ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 311630

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

PIN # 4625 -85 -2926

APPLICANT/OWNER: Lee + Kristi Dietrich APPLICANT ADDRESS: 106 Brick Kiln Way Mooresville NC 28117.

SITE ADDRESS: 106 Brick Kiln Way Mooresville NC 28117. PHONE: 828-381-1590 ALT. PHONE —

SITE DIRECTIONS: BSR to Brick Kiln. SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: The Point ON NORMAN SECTION: 5 LOT # 517. LOT AREA: .76Acres DESIGN FLOW: 480 L.T.A.R.: -275

Septic Tank	1000 Ext (gal)	STB		Date		[ ] New System	☐ Repair	☒ Expansion	System Type: I II III IV V VI	☒ Residence	No. Bedrooms 4	Water Supply
Pump Tank	1000 Ext (gal)	PT		Date		System Description:		CP-PPBPS - 50% Reduction		☐ Business	No. Persons	☐ Private
Pump Make	Gould's	Model		Serial #		Repair System Description:		TS-II Pretreatment PPBPS		☐ Other	No. Employees	☐ Public
# Nitrification Fields	1	# Lines	2	Linear Ft	124	Maintenance Agreement Required:	☒ YES	☐ NO		☐ Slab	☐ Crawl Space	☒ Community
Trench Width	24	Trench Bottom Depth (Trenches)	36in max	Gravel Depth	—		☐ GRAVITY	☒ PRESSURE		☒ Basement w/plumbing		☐ Basement w/o plumbing

Comments / Conditions: Retaining Wall not to be Greater than 2ft cut or have Drainage.

PT, drain lines checked by JB

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:

Michael Athanas + Associates Inc

LSS # 1252

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.

6/10/21 Set 2ft pressure Checked float & alarm. MK

	Date	Initials
Drain Lines Checked	4-15-2021	
Tanks Checked	4-15-2021	
Pressure Manifold or Valve Box Checked	4-15-2021	
Pressure Head Set	6/10/21	MK
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Y (N)		
Comments:		

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**

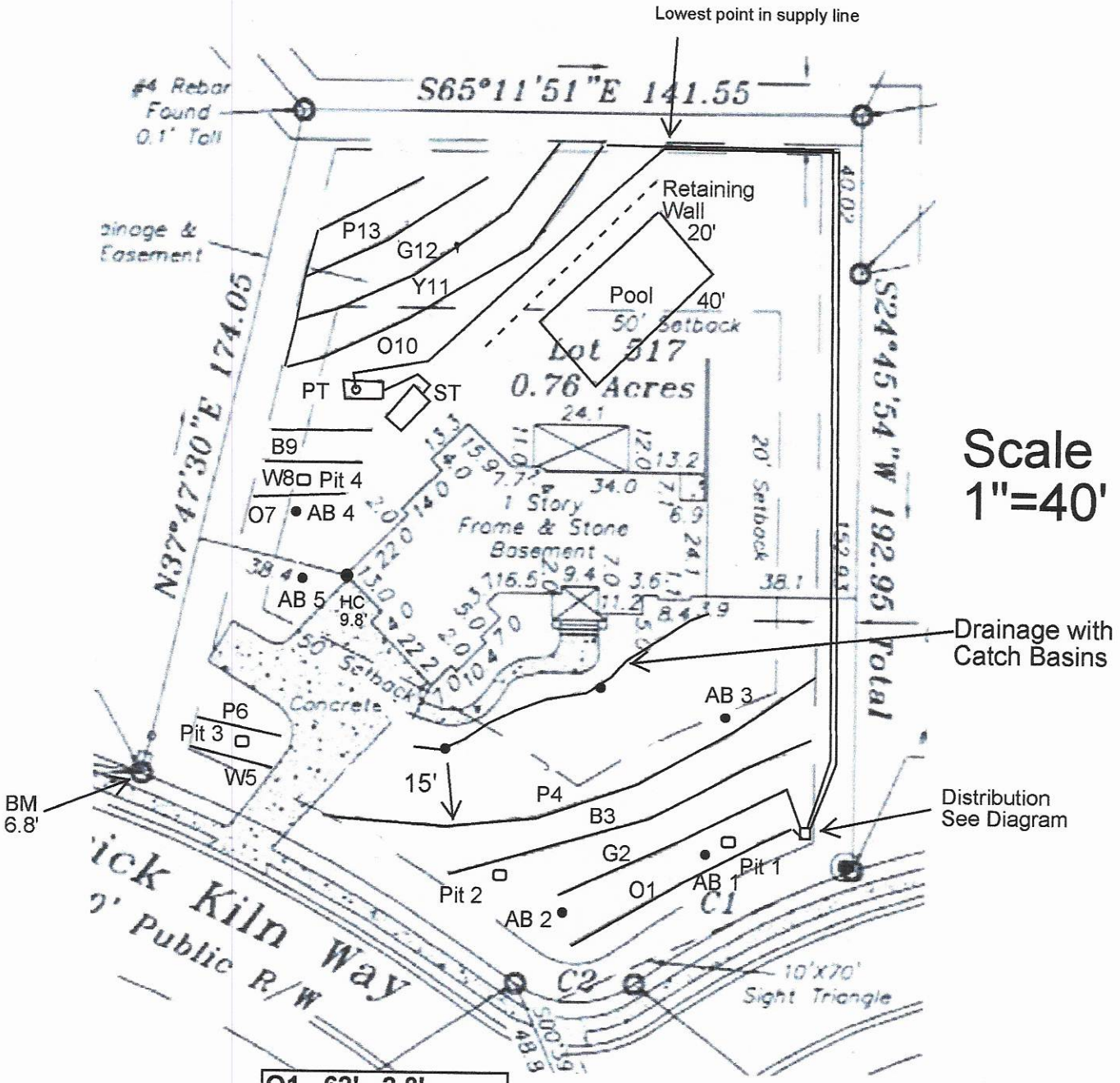
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☐ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT, not to exceed 60 mo.*

