ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 | PERMIT # AP 317436

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

PIN # 4627 -- 73 -- 8787

APPLICANT/OWNER: Jeff Morgan | APPLICANT ADDRESS: 441 Beaton Path Mooresville NC 28117.

SITE ADDRESS: 450 Beaton Path Rd Mooresville NC 28117 | PHONE: 847-385-4195 | ALT. PHONE

SITE DIRECTIONS: Brawley School Rd to Blume Rd Rd then Left on Beaton Path. | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: CL+T | SECTION: 9 | LOT # 68 | LOT AREA: .74Ac | DESIGN FLOW: 480 | L.T.A.R.: .40

Septic Tank	1000	(gal)	STB		Date				
Pump Tank	1000	(gal)	PT		Date				
Pump Make		Model			Serial #				
# Nitrification Fields	1	# Lines	3		Linear Ft	200			
Trench Width	36in	Trench Bottom Depth(Low side)	26in		Gravel Depth				

☐ New System ☐ Repair ☐ Expansion System Type: I II III (IV) V VI

System Description: LP - HPPBPS - 50% Reduction

Repair System Description: TS-II HPPBPS - 50% Red

Maintenance Agreement Required: ☒ YES ☐ NO

☐ GRAVITY ☒ PRESSURE

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

No. Bedrooms 4 | No. Persons 8 | No. Employees | ☐ Crawl Space | ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions:

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:

Coddle Creek Soil Consulting

LSS# 1291 Dated July 12 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.

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: Jeff Morgan | Date: 9-21-2022 | Installed by: Abernathy

IMPROVEMENT PERMIT by: Benjamin A Blum | Date: 7-11-2022 | OPERATION PERMIT by: Cory Whl | Date: 9/21/22

AUTHORIZATION TO CONSTRUCT by: Benjamin A Blum | Date: 7-12-2022. | Existing System Inspected by: | Date:

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

Item	Date	Initials
Drain Lines Checked		
Tanks Checked		
Pressure Manifold or Valve Box Checked		
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Needed? Y / N		
Comments:		

Repairs Only	
	State Code
Failing System Code	
Type of Distribution	G or P
Type of Failure/Malfunction	
Primary Cause of Failure/Malfunction	
Age of System? _____	
Initial or Repair? _____	

Coddle Creek Soil Consulting
5500 Deer Run Court
Davidson, NC 28036
(704) 706 4645

July 12, 2022

Iredell County Environmental Health
Attention: Mr. Ben Botkins
349 North Center Street
Statesville, North Carolina 28677

Subject: Recommended Wastewater Disposal System
Parcel ID: 4627738795
450 Beaten Path Road
Mooresville, North Carolina 28117
Jeff Morgan, Owner

Enclosed you will find a copy of the wastewater disposal system proposed for Jeff Morgan. The property is at 450 Beaten Path Road described as Lot 68 Parcel ID: 4627738795 . Attached are sealed soil notes as well as site plans and designs for a on-site wastewater disposal system. This design is submitted under Session Law 2022-11 (S372). Please review the enclosed document presented to you. Please contact me for concerns regarding the wastewater disposal system design.

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

Owner: Jeff Morgan

Signature: Jeff Morgan

LICENSED SOIL SCIENTIST
STEVEN RANDAL CANNON
1291
STATE OF NORTH CAROLINA

"The LSS Evaluation is submitted pursuant to and meeting requirements of SL 2018-114 Section 11.C."

Steve Cannon, LSS

Signature: Steve Cannon

County: Iredell

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 4627738795

Issued To: Jeff Morgan

Property Location: 450 Beaten Path Road Mooresville, NC 28117

Subdivision: _____ Lot #: 68 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

If yes, name and license number of LSS: Steven R. Cannon #1291

New ☑ Repair ☐ Expansion ☐ System Relocation ☐

Proposed Structure: House

Proposed Wastewater System Type: Horizontal PPBPS (Initial) Horizontal PPBPS (Repair)

Fill System: ☐ Yes ☑ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area please provide a fill plan)

Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): .4 Proposed LTAR (Repair): .4

Design Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process

Number of bedrooms: 4 Number of Occupants: _____ Other: _____

Pump Required: ☑ Yes ☐ No ☐ May be required based upon final location and elevations of facilities

Artificial Drainage Required: ☐ Yes ☑ No If yes, please specify details: _____

Type of Water Supply: ☑ Private well ☐ Public well ☐ Municipal Supply ☐ Spring ☐ Other: _____

