# Supervisor/Administrative Professional Checklist

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

New Septic Fees Paid

IP ($250.00) aas 11/2/17 Initials/Date

CA ($200.00) aas 3/22/18 Initials/Date

OP ($200.00) aas 3/22/18 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 ☑ JAM 3/22/18

This site is served by septic and well. Verify each is complete before final hold is released. ☒ NO Well

Septic file completed. ☑ JAM 12-5-18 Well file completed. ☐ _____

Send permit for signature. ☒ Signature received. ☒ Confirmed City Well

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

Certified operator contract is on file. ☐ _____

## Groundwater & Wastewater Services
## Septic Project File & Data Review Worksheet

GWS File #: 9862R WASPS App #: 9262

Primary ES assigned to project: Kim Gaertle

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: 4 | | | |
| | Were sufficient auger borings made? | Yes ☑ | No ☐ | N/A ☐ |
| .1939(d), .1955, .1956, .1957 | LTAR 0.275 | Yes ☑ | No ☐ | N/A ☐ |
| | **Improvement Permit/Construction Authorization** | | | |
| .1937(g) 130A-336(a) | Proposed System Type stated-Initial | Yes ☑ | No ☐ | N/A ☐ |
| .1945(b) | Proposed System Type stated-Repair | Yes ☑ | No ☐ | N/A ☐ |
| 130A-336 (a)(3) | System location identifiable by setbacks - Initial | Yes ☑ | No ☐ | N/A ☐ |
| .1937(g) .1945(b) | System components shown – Initial | Yes ☑ | No ☐ | N/A ☐ |
| .1945(b) | Repair area shown | Yes ☑ | No ☐ | N/A ☐ |
| .1937 (f)(g) | Does System design match facility, flow & WWcharacteristics? | Yes ☑ | No ☐ | N/A ☐ |
| .1937 (f)(g) | Is System design consistent with soil/site conditions? | Yes ☑ | No ☐ | N/A ☐ |
| .1937 (f)(g) | Is the System located in the approved area? | Yes ☑ | No ☐ | N/A ☐ |
| 130A-336(a) | Is the Design flow (gpd) indicated? | Yes ☑ | No ☐ | N/A ☐ |

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

**II. WASPS Review:**

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

# Items requiring correction/modification: _____

Comments:

_____

_____

_____

_____

_____

IA issued date: _____

OP issued date: _____

Review performed by: _____ Date performed: _____

MECKLENBURG COUNTY
HEALTH DEPARTMENT

98628
#9262

1 NOV '17 PM 4:04

# 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: 011-062-05
STREET ADDRESS: 12731 Westmoreland Rd
CITY: Huntersville
STATE: NC ZIP:
SUBDIVISION NAME: Graystone Farms
LOT #: 1 LOT SIZE (acres): 3.26

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: 8,000
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 10

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 _____

**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 PPBPS

8A. RANK: ____ ____ ____ ____ ____

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

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

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

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

**12. PROPERTY OWNER:**

NAME: Melissa Chambers
ADDRESS: 19721 Bethel Church Rd
CITY: Cornelius
STATE: NC ZIP: 28031
WORK PHONE: (704) 439-6232
MOBILE PHONE:
FAX:
E-MAIL: melissachambers@kw.com

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

NAME: Michael Athanas & Associate, Inc.
ADDRESS: 561 Ennis Rd
CITY: Weddington
STATE: NC ZIP: 28173
WORK PHONE: (704) 576-3887
MOBILE PHONE:
FAX:
E-MAIL: mike@michaelathanas.com



MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17

**14. SEPTIC SYSTEM PERMIT APPLICATION:**

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

_____ (Initial here for septic system applications)

**15. WELL PERMIT APPLICATION:**

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

_____ (Initial here for well applications)

**16. APPLICATION SIGNATURE SECTION:**

**ONLY COMPLETE APPLICATIONS WILL BE PROCESSED.** A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

_____ 11/1/2017

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

---

*OFFICE USE ONLY*

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

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

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

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:



MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

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: 12731 Westmoreland Rd

Tax Parcel #: 011-062-05

Subdivision Name: Graystone Farms

Lot #: 1

See Attached Plan

Property Owner's or Owner's Legal Representative Signature

11/1/2017
Date



MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17

# MECKLENBURG COUNTY
## Health Department

E. Winters Mabry, MD
Director

(704) 432-3199

Addendum to Application for
New Well or Septic System Installation
Abandonment or Repair of Existing Well or Septic System

Your signature below confirms the following:

1. The information on the application is true, complete and accurate.
2. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliances with applicable laws and rules.
3. I acknowledge that **Michael Athanas** is acting as my legal representative (agent) in the submittal of the application for a water supply well or septic permit located at

**12801 Westmoreland Rd. LOT 1 Parcel ID Pending**

Number Street Town
(Or Parcel Number)

**Melissa Chambers**
Property Owner (print name)

*Melissa Chambers* dotloop verified KHPC-OLQ4-K9II-HFIR
Property Owner (signature)

**10/24/2017**
Date

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

**Receipt Information**

**Date:** 03/22/18
**Receipt #:** 110351
**Check / Auth #:** CHARGE
**Received By:** ABDUSAI

**Amount:** 200.00
**Tendered:** 200.00
**Returned:** 0.00

**Account Information**

**Account #:** X53542
**Contractor:** FOUNDATION HOMES RESID LLC
**Attn:**
**Address:** 268 GLENCOE LN
**Address:**
**City/State/Zip:** MOORESVILLE, NC 28117

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0703 | Septic Operational Permit<br>12731 WESTMORELAND RD | | 1 | 200.00 | 200.00 |

**Outstanding Balances**

| Month-To-Date | Prior Month | 30 Days | 60 Days | 90 Days | Balance |
|---|---|---|---|---|---|
| 400.00 | | | | | |

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

**Receipt Information**

| | | | |
|---|---|---|---|
| **Date:** | 03/22/18 | **Amount:** | 200.00 |
| **Receipt #:** | 110350 | **Tendered:** | 200.00 |
| **Check / Auth #:** | CHARGE | **Returned:** | 0.00 |
| **Received By:** | ABDUSAI | | |

**Account Information**

**Account #:** X53542
**Contractor:** FOUNDATION HOMES RESID LLC
**Attn:**
**Address:** 268 GLENCOE LN
**Address:**
**City/State/Zip:** MOORESVILLE, NC 28117

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0734 | Septic Construction Authorizat<br>12731 WESTMORELAND RD | | 1 | 200.00 | 200.00 |

