ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP 518377

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

PIN # 4639 -30 -0162

APPLICANT/OWNER: Gisella Romero — APPLICANT ADDRESS: 123 Meadow Glen Lane Mooresville NC

SITE ADDRESS: 113 Cedar Branch CT Mooresville NC — PHONE: 631 953 7730 — ALT PHONE:

SITE DIRECTIONS: Frontage to Byerly to Cedar Branch CT

SUBDIVISION: Woodleaf — SECTION: 2 — LOT # 102 — LOT AREA: 1.746 AC — SAP CONTROLLED: [X] YES [ ] NO — DESIGN FLOW: 480 — L.T.A.R. .30

Septic Tank: 1000 (gal)	STB: 2152	Date: INFILTRATOR	[X] New System [ ] Repair [ ] Expansion	System Type: I II III IV V VI	[X] Residence	No. Bedrooms: 4	Water Supply: [X] Private
Pump Tank: 1000 (gal)	PT: 2149	Date: INFILTRATOR	System Description: PM-25 Reduction		[ ] Business	No. Persons: 8	[ ] Public
Pump Make:	Model:	Serial #:	Repair System Description: GPP-PPBDS-SAS-Reduction		[ ] Other	No. Employees:	[ ] Community
# Nitrification Fields: 1	# Lines: 3	Linear Ft: 420	Maintenance Agreement Required: [ ] YES [X] NO		[ ] Slab	[X] Crawl Space	
Trench Width: 36in	Trench Bottom Depth(Low side): 36 max	Gravel Depth: —	[ ] GRAVITY [X] PRESSURE		[ ] Basement w/ plumbing	[ ] Basement w/o plumbing	

Comments / Conditions: Event Recorded Bk 2934 - Pg 570-572

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:

Soil & Forestry Services, Etc Carolina PH

LSS# 1215 Dated June 19, 2022

AS BUILT SKETCH

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

- TANKS
- [redacted] TOP 2
- DRAINLINES
- CHECKED 1-20-2023 BW
- bottom line, supply line 1/24/23
- Floats
- Alarm CW 2/3/23
- PH
- PM

See attached as built

Needs Eletrical

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

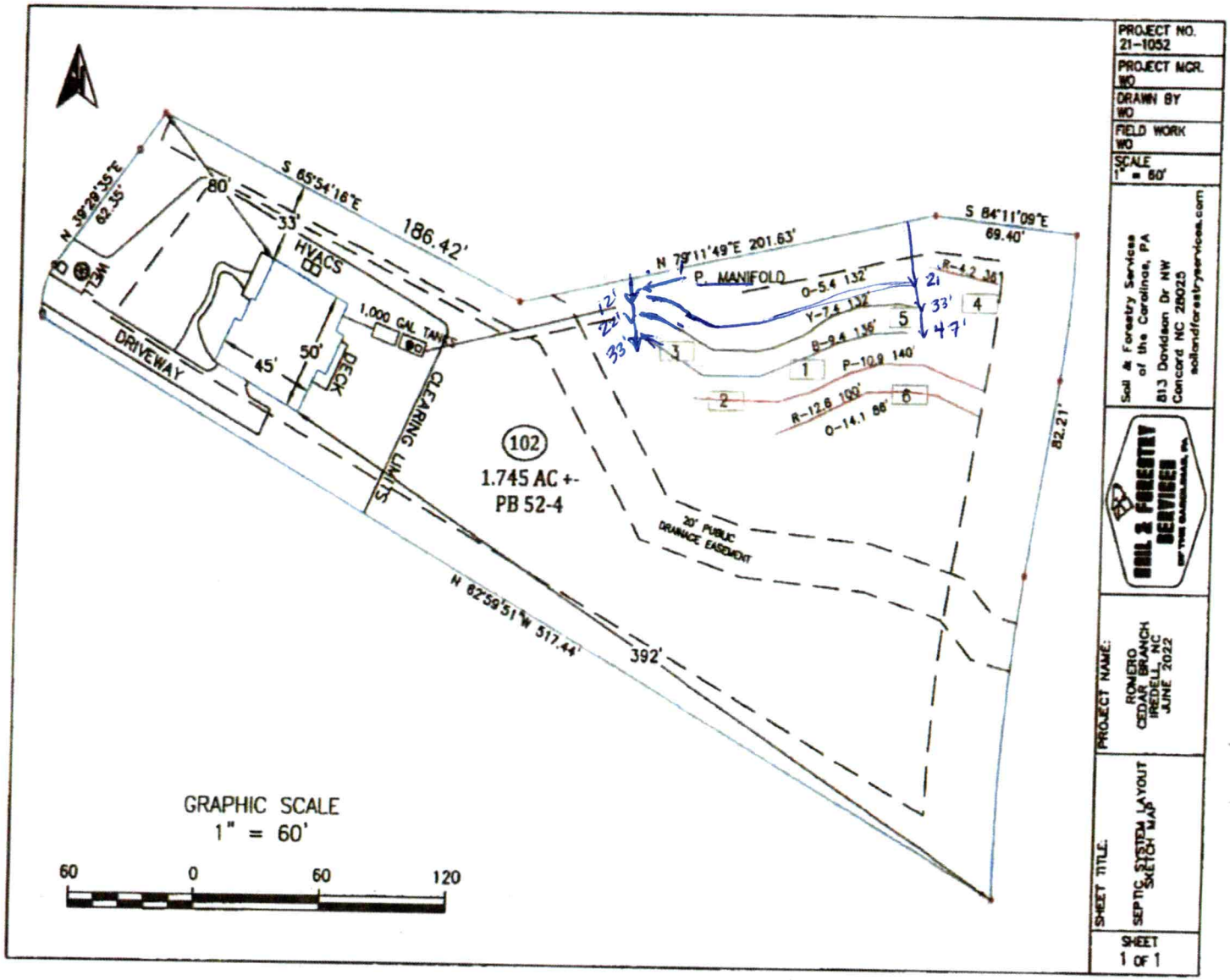
[ ] IMPROVEMENT PERMIT with plat valid without expiration. [X] IMPROVEMENT PERMIT with site plan valid for 60 mos. [X] AUTHORIZATION TO CONSTRUCT valid for period equal to IMPROVEMENT PERMIT - not to exceed 60 mo.

