SUPERVISOR/ADMINISTRATIVE PROFESSIONAL CHECKLIST

NEW SEPTIC A2

IP & CA

File Number: 122948

Assigned Inspector: Bracken

☑ IP & CA $180.00: HP 7/10/25 Initial/Date

☑ OP $200.00: HP 7/10/25 Initial/Date

☑ ~~Send IP permit for signature:~~ _____ ☐ ~~Signature received:~~ _____

☐ ~~Floor plans reviewed~~

☒ Generate CA ☒ Approve as Noted in Winchester 7/11/25 MR

☐ This site is served by septic and well. Verify each is complete before final hold is released

☐ This septic system requires a certified operation contract before final hold is released

☐ Certified operator contract is on file: _____

☒ Septic file complete: 12/22/25

☒ Release final hold in Winchester: _____

Comments:

Please let owner know the permit is approved. ✓ MR 7/21/25

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

7/10/2025

Mecklenburg Groundwater & Wastewater Services
Attn: Jeremy Michelone
3205 Freedom Dr., Suite 8000
Charlotte, NC 28208

Re: Improvement Permit & CA Submittal for 14901 BIRLING RD

Mr. Michelone,

Attached please find sealed soil notes as well as site plans and design related data for a 2 bedroom house ACCEPTED system using PMANIFOLD distribution.

"The LSS evaluation attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6)."

Owner/Applicant: Keith Powley

Signature: Keith Powley

Date: 07/10/2025

"The LSS Evaluation is being submitted pursuant to and meets requirements of GS 130A-335(a2)." This Improvement Permit is issued pursuant to G.S. 130A-335(a2),(a3), and (a4) using the signed and sealed LSS evaluation attached here". "This AOWE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5)"

"This Construction Authorization is issued pursuant to G.S. 130A-335 (a2), and (a5) and (a6) using the signed and sealed plans or evaluations attached here."

Wendell Overby LSS, 980-439-5007

Signature: Wendell Overby

Date: 7/10/2025 Seal:





MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 07/10/25
Receipt #: 156117
Check / Auth #: VISA 001275
Received By: PLACILJ

Amount: 180.00
Tendered: 180.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: KEITH POWLEY
Attn:
Address: 12301 CULPEPPER CT
Address:
City/State/Zip: CHARLOTTE, NC 28278

Item	Description	Quantity	Unit Price	Total Price
0789	A2 Session Law IP/CA Combo 14901 BIRLING RD	1	180.00	180.00

Permit#

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

ACCEPTED using PMANIFOLD distribution
Site location: 14901 BIRLING RD, Lot # N/A

* **CALL 811 BEFORE DIGGING**
* 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 DHHS, and certification supplied by the that must be considered along with all other considerations.
* 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 joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
* 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.
* Pump tank riser should be 6" above grade, control panel should be 24" above grade.

* **System specified as ACCEPTED type using PMANIFOLD distribution**
* **Repair specified as HPPBPS type using PMANIFOLD distribution**
* **System trench depth specified at 14"**
* **System trenches installed on 9' minimum; 36" wide trenches**
* **Installation requires a 8" soil cap of county approved soil**

46 48 11
44 11
44 11
232 44 11
52 11
12

46
46
234 46
46
50

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

SFSConcordNC@gmail.com
980-439-5007
813 Davidson Dr NW
Concord 28025, NC
SoilAndForestryServices.com

Project# 22-113

Septic System Design for a 2 bedroom house
ACCEPTED using PMANIFOLD distribution
Site location: 14901 BIRLING RD, Lot # N/A

Contents	**Page**
Information for the Installer	1
Design Specifications	2
Layout Specifications	3
System Flow	4
Site Plan	5
Pump Specifications	6
Pressure Manifold Specifications	7
Calculations	8
Soil Descriptions	9
Floor Plans	10
Easement	11-12
Health Dept Use Only Blank Forms	13-15

Jul 2025
Design By: Wendell Overby

Page 2	DESIGN SPECIFICATIONS	Project #22-113

ACCEPTED using PMANIFOLD distribution
Site location: 14901 BIRLING RD, Lot # N/A

Business (if applicable):	N/A
Contact:	Keith Powley
Phone:	704-290-6232
Email:	keithpowley046@gmail.com
County:	Mecklenburg
Location:	14901 BIRLING RD
Source of Wastewater Flow:	2 bedroom house
Estimated Daily Wastewater Production:	240 gpd
Drain field Size:	242 lf
Loading Rate:	0.25 gpd/ft.^{2}
Trench Depth:	14 in
Trench Width:	36 in
Soil Cap:	8 in
Septic Tank Size:	1000 gal
Pump Tank Size:	1000 gal
System Flow:	27.40 gpm
Lateral Length Required:	240 lf
Total Area Trench Bottom:	720 sf
Estimated Supply Line Length:	175 lf
Supply Line Diameter:	2" SCH 40 PVC
Supply Line Volume:	31 gal
Dosing Volume:	111 gal
Pump Draw Down:	5.3 in
Pressure Head:	2.0 ft
Friction Head:	2.7 ft
Elevation Head:	19.0 ft
Total Dynamic Head:	23.9 ft
Threaded Union:	In Tank
Gate Valves:	1 in Tank: 1 @ manifold
Check Valves:	In Tank
Anti-Siphon Hole:	n/a
Recommended Pump:	Zoeller 152 or County Approved Effluent Rated Pump Capable of Delivering 24 ft.of Head at 27 gpm Total Flow

CALCULATIONS	Project #22-113

ACCEPTED using PMANIFOLD distribution
Site location: 14901 BIRLING RD, Lot # N/A

PROJECT INFO	Designer	Wendell Overby
	Project #	22-113
	Project MM YYYY	Jul 2025
	County	Mecklenburg
	Project Location	14901 BIRLING RD
	Lot # (if applicable)	N/A
	Subdivision (if applicable)	N/A
	Parcel #	19933152
	Lot size (acres)	0.48
	Easement(s) on parcel?	Yes
	Business (if applicable)	N/A
	Current Owner (for AA)	N/A
	Electronic Signature OK?	N/A
	Name	Keith Powley
	Mailing Address	12301 Culpepper Ct
	City	Charlotte
	State	North Carolina
	Zip	28278
	Phone	704-290-6232
	Email	keithpowley046@gmail.com
	Facility Type	Residential
	Facility	House
	Bedroom	2
	Water Source	Single Family Well
	Foundation Type	Crawl Space
	Daily Flow (gallons)	240
	Soil Evaluation Date	09/15/2022
SYSTEM	System LTAR	0.25
	System Type	ACCEPTED
	System Distribution	PMANIFOLD
	System Trench Center Distance (feet)	9
	System Trench Width (inches)	36
	System Trench Depth (inches)	14
	Soil Cap (inches)	8
	Usable Soil Depth (inches)	30
	Media Height (inches)	12
	Tank Size (gallons)	1000
	Required Feet of Line (system)	240
	Designed Feet of Line (system)	242
	Saprolite system?	No
REPAIR	Repair LTAR	0.25
	Repair Type	HPPBPS
	Repair Distribution	PMANIFOLD
	Repair Trench Center Distance (feet)	8
	Repair Trench Width (inches)	36
	Repair Trench Depth (inches)	29
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	44
	Tank Size (gallons)	1000
	Required Feet of Line (repair)	160
	Designed Feet of Line (repair)	160
	Saprolite system?	No
SYSTEM PUMP VARIABLES	Amount of Line from Layout (feet)	242
	Gallons per Minute	27.4
	Required Septic Tank Capacity (gallons)	1000
	Minimum Standard Tank Size (gallons)	1000
	Lateral Line Volume (gallons)	158
	Dosing Volume (gallons)	111
	Tank Draw Down (inches)	5.3
	Pump Run Time (minutes)	4.1
	Elevation Head (feet)	19
	Pressure Head (feet)	2.0
	Supply Line Length (feet)	175
	Supply Line Volume (gallons)	31
	Supply Line Diameter	2" SCH 40 PVC
	Friction Factor (ft/100ft)	1.5
	Friction Head (feet)	2.7
	Friction Head +10% (feet)	2.9
	Total Dynamic Head (feet)	23.9
	Pump Recommendation	Zoeller 152

