IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 225593

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

PIN # 4626-10-2884

APPLICANT/OWNER: IQ Custom Construction APPLICANT ADDRESS: 840 Edmiston Rd. Mt. Ulla 28125

SITE ADDRESS: 226 Barber Loop. Mooresville, NC 28117 PHONE: 704-578-4951 ALT. PHONE

SITE DIRECTIONS: BSR towards Lake Norman → R on Chuckwoal Rd → L on Barber Loop → Lot/House on R SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Watertree Landing SECTION: PH4 LOT # 69 LOT AREA: 0.71 acres DESIGN FLOW: 480 GPD L.T.A.R.: 0.30

Septic Tank	1000 (gal)	STB	825	Date	9-2-14	☒ New System	☐ Repair	☐ Expansion	System Type: I II (III) IV V VI	☒ Residence	No. Bedrooms 4
Pump Tank	1000 (gal)	PT	302	Date	5-3-17	System Description: 25% Reduction (PM)				☐ Business	No. Persons 8
Pump Make	Zoeller	Model	N152	Serial #		Repair System Description: 50% Reduction CLP-PPLPS)				☐ Other	No. Employees
# Nitrification Fields	1	# Lines	6	Linear Ft	400	Maintenance Agreement Required:	☐ YES	☒ NO		☒ Slab	☐ Crawl Space
Trench Width	36"	Trench Bottom Depth(Low side)	★variable★	Gravel Depth	—		☐ GRAVITY	☒ PRESSURE		☐ Basement w/plumbing	

Water Supply: ☒ Private ☐ Public ☐ Community ☐ Basement w/o plumbing

Comments / Conditions: ★ Beginning + ends of trenches will have variable installation depths however NO PART OF ANY TRENCH MAY HAVE A TRENCH BOTTOM EXCEEDING 36." Trench bottoms must still be level. LTB@ end of one line may be 36" but only 26" at other end ★

Recommend pumping septic tank every 3-5 years.

★ Preconstruction inspection REQUIRED ★ Call 704-902-4489 to schedule. meeting ★ House already built ★

INITIAL SITE SKETCH

See attached plans from The Oaks Group

Kathleen Saunders LSS # 1313

Dated: 9/22/17

Revised: 10/11/17

AS BUILT SKETCH

10/26/17 Checked tanks & lines & Set 2ft pressure

11/2/17: - Seperate breakers OK
- Piggy-back setup ok
- Alarm OK.

-SR

	Date	Initials
Drain Lines Checked	10/26/17	MD
Tanks Checked	10/26/17	MD
Pressure Manifold or Valve Box Checked	10/26/17	MD
Pressure Head Set	10/26/17	MD
Electrical Checked	11/2/17	SR
Floats Set	10/26/17	MD
Alarm Checked	11/2/17	SR
Maintenance Contract Y (N)	not Required	

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: Kathleen Saunders Date: 10-16-17 Installed by: Rowan Septic

IMPROVEMENT PERMIT by: Tom Shuck Date: 10/13/17 OPERATION PERMIT by: Tom Shuck Date: 11/2/17

