IREDELL COUNTY HEALTH DEPARTMENT

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

PERMIT # 234174

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

PIN # 4659846924 4958

APPLICANT/OWNER: DJ Phoenix LLC APPLICANT ADDRESS: 112 Old Post Rd

SITE ADDRESS: 135 Cottage Ct. Mooresville, NC PHONE: 704-400-5066 ALT. PHONE —

SITE DIRECTIONS: NC 115 N → Ron Shepherd Rd → R on Cottage Ct. → lot at end SAP CONTROLLED: ☑ YES ☐ NO

SUBDIVISION: The Glen SECTION: — LOT # 5 LOT AREA: 10.14ac DESIGN FLOW: 480gpd L.T.A.R.: .3 (.1 repair)

Septic Tank	1000	(gal)	STB SHOAF 7160	Date	8/13	☑ New System ☐ Repair ☐ Expansion System Type: I II III IV V VI		☑ Residence	No. Bedrooms	4	Water Supply
Pump Tank	1000	(gal)	PT SHOAF 363	Date	7/14	System Description: PM 25% reduction		☐ Business	No. Persons	8	☑ Private
Pump Make	Zoeller	Model	E 1165	Serial #		Repair System Description: TS I drip		☐ Other	No. Employees		☐ Public
# Nitrification Fields	1	# Lines	5	Linear Ft	400'	Maintenance Agreement Required: ☐ YES ☑ NO		☐ Slab ☐ Crawl Space			☐ Community
Trench Width	36"	Trench Bottom Depth(Low side)	32"/36" highest	Gravel Depth	—	☐ GRAVITY ☑ PRESSURE		☑ Basement w/plumbing ☐ Basement w/o plumbing			

Comments / Conditions: System must maintain a minimum of 100' from any well.
*Lot must be recorded prior to issuing AC.

INITIAL SITE SKETCH

See attached site plan by CS + SC, PLLC

- Put into land records (Plat Book #68 Page # 71) on 6-13-2018 (meets bearing + distances

AS BUILT SKETCH

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

As Built Attached

As Built Attached

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: [signature] Date: 4/4/18 Installed by: Tony Ball Grading & Septic

IMPROVEMENT PERMIT by: Kayla Watson Date: 4-2-18 OPERATION PERMIT by: Cary Wilt Date: 4/18/22

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 12/28/20 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	10/14/21	DW
Tanks Checked	10/14/21	DW
Pressure Manifold or Valve Box Checked	10/14/21	DW
* Pressure Head Set	4/18/22	CW
Electrical Checked	4/13/22	BW
Floats Set	4/13/22	BW
Alarm Checked	4/13/22	BW
Maintenance Contract Y (N)		

Risers 4/14/22 DW

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 234174

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

PIN # 4659846924

APPLICANT/OWNER: DJ Phoenix LLC APPLICANT ADDRESS: 112 Old Post Rd.

SITE ADDRESS: 135 Cottage Ct. Mooresville, NC PHONE: 704-400-5066 ALT. PHONE —

SITE DIRECTIONS: NC 115 N → R on Shepherd Rd → R on Cottage Ct. → lot at end SAP CONTROLLED: ☑ YES ☐ NO

SUBDIVISION: The Glen SECTION: — LOT # 5 LOT AREA: 10.14 ac DESIGN FLOW: 480gpd L.T.A.R.: .3 (.1 repair)

Septic Tank 1000 (gal) STB SHOAF 7160 Date 8/13
Pump Tank 1000 (gal) PT SHOAF 3603 Date 7/14
Pump Make Zoeller Model E 1165 Serial #
Nitrification Fields 1 # Lines 5 Linear Ft 400'
Trench Width 36" Trench Bottom Depth(Low side) 32"/36" highside Gravel Depth —

☑ New System ☐ Repair ☐ Expansion System Type: I II III IV V VI
System Description: PM 25% reduction
Repair System Description: ~~TS I~~ 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

Comments / Conditions: System must maintain a minimum of 100' from any well.
*Lot must be recorded prior to issuing AC.

INITIAL SITE SKETCH

See attached site plan by CS + SC, PLLC

- Put into land records (Plat Book #68 Page # 71) on 6-13-2018 (meets bearing + distances

AS BUILT SKETCH

Authorization to Construct
FOR SEPTIC FINAL INSPECTION
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As Built Attached

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Owner / Applicant Signature: Date: 4/3/18 Installed by: Tony Ball Grading & Septic

IMPROVEMENT PERMIT by: Kayla Wilson Date: 4-2-18 OPERATION PERMIT by: Date:

AUTHORIZATION TO CONSTRUCT by: Date: 12/28/20 Existing System Inspected by: Date:

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	Date	Initials
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Tanks Checked	10/14/21	DW
Pressure Manifold or Valve Box Checked	10/14/21	DW
* Pressure Head Set		
Electrical Checked	4/13/22	BW
Floats Set	4/13/22	BW
Alarm Checked	4/13/22	BW
Maintenance Contract Y / (N)		

