IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PERMIT # 204016

PIN # 4775047765

APPLICANT: Erika Vail

APPLICANT ADDRESS: 175 Howard Pond Lp Statesville NC

SITE ADDRESS: 175 Howard Pond Lp Statesville NC

PHONE: 704-402-4767 ALT. PHONE: N/A

SITE DIRECTIONS: 64E T/L Sain Rd T/L Spring Forest Rd T/L Howard Pond Lp lot on left

SUBDIVISION: Spring Forest SECTION: N/A LOT # 52 LOT AREA: 1.4274 ac DESIGN FLOW: 480 L.T.A.R.: 0.1

Septic Tank	TBD	(gal)	STB		Date						
Pump Tank	TBD	(gal)	PT		Date						
Pump Make		Model			Serial #						
# Nitrification Fields	1	# Lines	N/A		Linear Ft:	4800 sq ft					
Trench Width	N/A	Max. Trench Bottom Depth	61"		Gravel Depth	N/A					

[X] New System [ ] Repair [ ] Expansion System Type: I II III [IV] V VI

System Description: Drip

Repair System Description: Drip

Maintenance Agreement Required: [✓] YES [ ] NO

[ ] GRAVITY [✓] PRESSURE

[X] Residence No. Bedrooms 4

[ ] Business No. Persons 8

[ ] Other No. Employees

[ ] Slab [ ] Crawl Space

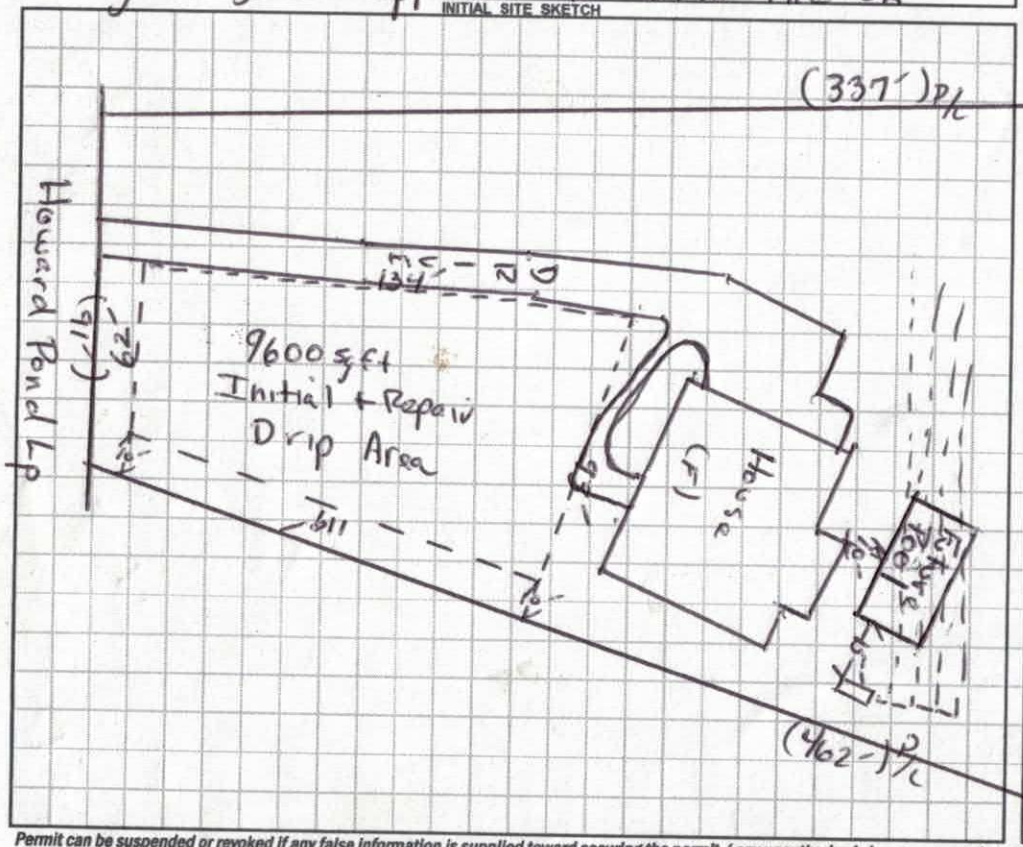
[X] Basement w/plumbing [ ] Basement w/o plumbing

Water Supply: [ ] Private [X] Public [ ] Community

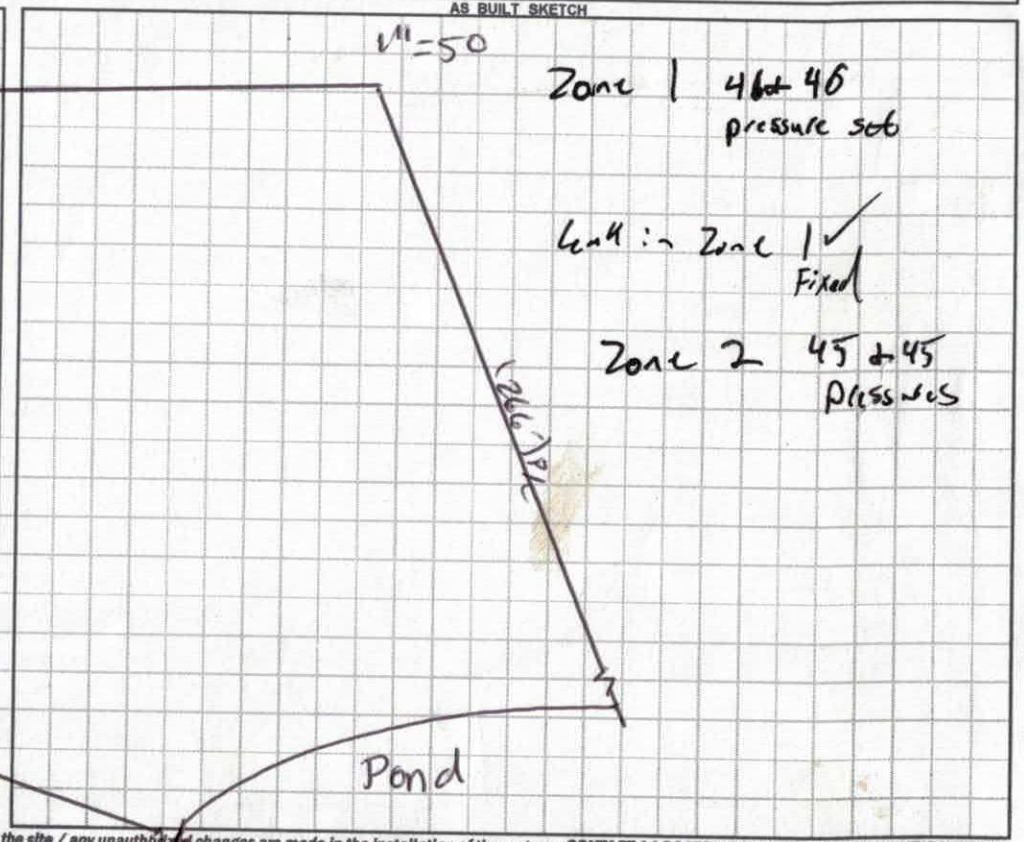
Comments / Conditions: * Improvements Only * Submit floor plan and Engineers Design prior to issuance of CA. Engineers Design, once submitted will require state approval to obtain the CA

