CHD - ENVIRONMENTAL HEALTH DIVISION

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

PERMIT # 312631

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

PIN # 4730 -70 -3568

APPLICANT/OWNER: 4G Design Build APPLICANT ADDRESS: 488 Pineville Rd Statesville 28677

SITE ADDRESS: 148 Crooked Bomb Way Troutman NC 28166 PHONE: ALT. PHONE

SITE DIRECTIONS: Perth, Winding Forest Drive @ Crooked Branch on Right SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Winding Forest SECTION: - LOT # 49 LOT AREA: .893 DESIGN FLOW: 360 L.T.A.R.: .25

Septic Tank	1000	(gal)	STB	SHOAF 760	Date	8/16	☒ New System	☐ Repair	☐ Expansion	System Type: I II III (IV) V VI		☒ Residence	No. Bedrooms	3	Water Supply		
Pump Tank	1000	(gal)	PT	SHOAF 363	Date	9/17	System Description:	LP-Pivel Block - 50% Reduction				☐ Business	No. Persons	6	☐ Private		
Pump Make	Liberty	Model		280-5	Serial #		Repair System Description:	Subsurface Drip				☐ Other	No. Employees		☐ Public		
# Nitrification Fields	1	# Lines		3	Linear Ft	240	Maintenance Agreement Required:	☒ YES	☐ NO			☐ Slab	☒ Crawl Space		☒ Community		
Trench Width	24	Trench Bottom Depth (~~Lowside~~)		30 is Max	Gravel Depth			☐ GRAVITY	☒ PRESSURE			☐ Basement w/plumbing			☐ Basement w/o plumbing		

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:

The Oaks Group, PA

LSS # 1313

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.

As Built Attached

	Date	Initials
Drain Lines Checked	10/15/21	DW
Tanks Checked	10/15/21	DW
Pressure Manifold or Valve Box Checked	10/15/21	DW
Pressure Head Set	10/15/21	DW
Electrical Checked	3-9-22	
Floats Set	10/19/21	DW
Alarm Checked	3-9-22	
Maintenance Contract (Y) / N	3-9-22	

* Water line moved 10' from system

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: 12-9-2020 Installed by: Andrew Daywalt

IMPROVEMENT PERMIT by: Benjamin A Bell Date: 11-20-2020 OPERATION PERMIT by: Date: 3-9-2022

AUTHORIZATION TO CONSTRUCT by: Benjamin A Bell Date: 11-20-2020 Existing System Inspected by: Date:

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

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

ON-SITE WATER PROTECTION BRANCH

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: ___

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

OWNER: 4G Design Build — APPLICATION DATE ___
ADDRESS: 488 Pineville Rd 28677 — DATE EVALUATED: 11/6/2020
PROPOSED FACILITY: SFR — PROPOSED DESIGN FLOW (.1949): 360 — PROPERTY SIZE: 0.893
LOCATION OF SITE: Winding Forest 49 — PROPERTY RECORDED: yes
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	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	L 5-10%	0-8	MoGRSL	FR NS/NP	Br				
		8-34	Mo SBKC	FR SS/SP	R				
		34-48	WK SBKC	↓	R; F/C sap	48+	N/A	N/A	0.3
2	L 5-10%	0-8	Mo GR SL	FR NS/NP	Br				
		8-39	Mo SBKC	FR SS/SP	R; C yel Br				
		39-48	WK SBKC	↓	R; C sap	48+	N/A	N/A	0.25
3	L 3-5%	0-8	Mo GR SL	FR NS/NP	Br				
		8-20	Mo SBK C	FR SS/SP	R; C yel Br				
						20+	N/A	N/A	0.1 drip
4	L 3-5%	0-8	Mo GR SL	FR NS/NP	Br				
		8-24	Mo SBK C	FR SS/SP	R; C yel Br				
						24+	N/A	N/A	0.1 drip

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	LP PPBPS	Sub. drip
Site LTAR	0.25	0.1

