IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 214662

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

PIN # 4637-13-9341

APPLICANT: William Lucas APPLICANT ADDRESS: 12711 Kane Alexander Dr. Huntersville

SITE ADDRESS: 143 Patternote Rd. Mrsol PHONE: 704-400-8932 ALT. PHONE:

SITE DIRECTIONS: BSR, TR Blume, TR Patternote, on L

SUBDIVISION: CLET SECTION: 9 LOT # 155 LOT AREA: .83 AC DESIGN FLOW: 360 L.T.A.R.: .275 (.125R)

Septic Tank	1000 (gal)	STB	794	Date	2-25-17	☑ New System	☐ Repair	☐ Expansion	System Type: I II III ⓘ V VI	☑ Residence	No. Bedrooms 3
Pump Tank	1000 (gal)	PT	283	Date	2-21-17	System Description:		LP - Panel Block		☐ Business	No. Persons 6
Pump Make	Liberty	Model	290	Serial #		Repair System Description:		TS-II Drip		☐ Other	No. Employees
# Nitrification Fields	1	# Lines	6	Linear Ft:	220'	Maintenance Agreement Required:	☑ YES	☐ NO		☐ Slab	☐ Crawl Space
Trench Width		Max. Trench Bottom Depth	36"	Gravel Depth	—		☐ GRAVITY	☑ PRESSURE		☑ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☑ Private ☐ Public ☐ Community

Comments / Conditions:

Checked Lines, Tanks, CVB BA 3-23-17
5/23/17 Checked Electrical alarm

INITIAL SITE SKETCH

See Plan From
Michael Athanas
&
Associates

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.* ☑ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☑ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 8-23-16 Installed by: Abernathy

IMPROVEMENT PERMIT by: APPROVED Date: AUG 18 2016 OPERATION PERMIT by: Maria Dotson Date: 5/30/17

AUTHORIZATION TO CONSTRUCT by: APPROVED Date: AUG 18 2016 Existing System Inspected by: Date:

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

APPROVED AUG 18 2016

3A

LAKE

#4 Rebar Found 1.0' Tall 3.48' on line

S35°47'01"E 213.97

BM 17.4

#4 Rebar Found Flush

760 Contour Line

Repair Area

P2

P3

P1

P4

50' Setback P.B. 14, Pg. 104

50' Setback Fr 760 Contour Li

DRIVE

W5-45'-6.3'

P4-45'-4.9'

W3 30' 3.6'

02-30'-2.4'

W1

Setback 0.8'

CVB

Proposed House

Area 2

15' Setback

N16°34'00"E 334.05

S44°55'58"W 270.03

Lot 154

Lot 156

Lot 155
35,299 Sq.Ft.
0.81 Acres

80' Setback

Well

131.2

Concrete Drive

P.B. 14, Pg. 106

Concrete Monument Found Flush

#6 Rebar Found Flush

Axle Found Flush

N53°04'46"W 60.17 Tie

C1

Patternote Rd.
60' R/W
S.R. 1240

Legend

Right-of-way
= #4 Rebar Set
= Not to scale
= Telephone Pedestal
= Utility Pole
= Edge of Pavement

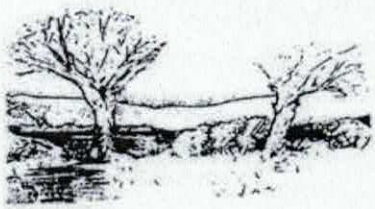
roperty may be subject to
ments, Rights-of-way,
estrictive Covenants.
ary information based on Plat
at Page: 106 as recorded in the
unty Register of Deeds.
urvey is of an existing
parcels of land.
y coordinate method.
e Commitment was
or reviewed.

Scale 1"=40'

GRAPHIC SCALE

50 0 25 50

CURVE TABLE			



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

Reference: Data Sheet for 143 Patternote Rd., CL&T Sec 9. Lot 155

House Footprint: See attached plan
Building Setbacks: 80' front, 15' side, 50' lake
Water Source: Existing private well
Number of Bedrooms: 3/360 GPD
Proposed LTAR: 0.275 GPD/FT2 (initial), 0.125 GPD/FT2 (repair)
Proposed System Type: PPBPS
Proposed Repair System Type: TSII Drip Irrigation
Distribution: Low pressure-CVB
Flow per Orifice: 0.59 GPM
Orifice Size: 3/16"
System Flow: 29.5 GPM
Dosing Volume: 180 gallons
Pump Run Time: 6.1 minutes
Elevation Head: 12.3'
Friction Head: 1.1'
Pressure Head: 2'
Total Dynamic Head: 15.4'
Supply Line Length: 60' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Number of Panels: 50
Proposed Trench Bottom: 36" maximum (initial), 20" (repair)
Proposed Trench Width: 24"

Line	Design Length	# of Panels	Actual Length	Elevation
White 1	25'	6	25'	0.8'
Orange 2	30'	7	30'	2.4'
Yellow 3	30'	7	30'	3.6'
Pink 4	45'	10	45'	4.9'
White 5	45'	10	45'	6.3'
Orange 6	45'	10	45'	8.2'

Initial System: 220' **Repair System:** 2880+FT2
Pump Tank: 8.1' **House Corner:** 5.5' **Benchmark:** 17.4'

Comments:

-This site was recently evaluated by Iredell County and an existing system check was completed and a new building permit was issued. The builder upon excavating for the basement over excavated by 3 feet at which time a portion of the existing system was revealed. MA&A went back out to the site and it appeared there was a step down that was not shown on the original existing permit/existing system check. Based on the new information MA&A has located a new septic area for a 3 bedroom residence.

