ICHD–ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # AP314005

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

PIN # 4644-48-1036

APPLICANT/OWNER: Michael Benfield | APPLICANT ADDRESS: 939 Brawley School Rd Mooresville NC 28117

SITE ADDRESS: 176 Westpaces Rd Mooresville NC 28117 | PHONE: 704-360-0376 | ALT. PHONE

SITE DIRECTIONS: NC 115 S to Ron Langtree Rd, at traffic circle 3rd exit to Mecklynn Rd, Ron Westpaces Rd, Lot on R

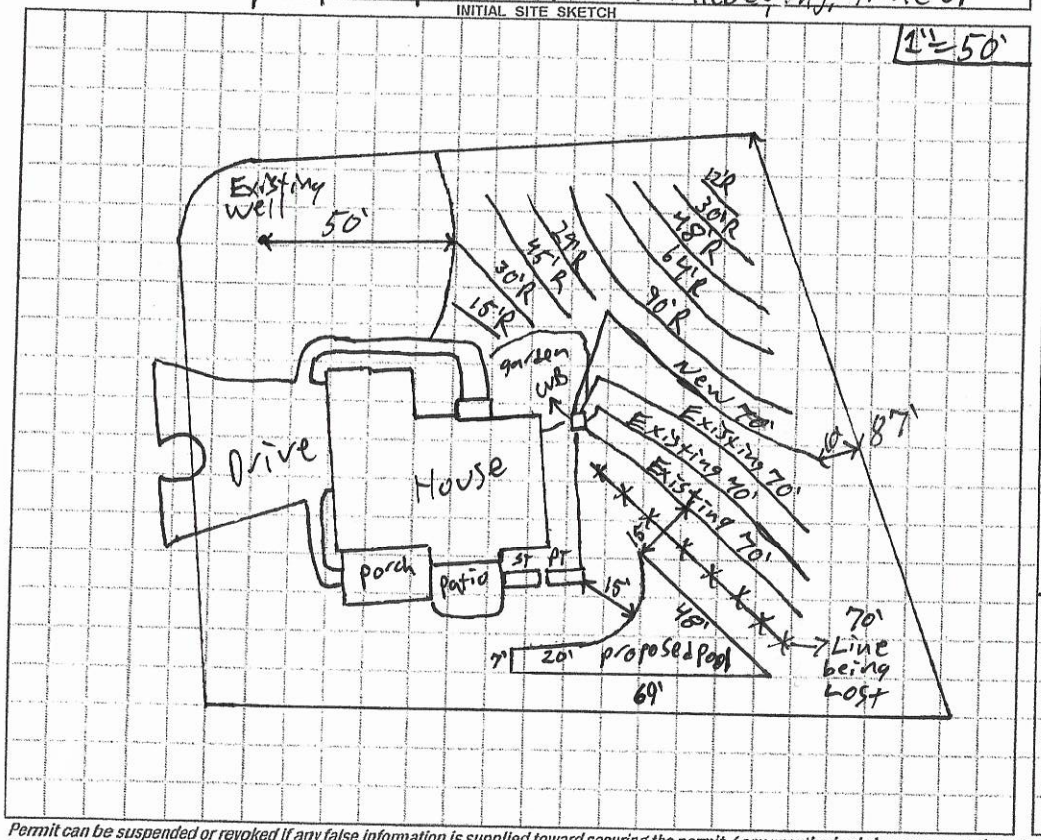
SUBDIVISION: West View | SECTION: – | LOT # 20 | LOT AREA: 0.57 acres | SAB CONTROLLED: ☐ YES ☒ NO | DESIGN FLOW: 480G PD | L.T.A.R.: .3

Septic Tank	Existing	(gal)	STB	Existing	Date	Existing	☒ New System	☐ Repair	☐ Expansion	System Type: I II III (IV) V VI	
Pump Tank	Existing	(gal)	PT	Existing	Date	Existing	System Description:	LPPPBPS			
Pump Make	Existing	Model	Existing		Serial #	Existing	Repair System Description:	LPPPBPS			
# Nitrification Fields	1	# Lines	1		Linear Ft:	70'	Maintenance Agreement Required:	☒ YES	☐ NO		
Trench Width	24"	Trench Bottom Depth(Low side)		34"	Gravel Depth			☐ GRAVITY	☒ PRESSURE		

