1.8 inch gal/min 22 gal/min PJB 4100

ICHD–ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP301425

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

PIN # 4628878579

APPLICANT/OWNER: Foundation Homes / Catherine Nickerson APPLICANT ADDRESS: 438 Williamson Rd. ste C Mooresville, NC

SITE ADDRESS: 162 Fern Haven Ln. Mooresville, NC 28117 PHONE: 704-650-22600 ALT. PHONE —

SITE DIRECTIONS: Perth → L on Fern Hill → keep R on Fern Haven → lot on R SAP CONTROLLED: ☑ YES ☐ NO

SUBDIVISION: — SECTION: — LOT # — LOT AREA: .78ac DESIGN FLOW: 480gpd L.T.A.R.: .3

Septic Tank	1000 (gal)	STB	794	Date	3-22-20	☑ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI	☑ Residence	No. Bedrooms 4
Pump Tank	1000 (gal)	PT	283	Date	3-22-20	System Description: PM 25% reduction		☐ Business	No. Persons 8
Pump Make	Goulds	Model	WE05 12H	Serial #		Repair System Description: LP PPBPS		☐ Other	No. Employees
# Nitrification Fields	1	# Lines	4 @ 100'	Linear Ft	400'	Maintenance Agreement Required: ☐ YES ☑ NO		☐ Slab	☐ Crawl Space
Trench Width	36"	Trench Bottom Depth(Low side)	31"/36" high side	Gravel Depth	—	☐ GRAVITY ☑ PRESSURE		☑ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☑ Private ☐ Public ☐ Community

Comments / Conditions: Maintain 100' from any well with any part of septic. Grinder pump may be required if too much grading occurs for basement OR tanks may need to be moved to achieve fall if too much grading for basement happens.

INITIAL SITE SKETCH

See attached site plan by Michael Athanas + Associates

	Date	Initials
Drain Lines Checked	5/7/20	MD
Tanks Checked	5/6/20	MD
Pressure Manifold or Valve Box Checked ✓	7/9/2020	SR
Pressure Head Set ✓	7/9/2020	SR
Electrical Checked ✓	7/9/2020	SR
Floats Set ✓	7/9/2020	SR
Alarm Checked ✓	7/9/2020	SR
Maintenance Contract Y / N	—	—

AS BUILT SKETCH

10ft off house with ST checked 5/6/2020

40ft from house drain (basement to bottom line

7/9/2020: - 1/2" SCH 40 Taps used (4 x)
- 2' of pressure set (Pressure Transducer AQUAWORX by Intellitector
- Breakers ok #7/5 (20 amp) control #29 Pump Alarm (15 amp)
- Alarm ok

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: Brenda Smith Date: 10-15-19 Installed by: Stanley Septic

IMPROVEMENT PERMIT by: Kayla Watson Date: 10-7-19 OPERATION PERMIT by: Tom Shuck Date: 7/9/2020

AUTHORIZATION TO CONSTRUCT by: Kayla Watson Date: 10-10-19 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.

plat book_____, page_____, that the ratio of precision is 1':10,000, that this map was prepared in accordance with the General Statutes of North Carolina Chapter 89C.

my hand and seal on the 7, day of MAY,
A.D. 20 18.

REVISED: SEPT. 6, 2019
ADDED DRIVE AND WALK

WILLIAM M. ALLEN, PLS

NORTH CAROLINA PROFESSIONAL SEAL L-3499 LAND SURVEYOR WILLIAM M. ALLEN

APPROVED OCT X 7 2019 KW

LINE TABLE		
LINE	BEARING	LENGTH
L1	N 11°00'02" W	40.00'
L2	N 84°13'00" E	33.08'
L3	N 33°12'00" E	60.30'

LAKE NORMAN

760 & 761 CONTOURS FOLLOW ALONG THE RETAINING WALL

WOOD WALL

BOAT RAMP

WOOD DECK

BRICK WALL

#4 REBAR @ 9.42'

N64°57'00"E 66.80'

WOOD WALL CROSSES PROPERTY LINE 2.5'

50' BUFFER FROM THE 760 CONTOUR

#4 REBAR @ 39.38'

L3

L1

37.1

JULIA C. NICHOLS 2408/251

35' SETBACK

15' SIDE

45.1

N20°31'40"W 56.60'

PROPOSED HOUSE

ST

PT 19.7'

AC

HC 13.3'

