ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP 317055

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

PIN # 4778 -69 -8026.

APPLICANT/OWNER: WJH LLC

APPLICANT ADDRESS: 3091 Governors Lake Drive Ste 300 Peachtree Corners GA 30071

SITE ADDRESS: 127 JO Creek Drive Harmony NC 28634

PHONE: 704-438-1100 ALT. PHONE

SITE DIRECTIONS: I-40 exit 154 to old Mocksville to Mt. Bethel to Rock Gate

SAP CONTROLLED: ☑ YES ☐ NO

SUBDIVISION: Rock Gate Estates SECTION: 2 LOT # 18 LOT AREA: .643

DESIGN FLOW: 360 L.T.A.R.: 30

Septic Tank 1000 (gal) STB 760 Date 3-5-2022

Pump Tank 1000 (gal) PT 363 Date 3-5-2022

Pump Make ____ Model ____ Serial # ____

Nitrification Fields 1 # Lines 6 Linear Ft 300

Trench Width 36in Trench Bottom Depth(~~Low side~~) 36in max Gravel Depth ____

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

System Description: PM - 25% Reduction

Repair System Description: PPBPS - 50% Reduction

Maintenance Agreement Required: ☐ YES ☑ NO

☐ GRAVITY ☑ PRESSURE

☑ Residence No. Bedrooms 3

☐ Business No. Persons 6

☐ Other No. Employees ____

☐ Slab ☑ Crawl Space

☐ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☐ Private ☑ Public ☐ Community

Comments / Conditions:

See drainline & tank notes from previous permit

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:

Thompson Environmental Consulting Inc.

LSS # 1297

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.

See attached

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

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

Owner / Applicant Signature: ____ Date: 5-18-22 Installed by: Dewey Sepp'e

IMPROVEMENT PERMIT by: Benjamin A Bottin Date: 5/13/2022 OPERATION PERMIT by: D. Wiebenz Date: 5/18/22

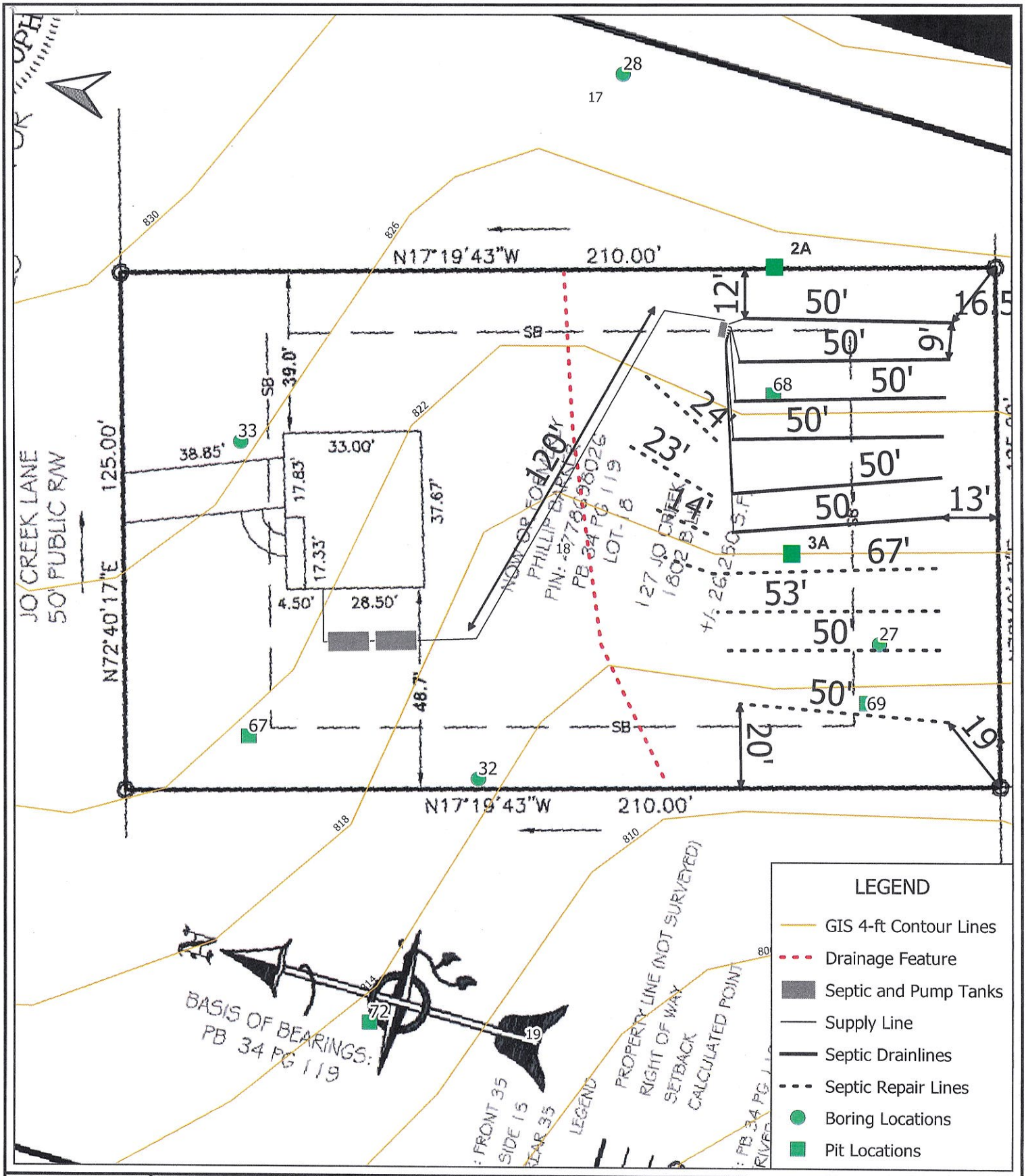
AUTHORIZATION TO CONSTRUCT by: Benjamin A Bottin Date: 5/13/2022 Existing System Inspected by: ____ Date: ____

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

Item	Date	Initials
Drain Lines Checked	See previous	
Tanks Checked	See previous	
Pressure Manifold or Valve Box Checked	5/18/22	DW
Pressure Head Set	5/18/22	DW
Electrical Checked	5/18/22	DW
Floats Set	5/18/22	DW
Alarm Checked	5/18/22	DW
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? _____	

