IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 | HS Mooresville Office (704) 660-3625 | PERMIT # AP305508

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

PIN # 4637004752

APPLICANT/OWNER: Bacon Development | APPLICANT ADDRESS: 124 C Fernwood Ln Mooresville, NC 28117

SITE ADDRESS: 136 Direct Drive Mooresville, NC 28117 | PHONE: 423 782-7637 | ALT. PHONE

SITE DIRECTIONS: Brantley School Rd TR Blume TL Beaten Path TL Direct Dr on rt | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Lakeview Haven | SECTION: | LOT # 6 | LOT AREA: .69 Acres | DESIGN FLOW: 480gpd | L.T.A.R.: .3/.1 Repair

Septic Tank	1000 (gal)	STB	760	Date	10/11/21	☒ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI
Pump Tank	100 (gal)	PT	363	Date	10/7/21	System Description:	LP- Panel Block
Pump Make		Model		Serial #		Repair System Description:	Drip
# Nitrification Fields	1	# Lines	3	Linear Ft	267'	Maintenance Agreement Required:	☒ YES ☐ NO
Trench Width	24"	Trench Bottom Depth(Low side)	36"	Gravel Depth	N/A	☐ GRAVITY	☒ PRESSURE

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

No. Bedrooms 4 | No. Persons 8 | No. Employees | ☐ Crawl Space

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: Per plan by Soil & Forestry Services of the Carolinas.

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:

Wendell Overby

LSS # 1218

See plan by: Soil & Forestry Services of the Carolinas.

AS BUILT SKETCH

Lines Installed as Drawn

Authorization to Construct
FOR SEPTIC FINAL INSPECTION
CALL 704-664-3703

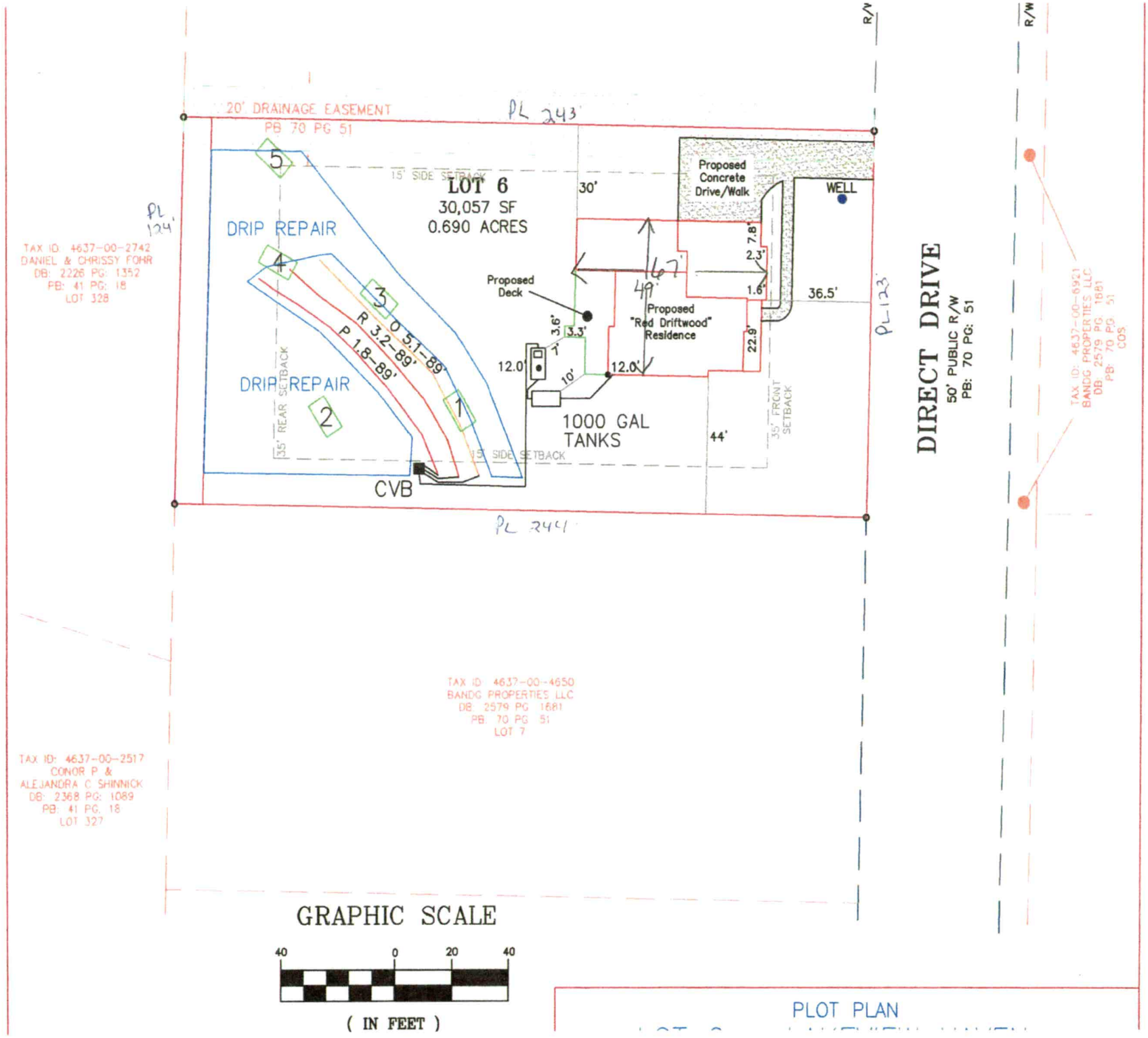
Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **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: _____ Installed by: Jake Williams

