ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5395 Mooresville Office (704) 660-3625 PERMIT # 244210

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

PIN # 4616 - 97 - 5421

APPLICANT/OWNER: Ernest Pruitt / Ron Carroll APPLICANT ADDRESS: 124 Kirkwall Place, Mooresville NC 28117.

SITE ADDRESS: 112 Kirkwall Place Mooresville NC 28117 PHONE: 704 677 3555 ALT. PHONE -

SITE DIRECTIONS: Brawley School Rd @ McKendree, @ Lake Shore Loop Left on Kirkwall SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: CL+F SECTION: 8 LOT # 221 LOT AREA: .8 Acres. DESIGN FLOW: 480 L.T.A.R.: .25

Septic Tank 1000 (gal) STB 760 Date 5/30/22

Pump Tank 1000 (gal) PT 363 Date 5/10/22

Pump Make GOULDS Model WE0311M Serial # E225550

Nitrification Fields 1 # Lines 6 Linear Ft: 321

Trench Width 24 in Trench Bottom Depth(Low side) 22 in Gravel Depth

☒ New System ☐ Repair ☐ Expansion System Type: I II III (IV) V VI

System Description: LP - HPPBPS - 50% Reduction

Repair System Description: PPBPS - TS-II

Maintenance Agreement Required: ☒ YES ☐ NO

☐ GRAVITY ☒ PRESSURE

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

No. Bedrooms 4 No. Persons 8 No. Employees ☒ Crawl Space

Water Supply: ☒ Private ☐ Public ☐ Community

☐ Basement w/o plumbing

Comments / Conditions: No foundation drain around Covered porch

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11 . (C) of S.L. 2018-114 using the signed and sealed LSS Evaluation by:

Soil & Forestry Services of the Carolinas, PA

LSS # 1231 . Dated March 5th 2021

AS BUILT SKETCH

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

tanks, lines, CVB, floats - 7/20/22 DW

pressure, alarm, electrical 8/12/22 DW

Authorization to Construct

FOR SEPTIC FINAL INSPECTION

CALL 704-664-3703

Installed as drawn - flags still on lines 7/20/22

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: 3/24/2021 Installed by: Steve Jordan - Piedmont Backhoe

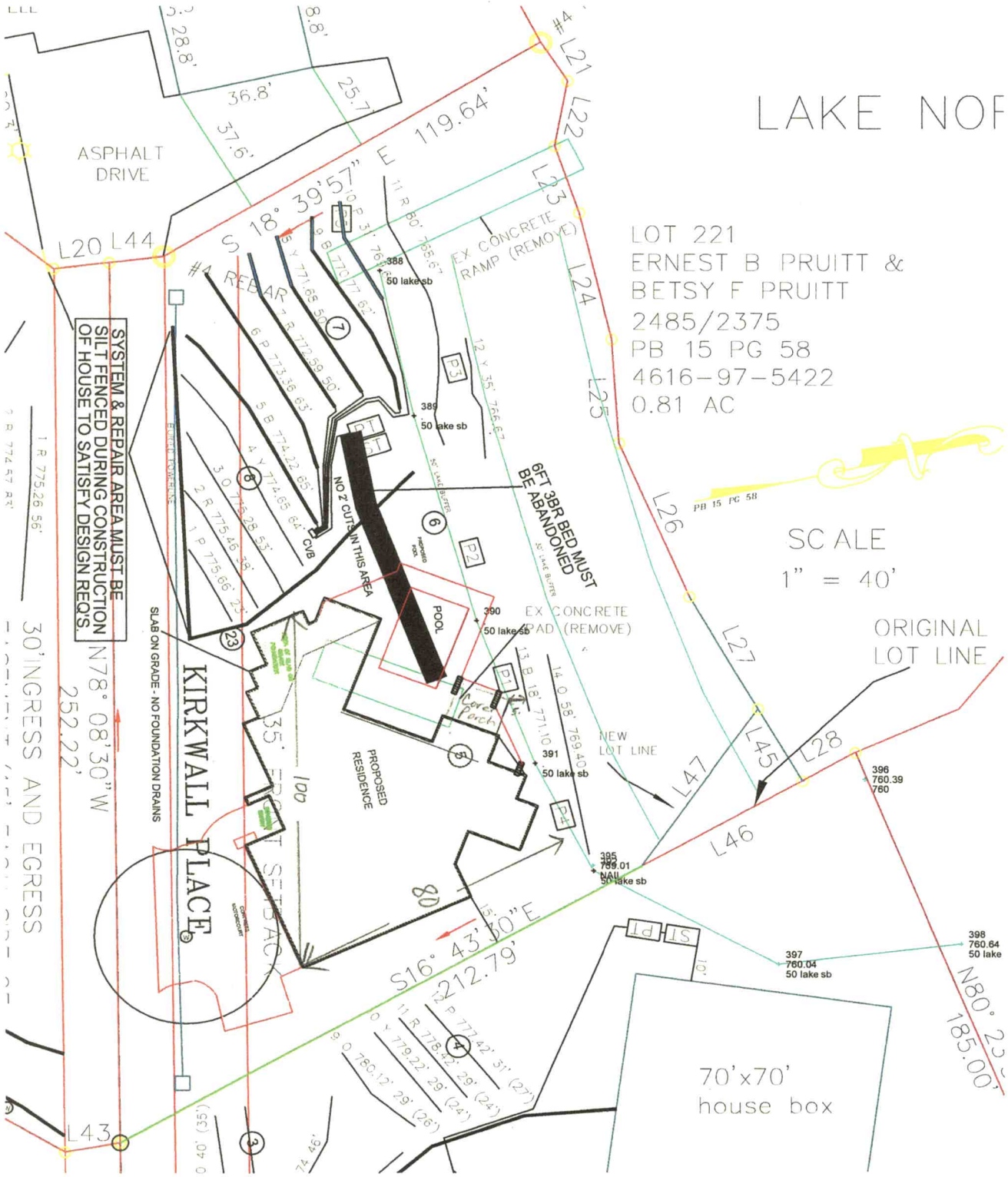
IMPROVEMENT PERMIT by: Benjamin Mabry Date: 3-19-2021 OPERATION PERMIT by: D. Imeberg Date: 11/2/22

AUTHORIZATION TO CONSTRUCT by: Marian Nolan Date: 5/12/21 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

Item	Date	Initials
Drain Lines Checked	7/20/22	DW
Tanks Checked	7/20/22	DW
Pressure Manifold or Valve Box Checked	7/20/22	DW
Pressure Head Set	8/12/22	DW
Electrical Checked	8/12/22	DW
Floats Set	7/20/22	DW
Alarm Checked	8/12/22	DW
Maintenance Contract Needed? (Y) / N		
Comments:		

Repairs Only	
	State Code
Failing System Code	
Type of Distribution	G or P
Type of Failure/Malfunction	
Primary Cause of Failure/Malfunction	
Age of System? _____	
Initial or Repair? _____	


LAKE NOF
LOT 221
ERNEST B PRUITT &
BETSY F PRUITT
2485/2375
PB 15 PG 58
4616-97-5422
0.81 AC
SCALE
1" = 40'
ASPHALT DRIVE
EX CONCRETE RAMP (REMOVE)
#4 REBAR
S 18° 39'57" E 119.64'
L20 L44
L21 L22 L23 L24 L25 L26 L27 L28 L45 L47 L46 L43
PB 15 PG 58
ORIGINAL LOT LINE
NEW LOT LINE
6FT 3BR BED MUST BE ABANDONED
NO 2' CUTS IN THIS AREA
SYSTEM & REPAIR AREA MUST BE SILT FENCED DURING CONSTRUCTION OF HOUSE TO SATISFY DESIGN REQ'S.
SLAB ON GRADE - NO FOUNDATION DRAINS
POOL
EX CONCRETE PAD (REMOVE)
PROPOSED RESIDENCE
Open Porch
KIRKWALL PLACE
30' INGRESS AND EGRESS
N78° 08'30"W 252.22'
S16° 43'30"E 212.79'
N80° 22' 185.00'
35' FRONT SETBACK
80
100
388 50 lake sb
389 50 lake sb
390 50 lake sb
391 50 lake sb
395 759.01 NAIL 50 lake sb
396 760.39 760
397 760.04 50 lake sb
398 760.64 50 lake
70'x70' house box

SHOAF PRECAST SEPTIC TANK, INC.

4130 West U.S. Hwy. 64
Lexington, NC 27295
Telephone: (336) 787-5826
FAX No. (336) 787-2826
Email Address: info@shoafprecast.com

TO WHOM IT MAY CONCERN:

This letter is to certify that the following tanks were vacuum tested to 5'' hg and held for five minutes with no leakage.

Contractor	Piedmont Backhoe Service
Invoice #	44581
Job Info:	112 Kirkwall Pl, Mooresville, NC 28117

Tank Size	Description	NC Approval #	Qty
1,000 gal.	Non-Traffic Mid Seam Septic Tank w/ filter & 2 - 6" x 20" EZset Risers cast in	STB-760.	1
1,000 gal.	1000 gal. Non-Traffic Top Seam Pump Tank with 24"D EZset Riser cast in	PT-363	1

Notes:	

Phillip Shoaf
Vice President
Shoaf Precast Inc.

_____

Date: 7/19/22

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 18-0080
March 5th, 2021

ERNEST PRUITT
Attn: *Ernest Pruitt*
Email: eplightwave@msn.com

RE: Soil & Site Evaluation for a 4 Bedroom Residence on Lot 221 CL&T, 0.80 ac Parcel, PIN# 4616975421, 112 Kirkwall Place, Mooresville, NC 28117.

Mr. Pruitt:

At your request Soil & Forestry Services of the Carolinas (S&FS) has performed soil/site evaluations on parcel noted above. The Lot size is noted on the attached survey map & soil evaluation form. The purpose of our work was to identify soil areas with potential to support subsurface wastewater disposal systems and provide design details for Session Law submittal to Iredell County Health Department to revise the previous permit.

Site Conditions

At the time of our evaluation land cover on the property was partially open and mixed pine/hardwood. Topography within the evaluated area was gentle to moderate slope near the house site and proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Lee Dowell (surveyor). The surveyor provided an Autocad File of a survey as a basemap. The proposed septic layout, soil borings and pits (B6,B7,B8,B23, & P1,P2,P3,P4,P5) were located via tape measures , GPS and survey. This base map was used to produce the attached *Site Plan*. The house envelope and pool were provided by the architect.

Methodology

We previously evaluated soil areas through the use of backhoe pits for the Expedited Review Permit Process. More recently five backhoe pits were evaluated for soil conditions. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field , flagged and located via survey. Four backhoe pits and three soil borings are located in or adjacent to the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each pit/boring. The house envelope and pool were provided by the architect. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the

layout were also located by survey and/or tape measures. Detailed system & repair information is summarized in the following paragraph for this Lot.

112 Kirkwall Place (*See Attached Design*)
The septic layout for this lot (8-9' centers) yielded a total of 753 linear feet of line. The primary system is proposed as 321 linear feet of HPPBPS (50% Reduction) drainfield with central valve box & low pressure distribution. Trench depth is specified at 22 inches. The repair system is proposed as 369 linear feet of PPBPS (50% Reduction) drainfield with low pressure distribution. The Repair system will require TS-II Pretreatment. Trench depth is specified at 30 inches.

Session Law Requirements

An LSS Evaluation may be submitted in conjunction with a complete application to the LHD. The application shall include all information described in 15A NCAC 18A .1937(d) and be accompanied by a signed and dated statement from the applicant (owner or owner's legal representative) that reads as follows:

"The LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c).".