Owner / Applicant Signature: Date: 11/25/2020 Installed by: Richard Abernathy

IMPROVEMENT PERMIT by: Date: 11-20-2020 OPERATION PERMIT by: Maria Olson Date: 6/10/21

AUTHORIZATION TO CONSTRUCT by: Date: 4-22-21 Existing System Inspected by: Date:

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



O1 - 62' - 2.8'	
G2 - 62' - 3.8'	
B3 - 97' - 4.5'	
P4 - 130' - 5.8'	
W5 - 20' - 7.7'	
P6 - 20' - 8.5'	
O7 - 24' - 15.6'	
W8 - 25' - 17.3'	
B9 - 26' - 18.7'	
O10 Ex - 94' - 22.6'	
Y11 Ex - 80' - 24.3'	
G12 Ex - 50' - 25.5'	
P13 Ex - 30' - 26.3'	



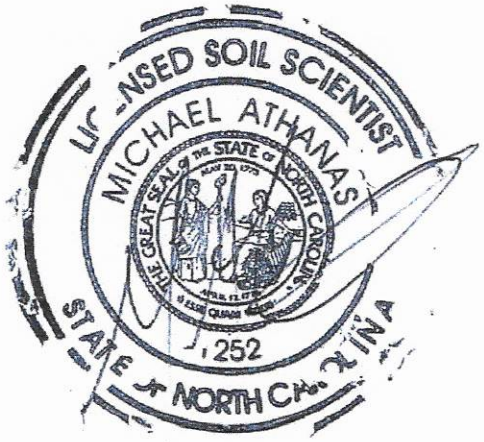
MICHAEL ATHANAS & ASSOCIATES, INC.
LICENSED SOIL SCIENTIST
561 Ennis Road
Weddington, NC 28173
704-576-3887 (Mobile)

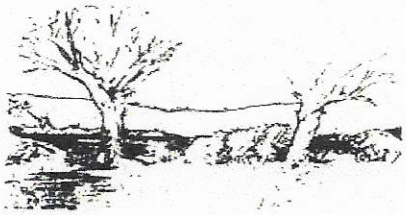
Session Law

Property:
106 Brick Kiln Way
Mooresville, NC 28117
The Point Lot 517
PIN 4625852926

Prepared for:
Lee Dietrich

11/10/2020





MICHAEL ATHANAS & ASSOCIATES
NC LICENSED SOIL SCIENTIST
SC PROFESSIONAL SOIL CLASSIFIER
561 Ennis Rd Weddington, NC 28173

WWW.MICHAELATHANAS.COM
(704) 576-3887

Date: 10/5/2020
Project Name

SESSION LAW 218-114, SECTION 11. (C) /HOUSE BILL 374, SECTION 11. (C)
AUTHORIZATION FORM

Michael Athanas & Associates (MA&A) has been contracted to evaluate soil, design and submit a septic system proposal to Iredell (County) on behalf of Clifford Lee Dietrich (Owner/Applicant for the property located at - 106 Brick Kiln Way Mooresville NC 28117 (address/PIN)

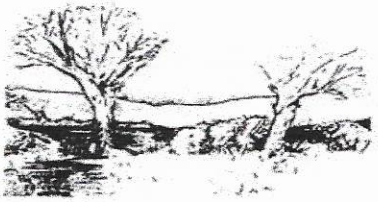
The Licensed Soil Scientist (LSS) Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 section 11 . (c)

By completing this form, sign and dating you agree that the permit issued by Iredell (county) will fall under the above referenced law.

Owner/Owners Legal Representative Clifford Lee Dietrich
Mailing address 106 Brick Kiln way Mooresville, NC 28117
Telephone Number 828-381-1590
Email Address ldietrich@utili-serve.com

Signature of Owner/ Owner Legal Rep.

