
- EXTERIOR WALL w/ BRICK VENEER
- EXTERIOR WALL w/ STONE VENEER

STONEBRIDGE 30

# 3663 Isabella

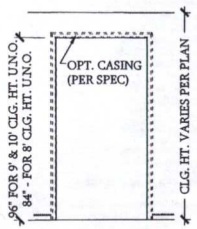
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Fort Mill, SC 29708
Phone: 704-574-0316

| | |
|---|---|
| designed by: | kwh |
| drawn by: | kdl |
| checked by: | kdl |
| date: | 1/8/10 |

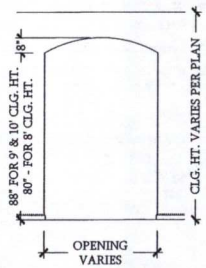
A-5.0d

SECOND FLOOR PLAN



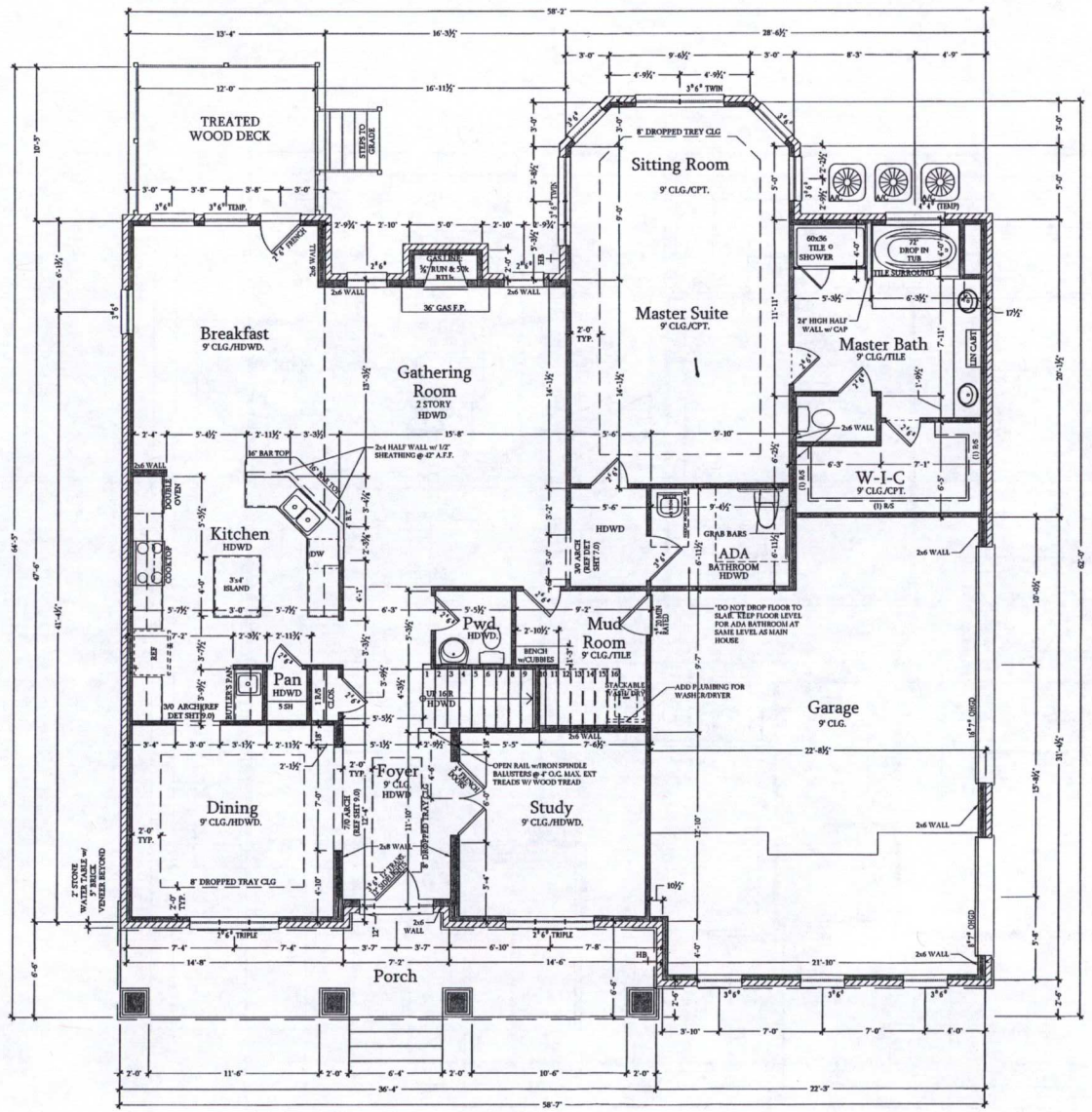

SHEETROCK OPENING DETAIL

SCALE: 3/16"=1'-0"