IMPROVEMENT PERMIT by: Maria Dotson Date: 1/15/2021 OPERATION PERMIT by: Cary Wil Date: 9/23/22

AUTHORIZATION TO CONSTRUCT by: Maria Dotson Date: 1/15/2021 Existing System Inspected by: _____ Date: _____


20' DRAINAGE EASEMENT
PB 70 PG 51
PL 243'
15' SIDE SETBACK
LOT 6
30,057 SF
0.690 ACRES
30'
Proposed Concrete Drive/Walk
WELL
DRIP REPAIR
DRIP REPAIR
R 3.2-89'
P 1.8-89'
O 5.1-89'
Proposed Deck
Proposed "Red Driftwood" Residence
67'
49'
7.8'
2.3'
1.6'
36.5'
22.9'
3.6'
3.3'
1'
10'
12.0'
12.0'
1000 GAL TANKS
44'
35' REAR SETBACK
35' FRONT SETBACK
15' SIDE SETBACK
CVB
PL 244'
PL 123'
PL 124'
R/W
R/W
DIRECT DRIVE
50' PUBLIC R/W
PB: 70 PG: 51
TAX ID: 4637-00-2742
DANIEL & CHRISSY FOHR
DB: 2226 PG: 1352
PB: 41 PG: 18
LOT 328
TAX ID: 4637-00-4650
BANDG PROPERTIES LLC
DB: 2579 PG: 1681
PB: 70 PG: 51
LOT 7
TAX ID: 4637-00-2517
CONOR P &
ALEJANDRA C SHINNICK
DB: 2368 PG: 1089
PB: 41 PG: 18
LOT 327
TAX ID: 4637-00-6921
BANDG PROPERTIES LLC
DB: 2579 PG: 1681
PB: 70 PG: 51
COS
GRAPHIC SCALE
40 0 20 40
(IN FEET)
PLOT PLAN

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 | PERMIT # AP305508

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

PIN # 4637CC4752

APPLICANT/OWNER: Bacon Development | APPLICANT ADDRESS: 124 C Fernwood Ln Mooresville, NC 28117

SITE ADDRESS: 136 Direct Drive Mooresville NC 28117 | PHONE: 423 782-7633 | ALT. PHONE

SITE DIRECTIONS: Brawley School Rd TR Blume TL Beaten Path TL Direct Dr on Rt | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Lakeview Haven | SECTION: | LOT # 6 | LOT AREA: .69 Acres | DESIGN FLOW: 450 gpd | L.T.A.R. .3/.1 Rep

Septic Tank	1000 (gal)	STB SHOAF 760	Date 10/11/21	☒ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI	☒ Residence	No. Bedrooms 4	Water Supply
Pump Tank	100 (gal)	PT SHOAF 363	Date 10/1/21	System Description: LP Panel Block		☐ Business	No. Persons 8	☒ Private
Pump Make		Model	Serial #	Repair System Description:		☐ Other	No. Employees	☐ Public
# Nitrification Fields	1	# Lines 3	Linear Ft 267	Maintenance Agreement Required:	☒ YES ☐ NO	☐ Slab	☐ Crawl Space	☐ Community
Trench Width	24"	Trench Bottom Depth(Low side)	36"	Gravel Depth N/A	☐ GRAVITY ☒ PRESSURE	☒ Basement w/ plumbing	☐ Basement w/o plumbing	

Comments / Conditions: Per plan by Soil & Forestry Services of the Carolinas

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:

Wendell Overby

LSS # 1218

See plan by: Soil & Forestry Services of the Carolinas

AS BUILT SKETCH

Lines Installed as Drawn

As Built on next page

Authorization to Construct

FOR SEPTIC FINAL INSPECTION

	Date	Initials
Drain Lines Checked	12-15-21	
Tanks Checked	tanks need filter 12/16/21	
Pressure Manifold or Valve Box Checked	12/16/21	DW
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Y/ N		
Comments: Tanks ≤3' below grade		

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Owner / Applicant Signature: | Date: | Installed by: Jake Williams

IMPROVEMENT PERMIT by: Myra Watson | Date: 1/15/2021 | OPERATION PERMIT by: | Date:

AUTHORIZATION TO CONSTRUCT by: Myra Watson | Date: 1/15/2021 | Existing System Inspected by: | Date:

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 (HS) | PERMIT # AP305508

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

PIN # 4637004752

APPLICANT/OWNER: Bacon Development | APPLICANT ADDRESS: 124 C Fernwood Ln Mooresville, NC 28117

SITE ADDRESS: 136 Direct Drive Mooresville, NC 28117 | PHONE: 423 782-7633 | ALT. PHONE

SITE DIRECTIONS: Brawley School Rd TR Blume TL Beaten Path TL Direct Dr on rt | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Lakeview Haven | SECTION: | LOT # 6 | LOT AREA: .69 Acres | DESIGN FLOW: 480gpd | L.T.A.R.: .3/.1 Repair

Septic Tank	1000 (gal)	STB ~~SHOAF~~ 760	Date 10/11/21	☒ New System	☐ Repair	☐ Expansion	System Type: I II III IV V VI
Pump Tank	100 (gal)	PT ~~SHOAF~~ 363	Date 11/1/21	System Description: LP- Panel Block			
Pump Make		Model	Serial #	Repair System Description: Drip			
# Nitrification Fields	1	# Lines 3	Linear Ft 267'	Maintenance Agreement Required:	☒ YES	☐ NO	
Trench Width	24"	Trench Bottom Depth(Low side)	36"	Gravel Depth N/A	☐ GRAVITY	☒ PRESSURE	

☒ Residence ☐ Business ☐ Other ☐ Slab ☒ Basement w/plumbing ☐ Crawl Space ☐ Basement w/o plumbing

No. Bedrooms 4 | No. Persons 8 | No. Employees

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: Per plan by Soil & Forestry Services of the Carolinas.