10/5/2020
Date



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887
9/25/2020

Reference: Data Sheet for 106 Brick Kiln Way, The Point 517
House Footprint: See attached
Building Setbacks: 35' front/rear, 15' side
Water Source: Community well
Number of Bedrooms/Daily Flow: 4/480 GPD
Proposed LTAR: 0.275 GPD/FT^2 (initial), 0.25 GPD/FT^2 (repair)
Proposed System Type: Existing 25% Reduction + new PPBPS
Proposed Repair System Type: TSII Pretreatment PPBPS
Distribution: Pressure manifold & LP-CVB
Flow per Tap: 1 @ 12.5 GPM for the Existing system, 0.41 GPM for LPPPBPS
Tap Size and Material: 1 @ ¾" SCH 40 for the Existing system, 5/32" for LPPPBPS
System Flow: 24 GPM
Dosing Volume: 211.8 gallons
Pump Run Time: 8 minutes
Elevation Head: 24.9' (lowest point in supply line 22.7')
Friction Head: 4.1'
Pressure Head: 2'
Total Dynamic Head: 31'
Supply Line Length: 310' of 2" PVC
Septic/Pump Tank Size: 1500 Ex ST/1500 New PT
Proposed Trench Bottom: 36" maximum



Line	Design Length	# of Panels	Actual Length	Elevation
Orange 1	**62'**	**14**	**62'**	**2.8'**
Green 2	**62'**	**14**	**78'**	**3.8'**
Blue 3			97'	4.5'
Pink 4			130'	5.8'
White 5			20'	7.7'
Pink 6			20'	8.5'
Orange 7			24'	15.6'
White 8			25'	17.3'
Blue 9			26'	18.7'
Orange 10 Ex	**94'**			**22.6'**
Yellow 11 Ex	**80'**			**24.3'**
Green 12 Ex	**50'**			**25.5'**
Pink 13 Ex	**30'**			**26.3'**

Initial System: 254' Existing 25% Reduction + 124' New PPBPS
Repair System: 342'
Pump Tank: 20.6' **House Corner:** 9.8' **Benchmark:** 6.8'

Comments:
MA&A are proposing to abandon the first two existing lines (186' of 25% Reduction) and replacing it with 124' of PPBPS.

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

11/10/2020
Due to the requirements of The Point subdivision, all T&J Panels systems must be distributed with low pressure. MA&A have redesigned the distribution to meet this standard.

Each panel line:
14 panels = 50.4 gal/dose/5.74 GPM (14 x 0.41 GPM/hole) = 8.8 minutes pump run time

Existing 25% Reduction:
(254'/100) x 65.3 = 165.9 x 67% = 111.1 gal/dose / 12.5 GPM = 8.9 minutes pump run time

PROPERTY ID #: 4625852926
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Clifford Dietrich APPLICATION DATE
ADDRESS: 106 Brick Kiln Way, Mooresville, NC 28117 DATE EVALUATED:
PROPOSED FACILITY: 4 bdrm PROPOSED DESIGN FLOW (.1949): 480 GPD PROPERTY SIZE: 0.76 AC
LOCATION OF SITE: 106 Brick Kiln Way, The Point Lot 517 PROPERTY RECORDED:
WATER SUPPLY: ☐ Private X Public X Well ☐ Spring ☐ Other
EVALUATION METHOD: X Auger Boring X Pit ☐ Cut TYPE OF WASTEWATER: X 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 8%	0-9	Br CL WSBK	FR SS SP SXP	N/A	50"	N/A	N/A	PS 0.3
		9-38	R C SBK	FR SS SP SXP					
		38-50	R CL WSBK	FR SS SP SXP					
PIT 2	LS 8%	0-16	Br SL WSBK	FR SS SP SXP	N/A	48"	N/A	N/A	PS 0.3
		16-48	R C SBK	FR SS SP SXP					
PIT 3	LS 8%	0-8	FILL		N/A	48"	N/A	N/A	PS 0.3
		8-16	Br SL WSBK	FR SS SP SXP					
		16-48	R C SBK	FR SS SP SXP					
PIT 4	LS 10%	0-6	FILL			60'	N/A	N/A	PS 0.25
		6-12	Br SL WSBK	FR SS SP SXP					
		12-32	R C ABK	FR SS SP SXP	YB				
		32-60	R CL WSBK	FR SS SP SXP	LITHO				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	372 FT^2 NEW	1026 FT^2
System Type(s)	PPBPS	PPBPS
Site LTAR	0.275	0.25

