IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 | PERMIT # 245661

4:00

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

PIN # 4659336908

APPLICANT/OWNER: Foley Home Sales | APPLICANT ADDRESS: 1075 Blue Spruce Drive Mooresville NC 28115

SITE ADDRESS: 109 Grasslands Drive Mooresville NC 28115 | PHONE: 856-464-5379 | ALT. PHONE –

SITE DIRECTIONS: Hwy 115 past Hwy 150 Continue on Hwy 21. Property on Right South of Freeze | SAP CONTROLLED: [X] YES [ ] NO

SUBDIVISION: Country Meadows | SECTION: – | LOT # 16 | LOT AREA: .47 Acres | DESIGN FLOW: 360 | L.T.A.R.: .30

Septic Tank	1000 (gal)	STB	760	Date	1-14-20	[X] New System	[ ] Repair	[ ] Expansion	System Type: I II (III) IV V VI
Pump Tank	– (gal)	PT	–	Date	–	System Description:	Gravity PPBPS -50% Reduction		
Pump Make	–	Model	–	Serial #	–	Repair System Description:	LP-PPBPS		
# Nitrification Fields	1	# Lines	4	Linear Ft	200	Maintenance Agreement Required:	[ ] YES	[X] NO	
Trench Width	24	Trench Bottom Depth	36	Gravel Depth	–		[X] GRAVITY	[ ] PRESSURE	

[X] Residence [ ] Business [ ] Other [ ] Slab [ ] Basement w/plumbing

No. Bedrooms 3 | No. Persons 6 | No. Employees – | [X] Crawl Space

Water Supply: [X] Private [ ] Public [ ] Community

[ ] Basement w/o plumbing

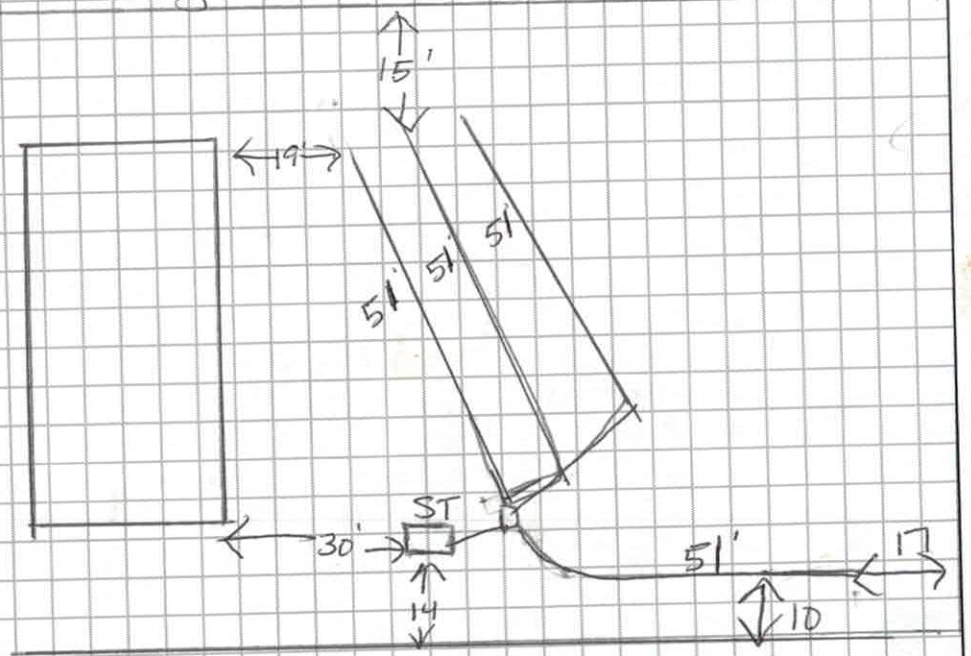
Comments / Conditions: ST 30ft to house, 14ft to PL

INITIAL SITE SKETCH

Permit issued pursuant to SL-2018 -114 Section 11. (c) using Signed and Sealed Lss evaluation by: Soil & Forestry Services of the Carolinas P.A.

