11:00

IREDELL COUNTY HEALTH DEPARTMENT

KLR (5)

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

PERMIT # AP-241992

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

PIN # 4638-64-7346

APPLICANT/OWNER: Titan Custom Homes / CS+SC | APPLICANT ADDRESS: 331 Alcove Rd. Suite 103 Mooresville, NC 28117

SITE ADDRESS: 118 Bay Point Lane, Mooresville, NC 28117 | PHONE: 704-202-5791 | ALT. PHONE

SITE DIRECTIONS: Perth Rd → Normandy Rd → Bay Point (1st @ end) | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Grand Bay | SECTION: A | LOT # 24 → 26 | LOT AREA: 3.702 acres | DESIGN FLOW: 480 GPD | L.T.A.R.: 0.30

Septic Tank	1000 (gal)	STB 766	Date 2-24	☒ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI	☒ Residence	No. Bedrooms 4	Water Supply
Pump Tank	1000 (gal)	PT 363	Date 3-20	System Description: PM - 25% Reduction		☐ Business	No. Persons 8	☒ Private existing
Pump Make	ZOELLER	Model N~~PES~~ BE-HS	Serial # Z19E07X	Repair System Description: same		☐ Other	No. Employees	☐ Public
# Nitrification Fields	1	# Lines 4	Linear Ft 400	Maintenance Agreement Required:	☐ YES ☒ NO	☐ Slab	☐ Crawl Space	☐ Community
Trench Width	36"	Trench Bottom Depth(Low side)	31	Gravel Depth	☐ GRAVITY ☒ PRESSURE	☒ Basement w/plumbing	☐ Basement w/o plumbing	

Comments / Conditions: Existing pump line (installation date, installer + materials unknown) must be pressure tested (with water) before placed in operation. Recommend that a heavy duty check valve be used in the pump tank (bronze or stronger). Also recommend that septic tank is pumped every 3-5 years and an effluent counter is installed in control panel to track pumping events.

INITIAL SITE SKETCH

See attached plans from Carolina Soil + Septic Consulting, PLLC

Dated 2/4/2020 Adrian Pruett LSS #1314

Revised 3/32/2020 (Site plan: pool)

- See approved floorplan (3/29/2019). Attic to remain unfinished

AS BUILT SKETCH

4-22-2020 - Tank Checked - Well is 50'

4-24-2020 - DRAIN LINES CHECKED - BCW

4-24-2020 - ALARM CHECKED - BCW

4-24-2020 - FLOATS CHECKED - BCW

4-24-2020 - ELECTRICAL CHECKED - BCW

DRAINLINES INSTALLED AS PERMITTED

4-24-2020 - BRASS CHECK VALVE CHECKED

~~4-24-202~~ 4/30/2020 4/28/2020

25 PSI → 20 PSI (failed) (morning)

20 psi → 18 PSI (failed) (afternoon)

5/5/2020 25 PSI @ 4:14 pm

5/6/2020 25 PSI @ 11:03 am - 5 ft (passed)

5/8/2020 Set 25ft pressure MD

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: Acceptance of permit lacrd Date: 4/6/2020 Installed by: Precision Grading

IMPROVEMENT PERMIT by: [signature] Date: 3/23/2020 OPERATION PERMIT by: Marian Dotson Date: 5/8/2020

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 3/23/2020 Existing System Inspected by: Date:

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

IREDELL COUNTY HEALTH DEPARTMENT
JANE HINSON, RN BSN MS
HEALTH DIRECTOR

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

ACKNOWLEDGEMENT OF ACCEPTANCE OF PERMIT DESIGN AND CONDITIONS

Any permit requiring a signature must have this form signed by the property owner or their authorized agent. Once this form is signed and returned to Environmental Health an official copy of the permit will be emailed to the email that you provide.