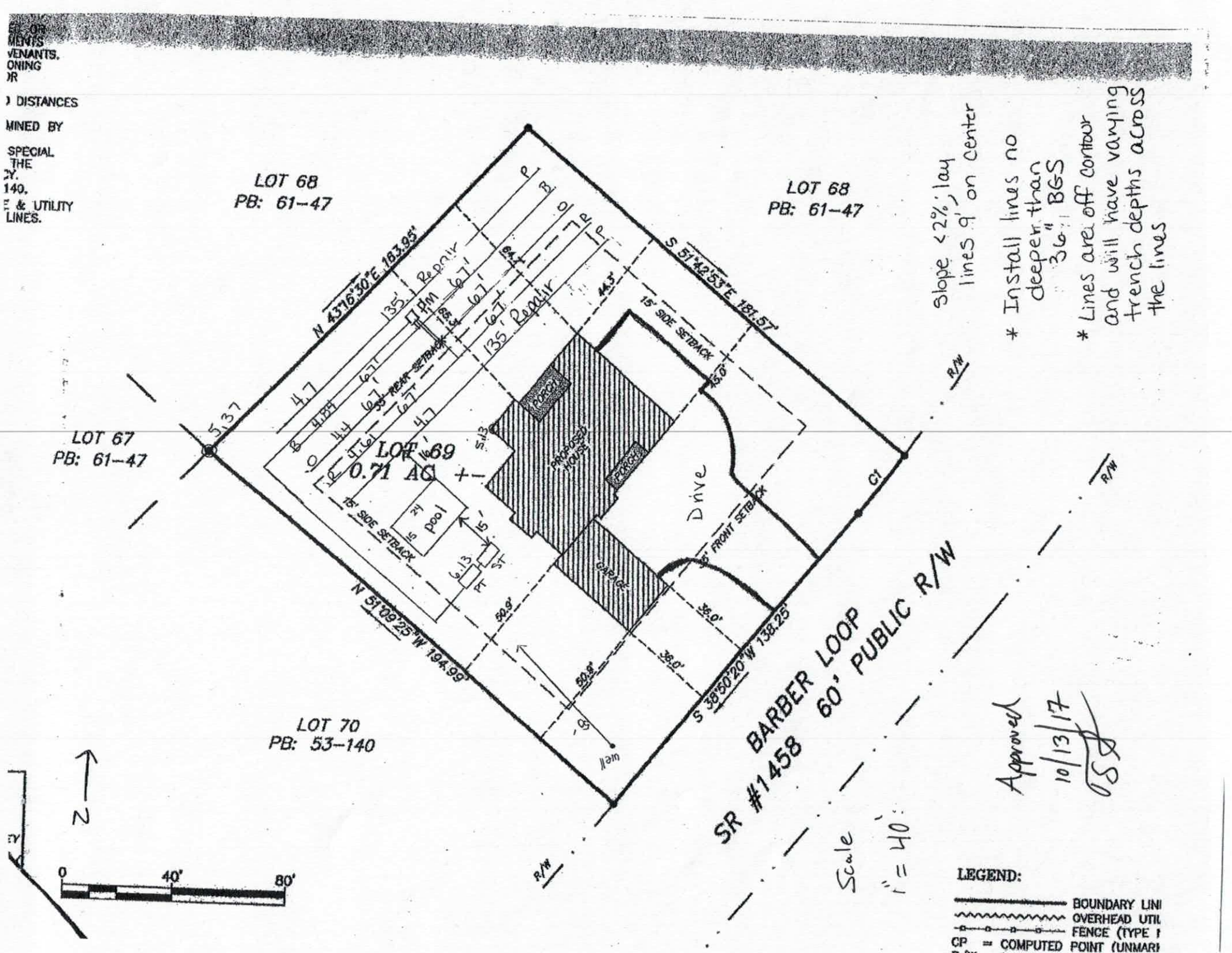
AUTHORIZATION TO CONSTRUCT by: Tom Shuck Date: 10/13/17 Existing System Inspected by: Date:

...OR
...MENTS
...VENANTS,
...ONING
...OR

...) DISTANCES

...MINED BY

...SPECIAL
...THE
...Y.
...140.
...& UTILITY
...LINES.