PROPERTY ID #: 19933152
COUNTY: Mecklenburg

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(complete all fields in full)

OWNER: Keith Powley — DATE EVALUATED: 09/15/2022
ADDRESS: 12301 Culpepper Ct
PROPOSED FACILITY: 2 bedroom house — PROPOSED DESIGN FLOW (.0400): 240 — PROPERTY SIZE: 0.48 acres
LOCATION OF SITE: 14901 BIRLING RD — PROPERTY RECORDED: Yes
WATER SUPPLY: [ ] Public [X] Single Family Well [ ] Shared Well [ ] Spring [ ] Other — WATER SUPPLY SETBACK: 50
EVALUATION METHOD: [X] Auger Boring [ ] Pit [ ] Cut — TYPE OF WASTEWATER: [X] Domestic [ ] High Strength [ ] IPWW

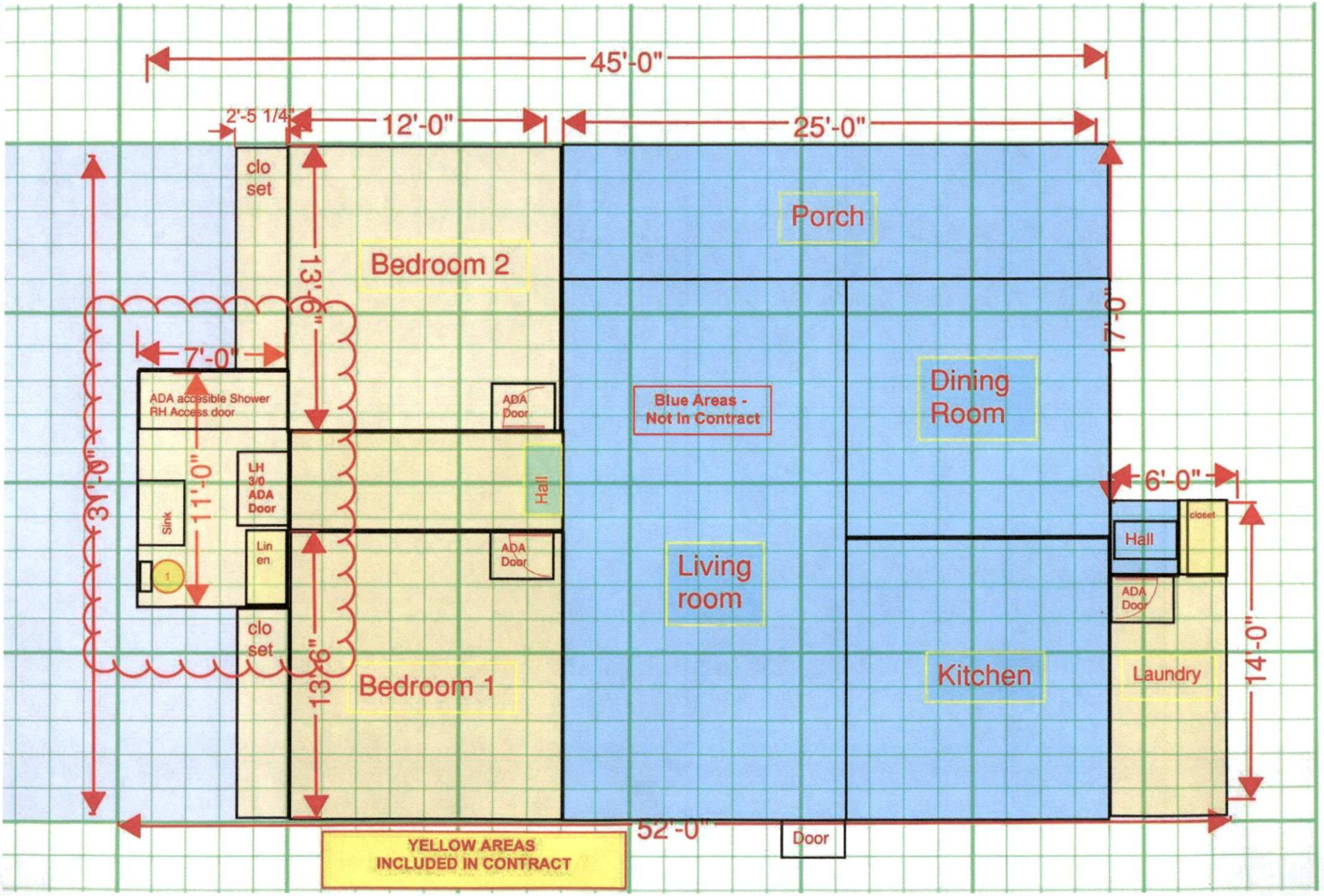
PROFILE #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				.0509 PROFILE CLASS & LTAR	.0502(d) SLOPE CORRECTION
			.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ		
1	L / 9%	0 - 4 4 - 44	B SCL WFG R C WMA	FR SS SP FI S P	N/A	44	N/A	N/A	0.275	4
2	L / 10%	0 - 3 3 - 36	B SL WFG R C WMA	FR SS SP FI S P	2CH@30	36	N/A	N/A	0.25	4

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.0508)	242	160
System Types(s)	ACCEPTED	HPPBPS
Site LTAR	0.25	0.25
Maximum Trench Depth	14	29

SITE CLASSIFICATION (.0509): S
EVALUATED BY: Wendell Overby
OTHER(S) PRESENT:

LICENSED SOIL SCIENTIST WENDELL OVERBY 1218 NORTH CAROLINA

COMMENTS:


45'-0"
2'-5 1/4"
12'-0"
25'-0"
clo set
Bedroom 2
13'-6"
Porch
17'-0"
7'-0"
ADA accesible Shower RH Access door
ADA Door
Blue Areas - Not In Contract
Dining Room
31'-0"
11'-0"
LH 3/0 ADA Door
Hall
6'-0"
Sink
Lin en
ADA Door
Living room
Hall
closet
ADA Door
clo set
13'-6"
Bedroom 1
Kitchen
Laundry
14'-0"
52'-0"
Door
YELLOW AREAS INCLUDED IN CONTRACT

NC DEPARTMENT OF
HEALTH AND
HUMAN SERVICES
Division of Public Health

Permit/File #: _____

ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County: _____

PIN/Lot Identifier: _____

Issued To: _____

Additional Improvement Permit Conditions:

Additional Construction Authorization Conditions:

Page 4	SYSTEM FLOW	Project #22-113

ACCEPTED using PMANIFOLD distribution
Site location: 14901 BIRLING RD, Lot # N/A

Line #	Color	Elev	Length	Hole Size	Flow/Tap	Line gpd	Line Trench Area	Flow/Line	Line LTAR
1	Red	4.6	50	SCH 80 1/2	**5.48**	48	150	**0.110**	**0.32**
2	Orange	5.2	46	SCH 80 1/2	**5.48**	48	138	**0.119**	**0.35**
3	Yellow	6.1	46	SCH 80 1/2	**5.48**	48	138	**0.119**	**0.35**
4	Blue	6.7	46	SCH 80 1/2	**5.48**	48	138	**0.119**	**0.35**
5	Pink	7.2	54	SCH 80 1/2	**5.48**	48	162	**0.101**	**0.30**
	total	**feet =**	242	**gal/min =**	**27.4**				

Design Flow	**240**	gpd
Pump Run to Dose 240 gpd=	**8.76**	
Soil LTAR	**0.250**	
Accepted LTAR	**0.33**	
Accepted LTAR+5%	**0.35**	

~~151~~, 152, ~~153~~

Dose-Mate

This is our fastest growing line of effluent pumps. The 150 series is truly a workhorse designed for reliability under extreme conditions in an effluent environment. 150 series pump curves cover a wide range of applications. They are well suited to applications with low pressure pipe (LPP) and enhanced flow STEP systems. Zoeller's cool run design and corrosion-resistant, powder coated epoxy finish, in addition to the hermetically sealed, oil-filled motor and non-clogging vortex impeller add up to a long-lasting, trouble-free product.



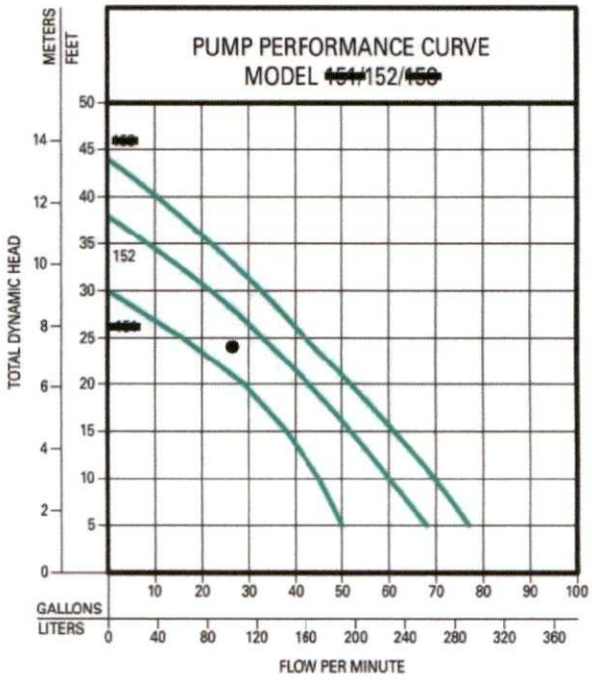
APPLICATIONS:

- STEP or onsite applications
- Light commercial dewatering

SPECIFICATIONS:

- 1-1/2" NPT discharge
- 3/10 HP through 1/2 HP
- Available in nonautomatic or with a variable level piggyback mechanical switch
- 1/2" (12 mm) spherical solids capacity with vortex thermoplastic impeller

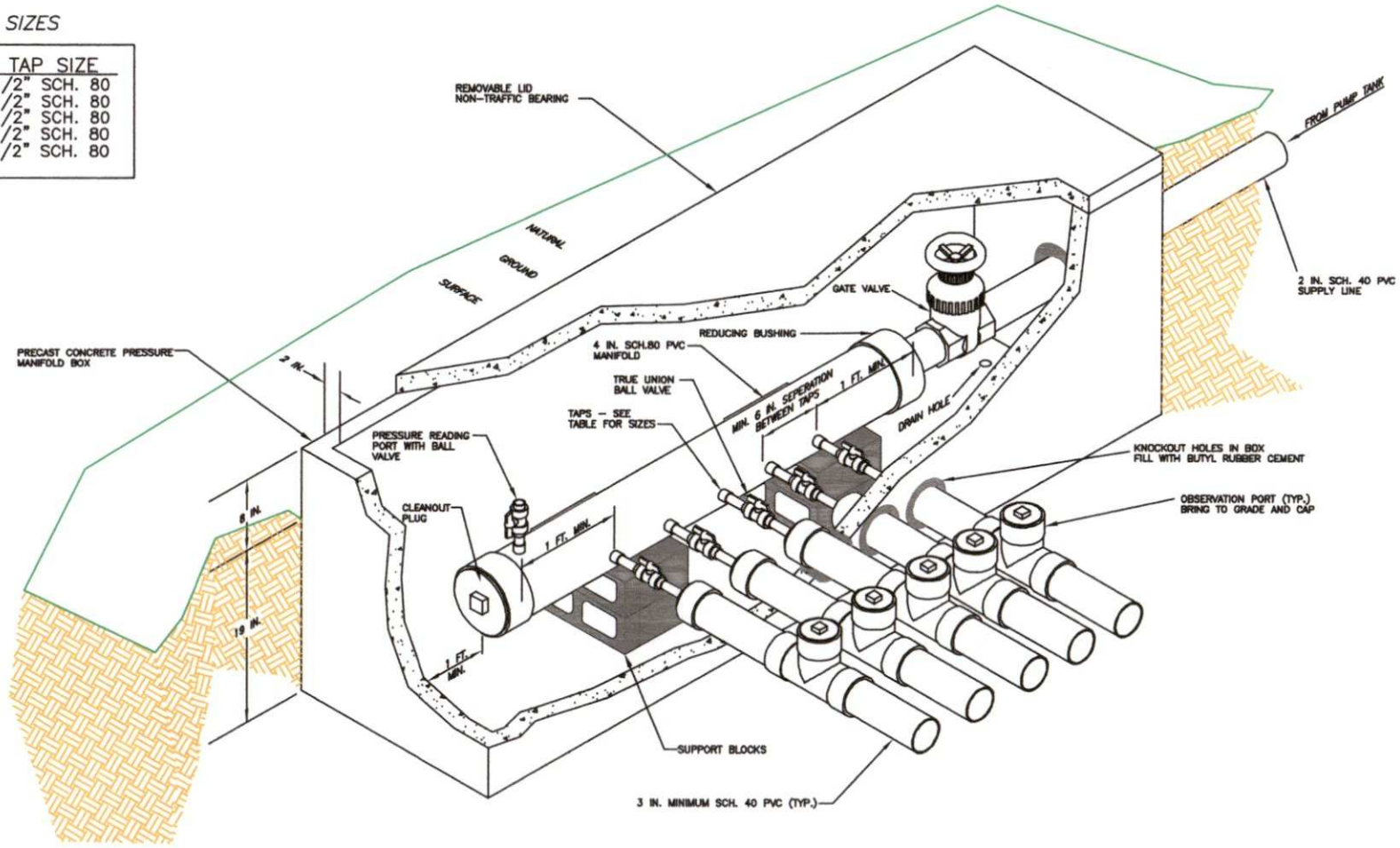
For more information, see Technical Data Sheet FM2784.



