IREDELL COUNTY HEALTH DEPARTMENT

KW

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

4:00

PERMIT # 231867

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

PIN # 4614859660

APPLICANT/OWNER: Richard Essick | APPLICANT ADDRESS: 158 Lucent Ln Mooresville, NC 28117

SITE ADDRESS: 158 Lucent Ln Mooresville, NC 28117 | PHONE: 704 224-7424 | ALT. PHONE

SITE DIRECTIONS: Brawley School Rd TR Tuskaroga Trail TR Lucent Ln @ fork stay left

SUBDIVISION: CL&T | SECTION: 6 | LOT # 257 | LOT AREA: .72 More or less | DESIGN FLOW: 480 gpd | L.T.A.R.: .3

SAP CONTROLLED: ☐ YES ☒ NO

Septic Tank	1000 (gal)	STB	760	Date	3-12-18	☒ New System	☐ Repair	☐ Expansion	System Type: I II III IV V VI
Pump Tank	1000 (gal)	PT	363	Date	3-12-18	System Description:	Pump-PM-25% Reduction		
Pump Make	Goulds	Model	3HP WE0312	Serial #		Repair System Description:	TS II Drip-Irrigation		
# Nitrification Fields	1	# Lines	3+exist	Linear Ft	100ft+exist	Maintenance Agreement Required:	☐ YES	☒ NO	
Trench Width	36"	Trench Bottom Depth(Low side)	36" max	Gravel Depth			☐ GRAVITY	☒ PRESSURE	

☒ Residence ☐ Business ☐ Other ☐ Slab ☐ Basement w/plumbing

No. Bedrooms: 4 | No. Persons: 8 | No. Employees: | ☒ Crawl Space | ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: Note: Abandon 8-ft of uppermost existing drainlines W1 and P2 to meet 50ft setback to new well

Pressure Manifold Specifications:
3/4" sch 80 tap to feed lines W1 & P2 } 3 taps
3/4" sch 40 tap to feed lines W3, W4 & W5 } total
1/2" sch 40 tap - feeds lines W6, W7 & P8 }

INITIAL SITE SKETCH

* Must abandon existing well prior to installing New Septic.

See attached, approved plan by Michael Athanasatos (dated 5/9/18)

AS BUILT SKETCH

6/15/18 Checked tanks & New drainlines & abandonment of 8ft on lines closest to new well location. New lines not turned on until exist well is abandoned-mp

6/19/18: Pressure head (2') + manifold checked (3 taps). Alarm float functional. 5ft

7-3-18: Solid pipe skewed in galvanized pipe installed under drive. Pipe < 30". KW

7-24-18 well abandonment COC signed. KW

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: [signature]

IMPROVEMENT PERMIT by: Marie Watson | Date: 5/22/18 | Installed by: Lentz Wastewater

AUTHORIZATION TO CONSTRUCT by: Marie Watson | Date: 5/17/18 | OPERATION PERMIT by: James Bragg (ad) | Date: 12-11-19

Date: 5/22/18 | Existing System Inspected by: | Date:

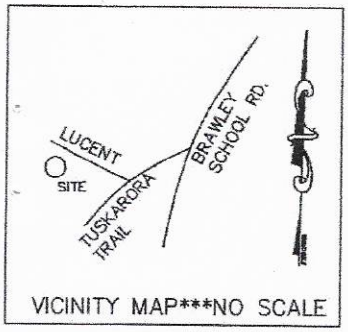
FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inpsector to confirm your inspection time.

6/21/18 Phone Conversation with Richard Essick told him existing Drainfield under drive will have to be Changed to solid pipe.

	Date	Initials
Drain Lines Checked	6/15/18	MD
Tanks Checked	6/15/18	MD
Pressure Manifold or Valve Box Checked	6/19	JT
Pressure Head Set	6/19	JT
Electrical Checked	12-11-19	JB
Floats Set	6/19/18	JT
Alarm Checked	6/19/18	JT
Maintenance Contract Y / (N)	N/A	

6/15/18 Abandonment of drainlines Closest to new well site New drainlines not turned on.