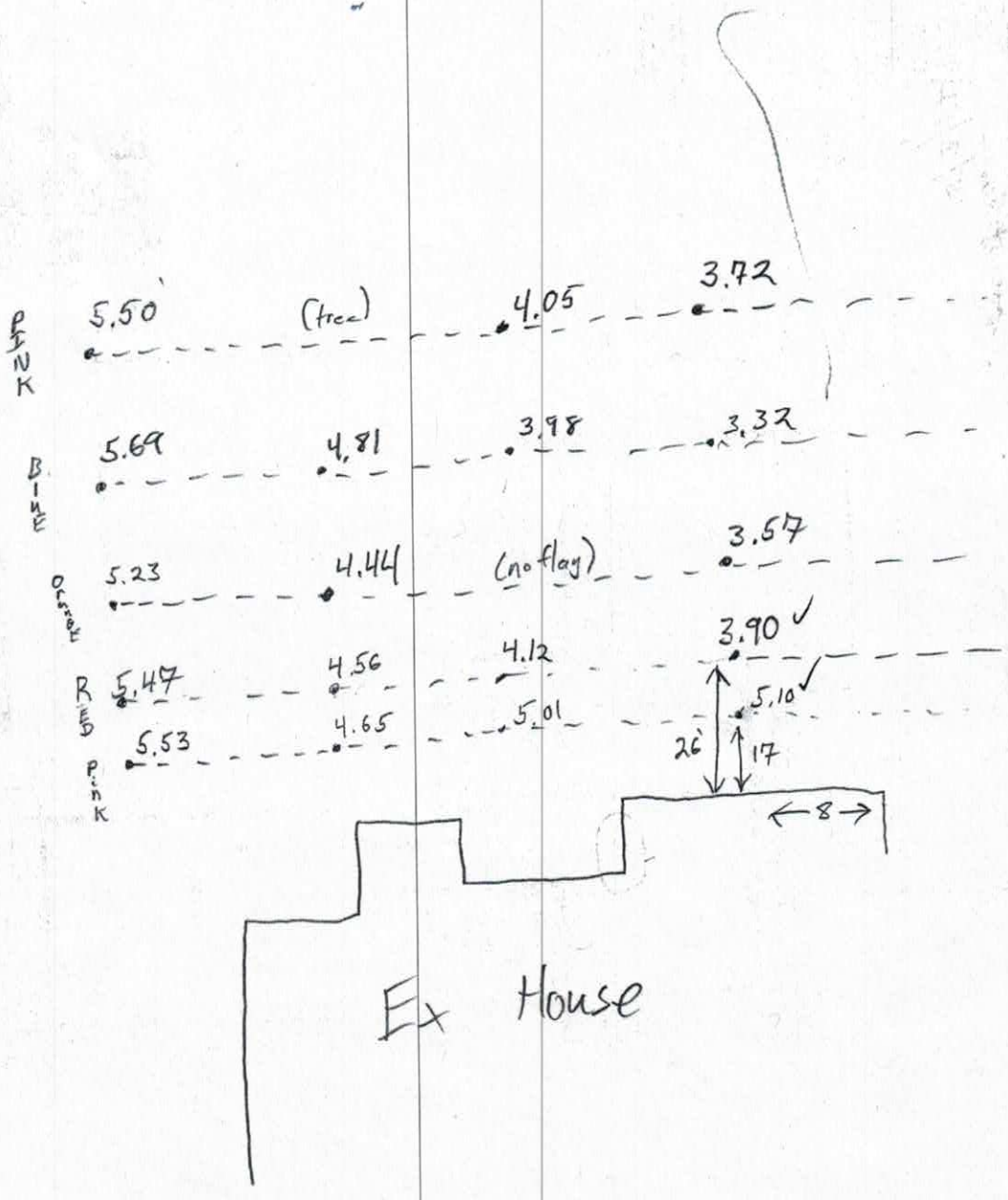
Slope <2%; lay lines 9' on center

* Install lines no deeper than 36" BGS
* Lines are off contour and will have varying trench depths across the lines

Approved
10/13/17

LEGEND:

BOUNDARY LINE
OVERHEAD UTIL
FENCE (TYPE
CP = COMPUTED POINT (UNMARK



- Kathleen, Heath + Brady Present

Watertree Lot 69 Fast Track Septic Spec Sheet

Number of Bedrooms	**4**
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.3**
Primary System Type	**25% Reduction**
No. Lines	6 (See Table)
Total Linear Feet	402
Trench Width	3' min.
Trench Spacing	9' min.
Max Trench Depth	30"
Pump Required	Yes
Distribution Device	Pressure Manifold
Maintenance Agreement Required	No
Length and Diameter of Supply Pipe	175' of 2" SCH 40 PVC
Flow Rate through the system	33 gpm
Elevation head	Approx. 7.73'
Pressure head	2.0'
Friction head	4.1'
20% Contingency	2.8'
Total Head	16.6'
Pump Requirements	33 gpm @ 16.6' of head To be designed by installer.
Maximum Dosing Volume	240 gal -2.0 doses/day @ design flow
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	14.5
Repair System	**LP PPBPS**
Total Linear Feet	270
Repair Loading Rate	0.3

Approved
10/13/17

Table: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Elevation (Ft.)
1	Repair	Pink	LP PPBPD	135	4.7
2	System	Blue	25% Reduction	67 endfed	4.84
3	System	Blue	25% Reduction	67 endfed	4.84
4	System	Orange	25% Reduction	67 endfed	4.4
5	System	Orange	25% Reduction	67 endfed	4.4
6	System	Red	25% Reduction	67 endfed	4.61
7	System	Red	25% Reduction	67 endfed	4.61
8	Repair	Pink	LP PPBPD	135	4.7
				Total System: 402'	
				Total Repair: 270'	

Tank	Red	1000 gal (2 compartment)	
Pump Tank	Red	1000	6.13
House	blue		5.13

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	6
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

Note: **All rod readings should be verified by installer prior to installation**
Tank Locations and distribution devices may be altered at the discretion of the ICHD
slope less than 2 percent, lay lines 9 ft on center
Lines will have varying trench depths. Install no lines greater than 36" below ground surface.