Drainfield location meets requirements of Rule .1945: Yes ☑ No ☐

Drainfield location meets requirements of Rule .1950: Yes ☑ No ☐

Permit valid for: ☑ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

Licensed Soil Scientist Print Name: Steven R. Cannon

Licensed Soil Scientist Signature: Steven R. Cannon Date: 7/12/22

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

See attached site sketch

Design Specifications for Proposed Wastewater Systems

Applicant: Jeff Morgan
441 Beaten Path Road
Mooresville, North Carolina 28117
Parcel ID # 4627-73-8795
450 Beaten Path Road
Acres: .74
Lot 68
Iredell County, North Carolina

Source of Water Flow	4 Bedroom House
Wastewater Treatment Systems	Horizontal PPBPS
Septic Tank	1000 gallons
Pump Tank	1000 gallons
Estimated Daily Flow	480 gallons/day
Wastewater Treatment: Initial	Horizontal PPBPS
Number of Panels	46 panels
Distribution	LPP
LPP Laterals	1 1/4" Sch 40 PVC
Loading Rate	.4 g/d/sq.ft.
Drainfield Size	200 feet
Trench Bottom Depth	26" on downslope
Slope	16 percent
Slope Correction	6 inches
Wastewater Treatment: Repair	Horizontal PPBPS
Number of Panels	61 panels
Distribution	LPP
Loading Rate	.4 g/d/sq.ft
Drainfield Size	262 feet
Trench Bottom Dept	26" on downslope
Slope Correction	6 inches
Slope	16 percent
Pretreatment	TS-II

Applicant: Jeff Morgan
441 Beaten Path Road
Mooresville, North Carolina 28117
Parcel ID # 4627-73-8795
450 Beaten Path Road
Acres: .74
Lot 68
Iredell County, North Carolina

Initial

Line	Flag Color	Line Elevation	Flagged Length	Number of Panels
1	Yellow	4.75'	54'	12
2	Yellow	4.75'	55'	13
3	Orange	6.5'	94'	21
			Total 203'	Total 46 Panels

Repair

Line	Flag Color	Line Elevation	Flagged Length	Number of Panels
1	Orange	2.85'	15'	3
2	Red	3.6'	22'	5
3	Blue	5.41'	20'	5
4	Red	6.85'	21'	5
5	Pink	14.33'	154' (25 % Red.)	36
6	White	16.66'	30' (25 % Red.)	7
			Total 262'	Total 61

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

Sheet __ of __

PROPERTY ID #: _____

DATE OF EVALUATION: 6/22/22

COUNTY: Iredell

Jeff Morgan 450 Beaten Path

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
B1	L 16%	0-10	L gr	ns np					PS .4
		10-32"	C sbk	ss sp fi s p					
		32-42	C sbk	ss sp fi s p					
		42-51"	C sbk	ss sp fi ss sp					
B2	L 16%	0-3"	L gr	ns np		51"			PS .4
		3-31"	C sbk	ss sp fi s p					
		31-40"	C sbk	ss sp fi s p					
		40-51"	C sbk	ss sp fi ss sp					
			Soil evaluated in bucket for TS-11 Pretreatment 6/22/22						

LICENSED SOIL SCIENTIST STEVEN RANDAL CANNON 1291 STATE OF NORTH CAROLINA

COMMENTS: _____

LICENSED SOIL SCIENTIST
STEVEN RANDAL CANNON
1291
STATE OF NORTH CAROLINA

N.C.P.L.S. L-2844
LICENSE NO.

PROFESSIONAL LAND SURVEYOR

Scale: 1" = 50'

VICINITY MAP
NO SCALE

BRADLEY SCHOOL RD.

PART OF LOT 68
ROBERT CORDLE
KAY CORDLE
DB 741-227
PIN 4627-73-9849
MB 14-98

LAKE NORMAN

COVERED FLOAT
RAMP
PIER

Repair System: Horizontal PPBPS

Orange	15'
Red	22'
Blue	20'
Red	21'
Pink	154'
White	30'
	Total 262'

