Mutiy Permit CLL

(4)

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 | PERMIT # 239372

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

PIN # 4638021482

APPLICANT/OWNER: Kain Milbredt/Southern Cottage | APPLICANT ADDRESS: 17830 Statesville Rd Ste. 225 Cornelius, NC 28031

SITE ADDRESS: 254 Hermance Ln Mooresville, NC | PHONE: 704 237-4554 | ALT. PHONE

SITE DIRECTIONS: 150 W TR Waddell TR Hermance, on right past Golden Pond | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: CL@T | SECTION: 11 | LOT # 242 | LOT AREA: .779 Ac | DESIGN FLOW: 480 gpd | L.T.A.R.: .3 Tot / .25 Rep

Septic Tank: 1000 (gal) | STB 465 | Date | Pump Tank: 1000 (gal) | PT 465 | Date | Pump Make: Gouds | Model: WED1224H | Serial # | # Nitrification Fields: 2 | # Lines: 8 | Linear Ft: main 267 | Trench Width: 24" & 36" | Trench Bottom Depth(low side): 25" Hort / 36" Vert | Gravel Depth: N/A

☒ New System ☐ Repair ☐ Expansion | System Type: I II III IV V

System Description: LP (Hort & Vertical) PPBPS

Repair System Description: PPBPS & Drip

Maintenance Agreement Required: ☒ YES ☐ NO | ☐ GRAVITY ☒ PRESSURE

☒ Residence | No. Bedrooms: 4 | ☐ Business | No. Persons: 8 | ☐ Other | No. Employees | ☐ Slab | ☐ Crawl Space | ☒ Basement w/ plumbing | ☐ Basement w/o plumbing

Water Supply: ☐ Private ☐ Public ☐ Community

Drip

Comments / Conditions: ☆Must used "traffic rated tanks"
Note: Septic plan has extra linear footage for Initial Drainfield.

Stormwater from culvert on Hermance Rd must be diverted to property line & piped around system area.
☆Existing well must be abandoned prior to A.C.

INITIAL SITE SKETCH

☆Must notify Design Engineer at time of Startup of Septic System.
See Attached Approved Septic Plan by Piedmont Design Associates, PA (dated 1/25/19)

Front

AS BUILT SKETCH

Drill 5/32" hole in panels
Existing well abandoned 2/13/19 mp
☆Preconstruction Meeting with Design Engineer & Staff

Authorization to Construct
FOR SEPTIC FINAL INSPECTION
CALL 704-664-3703

Needs to Her from Tank

Bottom Lines in back were dirt packed but was 7 panels 2nd was 10 3rd was 13"

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 plan 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: 2/19/2019 | Installed by: Richard Abernathy

IMPROVEMENT PERMIT by: Maina Dotson | Date: 2/1/18 | OPERATION PERMIT by: Benjamin Beam | Date: 5/19/2020

AUTHORIZATION TO CONSTRUCT by: Maina Dotson | Date: 2/13/19 | Existing System Inspected by: | Date:

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

PIEDMONT DESIGN ASSOCIATES, P.A.
125 East Plaza Drive | Suite #101
Mooresville, NC 28115
Phone: 704-664-7888 | Fax: 704-664-1778
Email: dmunday@pdapa.com

Engineering
Surveying
Planning

May 18, 2020

Iredell County Environmental Health Department
610 East Center Avenue
Mooresville, NC 28115
Attn: Mr. Ben Botkins, REHS

RE: 4 Bedroom LP PPBPS Effluent Disposal System
254 Hermance Lane, Mooresville, Iredell County, North Carolina

Dear Mr. Botkins:

ENGINEERS CERTIFICATION

I, **Donald L. Munday**, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically the construction of the referenced project, a low pressure PPBPS effluent disposal system; serving a new 4 bedroom residence, located at 254 Hermance Lane, Mooresville, Iredell County, NC, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the approved plans and specifications. The operating head on the panels was changed from 3 feet to 2 feet, therefore, resulting in a longer pump run time. The dose volume of 240 gallons remained as designed.

Sincerely,

PIEDMONT DESIGN ASSOCIATES, P.A.