Owner Date

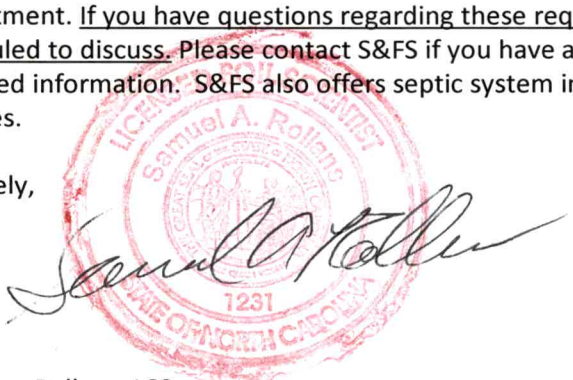
Print Name Ernest Fawitt
Signature _____ 3/5/21

The LSS Evaluation shall include a statement bearing the LSS seal and signature that reads as follows:

"The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c)."

Disclaimer
This report reflects the findings of S&FS, PA. *This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).* Any site modifications that impact the proposed septic areas at 112 Kirkwall Place may nullify this design. System design requirements and site requirements shall be adhered to for installation and Operations Permits to be issued by the local Health Department. If you have questions regarding these requirements a Pre-Construction meeting should be scheduled to discuss. Please contact S&FS if you have any questions regarding this report or the attached information. S&FS also offers septic system inspection, wetland delineation and forestry services.

Sincerely,



S. Ashley Rollans, LSS
Attachment: *Septic Design*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for a HPPBPS System with Low Pressure Distribution for a 4 bedroom single family residence at 112 Kirkwall Place., CL&T Lot # 221 (PIN# 4616975421), Iredell County, NC.

Information for the Installer---------- 1

Design Information

Design Specifications---------- 2-3
Layout Specifications---------- 4
System Tapsheet---------- 5

Site Plan/System Plan---------- 6

Calculations---------- 7

Profile Descriptions---------- 8-10

Septic Application---------- 10-11

Agent Authorization---------- 12

Green Sheet---------- 13

LICENSED SOIL SCIENTIST
Samuel A. Rollins
1231
STATE OF NORTH CAROLINA

March 2, 2021
Project #: 18-0080
Design By: Soil & Forestry Services of the Carolinas, PA

INFORMATION FOR THE INSTALLER:

The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.

- Tanks shall be approved by NC DHHS, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as a HPPBPS installation with low pressure distribution.
- Repair is specified as a Pretreated (TS-II) PPBPS installation with low pressure dist.
- **Existing Tank and Bed System to be properly abandoned.**
- **Any Utilities along Kirkwall need to be located/relocated prior to installation.**

LP HPPBPS SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Ernest Pruitt
Current Address:	124 Kirkwall Place Mooresville, NC 28117
Phone:	704.677.3555
County:	Iredell
Location:	CL&T Lot 221

Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	480 gpd
System Flow:	30.75 gpm

Design Specifications

Drainfield Size:	321
Loading Rate (gpd/ft.^{2}):	0.25
Depth of Gravel in Trench:	NA (HPPBPS)
Gravel Size:	NA (HPPBPS)
Max Trench Depth (LOW SIDE):	22 in., Repair 30 in. Trench Depth
Trench Width:	24 in.
Septic Tank Size:	1000
Pump Tank Size:	1000

Estimated Supply Line Length:	36
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	6.26
Dosing Volume:	270.00
Supply Manifold:	N/A
Supply Manifold Length:	N/A
Supply Manifold Volume:	N/A

Recommended Float Controls:	SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.

Pressure Head:	2 ft.
Friction Head:	0.85
Elevation Head:	8.00
Total Dynamic Head:	12.48

Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA

CL&T Lot 221

LP PPBPS

DESIGN FLOW (gpd):	480
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.25
TOTAL AREA TRENCH BOTTOM:	642
TOTAL LATERAL LENGTH:	321
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	320
SUPPLY LINE LENGTH:	36
TOTAL DYNAMIC HEAD:	12.48
MANIFOLD SIZE:	N/A
DOSING VOLUME:	270.00
PUMP TANK DRAW DOWN*:	12.9
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

112 Kirkwall Place (CL&T LOT 221)

Project #: 18-0080

LAYOUT FOR 4 BEDROOM HOME — March 2, 2021

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
HOUSE CNR	(LEFT FRONT)				775.60		
P. TANK					772.00		
1	PINK				775.66	33	23
2	RED				775.46	51	38
3	ORANGE				775.28	64	53
4	YELLOW				774.65	83	64
5	***BLUE***				***774.22***	***74***	***65***
6	***PINK***				***773.36***	***64***	***63***
7	***RED***				***772.59***	***50***	***50***
8	***YELLOW***				***771.68***	***50***	***50***
9	***BLUE***				***770.77***	***62***	***62***
10	***PINK***				***769.67***	***31***	***31***
11	RED				768.67	80	80
12	YELLOW				766.67	35	35
13	BLUE				771.10	18	18
14	ORANGE				769.40	58	58
ABANDON	ORANGE	(EXISTING 3BR BED)				(6 ' X 75 ')	(6 ' X 75 ')
					Total	**753**	**690**

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	TRENCH DEPTH
**** System***	***321***	***0.250***	MOD. CONV.	***0.250***	**HPPBPS**	**LOW PRESSURE**	22"
Repair	369	0.275	MOD. CONV.	0.275	PPBPS W/TS-II Pretreatment	LOW PRESSURE	30"

Notes:

**All measures in feet

LP HPPBPS TAPSHEET -112 Kirkwall Place

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
5	*BLUE*	*774.22*	*65*	*0.156*	*0.41*	*130*	**15**
6	*PINK*	*773.36*	*63*	*0.156*	*0.41*	*126*	**15**
7	*RED*	*772.59*	*50*	*0.156*	*0.41*	*100*	**12**
8	*YELLOW*	*771.68*	*50*	*0.156*	*0.41*	*100*	**12**
9	*BLUE*	*770.77*	*62*	*0.156*	*0.41*	*124*	*14*
10	*PINK*	*769.67*	*31*	*0.156*	*0.41*	*62*	*7*
	total	**feet =**	**321**	**gal/min =**	**30.75**		75

Des. Flow	**480**
Pump Run=	**8.78**
soil LTAR	**0.25**
LTAR +5%	**0.2625**
LTAR with mod.	**0.5**
LTAR with mod.. + 5%	**0.525**

.156 equals 5/32 inch hole

CALCULATIONS

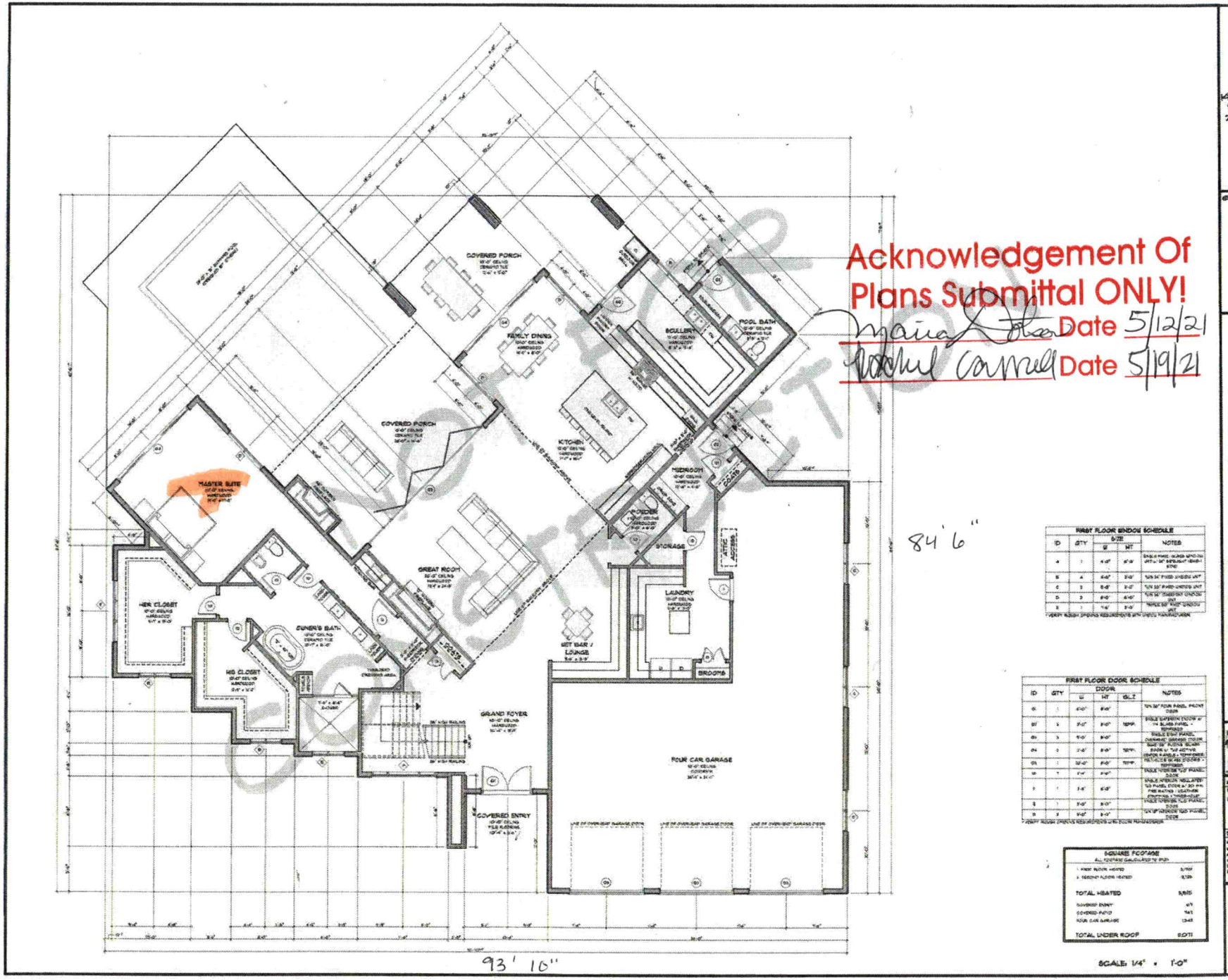
Location	112 Kirkwall Place	
Project Number	18-0080	
Lot No:	CL&T 221	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.25	$^{gal}/_{ft^2\ day}$
HPPBPS? (YES OR NO)	YES	
Supply Line Length	36	ft.
Supply Line Volume	6.264	gal.
Required Feet of Line	320	ft.
Amount of Line from Layout	321	ft.
Gallons per Minute	30.75	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Pump Tank Capacity	1000	gal.
Panel Volume	3.6	gal.
# of Panels	75	
Dosing Volume	270.00	gal.

Note: Dosing Volume based on 100% of # of panels times 3.6 gal/panel

Tank Draw Down	12.9	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	8.78	minutes
Elevation Head	8	ft.
Pressure Head	2	ft.
Friction Factor	2.37	ft./100 ft. *(From the interpolater.)*
Friction Head	0.85	ft.
Total Dynamic Head (+15%)	12.48	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42



Acknowledgement Of Plans Submittal ONLY!