I, _Kellie Paxton, am the legal owner or the agent of the property located at_118 Bay Point Ln Mooresville, NC 28117, identified as PIN (Parcel Identification Number)_4638-64-7346, located in Iredell County, North Carolina.
Permit # _AP-241992.

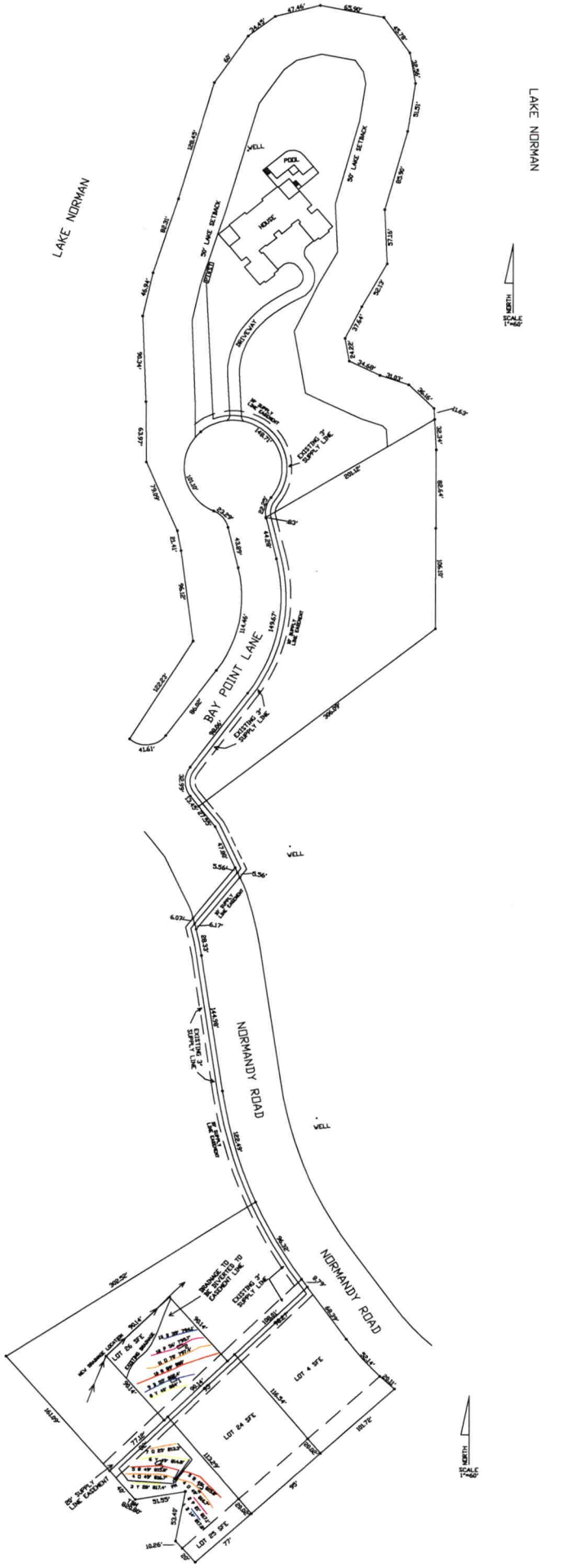
I do hereby agree to the permit design and the conditions of this permit.

