ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # AP 327420

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

PIN # 4774 -- 19 -- 1781

APPLICANT/OWNER: Salem Springs Dev LLC APPLICANT ADDRESS: P.O Box 3965 Mooresville NC 28117

SITE ADDRESS: 110 Salem Springs Way Statesville NC 28625 PHONE: 704-433-9947 ALT. PHONE —

SITE DIRECTIONS: Mocksville Hwy to New Salem Rd SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Salem Springs SECTION: — LOT # 3 LOT AREA: 1.162 Ac DESIGN FLOW: 480 L.T.A.R.: .25

Septic Tank	1000	(gal)	STB 760	Date	9/19/22	☒ New System	☐ Repair	☐ Expansion	System Type: I (II) III IV V VI	☒ Residence	No. Bedrooms 4
Pump Tank		(gal)	PT	Date		System Description:	Gravity - Conventional			☐ Business	No. Persons 8
Pump Make		Model		Serial #		Repair System Description:	LPP - Drip Irrigation			☐ Other	No. Employees
# Nitrification Fields	1	# Lines	6	Linear Ft	672	Maintenance Agreement Required:	☐ YES	☒ NO		☒ Slab	☐ Crawl Space
Trench Width	36in	Trench Bottom Depth(Low side)	48in	Gravel Depth	12in.		☒ GRAVITY	☐ PRESSURE		☐ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☐ Private ☐ Public ☒ Community

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:

Soil + Forestry Services of the Carolinas, ~~AA~~

LSS # 1231 Dated Nov 4th 2021

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.

Check filter & D-Box

See Attached for As-Built

Lines tanks ✓ CW 11/3/22

D-BOX CHECKED 11-10-2022

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**

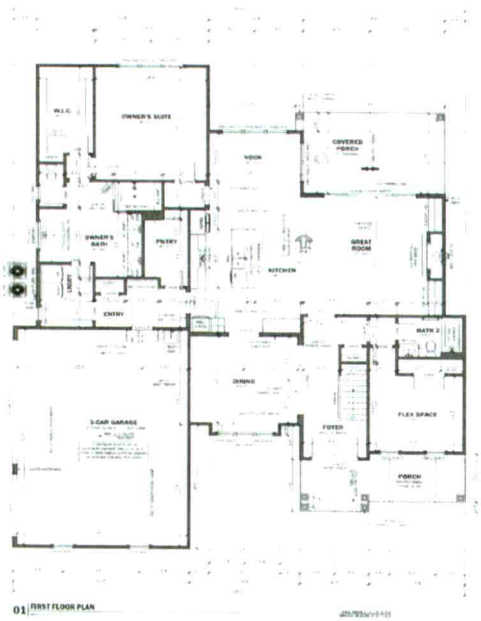
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☐ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 6/2/22 Installed by: Specialty

IMPROVEMENT PERMIT by: Date: 4/21/22 OPERATION PERMIT by: Date: 11-10-2022

AUTHORIZATION TO CONSTRUCT by: Date: 6-1-2022 Existing System Inspected by: Date:

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



01 FIRST FLOOR PLAN

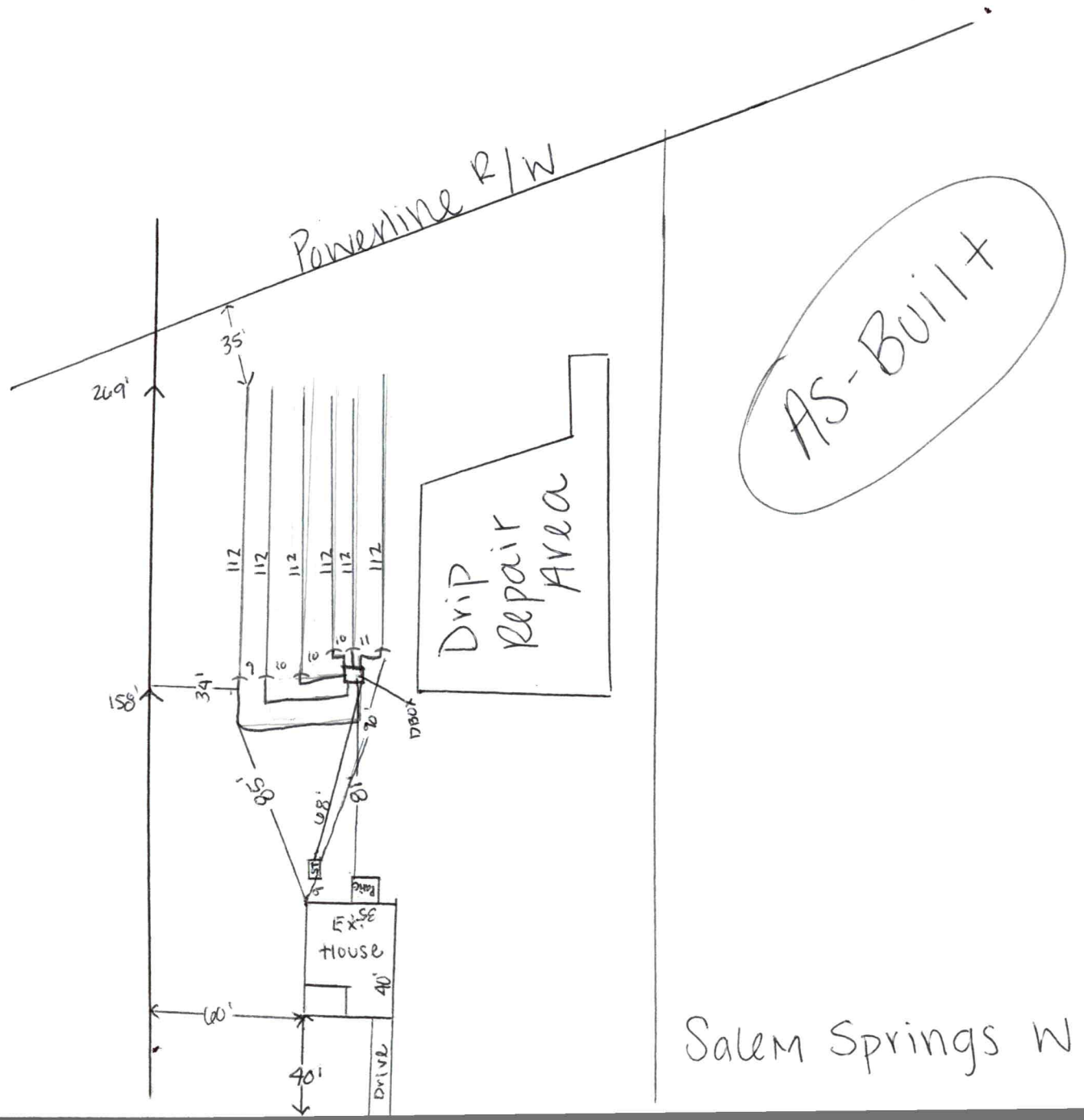
TYPICAL HANGERS

EXTERIOR WALL HDT (4) | EDGE SIZE/ SPACING

WALL BRACING NOTE:

FRAMING NOTES:

A3


Powerline R/W
35'
269'
158'
34'
112
112
112
112
112
112
10
10
10
10
11
2
Drip
Repair
Area
DBOX
20'
95'
68'
81'
Exist.
35'x15'
House
40'
60'
40'
Drive
AS-BUILT
Salem Springs Way ↓

MA&A
SOIL & ENVIRONMENTAL CONSULTANTS

MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
556 Walden Trail
Weddington, NC 28173
(704) 576-3887
8/17/2022

Reference: Data Sheet for 143 Mariner Pointe Ln, Pinnacle Shores Ph 3 Lot 21
House Footprint: See attached plan
Building Setbacks: 35' front/rear, 15' side, 50' lake
Water Source: Community well
Number of Bedrooms/Daily Flow: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT^2
Proposed System Type: 25% Reduction
Proposed Repair System Type: TS II Pretreatment PPBPS
Distribution: Pressure Manifold
Flow per Tap: 1 @ 12.5 GPM, 1 @ 10.1 GPM
Tap Size and Material: 1 @ ¾" SCH 40, 1 @ ¾" SCH 80
System Flow: 22.6 GPM
Dosing Volume: 175 gallons
Pump Run Time: 7.7 minutes
Elevation Head: 26.8'
Friction Head: 1.9'
Pressure Head: 2'
Total Dynamic Head: 30.7'
Supply Line Length: 145' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 24-36"