AS BUILT SKETCH

Installed PPBPS - 12 panels per ditch by Ground breakers.



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

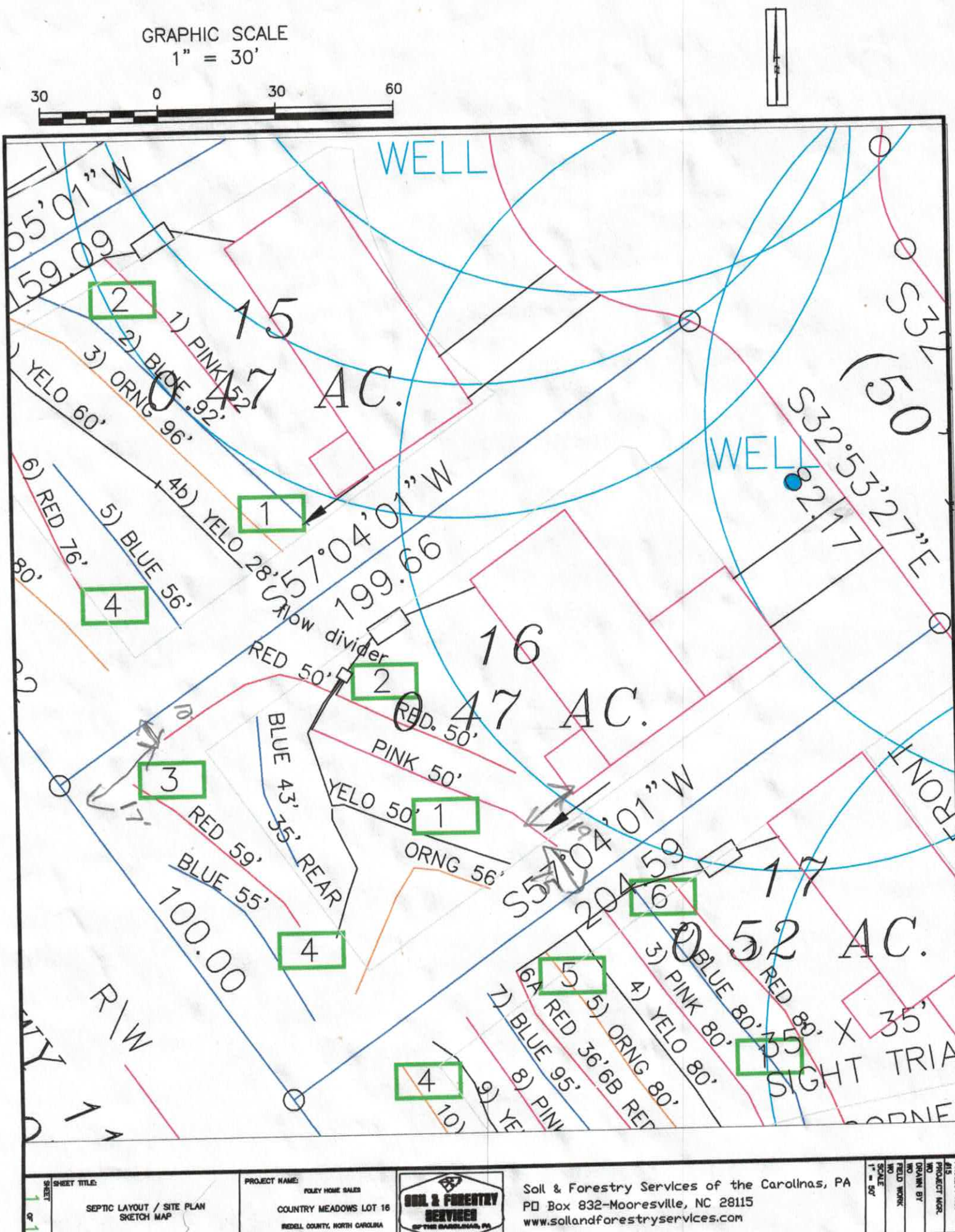
[ ] IMPROVEMENT PERMIT *with plat* valid without expiration. [X] IMPROVEMENT PERMIT *with site plan* valid for 60 mos. [X] AUTHORIZATION TO CONSTRUCT valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.