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

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

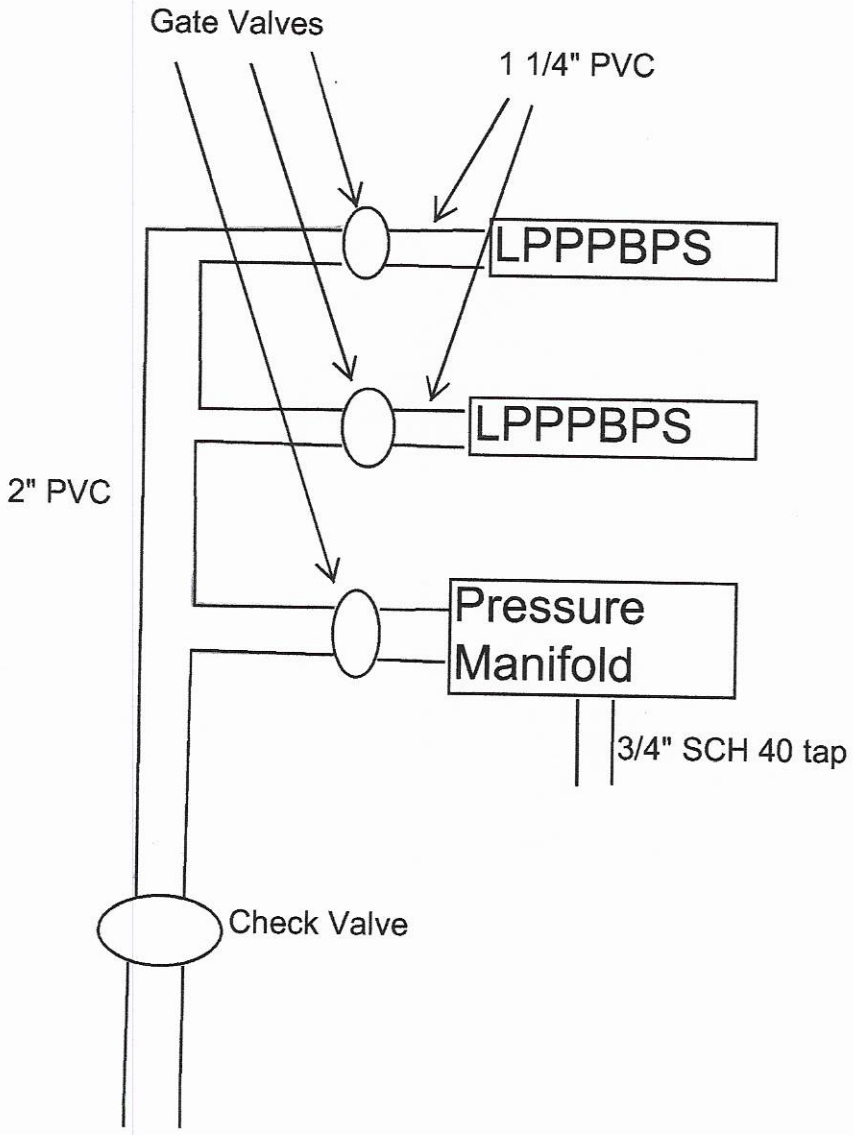
SOIL/SITE EVALUATION

(Continuation Sheet)

PROPERTY ID #: 4625852926
DATE OF EVALUATION: _____
COUNTY: IREDELL

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	
AB 1	LS 8%	0-4	Br CL WSBK	FR SS SP SXP	N/A	48"	N/A	N/A	PS 0.3
		4-34	R C SBK	FR SS SP SXP					
		34-48	R CL WSBK	FR SS SP SXP					
AB 2	LS 8%	0-12	Br SCL WSBK	FR SS SP SXP	N/A	48"	N/A	N/A	PS 0.3
		12-48	R C SBK	FR SS SP SXP					
AB 3	LS 8%	0-6	FILL		LITHO	48"	N/A	N/A	PS 0.3
		6-12	Br C SBK	FR SS SP SXP					
		12-46	R C SBK	FR SS SP SXP					
		46-48	R CL WSBK	FR SS SP SXP					
AB 4	LS 10%	0-8	FILL		YB	48"	N/A	N/A	PS 0.25
		6-30	R C ABK	FR SS SP SXP					
		30-48	R CL WSBK	FR SS SP SXP					
AB 5	LS 10%	0-30	FILL						US

COMMENTS: _____


Gate Valves
1 1/4" PVC
LPPPBPS
LPPPBPS
2" PVC
Pressure
Manifold
3/4" SCH 40 tap
Check Valve

RECEIVED NOV 1 3 2020

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM Paid $500.00 AP-311630

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 Session Law

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)

Applicant Name: Lee & Kristi Dietrich **Address:** 106 Brick Kiln Way, Mooresville, NC **Zip:** 28117

Applicant Email: _____ **Phone:** 828-381-1590 **Alt. Phone:** _____

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

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

Property Information:

Street Address: 106 Brick Kiln Way

Subdivision Name: The Point **Section/Phase:** _____ **Lot Number:** 517

Driving Directions: _____

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

CHECK FOUNDATION TYPE

( ) 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: _____

( ) 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: _____ 11/10/2020
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

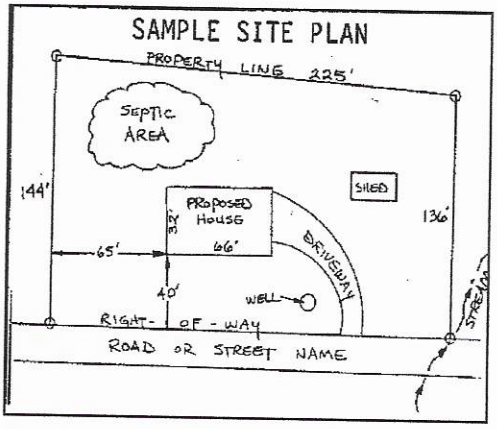
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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