127 Jo Creek



Thompson Environmental Consulting WATER • WASTEWATER • WETLANDS	Prepared For: Century Complete	Proposed Septic Layout Lot 18 - Rock Gate Estates 127 Jo Creek Lane Harmony, NC 28634 Iredell County	Date: June 2021 Scale: 0 15 30 ft TEC Job #: 21-167	Figure 1

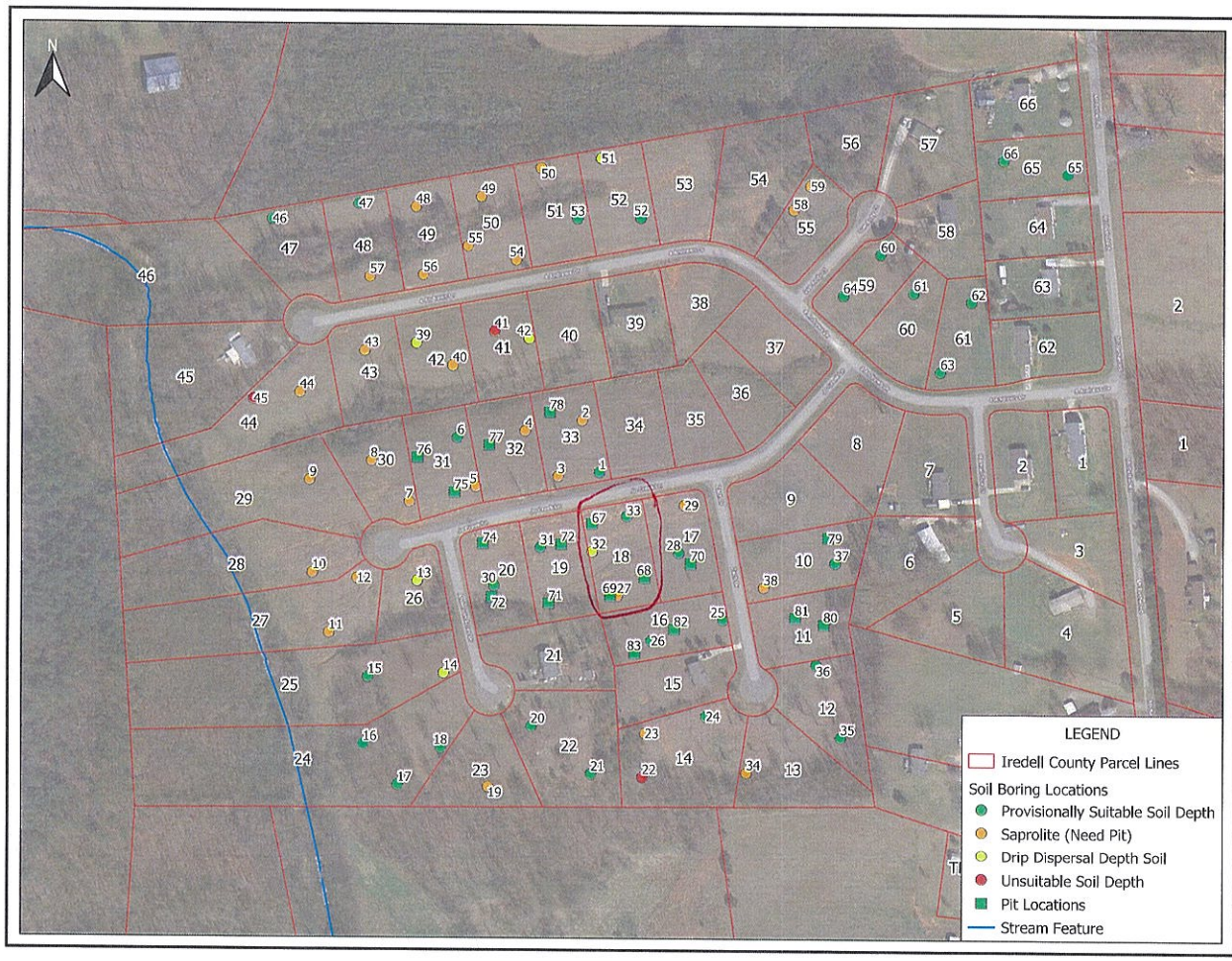


FIGURE 1

Prepared For:

Century Complete

Soil and Site Evaluation

Rock Gate Estates
Harmony, NC 28634

Iredell County

Scale:
0 150 300 ft

Date:	TEC Job No.
June 2021	21-167

Thompson Environmental Consulting
WATER • WASTEWATER • WETLANDS

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107

PROPERTY ID #:

COUNTY: IREDELL

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Phillip P. Barker
ADDRESS: 976 Shaw Road, Harmony, NC 28636
PROPOSED FACILITY: Res PROPOSED DESIGN FLOW (.1949):
LOCATION OF SITE: Rock Cove Estates, Harmony, NC 28636

DATE EVALUATED: 3/21/21
PROPERTY SIZE:
PROPERTY RECORDED:

WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other Lots 10-14, 16-20, 22-33, 41-44, 46-52, 55, 59-61, and 65

EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut

TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LS / 5%	0-3	GR / SL	VFR / NS	—	40+	30"	—	PS 0.35 Need P.I.
		3-30	SBK / CL	FR / S					
		30-40+	M / SiL	VFR / NS					
2	LS / 13	0-4	GR / SCL	VFR / NS	—	40+	19	—	PS 0.35 Need P.I.
		4-19	SBK / CL	FR / S					
		19-40+	M / SiL	VFR / NS					
3	LS /	0-9	SBK / SL	VFR / NS	—	40+	25	—	PS 0.35 Need P.I.
		9-25	SBK / CL	FR / S					
		25-40	M / SiL	VFR / NS					
4	LS / 13	0-14	SBK / CL	FR / S	—	40+	19	—	PS 0.35 Need P.I.
		14-19	SBK / SiL	FR / NS					
		19-40+	M / SiL	VFR / NS					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted	Accepted/PPBPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): Provisionally Suitable

EVALUATED BY: M. WOOD, LSS
OTHER(S) PRESENT: E. WOOD, LSS

Larry Thompson, LSS

LICENSED SOIL SCIENTIST — L. THOMPSON — 1287 — STATE OF NORTH CAROLINA

COMMENTS:

* P.I.'s needed on lots with shallow depths
* Lots 46-52 unsuitable
* Lots 41-44 & 55 Provisional

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

Updated February 2014

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #:

DATE OF EVALUATION: 3/21/21

COUNTY: IREDELL

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	
25	LS / 8	0-18	SBK / cl	FI / S	—	40+	29	—	PS 0.3
		18-29	SBK / l	FL / S					
		29-40+	m / sl	VFR / N					
26	LS / 9	0-19	SBK / sl	VFR / N	—	38+	—	—	PS 0.3
		19-38+	SBK / scl	FR / N					
27	LS / 12	0-10	SBK / l	FR / N	—	40+	10	—	PS 0.3F Need l2
		10-40+	m / sl	VFR / N					
28	LS / 8	0-12	SBK / C	FI / S	—	40+	32	—	PS 0.3
		12-19	SBK / cl	FR / S					
		19-32	SBK / l	FR / N					
		32-40+	m / sl	VFR / N					
29	LS / 4	0-19	SBK / cl	FR / S	—	40+	19	—	PS D35 Need P1
		19-30	m / cl	FR / S					
		30-40	m / sl	VFR / N					

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #:
DATE OF EVALUATION: 3/24/21
COUNTY: IREDELL

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
30	LS/ 11	0-8	GR / sl	VFR / N	—	40+	—	—	PS 0.3
		8-22	SBK / c	FI / S					
		22-40+	SBK / scl	FR / S					
31	LS/ 8	0-40+	SBK / scl	FR / N	—	40+	—	—	PS 0.3
32	LS/ 10	0-22	M / sl	VFR / N	—	22	—	22 Cr	P 0.1 Drp
		22	Cr						
33	LS/ 6	0-10	SBK / c	FI / S	—	40+	36	—	PS 0.3
		10-36	SBK / cl	FR / S					
		36-40+	M / sl	VFR / N					
34	LS/ 16	0-29	SBK / cl	FR / S	—	40+	29	—	P Drp Mod P
		29-40+	M / sl	VFR / N					

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

Sheet 1 of ___

PROPERTY ID #: _____

DATE OF EVALUATION: 8-11-21

COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
6-1	LS 5%	0-4	SBK/C	FI/SP/SCP	—	4"	L 4-5"	—	
		4-56	M/L	FRIABLE/NP/NCP					
6-5	LS 11%	0-40	SBK/C	FI/SP/SCP	—	49"	L 49-56	—	0.3
		40-49	SBK/CL	FI/SP/SCP					
		49-56	M/SL	FRIABLE/NP/NCP					
6-9	LS 11%	0-17	SBK/C	FI/SP/SCP	—	17"	L 17-51	—	
		17-51	M/L	FRIABLE/NP/NCP					
7-0	LS 8%	0-34	SBK/C	FI/SP/SCP	—	39"	L 39-50	—	0.3
		34-56	M/SL	FRIABLE/NP/NCP					
7-1	LS 6%	0-12	SBK/SCC	FI/SP/SCP	—	50"	—	—	
		12-52	SBK/C	FI/SP/SCP					
			& Parent material						

COMMENTS: Rock Gra

DocuSign Envelope ID: 19FF6C7D-FA05-48B4-AF7C-1873268303E2

To: Iredell County Environmental Health

From: Katie Dyess

Regarding: Rock Gate Subdivision
Session Law 2018-114 Permit Packages

The LSS evaluation attached to these applications is to be used to produce design and construction features for permitting in accordance with Session Law 2018-114 Section 11. (c).

DocuSigned by:
Katie Dyess
381FF6ADC84D42B...

Project Manager

5/13/2022

Date

Residential Subsurface Wastewater Treatment and Disposal System Proposal

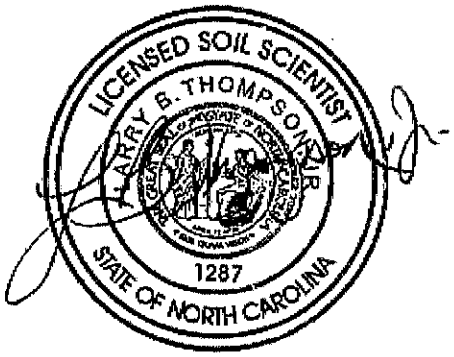
for

Lot 18 – Rock Gate Estates
127 Jo Creek Drive
Harmony, NC 28634

Tax Parcel # 4778698026.000
June 26, 2021

Prepared for:

Glenn Bird
Century Complete
9325 Center Lake Dr., Suite 160
Charlotte, NC 28216
1-833-791-0192



Prepared by:

Larry Thompson, REHS, LSS
Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541
Phone: 704-301-4881
info@thompsonenv.com



Details

Century Complete has contracted with Thompson Environmental Consulting, Inc. (TEC) to prepare a septic proposal for a 3-bedroom single family residence to be located on Lot 17, Rock Gate Estates, Harmony, North Carolina.

Based upon an investigation performed by TEC, it was determined that a sufficient amount of "Suitable" Group IV soils are available for the installation of a **Pump-To Accepted System** for a 3-bedroom residence (the proposed repair system will be Prefabricated Permeable Block Panel System). The property will be served by a municipal water supply.

Century Complete would like to request that Iredell County Environmental Health (ICEH) issue the appropriate permits for a subsurface wastewater treatment and disposal system based upon the following proposal and the enclosed Licensed Soil Scientist Evaluation, which is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11. (c).

Location

From Statesville, take I-40 to Old Mocksville Road. Turn left onto Old Mocksville Road, left onto Mt. Bethel Road, and left onto 4 Andrews Drive (Rock Gate Estates).

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 1, 2017.

Accepted Wastewater System No. AWWS-2005-02-R6; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, August 21, 2015.

Primary Investigator's Credentials

NC Registered Sanitarian No. 1208
NC Licensed Soil Scientist No. 1287
SC Certified Professional Soil Classifier No. 111
NC Subsurface Septic System Operator No. 22199
NC Grade IV Wastewater System Installer No. 1762
NC Certified Wastewater System Inspector No. 17621

Plans and Specifications

A. Septic Tank

1. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1,000 gallons (minimum) in capacity.
2. The septic tank will be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

B. Pump Tank

1. The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1,000 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
2. All pipe penetrations into the tank shall be booted (i.e., C-293 boot with a stainless-steel strap).
3. The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
4. The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4x rated control panel. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
5. Panel and control equipment shall include lightning protection, be protected from unauthorized access, and always remain accessible to the system operator.
6. The pump removal system will be via a pump tether made of nylon rope or its equivalent. The tether material should be resistant to mildew and rot.