Pit 4

Y9

W8

R7

B6

O5

Y4

W3

P2

B1

Pit 3

Pit 5

Pit 2

Pit 1

15' SETBACK

(BASE BEARING) S37°50'00"E

278.00'

0.78 AC.

35' SETBACK

38.4

1/2" PIPE

Well

R/W

C1

Shared Well

100'

220.00'

FERN HAVEN LANE
60' PUBLIC R/W

N83°20'00"W

DB. 2844 PG. 106

PM

#4 REBAR

BM 4.4'

R/W

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C1	50.00'	57.81'	N 68°53'19" W	54.64'

VICINITY MAP — NO SCALE

BELL CROSSROADS
SITE
S.R. 1300
S.R. 1302
S.R. 1303
S.R. 1396
N.C. HWY. 150
DOOLEY

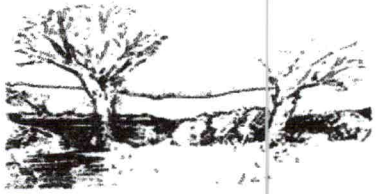
B1-89°-3.0'
P2-100'-3.7'
W3-100'-4.9'
Y4-100'-5.9'
O5-100'-7.3'
B6-70'-9.1'
R7-50'-10.8'
W8-36'-12.6'
Y30-30'-14.4'

NOTES
1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENT AND/OR RIGHTS-OF-WAY OF RECORD.
2) AREA COMPUTED BY THE COORDINATE METHOD.
3) EXISTING 760' & 761' CONTOUR ELEV-

0' 20' 40' 100'
SCALE IN FEET

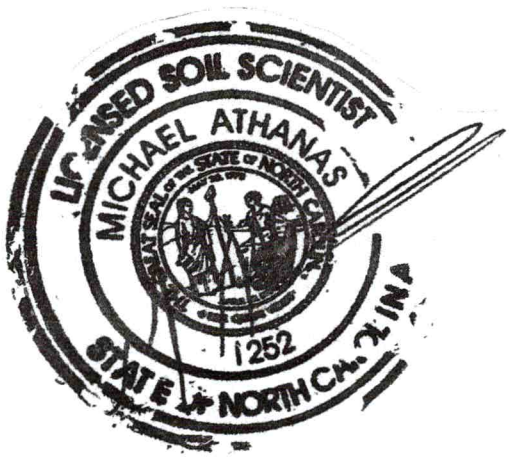
LEGEND
P.P. = POWER POLE
= POWER TRANS.
E.I.P. = EXISTING IRON FOUND
I.P.S. = #4 REBAR SET

PHYSICAL SURVEY



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887
9/26/2109

Reference: Data Sheet for 162 Fern Haven Ln
House Footprint: See attached plan
Building Setbacks: 35' front/rear, 15' side, 50' lake
Water Source: Private well
Number of Bedrooms/Daily Flow: 4/480 GPD
Predetermined LTAR: 0.3 GPD/FT^2
Proposed System Type: 25% Reduction
Proposed Repair System Type: PPBPS
Distribution: Pressure Manifold
Flow per Tap: 7.11 GPM
Tap Size and Material: ½" SCH 40
System Flow: 28.44 GPM
Dosing Volume: 175 gallons
Pump Run Time: 6.2 minutes
Elevation Head: 21'
Friction Head: 2.8
Pressure Head: 2'
Total Dynamic Head: 25.8'
Supply Line Length: 150' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 24-36"



Line	Design Length	Actual Length	Elevation
Blue 1		89'	3.0'
Pink 2	**100'**	**114'**	**3.7'**
White 3	**100'**	**120'**	**4.9'**
Yellow 4	**100'**	**110'**	**5.9'**
Orange 5	**100'**	**103'**	**7.3'**
Blue 6		70'	9.1'
Red 7		50'	10.8'
White 8		36'	12.6'
Yellow 9		30'	14.4'

Initial System: 400' **Repair System:** 275'
Pump Tank: 19.7' **House Corner:** 13.3' **Benchmark:** 4.4'

Comments:
The septic is being redesigned to fit the house design. The pit locations from the previous evaluations are shown on the site plan. Please refer to the original soil notes.