Owner / Applicant Signature: Shelagh Foley | Date: 9/5/19 | Installed by: Ground Breakers

IMPROVEMENT PERMIT by: Benjamin A. Bolkin | Date: 7/24/2019 | OPERATION PERMIT by: Maria Dotson | Date: 2/24/20

AUTHORIZATION TO CONSTRUCT by: Carlen C. Nicks | Date: 11-21-19 | Existing System Inspected by: | Date:

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



SHEET 1 of 1	SHEET TITLE: SEPTIC LAYOUT / SITE PLAN SKETCH MAP	PROJECT NAME: FOLEY HOME SALES COUNTRY MEADOWS LOT 16 RIDELL COUNTY, NORTH CAROLINA JULY 2019	SOIL & FORESTRY SERVICES SEPTIC INSTALLATION, PA	Soil & Forestry Services of the Carolinas, PA PO Box 832-Mooresville, NC 28115 www.soilandforestryservices.com

PROJECT NO.	#15
PROJECT MGR.	WD
DRAWN BY	WD
FIELD WORK	WD
SCALE	1" = 50'

CALCULATIONS

Location Country Meadows

Project Number 18-1185

Lot No: 16

No. of Bedrooms 3

Design Flow 360 $^{gal}/_{day}$

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

Accepted? (YES OR NO) no

Supply Line Length 10 ft.

Supply Line Volume 3.8 gal.

Required Feet of Line 200 ft.
Amount of Line from Layout 200 ft.

Gallons per Minute 0.00 $^{gal}/_{min}$

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

Lateral Line Volume 0 gal.
Panel Volume 3.6 gal.
# of Panels 0
Dosing Volume gal.

Tank Draw Down 0.0 in.
Generic Draw Down of 21 gal.per in.

Pump Run Time #DIV/0! minutes

Elevation Head 0 ft.
Pressure Head 0 ft.
Friction Factor 0 ft./100 ft. *(From the interpolater.)*
Friction Head 0.00 ft.
Elevation Head +15% 0
Total Dynamic Head 0.00 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

PROPERTY ID #: 4659349026
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Foley Home Sales APPLICATION DATE 7/5/19
ADDRESS: 1571 Charlotte Hwy Mooresville, NC 28115 DATE EVALUATED: 3/20/19
PROPOSED FACILITY: New Home PROPOSED DESIGN FLOW (.1949): 360 PROPERTY SIZE: .47
LOCATION OF SITE: Country Meadows Lot 16 PROPERTY RECORDED: NO
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 SAPRO CLASS	.1944 RESTR HORIZ	
1	L / 3%	0-10	B SL WFGr	Fr SS SP	N/A	38	PS	N/A	PS .3 > 29"
		10-29	RB SC WFS/A	Fr SS SP few Fe depl					
		29-38	RB SCL WFS	Fr SS SP c sap					
		38-60	VAR SL Mass	Fr SS SP					
2	L / 3%	0-7	B SL WFGr	Fr SS SP	N/A	50	PS	N/A	PS .3
		7-17	RB SC WMS	Fr SS SP					
		17-38	BR C WMS/A	Fr SS P					
		38-50	BR SCL WMS/A	Fr SS SP c sap					
		50-60	VAR SL Mass	Fr SS SP					
3	L / 3%	0-9	B SL WFGr	Fr SS SP [compact]	9-17" 2 chroma mottles	51	PS	N/A	PS .3 > 17"
		9-17	RB SC WCA	Fi SS P					
		17-36	BR C WMS/A	Fr SS SP					
		36-51	RB CL WFS	Fr SS SP few sap					
		51-60	VAR SL Mass	Fr SS SP					
4	L / 2%	0-12	B SL WFGr	Fr SS SP	12-17" 2 chroma [compact]	42	PS	N/A	PS .3
		12-17	RB SL MASS	Fi SS SP					
		17-27	BR C WFS/A	Fr SS SP					
		27-42	RB CL WFS	Fr SS SP c sap					
		42-60	VAR SL MASS	Fr SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	200	200
System Type(s)	PPBPS	PPBPS
Site LTAR	.3	.3