-Please note the pool is located in red pin flags, and the tanks in blue flags.

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

PROPERTY ID #: 4637139341
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

APPROVED AUG 18 2016

OWNER: William Lucas
APPLICATION DATE: [illegible]
ADDRESS: 12711 Kane Alexander Dr., Huntersville NC
DATE EVALUATED: _____
PROPOSED FACILITY: 3 bdrm
PROPOSED DESIGN FLOW (.1949): 360 GPD
PROPERTY SIZE: 0.81 AC
LOCATION OF SITE: 143 Patternote Rd, CL&T Sec 9, Lot 155
PROPERTY RECORDED: 5/9/1977
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	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
PIT 1	LS 12% /	0-6	FILL		N/A	39"	F-C SAP PS	N/A	PS 0.3-0.4
		6-26	R C SBK	FR SS SP SEXP					
		26-39	R CL WSBK	FR SS SP SEXP					
		39-60	SL SAP M	VFR SS SP SEXP					
PIT 2	LS12% ~	0-6	FILL		N/A	48"	F-C SAP PS	N/A	PS 0.3-0.35
		6-31	R C SBK	FR SS SP SEXP					
		31-48	R CL WSBK	FR SS SP SEXP					
		48-68	SL SAP M	VFR SS SP SEXP					
PIT 3	LS 12% ✓	0-9	FILL		N/A	22"	F-C SAP PS	N/A	PS 0.4
		9-22	R CL WSBK	FR SS SP SEXP					
		22-62	SL SAP M	VFR SS SP SEXP					
PIT 4	LS 12% ✓	0-10	FILL		N/A	51"	F-C SAP PS	N/A	PS 0.3-0.35
		10-30	R C SBK	FR SS SP SEXP					
		30-51	R CL WSBK	FR SS SP SEXP					
		51-61	SL SAP M	VFR SS SP SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	402 FT2	2880+FT2
System Type(s)	PPBPS	DRIP
Site LTAR	0.3	0.125

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

COMMENTS: _____

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

APPROVED AUG 18 2016

PROPERTY ID #: 4637139341
DATE OF EVALUATION:
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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
AB 1	LS 12%	0-22	R C SBK	FR SS SP SEXP	N/A	48"	F-C SAP	N/A	PS 0.3
		22-48	R CL WSBK	FR SS SP SEXP					
AB 2	LS 12%	0-16	FILL		N/A	44"	F-C SAP	N/A	PS 0.3
		16-22	R C SBK	FR SS SP SEXP					
		22-44	R CL WSBK	FR SS SP SEXP					

RECEIVED AUG 4 2016

IREDELL COUNTY HEALTH DEPARTMENT

Paid $350.00

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM* Paid $500.00 8-23-16 #214662

Application For:

( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment

(X) Septic Improvement Permit (X) 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: (X) 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: William Lucas **Address:** 127 Kane Alexander Dr. Huntersville NC **Phone:** Tim Wheeler Bldg 704 400-8952

Owner Name: Same **Address:** _____ **Phone:** _____

Property Information:

Street Address: 143 Patternote

Subdivision Name: CL+T **Section/Phase:** 9 **Lot Number:** 155

Driving Directions: BSR, TR Blume, TR Patternote, on Lt

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

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

Maximum Number of Bedrooms: 3
Maximum Number of Occupants: _____
(X) Swimming Pool
( ) Other Addition/Structure: _____

( ) Crawl Space Foundation
( ) Concrete Slab Foundation
(X) 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 (X) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* **Year existing system installed:** _____

( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative (X) Modified Conventional ( ) Other: _____

Please answer the following to the best of your ability:

( ) Yes (X) No **Does the site contain any jurisdictional wetlands?**
( ) Yes (X) No **Is any non-domestic sewage (i.e. industrial) to be generated?**
( ) Yes (X) 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: _____ 8/4/2016

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative:

Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:

Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form.

If there are multiple property owners, then all property owners must sign the form that designates a legal representative.

By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

I, William & Mary Lucas, am the legal owner(s) of the property located at 143 Patternote Road Mooresville NC 28117, identified as PIN (Parcel Identification Number) 4637-3-2841.000, located in Iredell County, North Carolina.

I do hereby authorize Michael Athanas & Associates, T. to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

Mary C. Lucas 08/01/2016 — Signature of Owner(s) — Date

Regina M Boller
X Regina M. Boller 08/01/2016 — Signature of Witness — Date

GINA M BOLLER NOTARY PUBLIC IREDELL COUNTY My Commission Expires:

Please return this signed form to the appropriate office:

Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

IREDELL COUNTY HEALTH DEPARTMENT

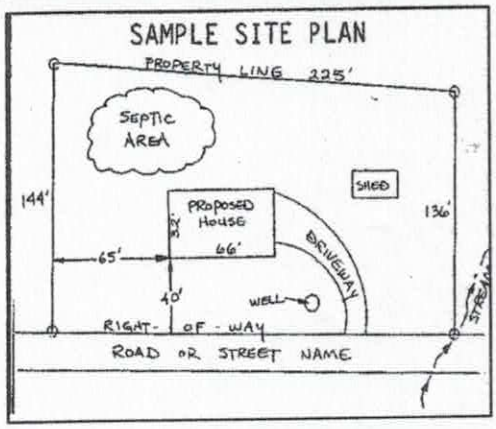
ENVIRONMENTAL HEALTH DIVISION

PAGE 2: *SITE PLAN WORKSHEET*

SEE THE "SAMPLE SITE PLAN" BELOW. *INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!*