Risers 4/14/22 DW

APPROVED APR X 2 2018

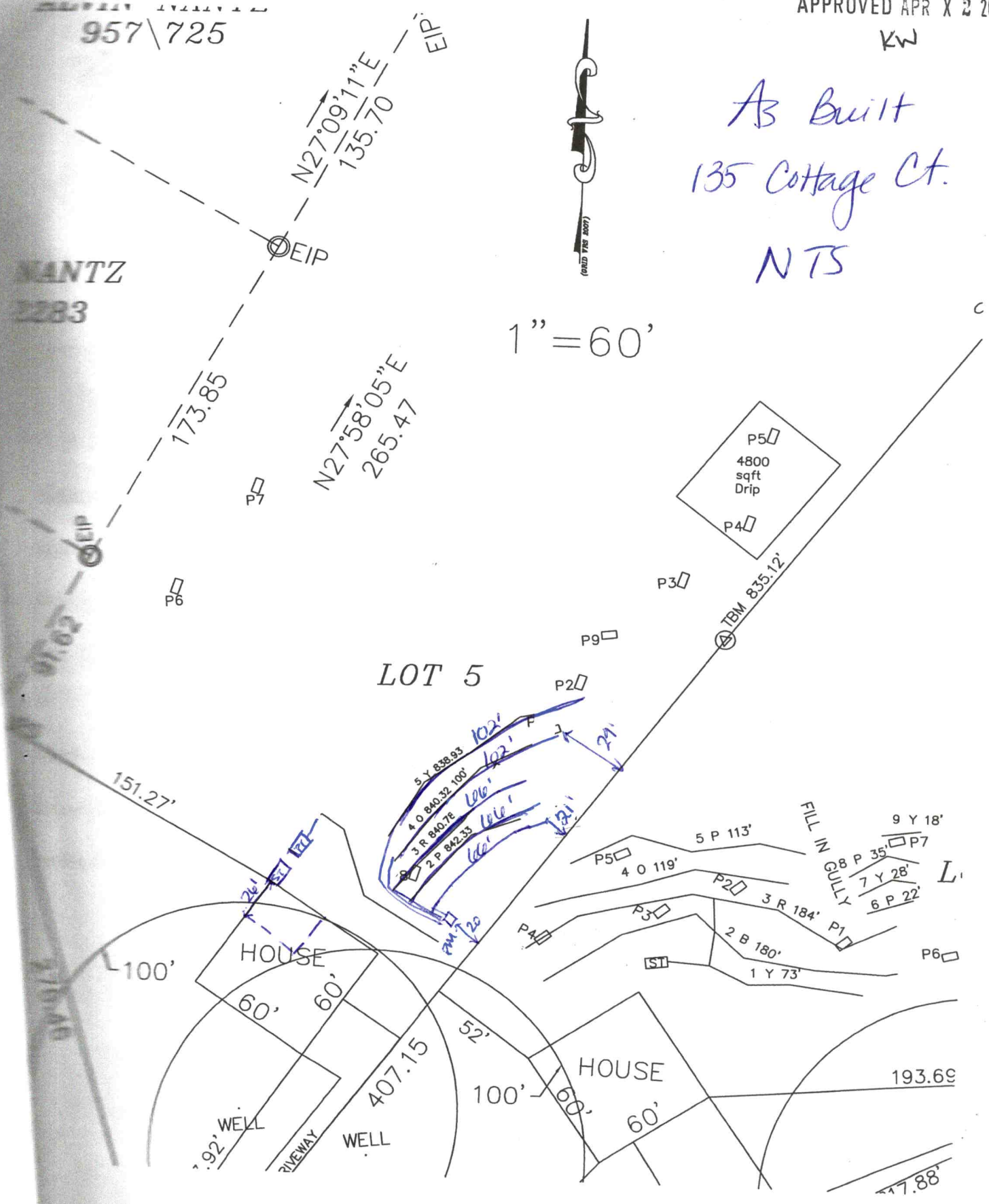
KW

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As Built

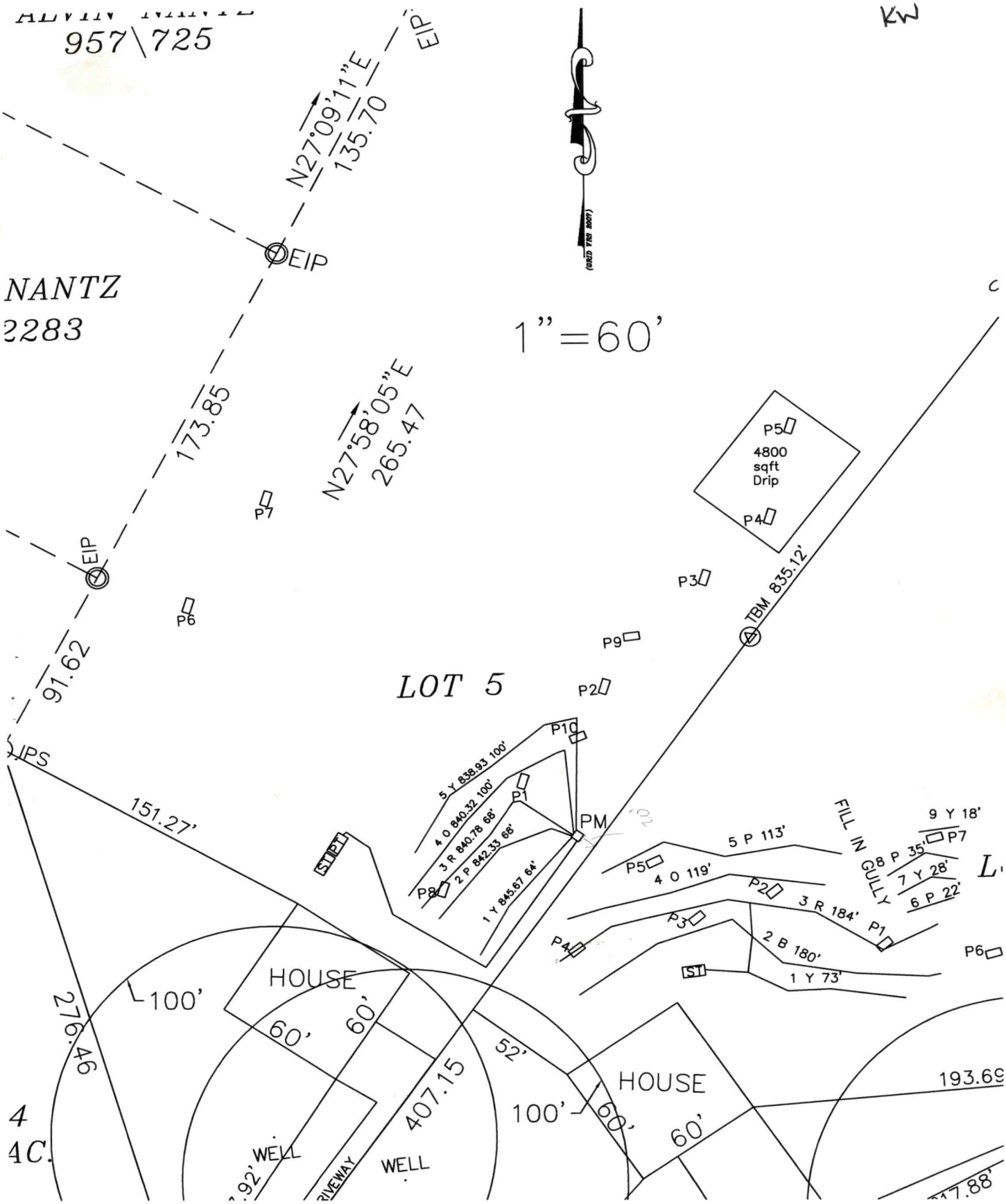
135 Cottage Ct.

NTS



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KW



Carolina Soil & Septic Consulting, PLLC

P.O. Box 1703, Mooresville, NC 28115

Phone: (704) 202-5791 Email: adrianpruett@yahoo.com

NC Licensed Soil Scientist, SC Professional Soil Classifier,
Certified Septic System Operator, Licensed Septic Installer,
Certified Septic Inspector

Proposed design for a 4 Bedroom Accepted 25% reduction Septic System with Pressure Manifold distribution for a single family residence on Lot 5 of The Glen Subdivision, Iredell County, North Carolina.

Contents: **Page**

Information for the Installer---------- 1

Design Information
- Design Specifications---------- 2
- Layout Specifications---------- 3
- System Tapsheet---------- 4
- Pressure Manifold Diagram---------- 5

Site Plan/System Plan---------- 6-7

Calculations---------- 8

Profile Descriptions---------- 9-10

March 15, 2018
Job Number: 17162
Design By: Adrian L. Pruett



INFORMATION FOR INSTALLER:

- The permit should be read very carefully prior to submitting bid. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by NC DHHS, and certification supplied by the manufacturer when requested.
- All tanks shall be properly back filled and compacted to prevent slumping at a later date.
- The installer is responsible for final grades and returning that grade to original, with exception of added structural features.
- The supply trench shall be compacted to eliminate any cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom has no more than 1/4"fall in 10 feet with no high or low areas within. If high or low areas do exist after trench excavation, high areas should be removed rather than filling in low areas. Do not over excavate trenches! Any fine grading should be completed by hand with a rake and shovel, leaving no loose material.
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral to prevent unwanted lateral water movement.
- Elevations at pin flag locations should be checked by the installer prior to beginning trenches to insure accuracy.
- Pump tank riser should be 6" above grade, control panel should be 12" above grade.
- If septic tank riser is used it should be a minimum of 6" above finished grade or within 6" below finished grade.
- Trench walls should be raked, limed and installed at the depth specified by this design.
- Rake trench walls, lime sidewalls, install trenches 36" wide and have no more than 1/4" fall in 10 feet.
- **System is specified as an Accepted Pressure Manifold 25% reduction installation.**
- **Repair is specified as an TS-I Drip Irrigation installation.**
- **If grading for slab foundation is utilized do not grade/create greater than 2 ft of elevation difference within 15 ft of any component of the septic or repair. If back filling do not backfill over any initial or repair septic line.**