C1	106.78'	10.31'	S 39°56'18" E	10.31'



VICINITY MAP***NO SCALE

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

LAKE NORMAN

760 CONTOUR PER ACTUAL FIELD SURVEY

761 CONTOUR (FLOOD LINE)

EIP

212.47

N67°07'53"W

Pit 3

Repair Area

AB 1

Pit 2

35' REAR SETBACK

P8-36'-14.5'

W7-32'-14.1'

50' BUFFER FROM 760 CONTOUR

15'

Pit 1

Well

O6-32'-13.1'

SIDE SETBACK

Pool Area

HC 11.8'

PT 12.1

EX. TRAILER

ST

15' SIDE

N58°44'00"E

241.46

(BASE BEARING)

43.2

LOT 258
MARK LYBERGER
2135\2242

EXISTING HOUSE

PROPOSED ADDITION

68'

60

15' SIDE

S47°42'24"W

147.83

30.5

21.9

LOT 256
FRANCIS LANGFORD
2426\943

Existing Drive

LOT 257
0.72 AC.

New Drive

W5-33'-7.4'

Y4-64-6.9'

65.9

35' FRONT SETBACK

W3-72'-6.3'

P2-67'-5.7'

W1-67'-4.7'

(TIE ONLY)

N36°36'34"W

150.33

Proposed Well

50'

R\W

S42°30'00"E

135.13

Set

C1

EIP

PM

Remove 8'

BM 4.1'

NOTES

1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENT AND/OR RIGHTS-OF-WAY OF RECORD.
2) AREA COMPUTED BY THE COORDINATE METHOD.
3) EXISTING 760' & 761' CONTOUR ELEVATION BASED ON LAKE NORMAN LAKE LEVEL AT COWAN'S FORD DAM (READING ON 11\10\2017
4) UNDERGROUND POWER
5) NO GRID MONUMENT FOUND WITHIN 2000 FEET.

50' Well

0' 20' 40' 100'

SCALE IN FEET

LUCENT LANE
60' PUBLIC R/W

R\W

PB84 PG30

LEGEND

= P.P. = POWER POLE

= POWER TRANS.

E.I.P. = EXISTING IRON FOUND

I.P.S. = #4 REBAR SET

R/W = RIGHT-OF-WAY

CP = COMPUTED POINT

SCALE 1" = 40'

ACQUIRED BY: RICHARD ESSICK

BOUNDARY SURVEY

OF

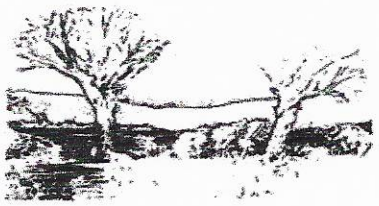
158 LUCENT LN.

LOT 257 CRESCENT LAND & TIMBER CORP. SECT. 6

DAVIDSON TWSP., IREDELL CO., N.C.