**Outstanding Balances**

| Month-To-Date | Prior Month | 30 Days | 60 Days | 90 Days | Balance |
|---|---|---|---|---|---|
| 200.00 | | | | | |

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

**Receipt Information**

**Date:** 11/01/17
**Receipt #:** 108017
**Check / Auth #:** CHECK 1875
**Received By:** ABDUSAI

**Amount:** 250.00
**Tendered:** 250.00
**Returned:** 0.00

**Account Information**

**Account #:** 200000
**Contractor:** ATHANAS, MICHAEL
**Attn:** MICHAEL ATHANAS & ASSOC.
**Address:** 561 ENNIS RD
**Address:**
**City/State/Zip:** WAXHAW, NC 28173

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0701 | Improvment Permit App-Residen<br>12731 WESTMORELAND RD | | 1 | 250.00 | 250.00 |

**Outstanding Balances**

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

FEE: 200.00
DATE: 3/23/2018

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

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

**FILE NUMBER:** 9862B

**PERMIT NUMBER:** 30009262

**PARCEL NUMBER:** 01106205

**JOB LOCATION INFORMATION**

**ADDRESS:** 12731 WESTMORELAND RD

**CITY:** HUNTERSVILLE **STATE: NC** **ZIP:** 28078

**ISSUED TO:** MELISSA CHAMBERS

**CONSTRUCTION AUTHORIZATION ISSUANCE DATE:** 3/22/2018

## CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30009262, 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. A PRE-CONSTRUCTION MEETING MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A LICENSED SEPTIC TANK CONTRACTOR WITH THE NORTH CAROLINA ONSITE WASTEWATER CONTRACTOR INSPECTOR CERTIFICATION BOARD.

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, AND MAY BE ISSUED AT THE SAME TIME THE IMPROVEMENT PERMIT IS ISSUED.

**Authorized Agent Signature** Kim Arnold

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

Sheet: 1 of 2
Property ID: 011-062-05
Lot #: 1
File #: 9862B
AppID: 9262

# SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Property Owner: Melissa Chambers
Address: 19721 Bethel Church Rd, Cornelius, NC 28031
Proposed Facility: 5 Bedroom House
Design Flow (.1949): 600 GPD
Location of Site: 12731 Westmoreland Rd, Huntersville, NC 28078
Water Supply: [ ] Public [X] Individual [X] Well
Evaluation Method: [X] Auger Boring [ ] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Applicant: Michael Athanas & Associates
Date Evaluated: 11/15/2017
Property Size: 3.26 ac
Property Recorded: Unknown
[ ] Spring [ ] Municipal
[ ] Cut
[ ] Mixed

| PROFILE # | .1940 Landscape Position/ Slope% | Horizon Depth (IN.) | SOIL MORPHOLOGY .1941 .1941 Structure/ Texture | .1941 Consistence Mineralogy | PROFILE FACTORS b .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 6% | 0 - 8 | gr CL | SS SP FR SEXP | >50" | 50 | NA | NA | | PS IV 0.275 | 36" |
| | | 8 - 34 | sbk C | S P FR SEXP | | | | | | | |
| | | 34 - 50 | sbk CL | SS SP FR SEXP | | | | | | | |
| Boring #2 | LS 8% | 0 - 10 | gr SCL | SS SP FR SEXP | >51" | 51 | NA | NA | manganese 24 - 48" | PS IV 0.275 | 36" |
| | | 10 - 51 | sbk C | S P FR SEXP | | | | | | | |
| Boring #3 | LS 8% | 0 - 8 | gr SCL | SS SP FR SEXP | >51" | 51 | NA | NA | saprolite inclusions 30 - 51" | PS IV 0.3 | 36" |
| | | 8 - 30 | sbk C | S P FR SEXP | | | | | | | |
| | | 30 - 51 | sbk CL | SS SP FR SEXP | | | | | | | |
| Boring #4 | LS 8% | 0 - 10 | gr SCL | SS SP FR SEXP | >51" | 51 | NA | NA | | PS IV 0.3 | 36" |
| | | 10 - 38 | sbk C | S P FR SEXP | | | | | | | |
| | | 38 - 51 | sbk CL | SS SP FR SEXP | | | | | | | |
| | | | | | | | | | | | |

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

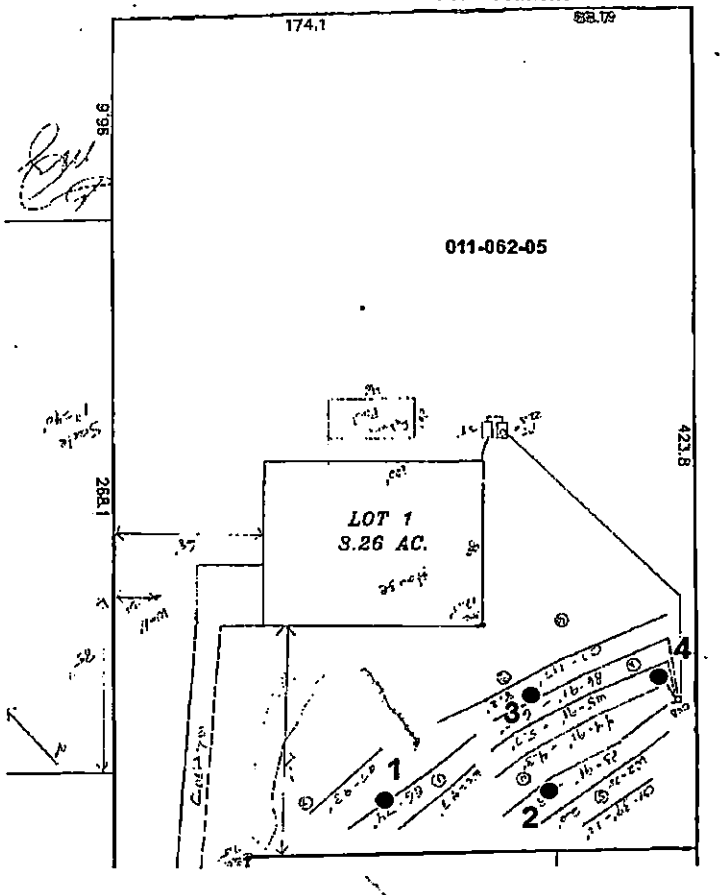
Other Factors (.1946):
Soil Evaluation By: Jacob Presley, REHS, LSS
Others Present:
Site Classification (.1948): Provisionally Suitable
Site Evaluation By: Kim Garrett, REHS
Others Present:

**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 | | | | Sap-Saprolite |
| 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**



Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: 30009262 GWS File #: 9862B Tax Parcel #: 011-062-05

- 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):** 12/21/2022

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

Structure Type: HOUSE Size ($ft^2$): 8000 # Bedrooms: 5 Max. Occup.: 10

Building Foundation: Basement With Plumbing Water Supply: Private Well

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

Initial System Specifications:

Design Flow (gpd): 600 LTAR (gpd/$ft^2$): 0.275 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1500

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area ($ft^2$): 1091 Total Trench Length (ft): 364

Maximum Trench Depth (in): 36 Depth of Media (in): 16 Distribution Device: Manifold (LPP Distri

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

Repair System Specifications:

Design Flow (gpd): 600 LTAR (gpd/$ft^2$): 0.275 Septic Tank Size (gal): 1500 Pump Tank Size (gal): 1500

Trench Width (ft): 3 Trench Spacing (ft): 9 Absorption Area ($ft^2$): 1091 Total Trench Length (ft): 364

Maximum Trench Depth (in): 36 Depth of Media (in): 16 Distribution Device: Manifold (LPP Distri

**IV. Permit Conditions/Comments:**

*(Please See the Following Page for Permit Conditions.)*

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, 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 a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Kim Garrett Owner/Legal Agent: Mike Adams

Print Name

Signature: Kim Garrett Signature:

Date Issued: 12/21/2017

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: 30009262 GWS File #: 9862B

**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.
- 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.
- Upon completion of the project the system designer shall provide Groundwater & Wastewater Services with a letter certifying that the system was installed in accordance with the approved design.
- Flow from all gutters and downspouts shall be directed 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.

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, 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 a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

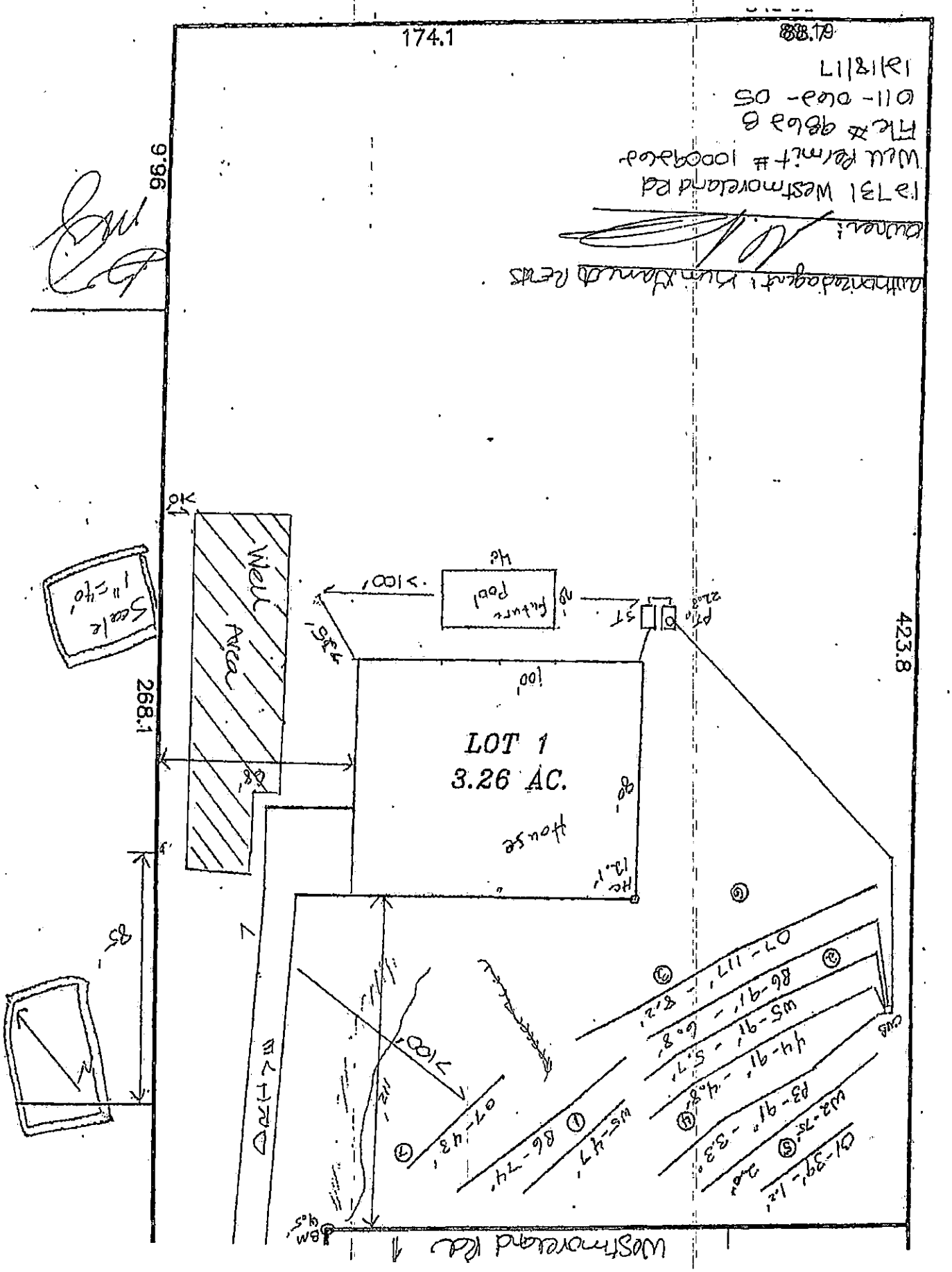
Authorized Agent: Kim Garrett

Signature: [signature]

Date Issued: 12/21/2017

Owner/Legal Agent: Mike Athenos
Print Name

Signature: [signature]


174.1
96.6
268.1
423.8
LOT 1
3.26 AC.
House
Well Area
Pool
Westmoreland Rd

**PIEDMONT DESIGN ASSOCIATES, P.A.**
125 East Plaza Drive, Suite #101
Mooresville, NC 28115
Phone: 704-664-7888 Fax: 704-664-1778
Email: dmunday@pdapa.com

Engineering
Surveying
Planning

GWS Septic System Design Review

| GWS File #: | Approved | Disapproved |
|---|---|---|
| Design | ☑ | ☐ |
| Field | ☑ | ☐ |

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

December 19, 2017

Michael Athanas & Associates
Mr. Michael Athanas, LSS
561 Ennis Road
Weddington, NC 28173

Re: 5 Bedroom SFR Prefabricated Permeable Block Panel (PPBPS) Septic System
12731 Westmoreland Road (PID No. 01106210), Mecklenburg County, NC

Dear Mr. Athanas,

At your request we have reviewed the design calculations for the proposed single family PPBPS septic system intended to serve the above lot. This review was conducted to comply with the North Carolina Board of Examiners for Engineers and Surveyors policy number BP-1007-1 with regards to on-site wastewater system design. We have found that the system is designed correctly and should function as intended.