FIELD LOCATED 760 CONTOUR

CP
1/2" PIPE
5.66'
L8
L7
L6
L5
L4
L3
L2
L1
L9
L10
L11
L12
L13

S 69°51'17"E 206.33'
143.02'
57.65'
1/2" PIPE

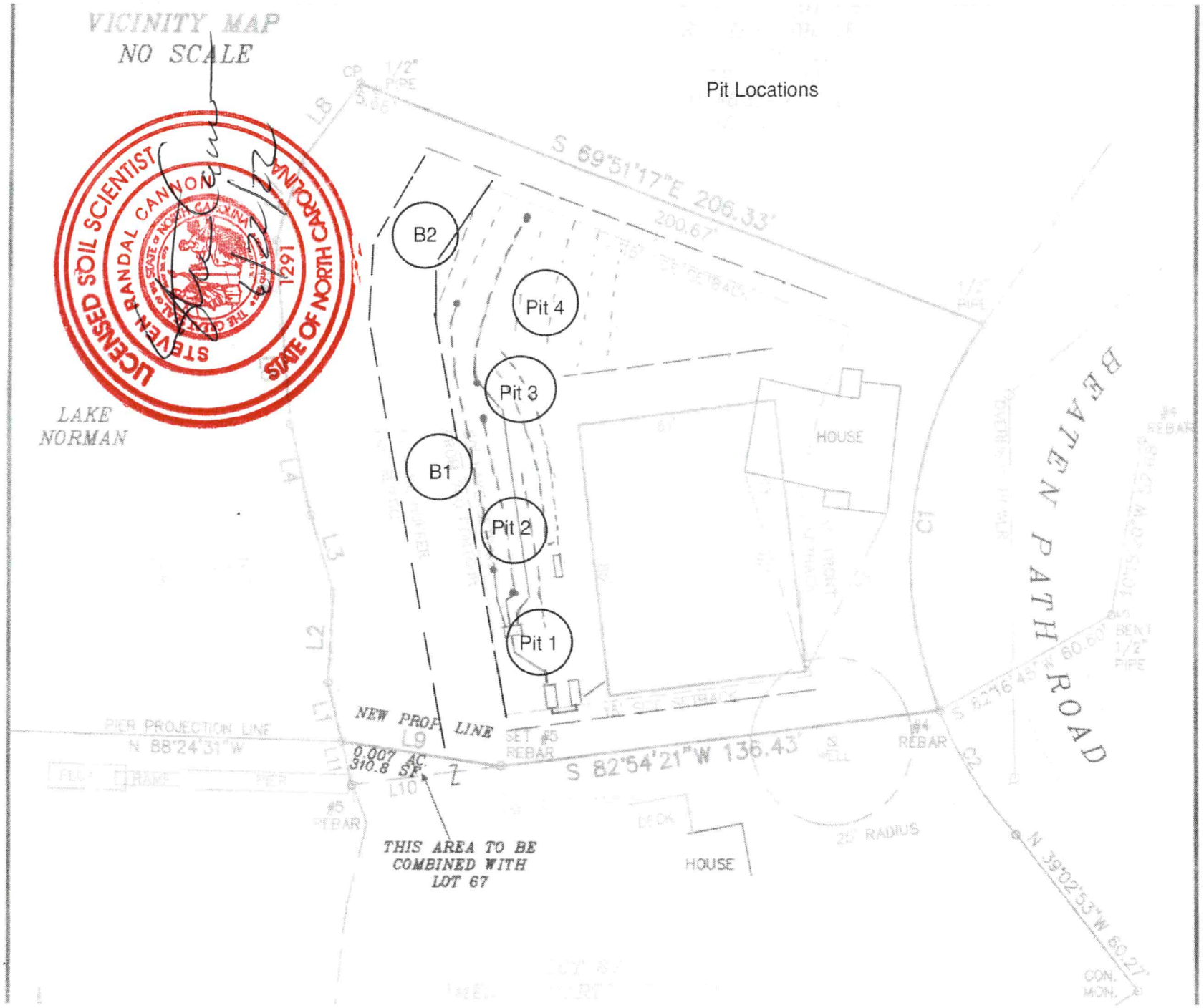
ORANGE PVC CAPS
30' White
ORANGE FLAGS
RED FLAGS
Red Blue Red Orange
15' SIDE SETBACK
36.76'
53.47'
ORANGE PVC CAP
STEPS
EXISTING HOUSE
PINK FLAGS
50' LAKE BUFFER FOR SEPTIC
760 CONTOUR
50' FROM LAKE SETBACK
BLOCK RET. WALL
35' FRONT SETBACK
81'
61'
36.20'
METER BOX
61' X 81' HSE. ENV.
WELL
PRESSURE
SEWER LIDS
24.28'
15' SIDE SETBACK
OVERHEAD POWER
BEARDEN PATHROAD
S 10°18'20"W
1/2" PIPE
#4 REBAR
S 62°16'35"W 60.60'
SET #5 REBAR
31.22'
NEW PROP. LINE
75.69'
S 82°54'21"W 106.91'
0.007 AC. 310.8 SF.
PIER PROJECTION LINE
N 88°24'31"W
FLOAT
RAMP
PIER
#5 REBAR
SPLIT RAIL FENCE
DECK
HOUSE
25' RAD.
C1
C2
C3
N 39°02'53"W 60.21'