Line	Design Length	Actual Length	Elevation
Blue 1		40'	2.7'
White 2		65'	3.0'
Orange 3		80'	3.7'
Blue 4	**100'**	**100'**	**4.5'**
Yellow 5	**115'**	**118'**	**5.1'**
Pink 6	**95'** (42' Rep)	**143'**	**6.2'**
White 7	**90'**	**92'**	**7.0'**
Orange 8		75'	8.1'

Initial System: 400'
Repair System: 302'
Pump Tank: 26.3'
House Corner: 10.7'
Benchmark: 8.8'

Comments:
B4 and Y5 will be on one tap (¾" SCH 40)
P6 and W7 will be on one tap (¾" SCH 80)

0 - 10 - SCL - Dishland
10 - 56 - C ABL 2-5YR 6/6
36 - 54 CL WSBL -

PS .30.

Hard Strip Inches

0 - 5 SCL - Dishland
5 - 32 C ABL 2.5YR 6/6
32 - 58 CL WSBL

PS .30

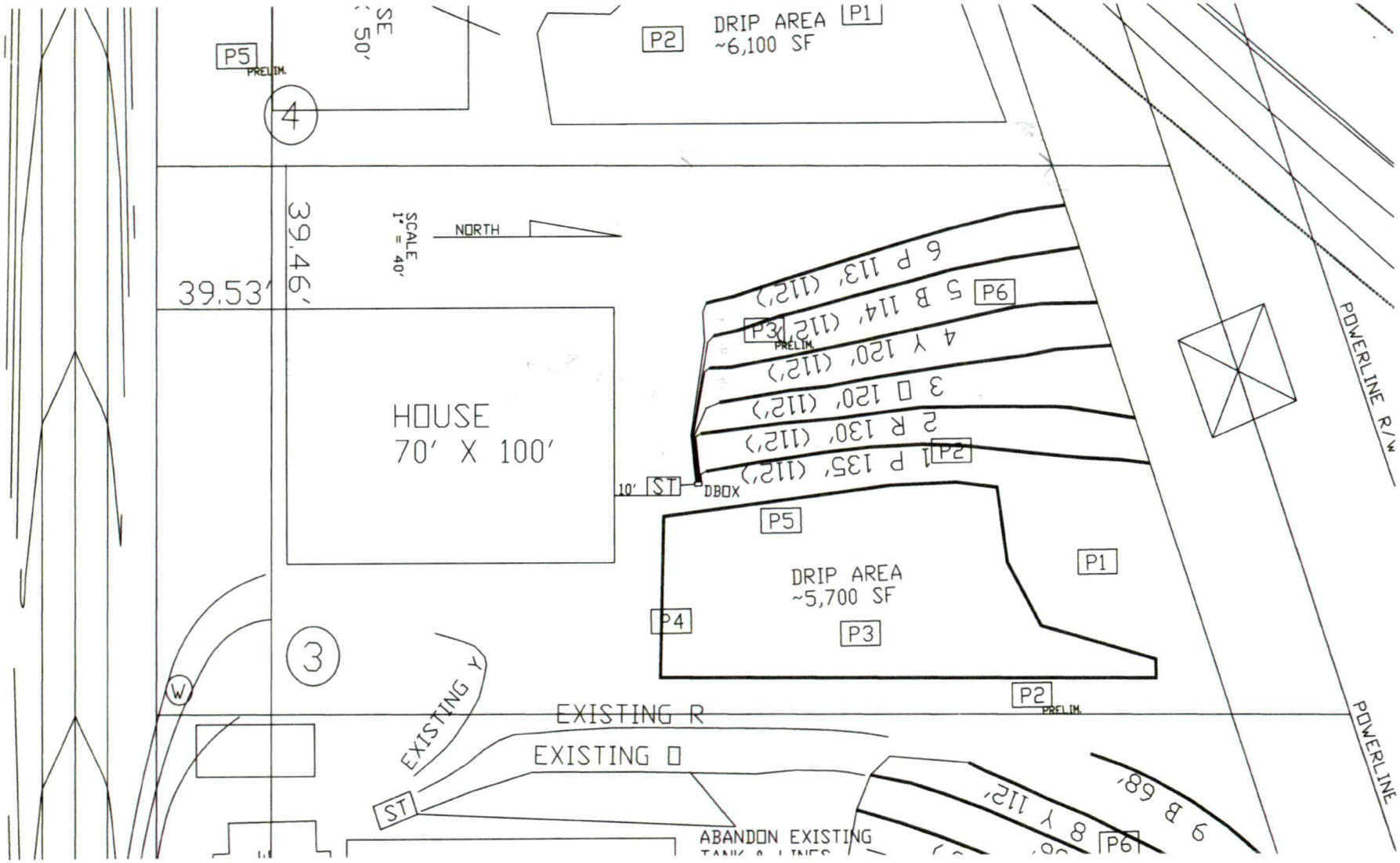
Fine Strip Inches

0 - 12 Fill - Dishland
12 - 48 C SBL/ABL
48 - 53 CL WSBL

PS .30.

0 - 6 SCL Dishland.
6 - 32 C SBL/ABL
32 - 53 CL WSBL

PS .30.


P5
PRELIM.
4
SE
50'
P2
DRIP AREA
~6,100 SF
P1
39.53'
39.46'
SCALE
1" = 40'
NORTH
HOUSE
70' X 100'
P6
P3
PRELIM.
6 P 113' (112')
5 B 114' (112')
4 Y 120' (112')
3 □ 120' (112')
2 R 130' (112')
1 P 135' (112')
P2
10'
ST
DBOX
P5
DRIP AREA
~5,700 SF
P1
P4
P3
3
W
EXISTING Y
EXISTING R
EXISTING □
ST
P2
PRELIM.
POWERLINE R/W
POWERLINE
9 B 68'
8 Y 112'
P6
ABANDON EXISTING

CALCULATIONS

Location	Salem Springs	
Project Number	21-0029	
Lot No:	3	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.250	$^{gal}/_{ft^2\ day}$
PPBPS? (YES OR NO)	NO	
Supply Line Length	4	ft.
Supply Line Volume	2.612	gal.
Required Feet of Line	640	ft.
Amount of Line from Layout	672	ft.
Gallons per Minute	N/A	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Septic Tank Size	1000	gal.