* See plan by Piedmont Design Associates * Request copy if needed.

INITIAL SITE SKETCH



AS BUILT SKETCH



Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

[ ] **IMPROVEMENT PERMIT** *with plat valid without expiration.*

[X] **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.*

[X] **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: [signature] Date: 5.27.16

IMPROVEMENT PERMIT by: [signature] Date: 05/17/16

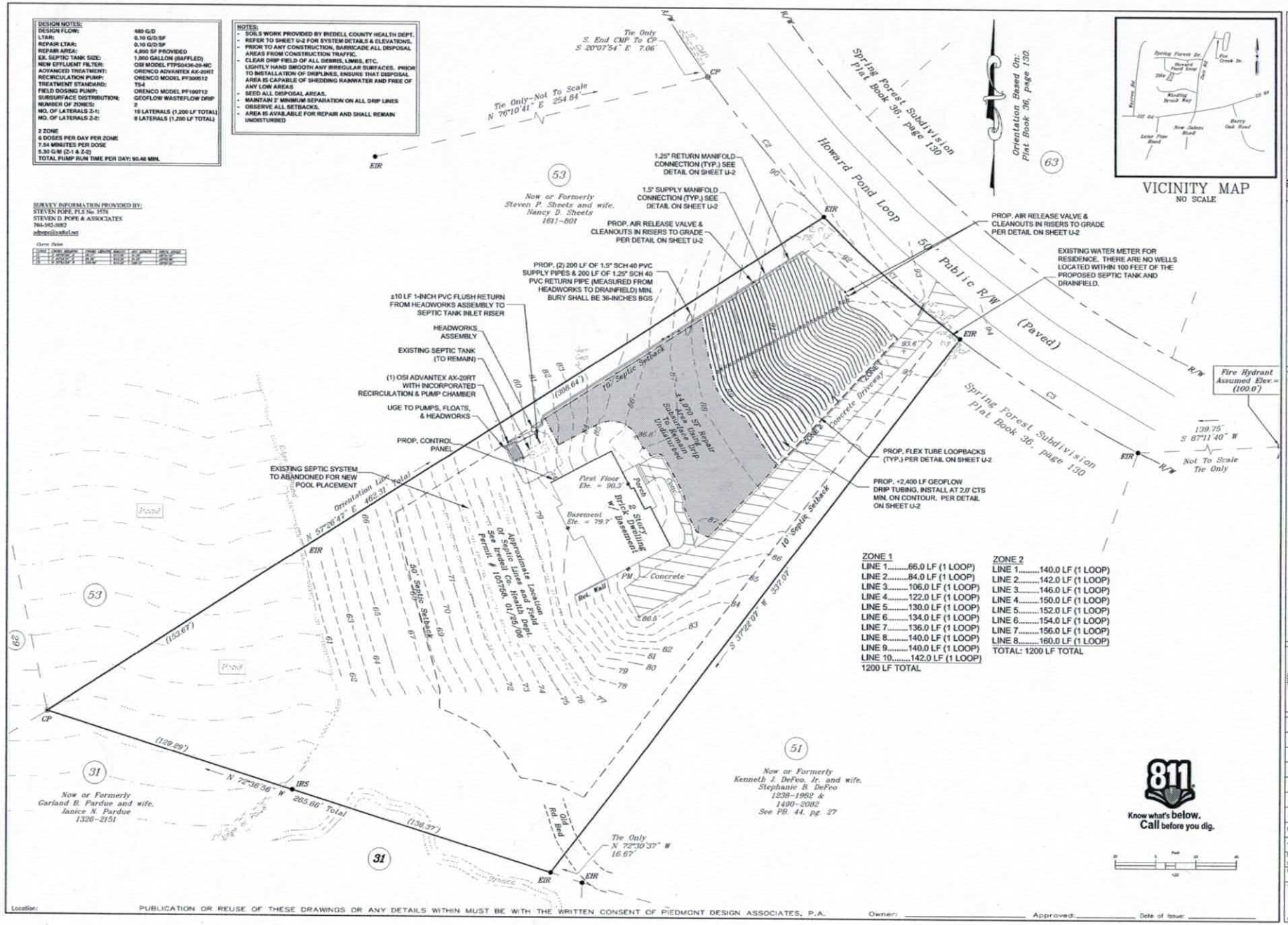
AUTHORIZATION TO CONSTRUCT by: [signature] Date: 04/07/17

Installed by: Sid Gaskins

OPERATION PERMIT by: [signature] Date: 06/19/17

Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK



PIEDMONT DESIGN
ENGINEERING • SURVEYING • PLANNING
Associates, P.A.
Suite 110 Westfield Center, 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone (704) 662-4869 Fax (704) 662-4870 pdapa.com
NC LIC # C-1607

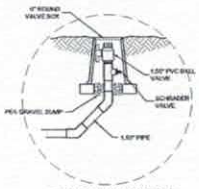
PREPARED FOR:
MICHAEL & ERIKA VAIL
175 HOWARD POND LOOP
STATESVILLE, NC 28625
704-904-3569

SUBSURFACE DRIP SEPTIC SYSTEM SITE PLAN
4 BEDROOM RESIDENCE
175 HOWARD POND LOOP | PIN: 4775-04-7765
STATESVILLE, IREDELL COUNTY, NORTH CAROLINA