C. Pipe, Fittings and Supply Line

1. All discharge piping, connectors and supply lines should be made of SCH 40 PVC and fitted with pressure rated couplings.
2. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
3. Supply line will be approximately 120 feet long and consist of a 2-inch SCH 40 PVC pipe with pressure fittings.

D. Pressure Manifold

1. A pressure manifold shall be used to distribute wastewater to six drainlines.
2. The pressure manifold shall be contained within an adequately sized box/vault that will allow future repair lines to be installed and is designed to allow for drainage of effluent that may accumulate in it during flushing and head pressure adjustments. The box should be placed upon a gravel base.
3. A gate valve shall be provided at the pressure manifold box to allow for final pressure adjustment (2 foot of head pressure as per design).
4. The pressure manifold shall be constructed of SCH 80 PVC.
5. There shall be 6 taps (1/2 inch SCH. 80 PVC - direct thread or saddle).
6. Each tap to have a true union ball valve that will allow for future removal/replacement.
7. The connecting pipe between the pressure manifold taps and the drainfield shall be constructed of PVC.

DI. Drainfield Installation

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
3. The specified system is an accepted wastewater system, specifically the Infiltrator Quick 4 chamber system or any other system with a state-approved 25% reduction in required drainline length.
4. The drainfield consists of six (6) lateral trenches 3-foot wide by 50 feet in length. Total trench length is 300 feet.
5. The maximum trench depth for this system shall be **36 inches**.
6. The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
7. The trenches should be left open for the final inspection by the ICEH.

DII. Final Landscaping

1. The final soil cover over the drainfield shall be a minimum of 6 inches deep.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.
3. The drainfield area should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

DIII. Utility Conflicts

1. The builder and property owner must take special care in planning for water, power, gas, telephone, and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground

utilities can negatively impact the installation and, in some cases, cause irreparable damage and permit revocation.
2. Lawn irrigation should not be placed over the drainfield area.
3. If there are any questions regarding preferred routes, contact the ICEH as soon as possible.

Maintenance

H. In General

1. The homeowner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 25 percent of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When it becomes necessary to clean the effluent filter, the filter should be removed, and the accumulated debris washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages, or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Design Specifics

Daily Design Flow:	360 GPD – 4 Bedroom Home
Septic Tank Requirements:	1,000 Gallon Septic Tanks
Pump Tank Requirements:	1,000 Gallon Pump Tank
Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	Infiltrator Quick4 Plus Standard
Distribution Method:	Pressure Manifold
Number of Taps:	6 (1/2 inch SCH. 80 PVC)
Number of Drainlines:	6
Drain Lines:	(6) 3' Wide x 50' Long
Total Trench Length:	300 Linear Feet
Maximum Trench Depth:	36 Inches

Final Cover Requirement:	6 Inches (minimum)
Pump Requirements from Barn:	32.88 GPM at 16 Feet TDH
Recommended Pump:	Liberty FL50 (or equivalent)
Dose Volume:	147 Gallons
Pump Run Time:	4.47 Minutes
Pump Tank Drawdown:	7 Inches – Assumes 21 gallons per inch. Check with individual tank manufacturer

Repair Option

Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	PPBPS
Required Linear Footage:	200 Feet
Available Linear Footage:	281 Linear Feet
Installation Depth:	36 Inches

PRELIMINARY SOIL AND SITE EVALUATION

Rock Gate Estates
Harmony, NC 28636

Prepared For:

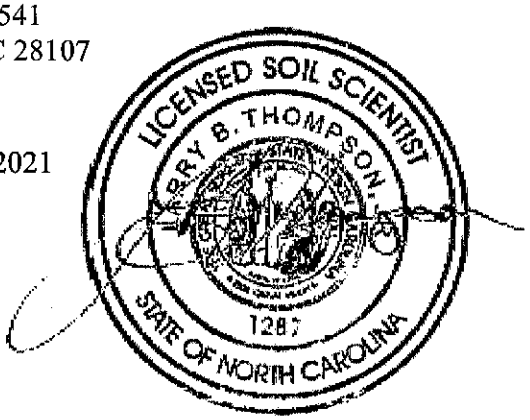
Katie Dyess
Century Complete
9325 Center Lake Dr., Suite 160
Charlotte, NC 28216

Prepared By:

Thompson Environmental Consulting
WATER • WASTEWATER • WETLANDS

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107

June 11, 2021



INTRODUCTION & SITE DESCRIPTION

This Preliminary Soil and Site Evaluation was performed on 38 lots located in the Rock Gate Estate subdivision, Harmony, North Carolina (Lots10-14, 16-20, 22-33, 41-44, 46-52, 55, 59-61, and 65).

Thompson Environmental Consulting, Inc. (TEC) was retained to determine whether the soils were suitable for the installation of onsite subsurface wastewater treatment and disposal systems. The property was evaluated in accordance with North Carolina statutes for waste disposal ("Laws and Rules for Sewage Treatment and Disposal Systems", amended April 1, 2017).

INVESTIGATION METHODOLOGY & SITE PHYSICAL CHARACTERISTICS

The evaluation was conducted by Michael Wood, LSS, Larry Thompson, LSS, and Ethan Wood, ES on March 20-21, and June 11, 2021. Sixty-six soil borings and 17 pits were advanced, and soil color was determined with a Munsell Soil Color Chart. Observations of the landscape (slope, drainage patterns, etc.) as well as soil properties (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) were recorded.

The project study area has been previously developed as a single-family residence subdivision served by public water.

FINDINGS

Borings rated as "Provisionally Suitable" for the installation of an Accepted System or Prefabricated Permeable Block Panel Systems (PPBPS) are denoted in the attached Figure as green and orange points. Surfaces typically exhibited friable silt loam to clay loam textures with weak, medium, subangular blocky structure 3 to 12 inches in depth. Lower subsurface horizons exhibited firm clay loam, sandy clay loam, to clay textures with moderate, medium, subangular blocky structure to a depth of 13 to greater than 40 inches before encountering sandy loam to loam saprolite. A long-term acceptance rate (LTAR) of 0.3 to 0.4 gal./day/sq. ft. would be recommended for these soils.