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): ___
EVALUATED BY: KMS
OTHER(S) PRESENT: ___

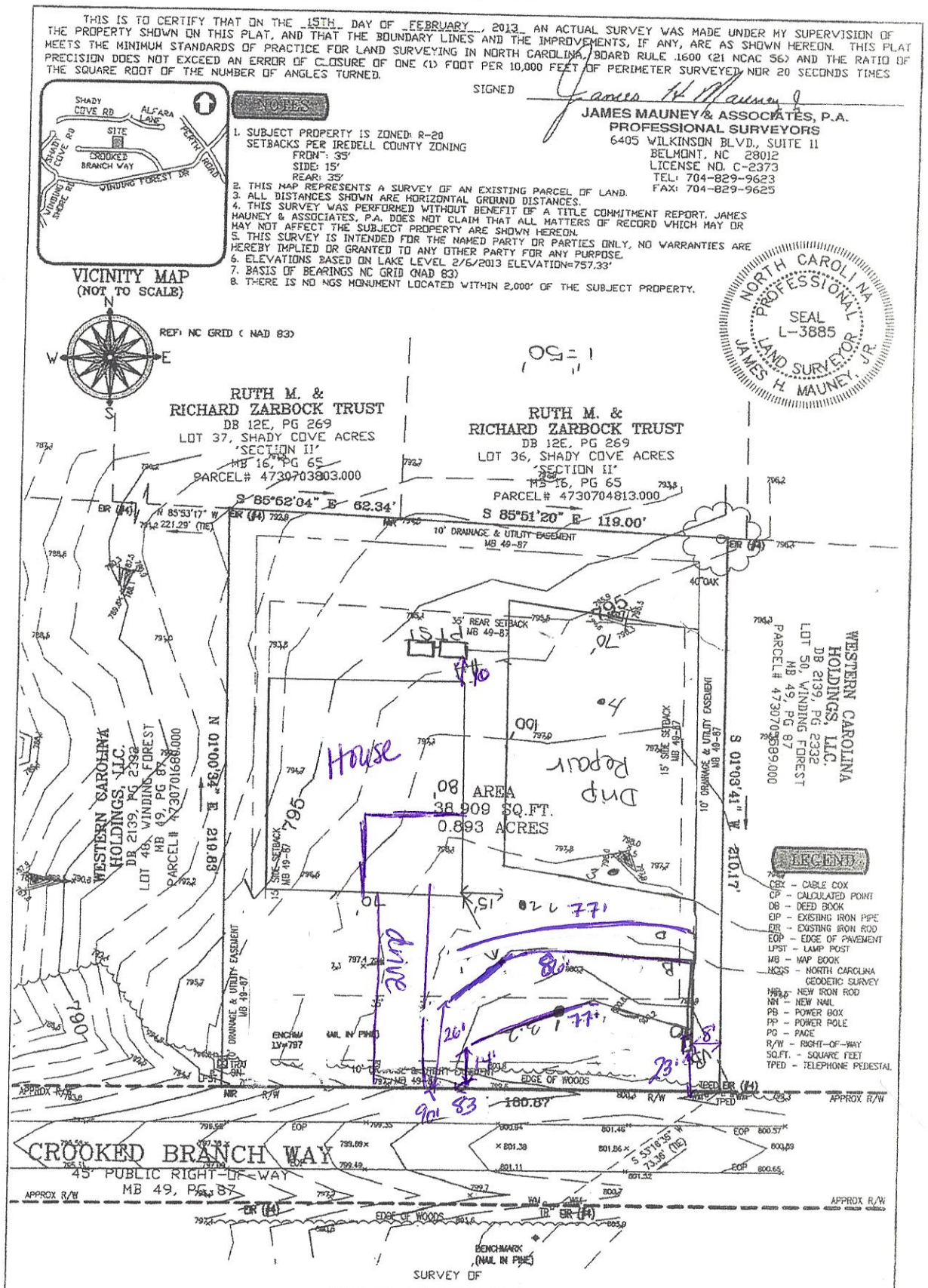
LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
1313
STATE OF NORTH CAROLINA