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

LICENSED SOIL SCIENTIST JAMES WENDELL OVERBY 1218 STATE OF NORTH CAROLINA

COMMENTS:

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

July 1, 2019

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

Re: Session Law 2018-114 Submittal for Country Meadows Subdivision-Mooresville

Lot 16-109 Grasslands Drive

Mr. Snow,

Attached please find sealed soil notes as well as site plans and design related data for a 3-bedroom vertical panel block system using gravity 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: Doug Foley, Foley Home Sales, Inc.:

Signature: D Foley

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

Wendell Overby, LSS

Signature: Wendell Overby 7-1-19

Seal:



Three (3) Bedroom PPBPS Septic System Design using Gravity Distribution for Lot 16 of Country Meadows 109 Grassland Drive, Mooresville

Contents: **Page**

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

Design Information

Design Specifications---------- 2-3

Layout Specifications---------- 4

System Flow---------- 5

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

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

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

Iredell County Septic Application---------- 9-10

Iredell County Zoning Permit---------- 11

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

Owner: Foley Home Sales, LLC

856 404-5379

May 30, 2019

Job 18-1185

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
- Septic tank riser shall be a minimum of 6" above finished grade.
- **System specified as PPBPS using gravity distribution**
- **Repair specified as PPBPS with LPP distribution**
- **System trench depth specified at 36"**
- **System trenches installed on 8' minimum; 2' wide trenches**
- Backfill 4 - 6" of material (County Approved) over panels, rake trench walls, lime side-walls, install trenches 24" wide and have no more than 1/4" fall in 10 feet.

PPBPS GRAVITY DOSED SYSTEM
FOR WASTEWATER TREATMENT

Applicant:	Foley Home Sales
Phone:	856 404-5379
County:	Iredell
Location:	Country Meadows Lot 16

Source of Wastewater Flow:	3 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	360 gpd
System Flow:	0.00 gpm

Design Specifications

Drainfield Size:	200 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:	n/a
Estimated Supply Line Length:	12 lf
Supply Line Diameter:	3 in. SCH 40 PVC
Supply Line Volume:	3.80 gal
Dosing Volume:	0.00 gal

Recommended Float Controls:	N/A
Recommended Control Panel:	N/A

Pressure Head:	0
Friction Head:	0.00 ft
Elevation Head:	0.00 ft
Total Dynamic Head:	0.00 ft
Threaded Union:	
Gate Valves:	N/A
Check Valves:	N/A
Anti-Siphon Hole:	n/a
Recommended Pump:	

Country Meadows Lot 16

PPBPS Gravity Design

DESIGN FLOW:	360	gpd
SOIL APPLICATION RATE:	0.3 gpd/ft.^{2}	
TOTAL AREA TRENCH BOTTOM:	400	sf
TOTAL LATERAL LENGTH:	200	lf
NUMBER OF FIELDS:	1	
LATERAL LENGTH REQUIRED PER FIELD:	200	lf
SUPPLY LINE LENGTH:	10	lf
TOTAL DYNAMIC HEAD:	0.00	gpm
DOSING VOLUME:	0.00	gal
PUMP TANK DRAW DOWN*:	0.0	in
SEPTIC TANK SIZE:	1000	
PUMP TANK SIZE:	N/A	