These comments and recommendations are based on observations made at the time of this review (December 19, 2017) and are limited to that discussed in this letter. Any conditions that may come forth and are different from that discussed herein should be reported to the Engineer for further evaluation. Any questions regarding the recommendations should be addressed to the Engineer for elaboration. Thank you for allowing us to provide this service to you.

Yours truly,

**Piedmont Design Associates, P. A.**

Donald L. Munday, P.E.
N. C. Registration No. 17327

NORTH CAROLINA PROFESSIONAL SEAL 17327 ENGINEER DONALD L. MUNDAY

12/19/2017



**MICHAEL ATHANAS & ASSOCIATES**
**LICENSED SOIL SCIENTIST**
**561 Ennis Rd.**
**Weddington, NC 28173**
**(704) 576-3887**

**Reference: Data Sheet for 12731 Westmoreland Rd, Graystone Farms Lot 1**

**House Footprint:** 80' x 100'
**Building Setbacks:**
**Water Source:** Private well
**Number of Bedrooms:** 5/600 GPD
**Proposed LTAR:** 0.275 GPD/FT2
**Proposed System Type:** PPBPS
**Proposed Repair System Type:** PPBPS
**Distribution:** Low Pressure-CVB
**Flow per Orifice:** 0.41 GPM
**Orifice Size:** 5/32"
**System Flow:** 34.44 GPM
**Dosing Volume:** 302.4 gallons
**Pump Run Time:** 8.8 minutes
**Elevation Head:** 24.5'
**Friction Head:** 13.5'
**Pressure Head:** 2'
**Total Dynamic Head:** 40'
**Supply Line Length:** 165' of 2" PVC
**Septic/Pump Tank Size:** 1500/1500 gallons
**Proposed Trench Bottom:** 36"
**Proposed Trench Width:** 36" (9' on center)

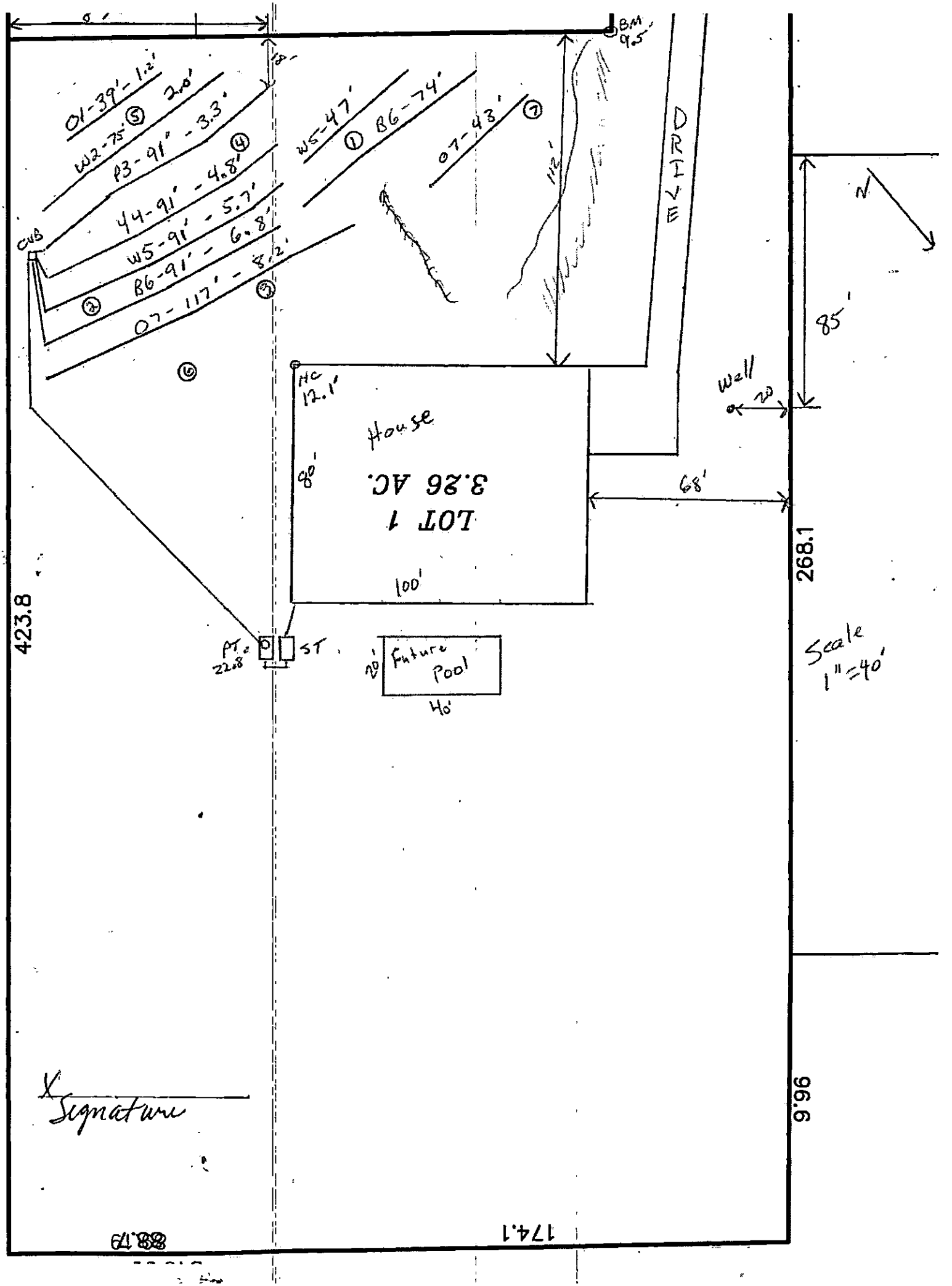
GWS Septic System Design Review
**GWS File #:** 9862S **Approved** ☑ **Disapproved** ☐
**Design Review:** ☑ ☐
Field Review: ☑ ☐
*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.

| Line | Design Length | # of Panels | Actual Length | Elevation |
|---|---|---|---|---|
| Orange 1 | | | 39' | 1.2' |
| White 2 | | | 75' | 2.0' |
| **Pink 3** | **91'** | **21** | **100'** | **3.3'** |
| **Yellow 4** | **91'** | **21** | **100'** | **4.8'** |
| **White 5** | **91'/47' (R)** | **21'** | **144'** | **5.7'** |
| **Blue 6** | **91'/74' (R)** | **21** | **171'** | **6.8'** |
| Orange 7 | | | 117'/43' | 8.2' |

**Initial System:** 364' **Repair System:** 395'
**Pump Tank:** 22.8' **House Corner:** 12.1' **Benchmark:** 9.5'

**Comments:**

- The pipe used in the low pressure distribution should be 1 ¼" PVC.
- The house foundation will be a basement with plumbing.