INITIAL SITE SKETCH

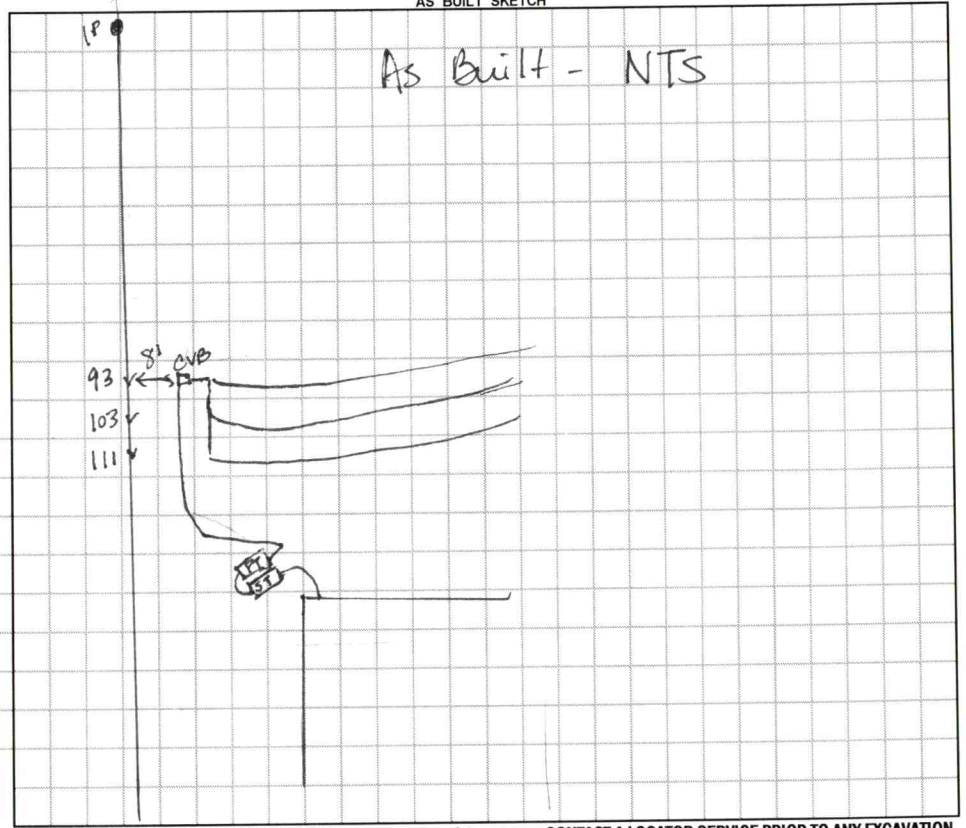
This permit is issued pursuant to Section 11 . (C) of S.L. 2018-114 using the signed and sealed LSS Evaluation by:

Wendell Overby

LSS # 1218

See plan by: Soil & Forestry Services of the Carolinas.

AS BUILT SKETCH



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Owner / Applicant Signature: _____ Date: _____ Installed by: _____

IMPROVEMENT PERMIT by: Myra Dotson Date: 1/15/2021 OPERATION PERMIT by: _____ Date: _____

AUTHORIZATION TO CONSTRUCT by: Myra Dotson Date: 1/15/2021 Existing System Inspected by: _____ Date: _____

PPBPS LPP DOSED SYSTEM
FOR WASTEWATER TREATMENT

Applicant:	Bacon Development, LLC
Contact:	Chad Bacon
Phone:	423 782-7633
County:	Iredell
Location:	Lot 6 Lakeview Haven

Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	480 gpd
System Flow:	25.83 gpm

Design Specifications

Drainfield Size:	267 lf
Loading Rate:	0.3 gpd/ft.^{2}
Depth of Gravel in Trench:	n/a
Gravel Size:	n/a
Trench Depth:	36 in
Trench Width:	24 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	90 lf
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	15.66 gal
Dosing Volume:	226.80 gal

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:	1.14 ft
Elevation Head:	15.00 ft
Total Dynamic Head:	18.31 ft
Threaded Union:	In Tank
Gate Valves:	1 in Tank: 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	n/a

Lot 6 Lakeview Haven

LPP PPBPS System

DESIGN FLOW:	480	gpd
SOIL APPLICATION RATE:	0.3 gpd/ft.^{2}	
TOTAL AREA TRENCH BOTTOM:	534	sf
TOTAL LATERAL LENGTH:	267	lf
NUMBER OF FIELDS:	1	
LATERAL LENGTH REQUIRED PER FIELD:	267	lf
SUPPLY LINE LENGTH:	90	lf
TOTAL DYNAMIC HEAD:	18.31	gpm
DOSING VOLUME:	226.80	gal
PUMP TANK DRAW DOWN*:	10.8	in
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.*

Lot 6 Lakeview Haven

Layout for a 4 bedroom home **Jan 2021**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM		12.0			100.0		
INSTR. 1			112.0				
HOUSE				12.00	100.0		
TANK				12.00	100.0		
			SYSTEM				
1	Pink			1.80	110.2	89	89
2	Red			3.20	108.8	89	89
3	Orange			5.10	106.9	89	89

REPAIR

4800sf Drip Irrigation Area

	LINE LENGTH	LTAR GPD/FT	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH
SYSTEM	267	0.300	PPBPS	50%	LPP	36
REPAIR	2400	0.100	DRIP	0%	DRIP	6

Notes:

**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

Lot 6 Lakeview Haven

SYSTEM FLOW

DESIGN SPECIFICATIONS

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench A	Number of Panels
1	PINK	110.2	89	0.156	0.41	178	21
2	RED	108.8	89	0.156	0.41	178	21
3	ORNG	106.9	89	0.156	0.41	178	21
							63
	total	feet =	267	gal/min =	25.83		
			Des. Flow	480			
			Pump Run=	8.78			
			soil LTAR	0.3			
			LTAR with mod.	0.6			

.156 equals 5/32 inch hole

CALCULATIONS

Location Lakeview Haven

Project Number 20-1069

Lot No: 6

No. of Bedrooms 4

Design Flow 480 $^{gal}/_{day}$

LTAR 0.3 $^{gal}/_{ft^2\,day}$

Accepted? (YES OR NO) No

Supply Line Length 90 ft.

Supply Line Volume 15.66 gal.

Required Feet of Line 267 ft.
Amount of Line from Layout 267 ft.

Gallons per Minute 25.83 $^{gal}/_{min}$

Required Septic Tank Capacity 1000 gal.
Minimum Standard Tank Size 1000

Panel Volume 3.6 gal.
# of Panels 63
Dosing Volume 226.80 gal.

Note: Dosing volume based on # of panels x 3.6 gal/panel

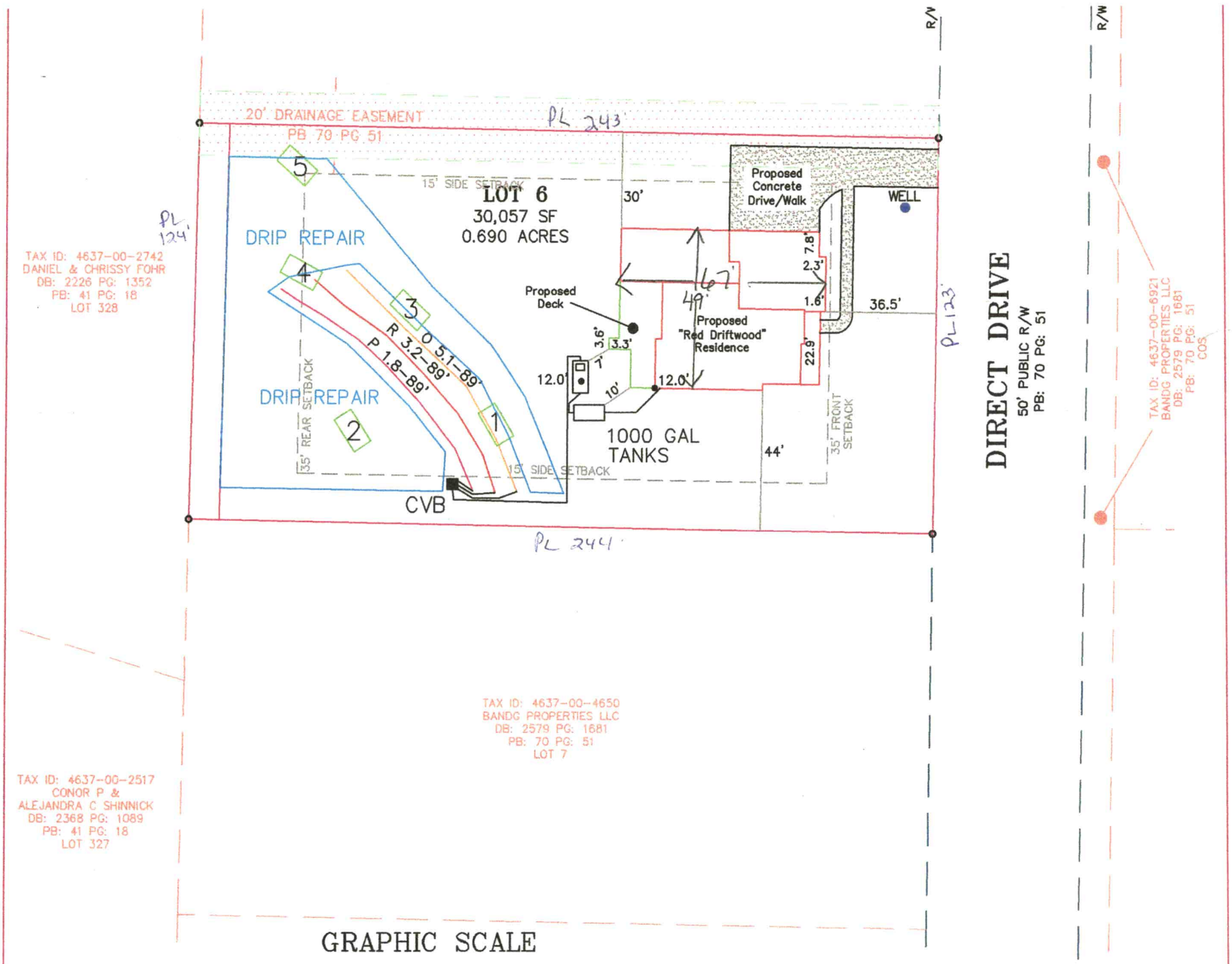
Tank Draw Down 10.8 in.
Generic Draw Down of 21 gal.per in.