Maria Tolson Date 5/12/21

Rachel Carroll Date 5/19/21

FIRST FLOOR WINDOW SCHEDULE

ID	QTY	SIZE W	SIZE HT	NOTES
A	1	4'-0"	5'-0"	SINGLE PANEL GLASS SPECIAL SHAPE - 36" REPLACEMENT WINDOW WITH
B	4	4'-0"	3'-0"	TURN 36" FIXED UNEQUAL UNIT
C	2	5'-0"	3'-0"	TURN 30" FIXED UNEQUAL UNIT
D	2	8'-0"	6'-0"	TURN 96" CASEMENT UNEQUAL PAIR
E	1	7'-0"	3'-0"	TRIPLE 30" FIXED UNEQUAL UNIT

* VERIFY ROUGH OPENING REQUIREMENTS WITH WINDOW MANUFACTURER

FIRST FLOOR DOOR SCHEDULE

ID	QTY	DOOR W	DOOR HT	DOOR TH	NOTES
A	1	6'-0"	8'-0"		TURN 36" FOUR PANEL FRENCH DOOR
B1	1	3'-0"	8'-0"	1 3/8"	SINGLE EXTERIOR DOOR W/ 14 GLASS PANEL - REMOVED
B2	3	3'-0"	8'-0"		SINGLE EXIT PANEL OVERHEAD GARAGE DOOR
C1	2	2'-6"	8'-0"	1 3/8"	SINGLE 15 LITE PANEL DOOR W/ TWO ACTIVE DOOR HANDLE + TOWN DOOR
C2	1	2'-6"	8'-0"	1 3/8"	METAL CLAD W/ RE DOORS - INTERIOR
D	1	2'-6"	8'-0"	1 3/8"	SINGLE PANEL DOOR
E	1	2'-6"	8'-0"		SINGLE PANEL DOOR
F	1	2'-6"	8'-0"		SINGLE INTERIOR INSULATED 10 PANEL DOOR W/ 20 min FIRE RATING - LOCATION STAIRWELL TO BASEMENT
G	1	2'-6"	8'-0"		SINGLE PANEL DOOR
H	1	2'-6"	8'-0"		SINGLE INTERIOR 10 PANEL DOOR

* VERIFY ROUGH OPENING REQUIREMENTS WITH DOOR MANUFACTURER

SQUARE FOOTAGE

All footages calculated to inch

1 - FIRST FLOOR HEATED	3,707
2 - SECOND FLOOR HEATED	2,128
TOTAL HEATED	5,835
COVERED ENTRY	69
COVERED PATIO	743
FOUR CAR GARAGE	1,343
TOTAL UNDER ROOF	8,071

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

KHRESIDENTIAL DESIGNS.COM
704-728-0505
N·C·B·D·C
ENGINEER:

THE CARROLL RESIDENCE
116 KIRKWALL PLACE
MOORESVILLE, NORTH CAROLINA

MEMBER AIBD

PROJECT NO: 2021-104
DATE: 4/14/2021

DRAWN BY: S. MCGRIGGS

COPYRIGHT
THIS ARCHITECTURAL PROJECT, AUTHORIZED THIS PLAN TO BE BUILT ONE TIME BY THE ORIGINAL PURCHASER — REPRODUCTION AND RESALE OF THIS PLAN IS PROHIBITED!

SHEET TITLE
FIRST FLOOR PLAN

04
SHEET 04 OF 12



NOT FOR CONSTRUCTION

Acknowledgement Of
Plans Submittal ONLY!
Maria Dixon Date 5/12/21
Robert Carroll Date 5/1

SECOND FLOOR WINDOW SCHEDULE

ID	QTY	SIZE W	SIZE HT	NOTES
K	1	3'-0"	6'-0"	SINGLE FIXED GLASS WINDOW UNIT W/ 1/2" TEMPERED INSULATED GLASS W/ LOW-E COATING
L	1	4'-0"	7'-0"	SINGLE FIXED GLASS WINDOW UNIT W/ 1/2" TEMPERED INSULATED GLASS W/ LOW-E COATING
M	4	6'-0"	5'-0"	TWIN 36" FIXED WINDOW UNIT
N	2	3'-0"	5'-0"	SINGLE 30" CASEMENT WINDOW UNIT
P	2	3'-0"	6'-6"	SINGLE 30" CASEMENT WINDOW UNIT
Q	1	10'-0"	6'-8"	QUAD 48" FIXED WINDOW UNIT

SECOND FLOOR DOOR SCHEDULE

ID	QTY	DOOR W	DOOR HT	DOOR SLAB	NOTES
N	2	3'-0"	8'-0"	TEMP.	SINGLE ENTRY DOOR SLAB - 1/2" TEMPERED
R	3	2'-6"	6'-0"		SINGLE INTERIOR 1/2 PANEL DOOR
S	4	2'-8"	6'-0"		SINGLE INTERIOR 1/2 PANEL DOOR
T	1	2'-8"	6'-0"		SINGLE INTERIOR 1/2 PANEL DOOR
U	1	4'-0"	6'-0"		1/2 PANEL DOOR
V	1	6'-0"	8'-0"	TEMP.	TWO 3'-0" INTERIOR GLASS PANEL DOOR - TEMPERED

SQUARE FOOTAGE
ALL FOOTAGES CALCULATED TO STUD

1. FIRST FLOOR HEATED	3,960
2. SECOND FLOOR HEATED	1,728
TOTAL HEATED	5,688
COVERED ENTRY	67
COVERED PATIO	747
FOUR CAR GARAGE	1,447
TOTAL UNDER ROOF	8,078

SCALE: 1/4" • 1'-0"

K&H RESIDENTIAL DESIGNS.COM
704-728-0505
N·C·B·D·C

THE CARROLL RESIDENCE
116 KIRKWALL PLACE
MOORESVILLE, NORTH CAROLINA

MEMBER AIBD

PROJECT No. 2021-1061
DATE 4/14/2021

SHEET TITLE
SECOND FLOOR PLAN

05
SHEET 05 OF 10

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED

Iredell County Health Department – Environmental Health Division

PAGE 1: *APPLICATION FORM* AP-244210

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: (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: (PRINT CLEARLY)

Applicant Name: Ron Carroll **Address:** PO Box 4297 **Zip:** 28117
Applicant Email: info@stonebridgeluxuryhomes.com **Phone:** 704-400-1235 **Alt. Phone:**
Owner Name: Ron & Rachel Carroll **Address:** 112 Cedar Bluff Ln. **Zip:** 28117
Owner Email: ron@stonebridgeluxuryhomes.com **Phone:** 704-400-1235 **Alt. Phone:**

Property Information:

Street Address: ~~112~~ 112 Kirkwall Place
Subdivision Name: ~~Kirkwall Place~~ CLT **Section/Phase:** 8 **Lot Number:** 221
Driving Directions: right on Mckendree right on 2nd lakeview shores loop

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

CHECK FOUNDATION TYPE

(✓) New Single Family Residence — Maximum Number of Bedrooms: 4 — (✓) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: — ( ) Concrete Slab Foundation
( ) Accessory Building — (✓) Swimming Pool — ( ) Basement with Plumbing
( ) Bedroom(s) Addition — ( ) Other Addition/Structure: — ( ) Basement without Plumbing
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem:
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.

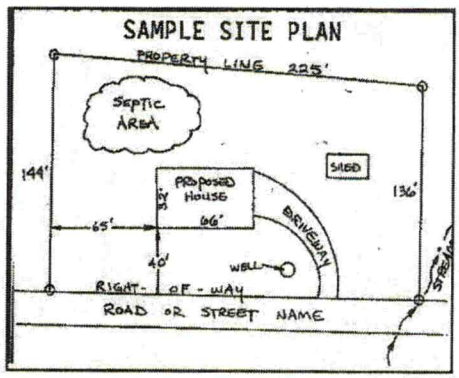
Signature: _____ 4/22/2021
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

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

Signature: _____ _____

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

LAKE NOF
ASPHALT DRIVE
S 18° 39'57" E 119.64'
L20
L44
L21
L22
L23
L24
L25
L26
L27
L28
L45
L46
L47
LOT 221
ERNEST B PRUITT &
BETSY F PRUITT
2485/2375
PB 15 PG 58
4616-97-5422
0.81 AC
SCALE
1" = 40'
SYSTEM & REPAIR AREA MUST BE SILT FENCED DURING CONSTRUCTION OF HOUSE TO SATISFY DESIGN REQ'S.
6FT 3BR BED MUST BE ABANDONED
NO 2' CUT IN THIS AREA
CVB
POOL
EX. CONCRETE
PROPOSED RESIDENCE
SLAB ON GRADE - NO FOUNDATION DRAINS
KIRKWALL PLACE
388
50 lake sb
389
50 lake sb
390
50 lake sb
391
50 lake sb
385
799.01
50 lake sb
386
760.39
760
397
760.04
50 lake sb
398
760.64
50 lake
N76° 08'30"W
252.22'
S16° 43'30"E
212.79'
N60° 2
185.00'
70'x70'
house box
30' INGRESS AND EGRESS

RECEIVED MAR9 - 2021

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM Paid $1200.00 Session Law

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 # 244210

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* (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

****

Applicant Information: **(PRINT CLEARLY)**

Applicant Name: Ernest Pruitt **Address:** 124 Kirkwall Place, Mooresville NC **Zip:** 28117

Applicant Email: EPLIGHTWAVE@MSN.com **Phone:** 704-677-3555 **Alt. Phone:**

Owner Name: Ernest Pruitt **Address:** 124 Kirkwall Place, Mooresville NC **Zip:** 28117

Owner Email: EPLIGHTWAVE@MSN.COM **Phone:** 704-677-3555 **Alt. Phone:**

****

Property Information:

Street Address: 112 Kirkwall Place, Mooresville NC 28117

Subdivision Name: CLJT **Section/Phase:** 58 **Lot Number:** 221

Driving Directions: Brawley, Right on McKendree, right Lake Shores Loop, Left on Kirkwall

****

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: 8
(✓) Swimming Pool
( ) Other Addition/Structure:

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: HPPBDS

****

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: Samuel A Pruitt
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

3/5/21
DATE

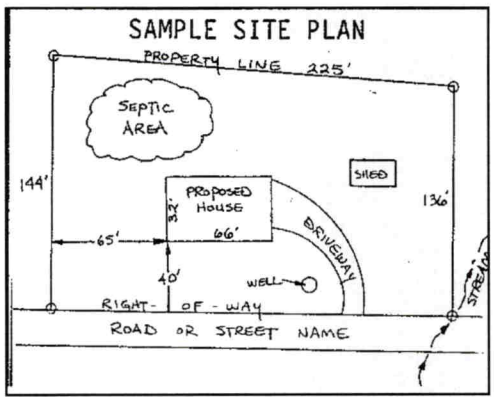
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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:

- (X) **Property Line measurements are clearly identified**
- (X) **All proposed structures are indicated**
- (X) **Front and side setbacks from property line**
- (X) **Preferred driveway location**
- (X) **Preferred well location**
- (X) **Preferred septic system location**
- (X) **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

Signature: Samuel A Tallman
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

3/5/21
DATE

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

PROPERTY ID #: 4616975421
COUNTY: Iredell

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

OWNER: Ernest Pruitt
ADDRESS: 124 Kirkwall Place, Mooresville NC 28117
PROPOSED FACILITY: 4 BR
PROPOSED DESIGN FLOW (.1949): 480 gpd
LOCATION OF SITE: 112 Kirkwall Place, Mooresville NC 28117
WATER SUPPLY: ☑ Private ☐ Public ☑ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

APPLICATION DATE
DATE EVALUATED: 12/20
PROPERTY SIZE: 0.8 AC
PROPERTY RECORDED: Yes

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
B6	L/13%	0-10	RBCL wfsbk	Fr SS SP SEXP		48	–	–	PS 0.3
		10-20	BRC wmsbk/Abk	Fr SS SP SEXP					
		20-35	RC wmsbk	Fr SS SP	Few Wheathr Rock				
		35-48	RCL wfsbk	Fr SS SP	Few Wheather Rock				
B7	L/12%	0-10	BCL wfsbk	Fr SS SP SEXP		48	–	–	PS 0.25-0.275
		10-35	BRC mmsbk/Abk	Fr SS SP SEXP	Few to C. Wth Rock ~25%				
		35-48	RC/CL wmsbk	Fr SS SP	C. Wh. Rock ~35-40%				
B8	L/5%	0-6	Fill			50			PS 0.275-0.3
		6-10	BL Gr	Fr SS SP SEXP					
		10-17	RBCL wfsbk	Fr SS SP					
		17-40	RC mmsbk/Abk	Fr SS SP	Few Magn.				
		40-48	RC mmsbk	Fr SS SP					
B9		48-50	RCL wfsbk	Fr SS SP					