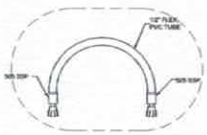
REVISIONS	BY

Date: 3/13/2017
Scale: 1"=20' FT
1' CONTOURS
Drawn: DMD
Checked: DLM
Project: 2017-03-01
Job: 2017-03-01
Sheet
U-1
of 2 Sheets

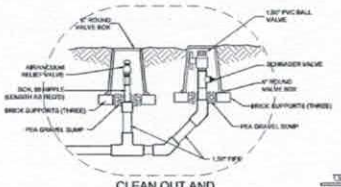
D:\Engineering 1-Projects\2017\2017-03 - Misc Septic\2017\03\01\Soil Drip\dwg\U-1\Soil Drip.dwg, 3/14/2017 1:18:12 PM, Alexander



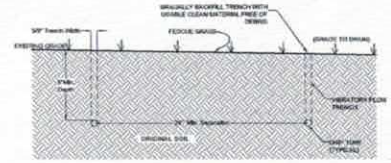
1/U2 CLEAN OUT DETAIL
N.T.S.



3/U2 LOOP CONNECTION
N.T.S.

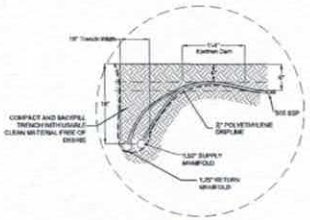


CLEAN OUT AND AIR/VACUUM RELIEF VALVE DETAIL (TYP.)
5/U2 N.T.S.

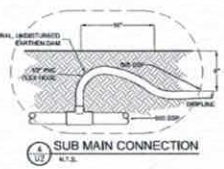


SECTION THRU DRIP LINES

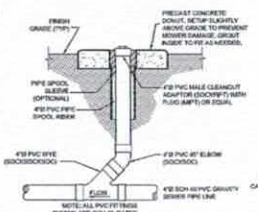
GENERAL NOTES:
1. NOTIFY UNDERGROUND UTILITIES LOCATOR PRIOR TO ANY EXCAVATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL TRADES AND SUBCONTRACTORS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS, ELEVATIONS, AND LOCATION OF ALL EXISTING CONDITIONS AND UTILITIES.
2. ALL PIPING SHALL BE SCH 40 PVC UNLESS OTHERWISE NOTED ON PLANS. ALL PVC PIPES SHALL BE BURIED A MINIMUM OF 3 FEET UNLESS SHOWN OTHERWISE.
3. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.
4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA, NCDOT, AND OTHER RELATED SAFETY REQUIREMENTS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL CONSTRUCTION DAMAGE EXPEDITIOUSLY AND AT NO ADDITIONAL COST TO THE OWNER.
6. SEPTIC TANK SHALL BE CONSTRUCTED WITH A BAFFLE WALL DIVIDING THE TANK INTERIOR 2/3rd TO 1/3rd. THE BAFFLE WALL SHALL BE CONSTRUCTED TO PERMIT PASSAGE OF EFFLUENT THROUGH A SLOT OR HOLES LOCATED BETWEEN 45 & 55 PERCENT OF THE INTERIOR DEPTH.
7. ALL TANKS SHALL HAVE A MINIMUM 28-DAY CONCRETE STRENGTH OF 4,500 PSI.
8. TANK SHALL MEET REINFORCING REQUIREMENTS TO ACCOMMODATE 3,000 POUNDS PER SQ. FT. EITHER STEEL REINFORCING WIRE, REBAR OR APPROVED FIBER MAY BE USED.
9. ALL SERVICE ACCESS OPENINGS SHALL BE A MINIMUM OF 24 INCHES.
10. RISERS TO BE CAST IN PLACE AT TIME OF TANK CONSTRUCTION.
11. ALL TANKS AND EFFLUENT FILTERS SHALL BE APPROVED BY ENGINEER & NCDHHS. EFFLUENT FILTERS SHALL BE SIZED FOR DESIGN FLOW AND EXTEND DOWN TO 50-PERCENT OF LIQUID LEVEL.
12. ALL JOINTS (MID-SEAM, TOP-SEAM) SHALL BE SEALED USING CONCRETE SEALANTS BUTYL SEALANT # CS-102 MEETING ASTM C-990.
13. TANKS SHALL BE LEAK-TESTED PRIOR TO SYSTEM START UP BY APPLYING A VACUUM OF 5-INCHES OF MERCURY WITH RISER ASSEMBLIES IN-PLACE OR A 24-HOUR STATIC WATER TEST IN ACCORDANCE WITH ASTM STANDARDS.
14. ALL PIPE PENETRATIONS THROUGH PRECAST CONCRETE TANKS SHALL BE PRESS-SEAL CAST-A-SEAL 402 RUBBER BOOTS AND GROUTED.
15. ALL TANK RISERS AND LIDS SHALL EXTEND A MINIMUM OF 6" ABOVE THE FINISHED GRADE.
16. ALL METAL INSTALLED IN TANKS SHALL BE STAINLESS STEEL.
17. ALL MANHOLES NOT INSTALLED NOT IN TRAFFIC AREAS SHALL HAVE TAMPER RESISTANT BOLTS ON LIDS.
18. CONTROL PANELS SHALL BE INSTALLED A MINIMUM OF 36 INCHES FROM FINISHED GRADE TO BOTTOM OF PANEL BOX. SEAL OFF ALL CONDUITS BETWEEN TANKS AND PANEL.
19. CONTRACTOR TO VERIFY EXISTING SITE POWER SUPPLY (VOLTAGE) BEFORE ORDERING PUMPS, CONTROLS, ETC.



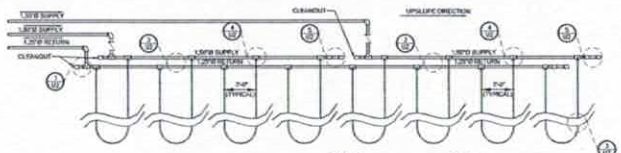
4/U2 DRIP FIELD MANIFOLD DETAIL
N.T.S.



5/U2 SUB MAIN CONNECTION
N.T.S.



GRAVITY CLEANOUT
N.T.S.

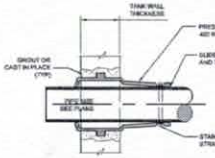


DRIP FIELD LAYOUT
N.T.S.