THIS AREA TO BE COMBINED WITH LOT 67

THIS AREA TO BE COMBINED WITH LOT 68

LOT 67
JAMES G. MARTIN TRUSTEE

9:50 PM Thu Mar 18
22%
Done
MARTIN-JIM-SEPTIC01-22-21.pdf
Open in Acrobat





N.C.P.L.S. L-2844
LICENSE NO.

PROFESSIONAL LAND SURVEYOR

Scale: 1" = 50'

VICINITY MAP
NO SCALE

PART OF LOT 68
ROBERT CORDLE
KAY CORDLE
DB 741-227
PIN 4627-73-9849
MB 14-98

LAKE NORMAN

COVERED FLOAT
RAMP
PIER

Repair System: Horizontal PPBPS

Orange	15'	
Red	22'	
Blue	20'	
Red	21'	
Pink	154'	
White	30'	
		Total 262'

FIELD LOCATED 760 CONTOUR

CP
1/2" PIPE
5.66'
L8
L7
L6
L5
L4
L3
L2
L1
S 69°51'17"E 206.33'
143.02'
30' White
ORANGE PVC CAP
ORANGE FLAGS
RED FLAGS
Red Blue Red Orange
15' SIDE SETBACK
36.78'
57.65'
1/2" PIPE
53.47'
ORANGE PVC CAP
STEPS
EXISTING HOUSE
BLOCK RET. WALL
35' FRONT SETBACK
36.20'
OVERHEAD POWER
BATTEN PATH ROAD
30' LAKE BUFFER FOR SEPTIC
154'
PINK FLAGS
50' LAKE SETBACK FROM 760 CONTOUR
METER BOX
61' X 81' HSE. ENV.
61'
WELL
PRESSURE
SEWER LIDS
24.28'
15' SIDE SETBACK
SET #5 REBAR
31.22'
L13
#4 REBAR
60.60'
S 62°16'15"W
C3
C2
C1
PIER PROJECTION LINE
N 88°24'31"W
NEW PROP. LINE
L9
75.69'
S 82°54'21"W 106.91'
0.007 AC. 310.8 SF
L12
NEW PROP. LINE
25' RAD.
FLOAT
RAMP
PIER
L10
#5 REBAR
SPLIT RAIL FENCE
DECK
HOUSE
THIS AREA TO BE COMBINED WITH LOT 67
THIS AREA TO BE COMBINED WITH LOT 68
N 39°02'53"W 60.27'
CON. MON.

LOT 67
JAMES C. MARTIN TRUSTEE

Design Specifications for Proposed Wastewater Systems

Applicant: Jeff Morgan
441 Beaten Path Road
Mooresville, North Carolina 28117
Parcel ID # 4627-73-8795
450 Beaten Path Road
Acres: .74
Lot 68
Iredell County, North Carolina

Source of Water Flow	4 Bedroom House
Wastewater Treatment Systems	Horizontal PPBPS
Septic Tank	1000 gallons
Pump Tank	1000 gallons
Estimated Daily Flow	480 gallons/day
Wastewater Treatment: Initial	Horizontal PPBPS
Number of Panels	46 panels
Distribution	LPP
LPP Laterals	1 1/4" Sch 40 PVC
Loading Rate	.4 g/d/sq.ft.
Drainfield Size	200 feet
Trench Bottom Depth	26" on downslope
Slope	16 percent
Slope Correction	6 inches
Wastewater Treatment: Repair	Horizontal PPBPS
Number of Panels	61 panels
Distribution	LPP
Loading Rate	.4 g/d/sq.ft
Drainfield Size	262 feet
Trench Bottom Dept	26" on downslope
Slope Correction	6 inches
Slope	16 percent
Pretreatment	TS-II

Applicant: Jeff Morgan
441 Beaten Path Road
Mooresville, North Carolina 28117
Parcel ID # 4627-73-8795
450 Beaten Path Road
Acres: .74
Lot 68
Iredell County, North Carolina

Initial

Line	Flag Color	Line Elevation	Flagged Length	Number of Panels
1	Yellow	4.75'	54'	12
2	Yellow	4.75'	55'	13
3	Orange	6.5'	94'	21
			Total 203'	Total 46 Panels