APPROVED OCT X 7 2019
KW

APPROVED MAY 25 2018
KW

PROPERTY ID #: 4628878579_
COUNTY: _Iredell_____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Randalph Ensign_____ APPLICATION DATE_____
ADDRESS: 716 Rollingwood Dr, Greensboro, NC 27410_____ DATE EVALUATED: _____
PROPOSED FACILITY: __4 bdrm_____ PROPOSED DESIGN FLOW (.1949): __480 GPD____ PROPERTY SIZE: _0.78 AC_____
LOCATION OF SITE: 162 Fern Haven Ln_____ PROPERTY RECORDED: _8/17/1962_____
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)		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	
PIT 1	LS 12%	0-6	Br SCL WSBK	FR SS SP SXP	N/A	50"	F-C SAP PS	N/A	PS 0.3-0.4
		6-22	R C SBK	FR SS SP SXP					
		22-50	R CL WSBK	FR SS SP SXP					
		50-68	VER SL SAP M	VFR SS SP SXP					
PIT 2	LS 12%	0-5	Br SCL WSBK	FR SS SP SXP	N/A	47"	F-C SAP PS	N/A	PS 0.3-0.4
		5-22	R C SBK	FR SS SP SXP					
		22-47	R CL WSBK	FR SS SP SXP					
		47-64	VER SL SAP M	VFR SS SP SXP					
PIT 3	LS 12%	0-5	Br SCL WSBK	FR SS SP SXP	N/A	46"	F-C SAP PS	N/A	PS 0.3-0.4
		5-20	R C SBK	FR SS SP SXP					
		20-46	R CL WSBK	FR SS SP SXP					
		46-70	VER SL SAP M	VFR SS SP SXP					
PIT 4	LS 12%	0-22	R C SBK	FR SS SP SXP	N/A	42"	F-C SAP PS	N/A	PS 0.3-0.4
		22-42	R CL WSBK	FR SS SP SXP					
		42-70	VER SL SAP M	VFR SS SP SXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	804 FT2	819 FT2
System Type(s)	PPBPS	PPBPS
Site LTAR	0.3	0.3

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____PS_____
EVALUATED BY: _____MA&A_____
OTHER(S) PRESENT: _____

COMMENTS:_____

SOIL/SITE EVALUATION

(Continuation Sheet)

APPROVED MAY 2 5 2018
KW

PROPERTY ID #: 4628878579____
DATE OF EVALUATION: _____
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
PIT 5	LS 12%	0-4	Br SCL WSBK	FR SS SP SXP	N/A	60”		N/A	PS 0.3-0.4
		4-21	R C SBK	FR SS SP SXP					
		21-60	R CL WSBK	FR SS SP SXP			F-C SAP PS		
		60-77	VER SL SAP M	VFR SS SP SXP					
AB 1	LS 12%	0-3	Br SCL WSBK	FR SS SP SXP	N/A	40”		N/A	PS -.3-0.4
		3-20	R C SBK	FR SS SP SXP					
		20-40	R CL WSBK	FR SS SP SXP			F-C SAP PS		
		40-48	VER SL SAP M	FR SS SP SXP					
AB 2	LS 12%	0-3	Br SCL WSBK	FR SS SP SXP	N/A	45”		N/A	PS 0.3-0.4
		3-15	R C SBK	FR SS SP SXP					
		15-45	R CL WSBK	FR SS SP SXP			F-C SAP PS		
		45-48	VER SL SAP M	FR SS SP SXP					

COMMENTS: _____

IH - Relayout
$225.00
~~$235.00~~
AP 301425

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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: (✓) 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: Foundation Homes **Address:** 438 Williamson Rd, STE C Mooresville, NC **Zip:** 28117

Applicant Email: _____ **Phone:** Jonathan-704-650-2260 **Alt. Phone:** _____

Owner Name: Catherine Nickerson **Address:** 11 Morse Cir, Shirley, MA **Zip:** 01464

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

Property Information:

Street Address: 162 Fern Haven Ln

Subdivision Name: _____ **Section/Phase:** _____ **Lot Number:** _____

Driving Directions: _____

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: _____
( ) 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: Accepted

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: _____ 10/1/2019
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

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, James + Catherine Nickerson, am the legal owner(s) of the property located at 162 Fern Haven, Mooresville NC 28117, identified as PIN (Parcel Identification Number) 4625587579.000, located in Iredell County, North Carolina.