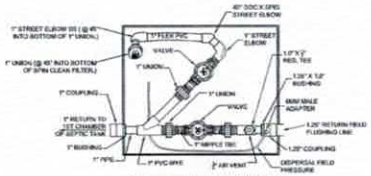
TWO ZONE DRIP FIELD (16 LATERALS @ VARIOUS LF EA) WITH A TOTAL OF 2,400 LF OF TUBING W/ EMITTERS SPACED @ 24" CTC. EACH WAY. SEE SITE PLAN FOR DRIP FIELD LAYOUT

ZONE 1
LINE 1 ..... 66.0 LF (1 LOOP)
LINE 2 ..... 84.0 LF (1 LOOP)
LINE 3 ..... 106.0 LF (1 LOOP)
LINE 4 ..... 122.0 LF (1 LOOP)
LINE 5 ..... 130.0 LF (1 LOOP)
LINE 6 ..... 134.0 LF (1 LOOP)
LINE 7 ..... 136.0 LF (1 LOOP)
LINE 8 ..... 140.0 LF (1 LOOP)
LINE 9 ..... 140.0 LF (1 LOOP)
LINE 10 ..... 142.0 LF (1 LOOP)
1200 LF TOTAL

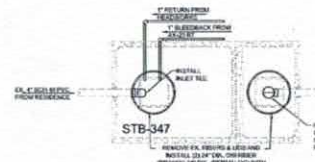
ZONE 2
LINE 1 ..... 140.0 LF (1 LOOP)
LINE 2 ..... 142.0 LF (1 LOOP)
LINE 3 ..... 146.0 LF (1 LOOP)
LINE 4 ..... 150.0 LF (1 LOOP)
LINE 5 ..... 152.0 LF (1 LOOP)
LINE 6 ..... 154.0 LF (1 LOOP)
LINE 7 ..... 156.0 LF (1 LOOP)
LINE 8 ..... 160.0 LF (1 LOOP)
TOTAL: 1298 LF TOTAL



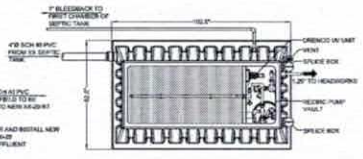
STANDARD PIPE PENETRATIONS
N.T.S.



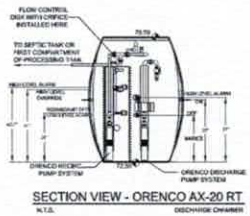
PLAN VIEW - HEADWORKS
N.T.S.



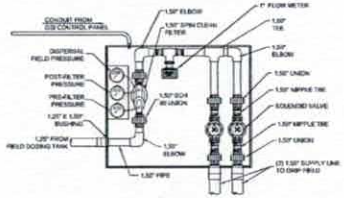
PLAN VIEW - EX. SEPTIC TANK
N.T.S.



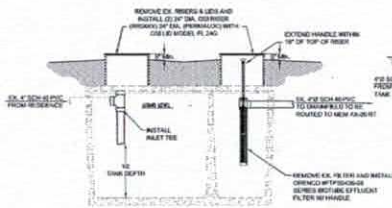
PLAN VIEW - ORENCO AX-20 RT
N.T.S.



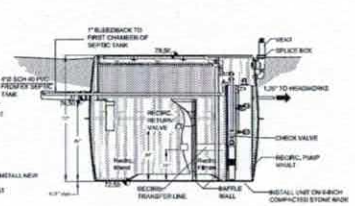
SECTION VIEW - ORENCO AX-20 RT
N.T.S.



PLAN VIEW - HEADWORKS
N.T.S.



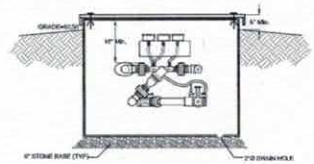
SECTION VIEW - EX. SEPTIC TANK
N.T.S.



SECTION VIEW - ORENCO AX-20 RT
N.T.S.



CONTROL PANEL DETAIL
N.T.S.



SECTION VIEW - HEADWORKS
N.T.S.

REFER TO SPECIFICATION PACKAGE FOR MATERIALS SELECTION AND INSTALLATION REQUIREMENTS

TANK ELEVATIONS

NOTE: TANK DIMENSIONS & ELEVATIONS BASED ON SHAW PRECAST COMPANY, INC. EITHER STATE APPROVED TANKS MAY BE SUBSTITUTED BUT NOT WITHOUT PRIOR APPROVAL FROM THE ENGINEER. CONTRACTOR SHALL VERIFY DIMENSIONS AND ADJUST GRADES AND FLOAT SETTINGS AS REQUIRED TO CAUSE FLOW AND DOSING AS CALLED FOR. TANKS SHALL NOT BE PUMPED DURING EXTREMELY WET CONDITIONS.

PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A.

Location: Owner: Approved: Date of Issue:

PIEDMONT DESIGN
ENGINEERING/SURVEYING/PLANNING
Associates, P.A.
Suite 101 Woodland Gateway 235 Bell Mine Street
Hendersonville, North Carolina 28739
Phone (704) 696-7000 Fax (704) 696-7777 e-mail: pda@pda.com
NC Engineering Firm C-2253 NC Surveying Firm C-2253

PREPARED FOR:
MICHAEL & ERIKA VAIL
175 HOWARD POND LOOP
STATESVILLE, NC 28625
704-904-3669

SUBSURFACE DRIP SEPTIC SYSTEM DETAILS
4 BEDROOM RESIDENCE
175 HOWARD POND LOOP | PIN: 4775-04-7765
STATESVILLE, IREDELL COUNTY, NORTH CAROLINA

REVISIONS	BY

Date: 3/13/2017
Scale: AS SHOWN
Drawn: DMD
Checked: DLM
Project: 2017-03-01
Job: 2017-03-01
Sheet: U-2
of 2 Sheets

I:\Engineering\Jobs\Projects\2017\2017 - Misc Septic\2017\03\01\Vail Dsgn\A2.dwg, 3/9/2017 10:32:36 AM, rbeamon

Spring Forest 12/53

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH

ROY COOPER
GOVERNOR

MANDY COHEN, MD, MPH
SECRETARY

DANIEL STALEY
DIRECTOR

April 6, 2017

Mr. Heath Snow
Iredell County Health Dept
318 Turnersburg Hwy
Statesville, NC 28625

Subject: Approval of 175 Howard Pond Loop Wastewater System Plans and Specifications
Statesville, Iredell County, NC
Project Number 2017-12

Dear Mr. Snow:

We have reviewed plans and specifications for the wastewater system proposed to serve 175 Howard Pond Loop, Statesville, Iredell County, North Carolina received from Donald Munday, PE, Piedmont Design Associates, PA.