Donald L. Munday, P.E.
N.C. Registration No. 17327

Cc: Kevin Milbredt, Southern Cottage



05/18/2020

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

Sheet of
PROPERTY ID #: 9638021482
COUNTY: Iredell

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

OWNER: Brady Lisa Thimes — APPLICATION DATE: 10/4/18
ADDRESS: 254 Hermance Mooresville NC — DATE EVALUATED: 10/3/18
PROPOSED FACILITY: House — PROPOSED DESIGN FLOW (.1949): 480 gpd — PROPERTY SIZE: 7.79 Ac
LOCATION OF SITE: 254 Hermance Ct Lot 242 — PROPERTY RECORDED: Y
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	7%	0-12	Brw SCL SS, SP, SExp, FR						PS .3 to .40" .25 > 40"
		12-29	Rd/Brw C mSBK SS, SP, SExp, FR						
		29-40	Rd/Brw C m-wSBK SS, SP, SExp, FR						
		40-48	R to Yel/Brw C m-wSBK S, P, SExp, Fi LR*						
2		0-42"	Fill						PS .25 >42"
		42-48	RC wSBK w/ Yel/Brw S, P, SExp ~~SExp~~ Fi						
3	8%	0-20	Brw SCL SS, SP, SExp, FR						PS .3 to 41" >41 = .25
		20-32	RC wSBK SS, SP, SExp, FR						
		32-41	RC w-mSBK SS, SP, SExp, Fi ~~FR~~						
		41-50	RC mSBK SS, SP, SExp, Fi ~~FR~~ w/ Yel/Brw Mottles 50"						
4		0-42"	Fill						U

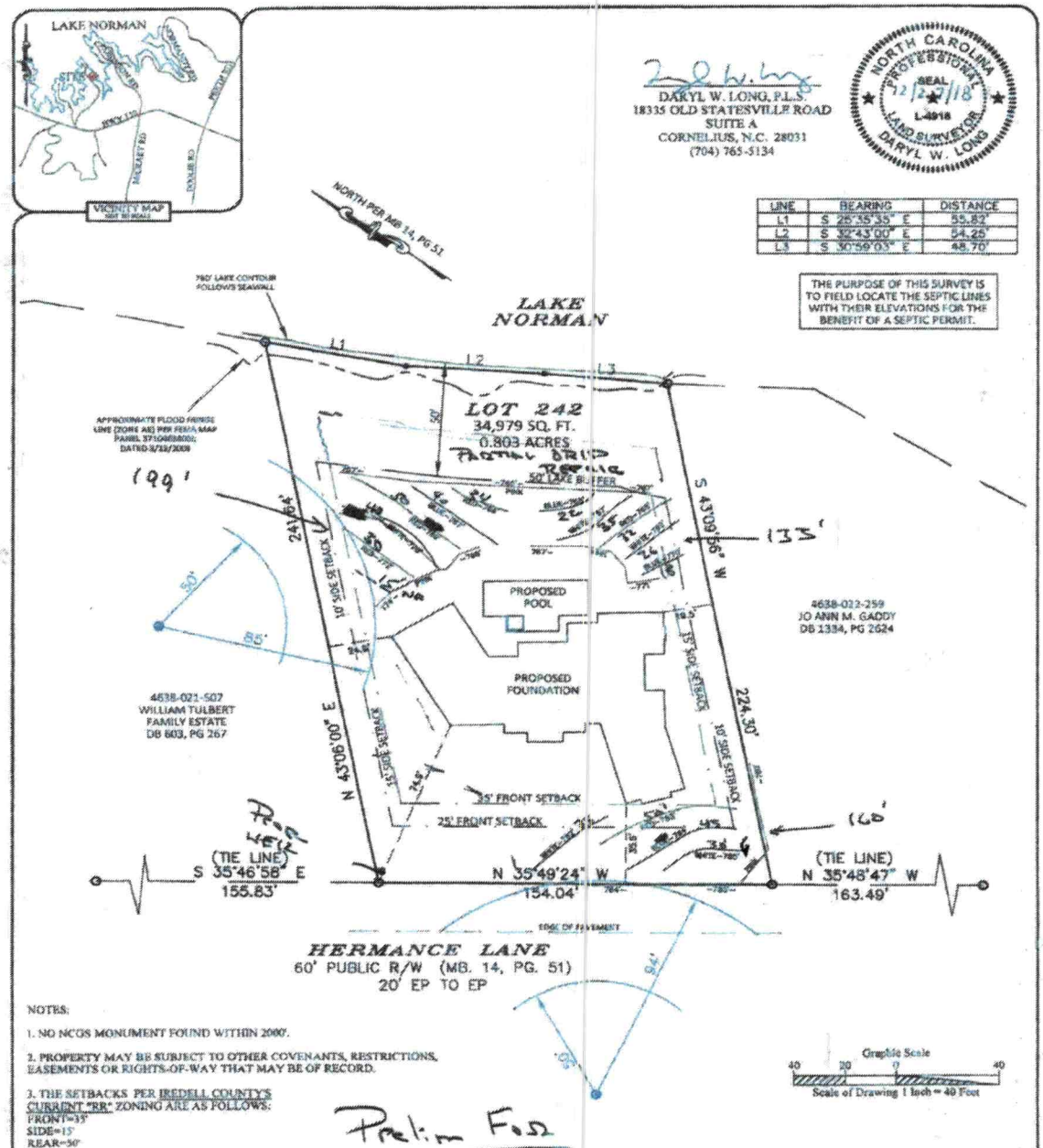
DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: Maria Dotson
OTHER(S) PRESENT: Kevin Milbrandt