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

Country Meadows Lot 16

Layout for a 3 bedroom home **April 2019**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM							
INSTR. 1							

*Field layout performed on 9' centers

				SYSTEM			
1	Blue					39	0
2	Orange					64	0
3	Red					121	100
4	Pink					73	50
5	Yellow					86	50
				REPAIR			
6	Orange					56	50
8	Blue					43	40
9	Red					59	55
10	Blue					55	55

	LINE LENGTH	LTAR GPD/FT	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH
SYSTEM	200	0.300	PPBPS	50%	GRAVITY	36
REPAIR	200	0.300	PPBPS	50%	LPP	36

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

COUNTRY MEADOWS LOT 16

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench A	Number of Panels
3	RED	N/A	50	N/A	N/A	100	12
3	RED	N/A	50	N/A	N/A	100	12
4	PINK	N/A	50	N/A	N/A	100	12
5	YELO	N/A	50	N/A	N/A	100	12
							48

total	feet =	200	gal/min =	N/A	
		Des. Flow	360		
		Pump Run=	N/A		
		soil LTAR	0.3		
		LTAR +5%	0.315		
		LTAR with mod.	0.6		
		LTAR with mod.. + 5%	0.63		

.156 equals 5/32 inch hole

RECEIVED JUL 1 8 2019

Paid $500.00

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

#245661

Application For: (X) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(X) 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 (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: FOLEY HOME SALES **Address:** 1075 BLUE SPRUCE DRIVE **Zip:** 28115

Applicant Email: FOLEY1301C GMAIL.COM **Phone:** 856 404-5379 **Alt. Phone:**

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

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

Property Information:

Street Address: 109 GRASSLANDS DRIVE MOORESVILLE NC

Subdivision Name: COUNTRY MEADOWS **Section/Phase:** **Lot Number:** 16

Driving Directions: STATESVILLE AVENUE NORTH (HWY 115) PAST HWY 150. CONTINUE ON HWY 21. PROPERTY ON RIGHT JUST SOUTH OF FREEZE CROSSING.

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

CHECK FOUNDATION TYPE

(X) New Single Family Residence — Maximum Number of Bedrooms: 3 — (X) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: 6 — ( ) 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:

(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: Wendell Cg 5/30/19

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

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, DOUG FOLEY, am the legal owner(s) of the property located at 1571 CHARLOTTE HWY, MOORESVILLE, NC 28115, identified as PIN (Parcel Identification Number) 4659-34-4026-000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) SOIL & FORESTRY SERVICES, 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