Borings rated as "Provisionally Suitable" for the installation of Subsurface Drip Dispersal product are denoted in the attached Figure as yellow points. Textures of friable sandy loam with weak, medium, granular blocky structure were recorded to depths of 15 to 22 inches before encountering >50% parent rock. A long-term acceptance rate (LTAR) of 0.1 to gal./day/sq. ft. would be recommended for these soils.

Borings rated as "Unsuitable" for the installation of subsurface wastewater treatment and disposal systems are denoted as red points in the attached Figure. These soils were shallow to soil rock.

DISCUSSION

Twenty-six of the sixty-six borings were noted as having sandy loam to loam saprolitic material, which can be considered for use with onsite wastewater treatment and disposal if no open and continuous joints, quartz veins, or fractures that are relic of parent rock is observed. While the borings give every indication that we have "suitable" saprolite, 15A NCAC 18A .1956 MODIFICATIONS TO SEPTIC TANK SYSTEMS, (6) SAPROLITE SYSTEM states that an investigation of the site using pits is a requirement. This was completed with a deep pit evaluation on June 11, 2021 and the saprolite was determined to be "Suitable" for wastewater treatment and disposal.

It is estimated that approximately 4,800 square feet of suitable soil area would need to be allocated and left completely available for the installation of a 3-bedroom Accepted System in "Provisionally Suitable" soil. Some of the lots would benefit from the installation of a PPBPS due to limited areas of "Provisionally Suitable Soil" and, in this case, would need approximately 3,300 square feet of suitable soil area allocated and left completely available for a 3-bedroom system installation.

Soil borings designated as "Drip Dispersal Depth" in the Figure have the potential to support the installation of a Subsurface Drip Dispersal septic system. It is estimated that approximately 7,200 square feet of suitable soil would need to be allocated and left completely available for the installation of a 3-bedroom Subsurface Drip Dispersal septic system. A special hydraulic assessment would be required to determine the exact square footage that might be required when considering subsurface drip dispersal.

TEC is not aware of any innovative or alternative systems currently permitted for use in North Carolina that can be used in areas with "Unsuitable" soil borings.

Based on our evaluation, it appears that Lots 26 and 46 would be considered "Unsuitable" and Lots 41 and 42 could be classified as "Provisionally Suitable" for use with subsurface drip dispersal.

CONCLUSION

The findings presented herein represent TEC's professional opinion based on our Soil and Site Evaluation and knowledge of the current laws and rules governing on-site wastewater systems in North Carolina. Soils naturally change across a landscape and contain many inclusions. As such, attempts to quantify them are not always precise and exact. Due to this inherent variability of soils and the subjectivity when determining limiting factors, there is no guarantee that a regulating authority will agree with the findings of this report.

Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107

PROPERTY ID #: _____
COUNTY: Iredell

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

OWNER: Century Complete
ADDRESS: _____
PROPOSED FACILITY: Lot PROPOSED DESIGN FLOW (.1949): 360 gpd
LOCATION OF SITE: 121, 127 and 139 Jo Creek Drive, Harmony, NC
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other Rock Gate Lots 17, 18, & 20
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut
DATE EVALUATED: 5-4-22
PROPERTY SIZE: Varies
PROPERTY RECORDED: _____
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1A	LS 8%	0-12	SBK/CL	FR/SS/SP/ESP	—	13"	III L 13-84"	—	PS 0.3
		12-13	SBK/C	FI/SP/ESP					
		13-84	M/L	FR/NS/NP/NSP					
2A	LS 8%	0-6	SBK/CL	FR/SS/SP/ESP	—	36"	III L 36-84"	—	PS 0.3
		6-36	SBK/C	FI/SP/ESP					
		36-84	M/L	FR/NS/NP/NSP					
3A	LS 8%	0-24	SBK/C	FI/SP/ESP	—	24"	III L 24-84"	—	PS 0.4
		24-84	M/L	FR/NS/NP/NSP					
4A	LS 5%	0-5	SBK/CL	FR/SS/SP/ESP	—	24"	III L 24-84"	—	PS 0.4
		5-24	SBK/C	FI/SP/ESP					
		24-84	M/L	FR/NS/NP/NSP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted	Accepted
Site LTAR	0.3	0.4

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): Provisional
EVALUATED BY: L. Thompson
OTHER(S) PRESENT: _____

LICENSED SOIL SCIENTIST — LARRY D. THOMPSON — 1287 — STATE OF NORTH CAROLINA

COMMENTS: _____

Updated February 2014

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

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #:

DATE OF EVALUATION: 5-4-22

COUNTY: Iredell

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	
SA	LS 7%	0-6	SBK/CL	FR/SS/SP/SEXP	—	32	TI L 32-84"	—	PS 0.35
		6-32	SBK/C	FI/S/P/SEXP					
		32-84	M/L	FR/NS/NP/MEXP					

BB

RECEIVED MAY 5 - 2022

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED Paid $500.00

Iredell County Health Department – Environmental Health Division

PAGE 1: *APPLICATION FORM* Session Permit- Upated

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

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

****

Page 2: *Site Plan Worksheet* form MUST accompany this application AP- 317055

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

****

Applicant Information: (PRINT CLEARLY)

Applicant Name: _____ **Address:** 3091 Governors Lake Dr., Ste. 300 Peachtree Corners GA 30071 **Zip:** _____

Applicant Email: katie.dyess@centurycommunities.com **Phone:** 704-488-1100 **Alt. Phone:** _____

Owner Name: WJH LLC **Address:** _____ **Zip:** _____

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

****

Property Information:

Street Address: 127 Jo Creek

Subdivision Name: Rock Gate **Section/Phase:** _____ **Lot Number:** 18

Driving Directions: Turn right onto Kelly St, Turn right onto Feimster St, Take I-40 E and Old Mocksville Rd to Mt Bethel Rd, Turn left onto N Center St, Turn right to merge onto I-40 E, Take exit 154 for Old Mocksville Rd, Turn left onto Old Mocksville Rd, Turn left onto Mt Bethel Rd. Drive and turn left into Rock Gate Development

****

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: _____ — ( ) 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: _____

( ) New Well ( ) Existing Well ( ) Community Well ( ) City Water (X) Other Public Water

****

Desired Septic System Type: *(you may rank in order of preference)* Year existing system installed: _____
( ) No Preference ( ) Alternative (X) Conventional ( ) Innovative ( ) 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?
(X) Yes ( ) 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: Katie Dyess for WJH LLC TA Century Complete 5-5-22

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

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

☒ **1. * APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) Katie Dyess WJH LLC TA Century Complete

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.