LICENSED SOIL SCIENTIST Samuel A. Rollans 1231 SOIL CONTAMINATION

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	HPPBPS	PPBPS W/TS-II
Site LTAR	0.25	0.275

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS

EVALUATED BY: S. Ashley Rollans
OTHER(S) PRESENT: Chad Wagner

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 4616975421
DATE OF EVALUATION: 12/2020
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
B23	L/7%	0-7	BCL wmsbk	Fr SS SP SEXP					PS 0.3
		7-36	RC wmsbk	Fr SS SP					
		36-48	RBCL wfsbk	Fr SS SP	Few SAP	48	—	—	

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 #: 4616975421
DATE OF EVALUATION: 12/2/20
COUNTY: Iredell

112 Kirkwall Pl - Lot 221

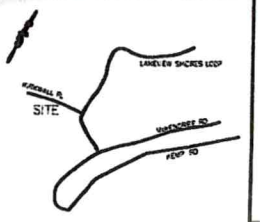
PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 1	L/14%	0-3	RBCL wfsbk	Fr SSSP	Few to C. SHP Wh. Rock ~ 15% - C. Rock Inch.				PS .3
		3-20	BRC wmsbk	Fr SS SP					
		20-48	RBCL wfsbk	Fr SS SP					
		48-56	VAR L. MASS	Fr SS SP					
P 2	L/15%	0-6	BCL wfsbk	Fr SS SP	- Few Rock Inch. ~ 10%				PS .3 to 43" HPPB PS
		6-25	BRC wmsbk	Fr SS SP					
		25-43	RBCL wfsbk	Fr S SP					
		43-54	> 50% Rock						
P 3	L/15%	0-6	RBCL wfsbk	Fr SS SP	- Few Rock/WHRock ~ 60% - Few SHP/WH Rock ~ 10%				PS .3
		6-25	BRC wmsbk/Abk	Fr SS SP					
		25-62	RBCL wfsbk	Fr. SS SP					
P 4	L/16%	0-3	BCL wfsbk	Fr SS SP	- Few to F. SHP - Quartz Vein				PS .3
		3-30	BRC wmsbk	Fr SS SP					
		30-62	RBCL wf sbk	Fr SS SP					
P 5	L/12%	0-6	BCL wfsbk	Fr SS SP	- Few to C. SHP				PS .3-.325
		6-26	RC wmsbk	Fr SS SP					
		26-59	RBCL wfsbk	Fr SS SP					
		59-69	VAR L. MASS	Fr SS SP					

COMMENTS:

719 Kemp / Eric Warner

B_1 L/110/0 0-10 RBCL wfsblk Fr SS SP
10-50 RBC wmsblk Fr S S SP - Fe Depl @ 33-34" PS .275
- Cu. Rz's @ 46

B_2 L/110/0 0-12 RBCL wfsblk Fr S S SP
12-50 RBC wmsblk Fr SS SP - Few Maga. Con. PS .275



VICINITY MAP NO SCALE

STATE OF NORTH CAROLINA
COUNTY OF IREDELL

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

DATE REVIEW OFFICER

I HEREBY CERTIFY THAT THIS PLAT FOR RECORDATION IS AN EXCEPTION TO THE SUBDIVISION ORDINANCE OF IREDELL COUNTY, NORTH CAROLINA.

DATE SUBDIVISION ADMINISTRATOR

SURVEYORS CERTIFICATION

I, DOUGLAS L. DOWELL JR CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 28, PAGE 28); THAT THE RATIO OF PRECISION AS CALCULATED BY LATITUDES AND DEPARTURES IS 1:10000; (THAT THE BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES PLOTTED FROM INFORMATION FOUND IN BOOK PAGE); THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH G.S. 47-30, AS AMENDED.

WITNESS MY HAND AND SEAL THIS 28TH DAY OF MARCH, A.D. 2019

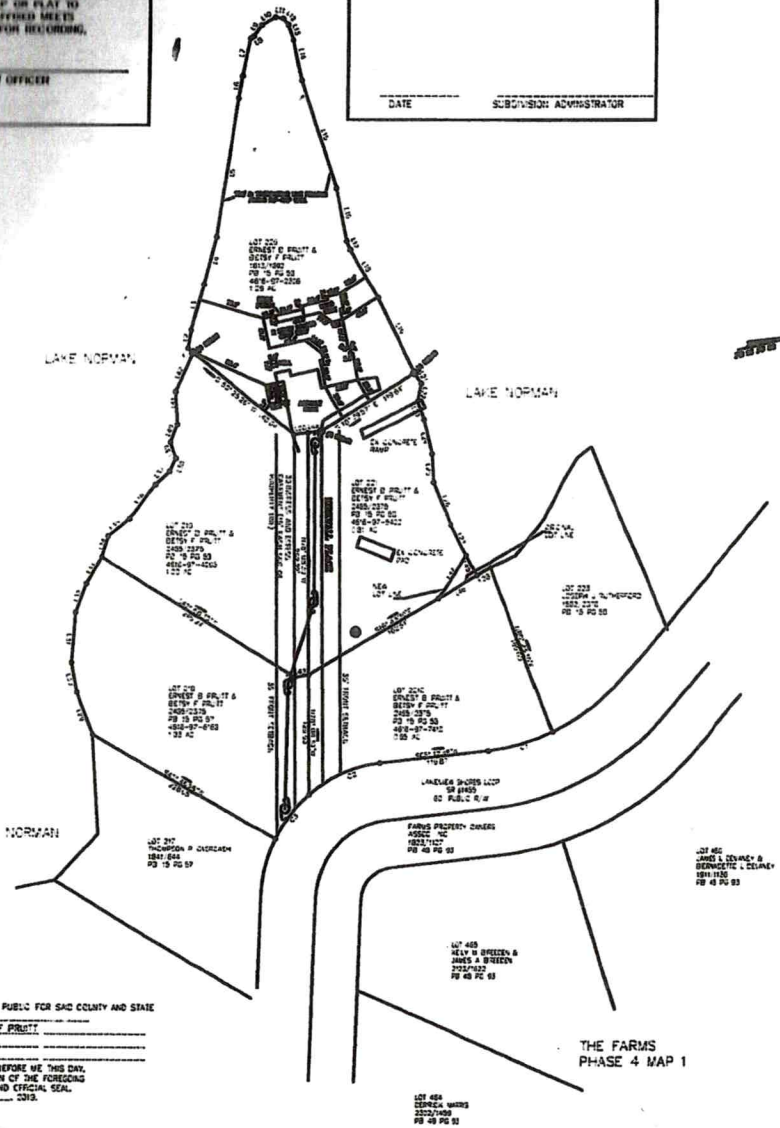
Douglas L Dowell Jr
REGISTERED LAND SURVEYOR
L-3258
REGISTRATION NUMBER

NOTES:

1. THIS PROPERTY MAY BE SUBJECT TO ANY AND / OR RIGHTS OF WAY OF RECORD
2. OWNER TO VERIFY ALL SETBACKS AND ZONING REGULATIONS PRIOR TO ANY PLANNING OR CONSTRUCTION
3. DIMENSIONS OF ALL IMPROVEMENTS SHOWN ON THIS PLAT SHOULD NOT BE SCALED OR RELIED UPON FOR DESIGN OR CONSTRUCTION WITHOUT FIELD VERIFICATION OF ALL DIMENSIONS
4. THIS PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD PLAIN
5. ALL STRUCTURES, STREAMS, AND IMPROVEMENTS MAY NOT BE SHOWN HEREON
6. THE PURPOSE OF THIS PLAT IS TO CREATE 20' EASEMENT FOR INGRESS AND EGRESS FOR KIMBALL PLACE
7. THAT THE SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT ORDERED SURVEY OR OTHER EXCEPTION TO THE DEFINITION OF SUBDIVISION

Douglas L Dowell Jr
PROFESSIONAL LAND SURVEYOR PLS 3258

8. THE PROPERTY IS ZONED FA
   SETBACKS:
   FRONT = 35'
   SIDE = 15'
   REAR = 35'
9. THE PURPOSE OF THIS PLAT IS TO CREATE THE 30' INGRESS AND EGRESS EASEMENT ALONG THE PREVIOUSLY ABANDONED KIMBALL PLACE R/W (SEE DB 2465 PG 2375 RECORDED ON 4/24/17), IN ORDER TO ACCESS LOTS 218 THROUGH 221C AS SHOWN ON PLAT. ALSO TO REVISE THE LOT LINE BETWEEN LOTS 221 AND 221C NEXT TO THE LAKE AS SHOWN