PRESSURE MANIFOLD SYSTEM
DESIGN SPECIFICATIONS

Owner:	DJ Phoenix LLC
Address:	112 Old Post Rd. Mooresville, NC 28117
Contact:	Doug Johnson
Phone:	704-400-5066
County:	Iredell
Location:	THE GLEN SUBDIVISION LOT 5
Drainfield Design Flow (gpd):	480
Loading/Soil Application Rate (gpd/ft.^{2}):	0.3
Depth of Gravel in Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Total Lateral Length From Layout:	400
Total Lateral Length Required:	400
Trench Depth:	32 in. Low side
Trench Width:	36 in.
Trench Spacing:	9 ft. on center
Trench Bottom Area:	1200
Repair Trench Spacing:	2 ft. on center
Repair Trench Depth:	6 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	169
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	29.41
Dosing Volume:	182.84
Pump Tank Draw Down:	8.7
Supply Manifold Size:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
Supply Manifold Volume:	N/A
Recommended Dosing Controls:	Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	NEMA 4X Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	3.48
Elevation Head:	24.37
Total Dynamic Head:	38.70
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by CS&SC

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KW

**Pump tank draw down based on an industry standard volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

THE GLEN SUBDIVISION LOT 5
FIELD LAYOUT SPECIFICATIONS

LAYOUT FOR 4 BEDROOM HOME

March 15, 2018

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM					835.12		
INSTR. 1							
HOUSE					842.57		
TANK					826.30		
1	***PINK***				***845.67***	***64***	***64***
2	***ORANGE***				***842.33***	***68***	***68***
3	***YELLOW***				***840.78***	***68***	***68***
4	***BLUE***				***840.32***	***100***	***100***
5	***RED***				***838.93***	***100***	***100***
6	TS-1 DRIP				870.20	4800 SQFT	4800 SQFT
					Total	**400**	**400**

	LINE LENGTH	SYSTEM TYPE	SOIL LTAR GPD/FT[1]	TRENCH SYSTEM	DISTRIBUTION
**** System***	***400***	***ACCEPT.***	***0.300***	***25% RED.***	**PRESSURE MANIFOLD**
Repair	4800 SQFT	INNOV.	0.100	TS-I DRIP	LOW PRESSURE

Notes:
** TBM located at angle point along right property line (see site plan)
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings

Comments: **Iredell County has CS&SC's permission to change Tank and distribution device locations.**

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PRESSURE MANIFOLD TAPSHEET - THE GLEN SUBDIVISION LOT 5

SYSTEM

Line #	Color	Elev	Length	Hole Size	Flow/Tap	gpd	Trench Area	Line LTAR
1	*YELLOW*	*845.67*	*64*	SCH 40 1/2	**7.11**	31.30	192	0.16
2	*PINK*	*842.33*	*68*	SCH 40 1/2	**7.11**	31.30	204	0.15
3	*RED*	*840.78*	*68*	SCH 40 1/2	**7.11**	31.30	204	0.15
4	*ORANGE*	*840.32*	*100*	SCH 80 3/4	**10.1**	44.47	300	0.15
5	*YELLOW*	*838.93*	*100*	SCH 80 3/4	**10.1**	44.47	300	0.15
	total	**feet =**	**400**	**gal/min =**	**41.53**			
			Des. Flow	**480**				
			Pump Run=	**4.40**				
			LTAR	**25% RED.**				

Some lines flagged longer in the field, shorten to lengths shown here.

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

APPROVED APR X 2 2018
KW

PROPERTY ID #: _____
COUNTY: IREDELL

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

OWNER: DJ PHOENIX LLC. APPLICATION DATE3-15-18
ADDRESS: 112 OLD POST RD. MOORESVILLE, NC 28117 DATE EVALUATED: 3-9-18
PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.1949): 480 GPD PROPERTY SIZE: _____
LOCATION OF SITE: THE GLEN LOT 5, COTTAGE COURT, MOORESVILLE 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)		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	
P 1	LSS 6%	0-35	RC,M,SBK/ABK	FR,SS,SP,SEXP	NA	49"	S	57"	.3
		35-49	RCL,W,SBK	FR,SS,SP,SEXP					
		49-57	LSAP,MASSIVE	FR,SS,SP,SEXP					
P 2	LSS 6%	0-21	RC,M,SBK	FR,SS,SP,SEXP	Y/BR @ 0-21 CH2 @ 21"	42"	U	21"	.1 DRIP
		21-42	RC,S,ABK	FIRM,S,P,SEXP					
		42-55	C/CL SAP	FIRM,S					
P 3	LSS 4%	0-15	RSCL,W,SBK	FR,SS,SP,SEXP	NA	54"	NA	54"	.225
		15-54	Y/RSC,W,SBK	FR,S,SP,SEXP					
P 4	LSS 4%	0-14	LS,GR	VFR,NS,NP,SEXP	Y/BR @14-42 WATER RUNNING IN BOTTOM OF PIT	57"	NA	57"	.1 DRIP
		14-42	SCL,W,SBK	FR,SS,SP,SEXP					
		42-57	BRSC,W,SBK	FR,S,SP,SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	PM 25% RED.	TS-1 DRIP IRR.
Site LTAR	0.3	0.1