BM 9.5'
01-39'-1.2'
W2-75' ⑤ 2.0'
P3-91' - 3.3' ④
44-91' - 4.8'
W5-91' - 5.7'
B6-91' - 6.8'
07-117' - 8.2' ③
W5-47' ① B6-74'
07-43' ⑦
② ⑥
CUB
HC 12.1'
House
3.26 AC.
LOT 1
80'
100'
68'
112'
THIRD
N
85'
Well
20'
PT. 22.8
ST
20'
Future Pool
40'
423.8
268.1
Scale 1"=40'
9.96
174.1
88.79
X Signature

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

OWNER: Melissa Chambers APPLICATION DATE
ADDRESS: DATE EVALUATED:
PROPOSED FACILITY: 5 bdrm PROPOSED DESIGN FLOW (.1949): 600 GPD PROPERTY SIZE: 3.26 AC
LOCATION OF SITE: 12801 Westmoreland Rd, Huntersville, Graystone Farms Lot 1 PROPERTY RECORDED:
WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE | .1941 CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LS 8% | 0-8 | Br CL WSBK | FR SS SP SEXP | N/A | 48" | F-C SAP | N/A | PS 0.3 |
| | | 8-32 | R C SBK | FR SS SP SEXP | | | | | |
| | | 32-48 | R CL WSBK | FR SS SP SEXP | | | | | |
| 2 | LS 8% | 0-6 | Br CL WSBK | FR SS SP SEXP | N/A | 48" | F-C SAP | N/A | PS 0.3 |
| | | 6-32 | R C SBK | FR SS SP SEXP | | | | | |
| | | 32-48 | R CL WSBK | FR SS SP SEXP | | | | | |
| 3 | LS 8% | 0-4 | Br CL WSBK | FR SS SP SEXP | N/A | 48" | F-C SAP | N/A | PS 0.3 |
| | | 4-26 | R C SBK | FR SS SP SEXP | | | | | |
| | | 26-48 | R CL WSBK | FR SS SP SEXP | | | | | |
| 4 | LS 8% | 0-8 | Br CL WSBK | FR SS SP SEXP | Mn | 48" | N/A | N/A | PS 0.275 |
| | | 8-48 | R C SBK | FR SS SP SEXP | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | 1092 FT2 | 1185 FT2 |
| System Type(s) | PPBPS | PPBPS |
| Site LTAR | 0.275 | 0.275 |

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: MA&A
OTHER(S) PRESENT:

COMMENTS:

# SOIL/SITE EVALUATION

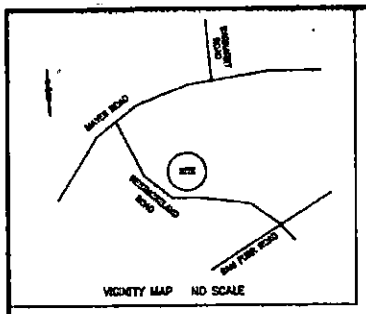
*(Continuation Sheet)*



PROPERTY ID #: 01106210_____
DATE OF EVALUATION: _____
COUNTY: Mecklenburg_____

| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) | | OTHER PROFILE FACTORS | | | | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| | | | .1941 STRUCTURE/ TEXTURE | .1941 CONSISTENCE/ MINERALOGY | .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | |
| 5 | LS 8% | 0-8 | Br CL WSBK | FR SS SP SEXP | Mn | 48" | N/A | N/A | PS 0.275 |
| | | 8-48 | R C SBK | FR SS SP SEXP | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 6 | LS 12% | 0-4 | Br CL WSBK | FR SS SP SEXP | N/A | 48" | N/A | N/A | PS 0.3 |
| | | 4-34 | R C SBK | FR SS SP SEXP | | | | | |
| | | 34-48 | R CL WSBK | FR SS SP SEXP | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 7 | LS 6% | 0-4 | Br CL WSBK | FR SS SP SEXP | N/A | 48' | F-C SAP | N/A | PS 0.3 |
| | | 4-30 | R C SBK | FR SS SP SEXP | | | | | |
| | | 30-48 | R CL WSBK | FR SS SP SEXP | | | | | |
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COMMENTS:_____




VICINITY MAP NO SCALE

## SURVEYORS CERTIFICATION

I, WILLIAM M. ALLEN CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK ____, PAGE ____; THAT THE RATIO OF PRECISION AS CALCULATED BY LATITUDES AND DEPARTURES IS 1:10000; (THAT THE BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES PLOTTED FROM INFORMATION FOUND IN BOOK ____, PAGE ____; THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH G.S. 47-30, AS AMENDED.

WITNESS MY HAND AND SEAL THIS 13 DAY OF Sept A.D. 2017.

OFFICIAL SEAL

PROFESSIONAL LAND SURVEYOR

L-3499

REGISTRATION NUMBER

NORTH CAROLINA PROFESSIONAL SEAL L-3499 LAND SURVEYOR WILLIAM M. ALLEN

THIS SURVEY CREATES A SUBDIVISION OF LAND WITHIN THE AREA OF A COUNTY OR MUNICIPALITY THAT HAS AN ORDINANCE THAT REGULATES PARCELS OF LAND.

THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA ACCORDING TO FLOOD INSURANCE RATE MAP – COMMUNITY PANEL 3710465220DJ EFFECTIVE DATE: 08/02/2009

LEGEND
"D" = P.K. = MAG NAIL
□ = PINCH TRANS
E.I.P. = EXISTING IRON FOUND
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
● = WELL
☼ = LP = LIGHT POLE
POE = PUBLIC DRAINAGE EASEMENT
CP = COMPUTED POINT

Approved in accordance with the Engineering requirements of Mecklenburg County, North Carolina.