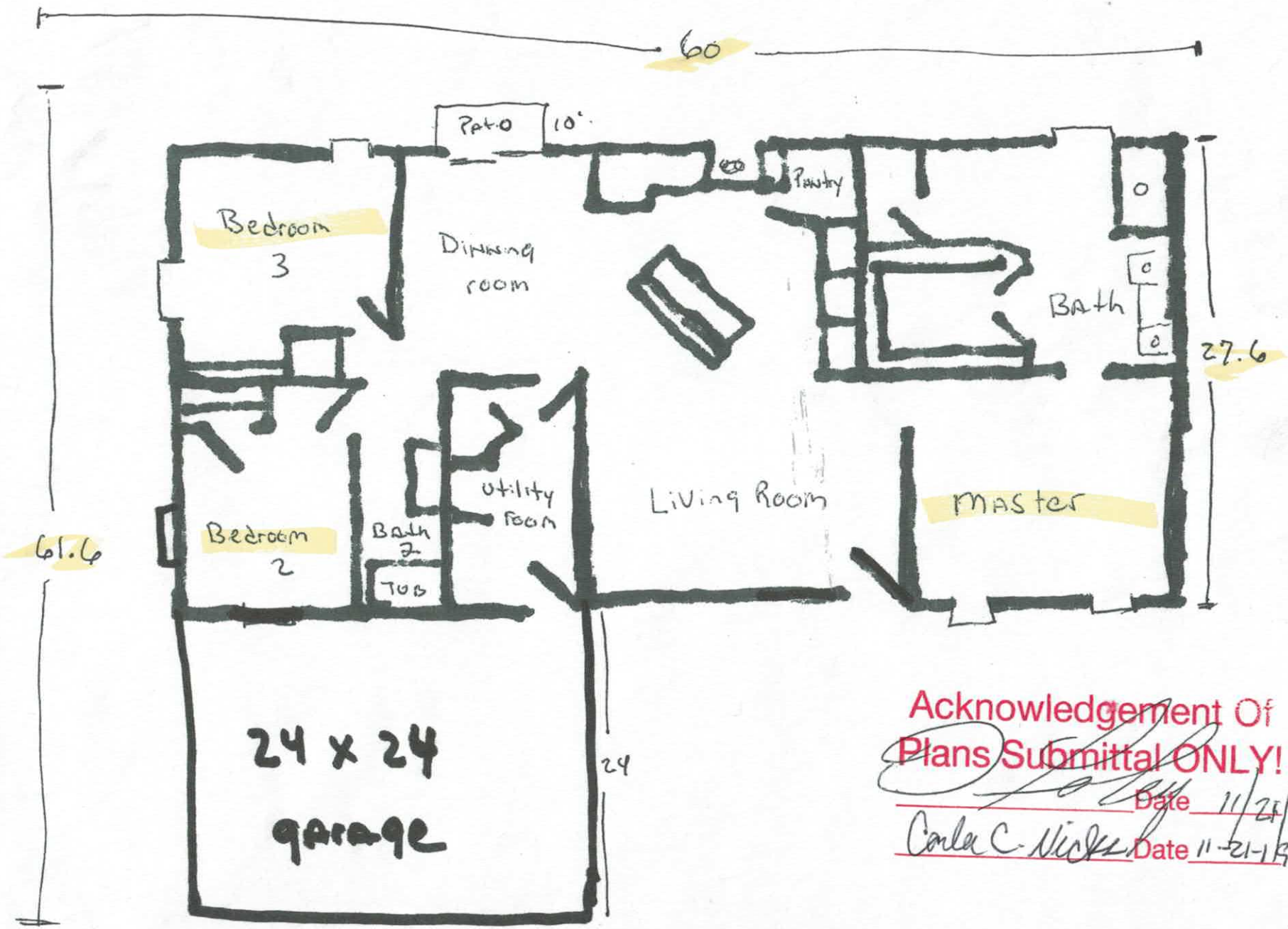
I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

Signature of Owner(s)	Date	Signature of Witness	Date
D Foley	5/17/19	Wendell Cly	5/17/19

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



Acknowledgement Of
Plans Submittal ONLY!

Date 11/21/19

Carla C. Nicks Date 11-21-19

IREDELL COUNTY

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

APPLICATION NUMBER
245661
Issue Date: 06/13/2019

ZONING PERMIT

Parcel Number	Street Address	Jurisdiction
4659349026.000	109 GRASSLAND DRIVE, MOORESVILLE, NC 28115	IREDELL COUNTY

Owner Information	Applicant Information
Owner: FOLEY HOME SALES LLC	Applicant: FOLEY HOME SALES LLC
Address: 1075 BLUE SPRUCE DRIVE	Address: 1075 BLUE SPRUCE DRIVE
MOORESVILLE, NC 28115	MOORESVILLE, NC 28115
Phone: 856-404-5379	Phone: 856-404-5379

Use Requested	Zone Code
MODULAR LOT 16	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
12.030	35.00	35.00	15.00	15.00	NOT	X

Remarks:

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

Applicant: _____ Date: _____

Permit Number	181167	TOTAL FEES:	$ 77.25