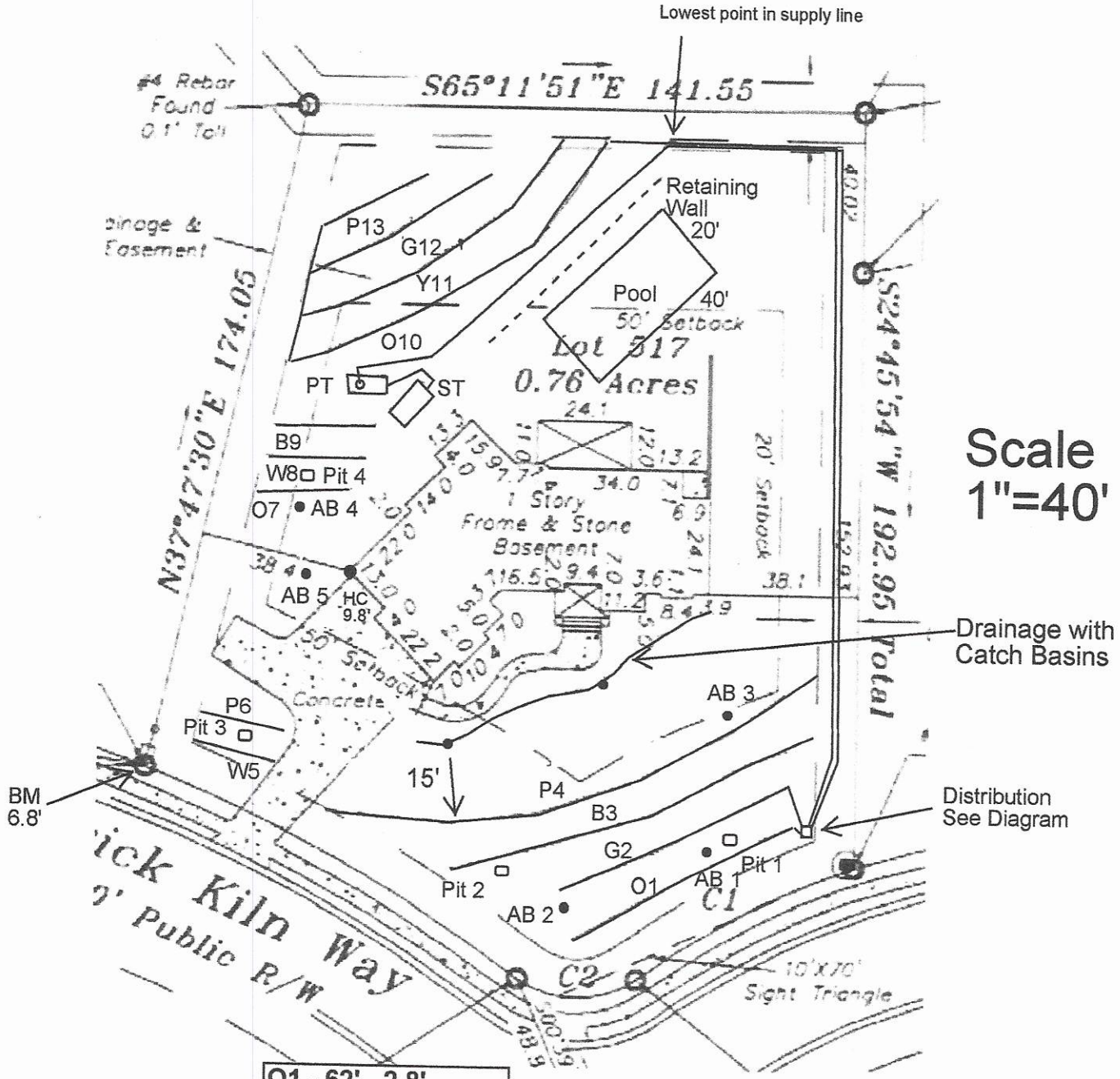
See attached plan

Signature: _____

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

11/10/2020

DATE



O1 - 62' - 2.8'
G2 - 62' - 3.8'
B3 - 97' - 4.5'
P4 - 130' - 5.8'
W5 - 20' - 7.7'
P6 - 20' - 8.5'
O7 - 24' - 15.6'
W8 - 25' - 17.3'
B9 - 26' - 18.7'
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G12 Ex - 50' - 25.5'
P13 Ex - 30' - 26.3'