County Engineering Staff

9/29/17
Date

Town of Huntersville
Minor Residential Subdivision

MINOR SUBDIVISION

APPROVED IN ACCORDANCE WITH THE MINOR SUBDIVISION PROVISION AS SET FORTH IN THE SUBDIVISION ORDINANCE OF THE TOWN OF HUNTERSVILLE, NORTH CAROLINA. ANY FURTHER SUBDIVISION OF THE PROPERTY IS SUBJECT TO REVIEW AND MAY CONSTRUE A MAJOR SUBDIVISION OF LAND.

Meredith Nesbon
Town Planner

9-29-17
Date

REVIEW OFFICER BLOCK

Meredith Nesbitt REVIEW OFFICER OF MECKLENBURG COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

Meredith Nesbitt
REVIEW OFFICER

9-29-17
Date

OWNER CERTIFICATION

I hereby certify that I am the owner of the property shown and described hereon and that I hereby adopt this plan of subdivision with my free consent, and dedicate all streets, alleys, walks, parks, and other sites and easements to public or private use as noted. Furthermore, I dedicate all sewer lines and all water lines to the Charlotte-Mecklenburg Utility Department, if applicable.

9.25.17 Melissa Chambers
Date Owner(s)

9.25.17
Date Owner(s)

## DIVISION OF HIGHWAYS DISTRICT ENGINEER CERTIFICATE

I HEREBY CERTIFY THAT THE RIGHT OF WAY DEDICATION ALONG THIS EXISTING STATE MAINTAINED ROADWAY SHOWN ON THIS PLAT IS APPROVED AND ACCEPTED AS PUBLIC RIGHT OF WAY BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS.

APPROVED Wendy Taylor DISTRICT ENGINEER DATE 9/29/2014

ONLY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION APPROVED STRUCTURES ARE TO BE CONSTRUCTED ON PUBLIC RIGHT-OF-WAY.

### CALCULATION

THE PROPERTY OWNERS ARE OFFERING TO LIMIT BUA TO 12% TO STAY UNDER LID REQUIREMENTS.
THE TOTAL AREA IN LOTS = 5.36 AC. (233,481.60 SQ. FT.)
233,481.60 – (8,675 EXEMPT) X 12% = 25,975.79 SQ. FT. TOTAL IMPERVIOUS ALLOWED

LOT 1 MAX IMPERVIOUS = 10,517 SQ. FT.
LOT 2 MAX IMPERVIOUS = 2,458.79 SQ. FT.
LOT 2 EXISTING IMPERVIOUS (EXEMPT) = 8,675 SQ. FT.
LOT 3 MAX IMPERVIOUS = 5,000 SQ. FT.
TOTAL MAX IMPERVIOUS 25,975.79 SQ. FT.

### OPEN SPACE CALCULATION

TO SUBDIVIDE THE 5.50 AC. TRACT, ZONED TR, INTO 3 LOTS 21% OF OPEN SPACE IS REQUIRED.

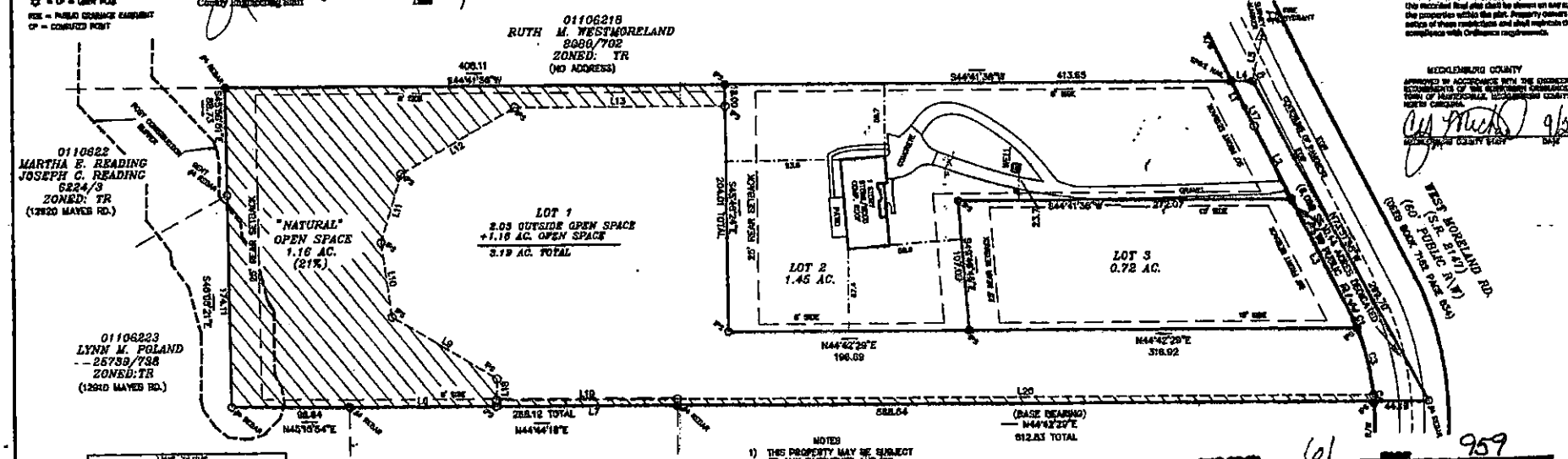
"The subdivided property is considered a larger common plan of development and therefore will be subject to the applicable portions of the Town of Huntersville Post-Construction Storm Water Ordinance during development and redevelopment (including expansion)."

The purpose of the final plat is to indicate the enforcement restrictions on property usage that run with the land to ensure that future development and redevelopment maintains the site in compliance with Ordinance requirements. The restrictions on this recorded final plat shall be shown on any survey of any of the properties within the plat. Property owners have record notice of these restrictions and shall maintain the site in compliance with Ordinance requirements.

MECKLENBURG COUNTY
APPROVED IN ACCORDANCE WITH THE ENGINEERING REQUIREMENTS OF THE SUBDIVISION ORDINANCE OF THE TOWN OF HUNTERSVILLE, MECKLENBURG COUNTY, NORTH CAROLINA.