FIELD BOOK: 502
FILE: CLT 257 S6
DC FILE:
TAX MAP NO: 4614859660

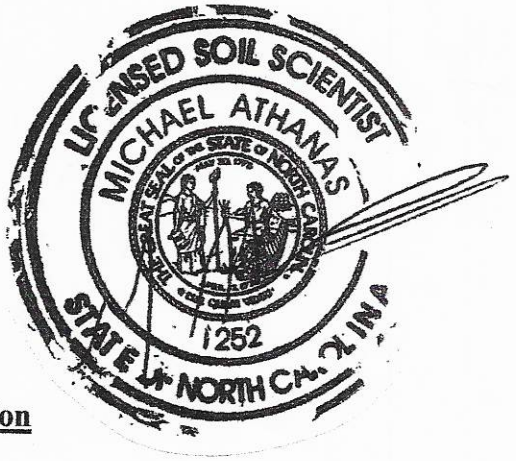
Approved
5/17/18
MD



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

Approved
5/17/18
MD

Reference: Data Sheet for 158 Lucent Ln, CL&T Sec 6, Lot 257
House Footprint: See attached plan
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Private well
Number of Bedrooms/Daily Flow: 4/480 GPD
Proposed LTAR: 0.3 GPD
Proposed System Type: 25% Reduction
Proposed Repair System Type: TSII Drip Irrigation
Distribution: Pressure manifold
Flow per Tap: 1 @ 10.1 GPM, 1 @ 12.5 GPM, 1 @ 7.11 GPM
Tap Size and Material: 1 @ ¾" SCH 80, 1 @ ¾" SCH 40, 1 @ ½" SCH 40
System Flow: 29.71 GPM
Dosing Volume: 176.3 gallons
Pump Run Time: 5.9 minutes
Elevation Head: 12.4'
Friction Head: 2'
Pressure Head: 2'
Total Dynamic Head: 16.4'
Supply Line Length: 105' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 24-36"



Line	Design Length	Actual Length	Elevation
White 1 (ex)	67'	85'	4.7'
Pink 2 (ex)	67'	85'	5.7'
White 3 (ex)	72'	82'	6.3'
Yellow 4 (ex)	64'	78'	6.9'
White 5 (ex)	33'	66'	7.4'
Orange 6	32'	32'	13.1'
White 7	32'	32'	14.1'
Pink 8	36'	36'	14.5'

Initial System: 403'
Repair System: 1200+ FT2
Pump Tank: 12.1'
House Corner: 11.8'
Benchmark: 4.1'

Approved
5/17/18
MD

Comments:

This lot has an existing four bedroom system installed. The owners are building an addition, but not changing the daily flow. A new drive is proposed to be built over the existing drainfield and the existing well will be abandon and a new well installed. To have 50' from the new well, 8' of W1 and P2 must be removed. MA&A are proposing to leave the portion of the lines under the proposed drive, but subtract those portions from the usable system area (see below).

White 1 = 85'- 10'(driveway)-8'(well SB)
Pink 2 = 85'-10'(driveway)-8'(well SB)
White 3 = 82'-10'(driveway)
Yellow 4 = 78'-14'(driveway)
White 5 = 66'-33'(driveway)

The wall along the current driveway does not have a foundation drain and is less than 2'. New septic and pump tanks will be installed. We dug three pits and one auger boring. A fourth pit was not dug because we knew the general location of the current water line, but not the exact location. A fourth pit would have been in the general location of that water line.

Tank location-Yellow flag
Pool area-Blue flags
House expansion-Staked with red flagging

¾" SCH 80 tap – W1 & P2 134
¾" SCH 40 tap – W3, Y4, & W5 169
½" SCH 40 tap – O6, W7, & P8 100

PROPERTY ID #: 4614859660
COUNTY: Iredell

Approved 5/17/18 MD

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Richard Essick
ADDRESS: 158 Lucent Ln, Mooresville, NC 28117
PROPOSED FACILITY: 4 bdrm PROPOSED DESIGN FLOW (.1949): 480 GPD
LOCATION OF SITE: 158 Lucent Ln, CL&T Sec 6, Lot 257
WATER SUPPLY: Ξ Private ☐ Public Ξ Well ☐ Spring ☐ Other
EVALUATION METHOD: Ξ Auger Boring Ξ Pit ☐ Cut

APPLICATION DATE
DATE EVALUATED:
PROPERTY SIZE: 0.72 AC
PROPERTY RECORDED: 9/14/1976

TYPE OF WASTEWATER: Ξ 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	
PIT 1	LS 4-6%	0-8	Br SCL WSBK	FR SS SP SXP	N/A	63"	N/A	N/A	PS 0.3
		8-35	R C SBK	FR SS SP SXP					
		35-63	R CL WSBK	FR SS SP SXP					
PIT 2	LS 4-6%	0-5	Br SCL WSBK	FR SS SP SXP	N/A	56"	N/A	N/A	PS 0.3
		5-28	R C SBK	FR SS SP SXP					
		28-56	R CL WSBK	FR SS SP SXP					
PIT 3	LS 4-6%	0-5	Br SCL WSBK	FR SS SP SXP	N/A	54"	N/A	N/A	PS 0.3
		5-26	R C SBK	FR SS SP SXP					
		26-54	R CL WSBK	FR SS SP SXP					
AB 1	LS 4-6%	0-5	Br CL WSBK	FR SS SP SXP	N/A	30"	N/A	N/A	PS 0.3
		5-26	R C SBK	FR SS SP SXP					
		26-30	R CL WSBK	FR SS SP SXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1209 FT2	1200 FT2
System Type(s)	25% Reduction	DRIP
Site LTAR	0.3	0.125