OTHER FACTORS (.1946): NONE
SITE CLASSIFICATION (.1948): PS

EVALUATED BY: BEN ALDRIDGE
OTHER(S) PRESENT: JACOB CONRAD

COMMENTS: _____

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

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

APPROVED APR X 2 2018
KW

PROPERTY ID #: _____
DATE OF EVALUATION: 3/9/18
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
P5	LSS 5%	0-9	RSCL,W,SBK	FR,SS,SP,SEXP	CH2 @ 33"	53"	NA	33"	.1 DRIP
		9-33	YSCL,W,SBK	FR,SS,SP,SEXP					
		33-53	YSC,W,SBK	FIRM,S,SP,SEXP					
P6	LSS 10%				CH2 @ 3"				U
P7	LSS 10%	0-39	RC,M,SBK	FR,SS,SP,SEXP	Y/BR @ 0-39 CH2 @ 39"	55"	COM INC @ 39"	39"	.225
		39-55	RCL,W,SBK	FR,SS,SP,SEXP					
P8	LSS 10%	0-9	RC,M,SBK/ABK	FR,SS,SP,SEXP	NA	27"	S	60"	.35
		9-27	RCL,W,SBK	FR,SS,SP,SEXP					
		27-60	LSAP,MASSIVE	FR,SS,SP,SEXP					
P9	LSS 8%	0-19	RC,S,ABK	FIRM,S,SP,SEXP	Y/BR AND GREY MINERALS THROUGH OUT	47"	S	62"	.275
		19-47	RCL,W,SBK	FR,SS,SP,SEXP					
		47-62	LSAP,MASSIVE	FR,SS,SP,SEXP					

COMMENTS: _____

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

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

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DATE OF EVALUATION: 3-9-18
COUNTY: IREDELL

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	
P 10	LSS 10%	0-25	RC,M,SBK/ABK	FR,SS,SP,SEXP	NA	35"	S	60"	.35
		25-35	RCL,W,SBK	FR,SS,SP,SEXP					
		35-60	LSAP,MASSIVE	FR,SS,SP,SEXP					

RECEIVED MAR 19 2018

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

Paid $350.00 # 234174

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

Paid $500.00 4-17-18

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

Applicant Information: **(PRINT CLEARLY)**

Applicant Name: DJ PHOENIX, LLC/CS&SC **Address:** 112 OLD POST RD., MOORESVILLE, NC **Zip:** 28117

Applicant Email: douglasajohnson1@gmail.com **Phone:** 704-400-5066 **Alt. Phone:** _____

Owner Name: SAME **Address:** _____ **Zip:** _____

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

Property Information:

Street Address: 135 ~~STONE~~ COTTAGE CT., MOORESVILLE

Subdivision Name: THE GLEN **Section/Phase:** 1 **Lot Number:** 5

Driving Directions: HWY 115 N, TR ON SHEPHERD RD., NEW SUBDIVISION RD ON R PAST SHEPHERD VALLEY, @ END OF CUL-DE-SAC

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

CHECK FOUNDATION TYPE

(X) New Single Family Residence — Maximum Number of Bedrooms: 4 — ( ) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: 8 — ( ) Concrete Slab Foundation
( ) Accessory Building — ( ) Swimming Pool — (X) Basement with Plumbing
( ) Bedroom(s) Addition — ( ) Other Addition/Structure: _____ — ( ) Basement without Plumbing
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____
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: _____

(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 (X) 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: _____ 3-15-18
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

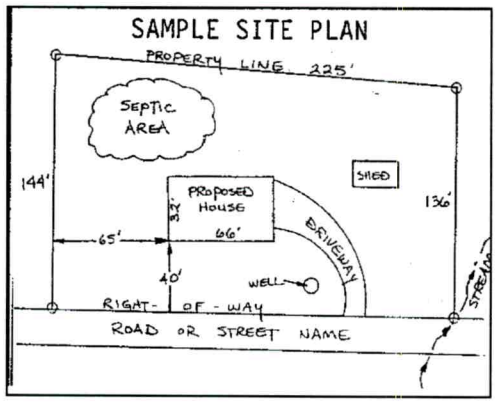
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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:

- (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**
- (X) **Preferred well location**
- (X) **Preferred septic system location**
- (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 SITE PLAN AND DESIGN

Signature: _____

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

3-15-18

DATE

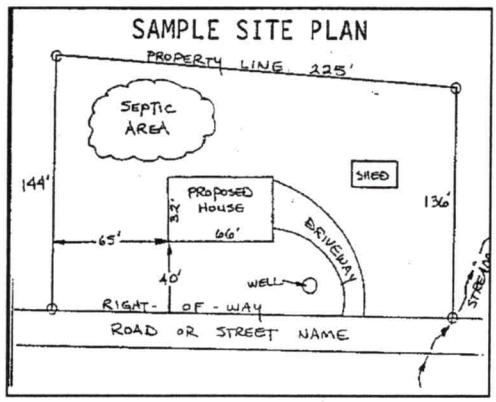
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- ☒ **Preferred well location**
- ☒ **Preferred septic system location**
- ☒ **North arrow, or other sufficient indicator of direction**