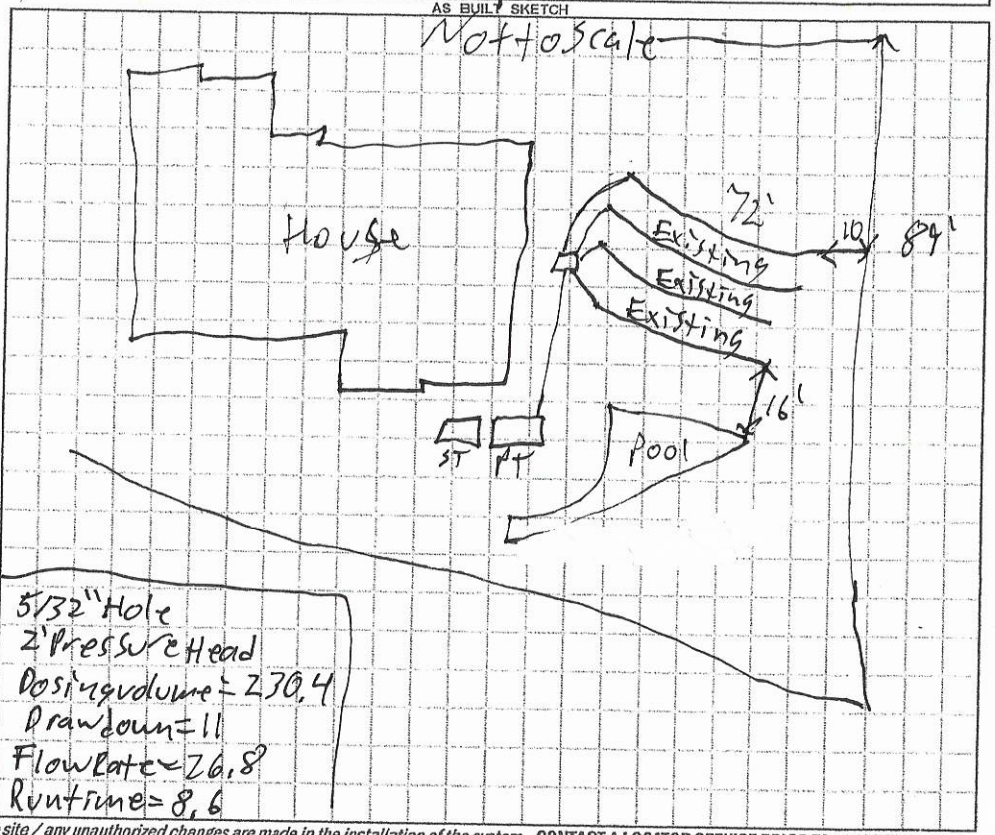
☒ Residence	No. Bedrooms	4	Water Supply
☐ Business	No. Persons	8	☒ Private
☐ Other	No. Employees		☐ Public
☐ Slab	☒ Crawl Space		☐ Community
☐ Basement w/plumbing			☐ Basement w/o plumbing

Comments / Conditions: Install line on contour. Do Not drive on, store material or manipulate drainfield in anyway. All property lines corners and proposed pool must be marked during time of installation and inspection. All parts of septic must be 15' off water's edge of pool. The purpose of this permit is to relocate 1 drainline for new pool.

INITIAL SITE SKETCH



AS BUILT SKETCH



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: Ahmed El-Rafei | Date: 2/19/2021 | Installed by: Presion

IMPROVEMENT PERMIT by: Patrick J Boyle III | Date: 2/12/2021 | OPERATION PERMIT by: Patrick J Boyle III | Date: 3/3/2021

AUTHORIZATION TO CONSTRUCT by: Patrick J Boyle III | Date: 2/12/2021 | Existing System Inspected by: | Date:

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

	Date	Initials
Drain Lines Checked	2/23/2021	PJB
Tanks Checked	2/23/2021	PJB
Pressure Manifold or Valve Box Checked	2/23/2021	PJB
Pressure Head Set	2/23/2021	PJB
Electrical Checked	3/3/2021	PJB
Floats Set	3/3/2021	PJB
Alarm Checked	3/3/2021	PJB
Maintenance Contract Y / N	3/3/2021	PJB
Comments: not attached		