COMMENTS: ___

Updated February 2014

#3 Built: NTS

148 Crooked Branch



SURVEY OF

LOT 49, WINDING FOREST

FALLSTOWN TOWNSHIP, IREDELL COUNTY, NORTH CAROLINA

PREPARED FOR QUINTON GANDY

SCALE 1"=40'

FLOOD CERTIFICATION

THIS IS TO CERTIFY THAT THE SUBJECT PROPERTY IS NOT

2 Session Law $1200

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM RECEIVED NOV 13 2020 AP-312631

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(X) 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

The following optional attachments may 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: 4G Design Build Address: 488 Pineville Rd 28677 Zip: _____

Applicant Email: _____ Phone: _____ Alt. Phone: _____

Owner Name: Same Address: _____ Zip: _____

Owner Email: _____ Phone: _____ Alt. Phone: 704-578-495 (SS)

Property Information:

Street Address: 148 Crooked Branch Way

Subdivision Name: Winding Forest Section/Phase: _____ Lot Number: 49

Driving Directions: Perth, Winding Forest Dr, R Crooked Branch, on R

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

(X) 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: 3
Maximum Number of Occupants: 6
( ) Swimming Pool
( ) Other Addition/Structure: _____

CHECK FOUNDATION TYPE
(X) 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 (X) 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: Kathleen Saunders 11-9-2020
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

SITE PLAN WORKSHEET

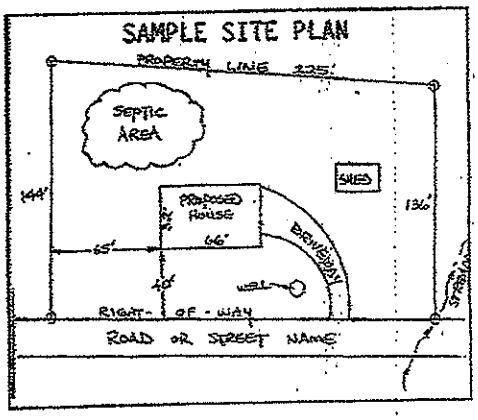
SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM OR WELL PERMIT!!!***

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

- (✓) Property Line measurements are clearly identified
- (✓) All proposed structures are indicated
- (✓) Front and side setbacks from property line
- (✓) Preferred driveway location
- (✓) Preferred well location
- (✓) Preferred septic system location
- (✓) 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

Please see Attached

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

11-9-2020
DATE

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, 4G Design Build, am the legal owner of the property located at 148 Crooked Branch Way identified as PIN(Parcel Identification Number) _____, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) The Oaks Group _____, _____, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

[signature] 11/9/2020
Signature of Owner Date

_____ _____
Signature of Witness Date

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

APPLICATION NUMBER
312631 Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4730703568.000	148 CROOKED BRANCH WAY	Iredell County

Owner Information	Applicant Information
Name: WATERVIEW INVESTMENTS LLC	Name: THE OAKS GROUP
Address: 488 PINEVILLE RD	Address: 121 HOLT LN
STATESVILLE, NC 28677	MOORESVILLE, NC 28117
Phone:	Phone: (704)578-4951

Use Requested	Zone Code
Single Family Dwelling	R-20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.893	35	35	15	15	WSIV-CA Catawba/Lake Norman	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: 11/13/2020