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

COMMENTS:

RECEIVED MAY 9 - 2018

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM Relocation of Pump System

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 Paid $250.00 (add'l $ due)

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: (PRINT CLEARLY) Paid $600.00 5-22-18 # 231867

Applicant Name: Richard Essick **Address:** 158 Lucent Ln, Mooresville, NC **Zip:** 28117

Applicant Email: _____ **Phone:** 704-224-7424 **Alt. Phone:** _____

Owner Name: Same **Address:** _____ **Zip:** _____

Owner Email: _____ **Phone:** _____ **Alt. Phone:** _____

Property Information:

Street Address: 158 Lucent Ln

Subdivision Name: CL&T **Section/Phase:** 6 **Lot Number:** 257

Driving Directions: BSR, TR Tuscaroara, TR Lucent, on RT

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

( ) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: _____
( ) Swimming Pool
(✓) Other Addition/Structure: house addition

CHECK FOUNDATION TYPE
(✓) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development: Type of Business: _____
Square Footage of Building: _____ **Max. Number of Employees:** _____ **Max. Number of Seats/Beds/Other:** _____

Water Supply: ( ) Replacement Well – Reason: _____
( ) Multi-connection Well **Number of Houses:** _____ **Number of Persons:** _____

(✓) 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:** _____
( ) 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: _____ 5/9/2018
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**

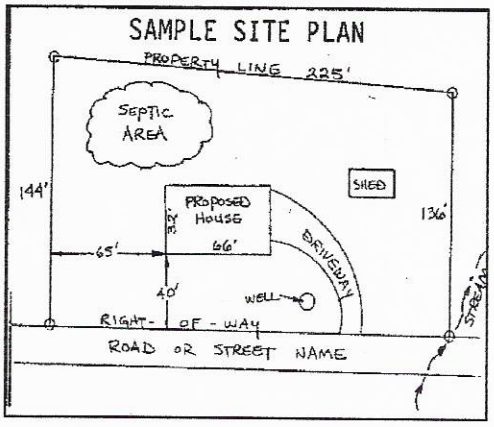
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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 OR WELL 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
- ( ) Preferred well location
- ( ) Preferred septic system location
- ( ) 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: _____ 5/9/2018

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

IREDELL COUNTY HEALTH DEPARTMENT

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTR

LLE 704-878-5305, 50.00 Pd MOORESVILLE 704-664-5281

/ OPERATION PERMIT / EXISTING SYSTEM INSPECTION

PERMIT# 123340 PIN# 4614-85-9660 DATE 3/23/05

OWNER OR CONTRACTOR Richard Essick PHONE: Business 704-224-7424 Home 770-660-5572