106 Brick Kiln Way

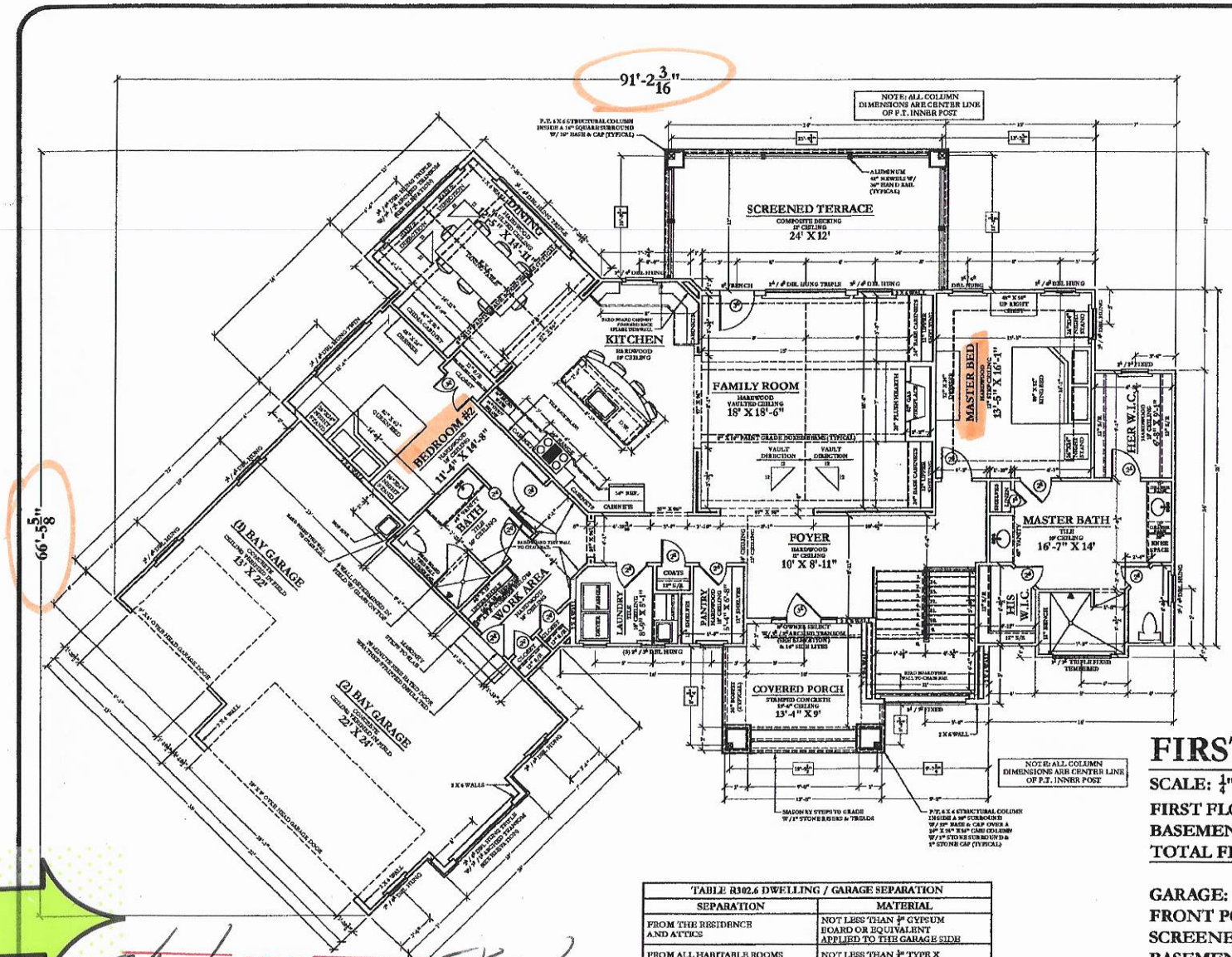


TABLE R302.6 DWELLING / GARAGE SEPARATION	
SEPARATION	MATERIAL
FROM THE RESIDENCE AND ATTICS	NOT LESS THAN 5/8" GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE
FROM ALL HABITABLE ROOMS ABOVE THE GARAGE	NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT
STRUCTURE(S) SUPPORTING ASSEMBLIES USED FOR SEPARATION REQUIRED BY THIS SECTION	NOT LESS THAN 5/8" GYPSUM BOARD OR EQUIVALENT
GARAGES LOCATED LESS THAN 3 FEET FROM A DWELLING UNIT ON THE SAME LOT	NOT LESS THAN 5/8" GYPSUM BOARD OR EQUIVALENT APPLIED TO THE INTERIOR SIDE OF EXTERIOR WALLS THAT ARE WITHIN THIS AREA

FIRST FLOOR PLAN

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

FIRST FLOOR FINISHED:	2297 SQ. FT.
BASEMENT FINISHED:	1230 SQ. FT.
TOTAL FINISHED:	3527 SQ. FT.
GARAGE:	829 SQ. FT.
FRONT PORCH:	115 SQ. FT.
SCREENED TERRACE:	286 SQ. FT.
BASEMENT UNFINISHED:	956 SQ. FT.
TOTAL UNFINISHED:	2186 SQ. FT.
TOTAL HOUSE UNDER FOOTING / ROOF:	5713 SQ. FT.