COMMENTS:

	Date	Initials
Drain Lines Checked RTB 2/29/20 & 3/2/20		MD
Tanks Checked >5ft to house	3/4/20	MD
Pressure Manifold or Valve Box Checked	5/18	BB
Pressure Head Set	5/18	
Electrical Checked	5/18	
Floats Set	5/18	
Alarm Checked	5/18	
Maintenance Contract (Y) N	5/19	

Supply line Checked 3/2/20 MD
Check valves installed on uphill lines



DARYL W. LONG, P.L.S.
18335 OLD STATESVILLE ROAD
SUITE A
CORNELIUS, N.C. 28031
(704) 765-5134

NORTH CAROLINA PROFESSIONAL SEAL L-4918 LAND SURVEYOR DARYL W. LONG

12/27/18

LINE	BEARING	DISTANCE
L1	S 28°35'35" E	55.82'
L2	S 32°43'00" E	54.25'
L3	S 30°59'03" E	48.70'

THE PURPOSE OF THIS SURVEY IS TO FIELD LOCATE THE SEPTIC LINES WITH THEIR ELEVATIONS FOR THE BENEFIT OF A SEPTIC PERMIT.

NOTES:

1. NO NCGS MONUMENT FOUND WITHIN 2000'.

2. PROPERTY MAY BE SUBJECT TO OTHER COVENANTS, RESTRICTIONS, EASEMENTS OR RIGHTS-OF-WAY THAT MAY BE OF RECORD.

3. THE SETBACKS PER IREDELL COUNTY'S CURRENT "RR" ZONING ARE AS FOLLOWS:
FRONT=35'
SIDE=15'
REAR=50'

THE SETBACKS PER MB. 14, PG. 51 ARE AS FOLLOWS:
FRONT=25'
SIDE=10'
REAR=50'

Prelim For REVIEW

4. VERTICAL ELEVATION BASED ON LAKE LEVEL OF LAKE NORMAN PER DUKE ENERGY AT THE TIME OF THE SURVEY (NGVD 29).

5. CONSULT WITH GOVERNING AGENCY FOR PREVAILING LAND DEVELOPMENT AND ZONING REQUIREMENTS PRIOR TO DESIGN OR CONSTRUCTION OF ANY IMPROVEMENTS

Graphic Scale
40 20 0 40
Scale of Drawing 1 Inch = 40 Feet

LEGEND:
- #4 REBAR FOUND
- COMPUTED POINT
- WELL
- SUBJECT PROPERTY LINE
- ADJOINER PROPERTY LINE
- RECORD PLAT SETBACK
- ZONING SETBACK

Site Plan of Lot 242 of Crescent Land & Timber Corp., Section 11

Professional Property Surveyors, Inc.
18335 Old Statesville Road Ste. A
Cornelius, N.C. 28031
704-765-5134 Phone/Fax
Firm License: C-3666

Property of:
Brad & Lisa Thinnes

As Recorded in:
Map Book 14, Pg 51
Deed Book 2262, Pg 1679

Site Address:
254 Hermance Lane
Mooresville, NC 28117
Iredell County

122818-02	JML	≥ 1:10,000	1"=40'	4638-021-482	SEPTIC	1 of 1	12/27/2018
Job No.	Prepared By	Error of Closure	Drawing Scale	Tax Parcel Number	Drawing File Name	Sheet Number	Date