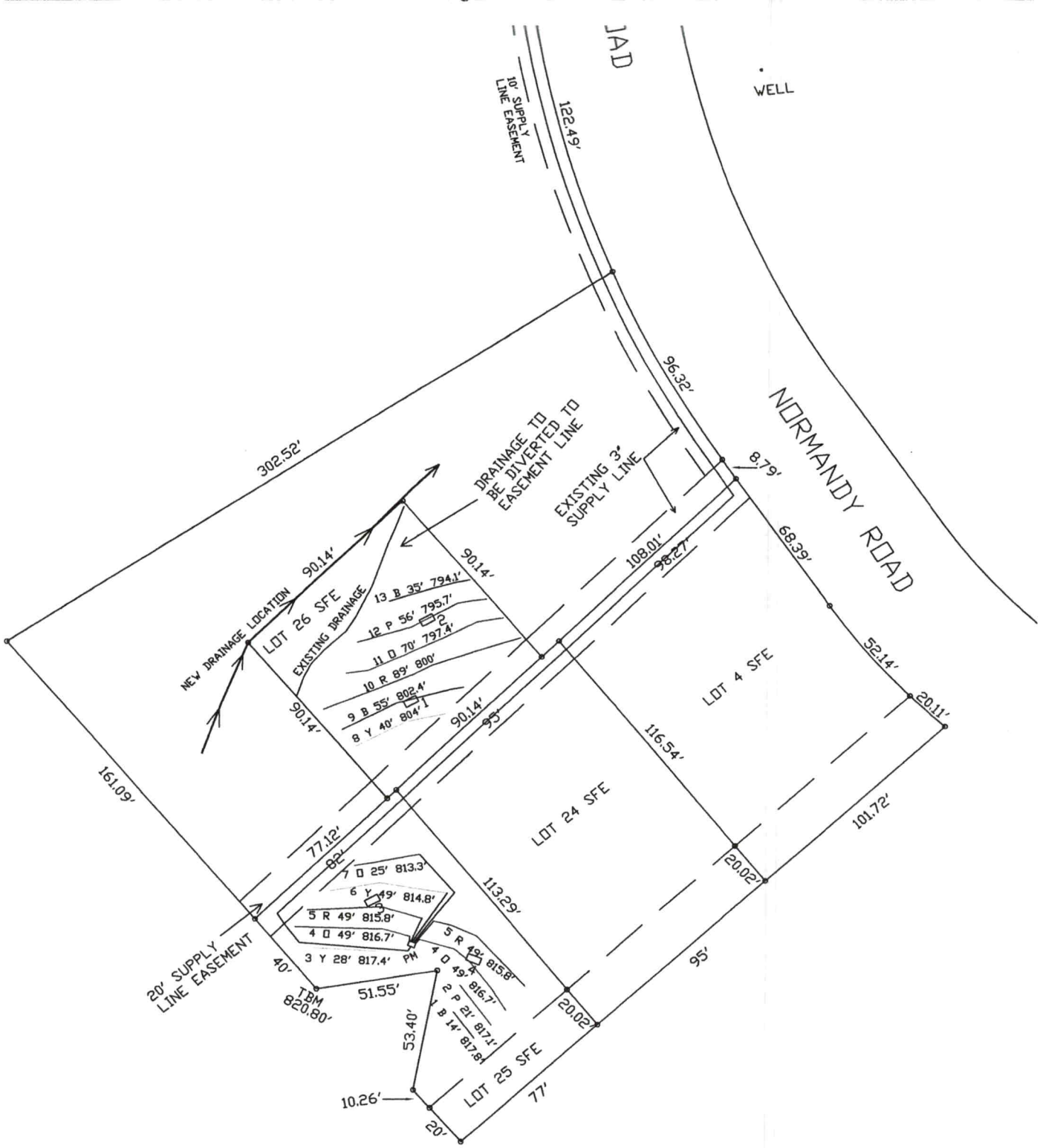
_____ **4-6-2020**
Signature of Owner/Authorized Agent Date

_____ **4-6-2020**
Signature of Witness Date

ellen@titanrealty.com
email

Not to scale


LAKE NORMAN
LAKE NORMAN
WELL
POOL
HOUSE
50' LAKE SETBACK
50' LAKE SETBACK
BAY POINT LANE
EXISTING 2" SUPPLY LINE
EXISTING 2" SUPPLY LINE
EXISTING 2" SUPPLY LINE
WELL
WELL
NORMANDY ROAD
NORMANDY ROAD
RUNNING TO BE RELOCATED EASEMENT LINE
EXISTING 2" SUPPLY LINE
LOT 05 3FC
LOT 04 3FC
LOT 4 3FC
LOT 05 3FC
SF SUPPLY LINE EASEMENT
NORTH
SCALE 1"=60'
NORTH
SCALE 1"=60'