Date 11/29/2021

Date 12-13-21

Plans Submittal ONLY

Acknowledgement Of

General Notes

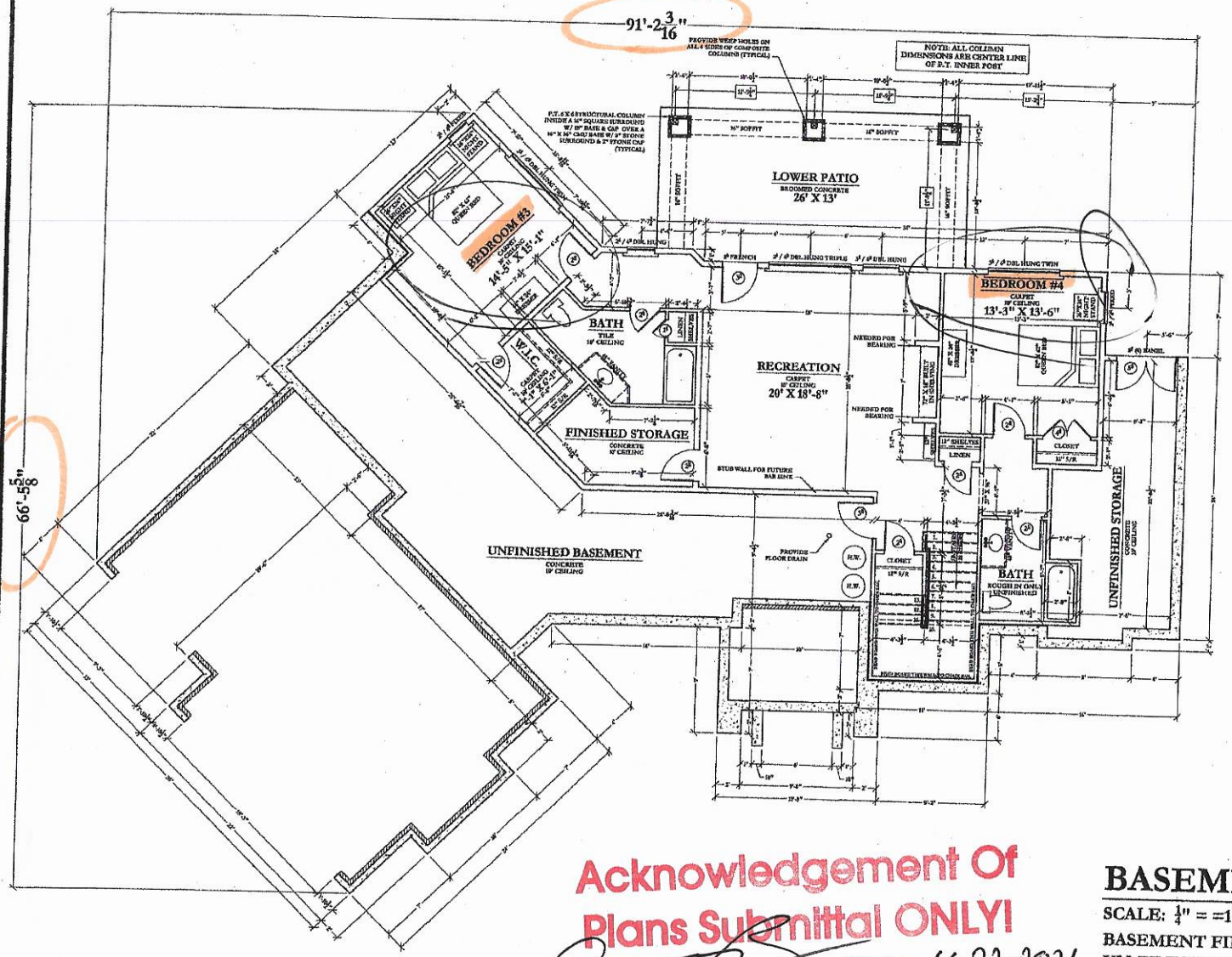
McFarland Design Group or Robert S. McFarland assumes no liability for any items constructed from this plan. Release of these plans for construction constitutes acceptance of these conditions. Changes made from these plans without consent of the McFarland Design Group are unauthorized and shall relieve the Designer of all responsibility for the project. Contractor shall verify all dimensions and conditions on the job. Figured dimensions take precedence over scaled dimensions, contractor shall verify and be responsible for all dimensions and conditions on the job.

"The McMillan Residence"
Lot #517 The Point, Mooresville,
Iredell County, NC 28117

McFarland Design Group Inc.
7231 Windy Pine Circle Denver, NC 28037
980-223-1726
www.mcfarlanddesign.com

First Floor Plan

Sheet A-4



Acknowledgement Of Plans Submittal ONLY!

Date 4-22-2021

Date 4/28/2021

BASEMENT PLAN

SCALE: $\frac{1}{4}$" = =1'-0"

BASEMENT FINISHED:	1230 SQ. FT.
UN-FINISHED / STORAGE:	956 SQ. FT.
LOWER PATIO:	335 SQ. FT.

"The McMillan Residence"
Lot #517 The Point, Mooresville,
Iredell County, NC 28117

McFarland Design Group Inc.
7231 Windy Pine Circle, Denver, NC 28037
980-722-3726
www.mcfarlanddesign.com

General Notes

Basement Plan

Date 8-5-2020

Scale 1/4" = 1'-0"

Sheet A-3

IREDELL COUNTY · NC

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

APPLICATION NUMBER
311630
Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4625852926.000	106 BRICK KILN WAY	IREDELL COUNTY

Owner Information	Applicant Information
Name: DIETRICH CLIFFORD L+KRISTI F	Name: MICHAEL ATHANAS & ASSOCIATES
Address:	Address: 561 ENNIS RD
	WEDDINGTON, NC 28173
Phone:	Phone: (704)576-3887

Use Requested	Zone Code
SWIMMING POOL	R20CUD

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.764	150	10	10	10	WSIV-CA Catawba/Lake Norman	NO