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

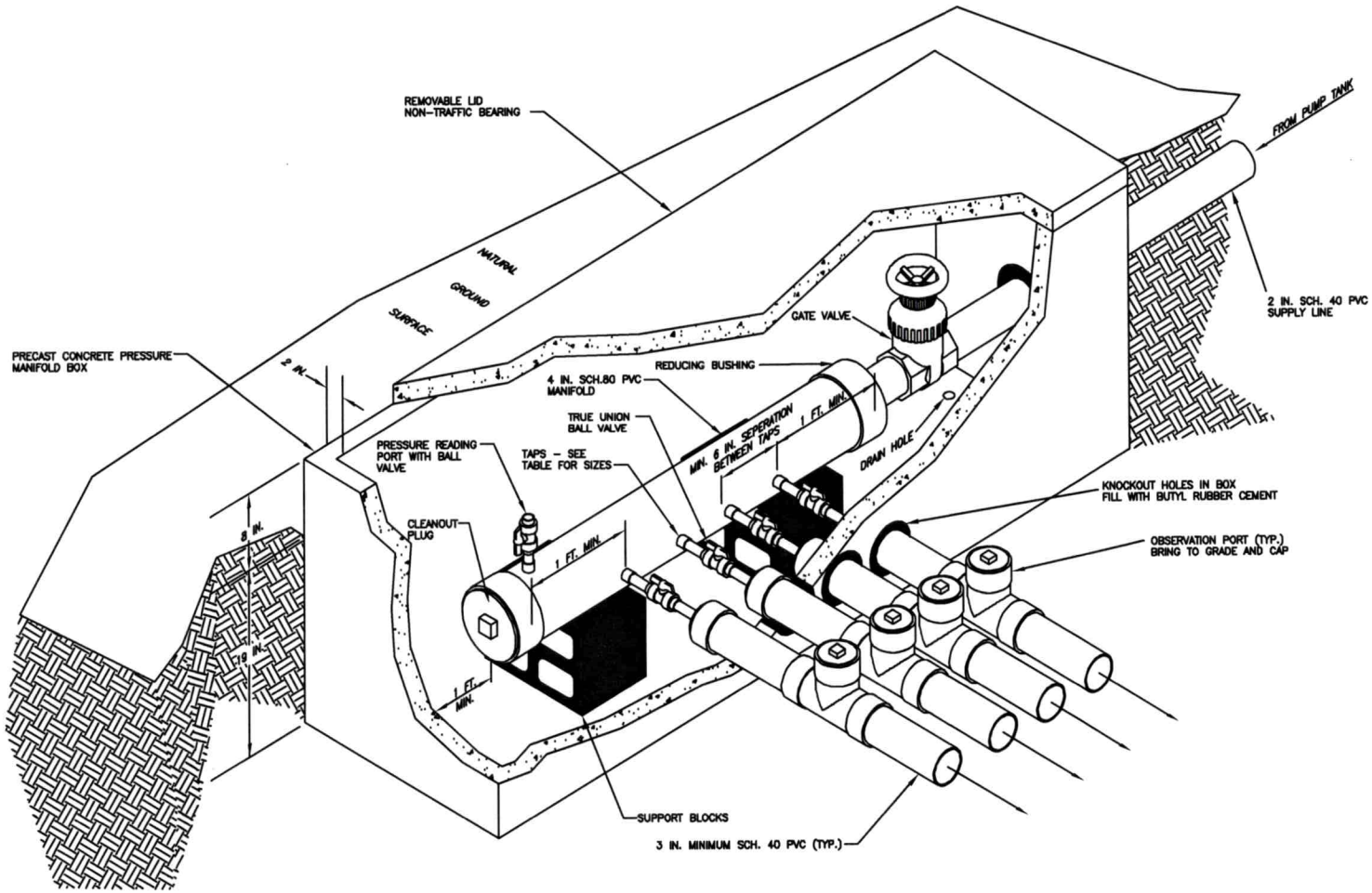
Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