PRESSURE MANIFOLD DETAILS
14901 BIRLING RD

TAP SIZES

LINE No.	TAP SIZE
1	1/2" SCH. 80
2	1/2" SCH. 80
3	1/2" SCH. 80
4	1/2" SCH. 80
5	1/2" SCH. 80



ACCEPTED using PMANIFOLD distribution
Site location: 14901 BIRLING RD, Lot # N/A

Daily Flow (gpd) **240** **Jul 2025**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH	END CAP LENGTH	TOTAL LENGTH
TBM		0.0			100.0				
INSTR. 1			100.0						
			SYSTEM						
1	Red			4.6	95.4	48	48	2	50
2	Orange			5.2	94.8	44	44	2	46
3	Yellow			6.1	93.9	44	44	2	46
4	Blue			6.7	93.3	44	44	2	46
5	Pink			7.2	92.8	56	52	2	54
			REPAIR						
6	Red			7.6	92.4	35	32	N/A	32
7	Orange			8.0	92.0	37	32	N/A	32
8	Yellow			9.3	90.7	35	32	N/A	32
9	Blue			9.7	90.3	35	32	N/A	32
10	Pink			10.5	89.5	31	32	N/A	32
11	Red		Extra -->	11.6	88.4	24	0	N/A	0

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH	SOIL CAP
SYSTEM	242	0.250	ACCEPTED	25%	PMANIFOLD	14	8
REPAIR	160	0.250	HPPBPS	50%	PMANIFOLD	29	0

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

Lynn Powley recorded in Plat Book 71, Page 998, Mecklenburg County Public Registry; thence, with the southern margin of the right of way for Birling Road, a curve to the left with a radius of 207.27 feet, an arc length of 20.29 feet, and a chord bearing North 81-52-41 East 20.28 feet to a point; thence, a new line within the Residual Lot, South 17-41-32 East 92.31 feet to a point; thence, another new line within the Residual Lot, South 77-12-10 West 138.21 feet to a point; thence, North 12-47-50 West 15 feet to a point on the southern boundary of New Lot 1; thence, with the southern boundary of New Lot 1, North 77-12-10 East 116.8 feet to a #4 rebar found on the southeastern corner of New Lot 1; thence, with the eastern boundary of New Lot 1, North 17-41-32 West 78.92 feet to the point and place of the BEGINNING, being the "Proposed Variable Width Utility Easement", as shown on that Exhibit "A" attached hereto and incorporated herein by reference.

It is understood and agreed that the said easement is appurtenant and shall run with the land and be used in common by the Grantors and Grantees and their heirs, successors, and assigns. Grantees agree that they will at all times keep the septic field lines and repair lines installed within the easement in proper repair and abide by all health regulations pertaining to the same. Furthermore, upon installation or repair upon the easement, the ground will be re-leveled and reseeded and kept in as good a condition as the same was prior to such work.

TO HAVE AND TO HOLD said perpetual easement for septic system purposes upon the Easement Area, unto the Grantees, their heirs, successors, and assigns, subject to Grantors and their heirs, successors and assigns having the continued right to use said easement in common with Grantees; and said easement hereby granted is appurtenant to and runs with the land of both parties pursuant to NCGS § 39-6.4; and the Grantors for themselves, their heirs, successors, executors and assigns, hereby warrant and covenant that they are the sole owners of the property subject to this easement, that they solely have the right to grant said easement, and that they will warrant and defend the title to the same forever against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals, the day and year first above written.

Angela Atkins Powley (SEAL)
Angela Atkins Powley

Keith Lynn Powley (SEAL)
Keith Lynn Powley

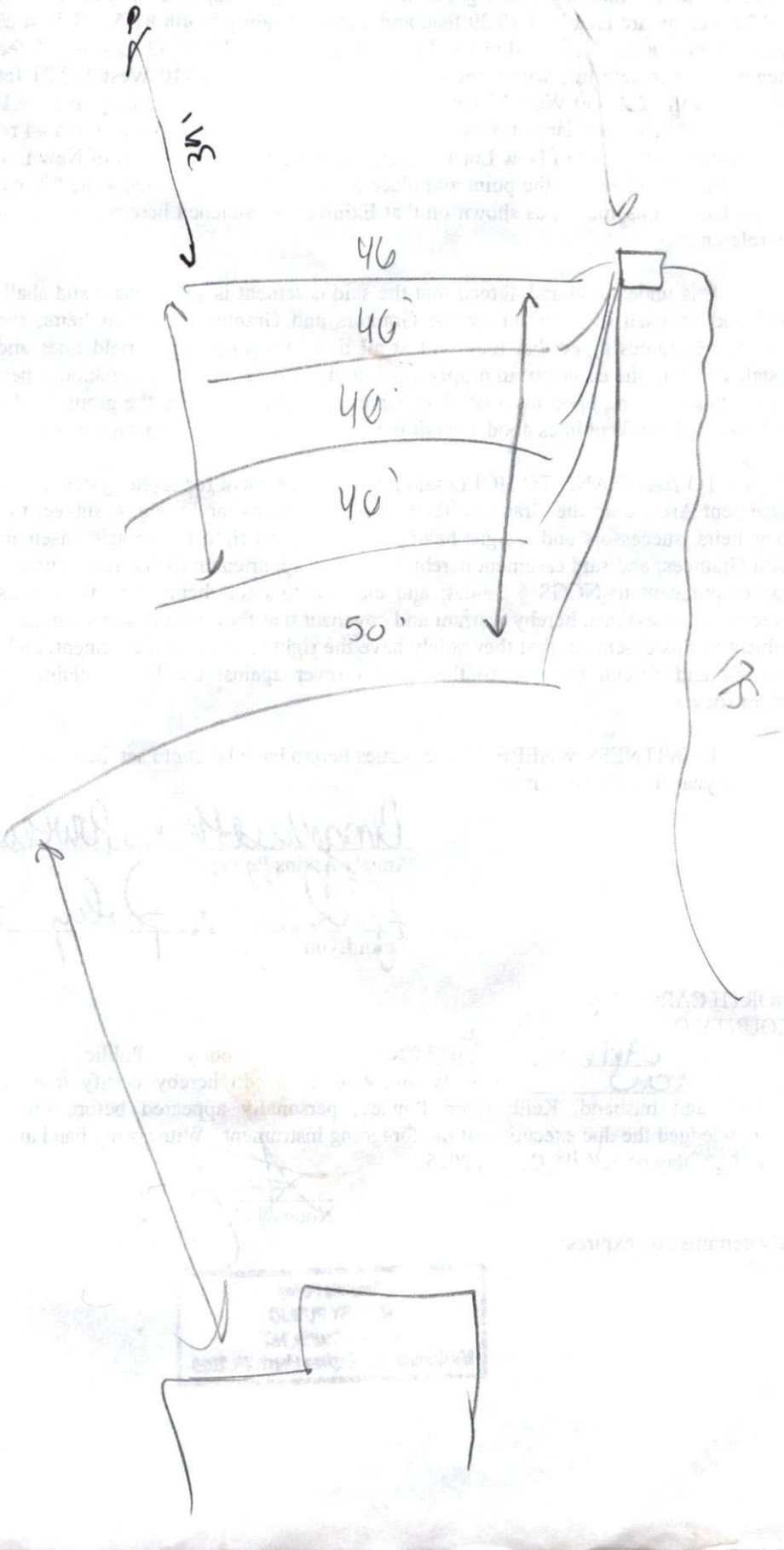
NORTH CAROLINA
COUNTY OF Gaston

I, Amanda Finley, a Notary Public, in and for Gaston County and said State, do hereby certify that Angela Atkins Powley and husband, Keith Lynn Powley, personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and notarial seal, this 25th day of June, 2025.