ADDRESS 158 Lucent Ln Mooresville NC 28117

LOCATION BSR IR Tuskaloosa, TR Lucent on Rt #158

SUBDIVISION Clt BLOCK / SECTION 6 LOT 257 LOT AREA 0.72Ac SITE CLASS. PS DESIGN FLOW 480 L.T.A.R. 0.3

Septic Tank: 1000 Gallons: STB 825 Date 1/30/06

Pump Tank: 1000 Gallons: PT 302 Date 2/10/06

Pump Make: _____ Model _____ Serial No. _____

Nitrification Field: No Fields 1 Square Feet 1200 Linear Feet 400

No Lines 5 @ 80' Trench Width 36" Max Trench Bottom Depth 36" Gravel Depth —

☒ New System ☐ Repair System Type: I, II, III, IV, V, VI

System Description: PM 25% Reduction

Repair System Description: Limited - .1945c

Maintenance Agreement Required: ☐ Yes ☒ No

☐ House/Mod. Home No. Bedrooms 4

☐ Mobile Home No. Bathrooms ___

☐ Business No. Employees ___

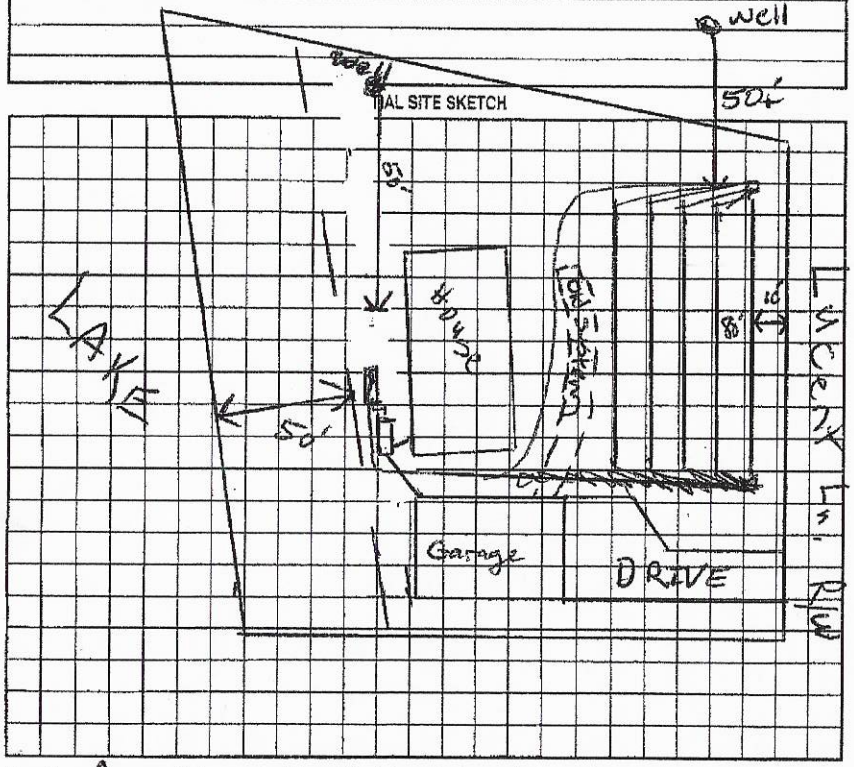
☒ Other Garage

☐ Slab ☒ Crawl Space ☐ Basement w/plumbing ☐ Basement wo/plumbing

Water Supply: ☒ Individual ☐ Public ☐ Community

Existing

Comments/Conditions:



Comments/Conditions: Existing House 3bdrm - Garage possible Bdrm

AS BUILT SKETCH

Infiltrator QuickK4 Installed

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. Improvement Permit with plat valid without expiration. Improvement Permit with site plan valid for sixty months. Authorization to Construct is valid for a period equal to that of Improvement Permit – not to exceed sixty months.

Signed: _____ date 4-7-05 Installed by: Rowan Septic

Improvement Permit by: _____ RS date 3/23/05 Operation Permit by: _____ RS date 5/9/06

Authorization to Construct by: _____ RS date 3/23/05 Existing System Inspection by: _____ date _____

HEALTH DEPT. COPY: WHITE OWNER COPY (FINAL): YELLOW OWNER COPY (INITIAL): PINK

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, Richard Essick, am the legal owner(s) of the property located at 158 Lucent Lane Mooresville NC 28117, identified as PIN (Parcel Identification Number) _____, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Michael Thomas & Assoc., _____, 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.