ARCHED OPENING DETAIL

SCALE: 3/16"=1'-0"




FIRST FLOOR PLAN

SCALE: 1/8"=1'-0"

DO NOT SCALE DRAWINGS
For Dimensions not shown contact plan coordinator for clarification

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| revisions: | |
|---|---|
| date: | revised by: |
| - | - |

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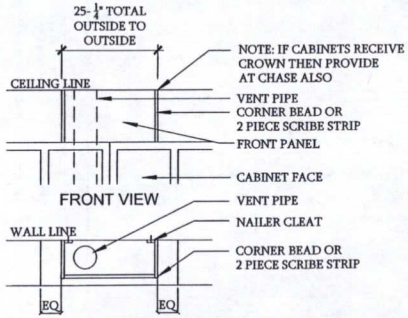
## WALL & SYMBOL LEGEND

- TYP. FRAME WALL
- INTERIOR BEARING WALL
- HALF WALL
- EXTERIOR WALL w/ BRICK VENEER
- EXTERIOR WALL w/ STONE VENEER

## SQUARE FOOTAGE TABLE

BASE PLAN

| | |
|---|---|
| FIRST FL. LIVING: | 2233 s.f. |
| SECOND FL. LIVING: | 2044 s.f. |
| TOTAL LIVING: | 4277 s.f. |
| GARAGE: | 660 s.f. |
| FRONT PORCH/COVERED ENTRY: | 227 s.f. |




VENT PIPE CHASE FOR GAS RANGE

SCALE: 3/16"=1'-0"

STONEBRIDGE 30

# 3663 Isabella

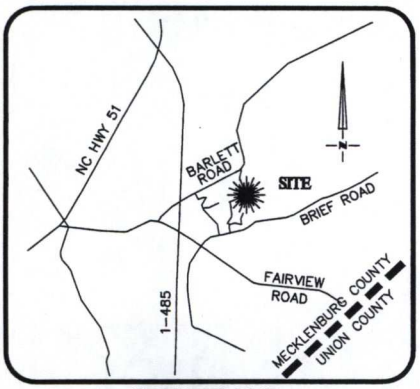
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Fort Mill, SC 29708
Phone: 704-574-0316

| | |
|---|---|
| designed by: | fwh |
| drawn by: | fdl |
| checked by: | fdl |
| date: | 1/8/10 |