JAD
WELL
10' SUPPLY LINE EASEMENT
122.49'
NORMANDY ROAD
96.32'
8.79'
68.39'
52.14'
20.11'
302.52'
DRAINAGE TO BE DIVERTED TO EASEMENT LINE
EXISTING 3' SUPPLY LINE
NEW DRAINAGE LOCATION
90.14'
LOT 26 SFE
EXISTING DRAINAGE
13 B 35' 794.1'
12 P 56' 795.7'
11 O 70' 797.4'
10 R 89' 800'
9 B 55' 802.4'
8 Y 40' 804'
108.01'
98.27'
LOT 4 SFE
116.54'
95'
LOT 24 SFE
161.09'
77.12'
82'
7 O 25' 813.3'
6 Y 49' 814.8'
5 R 49' 815.8'
4 O 49' 816.7'
3 Y 28' 817.4'
PM
113.29'
20' SUPPLY LINE EASEMENT
40'
TBM 820.80'
51.55'
53.40'
2 P 21' 817.1'
1 B 14' 817.8'
20.02'
101.72'
95'
10.26'
20'
LOT 25 SFE
77'

PRESSURE MANIFOLD SYSTEM
DESIGN SPECIFICATIONS

Owner:	David and Kellie Paxton
Address:	120 Audrey Ln. Mooresville, NC 28117
Contractor:	Roger Hand
Phone:	704-201-6705
County:	Iredell
Location:	Grand Bay lot 25
Drainfield Design Flow (gpd):	480
Loading/Soil Application Rate (gpd/ft.^{2}):	0.3
Depth of Gravel in Trench:	NA (PPBPS)
Gravel Size:	NA (PPBPS)
Total Lateral Length From Layout:	270
Total Lateral Length Required:	267
Trench Depth:	24 in. Low side
Trench Width:	24 in.
Trench Spacing:	8 ft. on center
Trench Bottom Area:	810
Repair Trench Spacing:	9 ft. on center
Repair Trench Depth:	30 in. Low side
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	1534
Supply Line Diameter:	3 in. SCH 40 PVC (Existing)
Supply Line Volume:	589.06
Dosing Volume:	219.60
Pump Tank Draw Down:	10.5
Supply Manifold Size:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
Supply Manifold Volume:	N/A
Recommended Dosing Controls:	Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	NEMA 4X Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	0.86
Elevation Head:	41.00
Total Dynamic Head:	67.43
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by CS&SC

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

APPROVED MAR 29 2019

GRAND BAY LOT 25
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR 4 BEDROOM HOME — February 11, 2019

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM					820.80		
INSTR. 1							
HOUSE					789.99		
TANK					781.00		
1	BLUE				817.80	14	14
2	PINK				817.10	21	21
3	YELLOW				817.40	28	28
4	***ORANGE***				***816.70***	***49***	***49***
4	***ORANGE***				***816.70***	***49***	***49***
5	***RED***				***815.80***	***49***	***49***
5	***RED***				***815.80***	***49***	***49***
6	***YELLOW***				***814.80***	***49***	***49***
7	***ORANGE***				***813.30***	***25***	***25***
8	YELLOW				804.00	45	40
9	BLUE				802.40	65	55
10	RED				800.00	93	89
11	ORANGE				797.40	74	70
12	PINK				795.70	56	56
13	BLUE				794.10	35	35
					Total	**701**	**678**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT[1]	TRENCH SYSTEM	DISTRIBUTION
**** System***	***270***	***MOD.***	***0.300***	***PPBPS***	**PRESSURE MANIFOLD**
Repair	345	ACCEPT.	0.350	25% RED.	PRESSURE MANIFOLD

Notes:
** TBM located at angle point at rear of Lot 25 offsite area (see site plan)
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings

Comments: **Lots 25 and 26 of Grand Bay were combined to create Lot 25 in 2013. Offsite septic areas for former lots 25 and 26 were used for initial and repair fields for now Lot 25.**
Supply lines serving lots 24, 25 and 26 of Grand Bay were previously installed, stub ups are located at lot and offsites.