Repair

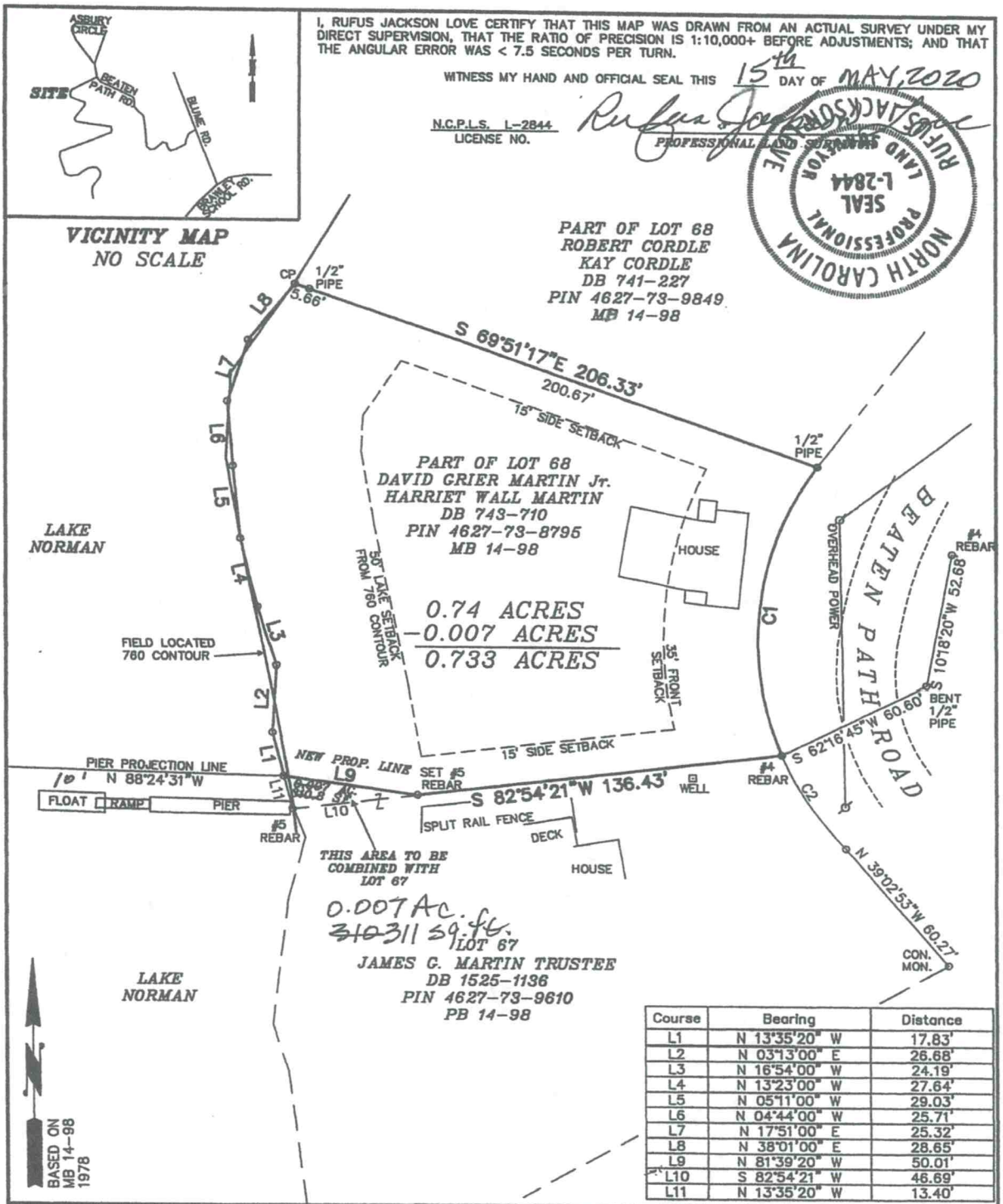
Line	Flag Color	Line Elevation	Flagged Length	Number of Panels
1	Orange	2.85'	15'	3
2	Red	3.6'	22'	5
3	Blue	5.41'	20'	5
4	Red	6.85'	21'	5
5	Pink	14.33'	154' (25 % Red.)	36
6	White	16.66'	30' (25 % Red.)	7
			Total 262'	Total 61