Owner Applicant Signature: [signature] Date: 7/26/22 Installed by: WATER MANAGEMENT

IMPROVEMENT PERMIT by: [signature] Date: 7/26/2022 OPERATION PERMIT by: [signature] Date: 4/14/23

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 7/26/22 Existing System Inspected by: Date:

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


N 39°28'35"E
62.35'
80'
S 65°54'16"E
186.42'
33'
HVACS
METER
1,000 GAL TANK
DRIVEWAY
45'
50'
DECK
CLEARING LIMITS
102
1.745 AC +-
PB 52-4
N 79°11'49"E 201.63'
P. MANIFOLD
S 84°11'09"E
69.40'
82.21'
20' PUBLIC DRAINAGE EASEMENT
N 82°59'51"W 517.44'
392'
GRAPHIC SCALE
1" = 60'
60 0 60 120
PROJECT NO. 21-1052
PROJECT MGR. WO
DRAWN BY WO
FIELD WORK WO
SCALE 1" = 60'
Soil & Forestry Services of the Carolinas, PA
813 Davidson Dr NW
Concord NC 28025
soilandforestryservices.com
SOIL & FORESTRY SERVICES
PROJECT NAME:
ROMERO
CEDAR BRANCH
IREDELL, NC
JUNE 2022
SHEET TITLE:
SEPTIC SYSTEM LAYOUT SKETCH MAP
SHEET 1 OF 1

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

June 19, 2022

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

Re: Session Law 2018-114 Submittal for **113 Cedar Branch Court**

Mr. Snow,

Attached please find sealed soil notes as well as site plans and design related data for a 4-bedroom accepted system using pressure manifold. 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: Giselle Romero:

Signature: Giselle Romero

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

Wendell Overby, LSS

Signature: W Cly

Seal:

LICENSED SOIL SCIENTIST
JAMES WENDELL OVERBY
1218
STATE OF NORTH CAROLINA

113 Cedar Branch Ct, Lot# 102
PRESSURE MANIFOLD DOSED SYSTEM
FOR WASTEWATER TREATMENT

Business (if applicable):	N/A
Contact:	Giselle Romero
Phone:	631-983-7730
Email:	romerogiselle229@gmail.com
County:	Iredell
Location:	113 Cedar Branch Ct