Signature of Owner/Contractor

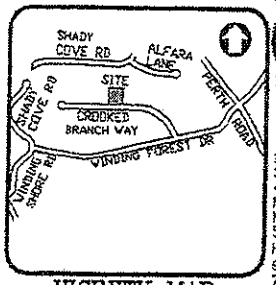
Permit Number	312631

TOTAL FEES:	$77.25

THIS IS TO CERTIFY THAT ON THE 15TH DAY OF FEBRUARY, 2013 AN ACTUAL SURVEY WAS MADE UNDER MY SUPERVISION OF THE PROPERTY SHOWN ON THIS PLAT, AND THAT THE BOUNDARY LINES AND THE IMPROVEMENTS, IF ANY, ARE AS SHOWN HEREON. THIS PLAT MEETS THE MINIMUM STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA, BOARD RULE .1600 (21 NCAC 56) AND THE RATIO OF PRECISION DOES NOT EXCEED AN ERROR OF CLOSURE OF ONE (1) FOOT PER 10,000 FEET OF PERIMETER SURVEYED NOR 20 SECONDS TIMES THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED.

SIGNED James H Mauney Jr

JAMES MAUNEY & ASSOCIATES, P.A.
PROFESSIONAL SURVEYORS
6405 WILKINSON BLVD., SUITE 11
BELMONT, NC 28012
LICENSE NO. C-2373
TEL: 704-829-9623
FAX: 704-829-9625



VICINITY MAP
(NOT TO SCALE)

NOTES:

1. SUBJECT PROPERTY IS ZONED: R-20
   SETBACKS PER IREDELL COUNTY ZONING
   FRONT: 35'
   SIDE: 15'
   REAR: 35'
2. THIS MAP REPRESENTS A SURVEY OF AN EXISTING PARCEL OF LAND.
3. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES.
4. THIS SURVEY WAS PERFORMED WITHOUT BENEFIT OF A TITLE COMMITMENT REPORT. JAMES HAUNEY & ASSOCIATES, P.A. DOES NOT CLAIM THAT ALL MATTERS OF RECORD WHICH MAY OR MAY NOT AFFECT THE SUBJECT PROPERTY ARE SHOWN HEREON.
5. THIS SURVEY IS INTENDED FOR THE NAMED PARTY OR PARTIES ONLY. NO WARRANTIES ARE HEREBY IMPLIED OR GRANTED TO ANY OTHER PARTY FOR ANY PURPOSE.
6. ELEVATIONS BASED ON LAKE LEVEL 2/6/2013 ELEVATION=757.33'
7. BASIS OF BEARINGS NC GRID (NAD 83)
8. THERE IS NO NGS MONUMENT LOCATED WITHIN 2,000' OF THE SUBJECT PROPERTY.

NORTH CAROLINA PROFESSIONAL SEAL L-3885 LAND SURVEYOR JAMES H. MAUNEY, JR.

REF: NC GRID (NAD 83)

RUTH M. & RICHARD ZARBOCK TRUST
DB 12E, PG 269
LOT 37, SHADY COVE ACRES
"SECTION II"
MB 16, PG 65
PARCEL# 4730703803.000

RUTH M. & RICHARD ZARBOCK TRUST
DB 12E, PG 269
LOT 36, SHADY COVE ACRES
"SECTION II"
MB 16, PG 65
PARCEL# 4730704813.000

WESTERN CAROLINA HOLDINGS, LLC.
DB 2139, PG 2332
LOT 49, WINDING FOREST
MB 49, PG 87
PARCEL# 4730701688.000

WESTERN CAROLINA HOLDINGS, LLC.
DB 2139, PG 2332
LOT 50, WINDING FOREST
MB 49, PG 87
PARCEL# 4730705889.000

S 85°52'04" E 62.34'
S 85°51'20" E 119.00'
N 85°53'17" W 221.29' (TIE)
N 01°00'34" E 219.83'
S 01°08'41" W 210.17'
N 88°54'52" W 160.87'
10' DRAINAGE & UTILITY EASEMENT MB 49-87
35' REAR SETBACK MB 49-87
15' SIDE SETBACK MB 49-87
35' BUILDING LINE MB 49-87
40" OAK
AREA
38,909 SQ.FT.
0.893 ACRES
BENCHMARK (NAIL IN PINE) ELV=797.80
BENCHMARK (NAIL IN PINE)
EDGE OF WOODS
APPROX R/W
CROOKED BRANCH WAY
45' PUBLIC RIGHT-OF-WAY
MB 49, PG 87