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

Sheet ___ of ___
PROPERTY ID #: 4638021481
COUNTY: Iredell

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

OWNER: Brad & Lisa Thinnes
ADDRESS: 254 Hermance Mooresville NC
PROPOSED FACILITY: House
LOCATION OF SITE: 254 Hermance Ct TL Lot 242
APPLICATION DATE 10/4/18
DATE EVALUATED: 10/30/18
PROPERTY SIZE: .779 Ac
PROPERTY RECORDED: Y
PROPOSED DESIGN FLOW (.1949): 480 gpd
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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	P5 10%	0-13	Brw SL, SS, SP SE XP FR						P5 .25
		13-53	RCm-wSBK S-SS, SP, SE XP	Fi-FR					
2									
3									
4									

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

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: Maria Dotson
OTHER(S) PRESENT: Kevin Mitbreadt

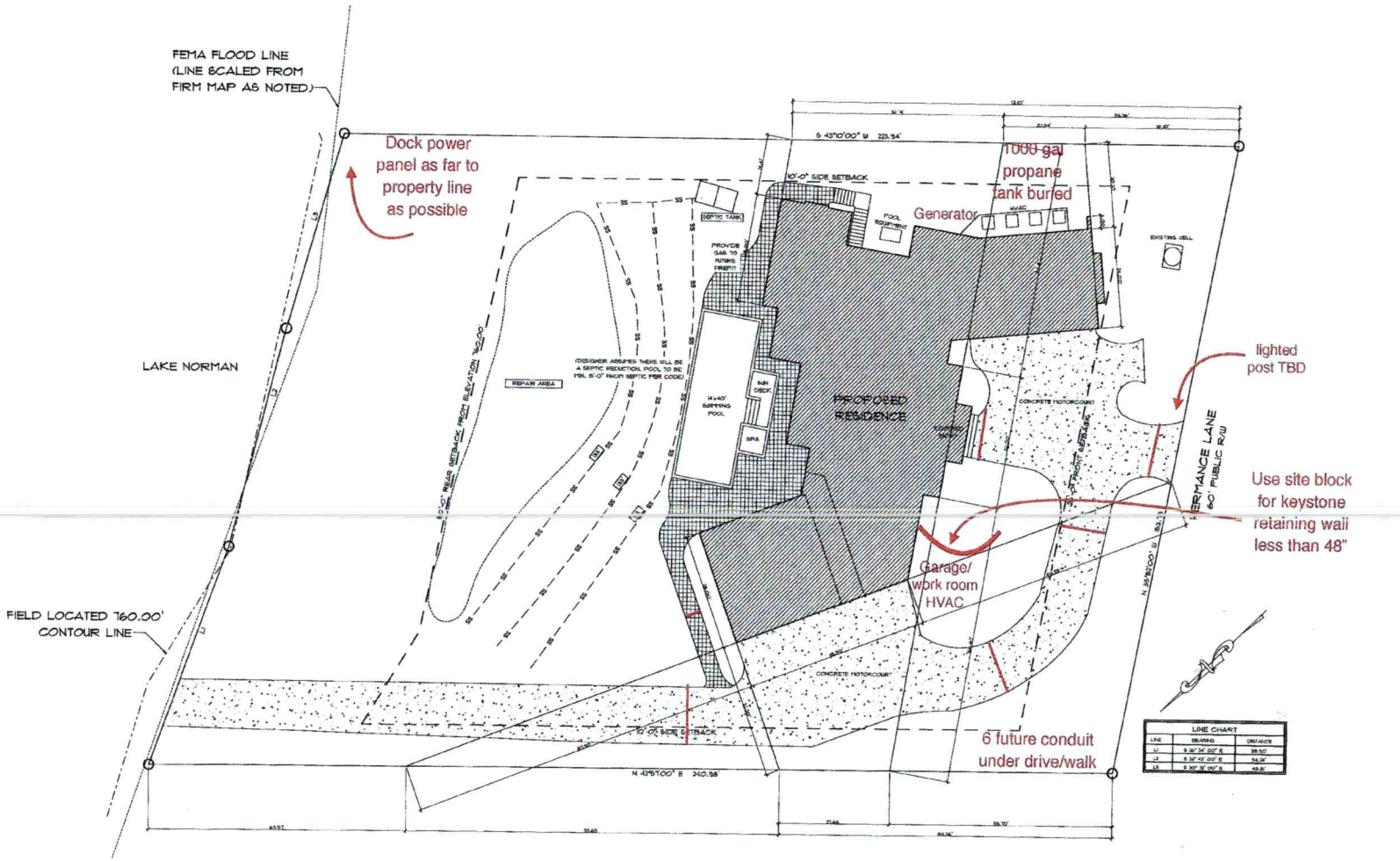
COMMENTS:

DESIGN SPECIFICATIONS - T & J PANEL SYSTEM

254 Hermance Lane

Iredell County, NC

Daily design waste flow:	480 G/D
Septic tank size:	1,000 gal. (2 compartment) H-20 Rated
Septic tank filter:	Polylok Model PL-122
Pumping tank size:	1,000 gal. H-20 Rated
Pressure Filter:	Sim-Tech Filter 100 Series
Control Panel:	Orenco S-Series Model S1IR2ROETMCT
Effluent loading rate:	0.30 G/D/SF (0.25 Repair Panel & 0.10 Repair Drip (50% increase with PPBPS)
Total linear feet and diameter:	355 ft. of 1-1/4" dia. PVC of laterals and T & J panels (both vertical & horizontal) (allow 4.33 ft per panel) (Does not inc. pipe from manifold to lateral)
Total length and diameter of supply manifold:	+/-120 LF 2" Dia. SCH 40 PVC
Number and length of laterals:	Line 1 – 7 Panels (V) Line 2 – 10 Panels (V) Line 3 – 13 Panels (V) Line 4 – 12 Panels (V) Line 5 – 7 Panels (V) Line 6 – 10 Panels (H) Line 7 – 13 Panels (H) Line 8 – 9 Panels (H) **Total Panels = 81 panels** 291.6 Volume
Hole size:	5/32"
Hole spacing:	1 hole per panel
Total number of holes:	81
Flow per hole at 3' head	0.50 G/M
Flow rate through the system:	40.5 G/M
Elevation head:	21.0'
Pressure head:	3.0'
Friction head:	14.56'
Total head:	38.56'
Pump requirements:	40.50 G/M at 38.56' use Goulds 3885 Series WE0712H 3/4 HP - 230 V - 1PH or approved equal
Dosing volume:	240 gal.
Depth of water pumped per dose:	8.5"
Pump run per dose:	5.93 min.
Check valve:	yes
Siphon break hole:	yes



K&H RESIDENTIAL DESIGNS
704-728-0501
N·C·B·D·C
ENGINEER:

THE THINNES RESIDENCE
25 SAWHORSE LANE
MOORESVILLE, NORTH CAROLINA

MEMBER
A B D

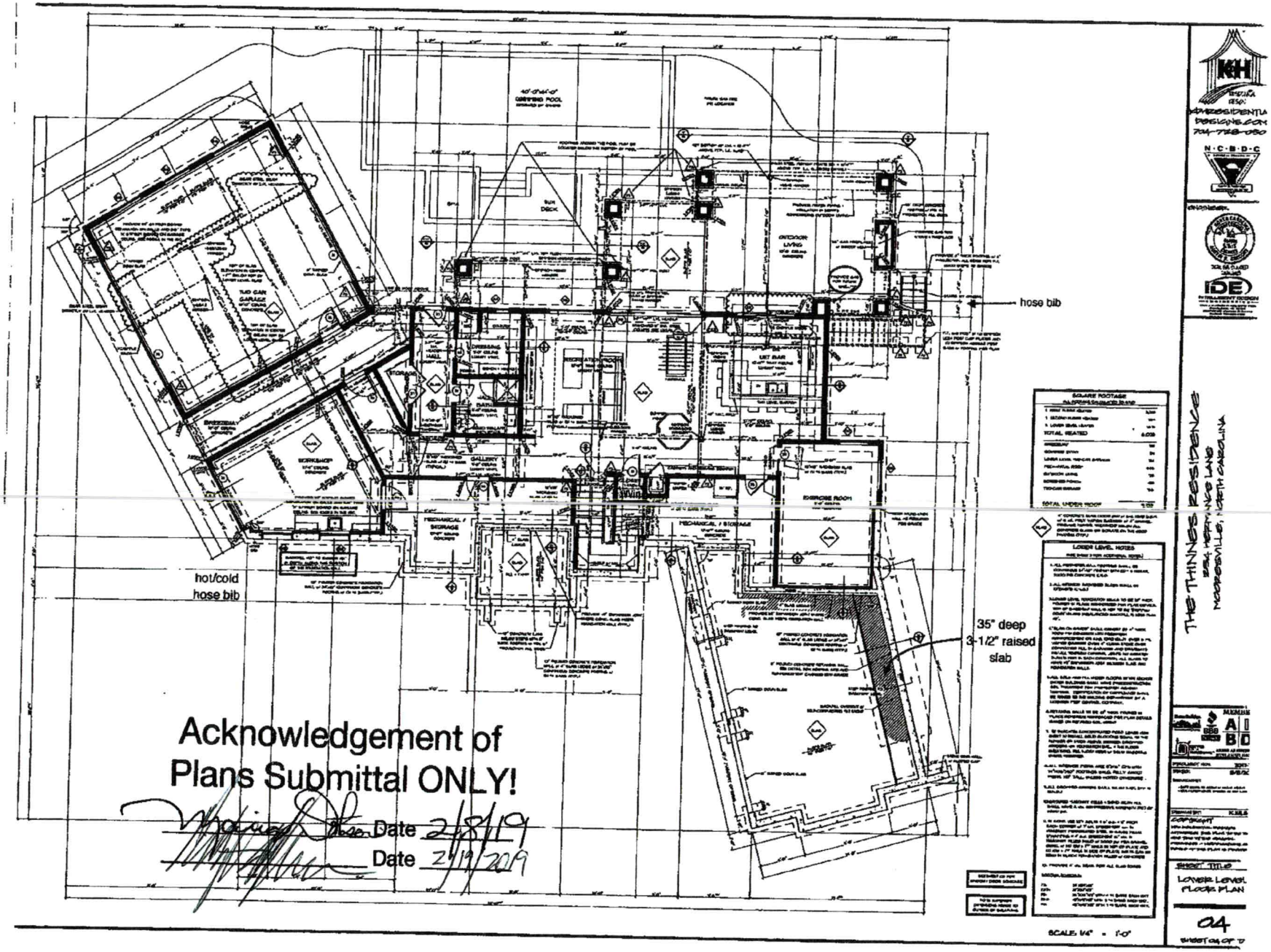
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DATE: 12/23/2
REVISIONS:

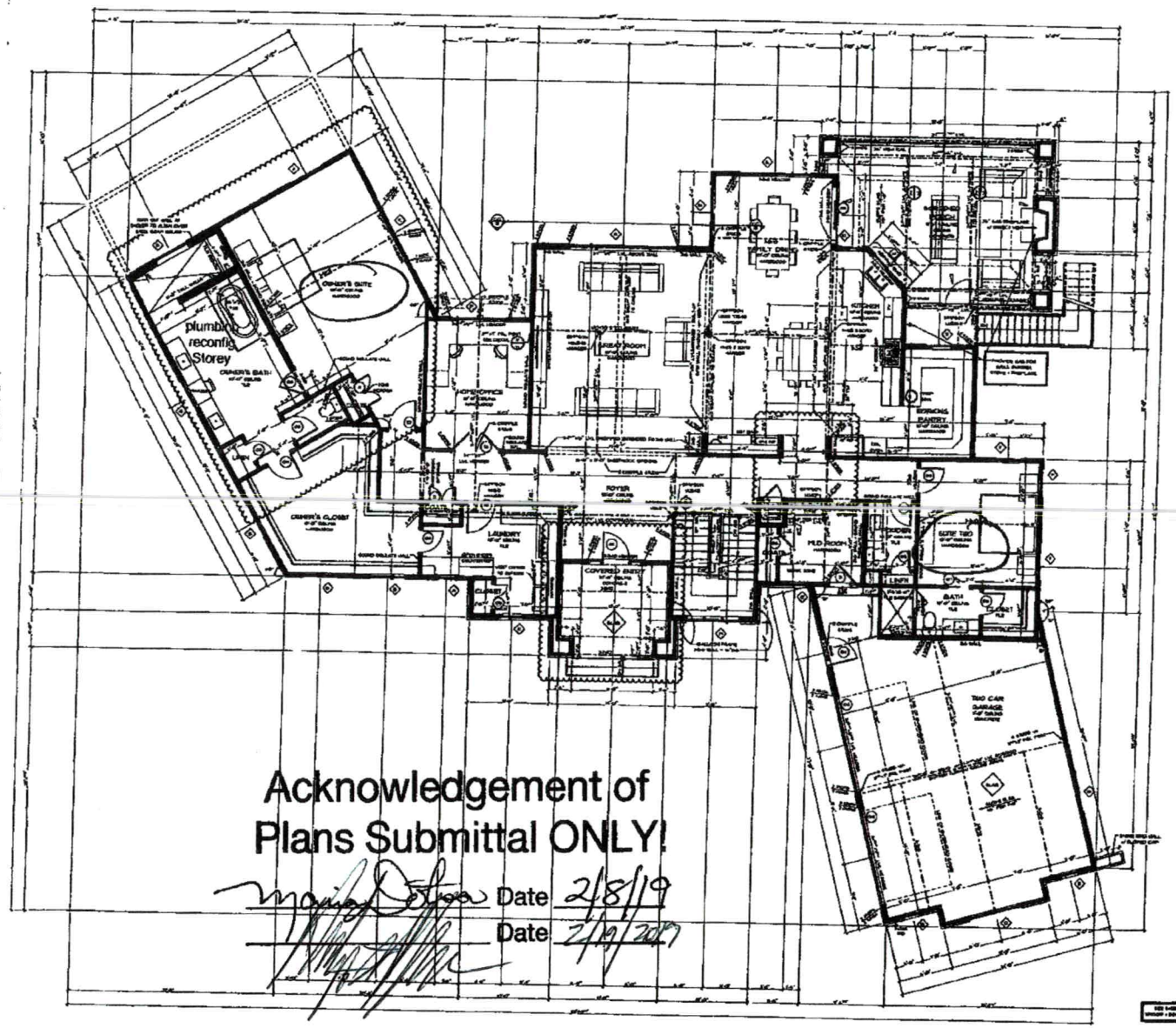
DRAWN BY: KJWL6

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REUSE OF THIS PLAN IS PROHIBITED

SHEET TITLE
SITE PLAN

02
SHEET 02 OF 17


hose bib
hot/cold
hose bib
35" deep
3-1/2" raised
slab
Acknowledgement of
Plans Submittal ONLY!
Date 2/8/19
Date 2/19/2019
SQUARE FOOTAGE
LOWER LEVEL NOTES