Design Specifications

Source of Wastewater Flow:	4	bedroom home
Estimated Daily Wastewater Production:	480	gpd
System Flow:	21.33	gpm
Drain field Size:	400	lf
Lateral Length Required:	400	lf
Loading Rate:	0.3	gpd/ft.^{2}
Trench Depth:	36	in
Trench Width:	36	in
Total Area Trench Bottom:	1200	sf
Septic Tank Size:	1000	gal
Pump Tank Size:	1000	gal
Estimated Supply Line Length:	145	lf
Supply Line Diameter:	2 in. SCH 40 PVC	
Supply Line Volume:	21.32	gal
Dosing Volume:	182.84	gal
Pump Draw Down*:	8.7	in
Pressure Head:	2	ft
Friction Head:	1.38	ft
Elevation Head:	8.50	ft
Total Dynamic Head:	12.02	ft
Threaded Union:	In Tank	
Gate Valves:	1 in Tank: 1 @ manifold	
Check Valves:	In Tank	
Anti-Siphon Hole:	n/a	
Recommended Pump:	Zoeller Flow Mate 53/55/57/59 or County Approved Effluent Rated Pump Capable of Delivering 12 ft.of Head at 21 gpm Total Flow	

113 Cedar Branch Ct, Lot# 102
LAYOUT SPECS

Daily Flow (gpd) 480 **Jun 2022**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM		0.0			100.0		
INSTR. 1			100.0				
			EXTRA				
1	Red			4.2		36	0
			SYSTEM				
2	Orange			5.4	94.6	158	132
3	Yellow			7.4	92.6	180	132
4	Blue			9.4	90.6	186	136
			REPAIR				
5	Pink			10.9	89.1	140	140
6	Red			12.6	87.4	100	100
7	Orange			14.1	85.9	86	27

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH
SYSTEM	400	0.300	ACCEPTED	25%	MANIFOLD	36
REPAIR	267	0.300	PANEL	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

113 Cedar Branch Ct, Lot# 102

SYSTEM FLOW

PRESSURE MANIFOLD DESIGN SPECIFICATIONS

Line #	Color	Elev	Length	Hole Size	Flow/Tap	gpd	Trench Area	Flow/Line	Line LTAR
2	Orange	97.0	132	SCH 40 1/2	7.11	160	396	0.054	0.40
3	Yellow	95.0	132	SCH 40 1/2	7.11	160	396	0.054	0.40
4	Blue	93.0	136	SCH 40 1/2	7.11	160	408	0.052	0.39
	total	feet =	400	gal/min =	21.33				

Design Flow	480
Pump Run to Dose 480 gpd=	22.50
Soil LTAR	0.3
Accepted LTAR	0.40

Mighty-Mate/Flow-Mate

Considered one of America's most popular sump pumps. This robust family of sump pumps is known for reliability, durability and performance. Available with an intergral, 2-pole, snap-action float switch. The heat-dissipating cast iron body with powder coated epoxy finish provides maximum pumping performance under the most extreme conditions. With Zoeller's cool run design, the hermetically sealed, oil-filled motor and non-clogging vortex impeller add up to a long-lasting, trouble-free product.



PROFESSIONAL

APPLICATIONS:

- Water transfer
- Sump and effluent systems
- Light commercial
- New sump and residential construction

SPECIFICATIONS:

- 1-1/2" NPT discharge
- 3/10 HP (53, 55, 57, 59), 1/2 HP (98)
- Available in automatic or nonautomatic
- 1/2" (12 mm) spherical solids capacity
- Thermoplastic or cast iron base
- Thermoplastic or cast iron impeller
- Bronze construction available (55/59 series)

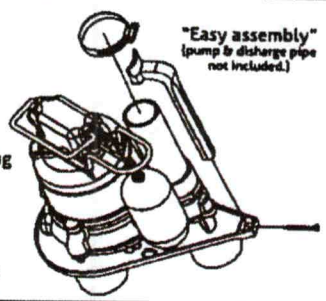
For more information, see Technical Data Sheets FM2778, FM2779.