Pump Run Time 8.78 minutes

Elevation Head 15 ft.
Pressure Head 2 ft.
Friction Factor 1.27 ft./100 ft. *(From the interpolater.)*
Friction Head 1.14 ft.
Friction Head +15% 1.31445
Total Dynamic Head 18.31 ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
27.4	1.51
30	1.78
	-1.76
35	2.37
37	2.63
40	3.03
42.7	3.43
45	3.77
46.51	4.01
50	4.58
57.11	5.89
60	6.42


20' DRAINAGE EASEMENT
PB 70 PG 51
PL 243'
15' SIDE SETBACK
LOT 6
30,057 SF
0.690 ACRES
30'
Proposed Concrete Drive/Walk
WELL
DRIP REPAIR
DRIP REPAIR
5
4
3
2
1
O 5.1-89'
R 3.2-89'
P 1.8-89'
Proposed Deck
Proposed "Red Driftwood" Residence
67'
49'
7.8'
2.3'
1.6'
36.5'
22.9'
3.6'
3.3'
1'
10'
12.0'
12.0'
1000 GAL TANKS
CVB
35' REAR SETBACK
15' SIDE SETBACK
35' FRONT SETBACK
44'
PL 124'
PL 123'
PL 244'
R/W
R/W
DIRECT DRIVE
50' PUBLIC R/W
PB: 70 PG: 51
TAX ID: 4637-00-2742
DANIEL & CHRISSY FOHR
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TAX ID: 4637-00-6921
BANDG PROPERTIES LLC
DB: 2579 PG: 1681
PB: 70 PG: 51
COS
GRAPHIC SCALE
40
0
20
40
(IN FEET)

PLOT PLAN

PPBPS LPP DOSED SYSTEM
FOR WASTEWATER TREATMENT

Applicant:	Bacon Development, LLC
Contact:	Chad Bacon
Phone:	423 782-7633
County:	Iredell
Location:	Lot 6 Lakeview Haven

Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	480 gpd
System Flow:	25.83 gpm

Design Specifications

Drainfield Size:	267 lf
Loading Rate:	0.3 gpd/ft.^{2}
Depth of Gravel in Trench:	n/a
Gravel Size:	n/a
Trench Depth:	36 in
Trench Width:	24 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	90 lf
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	15.66 gal
Dosing Volume:	226.80 gal

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:	1.14 ft
Elevation Head:	15.00 ft
Total Dynamic Head:	18.31 ft
Threaded Union:	In Tank
Gate Valves:	1 in Tank: 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	n/a

Lot 6 Lakeview Haven

LPP PPBPS System

DESIGN FLOW:	480	gpd
SOIL APPLICATION RATE:	0.3 gpd/ft.^{2}	
TOTAL AREA TRENCH BOTTOM:	534	sf
TOTAL LATERAL LENGTH:	267	lf
NUMBER OF FIELDS:	1	
LATERAL LENGTH REQUIRED PER FIELD:	267	lf
SUPPLY LINE LENGTH:	90	lf
TOTAL DYNAMIC HEAD:	18.31	gpm
DOSING VOLUME:	226.80	gal
PUMP TANK DRAW DOWN*:	10.8	in
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.*

Lot 6 Lakeview Haven

Layout for a 4 bedroom home **Jan 2021**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM		12.0			100.0		
INSTR. 1			112.0				
HOUSE				12.00	100.0		
TANK				12.00	100.0		
			SYSTEM				
1	Pink			1.80	110.2	89	89
2	Red			3.20	108.8	89	89
3	Orange			5.10	106.9	89	89

REPAIR

4800sf Drip Irrigation Area

	LINE LENGTH	LTAR GPD/FT²	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH
SYSTEM	267	0.300	PPBPS	50%	LPP	36
REPAIR	2400	0.100	DRIP	0%	DRIP	6

Notes:

**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

Lot 6 Lakeview Haven

SYSTEM FLOW

DESIGN SPECIFICATIONS

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench A	Number of Panels
1	PINK	110.2	89	0.156	0.41	178	21
2	RED	108.8	89	0.156	0.41	178	21
3	ORNG	106.9	89	0.156	0.41	178	21
							63
	total	feet =	267	gal/min =	25.83		
			Des. Flow	480			
			Pump Run=	8.78			
			soil LTAR	0.3			
			LTAR with mod.	0.6			

.156 equals 5/32 inch hole

CALCULATIONS

Location Lakeview Haven

Project Number 20-1069

Lot No:	6	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\ day}$
Accepted? (YES OR NO)	No	
Supply Line Length	90	ft.
Supply Line Volume	15.66	gal.
Required Feet of Line	267	ft.
Amount of Line from Layout	267	ft.
Gallons per Minute	25.83	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Panel Volume	3.6	gal.
# of Panels	63	
Dosing Volume	226.80	gal.

Note: Dosing volume based on # of panels x 3.6 gal/panel

Tank Draw Down	10.8	in.
		Generic Draw Down of 21 gal.per in.
Pump Run Time	8.78	minutes
Elevation Head	15	ft.
Pressure Head	2	ft.
Friction Factor	1.27	ft./100 ft. *(From the interpolater.)*
Friction Head	1.14	ft.
Friction Head +15%	1.31445	
Total Dynamic Head	18.31	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
27.4	1.51
30	1.78
	-1.76
35	2.37
37	2.63
40	3.03
42.7	3.43
45	3.77
46.51	4.01
50	4.58
57.11	5.89
60	6.42

4

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE
OR IT WILL NOT BE PROCESSED SL AP-305508

Iredell County Health Department – Environmental Health Division $500.00

PAGE 1: ***APPLICATION FORM***

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

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

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

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

Applicant Information: **(PRINT CLEARLY)**

Applicant Name: BACON DEVELOPMENT, LLC **Address:** 124C FERNWOOD LANE M'VILLE **Zip:** 28117

Applicant Email: CHAD@CRESENTCDS.COM **Phone:** (423) 782-7633 **Alt. Phone:**

Owner Name: SAME **Address:** **Zip:**

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

Property Information:

Street Address: 136 DIRECT DRIVE MOORESVILLE

Subdivision Name: LAKEVIEW HAVEN **Section/Phase:** **Lot Number:** 6

Driving Directions: BRAWLEY SCHOOL → BLUME → BEATEN PATH → DIRECT DRIVE

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

CHECK FOUNDATION TYPE

(X) 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
(X) Swimming Pool
( ) Other Addition/Structure:

( ) Crawl Space Foundation
( ) Concrete Slab Foundation
(X) Basement with Plumbing
( ) Basement without Plumbing

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

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

(X) 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 (X) Modified Conventional ( ) Other:

Please answer the following to the best of your ability:

( ) Yes (X) No **Does the site contain any jurisdictional wetlands?**
( ) Yes (X) No **Is any non-domestic sewage (i.e. industrial) to be generated?**
( ) Yes (X) No **Is the site subject to approval by any other public agency?**

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

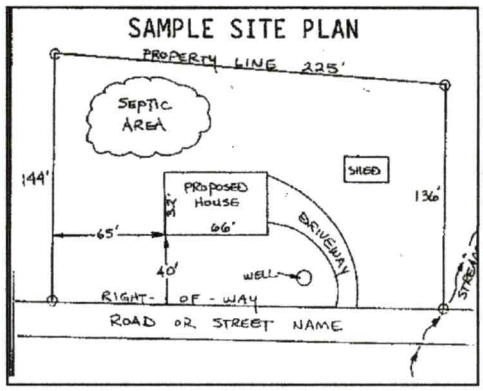
Signature: W Cly 1/7/21
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**

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:

- (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 and well location**
- (X) **Area you prefer your septic system to be placed**
- (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 PLANS

Signature: Wendell Cg — 1/7/21

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

(Check and sign only ONE of the options below)

☐ **1. * APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) _____

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.

☒ **2.** I, Bacon Development LLC Chad Bacon, am the legal owner(s) of the property located at 136 DIRECT DRIVE, MOORESVILLE NC, identified as PIN (Parcel Identification Number) 4631004752, located in Iredell County, North Carolina.

I do hereby authorize **(print legal representative/company name)** WENDELL OVERBY, _____, 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.

_____ 1-7-21
Signature of Owner(s) Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

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

IREDELL COUNTY · NC

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

APPLICATION NUMBER
305508 Issue Date: 03/02/2020

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4637004752.000	136 DIRECT DR	Iredell County

Owner Information	Applicant Information
Name: BANDG PROPERTIES LLC	Name: THE OAKS GROUP
Address:	Address: 121 HOLT LN
,	MOORESVILLE, NC 28117
Phone:	Phone: (704)578-4951

Use Requested	Zone Code
Single Family Dwelling	R20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.69	35	35	15	15	WSIV-CA Catawba/Lake Norman	NO