SEE ATTACHED SITE PLAN AND DESIGN

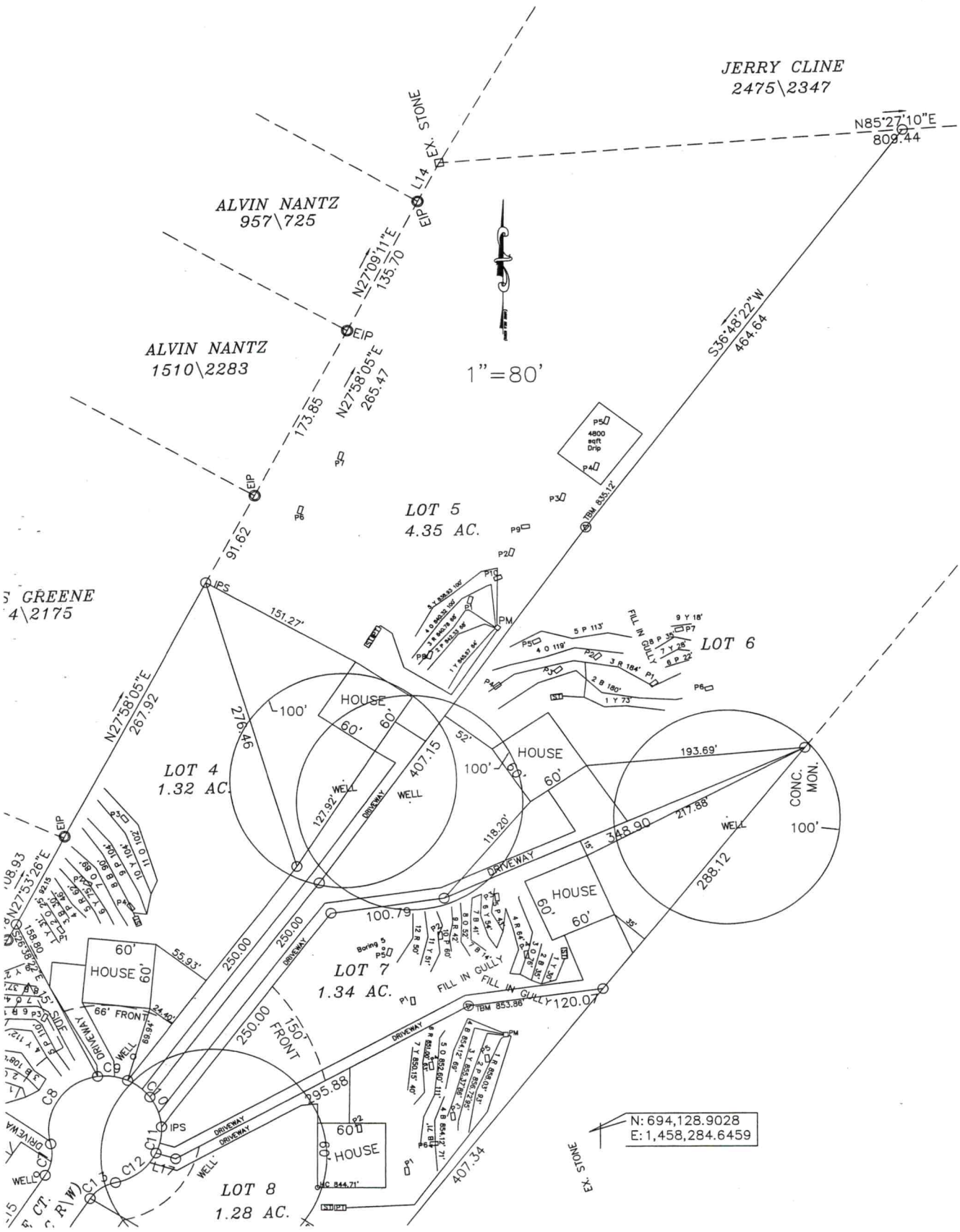
Signature: _____ 3-15-18

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

TYPICAL PRESSURE MANIFOLD DETAIL



APPROVED APR X 2 2018
KW



CALCULATIONS

Location THE GLEN SUBDIVISION

Lot No: 5

APPROVED APR X 2 2018
KW

No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.3	$^{gpd/ft^2}$
25% RED.? (YES OR NO)	YES	
Supply Line Length	169	ft.
Supply Line Volume	29.406	gal.
Required Feet of Line	400	ft.
Amount of Line from Layout	400	ft.
Gallons per Minute	41.53	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	261.2	gal.
Dosing Volume	182.84	gal.

Note: Dosing Volume based on 70% of lateral line volume

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Tank Draw Down	8.7	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	4.40	minutes
Elevation Head	24.37	ft.
Pressure Head	2	ft.
Friction Factor	3.48	ft./100 ft. *(From the interpolater.)*
Friction Head	5.88	ft.
Total Dynamic Head (+20%)	38.70	ft.

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, DOUG JOHNSON, am the legal owner(s) of the property located at 135 COTTAGE CT. MOORESVILLE, NC 28115, identified as PIN (Parcel Identification Number) 4659-84-6924, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) ADRIENNE PRUITT, CAROLINA SOIL + SEPTIC CONSULTING, 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 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

IREDELL COUNTY

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

APPLICATION NUMBER
234174
Issue Date: 03/16/2018

ZONING PERMIT

Residential

Parcel Number	Street Address	Jurisdiction
4659846924.000	135 COTTAGE COURT, MOORESVILLE, NC 28115	

Owner Information		Applicant Information	
Owner:	NANTZ MORRIS G JR+ERIC MARK NA NTZ	Applicant:	CAROLINA SOIL SEPTIC C
Address:	106 SAM SNEAD DR	Address:	162 WEST B ST
	MEBANE, NC 27302		KANNAPOLIS, NC 28081
Phone:		Phone:	704-202-5791