APPROVED MAR 29 2019

On former Lot 26 offsite, existing drainage to be diverted to rear easement line as shown on site plan. If gravity flow out of the basement cannot be achieved, the basement plumbing must be pumped up to the main floor level.

Iredell County has CS&SC's permission to relocate tanks and distribution devices as needed.

PRESSURE MANIFOLD TAPSHEET - GRAND BAY LOT 25

SYSTEM

Line #	Color	Elev	Length	Hole Size	Flow/Tap	gpd	Trench Area	Line LTAR
4	*ORANGE*		*49*	SCH 80 3/4	**10.1**	39.62	147	0.27
4	*ORANGE*		*49*	SCH 80 3/4	**10.1**	39.62	147	0.27
5	*RED*		*49*	SCH 80 3/4	**10.1**	39.62	147	0.27
5	*RED*		*49*	SCH 80 3/4	**10.1**	39.62	147	0.27
6	*YELLOW*		*49*	SCH 80 3/4	**10.1**	39.62	147	0.27
7	*ORANGE*		*25*	SCH 80 1/2	**5.48**	21.50	75	0.29
	total	**feet =**	**270**	**gal/min =**	**55.98**			
			Des. Flow	**480**				
			Pump Run=	**3.92**				
			LTAR	**0.300**				

Some lines flagged longer in the field, shorten to lengths shown here.

APPROVED MAR 29 2019

CALCULATIONS

Location GRAND BAY

Lot No: 25

No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.3	$^{gpd/ft^2}$
PPBPS RED.? (YES OR NO)	YES	
Supply Line Length	1534	ft.
Supply Line Volume	589.056	gal.
Required Feet of Line	267	ft.
Amount of Line from Layout	270	ft.
Gallons per Minute	55.98	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Panel Volume	3.6	
Number of Panels	61	
Dosing Volume	219.60	gal.

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

Tank Draw Down	10.5	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	3.92	minutes
Elevation Head	41	ft.
Pressure Head	2	ft.
Friction Factor	0.86	ft./100 ft. *(From the interpolater.)*
Friction Head	13.19	ft.
Total Dynamic Head (+20%)	67.43	ft.

FRICTION FACTOR INTERPOLATER
3" SCH 40 PVC

GPM	*f*
20	0.12
	-0.16
25	0.19
	-0.16
30	0.26
	-0.28
35	0.35
	-0.28
40	0.44
43.07	0.51
45	0.55
48.14	0.63
50	0.67
57.11	0.86
60	0.94

APPROVED MAR 29 2019

Sheet 1 OF 1
PROP. ID #: 4638647337
COUNTY: IREDELL

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

OWNER: DAVID THOME & KELLIE PAXTON
ADDRESS: 130 AUDREY LN. MOORESVILLE, N.C. 28117
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 480 GPD
LOCATION OF SITE: 118 BAY POINT LN.
WATER SUPPLY: X PRIVATE PUBLIC X WELL SPRING OTHER:
EVAL. METHOD: A. BORING X PIT CUT **WASTEWATER TYPE** X SEWAGE INDUSTRIAL PROCESS MIXED