The approved plans and specifications are for the following facilities and system components:

Facilities: Four (4) bedroom house

System: 1-1,000 gallon septic tank; 1-AdvanTex AX20 RT and associated appurtenances; drip irrigation headworks and hydraulic control unit; 1-subsurface drip irrigation field (2,400 linear feet total divided into 2 zones)

Design Flow: 480 gallons per day

Drainfield Loading Rate: 0.1 gpd/sq ft

Treatment Standard: TS-I (CBOD < 15 mg/L, TSS < 15 mg/L, Total Ammonia Nitrogen < 10 mg/L or at least 80% removal of NH_3 if influent TKN exceeds 50 mg/L, and fecal coliforms < 10,000 colonies/100 mL)

System classification: Va, requiring quarterly inspections by the ORC for the first year, and semi-annual inspections thereafter

The repair area identified for this project and access thereto must be maintained and kept available for future repair. No construction on or utilization of this area is permitted.

The operation permit must include, as conditions, the O&M procedures attached to the approved specifications. It shall also include the necessary information regarding the proposed management entity and certified operator as well as any additional concerns deemed appropriate by the health department for the O&M of this system.

A certified subsurface system operator shall be contracted to operate the subsurface system. The operator shall inspect the system quarterly for the first year, and semi-annually thereafter and report the findings to the health department semi-annually. The health department shall review/inspect system operation annually. O&M procedures listed in the operation permit shall include that during each operator visit the pump elapsed time and cycle counter readings shall be recorded at all pump tanks.

The installation must be approved by the health department and designer prior to the issuance of an operation permit.

Please contact me if you have any questions pertaining to this letter or if I may be of further assistance with this project. I can be contacted at 919-707-5878 or by email at trish.angoli@dhhs.nc.gov.

Sincerely,

Tricia Angoli, PE
On-Site Wastewater Engineering

cc: Donald Munday, PE, Piedmont Design Associates, PA

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 2
PROPERTY ID #: 4775047760
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: Erika Vail
APPLICATION DATE: 6-12-14
ADDRESS: 175 Howard Pond Ln
DATE EVALUATED: 6/22/16
PROPOSED FACILITY: SFD
PROPOSED DESIGN FLOW (.1949): 450
PROPERTY SIZE: 1.427 ac
LOCATION OF SITE: 64/E to Sain to Spring Forest to Howard/Pond
PROPERTY RECORDED: Yes
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other n/a
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

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	
1	L 10%	0-29	ABlC C+CR	Fi/Vfi SE	PS	29"	N/A	29"	Pits Drip 0.1
		29+	mass CR	Vfi N/A					
2	L 13%	0-29	ABlC C+CR	fi/vfi SE	PS	29"	N/A	29"	Pits Drip 0.1
		29+	mass CR	Vfi N/A					
P 3	L 9%	0-20	ABlC C+CR	Fi/Vfi SE	PS	20"	N/A	20"	Drip 0.1
		20+64	mass CR	Vfi N/A					
P 4	L 10%	0-20	ABlC C+CR	Fi/Vfi SE	PS	20"	N/A	20"	Drip 0.1
		20+	mass CR	Vfi N/A					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	IV	IV
Site LTAR	0.1	0.1

OTHER FACTORS (.1946): PS
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: HiSnow, Adam Pruitt, Alan McKinney
OTHER(S) PRESENT:

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

PROPERTY ID #: 4775017705
DATE OF EVALUATION: 5/12/16
COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P6	L 15%	0-4	Brown WSBlk CL	fr SS/SP SE	common mica ← few weathered inclusion rock / saprolite	V/A	V/A	17"	DNP
		4-17	Red MFSBlk CtoCL	fi SS/SP SE					
		17-39	Red WF SBlk CL	fi SS/SP few					
		34-84	Variegated SL Sap	fr/fi NS/NP					
			few to common Red CL between		weathered rock veins / common weathered rock				Partially rock
P7	L 23%	0-7	Brown WFSBlk CL	fr SS/SP	few weatherock				
		7-26	Red WFSBlk CL	fr com Sap Inc SS/SP					
		26-46	Variegated Sap (SL	fr SS/SP common CL	inc) few weather rock		VNS	26"	PS .3
		46-88	Variegate Sap SL	fr NS/NP	few CL inc) water coming in @ 80"				
P8	L 23%	0-6	Brown WFSBlk CL	fr SS/SP					
		6-24	Mass CR	vfi few	Cl veins 6"		V/A	6"	VNS
		24-36	Variegated mass Sap SCL	fr SS/SP many	c l/c veins ← chroma 1s in clay layers				
		36-46	Variegated mass CR+	vfr few	Cl veins				
		46-88	Variegated mass (SL Sap	fr SS/SP	very wet				
		0-22							
		22-48	Mass CR						

COMMENTS: _____

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION

CC (Concave Slope)
CV (Convex Slope)
D (Drainage Way)
DS (Debris Slump)
FP (Flood Plain)
FS (Foot Slope)
H (Head Slope)
L (Linear Slope)
N (Nose Slope)
R (Ridge)
S (Shoulder Slope)
T (Terrace)

GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*
I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4
II	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3
III	Si (Silt) SiCL (Silty Clay Loam) CL (Clay Loam) SCL (Sandy Clay Loam) SiL (Silt Loam)	0.6 - 0.3	0.3 - 0.15
IV	SC (Sandy Clay) SiC (Silty Clay) C (Clay) O (Organic)	0.4 - 0.1 None	0.2 - 0.05 None

MINERALOGY/ CONSISTENCE

SEXP (Slightly Expansive)
EXP (Expansive)

STRUCTURE

G (Single Grain)
M (Massive)
CR (Crumb)
GR (Granular)
SBK (Subangular Blocky)
ABK (Angular Blocky)
PL (Platy)
PR (Prismatic)

MOIST

VFR (Very Friable)
FR (Friable)
FI (Firm)
VFI (Very Firm v. Very Sticky)
EFI (Extremely Firm)