Place an (X) beside each item as you complete the site plan:

- ( ) **Property Line measurements are clearly identified**
- ( ) **All proposed structures are indicated**
- ( ) **Front and side setbacks from property line**
- ( ) **Preferred driveway location and well location**
- ( ) **Area you prefer your septic system to be placed**
- ( ) **North arrow, or other sufficient indicator of direction**



Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	**N/A**
Location of easements and rights of ways on your property	**N/A**
Location of any designated wetlands on the property	**N/A**

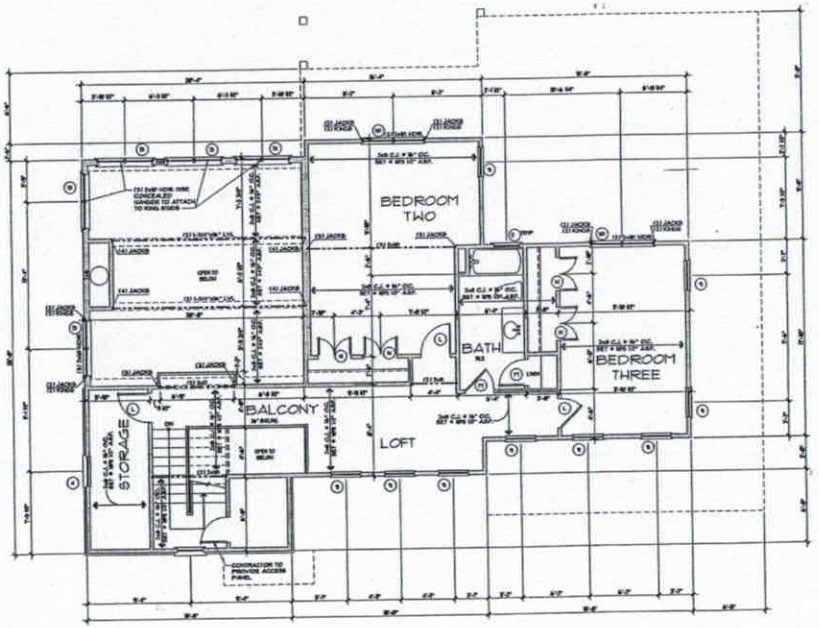
USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

See Attached Plan

Signature: _____ 8/4/2016

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**



DOOR SCHEDULE		
A	3'x8'	96" LITE EXTERIOR DOOR
B	2-2'x8'	EXTERIOR FRENCH DOORS
C	5'x8'	CASED OPENING
D	5'x8'	CASED OPENING
E	2'x8'	INTERIOR DOOR
F	2'x8'	INTERIOR DOOR
G	3'x8'	FULL LITE EXTERIOR DOOR
H	10'x8'	SLIDING GLASS DOOR
J	3'x8'	20 MIN FIRE RATED
K	3'x8'	EXTERIOR FIBERGLASS DOOR
L	2'x8'	INTERIOR DOOR
M	2'x8'	INTERIOR DOOR
N	2-1'x8'	INTERIOR DOORS
O	3'x8'	20 MIN FIRE RATED
P	3'x8'	EXTERIOR FIBERGLASS DOOR
Q	3'x8'	EXTERIOR FIBERGLASS DOOR
R	4-2'x8'	FULL LIGHT FRENCH DOORS
S	3'x8'	EXTERIOR FIBERGLASS DOOR
T	2-2'x8'	EXTERIOR FIBERGLASS DOORS
U	2-2'x8'	FULL LIGHT FRENCH DOORS

WINDOW SCHEDULE		
1	2'x6'	CASEMENT W/ 2' TRANSOM
2	2'x3'	CASEMENT
3	2-2'x3'	CASEMENT
4	2'x3'	CASEMENT
5	2-2'x3'	CASEMENT
6	2-2'x6'	CASEMENTS W/MULLED 7/16 FIXED BTWN
7	2-2'x3'	CASEMENT
8	2-2'x3'	CASEMENT
9	2'x3'	CASEMENT
10	2-2'x3'	CASEMENT
11	2'x3'	AWNING
12	2-2'x3'	CASEMENT
13	2-2'x3'	FIXED

HANGER SCHEDULE	
HEADER	HANGER (MFG.)
2-2x6	LUS26-2
2-2x10	HUS210-2 (FMK)
2-2x12	HUS212-2 (FMK)
3-1 3/4 x 9 3/4 LVL	HU410 (FMK)
3-1 3/4 x 11 7/8 LVL	HU412 (FMK)
3-1 3/4 x 14 LVL	HU414 (FMK)
ALL TRIPLE LVL	HUS26-3

Simpson Strong-Tie Co., Inc. (or "strong-tie" equivalent)

TYPICAL NOTES
• HARDWOOD FLOORS • MANHOPPER LEVELS W/G
• CONCRETE SLAB W/ TILE FINISH • LOWER LEVEL

SQUARE FOOTAGE 9/13/15		
MAIN LEVEL HEATED	1941 SQFT.	
UPPER LEVEL HEATED	996 SQFT.	
LOWER LEVEL HEATED	138 SQFT.	
TOTAL HEATED	3,075 SQFT.	
COVERED ENTRY	46 SQFT.	
TWO CAR GARAGE	625 SQFT.	
3RD GARAGE/PTO/H.	569 SQFT.	
SCREEN TERRACE	218 SQFT.	
LOWER TERRACE	357 SQFT.	
UNFINISHED CRAWL	389 SQFT.	
TOTAL UNDER ROOF	5,295 SQFT.	