Remarks

POOL

Swimming Pool: Must meet requirement R22 of the LDC. Pools shall be located to comply with minimum setbacks for accessory structures- located behind front building line of house, 10' from side & rear property line. Lake lots must meet the 50' setback from the 760 contour line AND the 35' setback from the rear property line. Pools that are not an integral part of the principal building shall be located at least the minimum distance from the principal building necessary to comply with N.C. Building Code. Setback from house could be +/-10'. Fenced with a minimum 4' in height, and equipped with self-closing and positive self-latching gate provided with hardware for permanent locking. Fence not required for above ground pools if they are at least 4' in height, the ladder removed, or when NOT in use have a gate to the ladder as described above. SETBACK TO STRUCTURE COULD BE MORE OR LESS DEPENDING UPON THE BUILDING CODE; HOWEVER THERE IS A ? FT SET BACK FROM THE PROPERTY LINE.*The setback could change depending on the structure and size of the structure.

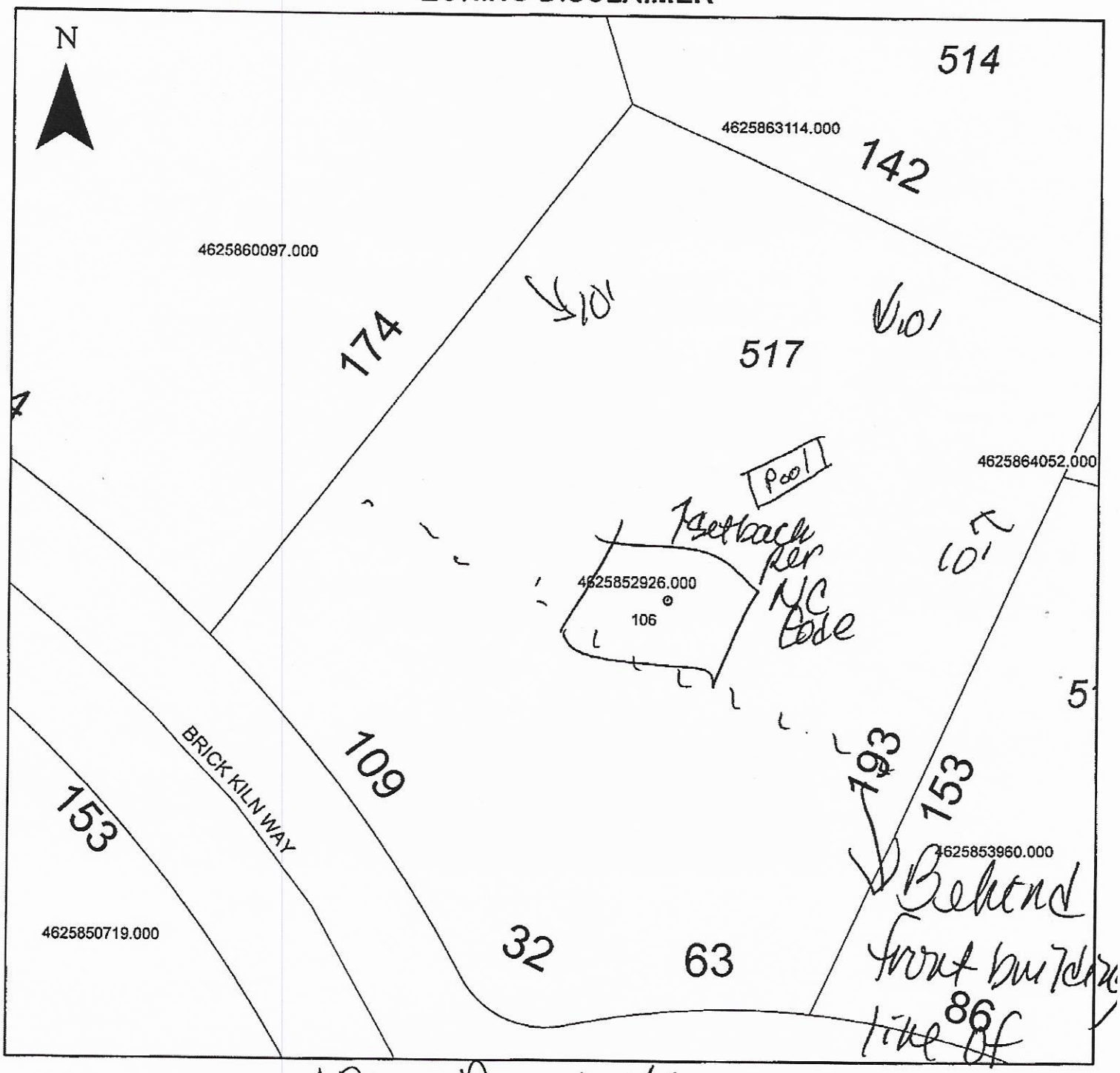
The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions,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

Signature of Owner/Contractor

Date: 10/08/2020

Permit Number	311630	TOTAL FEES:	$77.25

ZONING DISCLAIMER



Property Address 104 Brick Kiln

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.

Applicant

10/8/2020
Date