LINE DATA TABLE

LINE	DIRECTION	DISTANCE
L1	S 50° 29'45" W	7.09'
L2	N 81° 30'43" W	19.78'
L3	N 85° 19'43" W	49.52'
L4	N 85° 19'43" W	31.52'
L5	N 19° 30'55" W	144.26'
L6	N 68° 29'05" W	24.24'
L7	N 68° 29'05" W	33.16'
L8	S 19° 30'55" E	4.58'
L9	S 19° 30'55" E	4.58'
L10	S 40° 29'05" E	42.83'
L11	N 19° 41'46" W	19.59'
L12	N 20° 03'55" E	8.6'
L13	N 20° 03'55" E	8.6'
L14	N 68° 42'05" E	8.6'
L15	N 19° 03'15" W	12.61'
L16	N 89° 04'01" E	44.01'
L17	N 84° 01'19" E	119.29'
L18	S 89° 30'48" E	34.40'
L19	S 89° 30'48" E	34.40'
L20	S 70° 39'55" E	50.28'
L21	S 70° 39'55" E	58.59'
L22	S 69° 44'00" E	17.64'
L23	N 20° 03'55" E	8.6'
L24	N20° 03'55" E	8.6'
L25	S69° 44'00" E	34.40'
L26	N20° 16'00" E	97.77'
L27	S69° 19'45" E	30.00'
L28	S20° 16'00" W	97.77'
L29	S69° 19'45" E	30.00'
L30	N20° 16'00" E	16.66'
L31	S69° 44'00" E	4.30'
L32	S69° 44'00" E	17.64'
L33	N20° 16'00" E	16.66'
L34	S69° 44'00" E	34.40'
L35	N20° 16'00" E	97.77'
L36	S69° 19'45" E	30.00'
L37	S20° 16'00" W	97.77'
L38	S69° 19'45" E	30.00'
L39	N20° 16'00" E	16.66'
L40	S69° 44'00" E	4.30'
L41	N20° 16'00" E	97.77'
L42	S69° 19'45" E	30.00'
L43	S20° 16'00" W	97.77'
L44	S69° 19'45" E	30.00'
L45	N20° 16'00" E	16.66'
L46	S69° 44'00" E	4.30'
L47	S69° 44'00" E	17.64'
L48	N20° 16'00" E	16.66'
L49	S69° 44'00" E	34.40'
L50	N20° 16'00" E	97.77'
L51	S69° 19'45" E	30.00'
L52	S20° 16'00" W	97.77'
L53	S69° 19'45" E	30.00'
L54	N20° 16'00" E	16.66'
L55	S69° 44'00" E	4.30'
L56	N20° 16'00" E	97.77'
L57	S69° 19'45" E	30.00'
L58	S20° 16'00" W	97.77'
L59	S69° 19'45" E	30.00'
L60	N20° 16'00" E	16.66'
L61	S69° 44'00" E	4.30'
L62	N20° 16'00" E	97.77'
L63	S69° 19'45" E	30.00'
L64	S20° 16'00" W	97.77'
L65	S69° 19'45" E	30.00'
L66	N20° 16'00" E	16.66'
L67	S69° 44'00" E	4.30'
L68	N20° 16'00" E	97.77'
L69	S69° 19'45" E	30.00'
L70	S20° 16'00" W	97.77'
L71	S69° 19'45" E	30.00'
L72	N20° 16'00" E	16.66'
L73	S69° 44'00" E	4.30'
L74	N20° 16'00" E	97.77'
L75	S69° 19'45" E	30.00'
L76	S20° 16'00" W	97.77'
L77	S69° 19'45" E	30.00'
L78	N20° 16'00" E	16.66'
L79	S69° 44'00" E	4.30'
L80	N20° 16'00" E	97.77'
L81	S69° 19'45" E	30.00'
L82	S20° 16'00" W	97.77'
L83	S69° 19'45" E	30.00'
L84	N20° 16'00" E	16.66'
L85	S69° 44'00" E	4.30'
L86	N20° 16'00" E	97.77'
L87	S69° 19'45" E	30.00'
L88	S20° 16'00" W	97.77'
L89	S69° 19'45" E	30.00'
L90	N20° 16'00" E	16.66'
L91	S69° 44'00" E	4.30'
L92	N20° 16'00" E	97.77'
L93	S69° 19'45" E	30.00'
L94	S20° 16'00" W	97.77'
L95	S69° 19'45" E	30.00'
L96	N20° 16'00" E	16.66'
L97	S69° 44'00" E	4.30'
L98	N20° 16'00" E	97.77'
L99	S69° 19'45" E	30.00'
L100	S20° 16'00" W	97.77'
L101	S69° 19'45" E	30.00'
L102	N20° 16'00" E	16.66'
L103	S69° 44'00" E	4.30'
L104	N20° 16'00" E	97.77'
L105	S69° 19'45" E	30.00'
L106	S20° 16'00" W	97.77'
L107	S69° 19'45" E	30.00'
L108	N20° 16'00" E	16.66'
L109	S69° 44'00" E	4.30'
L110	N20° 16'00" E	97.77'
L111	S69° 19'45" E	30.00'
L112	S20° 16'00" W	97.77'
L113	S69° 19'45" E	30.00'
L114	N20° 16'00" E	16.66'
L115	S69° 44'00" E	4.30'
L116	N20° 16'00" E	97.77'
L117	S69° 19'45" E	30.00'
L118	S20° 16'00" W	97.77'
L119	S69° 19'45" E	30.00'
L120	N20° 16'00" E	16.66'
L121	S69° 44'00" E	4.30'
L122	N20° 16'00" E	97.77'
L123	S69° 19'45" E	30.00'
L124	S20° 16'00" W	97.77'
L125	S69° 19'45" E	30.00'
L126	N20° 16'00" E	16.66'
L127	S69° 44'00" E	4.30'
L128	N20° 16'00" E	97.77'
L129	S69° 19'45" E	30.00'
L130	S20° 16'00" W	97.77'
L131	S69° 19'45" E	30.00'
L132	N20° 16'00" E	16.66'
L133	S69° 44'00" E	4.30'
L134	N20° 16'00" E	97.77'
L135	S69° 19'45" E	30.00'
L136	S20° 16'00" W	97.77'
L137	S69° 19'45" E	30.00'
L138	N20° 16'00" E	16.66'
L139	S69° 44'00" E	4.30'
L140	N20° 16'00" E	97.77'
L141	S69° 19'45" E	30.00'
L142	S20° 16'00" W	97.77'
L143	S69° 19'45" E	30.00'
L144	N20° 16'00" E	16.66'
L145	S69° 44'00" E	4.30'
L146	N20° 16'00" E	97.77'
L147	S69° 19'45" E	30.00'
L148	S20° 16'00" W	97.77'
L149	S69° 19'45" E	30.00'
L150	N20° 16'00" E	16.66'
L151	S69° 44'00" E	4.30'
L152	N20° 16'00" E	97.77'
L153	S69° 19'45" E	30.00'
L154	S20° 16'00" W	97.77'
L155	S69° 19'45" E	30.00'
L156	N20° 16'00" E	16.66'
L157	S69° 44'00" E	4.30'
L158	N20° 16'00" E	97.77'
L159	S69° 19'45" E	30.00'
L160	S20° 16'00" W	97.77'
L161	S69° 19'45" E	30.00'
L162	N20° 16'00" E	16.66'
L163	S69° 44'00" E	4.30'
L164	N20° 16'00" E	97.77'
L165	S69° 19'45" E	30.00'
L166	S20° 16'00" W	97.77'
L167	S69° 19'45" E	30.00'
L168	N20° 16'00" E	16.66'
L169	S69° 44'00" E	4.30'
L170	N20° 16'00" E	97.77'
L171	S69° 19'45" E	30.00'
L172	S20° 16'00" W	97.77'
L173	S69° 19'45" E	30.00'
L174	N20° 16'00" E	16.66'
L175	S69° 44'00" E	4.30'
L176	N20° 16'00" E	97.77'
L177	S69° 19'45" E	30.00'
L178	S20° 16'00" W	97.77'
L179	S69° 19'45" E	30.00'
L180	N20° 16'00" E	16.66'
L181	S69° 44'00" E	4.30'
L182	N20° 16'00" E	97.77'
L183	S69° 19'45" E	30.00'
L184	S20° 16'00" W	97.77'
L185	S69° 19'45" E	30.00'
L186	N20° 16'00" E	16.66'
L187	S69° 44'00" E	4.30'
L188	N20° 16'00" E	97.77'
L189	S69° 19'45" E	30.00'
L190	S20° 16'00" W	97.77'
L191	S69° 19'45" E	30.00'
L192	N20° 16'00" E	16.66'
L193	S69° 44'00" E	4.30'
L194	N20° 16'00" E	97.77'
L195	S69° 19'45" E	30.00'
L196	S20° 16'00" W	97.77'
L197	S69° 19'45" E	30.00'
L198	N20° 16'00" E	16.66'
L199	S69° 44'00" E	4.30'
L200	N20° 16'00" E	97.77'
L201	S69° 19'45" E	30.00'
L202	S20° 16'00" W	97.77'
L203	S69° 19'45" E	30.00'
L204	N20° 16'00" E	16.66'
L205	S69° 44'00" E	4.30'
L206	N20° 16'00" E	97.77'
L207	S69° 19'45" E	30.00'
L208	S20° 16'00" W	97.77'
L209	S69° 19'45" E	30.00'
L210	N20° 16'00" E	16.66'
L211	S69° 44'00" E	4.30'
L212	N20° 16'00" E	97.77'
L213	S69° 19'45" E	30.00'
L214	S20° 16'00" W	97.77'
L215	S69° 19'45" E	30.00'
L216	N20° 16'00" E	16.66'
L217	S69° 44'00" E	4.30'
L218	N20° 16'00" E	97.77'
L219	S69° 19'45" E	30.00'
L220	S20° 16'00" W	97.77'
L221	S69° 19'45" E	30.00'
L222	N20° 16'00" E	16.66'
L223	S69° 44'00" E	4.30'
L224	N20° 16'00" E	97.77'
L225	S69° 19'45" E	30.00'
L226	S20° 16'00" W	97.77'
L227	S69° 19'45" E	30.00'
L228	N20° 16'00" E	16.66'
L229	S69° 44'00" E	4.30'
L230	N20° 16'00" E	97.77'
L231	S69° 19'45" E	30.00'
L232	S20° 16'00" W	97.77'
L233	S69° 19'45" E	30.00'
L234	N20° 16'00" E	16.66'
L235	S69° 44'00" E	4.30'
L236	N20° 16'00" E	97.77'
L237	S69° 19'45" E	30.00'
L238	S20° 16'00" W	97.77'
L239	S69° 19'45" E	30.00'
L240	N20° 16'00" E	16.66'
L241	S69° 44'00" E	4.30'
L242	N20° 16'00" E	97.77'
L243	S69° 19'45" E	30.00'
L244	S20° 16'00" W	97.77'
L245	S69° 19'45" E	30.00'
L246	N20° 16'00" E	16.66'
L247	S69° 44'00" E	4.30'
L248	N20° 16'00" E	97.77'
L249	S69° 19'45" E	30.00'
L250	S20° 16'00" W	97.77'
L251	S69° 19'45" E	30.00'
L252	N20° 16'00" E	16.66'
L253	S69° 44'00" E	4.30'
L254	N20° 16'00" E	97.77'
L255	S69° 19'45" E	30.00'
L256	S20° 16'00" W	97.77'
L257	S69° 19'45" E	30.00'
L258	N20° 16'00" E	16.66'
L259	S69° 44'00" E	4.30'
L260	N20° 16'00" E	97.77'
L261	S69° 19'45" E	30.00'
L262	S20° 16'00" W	97.77'
L263	S69° 19'45" E	30.00'
L264	N20° 16'00" E	16.66'
L265	S69° 44'00" E	4.30'
L266	N20° 16'00" E	97.77'
L267	S69° 19'45" E	30.00'
L268	S20° 16'00" W	97.77'
L269	S69° 19'45" E	30.00'
L270	N20° 16'00" E	16.66'
L271	S69° 44'00" E	4.30'
L272	N20° 16'00" E	97.77'
L273	S69° 19'45" E	30.00'
L274	S20° 16'00" W	97.77'
L275	S69° 19'45" E	30.00'
L276	N20° 16'00" E	16.66'
L277	S69° 44'00" E	4.30'
L278	N20° 16'00" E	97.77'
L279	S69° 19'45" E	30.00'
L280	S20° 16'00" W	97.77'
L281	S69° 19'45" E	30.00'
L282	N20° 16'00" E	16.66'
L283	S69° 44'00" E	4.30'
L284	N20° 16'00" E	97.77'
L285	S69° 19'45" E	30.00'
L286	S20° 16'00" W	97.77'
L287	S69° 19'45" E	30.00'
L288	N20° 16'00" E	16.66'
L289	S69° 44'00" E	4.30'
L290	N20° 16'00" E	97.77'
L291	S69° 19'45" E	30.00'
L292	S20° 16'00" W	97.77'
L293	S69° 19'45" E	30.00'
L294	N20° 16'00" E	16.66'
L295	S69° 44'00" E	4.30'
L296	N20° 16'00" E	97.77'
L297	S69° 19'45" E	30.00'
L298	S20° 16'00" W	97.77'
L299	S69° 19'45" E	30.00'
L300	N20° 16'00" E	16.66'
L301	S69° 44'00" E	4.30'
L302	N20° 16'00" E	97.77'
L303	S69° 19'45" E	30.00'
L304	S20° 16'00" W	97.77'
L305	S69° 19'45" E	30.00'
L306	N20° 16'00" E	16.66'
L307	S69° 44'00" E	4.30'
L308	N20° 16'00" E	97.77'
L309	S69° 19'45" E	30.00'
L310	S20° 16'00" W	97.77'
L311	S69° 19'45" E	30.00'