FRAMING NOTES
ALL JOISTS SHALL BE 2x8 #1 @ 16" O.C. U.N.O.
ALL HEADERS OVER LEVEL SHALL BE (2) 2x8 U.N.O.
ALL SUBFLOOR TO BE 3/4" TONGUE AND GROOVE ADVANTEC GLUED AND SCREWED OR GLUED AND NAILED, TO THE FLOOR JOISTS
ALL JOISTS SHALL BE SPACED ACCORDING TO THE JOIST DESIGNATION USED BELOW
ALL BEAMS AND SEAT CONDITIONS ARE SHOWN IN SEPARATE DETAILS AS REQUIRED.
ALL 2 x 6 PLY LVL OR BASH LUMBER BEAMS THAT REQUIRE BOLTING SHALL BE BOLTED W/ 2 ROWS OF 1/2"ø BOLTS @ 6" O.C.-3" FROM TOP AND BOTTOM OR PER MANUFACTURER
ALL CANTILEVERED JOISTS TO HAVE NEED STIFFENERS @ EACH CANTILEVERED END
* INDICATES BLOCKING FOR ABOVE CONCENTRATED LOADS AND ROOF BRACING POINT LOADS (IND., NEXT) EQUAL TO EVEN ABOVE. BLOCKING (ABOVE FLOOR SYSTEM) EQUAL TO EVEN ABOVE.
DOUBLE ALL JOISTS UNDER PARALLEL PARTITIONS (IND.)

Acknowledgement of Plans Submittal ONLY!

_____ Date _____

_____ Date _____

ashley j design
custom homes and renovations
P.O. BOX 5923 CHARLOTTE, NC 28299
WWW.ASHLEYJDESIGN.COM
704-895-9931

DRAWN BY:

GB Enterprises, PLLC.
Mooresville, NC 28117
Mooresville, NC 28117
H.C. Ins. Lic. #P-1088

SEAL:

BUILT BY:

WAC CONTRACTING

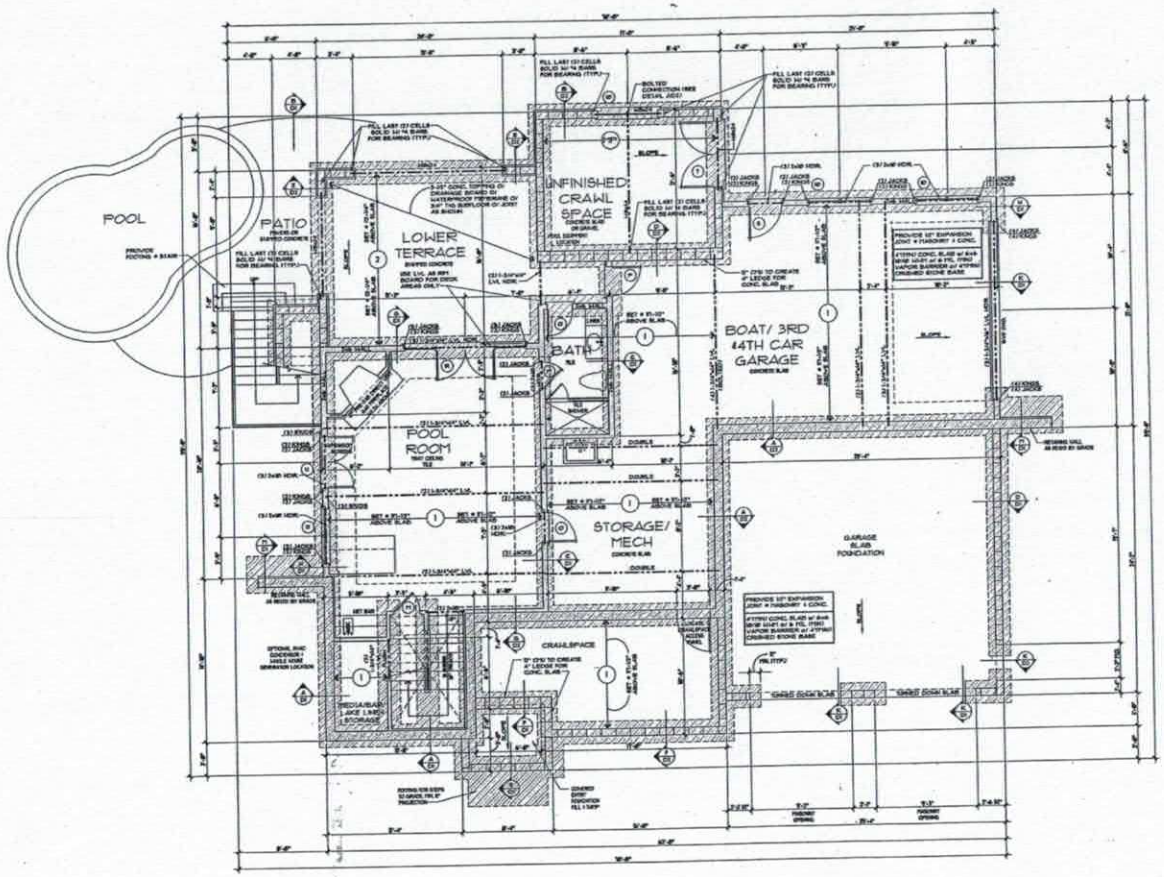
PROJECT:

CUSTOM HOME DESIGN
for
BILL & MARY LUCAS

1ST SUBMITTAL	
2ND SUBMITTAL	
3RD SUBMITTAL	
FINAL SUBMITTAL	
SCALE:	1/4" = 1'-0"