Notary Public

My commission expires:
(seal)

Amanda Finley
NOTARY PUBLIC
Gaston County, NC
My Commission Expires March 26, 2029


35'
46
46'
40'
40'
50'
15'

For Registration
Fredrick Smith
Register of Deeds
Mecklenburg County, NC
Electronically Recorded
2025 Jun 30 12:30 PM RE Excise Tax: $ 0.00
Book: 39689 Page: 460 - 461 Fee: $ 26.00
Instrument Number: 2025064686

Fredrick Smith

Drawn By: Marie M. Anders, Michael, Elting, & Anders, PLLC
Record & Return to: Angela and Keith Powley, 12031 Culpepper Ct., Charlotte, NC 28278

NORTH CAROLINA
MECKLENBURG COUNTY

DEED OF EASEMENT

THIS DEED OF EASEMENT, made and entered into this 25th day of June, 2025, by and between Angela Atkins Powley and husband, Keith Lynn Powley, hereinafter referred to as "Grantors"; and Angela Atkins Powley and husband, Keith Lynn Powley, hereinafter referred to as "Grantees"; all parties being of Mecklenburg County, North Carolina;

WITNESSETH:

THAT, WHEREAS, the parties are the owners of certain tracts of land acquired in Deed Book 35884, Page 441, described as "New Lot 1" and "Residual Lot" on that plat for Angela Atkins Powley and Keith Lynn Powley recorded in Plat Book 71, Page 998, Mecklenburg County Public Registry, New Lot 1 also identified on the Mecklenburg County Tax Maps as PID # 199-331-52 and Residual Lot also identified on the Mecklenburg County Tax Maps as PID # 199-331-43; and,

WHEREAS, the cabin located upon New Lot 1 is to be served by a septic system, including drain fields, which shall extend upon the Residual Lot and this easement is entered into pursuant to North Carolina General Statutes § 39-6.4 for the purpose of creating or declaring an easement to grant New Lot 1 (benefited parcel) the right to keep, repair, and maintain that portion of the septic system lying and being on the Residual Lot (burdened parcel).

NOW, THEREFORE, the Grantors, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration to them in hand paid by the Grantees, the receipt of which is hereby acknowledged, have given, granted, bargained, sold and conveyed and by these presents do give, grant, bargain, sell, convey and confirm, unto the Grantees herein, their heirs, successors and assigns, a perpetual non-exclusive easement for ingress and egress, system installation, operation, maintenance, monitoring, and repairs of the septic system, including the drain field, servicing the residence on New Lot 1, which extends upon the property of Residual Lot, the location of which septic easement hereinafter referred to as "Easement Area", described as follows:

BEGINNING at a #4 rebar found on the southern margin of the right of way for Birling Road, a 60' public right of way, said rebar found being on the common northeast corner of New Lot 1 and a northern corner of Residual Lot, both as shown on that plat for Angela Atkins Powley and Keith

Submitted electronically by "Michael, Elting, & Anders, PLLC"
in compliance with North Carolina statutes governing recordable documents
and the terms of the submitter agreement with the Mecklenburg County Register of Deeds.

PROJECT NO.	23-1133
PROJECT MGR.	WO
DRAWN BY	WO
FIELD WORK	WO
SCALE	1" = 30'

Soil & Forestry Services of the Carolinas, PA
813 Davidson Dr NW
Concord NC 28025

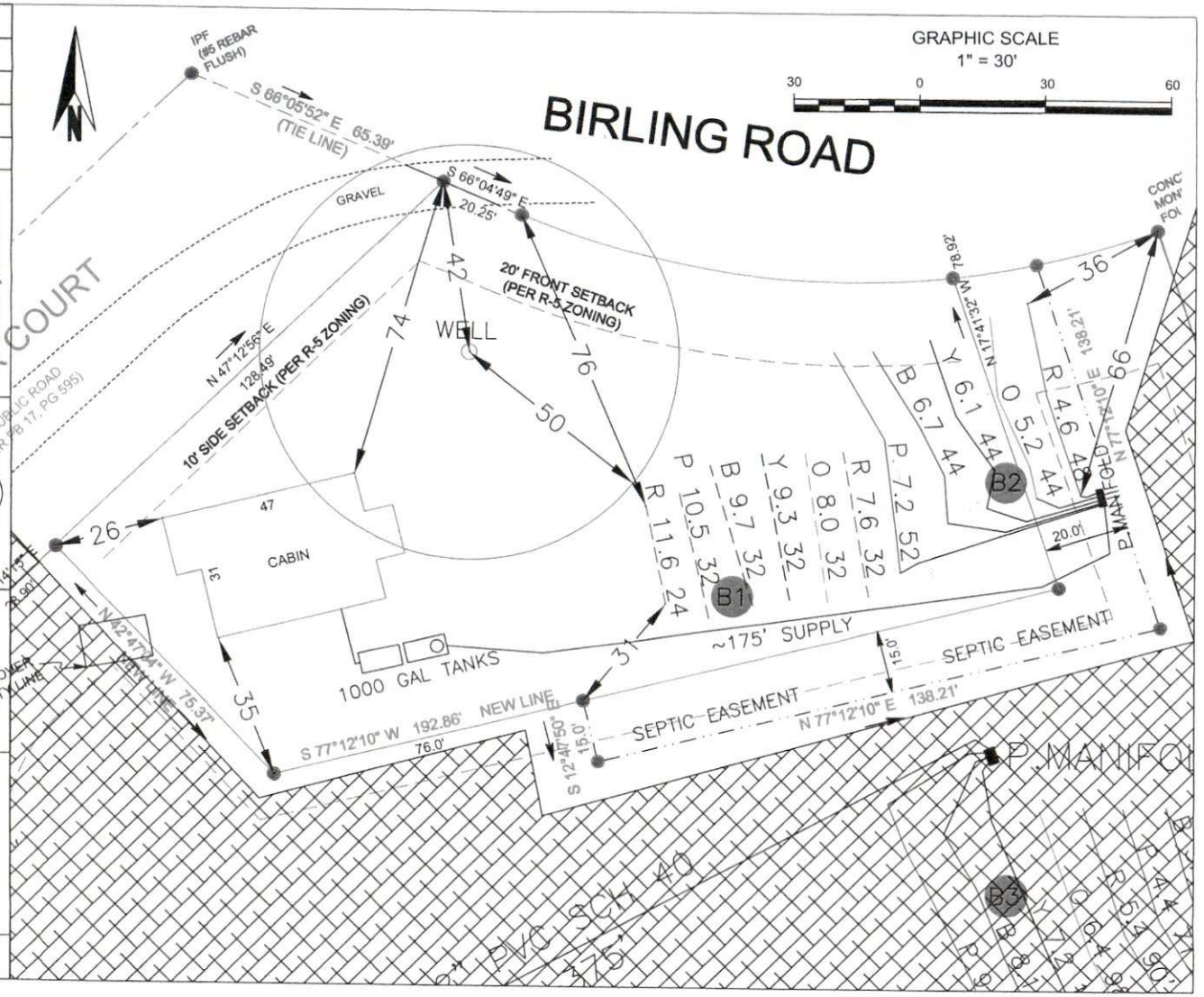
usablesoil@gmail.com
980-439-5007
soilandforestryservices.com