MECKLENBURG COUNTY STAFF

9/29/17
DATE




### LINE TABLE

| LINE | BEARING | LENGTH |
|---|---|---|
| L1 | N 70°55'50" W | 24.28' |
| L2 | S 72°26'18" E | 84.44' |
| L3 | S 73°08'34" E | 112.67' |
| L4 | S 44°41'36" W | 17.28' |
| L5 | N 33°32'20" W | 37.57' |
| L6 | N 44°44'18" E | 119.15' |
| L7 | N 44°44'18" E | 160.98' |
| L9 | S 77°54'58" W | 111.75' |
| L10 | S 47°00'09" E | 51.28' |
| L11 | S 33°32'20" E | 69.59' |
| L12 | S 19°53'05" W | 107.83' |
| L13 | S 44°41'36" W | 171.62' |
| L17 | S 73°09'18" E | 11.43' |
| L18 | N 43°23'55" W | 19.96' |
| L19 | N 44°44'18" E | 147.62' |
| L20 | N 44°42'29" E | 588.20' |

### CURVE TABLE

| CURVE | RADIUS | LENGTH | BEARING | CHORD |
|---|---|---|---|---|
| C1 | 215.00' | 8.71' | S 81°34'22" E | 8.71' |
| C3 | 215.00' | 55.07' | S 68°17'45" E | 54.93' |
| C4 | 215.00' | 9.02' | S 60°14'12" E | 9.02' |

### NOTES

1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY OF RECORD.
2) ACREAGE COMPUTED BY THE COORDINATE METHOD.
3) OVERHEAD POWER
4) NO GPID MONUMENT FOUND WITHIN 2000 FEET.
5) DEED REF – 32051\523
6) TAX PARCEL – 01106210
7) THE SOLE PURPOSE OF THIS PLAT IS TO DIVIDE PARCEL 01106210 INTO THREE LOTS WITH A OPEN SPACE.
8) ZONING – TR
FRONT SETBACK = 20'
REAR SETBACK = 20'
SIDE SETBACK = 6'
9) WATERSHED – CLARKE WATERSHED
10) OPEN SPACE IS DEDICATED IN PERPETUITY OPEN SPACE TO BE MAINTAINED BY LOT 1.
11) GARAGES WILL MEET THE REQUIREMENTS OF ARTICLE 8.16
12) ALL LOTS WILL BE SERVED BY PRIVATE WELLS & SEPTIC SYSTEMS.
13) TOTAL ACREAGE FOR THE SITE = 5.50 AC.
14) POOL 15' FROM ALL PROPERTY LINES.
15) IRON PINS AT ALL PROPERTY CORNERS, UNLESS OTHERWISE NOTED.
16) COMPLIANCE WITH THE POST-CONSTRUCTION STORM WATER ORDINANCE IS REQUIRED
17) GARAGES AND DRIVEWAYS ARE SUBJECT TO REQUIREMENTS OF ARTICLE 8.16.

FILED FOR REGISTRATION
OCT 05 2017
AT 1:25 PM

MAP BOOK 61 PAGE 959
#201713544 2

# RECORD PLAT OF GRAYSTONE FARMS

HUNTERSVILLE TWP., MECKLENBURG CO., N.C.
SCALE: 1" = 60'
DATE: AUGUST 8, 2017
REVISED DATE: AUGUST 30, 2017 (PER COMMENTS)
PLATTED DATE: SEPTEMBER 13, 2017

OWNER: MELISSA W. & ANDREW CHAMBERS

GRAPHIC SCALE

60 0 30 60 120 240
( IN FEET )
1 inch = 60 ft.

DAS
DON ALLEN & ASSOCIATES P.A.
"Since 1971"
Commercial • Residential • Mortgage Surveys • Multi-Family
Construction Staking • Subdivision Design • Topographical
131 Creekside Park Drive – Suite 102 • Mooresville, N.C. 28117
(704) 664-7028 (704) 664-8041 Fax
donallen.survey@gmail.com

FILE NAME: WESTMORELAND 12801 — 13474.DWG

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 # 98623 App # 30009262 Tax Parcel # 011-062-05

Property Owner: Andrew & Melissa Chambers

Job Location Address: 12731 Westmoreland Rd

City: Huntersville State: NC Zip Code: 28078

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: _____

   Contacted Michael Athens

* If "NO" is checked for 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.**

Kim Hamett REHS — **Authorized Agent**

9/25/18 — **Date**

Brad Russell & Chris Hearick R&H Septic — **Others Present**

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211, Charlotte, NC 28202
Phone: (980) 314-1680 • 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 #: 9862 B  Permit #: 30009262  Tax Parcel #: 011-062-05

Property Owner: Andrew & Melissa Chambers

Job Location Address: 12731 Westmoreland Rd

City: Huntersville  State: NC  Zip Code: 28078

**Operation Permit Issuance Date:** 12/4/18  **Contractor Name:** Chris Hedrick #4959, Brad Russell/ R&H Septic

Permitted Design Flow: 600 GPD  Liquid Capacity of Dosing Tank: 1500 gallons

Liquid Capacity of Septic Tank: 1500 gallons  Manufacture Dellinger  Effluent Pump Model: Myers ME 45MC-21

Drainfield Installation ☐ N/A

Trench Depth: 36 inches
Trench Width: 3 feet
Line Spacing: 9 feet (O.C.)
Total line length: 364 feet
# of Lines: 4 @ 91 feet
Depth of Media: 17 inches (Type) PPBPS
Depth of Cover: 11 inches
Distribution Device: manifold

Bed Installation (For Repair Installations ONLY) ☒ N/A

Bed Depth: _____ inches
Bed Width: _____ feet
Total line length: _____ feet
# of Lines: _____ @ _____ feet
Depth of Media: _____ inches (Type) _____
Depth of Cover: _____ inches
Distribution Device: _____

Water Supply Source

☐ Municipal ☒ Private Well ☐ Community Well
☐ Other _____

System Installation Setbacks

Distance from Building Foundation: >15 feet
Distance from Property Line: > 10 feet
Distance from Water Supply Source: >50 feet
Well not drilled yet

Inspection Dates

Tank(s) Inspected: 10/5/18
Excavation Inspected: 10/5/18
Pump & Controls Inspected: 10/5/18 / 12/4/18

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

System installed as per design by michael Arnolds & Assoc 12/19/17

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 operated 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: IIIa pressure, PPBPS, n/a, n/a

DENR Authorized Agent: Kim Garrett, REHS  Signature: Kim Garrett, REHS

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 #: 980215 Permit #: 30009262 Tax Parcel #: 011-062-05

Property Owner: Andrew & Melissa Chambers

Job Location Address: 6731 Westmoreland Rd

City: Huntersville State: NC Zip Code: 28078

**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: IVa

*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: Kim Garrett, REHS Date: 6/4/18

Signature: Kim Garrett, REHS

# R & H of Lake Norman Inc.

## Wastewater System Installation and Management Inspection & Maintenance Agreement

STATE OF NORTH CAROLINA, COUNTY of Iredell. This agreement is made and entered into this date of 12/4/18 by and between Chambers (the Owner) and R & H of Lake Norman Inc. (the Contractor).