ABBREVIATIONS:
CBX - CABLE COX
CP - CALCULATED POINT
DB - DEED BOOK
EIP - EXISTING IRON PIPE
EIR - EXISTING IRON ROD
EOP - EDGE OF PAVEMENT
LPST - LAMP POST
MB - MAP BOOK
NCGS - NORTH CAROLINA GEODETIC SURVEY
NIP - NEW IRON ROD
NN - NEW NAIL
PB - POWER BOX
PP - POWER POLE
PG - PAGE
R/W - RIGHT-OF-WAY
SQ.FT. - SQUARE FEET
TPED - TELEPHONE PEDESTAL

SURVEY OF

LOT 49, WINDING FOREST

FALLSTOWN TOWNSHIP, IREDELL COUNTY, NORTH CAROLINA

PREPARED FOR QUINTON GANDY

SCALE 1"=40'

FLOOD CERTIFICATION

Checklist For Licensed Soils Scientists

9/28/2015

NOTE: ALL Of The Following Must Be Complete Before Service Requests Are Placed On The Expedited Review Process List. Service Requests May Be Removed From The Expedited Review Process List If Any Items Below Are Not Completed!

An Application For Each Site Proposed Requires Submittal Of This Information:

✓ *A Copy of This Completed Checklist*

✓ Iredell County Health Department *Application For Improvement Permit* form completed and properly signed by owner or applicant (15A NCAC 18A .1937)

✓ Iredell County Health Department *Site Plan* form completed and properly signed by owner or applicant

✓ A copy of the Iredell County *Zoning Permit* (if required)

✓ *Documentation to Authorize an Owners Legal Representative* form

N/A *Voluntary Relinquishment of Administrative Appeal Rights* form for all Re-layouts

✓ Owner or Clients contact information, included on application or part of submitted design

✓ NCDENR *Soil/Site Evaluation for On-Site Septic System* form completed - clearly describing all soil pits or borings made at the site (15A NCAC 18A .1939). Minimum of two provisionally suitable auger borings or two evaluation pits must be described for both the proposed initial septic system area and the proposed repair area (if repair area is required). Submitted soil information must match the proposed system type and trench depth.

✓ Scaled, Detailed Site Plan (using an engineer's scale of 1"= 30', 1"= 40', 1"= 50' and 1"= 60') Which Must Include:

- ✓ Drainlines for initial and repair system
- ✓ Septic Tank locations identified
- ✓ Pump Tank location identified
- ✓ Proposed distribution method must be clearly identified
- ✓ All proposed and existing structures identified
- ✓ Proposed setbacks must be noted
- ✓ Proposed and existing driveway
- N/A Well locations (if applicable)
- ✓ North arrow identified

✓ Pump Systems must note the following elevations on a scaled site plan:

- ✓ Pump Tank
- ✓ Initial septic system and repair line elevations
- Front or rear of house at point closest to drain field
- Temporary Bench Mark

✓ Pump systems calculations (as appropriate) manifold and tap sizes, number of panels, number of holes, hole size, elevation head, friction head, pressure head, total dynamic head, dosing volume, system flow, pump run time, proposed trench bottom of system and repair, supply line length, supply line diameter, LTAR and an information page of special requirements for the installer as needed; any other calculations supporting design.

✓ Septic design signed and sealed by LSS.