Remarks
SFD

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: 03/02/2020

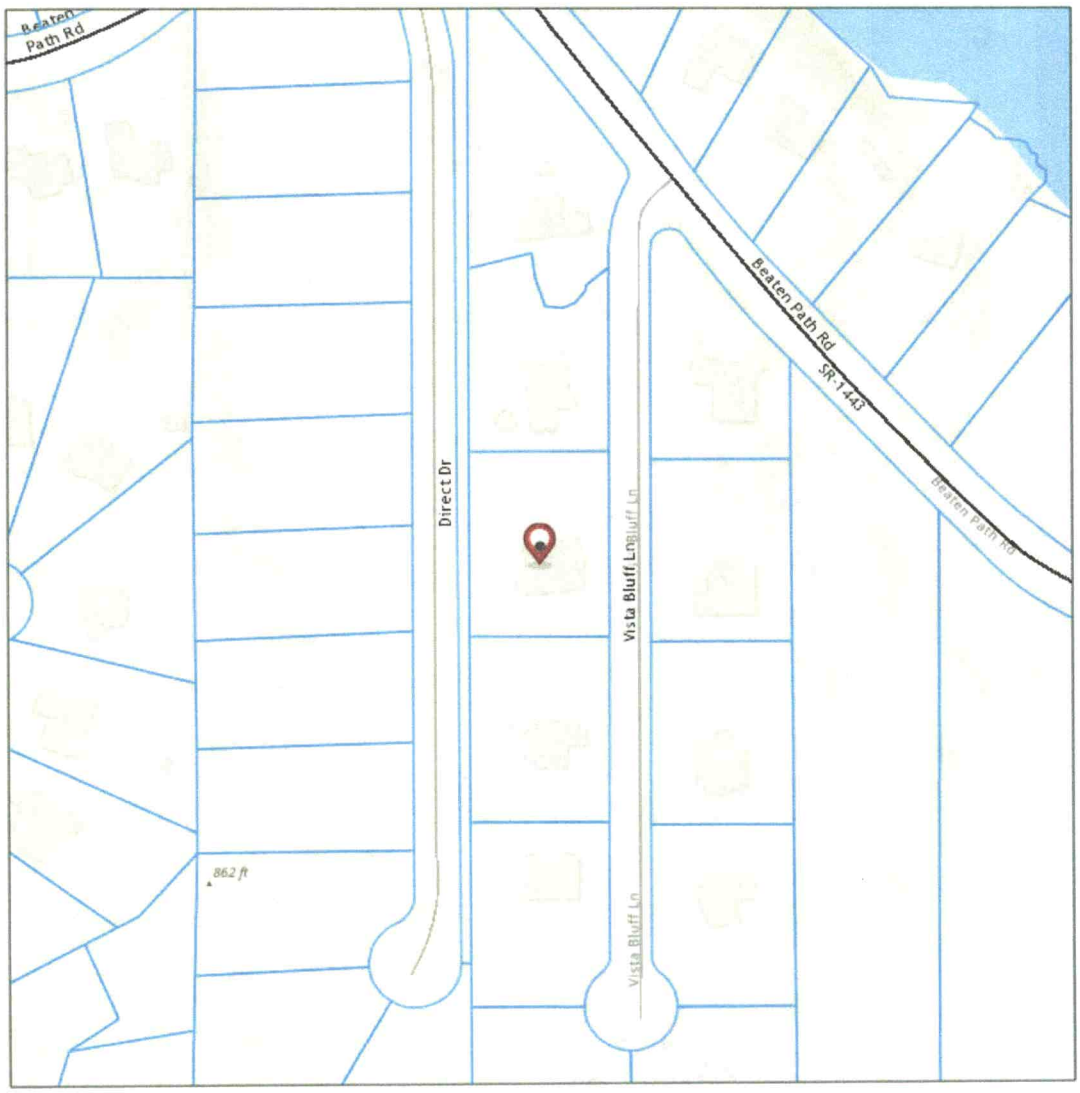
Permit Number	305508	TOTAL FEES:	$77.25

WPDT Report

Area of Interest (AOI) Information

Area : 3,134,508.72 ft²

Jan 21 2021 9:12:25 Eastern Standard Time



1:2,257

0 0.01 0.03 0.06 mi

0 0.03 0.05 0.1 km

Parcels (Polygons) - Parcels

Non-System Roads

Federal Route

Non-System

Other System Roads

Ramps, Rest Areas, Non-Mainline

Projected Route

Other State Agency Route

Secondary Route

Primary Roads

Interstate

US Route

Esri Community Maps Contributors, Iredell County, State of North Carolina DOT, BuildingFootprintUSA, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NCDOT GIS Unit, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson

All North Carolina Department of Environmental Quality (NCDEQ) GIS data is expressly provided "AS IS" and "WITH ALL FAULTS". The NCDEQ makes no warranty of any kind, express or implied, concerning this information, including but not limited to any warranties of merchantability or witness for any particular purpose. The NCDEQ assumes no responsibility or legal liability concerning the Data's accuracy, reliability, completeness, timeliness, or usefulness. The data is not intended to constitute advice nor is it to be used as a substitute for specific advice from a professional. Users should not act (or refrain from acting) based upon information in the Data without independently verifying the information and obtaining any necessary professional advice. Users are solely responsible for ensuring the accuracy, currency and other qualities of any products derived from or in connection with the NCDEQ's Data. The Data is collected from various sources and may be modified over time without notice to improve spatial andattribute accuracy. The NCDEQ disclaims responsibility for the spatial accuracy and attribution of GIS features and makes no warranty concerning same.

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

January 6, 2021

Iredell County Environmental Health
Attn: Heath Snow
349 N Center Street
Statesville, NC 28677

Re: Session Law 2018-114 Submittal for Lakeview Haven Subdivision-Mooresville

Lot 6-136 Direct Drive

Mr. Snow,

Attached please find sealed soil notes as well as site plans and design related data for a 4-bedroom vertical panel block system using LPP distribution. The design packet is submitted under Session Law 2018-114 (HB 374).

"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: Bacon Development, LLC c/o Chad Bacon:

Signature: _____

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

Wendell Overby, LSS

Signature: Wendell Overby

Seal:



Four (4) Bedroom PPBPS Septic System Design using
LPP Distribution for Lot 6 of Lakeview Haven Subdivision
136 Direct Drive, Mooresville, NC

Contents: **Page**

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

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4
- System Flow---------- 5

Site Plan---------- 6

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

LPP Trench Schematic---------- 8

Profile Descriptions---------- 9

Iredell County Septic Application---------- 10-11

Environmental Health Requirements---------- 12

Zoning Permit---------- 13

Agent Authorization---------- 14

Owner: Bacon Development, LLC
423 782-7633
Design By: Soil & Forestry Services of the Carolinas, PA

INFORMATION FOR THE INSTALLER:

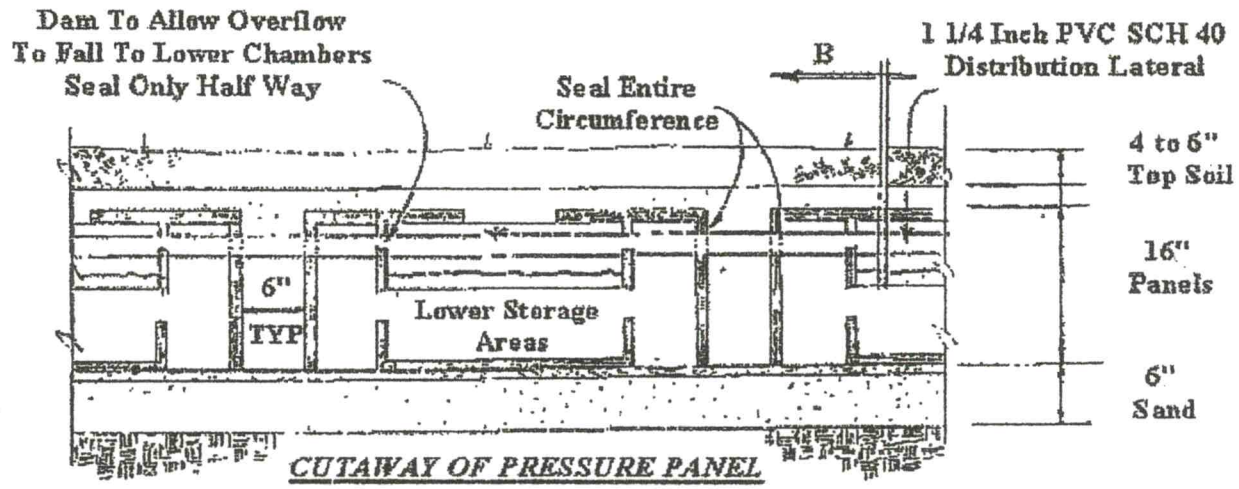
- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by DHH, and certification supplied by the manufacturer.
- The installer shall be responsible to the owner for placement of the 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
- 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.
- Elevations at pinflag locations should be checked by the installer prior to beginning
- Pump tank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- **System specified as LPP PPBPS type**
- **Repair specified as subsurface drip irrigation**
- **System trench depth specified at 36"**
- **System trenches installed on 8' minimum; 2' wide trenches**
- **Rake and lime system trenches as per manufacturers specs**