A-3.0d

FIRST FLOOR PLAN



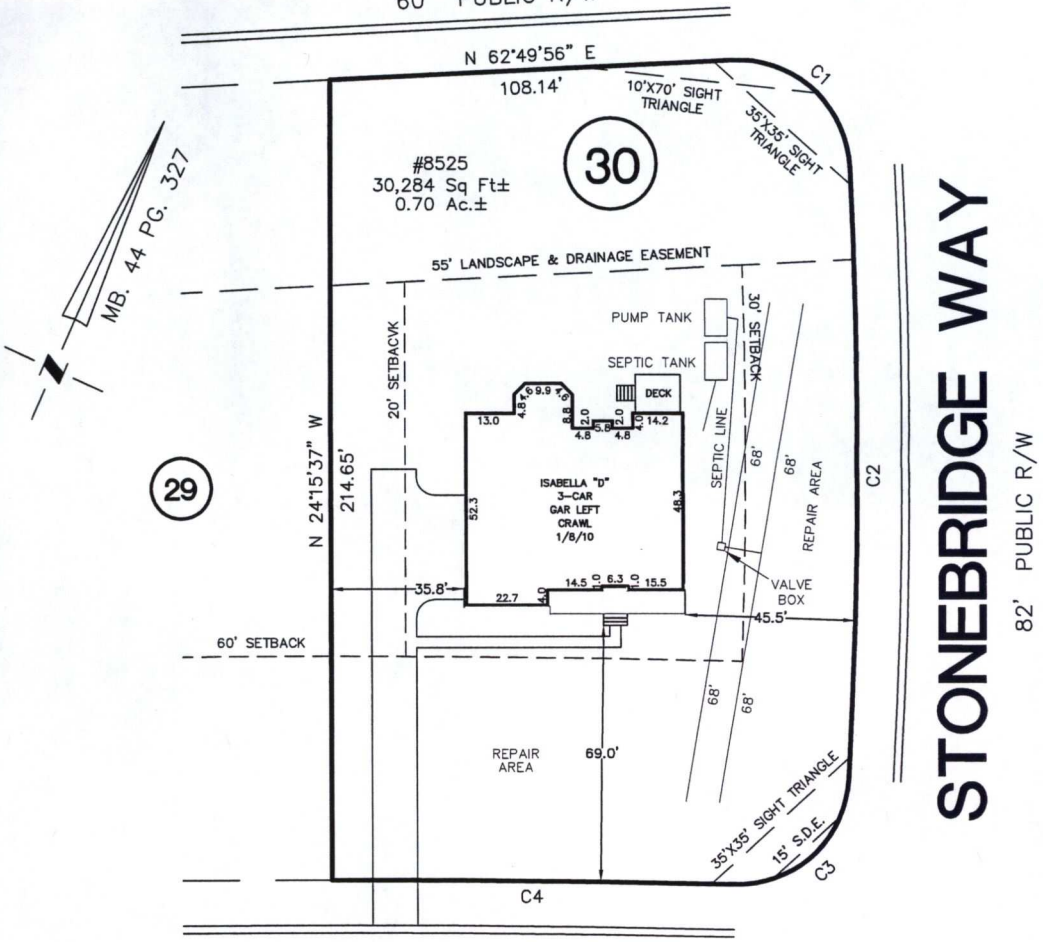

**VICINITY MAP**
Not To Scale

NOTE:
1. BUILDER ASSUMES RESPONSIBILITY FOR GRADING LOT AND/OR DESIGNING STEPS, PORCHES, DECKS, ETC. AS NECESSARY TO PREVENT ENCROACHMENT INTO SETBACKS.
2. HOUSE DIMENSIONS AND OPTIONS SHOULD BE VERIFIED WITH CONTRACTOR PRIOR TO CONSTRUCTION.
3. SETBACKS/ EASEMENTS SHOULD BE VERIFIED WITH DEVELOPER AND LOCAL OFFICIALS PRIOR TO CONSTRUCTION.
4. THIS IS A CONCEPTUAL DRAWING AND CONTENTS SHOWN HEREON ARE SUBJECT TO CHANGE UPON FINAL CONSTRUCTION.

REVISIONS

| REV. # | DATE | COMMENT |
|---|---|---|
| REV. 1 | 10/6/14 | SHIFTED BACK 5' |
| REV. 1 | 10/13/14 | SHIFTED LEFT 5' |

# BARTLETT ROAD
60' PUBLIC R/W




# STONEBRIDGE WAY
82' PUBLIC R/W

# CARLY LANE EAST
60' PUBLIC R/W

| CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | BEARING | CHORD | LENGTH | RADIUS |
| C1 | N72°05'45"W | 42.48 | 47.20 | 30.00 |
| C2 | N23°59'34"W | 164.84 | 164.92 | 1558.57 |
| C3 | N23°08'51"E | 41.76 | 46.19 | 30.00 |
| C4 | S66°31'39"W | 107.98 | 107.98 | 4308.80 |

THIS PROPERTY MAY BE SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD OR IMPLIED

THIS DRAWING DOES NOT REFLECT AS-BUILT INFORMATION

**PRELIMINARY PLAT**
**NOT FOR RECORDATION, CONVEYANCES, OR SALES.**

40 0 40
SCALE: 1" = 40'

**EASTOVER**
**LAND SURVEYING COMPANY, P.A.**
LAND SURVEYORS - PLANNERS - (C-1833)
600 TOWNE CENTRE BOULEVARD, SUITE #309
PINEVILLE, NORTH CAROLINA 28134
PHONE (704) 927-8080
FAX (704) 889-0105

## HOUSE LOCATION PLOT PLAN
FOR

LOT 30, STONEBRIDGE, PHASE 1 MAP 1
Town of Mint Hill, Mecklenburg County, North Carolina

PROPERTY OF: LIVEWELL HOMES

MAP BOOK 44 PAGE 327 DEED REFERENCE

DRAWN BY: ERG | DATE: SEPTEMBER 30, 2014

Released Hold IN
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8525 Carly Ln West
MH 28227