L312	N20° 16'00" E	16.66'
L313	S69° 44'00" E	4.30'
L314	N20° 16'00" E	97.77'
L315	S69° 19'45" E	30.00'
L316	S20° 16'00" W	97.77'
L317	S69° 19'45" E	30.00'
L318	N20° 16'00" E	16.66'
L319	S69° 44'00" E	4.30'
L320	N20° 16'00" E	97.77'
L321	S69° 19'45" E	30.00'
L322	S20° 16'00" W	97.77'
L323	S69° 19'45" E	30.00'
L324	N20° 16'00" E	16.66'
L325	S69° 44'00" E	4.30'
L326	N20° 16'00" E	97.77'
L327	S69° 19'45" E	30.00'
L328	S20° 16'00" W	97.77'
L329	S69° 19'45" E	30.00'
L330	N20° 16'00" E	16.66'
L331	S69° 44'00" E	4.30'
L332	N20° 16'00" E	97.77'
L333	S69° 19'45" E	30.00'
L334	S20° 16'00" W	97.77'
L335	S69° 19'45" E	30.00'
L336	N20° 16'00" E	16.66'
L337	S69° 44'00" E	4.30'
L338	N20° 16'00" E	97.77'
L339	S69° 19'45" E	30.00'
L340	S20° 16'00" W	97.77'
L341	S69° 19'45" E	30.00'
L342	N20° 16'00" E	16.66'
L343	S69° 44'00" E	4.30'
L344	N20° 16'00" E	97.77'
L345	S69° 19'45" E	30.00'
L346	S20° 16'00" W	97.77'
L347	S69° 19'45" E	30.00'
L348	N20° 16'00" E	16.66'
L349	S69° 44'00" E	4.30'
L350	N20° 16'00" E	97.77'
L351	S69° 19'45" E	30.00'
L352	S20° 16'00" W	97.77'
L353	S69° 19'45" E	30.00'
L354	N20° 16'00" E	16.66'
L355	S69° 44'00" E	4.30'
L356	N20° 16'00" E	97.77'
L357	S69° 19'45" E	30.00'
L358	S20° 16'00" W	97.77'
L359	S69° 19'45" E	30.00'
L360	N20° 16'00" E	16.66'
L361	S69° 44'00" E	4.30'
L362	N20° 16'00" E	97.77'
L363	S69° 19'45" E	30.00'
L364	S20° 16'00" W	97.77'
L365	S69° 19'45" E	30.00'
L366	N20° 16'00" E	16.66'
L367	S69° 44'00" E	4.30'
L368	N20° 16'00" E	97.77'
L369	S69° 19'45" E	30.00'
L370	S20° 16'00" W	97.77'
L371	S69° 19'45" E	30.00'
L372	N20° 16'00" E	16.66'
L373	S69° 44'00" E	4.30'
L374	N20° 16'00" E	97.77'
L375	S69° 19'45" E	30.00'
L376	S20° 16'00" W	97.77'
L377	S69° 19'45" E	30.00'
L378	N20° 16'00" E	16.66'
L379	S69° 44'00" E	4.30'
L380	N20° 16'00" E	97.77'
L381	S69° 19'45" E	30.00'
L382	S20° 16'00" W	97.77'
L383	S69° 19'45" E	30.00'
L384	N20° 16'00" E	16.66'
L385	S69° 44'00" E	4.30'
L386	N20° 16'00" E	97.77'
L387	S69° 19'45" E	30.00'
L388	S20° 16'00" W	97.77'
L389	S69° 19'45" E	30.00'
L390	N20° 16'00" E	16.66'
L391	S69° 44'00" E	4.30'
L392	N20° 16'00" E	97.77'
L393	S69° 19'45" E	30.00'
L394	S20° 16'00" W	97.77'
L395	S69° 19'45" E	30.00'
L396	N20° 16'00" E	16.66'
L397	S69° 44'00" E	4.30'
L398	N20° 16'00" E	97.77'
L399	S69° 19'45" E	30.00'
L400	S20° 16'00" W	97.77'
L401	S69° 19'45" E	30.00'
L402	N20° 16'00" E	16.66'
L403	S69° 44'00" E	4.30'
L404	N20° 16'00" E	97.77'
L405	S69° 19'45" E	30.00'
L406	S20° 16'00" W	97.77'
L407	S69° 19'45" E	30.00'
L408	N20° 16'00" E	16.66'
L409	S69° 44'00" E	4.30'
L410	N20° 16'00" E	97.77'
L411	S69° 19'45" E	30.00'
L412	S20° 16'00" W	97.77'
L413	S69° 19'45" E	30.00'
L414	N20° 16'00" E	16.66'
L415	S69° 44'00" E	4.30'
L416	N20° 16'00" E	97.77'
L417	S69° 19'45" E	30.00'
L418	S20° 16'00" W	97.77'
L419	S69° 19'45" E	30.00'
L420	N20° 16'00" E	16.66'
L421	S69° 44'00" E	4.30'
L422	N20° 16'00" E	97.77'
L423	S69° 19'45" E	30.00'
L424	S20° 16'00" W	97.77'
L425	S69° 19'45" E	30.00'
L426	N20° 16'00" E	16.66'
L427	S69° 44'00" E	4.30'
L428	N20° 16'00" E	97.77'
L429	S69° 19'45" E	30.00'
L430	S20° 16'00" W	97.77'
L431	S69° 19'45" E	30.00'
L432	N20° 16'00" E	16.66'
L433	S69° 44'00" E	4.30'
L434	N20° 16'00" E	97.77'
L435	S69° 19'45" E	30.00'
L436	S20° 16'00" W	97.77'
L437	S69° 19'45" E	30.00'
L438	N20° 16'00" E	16.66'
L439	S69° 44'00" E	4.30'
L440	N20° 16'00" E	97.77'
L441	S69° 19'45" E	30.00'
L442	S20° 16'00" W	97.77'
L443	S69° 19'45" E	30.00'
L444	N20° 16'00" E	16.66'
L445	S69° 44'00" E	4.30'
L446	N20° 16'00" E	97.77'
L447	S69° 19'45" E	30.00'
L448	S20° 16'00" W	97.77'
L449	S69° 19'45" E	30.00'
L450	N20° 16'00" E	16.66'
L451	S69° 44'00" E	4.30'
L452	N20° 16'00" E	97.77'
L453	S69° 19'45" E	30.00'
L454	S20° 16'00" W	97.77'
L455	S69° 19'45" E	30.00'
L456	N20° 16'00" E	16.66'
L457	S69° 44'00" E	4.30'
L458	N20° 16'00" E	97.77'
L459	S69° 19'45" E	30.00'
L460	S20° 16'00" W	97.77'
L461	S69° 19'45" E	30.00'
L462	N20° 16'00" E	16.66'
L463	S69° 44'00" E	4.30'
L464	N20° 16'00" E	97.77'
L465	S69° 19'45" E	30.00'
L466	S20° 16'00" W	97.77'
L467	S69° 19'45" E	30.00'
L468	N20° 16'00" E	16.66'
L469	S69° 44'00" E	4.30'
L470	N20° 16'00" E	97.77'
L471	S69° 19'45" E	30.00'
L472	S20° 16'00" W	97.77'
L473	S69° 19'45" E	30.00'
L474	N20° 16'00" E	16.66'
L475	S69° 44'00" E	4.30'
L476	N20° 16'00" E	97.77'
L477	S69° 19'45" E	30.00'
L478	S20° 16'00" W	97.77'
L479	S69° 19'45" E	30.00'
L480	N20° 16'00" E	16.66'
L481	S69° 44'00" E	4.30'
L482	N20° 16'00" E	97.77'
L483	S69° 19'45" E	30.00'
L484	S20° 16'00" W	97.77'
L485	S69° 19'45" E	30.00'
L486	N20° 16'00" E	16.66'
L487	S69° 44'00" E	4.30'
L488	N20° 16'00" E	97.77'
L489	S69° 19'45" E	30.00'
L490	S20° 16'00" W	97.77'
L491	S69° 19'45" E	30.00'
L492	N20° 16'00" E	16.66'
L493	S69° 44'00" E	4.30'
L494	N20° 16'00" E	97.77'
L495	S69° 19'45" E	30.00'
L496	S20° 16'00" W	97.77'
L497	S69° 19'45" E	30.00'
L498	N20° 16'00" E	16.66'
L499	S69° 44'00" E	4.30'
L500	N20° 16'00" E	97.77'
L501	S69° 19'45" E	30.00'
L502	S20° 16'00" W	97.77'
L503	S69° 19'45" E	30.00'
L504	N20° 16'00" E	16.66'
L505	S69° 44'00" E	4.30'
L506	N20° 16'00" E	97.77'
L507	S69° 19'45" E	30.00'
L508	S20° 16'00" W	97.77'
L509	S69° 19'45" E	30.00'
L510	N20° 16'00" E	16.66'
L511	S69° 44'00" E	4.30'
L512	N20° 16'00" E	97.77'
L513	S69° 19'45" E	30.00'
L514	S20° 16'00" W	97.77'
L515	S69° 19'45" E	30.00'
L516	N20° 16'00" E	16.66'
L517	S69° 44'00" E	4.30'
L518	N20° 16'00" E	97.77'
L519	S69° 19'45" E	30.00'
L520	S20° 16'00" W	97.77'
L521	S69° 19'45" E	30.00'
L522	N20° 16'00" E	16.66'
L523	S69° 44'00" E	4.30'
L524	N20° 16'00" E	97.77'
L525	S69° 19'45" E	30.00'
L526	S20° 16'00" W	97.77'
L527	S69° 19'45" E	30.00'
L528	N20° 16'00" E	16.66'
L529	S69° 44'00" E	4.30'
L530	N20° 16'00" E	97.77'
L531	S69° 19'45" E	30.00'
L532	S20° 16'00" W	97.77'
L533	S69° 19'45" E	30.00'
L534	N20° 16'00" E	16.66'
L535	S69° 44'00" E	4.30'
L536	N20° 16'00" E	97.77'
L537	S69° 19'45" E	30.00'
L538	S20° 16'00" W	97.77'
L539	S69° 19'45" E	30.00'
L540	N20° 16'00" E	16.66'
L541	S69° 44'00" E	4.30'
L542	N20° 16'00" E	97.77'
L543	S69° 19'45" E	30.00'
L544	S20° 16'00" W	97.77'
L545	S69° 19'45" E	30.00'
L546	N20° 16'00" E	16.66'
L547	S69° 44'00" E	4.30'
L548	N20° 16'00" E	97.77'
L549	S69° 19'45" E	30.00'
L550	S20° 16'00" W	97.77'
L551	S69° 19'45" E	30.00'
L552	N20° 16'00" E	16.66'
L553	S69° 44'00" E	4.30'
L554	N20° 16'00" E	97.77'
L555	S69° 19'45" E	30.00'
L556	S20° 16'00" W	97.77'
L557	S69° 19'45" E	30.00'
L558	N20° 16'00" E	16.66'
L559	S69° 44'00" E	4.30'
L560	N20° 16'00" E	97.77'
L561	S69° 19'45" E	30.00'
L562	S20° 16'00" W	97.77'
L563	S69° 19'45" E	30.00'
L564	N20° 16'00" E	16.66'
L565	S69° 44'00" E	4.30'
L566	N20° 16'00" E	97.77'
L567	S69° 19'45" E	30.00'
L568	S20° 16'00" W	97.77'
L569	S69° 19'45" E	30.00'
L570	N20° 16'00" E	16.66'
L571	S69° 44'00" E	4.30'
L572	N20° 16'00" E	97.77'
L573	S69° 19'45" E	30.00'
L574	S20° 16'00" W	97.77'
L575	S69° 19'45" E	30.00'
L576	N20° 16'00" E	16.66'
L577	S69° 44'00" E	4.30'
L578	N20° 16'00" E	97.77'
L579	S69° 19'45" E	30.00'
L580	S20° 16'00" W	97.77'
L581	S69° 19'45" E	30.00'
L582	N20° 16'00" E	16.66'
L583	S69° 44'00" E	4.30'
L584	N20° 16'00" E	97.77'
L585	S69° 19'45" E	30.00'
L586	S20° 16'00" W	97.77'
L587	S69° 19'45" E	30.00'
L588	N20° 16'00" E	16.66'
L589	S69° 44'00" E	4.30'
L590	N20° 16'00" E	97.77'
L591	S69° 19'45" E	30.00'
L592	S20° 16'00" W	97.77'
L593	S69° 19'45" E	30.00'
L594	N20° 16'00" E	16.66'
L595	S69° 44'00" E	4.30'
L596	N20° 16'00" E	97.77'
L597	S69° 19'45" E	30.00'
L598	S20° 16'00" W	97.77'
L599	S69° 19'45" E	30.00'
L600	N20° 16'00" E	16.66'
L601	S69° 44'00" E	4.30'
L602	N20° 16'00" E	97.77'
L603	S69° 19'45" E	30.00'
L604	S20° 16'00" W	97.77'
L605	S69° 19'45" E	30.00'
L606	N20° 16'00" E	16.66'
L607	S69° 44'00" E	4.30'
L608	N20° 16'00" E	97.77'
L609	S69° 19'45" E	30.00'
L610	S20° 16'00" W	97.77'
L611	S69° 19'45" E	30.00'
L612	N20° 16'00" E	16.66'
L613	S69° 44'00" E	4.30'
L614	N20° 16'00" E	97.77'
L615	S69° 19'45" E	30.00'
L616	S20° 16'00" W	97.77'
L617	S69° 19'45" E	30.00'
L618	N20° 16'00" E	16.66'
L619	S69° 44'00" E	4.30'
L620	N20° 16'00" E	97.77'