DRAWING: UPPER LEVEL FLOOR PLAN

PAGE: 6



DOOR SCHEDULE

A	3'x8' 3/4 LITE EXTERIOR DOOR
B	2-3'x8' EXTERIOR FRENCH DOORS
C	3'x8' CASED OPENING
D	3'x8' CASED OPENING
E	3'x8' INTERIOR DOOR
F	3'x8' INTERIOR DOOR
G	3'x8' FULL LITE EXTERIOR DOOR
H	10'x8' SLIDING GLASS DOOR
J	3'x8' 20 MIN FIRE RATED
K	6'x8' EXTERIOR FIBERGLASS DOORS
L	3'x8' INTERIOR DOOR
M	3'x8' INTERIOR DOOR
N	2-3'x8' INTERIOR DOORS
O	3'x8' 20 MIN FIRE RATED
P	3'x8' EXTERIOR FIBERGLASS DOOR
Q	3'x8' EXTERIOR FIBERGLASS DOOR
R	4-3'x8' FULL LIGHT FRENCH DOORS
S	3'x8' EXTERIOR FIBERGLASS DOOR
T	3-3'x8' EXTERIOR FIBERGLASS DOORS
U	2-3'x8' FULL LIGHT FRENCH DOORS

WINDOW SCHEDULE

1	2'6"x5' CASEMENT W/ 8" TRANSOM
2	2'x5' CASEMENT
3	2-2'6"x4' CASEMENT
4	2'x3' CASEMENT
5	2-3'x6' CASEMENT
6	2-2'6"x6' CASEMENT W/FIXED 2'X4' FIXED BTWN
7	2-3'x3'6" CASEMENT
8	2-3'x6' CASEMENT
9	2'x3' CASEMENT
10	2-3'x3'6" CASEMENT
11	2'x3' AWNING
12	2-3'x3' CASEMENT
13	2-3'x3'6" FIXED

CRAWL NOTES

- TYPICAL FOOTING TO BE 24"x10" CONTINUOUS CONCRETE FOOTING (UNO).
- ALL GIRDERS TO BE TRU OF "S" #1 ALL FLOOR JOISTS TO BE TRU OF "S" #1 FACE GRADE OF CRAWLSPACE
- EXCAVATION OF CRAWL MAY BE NECESSARY TO PURSUAN (1997 501) CLEARANCES TO FLOOR SYSTEM. BUILDER HAS OPTION OF CONSTRUCTING DROPPED FLOOR AREAS ON ELEVATED SLAB.
- UTILIZE 2" BLOCK AT REQUIRED LOCATIONS TO PROVIDE A 4" LEDGE FOR BRICK / CONCRETE SLAB.
- SLAB INSULATION TO BE R-5 (1997 501) 24" AT PERIMETER OF FOUNDATION WALL (OR AS REQD. BY LOCAL CODE)
- TERMITE CONTROL SHALL BE BY CHEMICAL SOIL TREATMENT OR OTHER METHODS APPROVED BY THE NORTH CAROLINA DEPT. OF AGRICULTURE
- ALL GIRDERS TO BE 6x10 #1
- BUILDER TO LOCATE CRAWL ACCESS
- BUILDER TO LOCATE HVAC UNITS AS REQUIRED
- PER CODE SECTION R408.6 PROVIDE (1) 18"x24" CRAWL ACCESS DOOR TO CRAWL SPACE AREAS
- PROVIDE ACCESS TO ALL AREAS OF CRAWL SPACE
- PER CODE SECTION R408.1 (2) PROVIDE FOUNDATION VENT LOCATIONS WITHIN 3'-0" OF EACH CORNER (VENT SIZE AND LOCATIONS BY BUILDER)
- PER CODE SECTION 4806.2 PROVIDE (1) 6 MIL POLY VAPOR BARRIER AT VELL CRAWL SPACE

BASEMENT NOTES

- TYPICAL BASEMENT SLAB TO BE 5" THICK CONCRETE W/ 6x6, W1.4/W1.4 WWF MESH ON FIBER MESH OVER VAPOR BARRIER OVER 4" COMPACTED GRAVEL BASE
- TYPICAL EXTERIOR FOOTING TO BE 24"x10" THICK WITH 2-#4 BARS CONTINUOUS (UNDER BASEMENT)
- SLAB INSULATION TO BE R-5 (1997 501) 24" AT PERIMETER OF FOUNDATION WALL
- ** INDICATES BLOCKING FOR ABOVE CONCENTRATED LOADS AND ROOF BRACING POINT LOADS UNLESS NOTED OTHERWISE
- PROVIDE FOUNDATION DRAIN ON ALL SIDES OF WALL + DRAIN TO DAYLIGHT
- STUB IN PLUMBING FOR ALL FUTURE AREAS
- PROVIDE BEAM POCKET IN POURED WALL IF REQUIRED FOR BEARING OF ENGINEERED BEAM.
- BUILDER TO LOCATE HVAC UNITS
- BUILD DOWN TRAYS IN BASEMENT AS NEEDED FOR HVAC TO RUN
- ALL EXTERIOR WALLS AT LOWER LEVEL TO BE 2x6 @16"OC

NOTE TO BUILDER/MAIN LUMBER SUPPLIER

DO NOT ALTER THE FRAMING PLANS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD. ANY ALTERATIONS MADE WITHOUT REVIEW AND APPROVAL BY THE ENGINEER OF RECORD SHALL ABSOLVE HIS OR ALL RESPONSIBILITY FOR ALL ASPECTS OF THE ENGINEERED DESIGN.