Use Requested	Zone Code
SFD LOT 5	RA

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

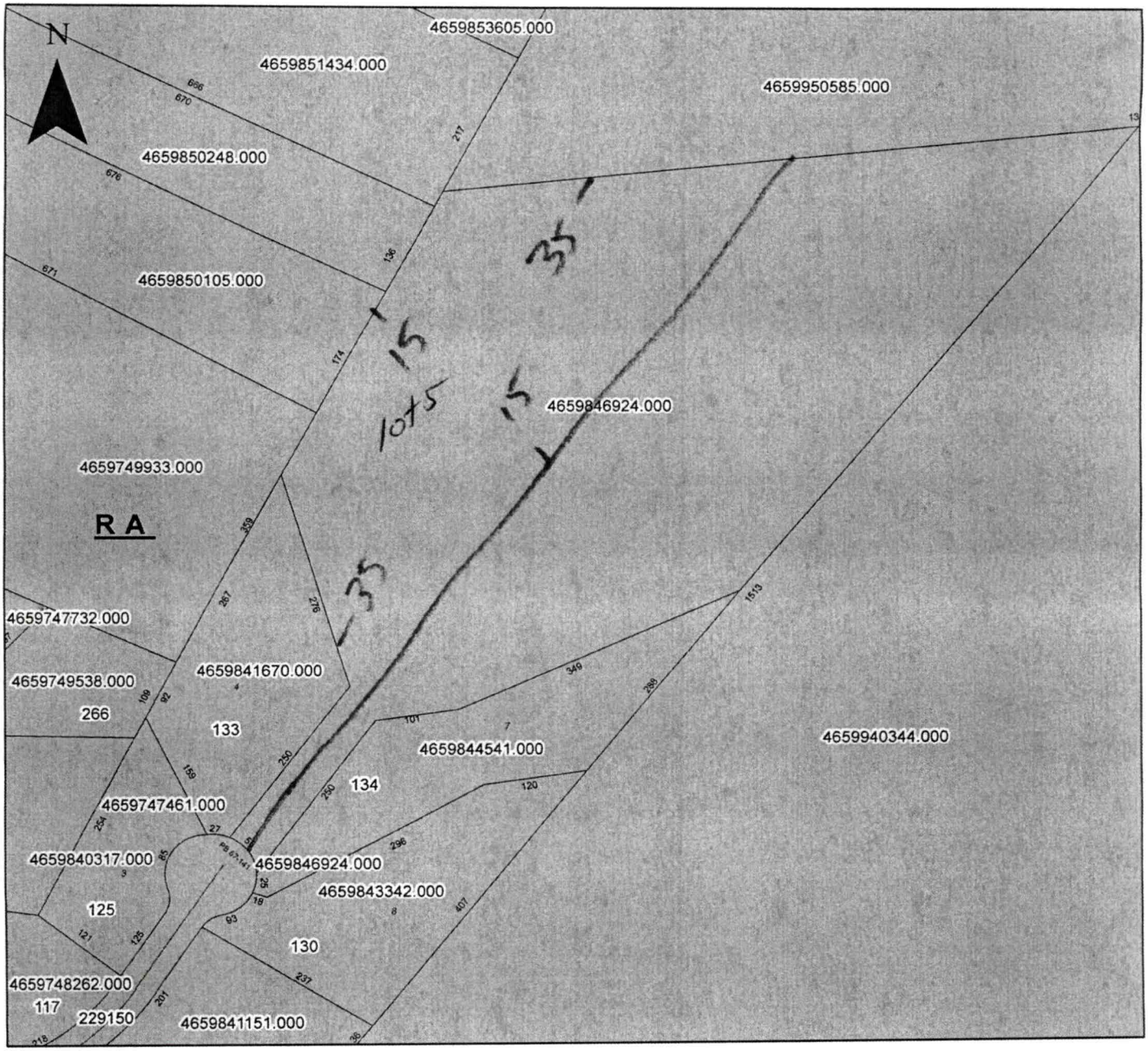
Remarks:

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	132246	TOTAL FEES:	$ 77.25

ZONING DISCLAIMER



Property Address 135 Cottage Ct.

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. Applicant further acknowledges that the 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

IREDELL COUNTY

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

APPLICATION NUMBER
234174
Issue Date: 03/16/2018

Permit Type: IMPROVEMENT PERMIT APPLICATION

Parcel Number	Street Address	Jurisdiction
4659846924.000	135 COTTAGE COURT	

Owner Information	Applicant Information	Contractor Information
Owner: NANTZ MORRIS G JR+ERIC MARK NA NTZ Address: 106 SAM SNEAD DR MEBANE, NC 27302 Phone:	Applicant: CAROLINA SOIL SEPTIC C Address: 162 WEST B ST KANNAPOLIS, NC 28081 Phone: 704-202-5791	Contractor: CAROLINA SOIL SEPTIC C Address: 162 WEST B ST KANNAPOLIS, NC 28081 Phone: 704-202-5791 License Type License Number UNLI

Project Description
NEW SINGLE FAMILY - IREDELL

Scope of Work
SFD LOT 5

Permit Details:

EFT	IMPROVEMENT PERMIT FEE	Amount:	350.00
		Amount:	
		Amount:	
		Amount:	
		Amount:	
		Amount:	
		Amount:	

I hereby certify that all information in this application is correct and all work will comply with the state code and all other applicable state and local laws, ordinances and regulations. The respective department will be notified of any changes in the approved plans, a change of contractor, and/or specifications for the project permitted herein. This application becomes a permit only when validated and approved.

Date: 03/16/2018

Signature of Owner/Contractor

ANY PERMIT ISSUED EXPIRES SIX (6) MONTHS AFTER ISSUANCE IF NO INSPECTIONS HAVE BEEN MADE. ANY PERMIT ISSUED SHALL EXPIRE TWELVE (12) MONTHS AFTER LAST INSPECTION IF THE WORK IS DISCONTINUED.

Permit Number	132247	TOTAL FEES:	$ 350.00