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, Ernest Pruitt, am the legal owner(s) of the property located at 112 Kirkwall Place, Mooresville NC 28115, identified as PIN (Parcel Identification Number) 4616975421, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) SFS / Ashley Rollans, _____, 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.

X _____ 3/5/21 _____ _____

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

IREDELL COUNTY

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

APPLICATION NUMBER
244210
Issue Date: 04/30/2019

ZONING PERMIT
Residential

Parcel Number	Street Address	Jurisdiction
4616975422.000	112 KIRKWALL PLACE, MOORESVILLE, NC 28117	

Owner Information		Applicant Information	
Owner:	PRUITT ERNEST B+BETSY F	Applicant:	ROLLANS SOIL & ENVIRON
Address:	124 KIRKWALL PLACE	Address:	470 NORTH BROAD STREET SUITE D
	MOORESVILLE, NC 28117		MOORESVILLE, NC 28115
Phone:		Phone:	704-658-1723

Use Requested	Zone Code
SFD	R20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
	35.00	50.00	15.00	15.00	CACL	X

Remarks:

Must meet both the 50-foot setback from the 760 Æ contour line and the 35-foot setback from the rear property line for any structure.

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: Samuel A Teller Date: 3/9/21

Permit Number	175560	TOTAL FEES:	$ 77.25

IREDELL COUNTY PLANNING & DEVELOPMENT
PO BO[redacted]ESVILLE NC 28687-0788
349 N[redacted]et / Building Standards Center
(704) 87[redacted]8 / FAX (704)928-2025

244210

Residential Zoning Permit Application

What are you building?(Please check) ***No building or addition shall be used for commercial, business, or other non-residential use unless appropriate permits and approval are obtained from Iredell County for commercial use.**

Stick built ✓ Modular___ Duplex___ Singlewide___ Doublewide___ Pier___ Addition___ Bedroom addition ✓

Accessory dwelling (ie: M-I-L Suite, guest house) ___ Accessory building (ie: garage, shed)___ Swimming pool ___

Are there any other structures currently on the property such as dwellings, sheds, garages? (Please list type below)

Is there a septic tank on the property? Yes No If residence how many bedrooms? 4 and stories? 2

Please describe project (Details, Purpose, or Use): ___

Please list square footage of project (Pier, Addition, Accessory Dwelling, Accessory Building only): ~500SF

Does the property have community water? Yes (No) If yes, please list who provides it: ___

Does the property have community sewer? Yes (No) If yes, please list who provides it: ___

Owner Information

Property Owner's Name Ernest Pruitt Phone# 704 677 3555

Owner's Current Address 124 Kirkwall Place Mooresville NC 28117

Property Information

Property Address 112 Kirkwall Place Mooresville NC 28117 Parcel # 4616975421

Subdivision: CLT Lot: 221 Zoning: ___ Watershed: Y / N Flood Plain: Y / N Township: ___

Directions to property (from a MAIN ROAD) McKendree, Lakeview Shores, Kirkwall

Application Information

Applicant's Name or Company Ernest Pruitt Applicant's Phone # 704 677 3555

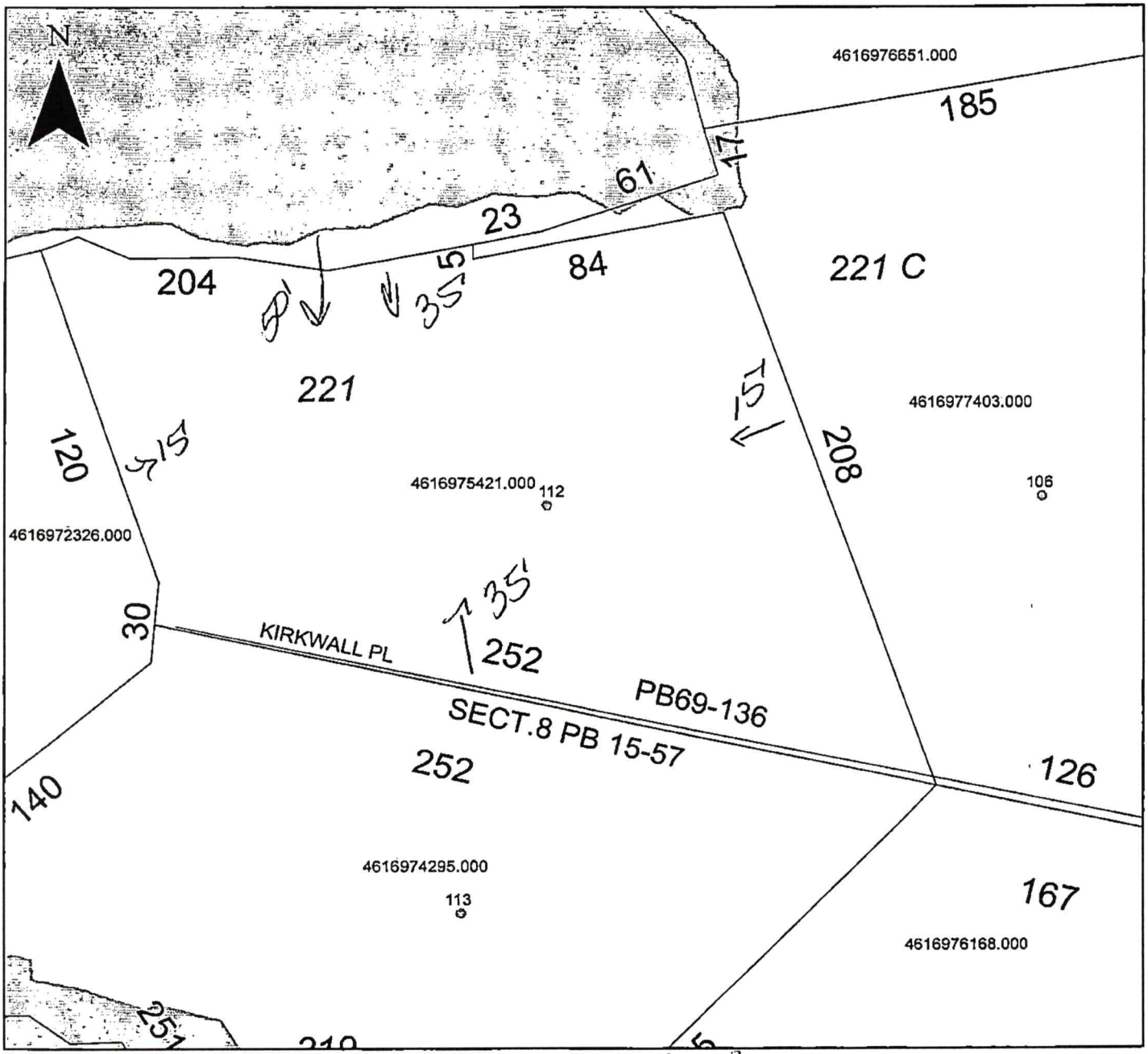
Applicant's Address 124 Kirkwall Place Mooresville NC 28117

If Company, Representative's Name and Title OWNER

IN APPLYING FOR A ZONING PERMIT I CERTIFY THAT ALL INFORMATION ON THIS APPLICATION IS CORRECT AND THAT ALL WORK WILL COMPLY WITH IREDELL COUNTY ZONING REGULATIONS. THE IREDELL COUNTY PLANNING & DEVELOPMENT DEPARTMENT WILL BE NOTIFIED OF ANY CHANGES THAT ARE MADE TO THIS PROJECT. I AM AWARE THAT THIS IS AN APPLICATION ONLY - NOT A PERMIT - AND DOES NOT CONSTITUTE APPROVAL OF THIS PROJECT. HOWEVER, IF THIS PROJECT IS APPROVED, THIS SIGNATURE IS VALID FOR MY PERMIT.

SIGNATURE OF APPLICANT [signature] DATE [redacted] 3/8/21

ZONING DISCLAIMER



Property Address 112 Kirkwall Place

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. Applicant further acknowledges that the 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.

Samuel A Tolbert

Applicant

3/9/21

Date

KW

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office – (704) 878-5305 x3456 | Mooresville Office (704) 660-3625

PRIVATE DRINKING WATER WELL PERMIT # 244210 **PIN #** 4616975422 **Type of Permit (circle one):** New Repair **Abandonment**

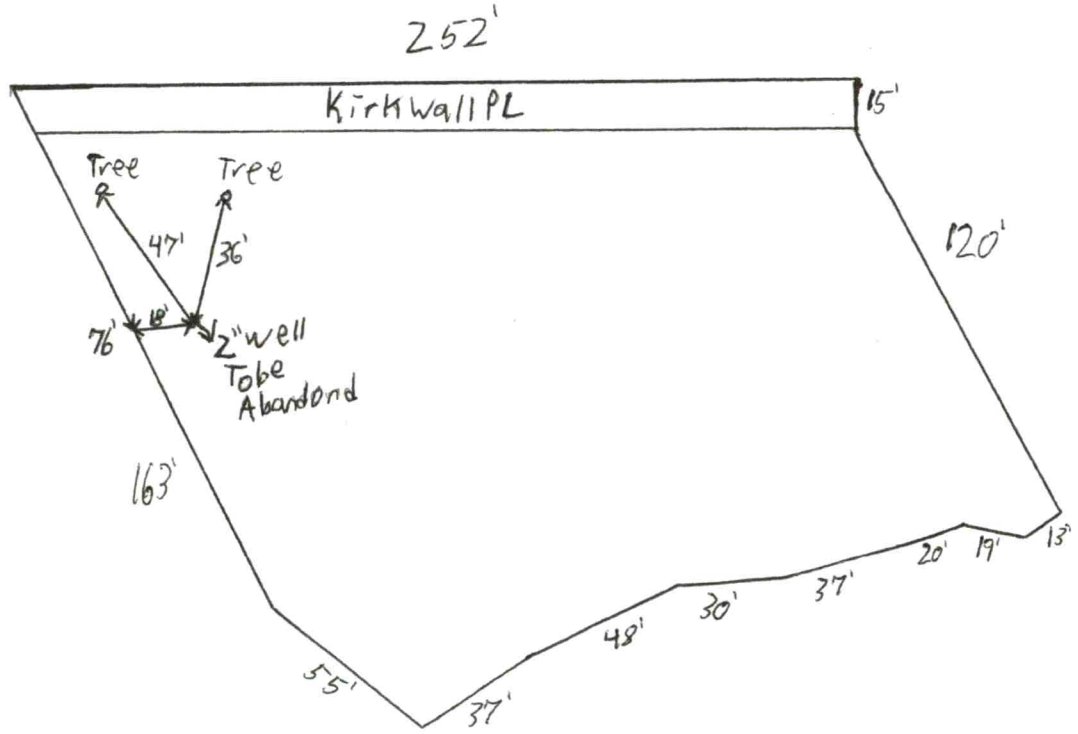
APPLICANT/OWNER NAME: Scott Wright ADDRESS: 2015 Townview Dr Kannapolis, NC 28081 PHONE: 704-425-6693

DIRECTIONS TO SITE: Brawley School Rd, Ron McKendree Rd, Ron Lakeview shores Lp, Sonkirkwall Pl, Lot on R

SITE ADDRESS: 112 Kirkwall Pl Mooresville, NC 28117 SUBDIVISION: Clandt SECTION/LOT: 58/221

Initial Site Sketch

1"=50'



GROUTING RESULTS

Total Depth _____

Depth of Casing _____

Yield _____

Notes:

Well GPS Latitude: _____

Longitude: _____

PERMIT CONDITIONS/COMMENTS: Follow all NC well Abandonment Rules.