HANGER SCHEDULE

2-2x6	LUS26-3
3-1x8	HUS26-2 (FSA6)
2-2x8	HUS26-2 (FSA6)
2-2 x 9 1/4 LVL	HUS8 (FSA6)
4-2 x 9 1/4 LVL	HUS8 (FSA6)
2-1 3/4 x 9 1/4 LVL	HUS8 (FSA6)
2-1 3/4 x 11 7/8 LVL	HUS8 (FSA6)
2-1 3/4 x 14 LVL	HUS8 (FSA6)
2-1 3/4 TRIPLE LVL	HUS8-3/4R

Western Strong-Tie Co., Inc. no brand-name equivalent

FRAMING NOTES

- PROVIDE DOUBLES UNDER ALL PARALLEL PARTITIONS.
- ALL SUBFLOOR TO BE 3/4" TONGUE AND GROOVE EDGEWISE, GLUED AND SCREWED OR GLUED AND NAILED, TO THE FLOOR JOISTS.
- ALL JOISTS SHALL BE SPACED ACCORDING TO THE JOIST DESIGNATION (SEE BELOW)
- ALL BEAMS AND BEAM CONDITIONS ARE SHOWN IN SEPARATE DETAILS AS REQUIRED.
- (4) 2 1/2" x 9 1/4" LVL OR 3-1/2" BEAM (UNLESS NOTED OTHERWISE) WITH (2) 5/8" DIA. BOLTS AT 2' MAX. O.C. STAGGERED TOP AND BOTTOM
- ALL CANTILEVERED JOISTS TO HAVE WEB STIFFENERS @ EACH CANTILEVERED END
- * INDICATES BLOCKING FOR ABOVE CONCENTRATED LOADS AND ROOF BRACING POINT LOADS (UNO). INSTALL SOLID BLOCKING WITHIN FLOOR SYSTEM EQUAL TO SIZES ABOVE.
- DOUBLE ALL JOISTS UNDER PARALLEL PARTITIONS (UNO).

JOIST DESIGNATION

1. 14" TRI 48 @ 16" O.C.
2. 2-2x8 FT. TERRACE JOISTS @ 2' O.C.
3. 2" COMPOSITE METAL FLOOR DECK W/ 2" CONCRETE TOPPING

Acknowledgement of Plans Submittal ONLY!

Date _____

Date _____

ashley j design
custom homes and renovations
P.O. BOX 9126 CHARLOTTE, NC 28299
WWW.ASHLEYJDESIGN.COM
704-841-8858

DRAWN BY:

G B Engineering, PLLC
Mooresville, NC 28117
704-799-8858
N.C. Firm Lic. # P-1289

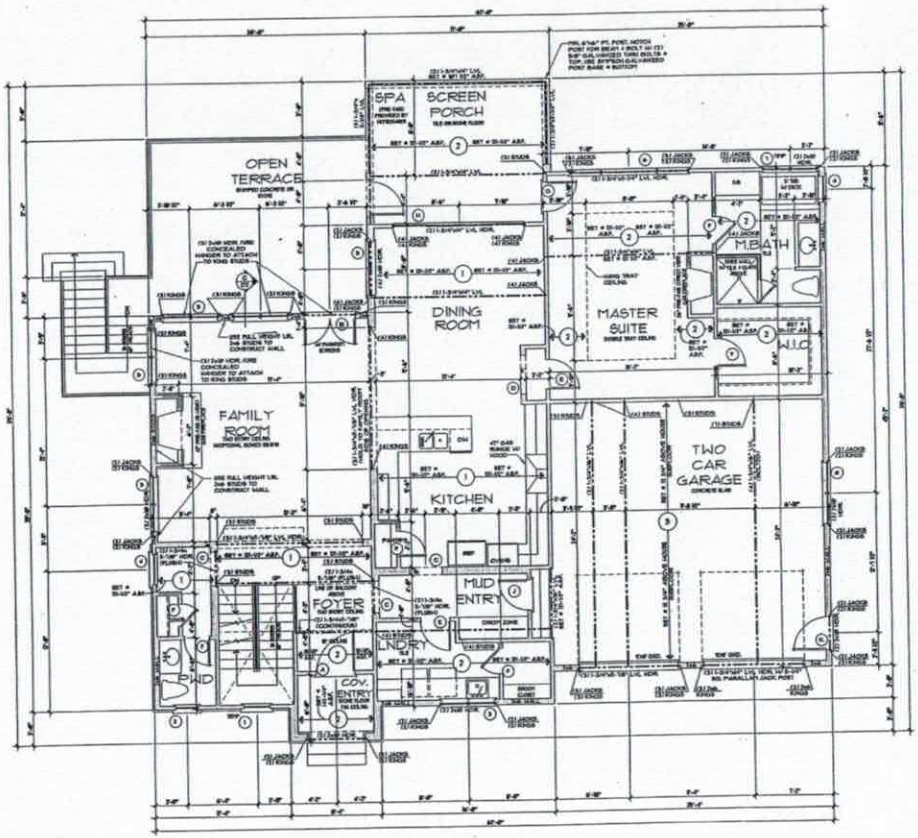
SEAL:

WAC CONTRACTING, INC. Building Since 1980

BUILT BY:

PROJECT: CUSTOM HOME DESIGN for BILL & MARY LUCAS

DRAWING:	DATE:	SUBMITTED/REVIEW:
LOWER LEVEL FLOOR PLAN	2/20/18	TO ENGINEER:
	3/2/18	
	3/23/18	
PAGE: 4	SCALE: 1/4" = 1'-0"	