WET

NS (Non-sticky)
SS (Slightly Sticky)
S (Sticky)
VS (Very Sticky)
NP (Non-plastic)
SP (Slightly Plastic)
P (Plastic)
VP (Very Plastic)

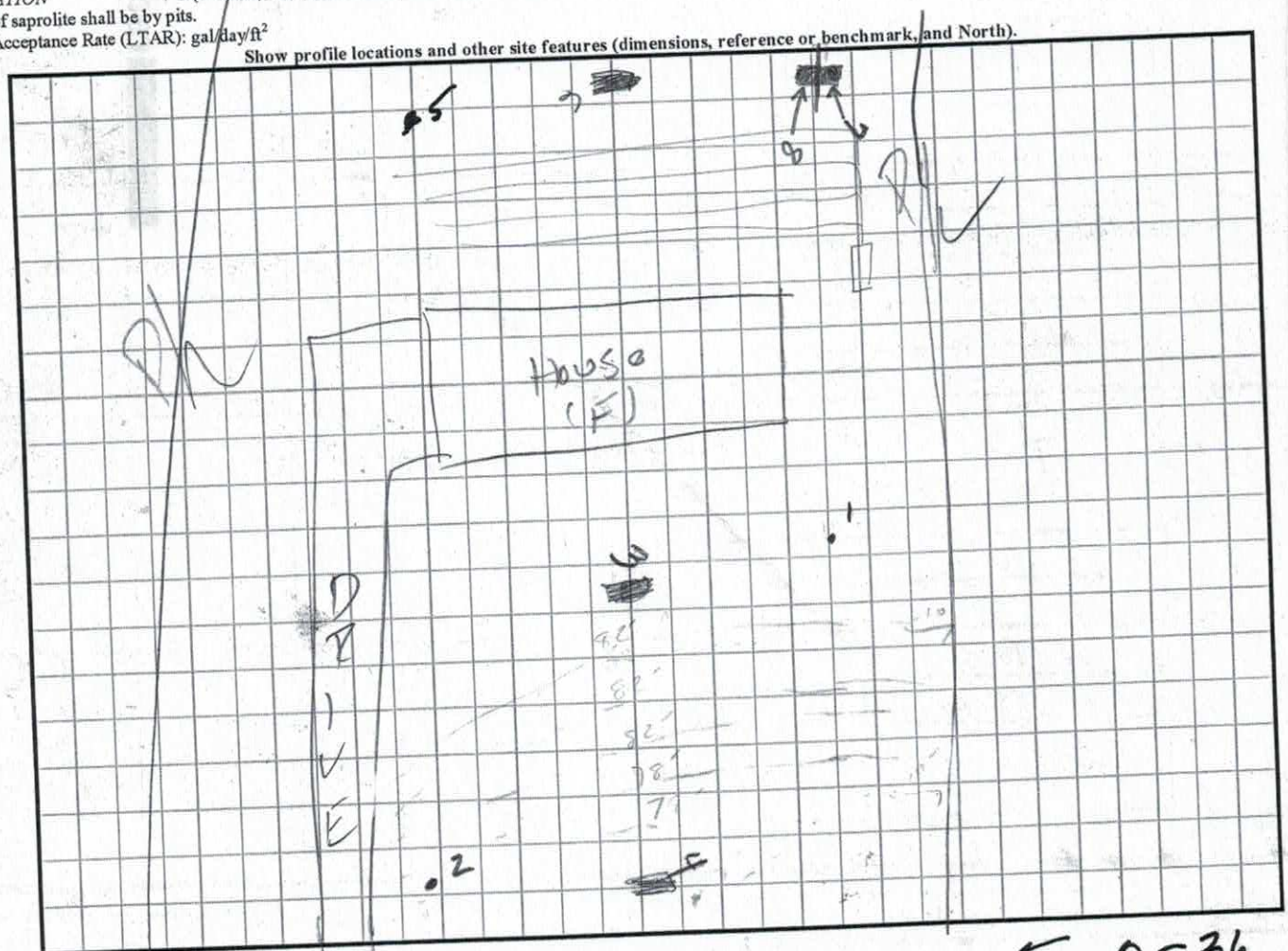
*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

NOTES

HORIZON DEPTH — In inches below natural soil surface
DEPTH OF FILL — In inches from land surface
RESTRICTIVE HORIZON — Thickness and depth from land surface
SAPROLITE — S(suitable) or U(unsuitable)
SOIL WETNESS — Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION — S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.
Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).



5 0-36
ABK C
0-48 W ABK BC
Chroma 2's @ 60

Howards Pond Lp

Call and will meet you at the site

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM*

Application For:
( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit ( ) Authorization to Construct (✓) Existing System Inspection ( ) Septic System Repair

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS.

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted: ( ) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) *beside whichever is submitted if applicable* ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

Applicant Name: Ericka Vail **Address:** 175 Howard Pond Loop, Statesville **Phone:** 704-402-4767

Owner Name: Michal + Ericka Vail **Address:** 175 Howard Pond Loop, Statesville **Phone:** 704-904-3660

Property Information:

Street Address: 175 Howard Pond Loop, Statesville, NC 28625

Subdivision Name: Spring Forest **Section/Phase:** _____ **Lot Number:** 52

Driving Directions: _____

Site Development Information: *(check or complete ALL that apply)*

( ) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

Maximum Number of Bedrooms: _____
Maximum Number of Occupants: _____
(✓) Swimming Pool
(✓) Other Addition/Structure: Move Septic

( ) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development:
Type of Business: _____
Square Footage of Building: _____
Maximum Number of Employee: _____
Maximum Number of Seats/Beds/Other: _____

Water Supply:

( ) New Well ( ) Existing Well ( ) Community Well (✓) City Water ( ) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* ✓ **Year existing system installed:** 2006
(✓) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other: _____

Please answer the following to the best of your ability:

( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (✓) No Is the site subject to approval by any other public agency?

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.