Approved
10/13/17

Sheet 1 of 1
PROPERTY ID #: 4626 TO 2884
COUNTY: Iredell

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

OWNER: IQ Custom Cont. — APPLICATION DATE 3-29-17
ADDRESS: 840 Edmiston Rd Mt Ulla — DATE EVALUATED: 3-21-17
PROPOSED FACILITY: SFR — PROPOSED DESIGN FLOW (.1949): 480 — PROPERTY SIZE: 0.71 AC
LOCATION OF SITE: Barber Coop Lot 69 Watertree — PROPERTY RECORDED: ✓
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other
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	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1 ✓	old L <2%	0-9	Mo GR SL	FR ns/np	Br	60+	N/A	N/A	0.3 PS
		9-46	Mo ABK C	FR SS/SP	R				
		46-60	Wk SBK C	↓	R; F Sap				
		40-64"							
2 ✓	old L 2%	0-6	Mo GR SL	FR SS/np	Br	60+	N/A	N/A	0.3 PS
		6-41	Mo ABK C	FR SS/SP	R; F Br				
		41-60	Wk SBK C	↓	R; F Sap				
3	new 2% L ✓	0-6	Mo GR SL	FR ns/np	Br	55+	N/A	N/A	0.3 w/ 36" TB
		6-24	Mo ABK C	FR SS/SP	R; F Br/yel Br				
		24-55	Wk SBK C	↓	R; F/C sap				
		46-56"	Clay loam w. SBK	sl. FR sl. SS, sl. Sap					
4	new L 2% ✓	0-21	Mo SBK C	FR SS/SP	R; F Br	48+	N/A	N/A	0.3 PS
		21-48	Wk SBK CL	↓	R; C Sap				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25% Red	LP PPBPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: KMS
OTHER(S) PRESENT: ELH
Tom Shuck 4/18/17 (Pits 1-4) OK

COMMENTS:

Updated February 2014

APPROVED APR 19 2017

RECEIVED SEP 2 2 2017

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM* Int. Relayout $225.00

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

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITI IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTEI 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 #225593

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

Applicant Information: contact Kathleen Saunders (704) 578-4951

Applicant Name: IQ Custom Const. **Address:** 840 Edmiston Rd Mt Ulla 28125 **Phone:**

Owner Name: Same **Address:** **Phone:**

Property Information:

Street Address: 226 Barber Loop Mooresville 28117

Subdivision Name: Watertree Landing **Section/Phase:** P4 **Lot Number:** 69

Driving Directions: Brawley School Rd, Right on Chuckwood. Left at first Barber Loop, lot on right

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

- (X) New Single Family Residence
- ( ) New Multi-Family Residence
- ( ) Accessory Building
- ( ) Bedroom(s) Addition

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

- ( ) Crawl Space Foundation
- (X) Concrete Slab Foundation
- ( ) Basement with Plumbing
- ( ) Basement without Plumbin

Non-Residential Site Development:
Type of Business:
Square Footage of Building:
Maximum Number of Employee:
Maximum Number of Seats/Beds/Other:

Water Supply: 14x30

(X) 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 (X) No Does the site contain any jurisdictional wetlands?
- ( ) Yes (X) No Is any non-domestic sewage (i.e. industrial) to be generated?
- ( ) Yes (X) 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: Emma Helt
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

~~3/20/17~~ 9/22/17
DATE

RECEIVED MAY 2 - 2017

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM*

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:
Place an (X) beside whichever is submitted if applicable
( ) Survey Plat, scaled no more than 1 inch = 60 feet
( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

Applicant Name: IQ Custom Construction **Address:** 840 Edmiston Rd Mt Ulla NC 28125 **Phone:** 980-297-2329

Owner Name: IQ Custom Construction **Address:** 840 Edmiston Rd Mt Ulla NC 28125 **Phone:** 980-297-2329