✓ Site requirements completed by time of health department staff visit:

- ✓ All under brushing, debris cleanup
- ✓ Property lines MUST be marked by string or flagging if they cannot be observed from all points on the lot
- ✓ Permanent corners must be identified in field, or located by a licensed surveyor as needed.
- ✓ Drainlines/laterals flagged in the field on contour for initial and repair system using different colored pin flags for each line
- ✓ Septic and Pump Tank location marked as required
- ✓ All proposed structures must be staked

Kathleen Saunders
Owner Signature

11-9-2020
Date

THE OAKS GROUP, PA

To: Iredell County Environmental Health Department (ICHD)

From: Kathleen Saunders, LSS

RE: 148 Crooked Branch Way

Date: November 6, 2020

Attached is the septic specification information required to permit 148 Crooked Branch Way for an Improvement Permit and/or Construction Authorization Permit in Iredell County via the Session Law 14 permitting process.

The attached information is not an Improvement Permit or an Authorization to Construct, and is only to assist the Iredell with permitting. The ICHD has to approve each lot and only the ICHD can issue these permits. The system should be installed according to the ICHD permits, policies, and NC Rules, which these specifications are in accordance with. If the ICHD wishes to change tank locations, distribution devices, etc they may do so at their discretion.

All information and specifications have been prepared in conjunction with ICHD permitting guidelines for the current lot owners to acquire an Improvement Permit and/or Authorization to Construct on this lot. It is ultimately the ICHD's responsibility to verify all specifications, **excluding** soil descriptions, before permitting and/or septic system installation. The site contains highly variable soils; there may be soil features present that were not encountered during the evaluation.

The LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c). The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 11.(c). The LSS Evaluation contains sufficient information to produce design and construction features for an IP/CA, and the LSS contains the proper insurance with the proper coverage.

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
1313
STATE OF NORTH CAROLINA