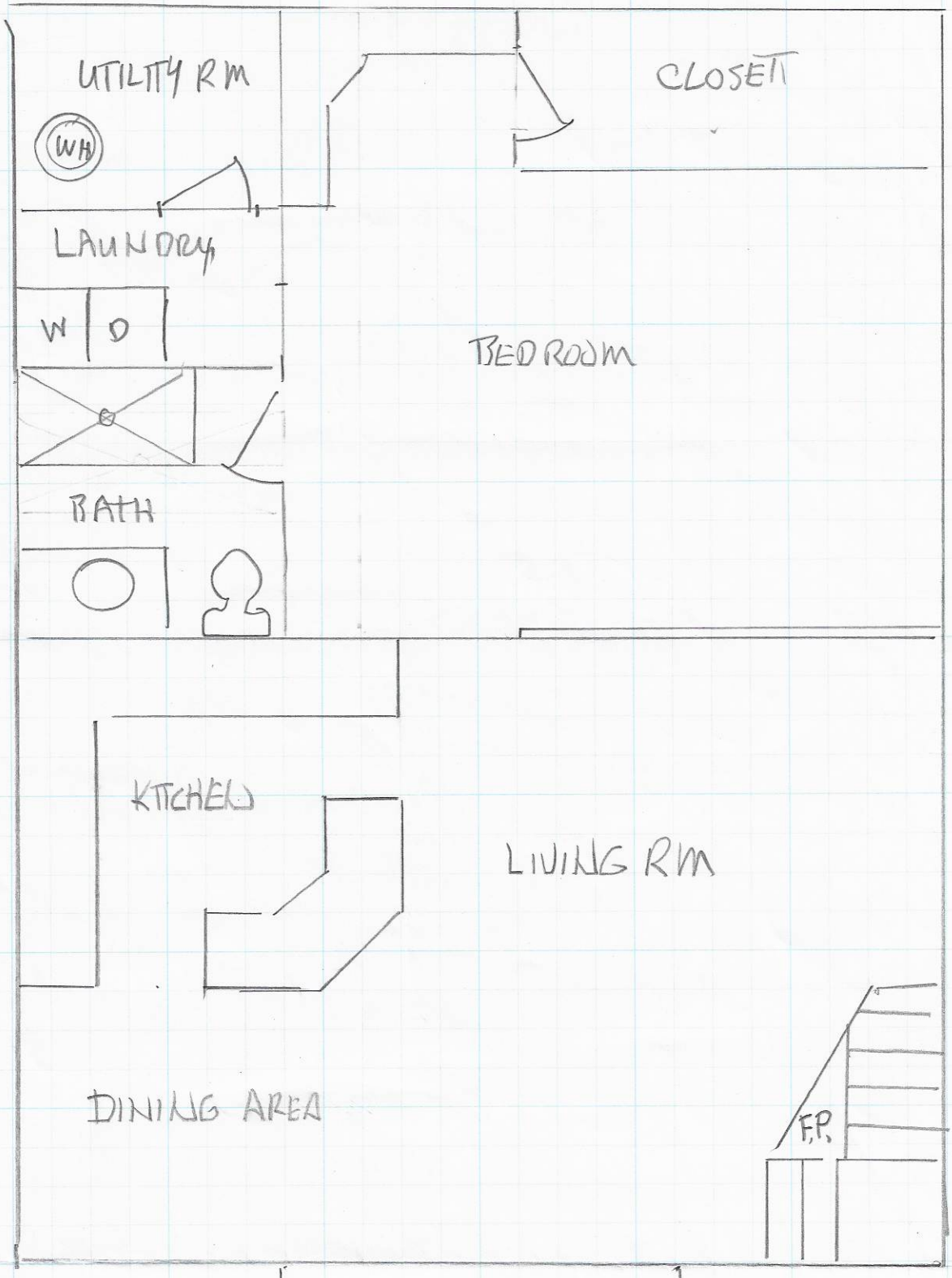
[signature] 5-2-18			
Signature of Owner(s)	Date	Signature of Witness	Date