Property Information:

Street Address: 226 Barber Loop Road Mooresville NC 28117

Subdivision Name: watertree Landing **Section/Phase:** _____ **Lot Number:** 69

Driving Directions: 77 south to Brawley school road, right on Brawley school Rd, turn right in 3-4 miles onto Chuckwood Rd, turn left in a mile onto Barber Loop Rd, house is a mile down Barber Loop Rd on the right

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

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

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

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

Non-Residential Site Development:
Type of Business: _____
Square Footage of Building: _____
Maximum Number of Employee: _____
Maximum Number of Seats/Beds/Other: _____

Water Supply:

(✓) 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 to that a complete site evaluation can be performed.

Signature: _____
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

5-2-17
DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

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.

I, IQ Custom Construction, am the legal owner(s) of the property located at 226 Barber Loop, identified as PIN (Parcel Identification Number) _____, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) The Oaks Group, 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.

[signature]	3/31/16	[signature]	3-31-16
Signature of Owner(s)	Date	Signature of Witness	Date

Please return this signed form to the appropriate office:

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

Acknowledgement of
Plans Submittal ONLY!

12-111-2

5/1/17 Date

Tom Hauck 5/1/17 Date

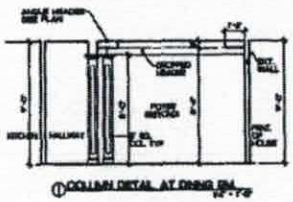
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20'-0"

77'0"

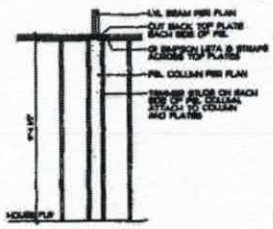
70'-6"

49'-0"