Panels With Pressure Distribution

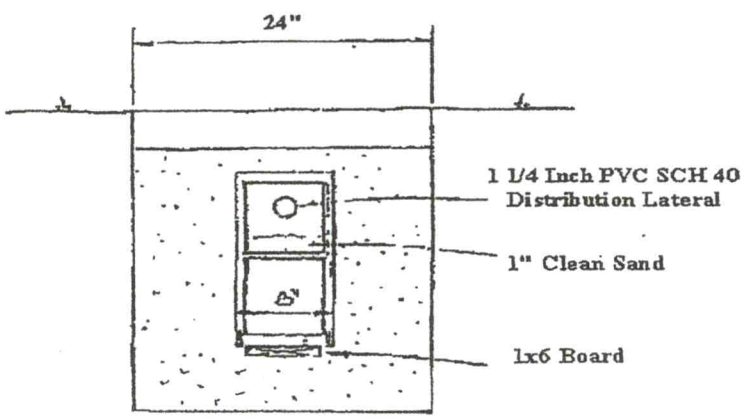
The LP Panel uses technology similar to that of Low Pressure Pipe (LPP) Systems. The tables and distribution design described in the LPP manual is applicable to the pressure Panel System. The system should be used with two to four feet of head. In many respects a LP Panel is similar to a LPP with the holes discharging into the panels.

The dosing cycle for the Panel System is designed to pump enough effluent to fill the top chambers of all the panels in the system. The top chamber of a 16 inch panel holds 3.6 gallons. When the system has 34 panels and all holes are the same size, then you would multiply 34 X 3.6 to get 122 gallons per dose cycle. The holes are drilled in the distribution pipe at the 10 and the 2 o'clock position. These are then placed so that the effluent is pumped into the top chamber of the panel. If the hole sizing changes in the system the pump cycle is set by the hole that is discharging the fastest.

All valves and turn-ups should be neatly capped, covered and labeled for future service. Pump tanks should be constructed as shown in the drawing on page 12 to allow for service and repairs.



CUTAWAY OF PRESSURE PANEL



PROPERTY ID #: 4637004752
COUNTY: Iredell

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**

OWNER: Bacon Development, LLC APPLICATION DATE
ADDRESS: DATE EVALUATED: 11/24/20
PROPOSED FACILITY: New house PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: .69
LOCATION OF SITE: 136 Direct Drive, Mooresville PROPERTY RECORDED:
WATER SUPPLY: x ☐ Private ☐ Public x☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ 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 SAPR CLASS	.1944 RESTR HORIZ	
1	L / 25%	0-5	DB L WFGr	Fr SS SP	N/A	48	PS		PS .3
		5-48	R C WMS/A	Fr SS SP					
		48-54	VAR L MASS	Fr SS SP					
2	L / 15%	0-3	B L WFGr	Fr SS SP	N/A	18/45	N/A		PS .1 ONE SIDE OF PIT SHALLOW TO ROCK
		3-18: 1 SIDE	R C WMS	Fr SS SP					
		18-45	R C WMS/A	Fr SS SP					
3	L / 25%	0-3	DB L WFGr	Fr SS SP	N/A	50	N/A		PS .3
		3-6	YR CL WFS	Fr SS SP					
		6-50	R C WFS/A	Fi SS SP					
4	L / 15%	0-4	DB L WFGr	Fr SS SP	N/A	52	N/A		PS .3
		4-10	YR CL WFS	Fr SS SP					
		10-40	R C WFS	Fi SS SP few rock					
		40-52	R CL WFS	Fr SS SP few sap					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	267	2400SF
System Type(s)	VPPBPS	Drip
Site LTAR	0.3	0.1

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Overby
OTHER(S) PRESENT: Joe Thompson

COMMENTS:

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 #4637004752
DATE OF EVALUATION: 11/24/20
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	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	L / 26%	0-4	DB L WFGr	Fr SS SP	N/A	54	N/A		PS .3
		4-10	YR CLWFS	Fr SS SP					
		10-54	R C WMA/S	Fi SS SP					

CLEARWATER SEPTIC&PUMPING
Better. Cheaper.

Clearwater Septic and Pumping, LLC

Mooresville NC 28115

(980)565-3255

Septic Maintenance Contract

Clearwater Septic and Pumping will service 136 Direct Drive, Mooresville NC 28117 once a year starting 9/21/2022 and ending 9/21/2023. This service will include:

A) Septic Tank Pumping

B) Perform test on septic pump to ensure it is functioning properly

C) Check alarm to ensure it is functioning properly

D) Clean septic pump tank floats

The cost of this service will be $450.00. If you have any concerns, please contact Reginald Childers |980 565 3255|.

Customer Signature: _____

Owner Signature: __Reginald Childers_____