Katie Dyess WJH LLC TA Century Complete 4-5-22

Signature of Owner(s) Date

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

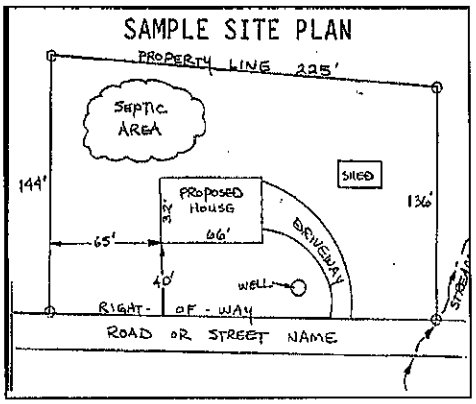
Statesville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 2: ***SITE PLAN WORKSHEET***

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***



Place an (X) beside each item as you complete the site plan:

- (X) **Property Line measurements are clearly identified**
- (X) **All proposed structures are indicated**
- (X) **Front and side setbacks from property line**
- (X) **Preferred driveway location and well location**
- (X) **Area you prefer your septic system to be placed**
- (X) **North arrow, or other sufficient indicator of direction**

Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	**N/A**
Location of easements and rights of ways on your property	**N/A**
Location of any designated wetlands on the property	**N/A**

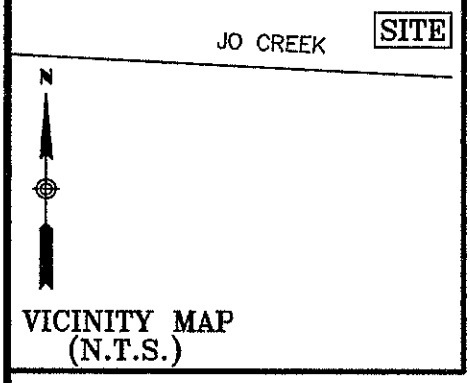
USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

See Attached Session Updated Application

Signature: Katie Dyess for WJH LLC TA Century Complete 5-5-22

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



VICINITY MAP
(N.T.S.)

CERTIFICATE OF SURVEY AND ACCURACY

I, CHRISTOPHER L COLE. CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN (REFERENCES AS SHOWN); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN (REFERENCES AS SHOWN); THAT THE RATIO OF PRECISION AS CALCULATED EXCEEDS 1:15,000; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600);