OPTIONAL* PUMP STAND P/N 10-2421

- Reduces potential clogging by debris
- Replaces rocks or bricks under the pump
- Made of durable, non-corrosive ABS
- Raises pump 2" (5 cm) off bottom of basin
- Provides the ability to raise intake by adding sections of 1-1/2" or 2" (DN40 or DN50) PVC piping
- Attaches securely to pump
- Accommodates sump, dewatering and effluent applications

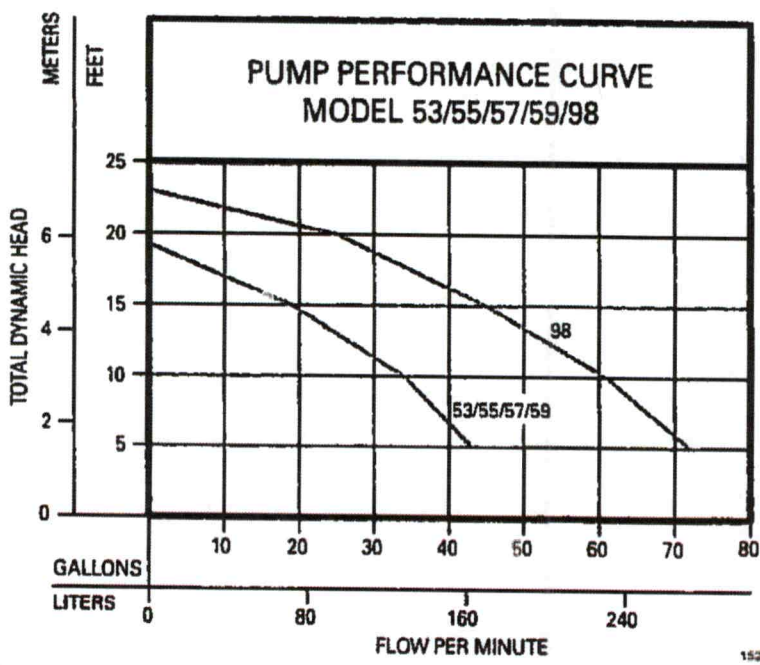
NOTE. Make sure float is free from obstruction.

*Fits series 49, 50, 63, 70, 95, 98, 130, 140 and 150.





Nonautomatic model with piggyback



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113 Cedar Branch Ct, Lot# 102
Calculations

SITE INFO	Designer		W Overby
	Project Name		113 Cedar Branch Ct
	Project #		22-1052
	Project MM YYYY		Jun 2022
	Lot # (if applicable)		102
	Business (if applicable)		N/A
	Contact		Giselle Romero
	Phone		631-983-7730
	Email		romerogiselle229@gmail.com
	County		Iredell
	Bedrooms		4
	Daily Flow		480
SYSTEM	System LTAR		0.3
	System Type		ACCEPTED
	System Distribution		MANIFOLD
	System Trench Depth		36
	Supply Line Length	145	lf.
	Supply Line Volume	21.315	gal.
	Required Feet of Line (system)		400
REPAIR	Repair LTAR		0.3
	Repair Type		PANEL BLOCK
	Panel Vertical or Horizontal		VERTICAL
	Repair Distribution		LPP
	Repair Trench Depth		36
	Required Feet of Line (panel repair)		267
SYSTEM PUMP INFO	Amount of Line from Layout	400	ft.
	Gallons per Minute	21.33	gpm
	Required Septic Tank Capacity	1000	gal.
	Minimum Standard Tank Size	1000	gal.
	Lateral Line Volume	261.2	gal.
	Dosing Volume	182.84	gal.
	Tank Draw Down	8.7	in.
	Pump Run Time	8.57	minutes
	Elevation Head	8.5	ft.
	Pressure Head	2	ft.
	Friction Factor	0.95	ft./100 ft. *(From the interpolater)*
	Friction Head	1.38	ft.
	Friction Head +10%	1.51525	ft.
	Total Dynamic Head	12.02	ft.
	Pump Recommendation		Zoeller Flow Mate 53/55/57/59

PRESSURE MANIFOLD DETAILS
FOR
113 CEDAR BRANCH CT

TAP SIZES

LINE No.	TAP SIZE
2	1/2" SCH. 40
3	1/2" SCH. 40
4	1/2" SCH. 40