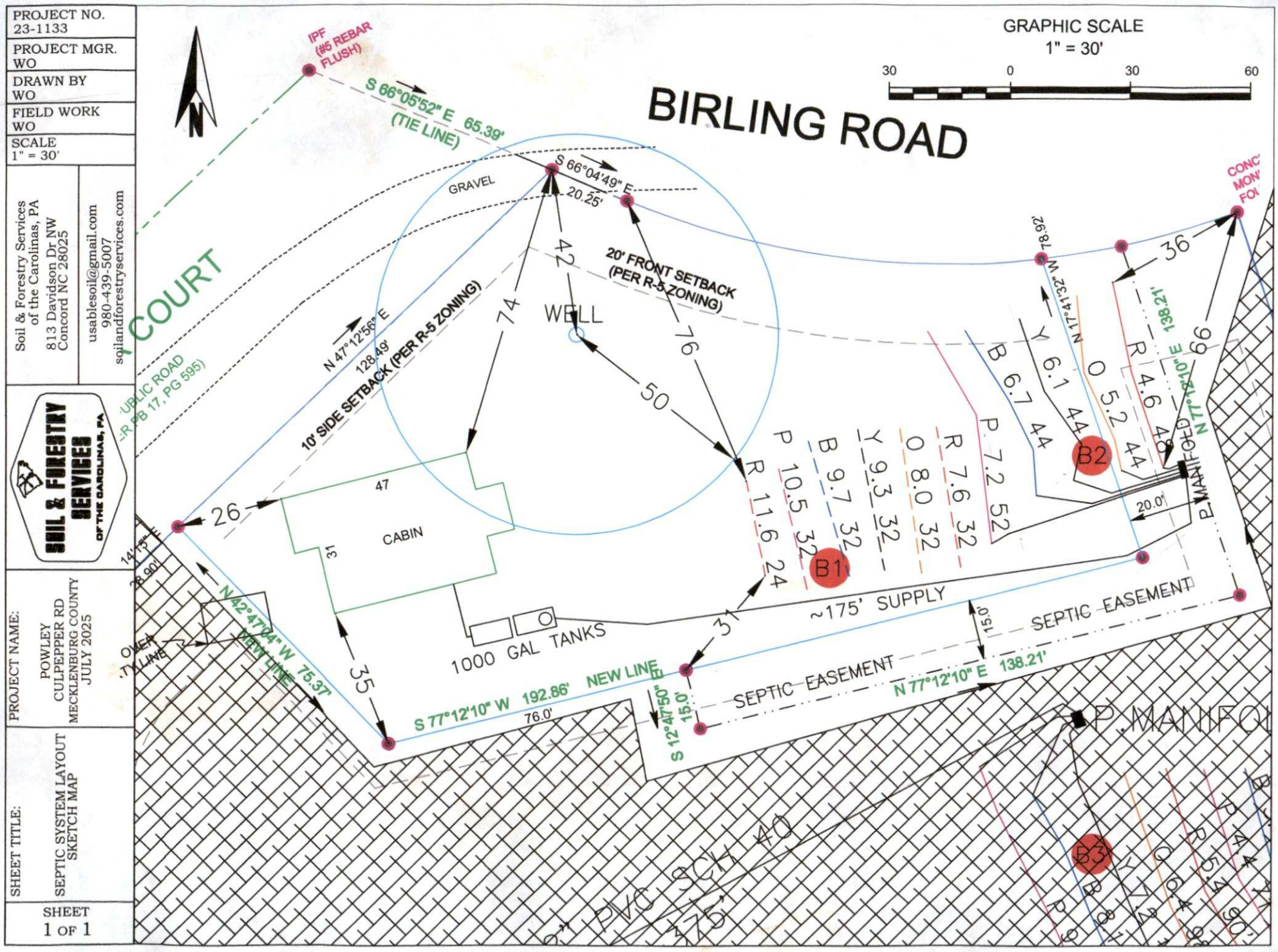
SOIL & FORESTRY SERVICES OF THE CAROLINAS, PA

PROJECT NAME:
POWLEY
CULPEPPER RD
MECKLENBURG COUNTY
JULY 2025

SHEET TITLE:
SEPTIC SYSTEM LAYOUT
SKETCH MAP

SHEET
1 OF 1



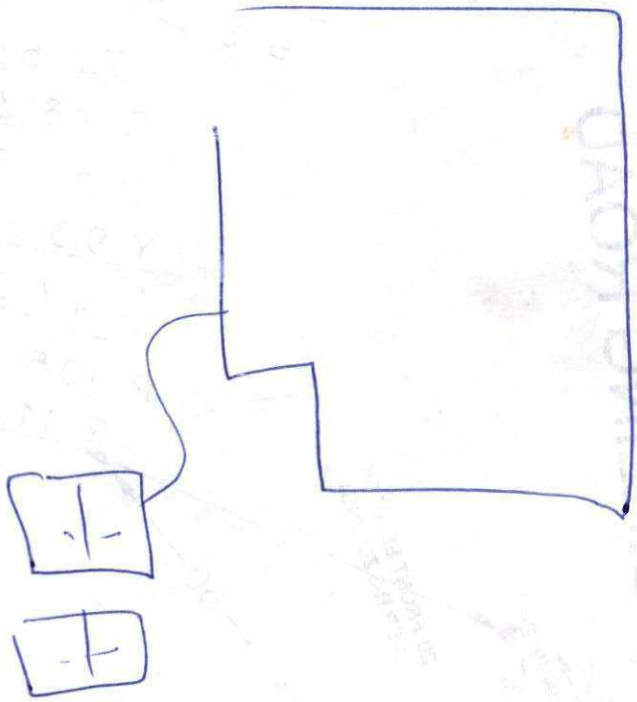

PROJECT NO.
23-1133
PROJECT MGR.
WO
DRAWN BY
WO
FIELD WORK
WO
SCALE
1" = 30'
Soil & Forestry Services
of the Carolinas, PA
813 Davidson Dr NW
Concord NC 28025
usablesoil@gmail.com
980-439-5007
soilandforestryservices.com
SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA
PROJECT NAME:
POWLEY
CULPEPPER RD
MECKLENBURG COUNTY
JULY 2025
SHEET TITLE:
SEPTIC SYSTEM LAYOUT
SKETCH MAP
SHEET
1 OF 1
GRAPHIC SCALE
1" = 30'
30 0 30 60
BIRLING ROAD
IPF
(#5 REBAR
FLUSH)
S 66°05'52" E 65.39'
(TIE LINE)
S 66°04'49" E
20.25'
GRAVEL
20' FRONT SETBACK
(PER R-5 ZONING)
10' SIDE SETBACK (PER R-5 ZONING)
N 47°12'56" E
128.49'
WELL
74
42
76
50
CONC'
MON'
FO'
N 77°41'32" W 78.92'
36
66
138.21'
N 77°12'10" E
P.MAINFOL
20.0'
B 6.7 44
Y 6.1 44
O 5.2 44
R 4.6 48
P 7.2 52
R 7.6 32
O 8.0 32
Y 9.3 32
B 9.7 32
P 10.5 32
R 11.6 24
B2
B1
B3
CABIN
47
31
26
35
31
14'15" E
28.90'
1000 GAL TANKS
~175' SUPPLY
SEPTIC EASEMENT
SEPTIC EASEMENT
N 77°12'10" E 138.21'
S 77°12'10" W 192.86' NEW LINE
76.0'
S 12°47'50" E
15.0'
15.0'
N 42°47'04" W 75.37'
NEW LINE
OVER
TY LINE
PUBLIC ROAD
R PB 17, PG 595)
COURT
2" PVC SCH 40
~175'
P.MAINFOL

S.T + P.T

Shoof
(1000)

Comerr

- inspector
S.T + P.T
- neer to look at
P.T (pump, floats etc.)



MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 07/10/25
Receipt #: 156118
Check / Auth #: VISA 001275
Received By: PLACILJ

Amount: 200.00
Tendered: 200.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: KEITH POWLEY
Attn:
Address: 12301 CULPEPPER CT
Address:
City/State/Zip: CHARLOTTE, NC 28278

Item	Description	Quantity	Unit Price	Total Price
0703	Septic Operational Permit 14901 BIRLING RD	1	200.00	200.00

Permit#

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

12294B
15602

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submited in accordance with G.S. 130A-335(a2), (a3), and (a5).
[hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for:

[X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):

[X] Accepted [ ] Conventional [ ] Innovative [ ] Other _____ [ ] Any

[X] New Construction [ ] Expansion [ ] System Relocation [ ] Change of Use [ ] Repair

[X] 5 Year Expiration Requested (site plan provided) [ ] Non-Expiring Permit Requested (plat provided, as defined in G.S. 130A-334(7a)

Requesting DHHS review? (systems >3000 GPD or IPWW) [ ] Yes [X] No

Applicant:	Wendell Overby, LSS // Soil & Forestry Services, PA
Mailing Address:	Concord
City:	Concord
State:	North Carolina
Zip:	28025
Phone #:	SFSConcordNC@gmail.com
Email:	813 Davidson Dr NW

Owner:	Keith Powley
Mailing Address:	12301 Culpepper Ct
City:	Charlotte
State:	North Carolina
Zip:	28278
Phone #:	704-290-6232
Email:	keithpowley046@gmail.com

If the answer to any of the following questions is "yes", applicant must attach supporting documentation.

[ ] Yes	[X] No	Does the site contain any jurisdictional wetlands?
[ ] Yes	[X] No	Is any wastewater going to be generated on the site other than domestic sewage?
[ ] Yes	[ ] No	Is the site subject to approval by any other public agency?
[X] Yes	[ ] No	Are there any easements or right of ways on this property?

I understand that the documentation and fees, as required in G.S. 130A-335(a2), (a3), (a5), and (a6), attached to this application are to be used to issue an Improvement Permit and/or Construction Authorization pursuant to G.S. 130A-335(a2),(a3), and (a5). I understand that authorized county and state officials are granted right of entry to the property indicated on this application to conduct necessary inspections to determine compliance with applicable laws and rules. ***I understand that if the information in the application for an Improvements Permit and/or Construction Authorization is falsified, changed, or the site is altered, then the Improvement Permit and Construction Authorization shall become invalid.***

Applicant Signature: _____ Date: 7/10/2025

Owner's Signature: Keith Powley Date: 07/10/2025

Permit/File #: 122948

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Submittal Includes; [X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] Fee $

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Mecklenburg
PIN/Lot Identifier: 19933152
Issued To: Keith Powley
Property Location: 14901 BIRLING RD
Subdivision (if applicable): N/A Lot#: N/A Block: Section:
LSS Report Provided: Yes [X] No [ ]
If yes, name and license number of LSS: Wendell Overby #1218
New [X] Expansion [ ] System Relocation [ ] Change of Use [ ]
Facility Type: Residential
Number of bedrooms: 2 Number of Occupants: 4 Other:
Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater
Proposed Design Daily Flow: 240 GPD Proposed LTAR (Initial): 0.25 Proposed LTAR (Repair): 0.25
Proposed Wastewater System Type*: IIIbg (ACCEPTED) PMANIFOLD (Initial) Pump Required: [X] Yes [ ] No [ ] May be required
Proposed Wastewater System Type*: IIIbg (HPPBPS) PMANIFOLD (Repair) Pump Required: [X] Yes [ ] No [ ] May be required
**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*
Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW
Saprolite System (Initial): [ ] Yes [X] No Saprolite System (Repair): [ ] Yes [X] No
Fill System (Initial): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Fill System (Repair): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Usable Depth to LC (Initial)*: 30 Usable Depth to LC (Repair)*: 44 ** Limiting Condition*
Max. Trench Depth (Initial)ǂ: 14 Max. Trench Depth (Repair)ǂ: 29 *ǂ Measured on the downhill side of the trench*
Artificial Drainage Required: [ ] Yes [X] No If yes, please specify details:
Type of Water Supply: [X] Private well [ ] Public well [ ] Shared well [ ] Municipal Supply [ ] Spring [ ] Other:
Drainfield location meets requirements of Rule .0508: Yes [X] No [ ] Drainfield location meets requirements of Rule .0601: Yes [X] No [ ]
Permit valid for: [X] Five years [site plan submitted pursuant to GS 130A-334(13a)] [ ] No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

Proposed septic areas are to remain undisturbed (no grading, no utilities installlation)
Proposed septic areas should be fenced/protected from disturbance (vehicle traffic, debris, etc...)

See Design for any additional details

Licensed Soil Scientist Print Name: Wendell Overby, LSS
Licensed Soil Scientist Signature: Wendell Overby Date: 7/10/2025

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: 12294B

This Section for Local Health Department Use Only

Initial submittal received: 7/17/25 (Date) by BRS (Initials)

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

_____

_____

Copies of this were sent to the LSS and the Applicant on _____ (Date)

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: Brad T. Shutt Date: 7/17/25

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. *This permit is subject to revocation if the site plan, plat, or the intended use changes.* The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of 15A NCAC 18E and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: 7/17/2030

See attached site sketch

NCDHHS

Permit/File #: 122948

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County: Mecklenburg **Pre-Construction Conference Required:** [ ] Yes [X] No

PIN/Lot Identifier: 19933152

Issued To: Keith Powley

Property Location: 14901 BIRLING RD

AOWE/PE Plans/Evaluations Provided: Yes [X] No [ ] If yes, name and license number of AOWE/PE: Wendell Overby #10044E

Facility Type: Residential

Number of bedrooms: 2 Number of Occupants: 4 Other:

[X] New [ ] Expansion [ ] Repair [ ] System Relocation [ ] Change of Use

Basement? [ ] Yes [X] No Basement Fixtures? [ ] Yes [ ] No

Crawl Space? [X] Yes [ ] No Slab Foundation? [ ] Yes [X] No

Type of Wastewater System* IIIbg (ACCEPTED) PMANIFOLD (Initial) IIIbg (HPPBPS) PMANIFOLD (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 240 GPD Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process WW