APPLICATION DATE:
DATE EVALUATED: 2/1/2019
PROPERTY SIZE: 2.66 AC
PROPERTY RECORDED: YES

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/C OLOR	.1943 SOIL DEPTH	.1956 SAPROLITE CLASS	.1944 RESTR HORIZON	
1	LSS 12%	0-17	RC WSBK	FR S SP SEXP	COM MICA 0-35 COM SAP 17-35	35"	S	55+	0.35
		17-35	RCL WSBK	FR SS SP SEXP					
		35-55	LSAP MASS	VFR SS SP SEXP					
2	LSS 14%	0-5	RC WSBK	FR SS SP SEXP	COM SAP 5-17	17"	S	63+	0.4
		5-17	RCL WSBK	VFR SS SP SEXP					
		17-63	LSAP MASS	VFR NS NP SEXP					
3	LSS/12%	0-15	SCL WSBK	VFR SS SP SEXP		52"	S	66+	0.3
		15-33	RC WSBK	FI S SP SEXP					
		33-52	RCL WSBK	FR SS SP SEXP					
		52-66	LSAP MASS	VFR SS SP SEXP					
4	LSS/8%	0-4	SL WSBK	VFR SS SP SEXP	MANY SAP 41-69	69"		69+	0.3
		4-12	SCL WSBK	FR SS SP SEXP					
		12-41	RC MABK/SBK	FI SS SP SEXP					
		41-69	RCL WSBK	VFR SS SP SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
AVAILABLE SPACE (.1945)	PS	PS
SYSTEM TYPE(S)	PM 25% REDUCTION	LP PBPPS
SITE LTAR	0.35	0.3
COMMENTS	APPROVED MAR 2 3 2020	

OTHER FACTORS (.1946):	N/A
SITE CLASSIFICATION (.1948):	PS
EVALUATED BY:	BEN ALDRIDGE
OTHER(S) PRESENT	JACOB CONRAD DAVID BEANE

RECEIVED MAR 0 3 2020

AP-241992
$225.00

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

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

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

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

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

Applicant Information: **(PRINT CLEARLY)** 42 @ 1:43pm 3/5/2020

Applicant Name: TITAN CUSTOM HOMES/CS&SC **Address:** 331 ALCOVE RD., SUITE 103, MOORESVILLE N.C. **Zip:** 28117

Applicant Email: ADRIANPRUETT@YAHOO.COM **Phone:** 704-202-5791 **Alt. Phone:** _____

Owner Name: KELLIE PAXTON **Address:** 130 AUDREY LN. MOORESVILLE, NC 28117 **Zip:** _____

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

Property Information:

Street Address: 118 BAY POINT LN. MOORESVILLE, NC 28117

Subdivision Name: GRAND BAY **Section/Phase:** P3 **Lot Number:** 25

Driving Directions: PERTH TL ON NORMANDY TR BAY POINT

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: 8 — ( ) 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: _____ 3-3-20
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

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

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

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

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

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

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

I, Kellie Paxton, am the legal owner(s) of the property located at 113 Bay Point Ln. Mooresville, NC 28117, identified as PIN (Parcel Identification Number) 4638-64-7337, located in Iredell County, North Carolina.

I do hereby authorize **(print legal representative/company name)** Adrian Pruett, Carolina Soil and Septic Consulting, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

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

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

Signature of Owner(s)	Date	Signature of Witness	Date
	01/31/2019		1/31/19

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
241992
Issue Date: 02/05/2019

ZONING PERMIT

Open Space

Parcel Number	Street Address	Jurisdiction
4638647337.000	118 BAY POINT LANE, MOORESVILLE, NC	IREDELL COUNTY

Owner Information		Applicant Information	
Owner:	KINN DEBRA L	Applicant:	CAROLINA SOIL SEPTIC C
Address:	9900 HILLHAVEN CIRCLE	Address:	162 WEST B ST
	ANCHORAGE, AK 99507		KANNAPOLIS, NC 28081
Phone:		Phone:	704-202-5791

Use Requested	Zone Code
SFD	RR

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
2.660	35.00	50.00	50.00	15.00	CACL	AE

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: _____ Date: _____

Permit Number	166658	TOTAL FEES:	$ 77.25