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

X Catherine Nickerson — 10/01/19 — _____ — _____

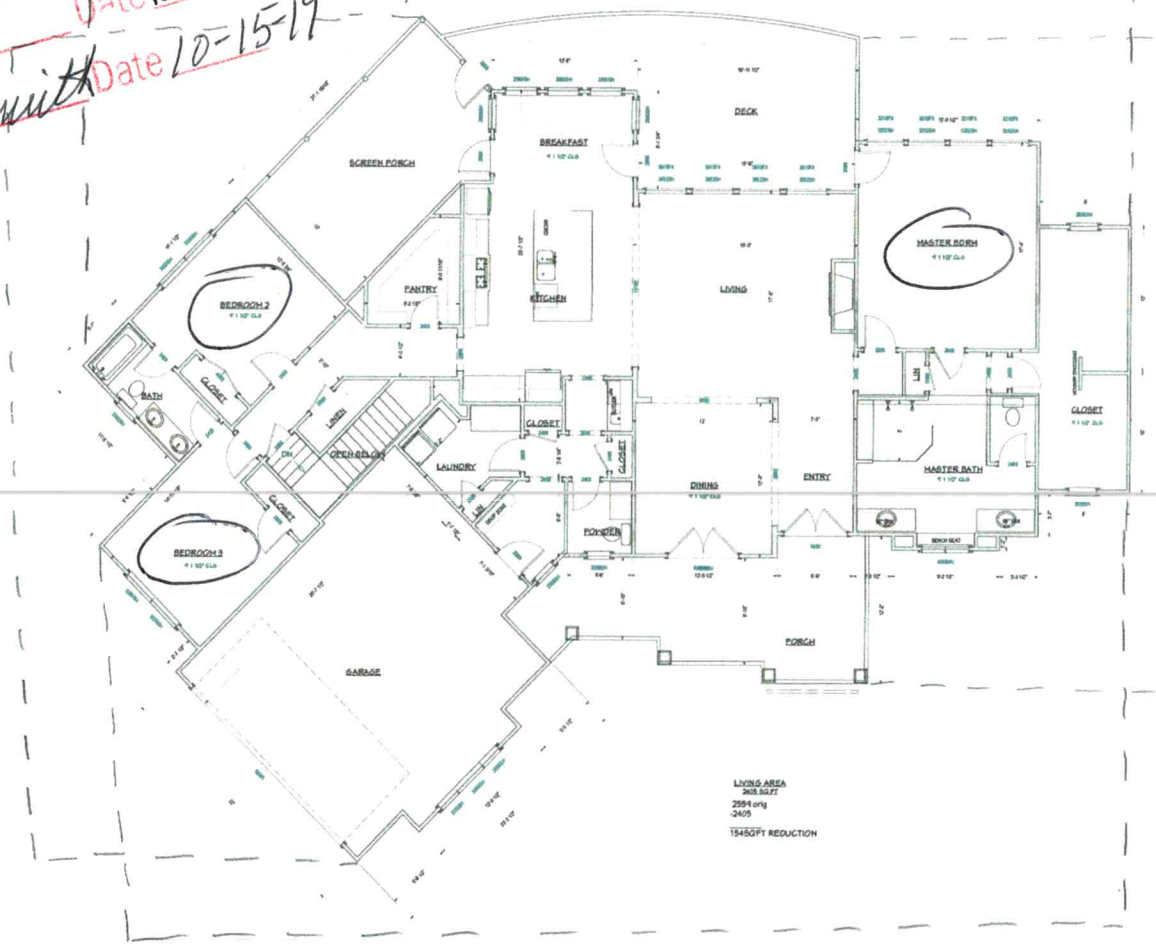
Signature of Owner(s) | Date | Signature of Witness | Date

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

cknowledgement of
lans Submittal ONLY
Date 10-10-19
Date 10-15-19



89'
69'
54'
88'

FIRST FLOOR PLAN
SCALE 1/4" = 1' - 0"