Kathleen Saunders

Winding Forest Lot 49 Septic System Information

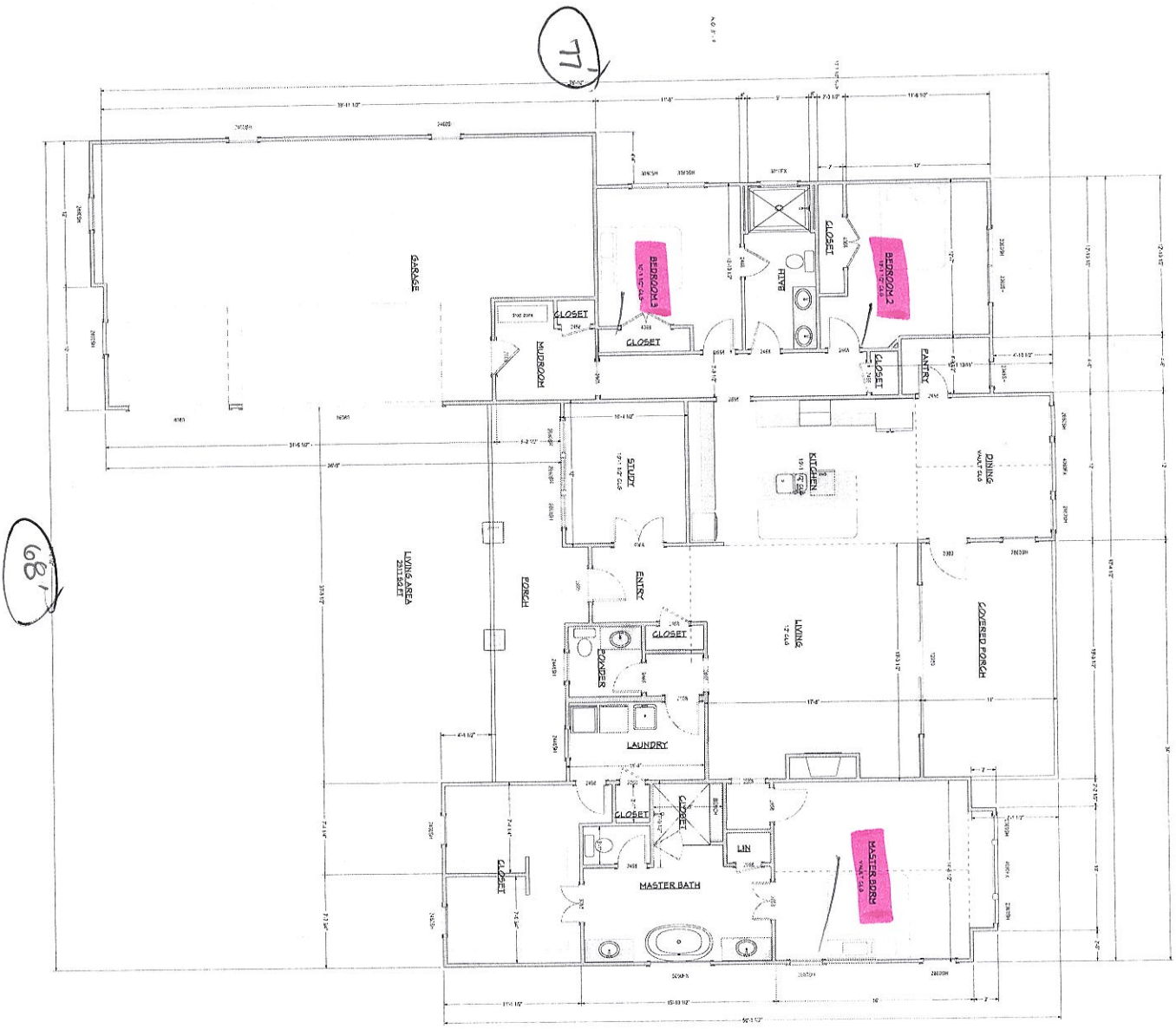
Number of Bedrooms		3
Basement or Crawl		**Crawl Space**
Design Flow (gpd)		360
LTAR (gpd/ft2)		0.25
Primary System Type	Horizontal Install	**LP PPBPS**
No. Lines		3 (See Table)
Total Linear Feet		240
Trench Width		3'
Trench Spacing		9'
Max Trench Depth		30"
Pump Required		Yes
Distribution Device		Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required		Yes
Length and Diameter of Supply Pipe		210' of 2" SCH 40 PVC
Size of laterals		1 1/4" SCH 40 PVC
Flow Rate through the system		27.5 gpm
Elevation head		Approx. 14.2'
Pressure head		3.0'
Friction head		3.7'
20% Contingency		4.2'
Total Head		25.1'
Pump Requirements		27.5 gpm @ 25.1' of head To be designed by installer.
Maximum Dosing Volume		198 gal -2.2 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		approx. 7.2 min.
Check Valve		Yes
Siphon Break hole		No
Repair System		**Subsurface Drip**
Total Linear Feet		3600
Repair LTAR		0.1
Repair Trench Depth		6"

Table 1: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elev. (Ft.)	Panels	Holes	Hole Spacing	Hole Size (In.)
1	System	Orange	LPPPBPS	70 endfed	3.2	16	16	1 per panel	5/32"
2	System	Blue	LPPPBPS	100 endfed	5.0	23	23	1 per panel	5/32"
3	System	Red	LPPPBPS	70 endfed	6.2	16	16	1 per panel	5/32"
						Total: 55	Total: 55 (1 in each panel turned up)		
				Total System: 240'					
				Total Repair: xxx'					

Tank	Red	1000 gal (2 compartment)	
Pump Tank	Red	1000 gal.	11.4
House	Blue		

Notes: Shave old berm in septic area to prevent upslope ponding



FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

SQUARE FOOTAGE	
1ST FLOOR HEATED	2917
TOTAL HEATED	2917
GARAGES	613
PORCHES	411
TOTAL UNDER ROOF	3541

SHEET: A-3		SCALE:	DATE: 9/25/2020	BUILD4G.com 488 Pineville Rd Statesville NC 28677 704-665-7578	PROJECT DESCRIPTION: Cunningham Residence Lot 49 Crooked Branch Way Troutman NC 28116		NO.	DESCRIPTION	BY DATE	BID