LINE SCHEDULE

LINE NUMBER	COLOR	FIELD ELEVATION	LENGTH (FT)	DESIGN LENGTH (FT)
1	EXISTING	2.7	70	0
2	EXISTING	2.9	70	70
3	EXISTING	3.1	70	70
4	EXISTING	3.4	70	70
5	PINK	4.8	15	0
6	BLUE	3.7	30	0
7	ORANGE	1.6	45	0
8	RED	2.4	99	70
9	GREEN	3.1	90	0
10	YELLOW	4.1	64	0
11	BLUE	4.5	48	0
12	PINK	4.7	30	0
13	WHITE	5	12	0
			TOTAL	TOTAL
			713	280

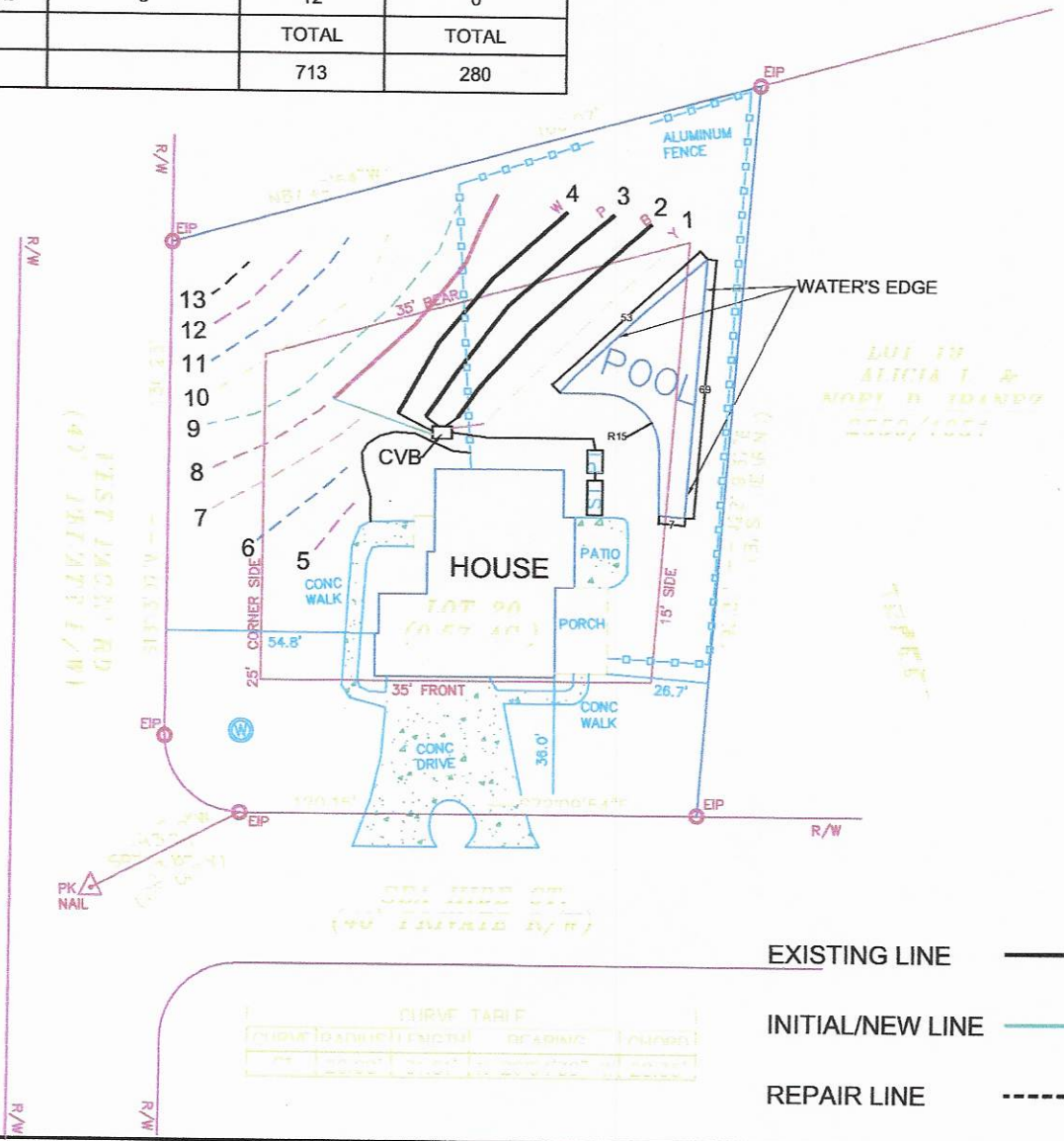
176 WESTPACES RD, MOORESVILLE NC.
SECTION -, LOT 20 WESTVIEW

4-BEDROOM EXISTING LP PBBPS
LINE 2-4 & 8A TOTAL 280 LINEAR FT
LTAR 0.3
25% REDUCTION 8'-9' OC
30-36" TRENCH BOTTOM

4-BEDROOM LP PPBPS SYSTEM
TOTAL 363 LINEAR FEET
LTAR 0.25
36" TRENCH BOTTOM

FOR GENERAL USE NOT A SURVEY
PRELIMINARY NOT FOR CONSTRUCTION

Notes: SOIL INFORMATION PROVIDED BY IREDELL CO
-DROP LINE 1
-USE 70' FROM LINE 8
-REPLACE OR ADJUST VALVES IN CVB



EXISTING LINE

INITIAL/NEW LINE

REPAIR LINE

0 25 50

SCALE:
1" = 50 ft.

BOSS

Benfield Outdoor Services & Solutions, LLC
939 Brawley School Rd, Mooresville, NC 28117 Ph:704-360-0376
Info@yardsbyboss.com

AHMED EL-RAFEI

LOT 20
176 Westpaces Rd,
MOORESVILLE, NC
IREDELL COUNTY

DATE:1/06/20 DRAWN BY:MDB CHECKED BY:MDB

LP PPBPS
Septic System Design

for

176 Westpaces Rd
Mooresville, North Carolina

Designed by:

Michael Benfield
Benfield Outdoor Services & Solutions, LLC
Mooresville, North Carolina
BOSS Project #: 865

01/07/2020

176 Westpaces Rd
Table of Contents

Contact Information	1
Specifications (system)	2
Tap Chart (system)	na
Site Plan (System)	4
Control Panel Specifications	5
Pump Specifications	7
Effuent Filter Specifications	na
Supply Line Hydraulic Profile	na

Attachments

Septic and Pumptank Details	Figure	1
Central Valve Box and Trench Details	Figure	2