DEV

NO.	DESCRIPTION	BY	DATE

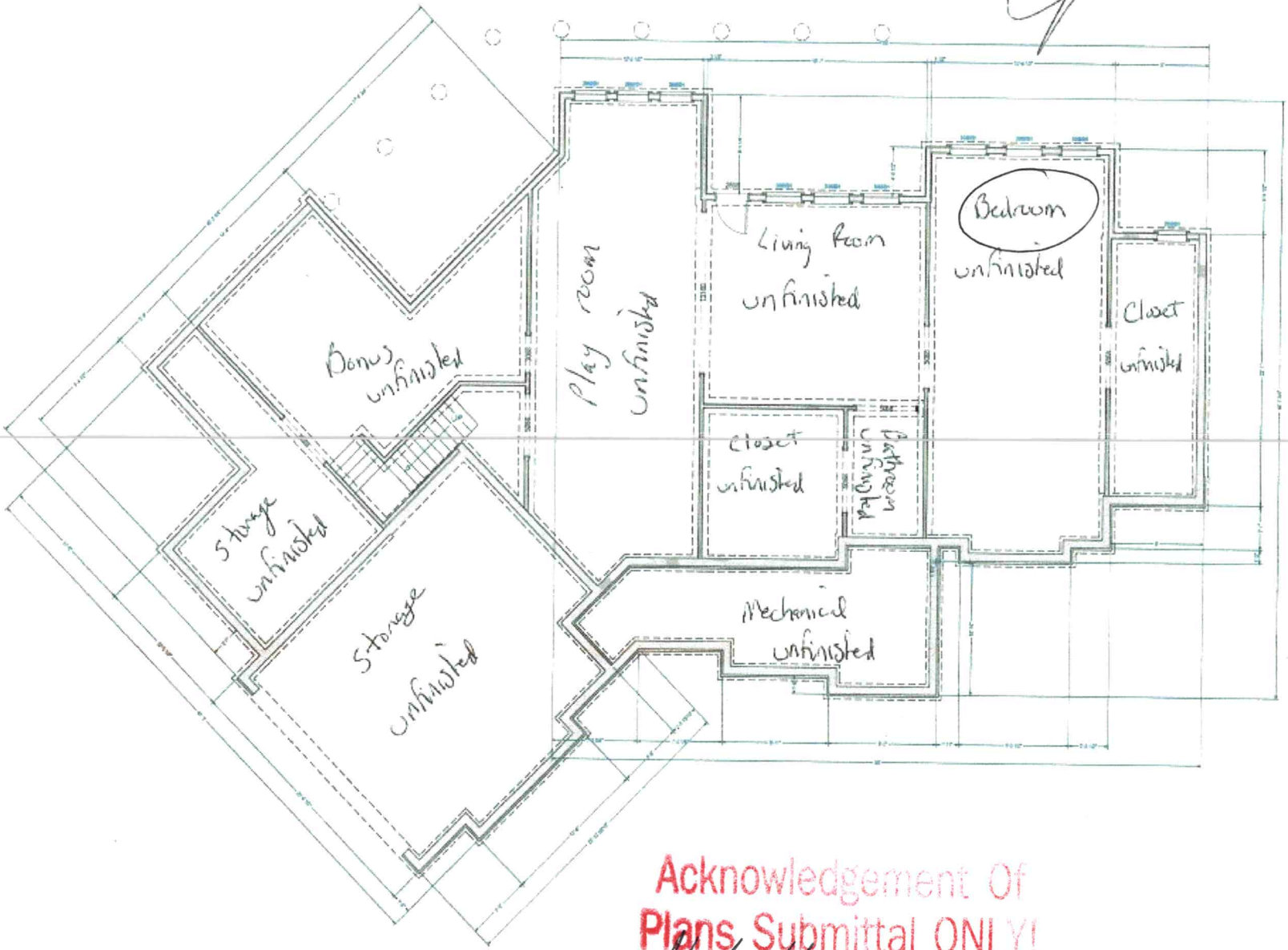
PROJECT DESCRIPTION:
Nickerson Residence
FOUNDATION HOMES

VISUAL DESIGN
VISUAL DESIGN & DRAFTING

DATE:
9/27/2019

SCALE:

SHEET:
A-5



Acknowledgement Of
Plans Submittal ONLY!

Date 10-10-19

Date 10-15-19

BASEMENT / FOUNDATION PLAN

SCALE 1/4" = 1'-0"

IREDELL COUNTY

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

APPLICATION NUMBER
235769
Issue Date: 05/18/2018

ZONING PERMIT

Residential

Parcel Number	Street Address	Jurisdiction
4628878579.000	162 FERN HAVEN LANE, MOORESVILLE, NC	IREDELL COUNTY

Owner Information		Applicant Information	
Owner:	ENSIGN RANDOLPH G+ANGELINE	Applicant:	MICHAEL ATHANAS & ASSO
Address:	6100 W FRIENDLY AVE APT-4201	Address:	561 ENNIS RD
	GREENSBORO, NC 27410		WEDDINGTON, NC 28173
Phone:		Phone:	704-576-3887

Use Requested	Zone Code
	RR

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
	35.00	50.00	15.00	15.00	CACL	AE

Remarks:

Lake Lots: Must meet both the 50-foot setback from the 760 Æ contour line and the 35-foot setback from the rear property line for any structure.

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	139360	TOTAL FEES:	$ 77.25