SCALE: 1/4" = 1'-0"
SHEET TITLE
LOWER LEVEL
FLOOR PLAN
04



SQUARE FOOTAGE

TOTAL HEATED

TOTAL UNDER ROOF

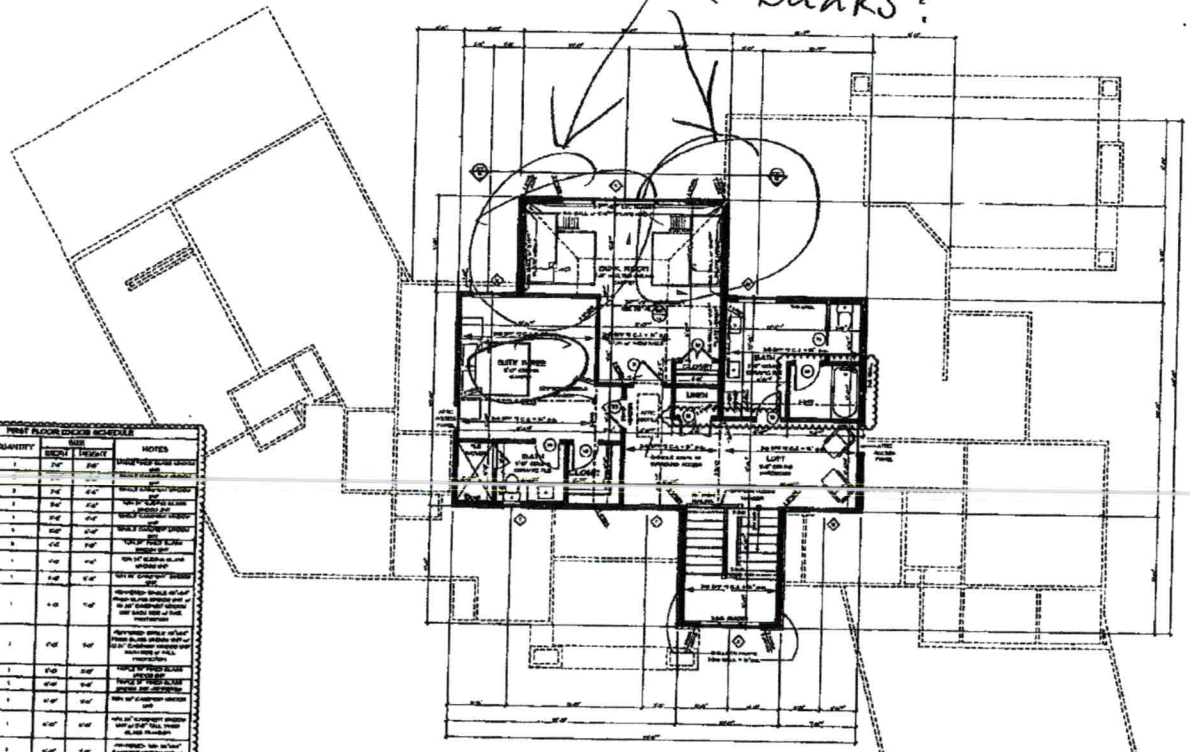
FLOOR PLAN CONSTRUCTION NOTES

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

THE THINNES RESIDENCE

SHEET TITLE
FIRST FLOOR PLAN

05



Acknowledgement of Plans Submittal ONLY!