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

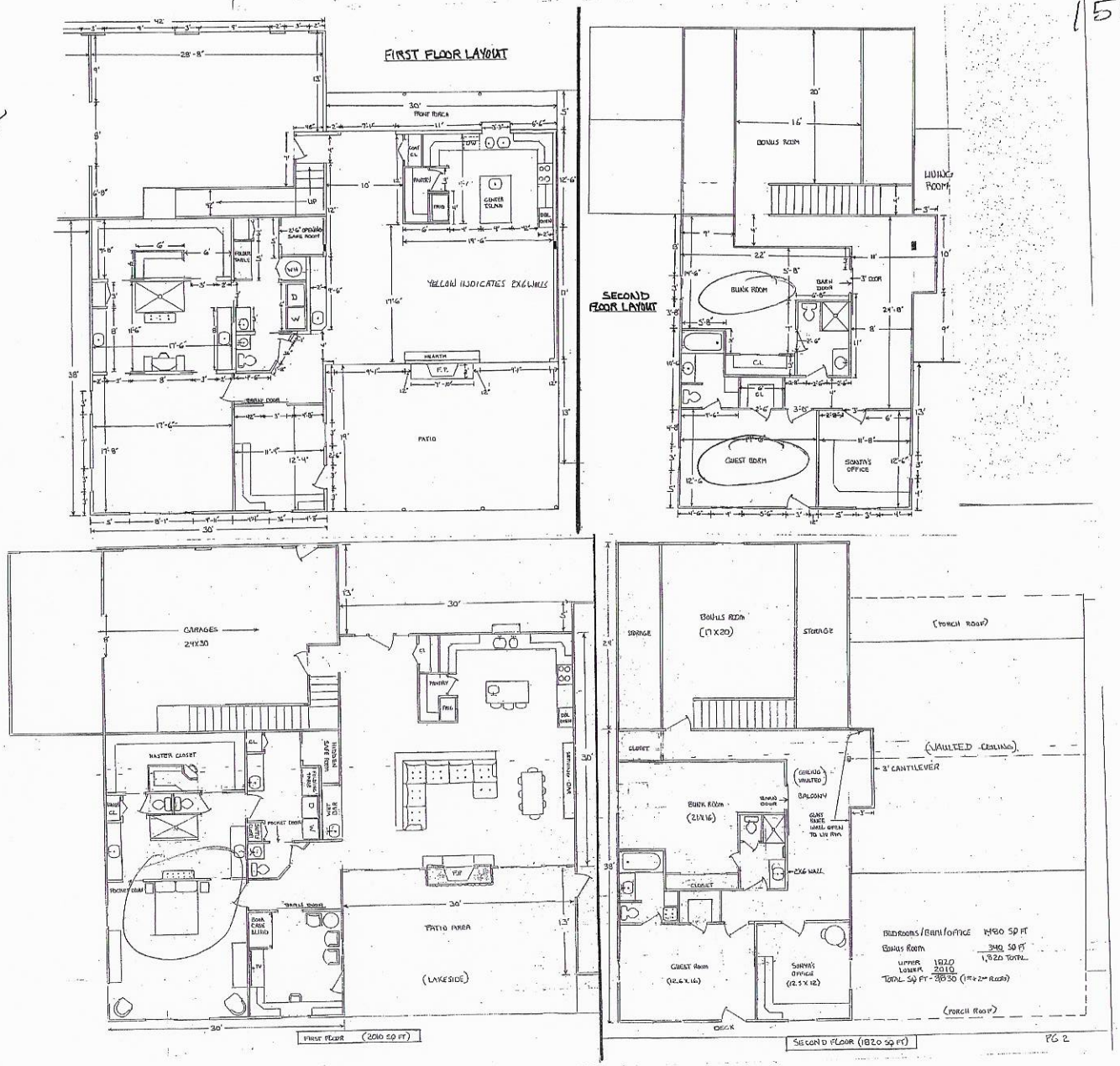
RICH + SONJA ESSICK / LUCENT CT



Acknowledgement of
Plans Submittal ONLY!

Richard Essick
158 Lucern

Acknowledgement of
Plans Submittal ONLY!
Malia Dilson Date 5/22/18
Date 5/22/18



PG 2

IREDELL COUNTY

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

APPLICATION NUMBER
231867
Issue Date: 11/30/2017

ZONING PERMIT

Parcel Number	Street Address	Jurisdiction
4614859660.000	158 LUCENT LANE, MOORESVILLE, NC	IREDELL COUNTY

Owner Information		Applicant Information	
Owner:	ESSICK RICHARD DALE	Applicant:	VENABLE, JOHN W.
Address:	158 LUCENT LANE	Address:	1047 GUS HILL RD
	MOORESVILLE, NC 28117		CLEMMONS, NC 27012
Phone:		Phone:	336-462-1583

Use Requested	Zone Code
DETATCHED GARAGE WITH LIVING SPACE INTO SFD	R20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
.720	35.00	50.00	15.00	15.00	CACL	AE

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	122017	TOTAL FEES:	$ 77.25