Panel Volume	N/A	gal.
# of Panels	N/A	
Dosing Volume	N/A	gal.
Tank Draw Down	N/A	
Pump Run Time		
Elevation Head	N/A	ft.
Pressure Head	N/A	ft.
Friction Factor	N/A	ft./100 ft. *(From the interpolater.)*
Friction Head	N/A	ft.
Total Dynamic Head (+15%)	N/A	ft.

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

RECEIVED APR 13 2022

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM AP-327420 Session Law

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 Paid $500.00

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: Salem Springs Dev LLC Address: P.O. Box 3965, Mooresville NC Zip: 28117
Applicant Email: mwetter@nesthomes.com Phone: 704 433 9947 Alt. Phone:
Owner Name: Magnolia Lakes Partners LLC Address: P.O. Box 3965, Mooresville NC Zip: 28117
Owner Email: Phone: Alt. Phone:

Property Information:

Street Address: 110 Salem Springs Way Statesville NC 28625
Subdivision Name: Salem Springs Section/Phase: Lot Number: 3
Driving Directions: Mocksville Hwy (Hwy 64), New Salem Rd

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: 8
( ) 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: [redacted]
( ) No Preference ( ) Alternative (✓) Conventional ( ) Innovative ( ) Modified Conventional

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: Samuel R Wetter 11/4/21
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

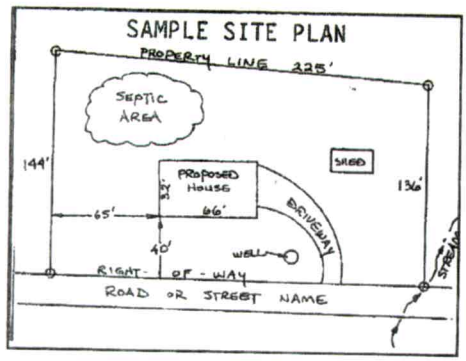
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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