Date 2/8/19

Date 2/11/2019

THE THINGS RESIDENCE
254 HERITAGE LANE
MOORESVILLE, NORTH CAROLINA

SHEET TITLE
SECOND FLOOR PLAN

08

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

WELL ABANDONMENT RECORD

For Internal Use ONLY

1. Well Contractor Information:

Alfred L Kiesling Jr

Well Contractor Name (or well owner personally abandoning well on his/her property)

3266-A

NC Well Contractor Certification Number

B & K Well Drilling Inc

Company Name

2. Well Construction Permit #: 239372

List all applicable well construction permits (i.e. FR, County, State, Variance, etc.) if known

3. Well use (check well use):

Water Supply Well:

- ☐ Agricultural
- ☐ Geothermal (Heating/Cooling Supply)
- ☐ Industrial/Commercial
- ☐ Irrigation
- ☐ Municipal/Public
- ■ Residential Water Supply (single)
- ☐ Residential Water Supply (shared)

Non-Water Supply Well:

- ☐ Monitoring
- ☐ Recovery

Injection Well:

- ☐ Aquifer Recharge
- ☐ Aquifer Storage and Recovery
- ☐ Aquifer Test
- ☐ Experimental Technology
- ☐ Geothermal (Closed Loop)
- ☐ Geothermal (Heating/Cooling Return)
- ☐ Groundwater Remediation
- ☐ Salinity Barrier
- ☐ Stormwater Drainage
- ☐ Subsidence Control
- ☐ Tracer
- ☐ Other (explain under 7g)

4. Date well(s) abandoned: 2/13/19

5a. Well location:

Kevin Milbredt

Facility/Owner Name

Facility ID# (if applicable)

954 Normance Ln

Physical Address, City, and Zip

Iredell

County

4638021482

Parcel Identification No. (PIN)

5b. Latitude and longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

_____ N _____ W

CONSTRUCTION DETAILS OF WELL(S) BEING ABANDONED

Attach well construction record(s) if available. For multiple injection or non-water supply wells ONLY with the same construction/abandonment, you can submit one form.

6a. Well ID#: _____

6b. Total well depth: 50 (ft.)

6c. Borehole diameter: 2 (in.)

6d. Water level below ground surface: 20 (ft.)

6e. Outer casing length (if known): _____ (ft.)

6f. Inner casing/tubing length (if known): _____ (ft.)

6g. Screen length (if known): _____ (ft.)

WELL ABANDONMENT DETAILS

7a. For Geoprobe/DPT or Closed Loop Geothermal Wells having the same well construction/depth, only 1 GW-30 is needed. Indicate TOTAL NUMBER of wells abandoned 1

7b. Approximate volume of water remaining in well(s): _____ (gal.)

FOR WATER SUPPLY WELLS ONLY:

7c. Type of disinfectant used: Chlorine

7d. Amount of disinfectant used: 8 oz

7e. Sealing materials used (check all that apply):

- ☐ Neat Cement Grout
- ☐ Sand Cement Grout
- ☑ Concrete Grout
- ☐ Specialty Grout
- ☐ Bentonite Slurry
- ☑ Bentonite Chips or Pellets
- ☐ Dry Clay
- ☐ Drill Cuttings
- ☐ Gravel
- ☐ Other (explain under 7g)

7f. For each material selected above, provide amount of materials used:

2 Bags Hole plug

1 Bag concrete

7g. Provide a brief description of the abandonment procedure:

poured + Hydrated

8. Certification:

Alfred L Kiesling — 2-13-19

Signature of Certified Well Contractor or Well Owner — Date

By signing this form, I hereby certify that the well(s) was (were) abandoned in accordance with 15A NCAC 02C .0100 or 2C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

9. Site diagram or additional well details:
You may use the back of this page to provide additional well site details or well abandonment details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

10a. For All Wells: Submit this form within 30 days of completion of well abandonment to the following:

**Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617**

10b. For Injection Wells: In addition to sending the form to the address in 10a above, also submit one copy of this form within 30 days of completion of well abandonment to the following:

**Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636**

10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county where abandoned.