176 Westpaces Rd
Contact Information

Client: Ahmed El-Rafei
Attn:
Street Address: 176 Westpaces Rd
Mooresville, NC
Phone: 704-293-8636
Fax: na

Designer: B.O.S.S.
Attn: Michael Benfield
Street Address: 939 Brawley School Rd.
Mooresville NC, 28117
Phone: 704-658-8616
Fax: na

176 Westpaces Rd

Layout/Design Specifications

Facility Type:	Single Family Home
# of Bedrooms:	4
Daily Flow:	480 **gal/day**
L.T.A.R.:	0.300 **gal/day/sq.ft**
Trench Depth:	36 **in**
Trench Width:	36 **in**
Trench Pipe size:	1.25 **in**
Hole Diameter:	0.25 **in**
Number of Panels:	64-66 New line must be 16 panels
CVB Length:	42 **in**
Manifold Diameter:	4 **in sch 80pvc**
Supply Line Length:	40 **ft**
Supply Line Diameter:	2 **in sch 40pvc**
Supply Line Volume:	13.72 **gallons**
Friction Loss + Fitting Loss:	0.50 **ft(supply line length + 70' for fittings in pump tank)**
Design Head:	2 **ft**
Elevation Head:	9.60 **ft**
Total Head:	12.10 **ft**
Dose Volume:	19.52 **gals**
% of Pipe Vol.	.75
Drawdown:	0.97 **in @ 20.16 gal/in**
Pump Run Time:	0.98 **Minutes**
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)
Pump:	Zoeller5032-0008 High Flow (or approved equivalent)
Tank Effluent Filter:	Zoeller 170-0144 residential effluent filter (or approved equivalent)
Septic Tank:	1000 **gallon Shoaf**
Pump Tank:	1000 **gallon Shoaf**

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #: 4644491036
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: Michael Banfield
ADDRESS: 939 Brawley School Rd
PROPOSED FACILITY: Existing Single fa PROPOSED DESIGN FLOW (.1949): 480GPD
LOCATION OF SITE: 176 Westpares
WATER SUPPLY: ☒ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut

APPLICATION DATE 1/8/2021
DATE EVALUATED: 1/28/2021
PROPERTY SIZE: 0.57 acres
PROPERTY RECORDED: yes

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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	SS 5%	0-7	SCL WSBK	Fr SS SP Sexp	—	48"	Litho incl Sap common at bottom	—	PS.3
		7-48	C SBK	Fr SS SP Sexp					
2	SS 5%	0-5	Fill	—	—	50"	Litho incl Sap common at bottom	—	PS.3
		5-9	SCL WSBK	Fr SS SP Sexp					
		9-48	C SBK	Fr SS SP Sexp					
		48-50	CL SBK	Fr SS SP Sexp					
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	267	267
System Type(s)	LPPPBPS	LPPPBPS
Site LTAR	.3	.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: Patrick B
OTHER(S) PRESENT:

COMMENTS:

RECEIVED JAN 0 8 2020

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

AP-314005 $500.00

Iredell County Health Department – Environmental Health Division

PAGE 1: *APPLICATION FORM*

Relocation

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

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

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

The following optional attachments may also be submitted: ( ) 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: BOSS Address: 939 Blandy School Rd Zip: 28117
Applicant Email: BOSSMb86@yahoo.com Phone: 704-360-0376 Alt. Phone: _____
Owner Name: Ahmed El-Rafei Address: 176 Westpaces Zip: 28117
Owner Email: _____ Phone: _____ Alt. Phone: _____

Property Information:

Street Address: 176 Westpaces Rd Mooresville NC 28117
Subdivision Name: Westview Section/Phase: _____ Lot Number: 20
Driving Directions: West on Longtree Rd, S on Mecklynn Rd, Enter in Gate #0733, R on Sea Hide Ct, first lot on Left

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

( ) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ✓ Drain lines Describe Problem: _____

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: 8
(✓) Swimming Pool
( ) Other Addition/Structure: _____

CHECK FOUNDATION TYPE
(✓) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

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 ( ) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* Year existing system installed: _____
( ) No Preference ( ) Alternative ( ) Conventional (✓) Innovative ( ) Modified Conventional ( ) Other: _____

Please answer the following to the best of your ability:

( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) 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: _____ 1-8-20
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*) _____

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, Ahmed Elaff, am the legal owner(s) of the property located at 126 west Paleo Rd, identified as

PIN (Parcel Identification Number)_____, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Mike Bayfield, B.O.S.S., 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.

Ahmed Elaff
Signature of Owner(s)

1/5/21
Date

Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

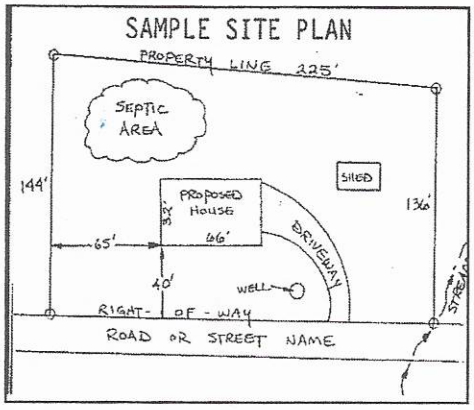
Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

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

Signature: _____ 1-8-20

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

IREDELL COUNTY HEALTH DEPARTMENT

4644-48-1036

STATESVILLE 704-878-5305 MOORESVILLE 704-664-5281

IMPROVEMENT PERMIT / CERTIFICATE OF COMPLETION / OPERATION PERMIT / EXISTING SYSTEM INSPECTION

PROPERTY DESCRIPTION NO. D67583 DATE 9/24/97 TAX MAP NO. 4644481479 P+ Watershed: ☒ Yes ☐ No

OWNER OR CONTRACTOR Crescent Resources PHONE: Business _____ Home _____

ADDRESS P.O Box 1003 Charlotte, NC 28201

LOCATION Langtree TR Mecklynn TR West Paces 1500ft on Rt (corner of West Paces & Seaside Ct)

SUBDIVISION Westview BLOCK / SECTION J LOT 20 LOT AREA .54 SITE CLASS. PS DESIGN FLOW 480gpd L.T.A.R. .3

Septic Tank: 1000 Gallons; STB 794 Date 4/19/01

Pump Tank: 1000 Gallons; PT 283 Date 6/16/02

Pump Make: Little Giant Model 9 EH-CIA-SP Serial No. _____

Nitrification Field: No Fields 1 Square Feet 560' Linear Feet 280'