## Witnesseth

WHEREAS, the owner owns or controls the property upon which a ground absorption sewage treatment system is installed, such system being designed a Type 4 system under the Rules for Sanitary Sewage Collection, Treatment and Disposal found at 15A N.C. Adm. Code 18A 1900 et seq,; and

WHEREAS, 15A N.C. Adm. 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. Adm. Code 18A. 1961 to manage a Type 4 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 1273 Westmoreland Rd Hendersonville

a. The Contractor shall inspect the system at least the frequency required in Table V(b) of 15A N.C. Adm. Code 18A 1961(b) for a Type 4 system.

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

c. The Contractor shall report results of inspections to the local department at the frequency specified in Table V(b) of 15A N.C. Adm. Code 18A 1961 for a Type 4 system.

d. If an inspection indicates the need for system repairs, the Contractor shall notify the health department within 24 hours of the then inspection.

e. The Contractor shall notify the Owner of needed repairs, which are outside the scope of routine maintenance described in sub-paragraph (b) above. The Contractor shall perform necessary repairs to the system at the request of the Owner and shall be entitled to payment thereof at the Contractor's normal charge for services and materials.

f. The Contractor shall employ or shall contract with a certified operator(s) if required by Table V(b) of 15A N.C. Adm. Code 18A 1961(b) for a Type 4 system.

g. The Contractor shall respond to a request for a non-scheduled service or maintenance call within 72 hours after receipt of such request.

2. The Owner's obligations.

a. The Owner shall pay to the Contractor the sum of $ 300 per year for periodic inspections, routine maintenance procedures and periodic reports. The annual fee may be amended upon 60 days advance notice to the Owner but may not increase more than 2 percent per year. The Owner shall pay to the Contractor the 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 30 days of billing. Payments due to the Contractor and unpaid by the Owner after 30 days shall accrue interest from the due date until paid at a rate of 2 percent per month.

b. Within 7 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 repairs were satisfactorily completed.

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 Consent. The Parties may mutually agree to terminate this Agreement by giving written notice of termination by mutual consent to the local Health Department within 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 30 days in advance of the date of termination.

d. Termination by the Contractor. The Contractor may terminate this Agreement for cause by giving notice of intent to terminate this Agreement to the Owner and the local Health Department 30 days in advance of the date of termination. Cause shall be defined as:

1. Failure to remit payment for any bill for services performed under and in accordance with this Agreement if said bill is not paid within 30 days of receipt by the Owner. If the said bill is paid after notice of termination in this Agreement, the Agreement shall continue in effect; or

2. Failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs were completed within 2 days of receipt of notice of needed repairs pursuant to paragraph 1.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 due date of termination of this Agreement, this agreement shall continue in effect;

3. 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.

4. 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 rights and duties under this Agreement to said purchaser.

b. Assignment by the Contractor. The Contractor may assign it's rights and duties under this Agreement to another management entity, which is qualified pursuant to 15A N.C. Adm. Code 18A. 1961 to manage a Type ___(( system upon 30 days written notice to the Owner and 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 the subcontractors.

6. Representatives. The parties represent to each other that each has the power, authority and legal right to enter into and perform it's obligations as set forth in this Agreement.

7. Regulatory Amendments. References in the Agreement to sections of the administrative code shall include such rules as the may be amended in the future.

8. No Implied Waiver. The waiver by either party of the default or a breach by the 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 provisions; and (b) shall not in any way affect the validity of this Agreement, or the right of either 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 a certified or registered mail, return receipt requested, postage prepaid to the party to be notified and addressed as follows:

To the Owner: Chambers
12731 [illegible] Westmoreland Rd
Huntersville NC

To the Contractor: R & H of Lake Norman Inc.
142 Hidden Harbor Road
Mooresville, NC 28117

To the local Health Department: Iredell County Health Department
610 East Center Avenue
Mooresville, NC 28115

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

10. Placement 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 and constitutes the entire Agreement 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. Severability. 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 or such other appropriate actions as shall, to the maximum practicable in light of such determination, implement and give effect to the intentions of the parties reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such actions, 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.

X _____ 12/4/18
(Owner) (Date)

X _____ 12/4/18
(Contractor) (Date)

**PIEDMONT DESIGN ASSOCIATES, P.A.**
125 East Plaza Drive | Suite #101
Mooresville, NC 28115
Phone: 704-664-7888 | Fax: 704-664-1778
Email: dmunday@pdapa.com

Engineering
Surveying
Planning

December 4, 2018

Mecklenburg County Health Department
Groundwater & Wastewater Services
700 North Tryon Street, Suite 211
Charlotte, NC 28202
Attn: Kimberly Garrett, REHS

RE: LP PPBPS Subsurface Effluent Disposal System
12731Westmoreland Road, Mecklenburg County, North Carolina

Dear Ms. Garrett:

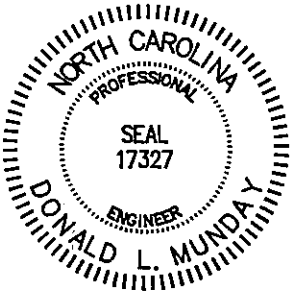
## ENGINEERS CERTIFICATION

I, **Donald L. Munday**, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically the construction of the referenced project, LP PPBPS Subsurface Effluent Disposal System; 12731 Westmoreland Road located in Mecklenburg County, NC, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the approved plans and specifications.

Sincerely,

**PIEDMONT DESIGN ASSOCIATES, P.A.**

Donald L. Munday, P.E.
N.C. Registration No. 17327




12/04/2018

Cc: Michael Athanas, LSS
Justin Smith, Foundation Homes LKN

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

**Receipt Information**

**Date:** 11/01/17
**Receipt #:** 108017
**Check / Auth #:** CHECK 1875
**Received By:** ABDUSAI

**Amount:** 250.00
**Tendered:** 250.00
**Returned:** 0.00

**Account Information**

**Account #:** 200000
**Contractor:** ATHANAS, MICHAEL
**Attn:** MICHAEL ATHANAS & ASSOC.
**Address:** 561 ENNIS RD
**Address:**
**City/State/Zip:** WAXHAW, NC 28173

| Item | Description | Permit# | Quantity | Unit Price | Total Price |
|---|---|---|---|---|---|
| 0701 | Improvment Permit App-Residen<br>12731 WESTMORELAND RD | | 1 | 250.00 | 250.00 |

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

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