DOOR SCHEDULE

A	3'-0"	9/8" LITE EXTERIOR DOOR
B	2-2'-6"	EXTERIOR FRENCH DOORS
C	3'-0"	CASED OPENING
D	3'-0"	CASED OPENING
E	2'-6"	INTERIOR DOOR
F	3'-0"	INTERIOR DOOR
G	2'-6"	FULL LITE EXTERIOR DOOR
H	10'-0"	SLIDING GLASS DOOR
J	2'-6"	20 MIN FIRE RATED
K	5'-0"	EXTERIOR FIBERGLASS DOOR
L	2'-6"	INTERIOR DOOR
M	2'-6"	INTERIOR DOOR
N	2-2'-6"	INTERIOR DOORS
O	2'-6"	20 MIN FIRE RATED
P	2'-6"	EXTERIOR FIBERGLASS DOOR
Q	2'-6"	EXTERIOR FIBERGLASS DOOR
R	4-2'-6"	FULL LIGHT FRENCH DOORS
S	2'-6"	EXTERIOR FIBERGLASS DOOR
T	2-2'-6"	EXTERIOR FIBERGLASS DOORS
U	2-2'-6"	FULL LIGHT FRENCH DOORS

WINDOW SCHEDULE

1	2'-6"	CASEMENT W/ 3' TRANSOM
2	2'-0"	CASEMENT
3	2-2'-6"	CASEMENT
4	1'-6"	CASEMENT
5	3-2'-0"	CASEMENT
6	2-2'-6"	CASEMENTS W/FIXED SIDEFIXED BETWEEN
7	2-2'-6"	CASEMENT
8	2-2'-6"	CASEMENT
9	2'-6"	CASEMENT
10	3-2'-6"	CASEMENT
11	2'-6"	AWNING
12	3-2'-6"	CASEMENT
13	2-2'-6"	FIXED

MAIN FLOOR NOTES

ALL ANGLED WALLS ARE 45° UNO.

"B" INDICATES BLOCKING FOR ABOVE CONCENTRATED LOADS AND ROOF BRACING POINT LOADS UNO.

SEE FRAMING NOTE 16 ON GENERAL NOTES FOR HEADER SIZES UNLESS NOTED ON PLANS

ALL DOORS ARE 6" FROM WALL UNLESS DIMENSIONED OTHERWISE

EXTERIOR WALL HEIGHT (h)	SIZE/ SPACING
h ≤ 8'	2x4 @ 16" o/c
8' < h ≤ 12'	2x6 @ 12" o/c
9' < h ≤ 12'	2x6 @ 16" o/c
h ≤ 9'	CONSULT ENG.

GARAGE WALL TO BE 2x6 @ 16" O/C. IF EXCEEDING 9' IN HEIGHT

THIS STRUCTURE HAS BEEN ANALYZED BY A PROFESSIONAL ENGINEER FOR LATERAL LOADING. IT HAS BEEN DESIGNED USING CONTINUOUS 7/16" RATED SHEATHING FASTENED AT 4" O.C. ALONG THE EDGES AND 12" O.C. ALONG THE INTERMEDIATE STUDS. EXCEPT THE WIDTH OF SAID NO HOLD DOWNS REQUIRED BY THE BUILDING CODE, HARDI WALL BRACING, SIMPSON STRONG-TIE HOLD DOWNS, EMBEDDED NAILS, ANCHOR BOLTS AND WOLD DOWNS HAVE BEEN INCLUDED TO RESIST THE LATERAL LOADS.

DO NOT ALTER THE FRAMING PLANS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD. ANY CHANGES MADE WITHOUT REVIEW AND APPROVAL BY THE ENGINEER OF RECORD SHALL ABSOLVE HIM OR HER OF ALL RESPONSIBILITY FOR ALL ASPECTS OF THE ENGINEERED DESIGN.

HANGER SCHEDULE

HEADER	HANGER (OR EQ.)
2-2x8	LUS28-2
2-2x10	HUS210-2 (ITW/AE)
2-2x12	HUS212-2 (ITW/AE)
2-1 3/4 x 9 1/4 LVL	HHUS7.25/10
2-1 3/4 x 9 7/8 LVL	HHU 7.25/12
2-1 3/4 x 11 7/8 LVL	HHUS 7.25/12
ALL TRIPLE LVL	HHUS5.5/18

Simpson Strong-Tie Co., Inc. For brand-name equivalent

FRAMING NOTES

ALL HEADERS THIS LEVEL SHALL BE (2) 2x10 UNO.

PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS.

ALL SUBFLOOR TO BE 3/4" TONGUE AND GROOVE ADHERED, GLUED AND SCREWED OR GLUED AND NAILED, TO THE FLOOR JOISTS

ALL JOISTS SHALL BE SPACED ACCORDING TO THE JOIST DESIGNATION (SEE BELOW)

ALL BEAMS AND BEAM CONDITIONS ARE SHOWN IN SEPARATE DETAILS AS REQUIRED.

ALL 3 1/4 PLY LVL OR EQUAL LUMBER BEAMS THAT REQUIRE BOLTING, SHALL BE BOLTED W/ 2 ROWS OF 1/2"ø BOLTS @ 9" O.C.- STAGGERED FROM TOP AND BOTTOM OR PER MANUFACTURER

ALL CANTILEVERED JOISTS TO HAVE MIN. BRIDGING @ EACH CANTILEVERED END

"B" INDICATES BLOCKING FOR ABOVE CONCENTRATED LOADS AND ROOF BRACING POINT LOADS UNO. INSTALL SOLID BLOCKING WITH FLOOR SYSTEM EQUAL TO JOISTS ABOVE.