Signature: Ericka Vail 6-12-14
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

PAID
Check
6-12-14

FRANK BETZ ASSOCIATES INC

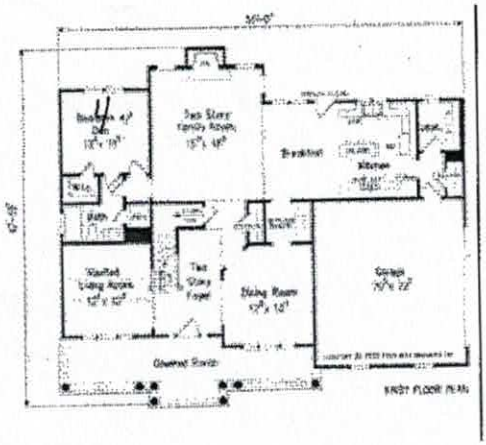
HOMEPLANS Designed for Today's Market.

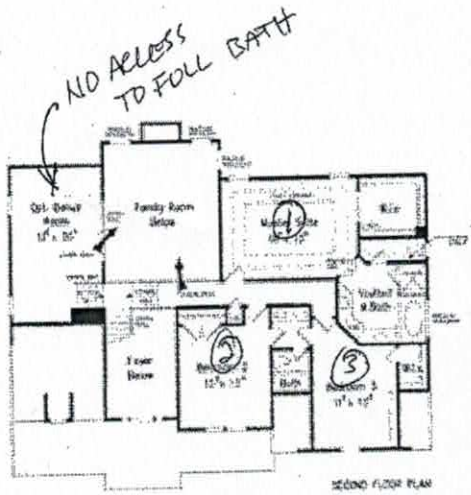
LAKESHORE



1st Floor	1483 sq. ft.
2nd Floor	1024 sq. ft.
Total	2507 sq. ft.
Opt. Bonus	252 sq. ft.

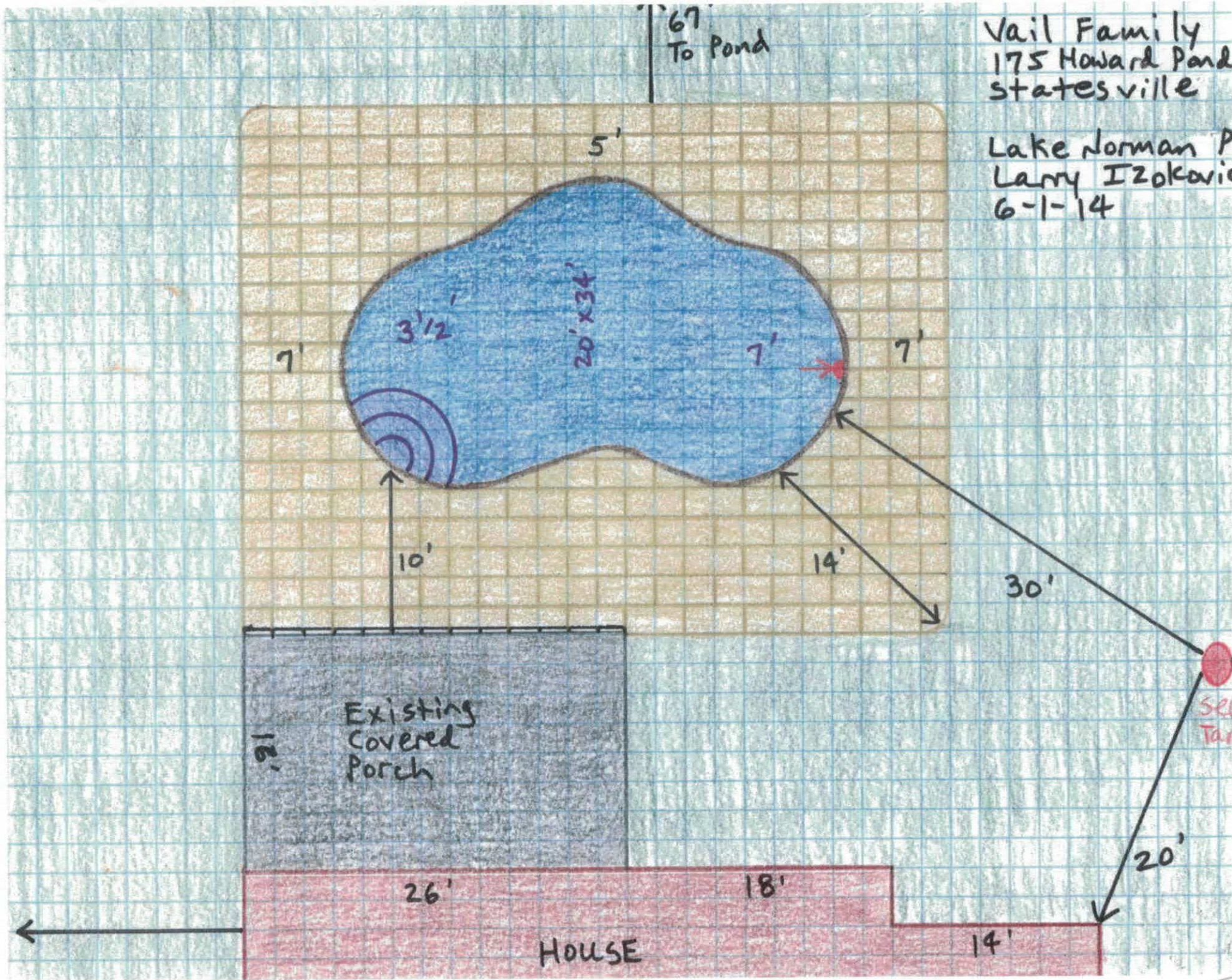
Overall Dimensions: 55'-0" x 47'-10"





Floorplans and Elevations are subject to change. Floorplan dimensions are approximate. Consult working drawings for actual dimensions and information. Elevations are artists' conceptions.

Acknowledgement Of
Plans Submittal ONLY!
Lee Cox Date 4-25-06
Karen Hall Date 4-25-06


67'
To Pond
Vail Family
175 Howard Pond
Statesville
Lake Norman
Larry Izokovic
6-1-14
5'
3'1/2'
20'x34'
7'
7'
7'
10'
14'
30'
Existing
Covered
Porch
26'
18'
14'
20'
HOUSE

IREDELL COUNTY

PO Box 788
349 North Center St.
Statesville, NC 28677

APPLICATION NUMBER
204016
Issue Date: 06/12/2014

ZONING PERMIT

Parcel Number	Street Address	Jurisdiction
4775047765.000	175 HOWARD POND LOOP, STATESVILLE, NC 28625	STATESVILLE

Owner Information	Applicant Information
Owner: VAIL MICHAEL R+ERICKA L WAGNER	Applicant: VAIL MICHAEL R+ERICKA
Address: 175 HOWARD POND LOOP STATESVILLE, NC 28625	Address: 175 HOWARD POND LOOP STATESVILLE, NC 28625
Phone:	Phone:

Use Requested	Zone Code
MOVING SEPTIC SYSTEM TO PUT IN SWIMMING POOL	

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
1.427					NOT	

Remarks:

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

Applicant: _____ Date: _____

Permit Number	14508	TOTAL FEES:	$ 77.25

STATE OF NORTH CAROLINA, COUNTY OF IREDELL

This agreement is made and entered into this 5th day of June, 2017 by and between Michael and Erika Vail (hereinafter referred to as the "Owners") and AQWA, Inc. (hereinafter referred to as the "Contractor"). The effective date corresponds to date of the Health Department Operations Permit.