WELL PERMIT ISSUED BY: Patrick D Bglett III DATE: 08/12/19 (Permit is valid for 5 years from date issued. This permit may be revoked if it is determined there has been a material change in any fact or circumstance upon which the permit is issued. Actions of the employees of the Iredell County Health Department shall in no way be taken as a guarantee that this well will produce water of any particular quantity or quality or for any amount of time. Employees of the Iredell County Health Department assume no liability for any damages, either direct or consequential which may be caused by this well.)

Well Contractor: B.M. Wright CONTRACTOR CERT #: 2801A GROUT INSPECTION BY: Abandonment Patrick D Bglett III DATE: 8/22/19

OR CERTIFICATION OF GROUT NOT WITNESSED BY DEPT: _____ DATE: _____ WELL HEAD INSPECTION BY: _____ DATE: _____

WELL HEAD INSPECTION (check when completed): GROUT TO GROUND SURFACE ☐ WELL CONTRACTOR ID PLATE ☐ PUMP INSTALLER ID PLATE ☐ SAMPLE PORT ☐

ACCESS PORT / VENT ☐ WELL SEAL ☐ WELL HEAD 12 INCHES / PITLESS ADAPTOR 8 INCHES ABOVE GRADE ☐

CERTIFICATE OF COMPLETION BY: _____ DATE: _____ WATER SAMPLES BY: _____ DATE: _____

Attachments: Form GW-1a (required except for abandonment) ☐ Form GW-30 ☐ Water Sample Re[illegible] ☐ Plat ☐ CALL 704-664-3703 to schedule grout or well head inspection[illegible]ween 8-9am

STATE OF NORTH CAROLINA
COUNTY OF IREDELL

CONTRACT FOR INSPECTIONS OF ON-SITE WASTEWATER SYSTEMS TYPE II, III, IV and V

This Contract is entered into this 24th day of October, 2022 by and between TCW Wastewater Management, Inc., a North Carolina company of Mecklenburg County, North Carolina (hereinafter "TCW") and **Ron and Rachel Carroll**

Preamble

TCW is contracting with The Owner to provide inspection services as described on Attachment A for the fees or charges also shown in Attachment A.

The Owner owns or controls the property upon which a ground absorption sewage treatment system ("System") is installed, such System being designated as a type II, III, IV or V system under the Rules for Sanitary Sewage Collection. Treatment and Disposal found at 15A N.C. Admin. Code 18A .1900 et seq.; and 15A N.C. Admin. Code 18A.1961 requires that a condition of the Operation Permit for certain systems be that a properly executed inspection contract between the System Owner and a management entity shall be in effect for as long as the System is in use. TCW is a management entity which employees certified operators of a type authorized by 15A N.C. Admin. Code 18a.1961 to manage and inspect type II, III, IV, and V systems.

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 TCW as stipulated below.

Conditions of the Contract

A. TCW, in consideration of the payment by the Owner as set out in the schedule of services and charges in Attachment A, incorporated herein, agrees

1) To provide the services set out in Attachment A according to the minimum schedule of inspections/services required by regulations for the lots or parcels set out in Attachment B.

2) To report results of the inspections to the local environmental regulatory agency having jurisdiction as required by applicable laws or regulations.

3) If inspections indicate the need for System repairs

   a) to notify the local environmental regulatory agency within 48 hours.

   b) to give notice to the "Owner" of needed repairs, and, if the necessary repairs are outside the scope of the routine maintenance described in Attachment A, then The Owner may request TCW to provide an estimate. At the authorization of The Owner TCW will perform the necessary repairs at TCW's then prevailing charges for services and materials.

4) If TCW's services are terminated, TCW will notify the local environmental regulatory agency within 48 hours.

B. The Owner, in consideration of the services performed, agrees

1) To pay TCW for its services according to the schedule of charges as set out in Attachment A.

2) Within 30 days of receipt of notice of repairs under A (3) above, the Owner(s) must provide proof that repairs have been performed by a licensed or qualified entity and the System is functioning properly or request and authorize TCW to complete the needed repairs.

3) To notify TCW promptly of any emergency or malfunction known to it which may violate environmental, health, or other laws and regulations, and to authorize immediate repair as necessary to restore the System to proper function and operation.

4) To use reasonable efforts to provide and to maintain at all times, such access to the Systems as is reasonably necessary for TCW to comply with its obligations under this Agreement.

C. **Terms of the Agreement**

1) This Agreement shall be effective for one year from the date of this contract and will be automatically renewed from year-to-year thereafter, unless written notice of termination and non-renewal is given to the other party not less than 60 days prior to the end of the then current annual contract year.

2) The real property to be serviced under this contract is listed on Attachment B.

3) This Agreement automatically terminates if the Operation Permit for the system is revoked and all appeals of the revocation are exhausted or time for making an appeal has passed.

4) The parties may terminate at the end of the then current term by consent of each party or by not less than 60 days written notice to the other party prior to the end of the then current contract year, and not less than 30 days written notice to the local environmental regulatory agency.

5) This Agreement may be terminated for cause for breach which remains unremedied after 15 days written notice to the defaulting party

D. **Limited Warranty**

TCW'S SOLE DUTIES AND RESPONSIBILITIES UNDER THIS AGREEMENT IS TO PROVIDE INSPECTION AND ROUTINE MAINTENANCE ONLY AS SPECIFIED IN THIS AGREEMENT. INSPECTIONS WILL COMPLY WITH APPLICABLE CODES, LAWS, AND REGULATIONS IN FORCE AT THE TIME OF THE INSPECTION AND REPORT. WORK AND MATERIALS USED IN REPAIRS ARE WARRANTED ONLY TO BE OF GOOD WORKMANSHIP, FREE OF DEFECTS, AND CONFORM TO THE SYSTEMS SPECIFICATIONS AND EQUAL TO THE ORIGINAL PARTS AND EQUIPMENT. THE OWNER'S SOLE REMEDY UNDER THIS EXPRESS WARRANTY IS REPAIR OR REPLACEMENT AND CONSEQUENTIAL DAMAGE OR DAMAGES FOR DELAY ARE LIMITED TO TOTAL SUMS PAID TCW UNDER THIS AGREEMENT FOR THE PARTICULAR LOT OR PARCEL FOR THE THEN CURRENT YEAR. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, ARE EXPRESSLY AND SPECIFICALLY EXCLUDED. REPAIRS, REPLACEMENTS, ADDITIONS AND CHANGES BY OTHERS TO THE SYSTEMS COVERED BY THIS AGREEMENT WITHOUT PRIOR NOTICE TO TCW OR ACCEPTANCE OF THE WORK BY TCW DURING THE TERM OF THIS AGREEMENT VOIDS ANY WARRANTY GRANTED HEREIN AS TO TCW.

E. **Miscellaneous**

1) Transfer of rights, responsibilities, and duties under this Agreement by any party shall be valid only on written notice and consent signed by all parties, which consent shall not be unreasonably or arbitrarily withheld.

2) TCW may perform its duties and responsibilities by subcontract but TCW will remain directly liable and responsible to the Owner under the terms of this Agreement.

3) Waiver of default or a breach of the Agreement by any party shall not operate nor be construed as a waiver of further or subsequent defaults or breach of this Agreement. Failure to take action in any default or breach does not bear action on such default at any time subsequent to such breach or default.

4) This Agreement constitutes the entire agreement of the parties, incorporating, and superseding all prior representations and negotiations and may not be changed or amended except in writing signed by the parties. The Agreement shall be interpreted under North Carolina law. Any part of the Agreement declared void, illegal, or unenforceable will not affect other provisions of the Agreement.

5) Disputes arising under this Agreement shall be determined by any method of Alternative Dispute Resolution the parties choose, including but not limited to, mediation or arbitration, under the Uniform Arbitration Act of North Carolina or its equivalent, or such means or methods as the parties agree to in writing.

6) Notices are deemed delivered if delivered in person, by certified or registered mail; by courier; or delivery service, if properly receipted, charges and postage prepaid, as follows:

Owner: Mr & Mrs Ron Carroll
112 Kirkwall Pl
Mooresville, NC 28117

Operator:
TCW Wastewater Management, Inc
5600 Lakeview Rd
Charlotte, NC 28269

Environmental Regulatory Agency:

Iredell County Environmental Health
610 E Center St
Mooresville, NC 28115

A party may change its address my giving notice in the manner provided above.

Each party has executed this Agreement with full power, authority, and legal right to enter into; to bind itself to the rights, duties and responsibilities under this Agreement, which is binding on the parties, their successors and assigns, heirs and personal representatives, on the date first above written.

WITNESS

Rachel Carnell

TCW Wastewater Management, Inc.

BY Lee Boyd

EXHIBIT A
TYPE II, III, IV

MONITORING & INSPECTION PLAN

1. **COST:** **INITIAL CONTRACT YEAR:** **$ 350.00 (2 required inspections)**
$ N/A (0 required lab)
$ 350.00 Total Initial Year

RENEWAL YEARS: **$ TBD (2 required inspections)**
$ N/A (0 required lab)
$ TBD Total Renewal Years

a. The Owner shall pay to TCW the aforementioned sums for each parcel listed on Attachment B. The initial annual fees are payable upon the execution of the contract. Annual billings will be made thereafter and payable within 30 days of billing. The annual billings will be made on the anniversary dates. The annual renewal fees may increase no more than 5% per year. The Owner shall pay to TCW his normal and customary fees for any authorized work performed on the System as a result of non-scheduled service or maintenance calls. These fees are due and payable within 30 days of billing. Payments due to TCW, and unpaid by the Owner after 30 days, shall be assessed late payment fee of 15% per month, accruing monthly on the unpaid balance.

2. **PERFORMANCE DUTIES:**

- Inspections and services that meet state requirements, i.e., inspections of System using an itemized check list, monitoring "septic tanks" to insure proper operation, and make adjustments of imbalances to systems through the distribution devices.
- Inspection report copies are sent to the environmental regulatory agency (if applicable) and homeowner
- Emergency service calls at an additional charge.
- 24-hour availability at an additional charge.
- The Owner will be advised of any repairs needed and estimated cost or repairs. Repairs will not be made without Owner authorization.
- The Owner will be advised when pumping is recommended

Bacteria Additive Option – Additional $60 per year:

- The addition of a bacterial product into the individual septic tank as needed to maintain the proper level of bacteria.

EXHIBIT B

1. PHYSICAL ADDRESS OF SYSTEM(S):

112 Kirkwall Pl
Mooresville, NC 28117

CL&T Lot 221 Ph 8

b. _____

c. _____

d. _____