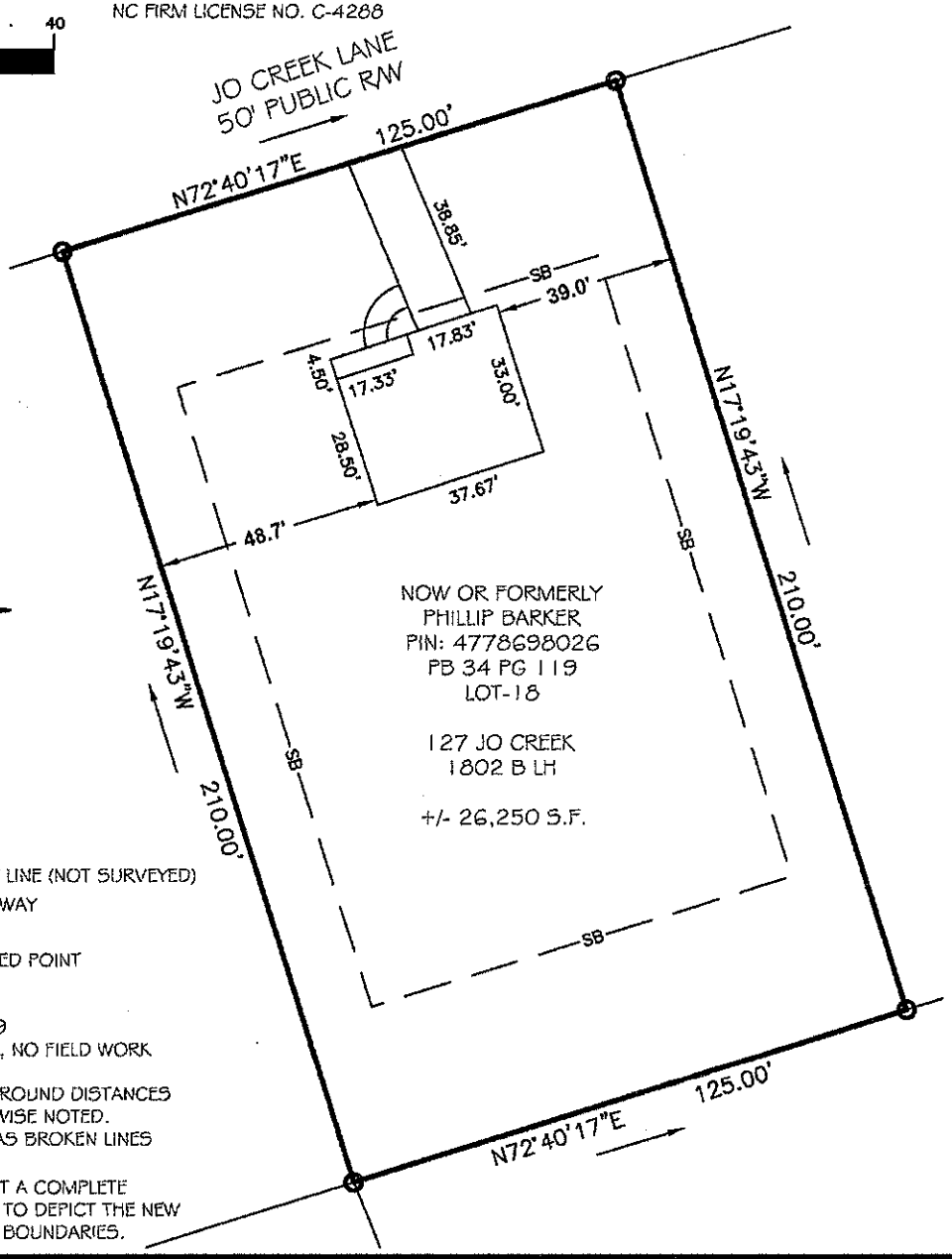
PRELIMINARY

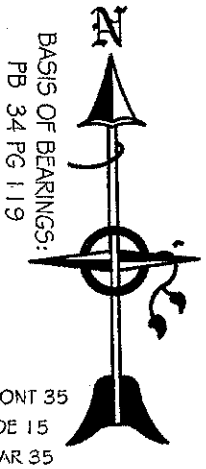
NOT FOR SALES, RECORDATION OR CONVEYANCES

CHRISTOPHER L. COLE
REGISTRATION/LICENSE NO. NCPLS L-5008
NC FIRM LICENSE NO. C-4288

NORTH CAROLINA PROFESSIONAL SEAL L-5008 LAND SURVEYOR CHRISTOPHER L. COLE

40 0 20 40
(IN FEET)
1 inch = 40 ft.





SETBACKS: FRONT 35
SIDE 15
REAR 35

LEGEND

PL	PROPERTY LINE (NOT SURVEYED)
RW	RIGHT OF WAY
SB	SETBACK
O	CALCULATED POINT

NOTES:

1) BASIS OF BEARINGS: PB 34 PG 119
2) BOUNDARY LINES DERIVED BY PLAT, NO FIELD WORK COMPLETED FOR THIS MAP.
3) ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
4)LINES NOT SURVEYED ARE SHOWN AS BROKEN LINES FROM
5) THIS SURVEY DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY AND IS INTENDED TO DEPICT THE NEW BUILDING LOCATION RELATIVE TO THE BOUNDARIES.

Ascension Land Surveying P.C.
Professional Land Surveying & Consulting
116 Williams Road, Mocksville, NC 27028
Phone: (704) 579-7197
Email: surveyor.chris007@gmail.com
NC FIRM LICENSE NO: C-4288
NC PLS NO: L-5008

4/14/2021

PIN:
4778698026
DRAWN BY: CC
CHECKED BY: JH
SCALE: 1"=40'
JOB: 21-02-24

PLOT PLAN
LOT-18
127 JO CREEK
ROCK GATE ESTATES
TURNERSBURG TWNSHP, IREDELL CO., NC

Acknowledgement Of Plans Submittal ONLY!

Date 8/4/21

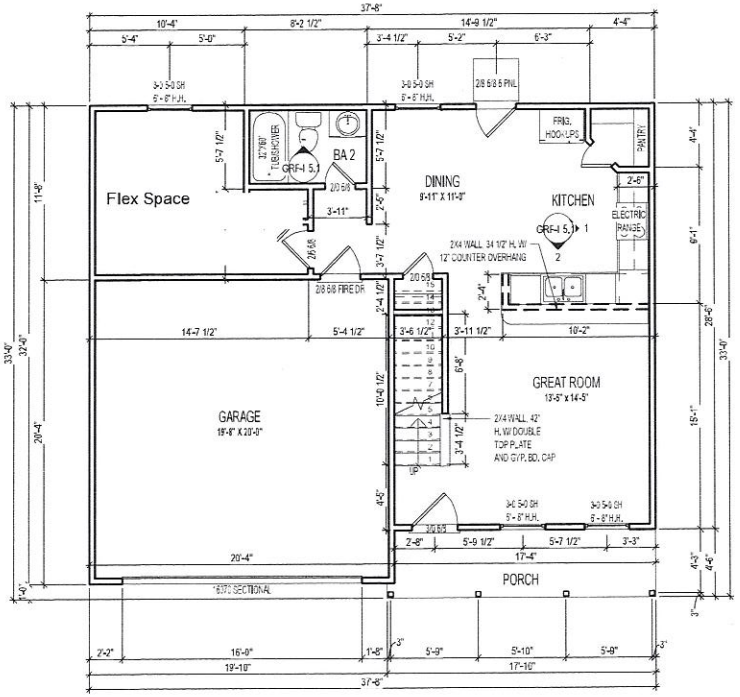
Date 8/4/21.

TABLE R302.6 Dwelling/Garage Separation	
Separation	Material
From the residence and attics	Not less than ½-inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent
Structure(s) supporting floor-ceiling assemblies used for separation required by this section	Not less than ½-inch gypsum board or equivalent

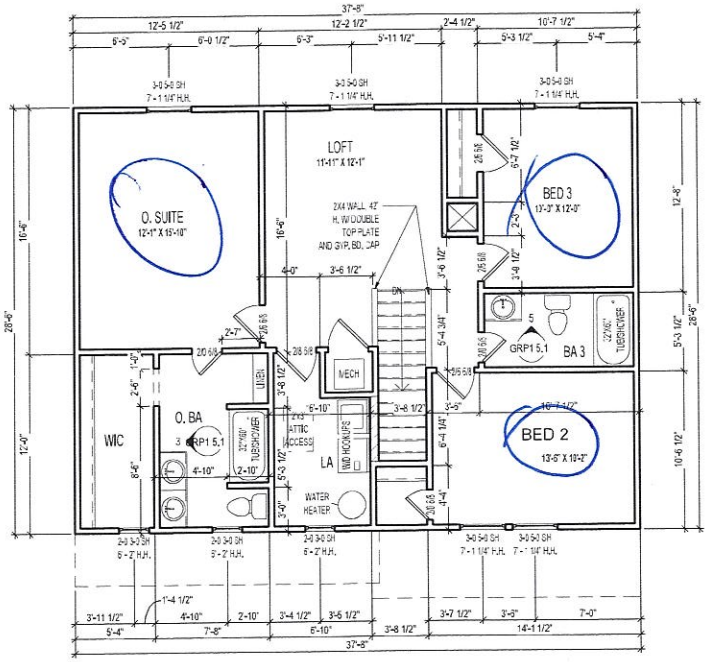
WALL LEGEND

- FULL HEIGHT 2X4 WOOD STUD PARTITION
- FULL HEIGHT 2X6 WOOD STUD PARTITION
- STONE VENEER
- DRYWALL OPENING HEIGHT AS NOTED ON PLAN, 6'-8" HOR HT.
- BRICK VENEER
- 1 ROD & SHELF
- STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED

NOTE: EXTERIOR WALLS FRAMED AT 16" O.C. INTERIOR NON-BEARING WALLS FRAMED AT 24" O.C. REF TO STRUCTURAL SHEETS FOR BEARING WALL SPECIFICATIONS AND PLATE INFORMATION



1 FIRST FLOOR PLAN ELEV 'B'
1/4" = 1'-0" AT 22" X 34" LAYOUT
1/8" = 1'-0" AT 11" X 17" LAYOUT



2 SECOND FLOOR PLAN ELEV 'B'
1/4" = 1'-0" AT 22" X 34" LAYOUT
1/8" = 1'-0" AT 11" X 17" LAYOUT

CENTURY Complete
MORE HOME • LESS MONEY
3091 GOVERNORS LAKE DR.
SUITE 300
NORCROSS, GA 30071
PHONE: 336 282 3606

WJH, LLC © 2021

GRP1 - 'B'

FLOOR PLANS

LOT #:

JOB #:

COMMUNITY:

ADDRESS:

PLAN # / ORIENTATION:
3821811 / LH

SERIES NAME:
DIAMOND

PLAN NAME:

LAST REVISION
2.04

SHEET #
GRP1 1.2

IREDELL COUNTY · NC

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

APPLICATION NUMBER
317056 Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4778698026.000	127 JO CREEK LN	Iredell County

Owner Information	Applicant Information
Name: BARKER PHILLIP P	Name: WJH, LLC
Address:	Address: 9325 CENTER LAKE DR CHARLOTTE, NC 28216
Phone:	Phone: (704)488-1100

Use Requested	Zone Code
Single Family Dwelling	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.603	35	35	15	15	N/A	NO

Remarks
SFD

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

Date: 04/22/2021

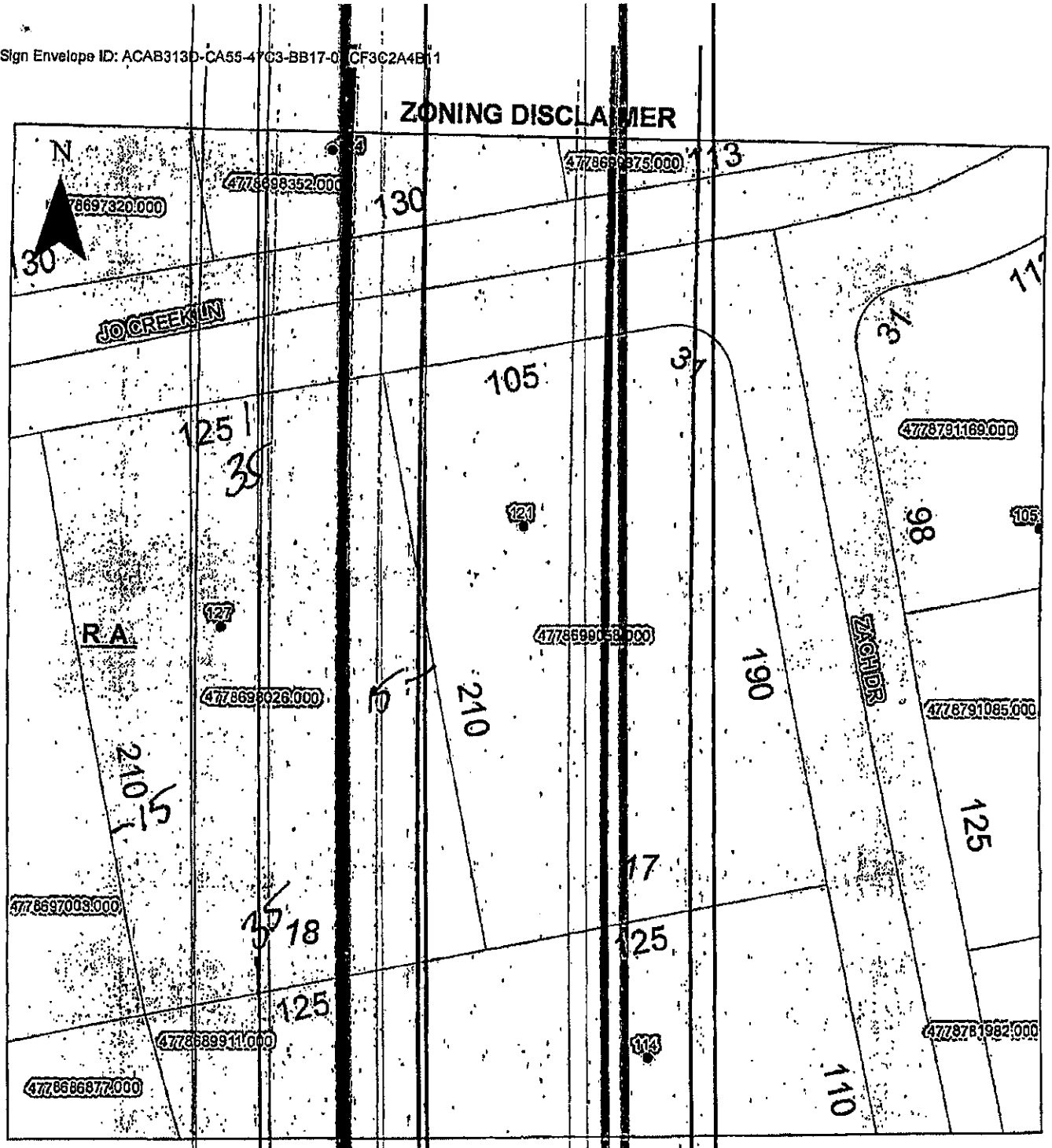
Signature of Owner/Contractor

Permit Number	317056

TOTAL FEES:	$77.25

DocuSign Envelope ID: ACAB313D-CA55-47C3-BB17-0[illegible]CF3C2A4B11

ZONING DISCLAIMER



Property Address 127 Jo Creek LN

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. Applicant further acknowledges that the 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.

DocuSigned by:
Katie Dyess
[illegible]1FF6ADC84D428...

Applicant

4/22/2021

Date