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? [ ] Yes [X] No

(if yes, please provide engineering documentation)

Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW

Type of Water Supply: [X] Private well [ ] Public well [ ] Shared well [ ] Municipal Supply [ ] Spring [ ] Other:

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 242 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.25 gpd/ft² Usable Depth to LC (Initial)*: 30 *Limiting condition

Soil Cover: 10 inches Slope Adjusted Maximum Trench/Bed Depth‡: 14 inches ***‡ Measured on the downhill side of the trench***

Pump Tank Size (if applicable): 1000 galllons Requires more than 1 pump? [ ] Yes [X] No

Pump Requirements: 23.92 ft. TDH vs. 27.4 GPM Grease Trap Size (if applicable): gallons

Distribution Method: [ ] Serial [ ] D-Box or Parallel [X] Pressure manifold(s) [ ] LPP [ ] Other

Artificial Drainage Required: Yes [ ] No [X] If yes, please specify details:

Legal Agreements *(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)*

Multi-party Agreement Required [.0204(g)]: [ ] Yes [X] No Declaration of Restrictive Covenants: [ ] Yes [X] No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: [X] Yes [ ] No

Management Entity Required: Yes [ ] No [X] Minimum O&M Requirements:

Permit conditions:

Proposed septic areas are to remain undisturbed (no grading, no utilities installation)

Proposed septic areas should be fenced/protected from disturbance (vehicle traffic, debris, etc...)

See Design for any additional details

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. *This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.* The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print name: Wendell Overby, LSS Expiration Date: 7/10/2030

AOWE/PE Signature: Date: 7/10/2025

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: 1294B

This Section for Local Health Department Use Only

Initial submittal received: 7/17/25 (Date) by BU (Initials)

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

_____

Copies of this were sent to the AOWE/PE and the Applicant on _____ (Date)

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: Brad P. Shutt Date of Issuance: 7/17/25

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: 7/17/2030

See attached site sketch

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

Septic System Pre-Construction Meeting Checklist

File # 12294B App# — Tax Parcel# 199-331-52

Property Owner: Angela (Kathy) Atkins Powley

Job Location Address: 14901 Birling Rd

City: Charlotte State: NC Zip Code: 28278

1. Does System design match facility, flow & wastewater characteristics?

   ☒ YES ☐ NO

   Comments: _____

2. Is there sufficient available space for the septic systems initial and repair areas?

   ☒ YES ☐ NO

   Comments: _____

3. Can the septic system be installed per the permit conditions and drawing on file?

   ☒ YES ☐ NO

   Comments: _____

*If "NO" is checked for any of the above the existing permit may need to be revoked.

Permission is hereby given to ☒ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge meeting all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. **System shall not be installed while soils are in wet condition.**

Braedon Shelton — Authorized Agent

8/15/25 — Date

First Choice — Others Present

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 12294B Permit #: — Tax Parcel #: 199-331-52

Property Owner: Angela + Keith Powley

Job Location Address: 14901 Birling Rd

City: Charlotte State: NC Zip Code: 28278

Operation Permit Issuance Date: 12/17/25 Contractor Name: First Choice

Permitted Design Flow: 240 GPD Liquid Capacity of Dosing Tank: 1000 gallons

Liquid Capacity of Septic Tank: 1000 gallons Tank Manufacture Shoaf Effluent Pump Model: Zoeller

Drainfield Installation ☐ N/A

Trench Depth: 14 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.) (46', 46', 46', 46', 50')

Total line length: 234 feet

# of Lines: 5 @ Varies feet Infiltrator

Depth of Media: 12 inches (Type) Quick-4

Depth of Cover: ≥6 inches

Distribution Device: Pressure Manifold

Bed Installation *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☒ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: ≥5 feet

Distance from Property Line: ≥10 feet

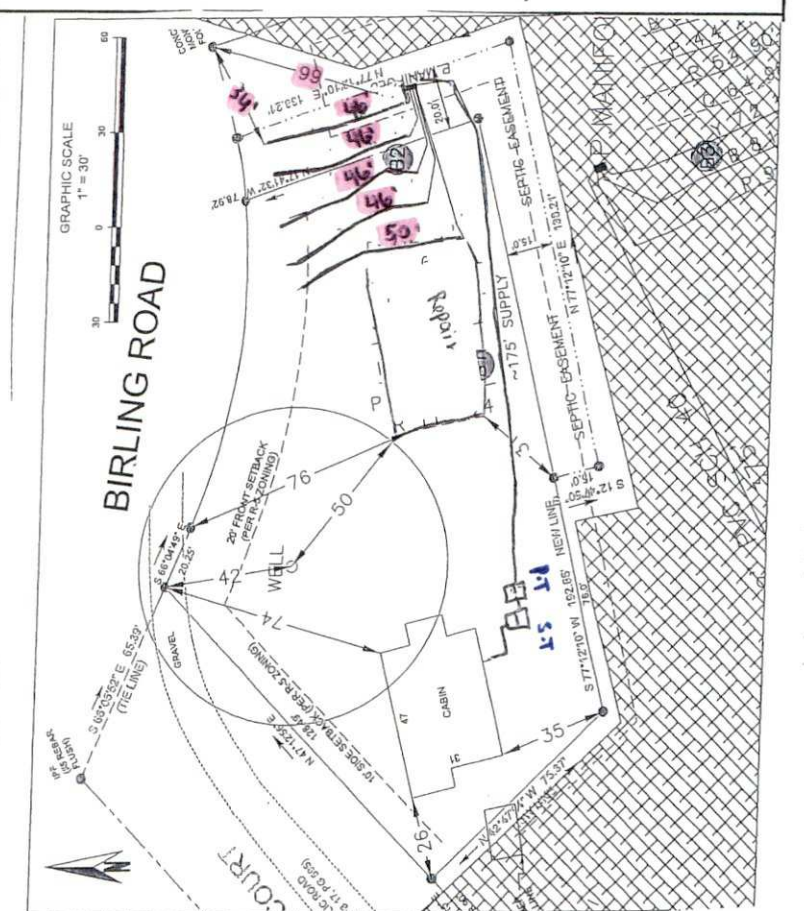
Distance from Water Supply Source: ≥50 feet

Inspection Dates

Tank(s) Inspected: 8/18/25

Excavation Inspected: 8/18/25

Pump & Controls Inspected: 12/17/25



The undersigned has inspected the Septic Tank System described above, and certifies it has been ☐ installed ☐ altered ☐ repaired ☒ as detailed in the plot above ☒ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: IIIb, Chm-36/91 N/A, N/A, 2 Bedroom System Installed in accordance to 2SS (A2) design permit.

DENR Authorized Agent: Brad Shuler Signature: _____

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 12294B Permit #: - Tax Parcel #: 199 331-52

Property Owner: Angela + Keith Powley

Job Location Address: 14901 Birling Rd

City: Charlotte State: NC Zip Code: 28278

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IIIb / Chm-36

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☐ No ☒

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☐ System does not require inspection by GWS on a routine frequency.

☒ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other: 2-Bedroom System. Installed in accordance to LSS (A2) Permit.

DENR Authorized Agent: Braedon Shelton Date: 12/17/25

Signature: Braed Shelton