WITNESSETH

WHEREAS, the Owners own or control the property upon which a ground absorption sewage treatment system (hereinafter "system") is installed, such system being designated a Type Va system (Treatment Standard II w/nitrogen reduction) under the Rules for Sanitary Sewage Collection, Treatment and Disposal found at 15A N.C. Administrative Code 18A.1900 et seq.; and,

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

WHEREAS, 15A N.C. Administrative Code 18A.1961 requires that a condition of the Operation Permit for said system be that a properly executed contract between the system Owners 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. Administrative Code 18A.1961 to manage a Type Va, TS I 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 Owners 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 175 Howard Pond Loop, Statesville, NC 28625:

   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 Va System and as specified in the State approval document for the equipment.

   b) The Contractor shall monitor the routine operation of the system using the telemetry equipped control panel at least monthly and make such performance data available to the Owners if requested.

   c) The Contractor shall take up to two laboratory samples of effluent per year from the system as prescribed by the Health Department to monitor system performance at no additional expense to the Owners.

   d) The Contractor shall perform the maintenance procedures in accordance with the conditions of the Operation Permit, specifications as set forth by the design engineer, 15A NC Administrative Code 18A.1961, specifications of the applicable NC Department of Natural Resources system approval document, and the Manufacturer's Maintenance Manual. Scheduled maintenance procedures include: inspect the structural integrity and maintain all of the physical and mechanical components of the system, inspect the performance and condition of the AdvanTex® Treatment System and low pressure panel-block drainfield, check and set pressures in the system, check and adjust pump delivery rate of the system, clean septic tank filter if applicable and accessible, perform any other requirements of the operations permit.

e) The Contractor shall have operator on call 24 hours daily. Emergency service to be billed to the Owners.

f) 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. Administrative Code 18A.1961(b) for a Type Va System.

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

h) The Contractor shall notify the Owners of needed repairs, which are outside of the scope of routine scheduled maintenance described in subparagraph (d) above. The Contractors shall perform necessary repairs to the system at the request of the Owners and shall be entitled to payment therefore at the Contractor's normal charge for services and materials.

i) The Contractor shall employ or shall contract with a State certified operator(s) if required by Table V (b) of 15A N.C. Administrative Code 18A.1961(b) for a Type Va System.

j) The Contractor shall respond to a request for service or maintenance call within twenty-four (24) hours upon receipt of request.

2. The Owner's Obligations.

a) The Owners shall pay to the Contractor the sum of $650.00 for the first year for periodic inspections, routine maintenance procedures, required sampling and periodic reports. The annual fee will be renewed at the end of each 12 month period. The annual fee may be amended upon sixty (60) days advance notice to the Owners but may not be increased more than six (6) percent per year. The Owners shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of unscheduled service or maintenance calls. One unscheduled service or maintenance call is included in the first year's fee. All subsequent unscheduled service or maintenance calls will be at the Contractor's customary rate with a two hour minimum, plus materials. All invoices are due and payable within thirty (30) days of billing. Payments due to the Contractor and unpaid by the Owners after thirty (30) days shall incur a late fee of $25 per month for each month payment is not received by the Contractor.

b) Within thirty (30) days of receipt of notice of needed repairs pursuant to paragraph 1.h. above, the Owners shall request the Contractor to complete needed repairs.

c) The Owners 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 and requirements of Currituck County.

d) The Owners shall keep the area of the septic system equipment and drain field properly mowed and protected from traffic.

e) The Owners shall provide year-round telephone service to the telemetry control panel, which requires access to the home phone line with "toll free" 800 number access. Installation of connection to be completed prior to start-up inspection, service available within 5 working days following issuance of the Certificate of Occupancy, and termination of service places the system Out of Service with the County.

f) The Owners shall provide a hose bib with water service within 75 feet of the system.

g) The Owners shall apply and enforce the "Do's and Don'ts" as prescribed by the manufacturer in the provided publication.

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

a) Automatic Termination. This agreement shall automatically terminate if the Operations Permit for the system is revoked and all appeals of 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 thirty (30) days in advance of the date of termination.

c) Termination by the Owners. The Owners may terminate this Agreement by giving notice to the Contractor and to the local health department thirty (30) days in advance of 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 Owners and to the local health department thirty (30) days in advance of the date of termination. Cause shall be defined as:

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

b) failure of the Owners to provide to the Contractor authorization to complete needed repairs within thirty (30) days of receipt of notice of needed repairs pursuant to paragraph 1.h. 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; or,

c) failure of the Owners 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 Owners. The Owners shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owners 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 its rights and duties under this Agreement to another management entity, which is qualified pursuant to 15A N.C. Administrative Code 18A.1961 to manage a Type Va system upon thirty (30) days written notice to the Owners 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 the 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 Party thereafter to enforce each 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 Owners: Michael and Erika Vail, 175 Howard Pond Loop, Statesville, NC 28625
   To the Contractor: AQWA, Inc., 2604 Willis Court, Wilson, NC 27896
   To Iredell County Environmental Health, 318 Turnersburg Hwy., Statesville, NC 28677

   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 or attempted deliver, 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 to the other party.

10. Place of Agreement. This Agreement and any questions concerning its validity, the system 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 Inspection and Maintenance of the system and constitutes the entire Inspection and Maintenance Agreement between the Parties. 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 as 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.

OWNERS: Michael and Erika Vail

Signature

Michael Vail
Printed Name

Signature

Erika Vail
Printed Name

Contractor
Mike Barry, Chief Operating Officer, AQWA, Inc.