Design Calculations for Wastewater System

Applicant: Jeff Morgan
441 Beaten Path Road
Mooresville, North Carolina 28117
Parcel ID # 4627-73-8795
450 Beaten Path Road
Acres: .74
Lot 68
Iredell County, North Carolina

Source of Wastewater Flow	4 Bedroom House
Source of Water	Private
Estimated Daily Flow	480 gallons
Wastewater Treatment System	Horizontal PPBPS
Number of PPBPS Panels	46 Panels
Dosing Volume per Panel	4.0 gallons
Dosing Volume	184 gallons
Estimated Supply Length	15 feet
Supply Line Diameter	2" Sch 40 PVC
Supply Line Volume	2.61gallons
Anti-Siphon Hole	Yes 3/16"
Distribution	LPP
LPP Laterals	1 1/4" Sch 40 PVC
Flow per Orfice	.59 gallons/min
Orifice Size	3/16"
System Flow	27.14 gallons/min
Pressure Head	2 feet
Friction Head	.23 feet
Elevation Head	7 feet
Total Dynamic Head	9.23 feet
Pump Tank Drawdown (may vary)	20.16 gallons per inch
Gate Valve	In tank
Check Valve	2 (1 in tank) (1 at manifold)
Threaded Union	In tank

Pump Time to Dose184 gallons	6m 46s or 6.77m
Pump Time to Dose 480 gallons	17m 40s
Pumps	Zoeller Model 151 Goulds WEO3L
Floats	SJE Sensor Float
Control Panel	SJE Rhombus Model 112
Alarm	RJE Rhombus Tank Alert I
Pump Block	4 inches
Pump Height	12 inches
Approximate Gallons at 16 inches in Pump Tank	322.56 gallons
Gallons between float on and alarm on	120.96 gallons
Tank Draw Down	9.12 inches or 9 1/8 inches"
Pump Float On	25 1/8 inches off tank bottom
Alarm On	31 1/8 inches off tank bottom
Storage After Alarm Sounds	372 gallons (about 19 hours)



Course	Bearing	Distance
L1	N 13°35'20" W	17.83'
L2	N 03°13'00" E	26.68'
L3	N 16°54'00" W	24.19'
L4	N 13°23'00" W	27.64'
L5	N 05°11'00" W	29.03'
L6	N 04°44'00" W	25.71'
L7	N 17°51'00" E	25.32'
L8	N 38°01'00" E	28.65'
L9	N 81°39'20" W	50.01'
L10	S 82°54'21" W	46.69'
L11	N 13°35'20" W	13.40'

BOUNDARY/PHYSICAL SURVEY

PROPERTY OF DAVID GRIER MARTIN Jr. & HARRIET WALL MARTIN

450 BEATEN PATH ROAD
PART OF LOT 68, CRESCENT LAND AND TIMBER CORP
LAKE NORMAN, RECREATION LOTS, SECT. 9, MB14-98
DEED BOOK 743-710, PIN 4627-73-8795
DAVIDSON TOWNSHIP, IREDELL COUNTY
NORTH CAROLINA
NOVEMBER 25, 2019

REVISED: TO SHOW NEW PROP. LINE & PIER PROJECTION. 5/13/20

FILE: MARTIN-JIM-PIER

50 0 50 100 150
GRAPHIC SCALE - FEET Scale 1" = 50'

NOTES:

1. THIS PROPERTY IS LOCATED IN A DESIGNATED FLOOD ZONE.
2. AREA DETERMINED BY COORDINATE COMPUTATION.
3. CP DENOTES COMPUTED POINT, NO MONUMENT FOUND OR SET.
4. UNDERGROUND UTILITIES NOT LOCATED AS OF THIS DATE.
5. ALL MONUMENTS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.
6. NO GRID MONUMENTS WITHIN 2000' OF SUBJECT PROPERTY.
7. THIS PROPERTY LIES IN THE WS-IV-CA WATERSHED.
8. THIS PROPERTY IS CURRENTLY ZONED R-20.

LEGEND:

PROPERTY LINE
TIE LINE
UNSURVEYED LINE
BACK OF CURB/EDGE OF PVMT.
SETBACK LINE
CP COMPUTED POINT
PP POWER POLE

PYRAMID LAND SURVEYING PA C-1341
P.O. BOX 11 DAVIDSON, NORTH CAROLINA
(704)892-4249 RUFUS JACKSON LOVE L-2844

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, _____, am the legal owner(s) of the property located at _____, identified as PIN (Parcel Identification Number)_____, located in Iredell County, North Carolina.

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

J. H. Morgan
Signature of Owner(s)

7/7/22
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