No Lines 4 at 70' Trench Width 24" Max Trench Bottom Depth ~30" Gravel Depth N/A

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

System Description: Pump - Paved Blk

Repair System Description: Same

Maintenance Agreement Required: ☒ Yes ☐ No

☒ House/Mod. Home No. Bedrooms 4

☐ Mobile Home No. Bathrooms 4

☐ Business No. Employees _____

☐ Other _____

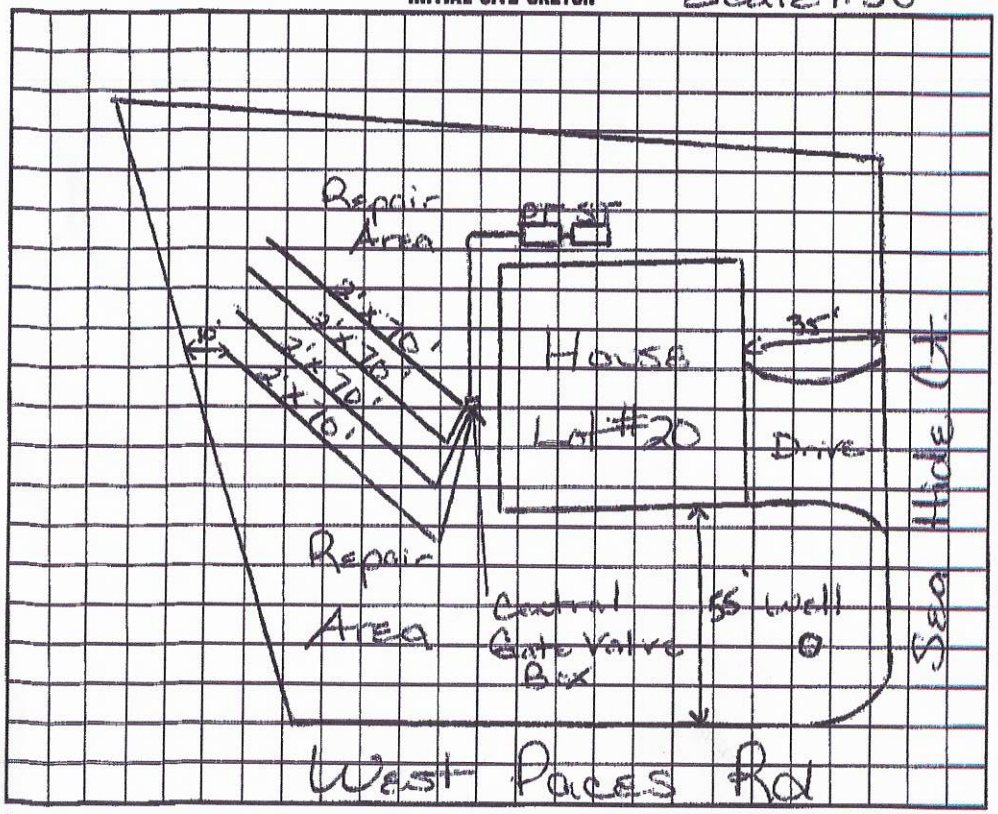
☐ Slab ☒ Crawl Space ☐ Basement w/plumbing ☐ Basement wo/plumbing

Water Supply: ☒ Individual ☐ Community ☐ Public

Comments: Well must be drilled well. 7/27/01 Reviewed plan - essentially complying with permit.

Comments:

INITIAL SITE SKETCH Scale 1:50



AS BUILT SKETCH

Installed As Drawn

I understand that this 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. Improvement Permit is valid for 60 months from date of issuance.

Signed: _____

Improvement Permit by: Mary H. Dotson date 9/24/97

Existing System Inspection by: Wm. Sparks RS date 7/27/01

Installed by: Gerald Tucker

Certificate of Completion by: _____ RS date 10/24/02

Operation Permit by: _____ date _____

HEALTH DEPT. COPY: WHITE / INSPECTION COPY (FINAL): GREEN / OWNER COPY (FINAL): YELLOW / INSPECTION COPY (INITIAL): PINK / OWNER COPY (INITIAL): GOLD