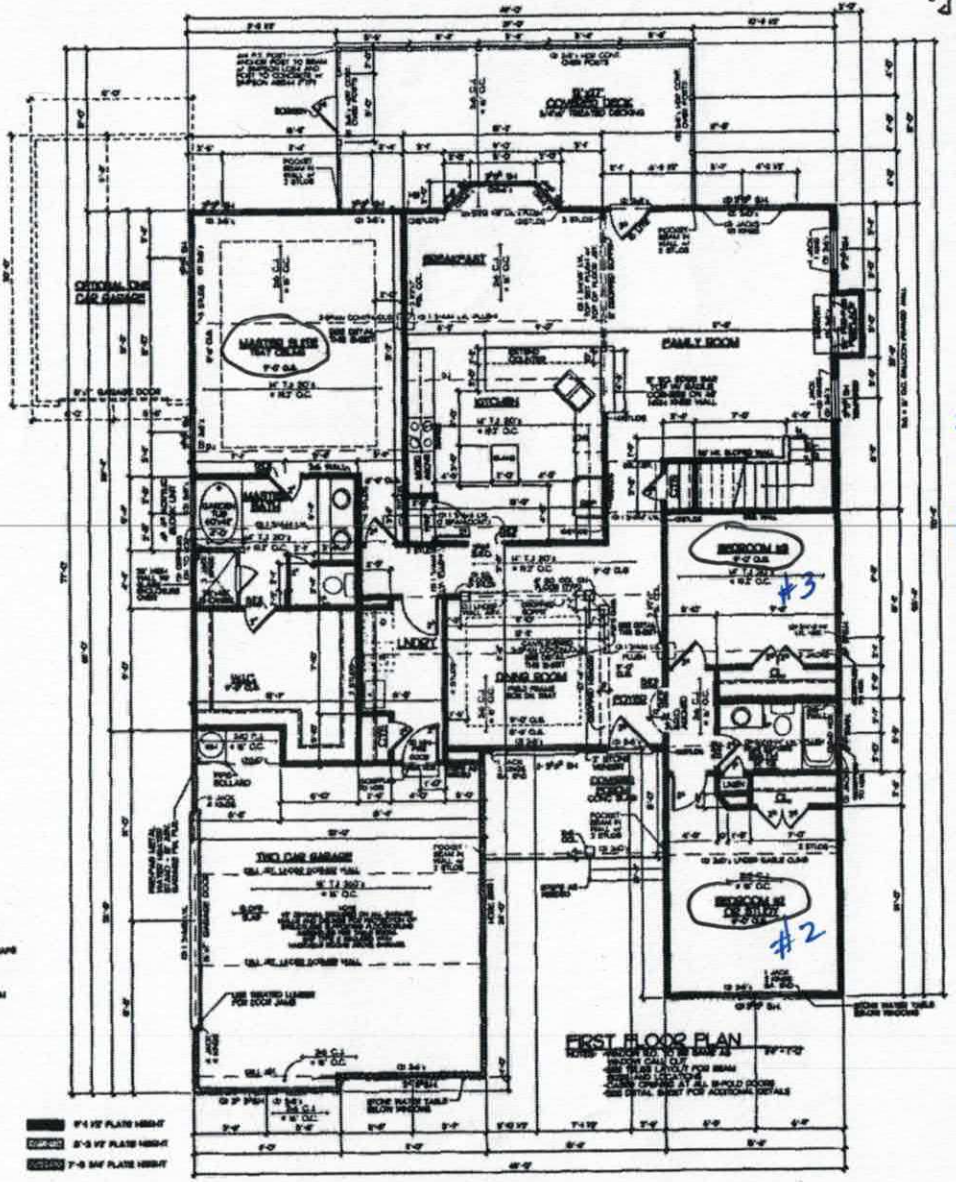


TYPICAL INTERIOR COLUMN IN PLAN





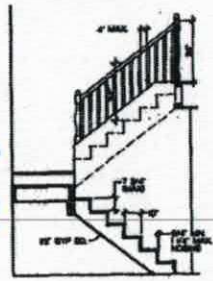
TYPICAL PIER COLUMN DETAIL



FIRST FLOOR PLAN

SQUARE FOOTAGE	
FIRST FLOOR	2220
SECOND FLOOR	1578
TOTAL	3,803
FRONT PORCH	106
SCREEN PORCH	212
2 CAR GARAGE	535

HANDRAIL NOTE



TYPICAL STAIR DETAIL

IQ CUSTOM CONSTRUCTION

The Cedar

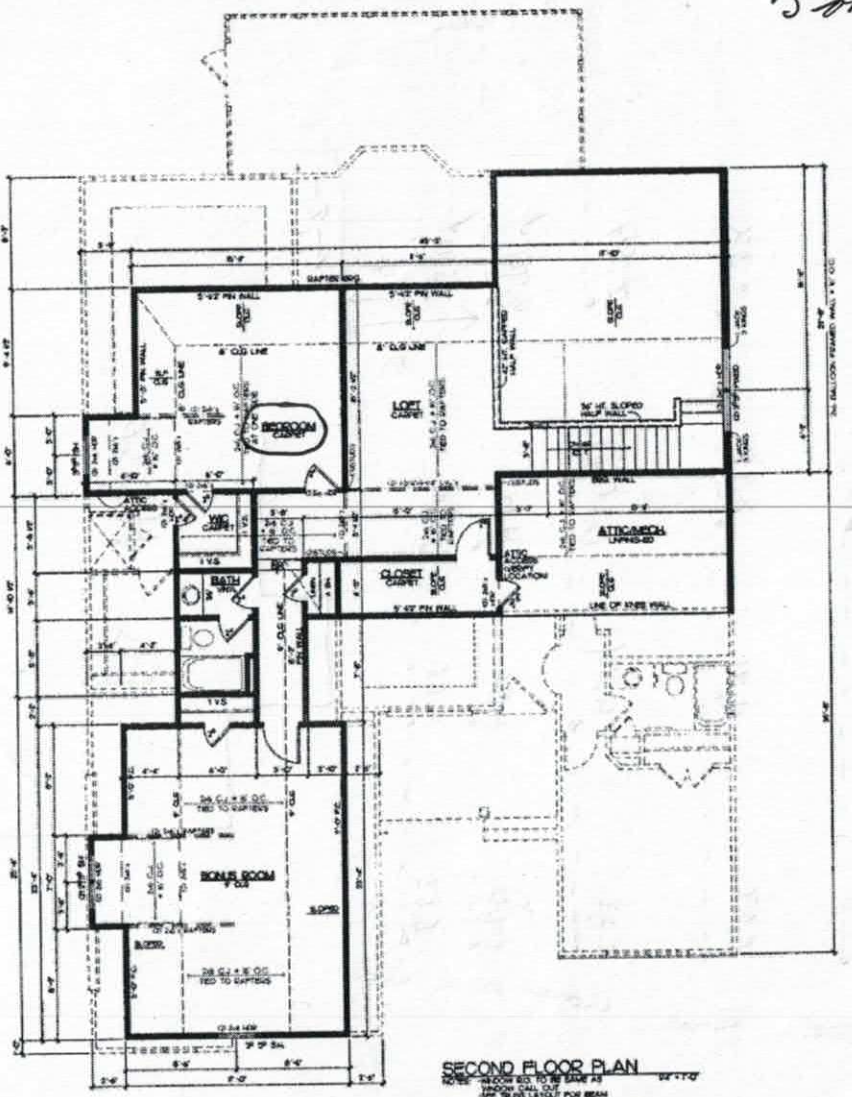
FIRST FLOOR PLAN

3

Acknowledgement of
Plans Submittal ONLY!

5/1/17
Date

5/3/17



SECOND FLOOR PLAN

Southern Dynamic Engineering and Design, PLLC
P.O. Box 87
Waxhaw, NC 28173
Seal for Structural Only
NC Certificate of Licensure P-0713

IQ CUSTOM CONSTRUCTION

Project: The Cedar
Sheet Title: SECOND FLOOR PLAN

Drawn By: J. BOSHAR
Date: 6-27-14
Rev: 09-10-14

CEDAR 2F
Sheet 4

GENERAL NOTES:
1. ALL FRAMING WALLS THAT FORM THE INTERIOR PERIMETER OF A HOME INSTALL HOUSE INSULATION (BATT/LOOSE FIBER) SHALL MEET OR EXCEED THE REQUIREMENTS OF THE 2009 NORTH CAROLINA RESIDENTIAL CODE (2012 IECC) AND SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING: ATTIC KNEE WALLS, ATTIC ACCESS DOOR, FIREPLACE (IF APPLICABLE) AND THE UNHEATED SIDE OF ALL WORK WALLS.

2. ALL SIDE OF OPENING WINDOWS AND DOORS SHALL HAVE A SILL OF OR SHALL BE LOCATED NO HIGHER THAN 44" ABOVE THE FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. 5" PER SECTION R312.2 OF THE 2009 NORTH CAROLINA RESIDENTIAL CODE.

WALL BRACING NOTES:
1. THE LATERAL BRACING REQUIREMENTS FOR THIS PLAN HAVE BEEN ACCOUNTED FOR UTILIZING AN ENGINEERED DESIGN AS PERMITTED IN SECTION R301.1 OF THE 2009 NORTH CAROLINA RESIDENTIAL CODE (2012 IECC) AMENDMENTS.

2. ALL FRAMING WALLS ARE TO BE FULLY SHEATED WITH A MINIMUM 7/16" OSB AND ATTACHED TO THE WALL FRAMING STUDS WITH 6d COMMON NAILS AT 6" OC SPACING AT PANEL EDGES AND 6" OC AT INTERMEDIATE SUPPORTS.

3. INSTALL BLOCKING ALONG OSB PANEL EDGES. PANEL EDGES TO BLOCKING AT 3" OC AND 6" OC AT INTERMEDIATE FRAMING MEMBERS. PANEL EDGES SHALL BE BLOCKED WHERE GREATER THAN 200 OF THE WALL IS SHEATHED.

4. SHEATH ALL GABLE END WALLS WITH 7/16" OSB.

DESIGNED AND ENGINEERED TO COMPLY WITH THE 2009 NCRC

IREDELL COUNTY

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

APPLICATION NUMBER
225593
Issue Date: 03/13/2017

ZONING PERMIT

Open Space

Parcel Number	Street Address	Jurisdiction
4626102884.000	226 BARBER LOOP, MOORESVILLE, NC	IREDELL COUNTY

Owner Information	Applicant Information
Owner: BAKER MARK+NANCY	Applicant: KATHLEEN SAUNDERS
Address: 4405 CANAL RD SPENCERPORT, NY 14559	Address: 121 HOLT LANE MOORESVILLE, NC 28117
Phone:	Phone: 704-578-4951

Use Requested	Zone Code
SFD REPLACING PERMIT 148877	RR

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
.710	35.00	35.00	15.00	15.00	CACL	X

Remarks:

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.

Applicant: _____ Date: _____

Permit Number	96045	TOTAL FEES:	$ 77.25