DOUBLE ALL JOISTS UNDER PARALLEL PARTITIONS UNO.

TYPICAL NOTES

- HARDWOOD FLOORS @ MAIN/UPPER LEVELS UNO.
- CONCRETE SLAB W/ TILE FINISH @ LOWER LEVEL

SQUARE FOOTAGE 9/13/15

MAIN LEVEL HEATED	1641 SQFT.
UPPER LEVEL HEATED	1936 SQFT.
LOWER LEVEL HEATED	138 SQFT.
TOTAL HEATED	3,615 SQFT.
COVERED ENTRY	46 SQFT.
TWO CAR GARAGE	625 SQFT.
3RD GARAGE/TECH.	369 SQFT.
SCREEN TERRACE	218 SQFT.
LOWER TERRACE	351 SQFT.
UNFINISHED CRAWL	261 SQFT.
TOTAL UNDER ROOF	6,295 SQFT.

JOIST DESIGNATION

1. 1-7/8" PRO 40" @ 16" O.C.
2. 2x8 SPF #2 @ 16" O.C.
3. 9 1/2" PRI 60 @ 16" O.C.

Acknowledgement of Plans Submittal ONLY!

_____ Date _____

_____ Date _____

ashley j design
custom homes and renovations
P.O. BOX 2423 CHARLOTTE, NC 28229
WWW.ASHLEYJDESIGN.COM
704-618-0935

DRAWN BY:

G B Engineering, P.L.L.C.
Gregory Bowers, P.E.
Mooresville, NC 28117
704-799-5811
N.C. Firm Lic. # P-1209

SEAL:

BUILT BY:
WAC Building Since 1980
CONTRACTING, INC.

PROJECT:
CUSTOM HOME DESIGN
for
BILL & MARY LUCAS

2/24/15	PLANNING SUBMITTAL
3/24/15	PRE-PERMITTING
12/29/15	PERMITTING SET

DRAWING:
MAIN LEVEL FLOOR PLAN

SCALE: 1/4" = 1'-0"

PAGE: 5

STATE OF NORTH CAROLINA

COUNTY OF Iredell

INSPECTION AND MAINTENANCE

THIS AGREEMENT is made and entered into this 25 day of May 2017 by and between Bill & Mary Lucas (hereinafter the "Owner") and Richard Abernathy Grading & Septic Inc (hereinafter the "Contractor").

WITNESSETH

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

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

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

WHEREAS, the Contractor is a management entity of a type authorized by 15A N.C. Admin. Code 18A.1961 to manage a Type IVc 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 143 Patternote Road Mooresville, N.C. 28117

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 IVc System.

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

(1) [from operation permit]
(2)
(3)

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

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

e. The Contractor shall notify the Owner of needed repairs which are outside of the scope of routine maintenance described in subparagraph (b) above. The Contractor shall perform necessary repairs to the system at the request of the Owner and shall be entitled to payment therefor at the 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. Admin. Code 18A.1961(b) for a Type IV System.

g. The Contractor shall respond to a request for a nonscheduled service or maintenance call within 48 hours after receipt of such request.

2. The Owner's Obligations.

a. The Owner shall pay to the Contractor the sum of $400.00 per year for periodic inspections, routine maintenance procedures and periodic reports. The annual fee may be amended upon sixty (60) days advance notice to the Owner but may not be increased more than ____ percent per year. The Owner shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of nonscheduled service or maintenance calls. All fees are due and payable within thirty (30) days of billing. Payments due to the Contractor and unpaid by the Owner after thirty (30) days shall accrue interest from the due date until paid at a rate of 1.5 percent per month.

b. Within 30 days of receipt of notice of needed repairs pursuant to paragraph 1.e. above, the Owner shall request the Contractor to complete needed repairs or shall provide to the Contractor evidence that the needed repairs were satisfactorily completed by another entity.

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

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

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

b. Termination by Mutual 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.

3

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

(a) failure 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 Owner of the bill. If said bill is paid after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect; or

(b) failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs to the system were completed by another entity within 30 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 date of termination of this Agreement, this Agreement shall continue in effect;

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

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

4. Assignment.

a. Assignment by the Owner. The Owner shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owner shall also notify any purchaser of the property on which the system is located of the existence of this Agreement and shall assign all 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. Admin. Code 18A.1961 to manage a Type

IV system upon thirty (30) days written notice to the Owner and to the local health department.

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

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

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

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

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

To the Owner: Bill and Mary Lucas
143 Patternote Rd. Mooresville N.C. 28117

To the Contractor: Richard Abernathy Grading & Septic Inc
1491 Mt. Ulla Hwy. Mt. Ulla, N.C. 28125

To the Local Health Department: Iredell County Health Dept

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 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 to the other party.

10. Place of Agreement. This Agreement and any questions concerning its validity, construction or performance shall be governed by the laws of the State

of North Carolina, notwithstanding the place of execution, or the order in which the signatures of the Parties are affixed.

11. Entire Agreement and Amendment. This Agreement supersedes all prior negotiations, agreements and understandings between the Parties with respect to the subject matter hereof 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 extent practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such action, remain in full force and effect.

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

William R. Lucas
(Owner)
Mary C. Lucas

Attest:

_____

Bat Abernathy (SEAL)
(Contractor)

Attest:

_____

(hr:mecontract.gm)