Signature: _____ 11/4/21

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

PROPERTY ID #: 4776,866411
COUNTY: Iredell

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

OWNER: Magnolia Lakes Partners LLC
ADDRESS: P.O. Box 3965, Mooresville NC 28117
PROPOSED FACILITY: 4 BR
PROPOSED DESIGN FLOW (.1949): 480 gpd
LOCATION OF SITE: Salem Springs Lot # 3
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☑ Other Community
EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut
APPLICATION DATE
DATE EVALUATED: 6/10/21
PROPERTY SIZE: 1.162 AC
PROPERTY RECORDED: No
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
P 1	L/2 3-6%	0-8	BSCL	Fr SS SP		64"	—	—	PS 0.275-.3 Deep only > 26"
		8-32	BRC	Fr SS P					
		32-64	BRC	Fr SS SP					
P 2	L/	0-7	BSCL	Fr SS SP		62"	—	—	PS 0.275 Deep only > 33"
		7-51		Fr SS P					
		51-62	RBCL	Fr SS SP					
P 3	/3-6%	0-11	BSCL	Fr SS SP SEW		72"	—	—	0.2 or 0.1 Drip
		11-50	BRC	Fr SS P					
		50-72	RBC	Fr SS SP					
P 4	L/2-6%	0-11	BSCL	Fr SS SP SEW		68"	—	—	0.2
		11-48	BRC	Fr SS P					
		48-68		Fr SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	CONV.	Drip Irrig.
Site LTAR	0.25	0.10

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S. Ashley Rollins
OTHER(S) PRESENT: Chad Wagner

COMMENTS:

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, Magnolia Lakes Partners LLC, am the legal owner(s) of the property located at Salem Springs Lot 3, identified as PIN (Parcel Identification Number) 4774086641, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) SFS/Ashley Rollans, 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 _____ 3/31/22
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

ENVIRONMENTAL HEALTH REQUIREMENTS for SEPTIC and WELL PERMITS

The following items must be completed *PRIOR* to the *SUBMITTAL* of any Environmental Health Application. Incomplete applications will be returned to the applicant and cannot be processed or placed on the work list.

***** Initial all lines below to indicate you have submitted each form and completed every site requirement *****

S.A.R. **Complete all Environmental Health forms:**
- S.A.R. Application
- S.A.R. Site Plan with dimensions of proposed structure, addition, pool etc.
- S.A.R. Documentation to Authorize Owner Agent (if the property owner is not the applicant)
- S.A.R. Copy of Zoning Permit when applicable
- S.A.R. Sign this sheet after you have completed all items

S.A.R. **Lot must be cleared of heavy undergrowth.** In order to evaluate the lot, the footprint of the proposed structure must be visible. Adequate area for the septic drain field and repair area must be sufficiently cleared of heavy undergrowth, with **50 feet of visibility** in all directions. Inspectors must be able to evaluate the property, shoot laser level elevations, layout the drain field, do soils work, etc. **If the lot is not cleared sufficiently, then a $100 site revisit fee will be charged and the evaluation will be put on HOLD until the requirement is met.**

S.A.R. **Clearly mark all property corners by locating existing iron or concrete markers.** Flag all property lines every 25 feet if adjacent corners are not visible when standing on any given corner. Property lines must be flagged by a licensed NC surveyor & easily identified **prior to application submittal** (exception may apply for septic repair evaluations only).
'Mow lines' and/or fence lines do NOT constitute marked lines. **If the property lines are not properly marked when the lot is ready to be evaluated, then the application will be put on HOLD and a $100 site re-visit fee charged.**

S.A.R. **Stake or flag the footprint of the proposed structure, addition, pool etc. to match the site plan submitted.** The proposed structure, etc. **must be staked** out on the property as per the site plan.

S.A.R. If an **Authorization to Construct (AC) is desired**, submit a recorded copy of the plat for newly created or subdivided lot(s) and a LEGIBLE copy of the basic floor plan no larger than 8 ½" x 14" for each floor of the structure including decks, porches, etc. **The overall dimensions must be clearly noted & the rooms labeled.**

Any site not meeting the above requirements when staff arrives for the evaluation will result in a $100 site revisit fee being charged and the request being placed on HOLD. This will delay the processing of the application.
Once work by Environmental Health staff begins, the up-front fees paid toward securing any health department permit are non-refundable. Refunds for work not started, due to a customer changing their mind or plans, are subject to an administrative fee of $50 to defray a portion of the costs of processing the refund.

Backhoe pits are required for all applications that require a soils evaluation.
DO NOT DIG PITS UNTIL THE EH SPECIALIST HAS AUTHORIZED AND SCHEDULED YOUR EVALUATION TIME.
- **All utilities shall be marked before pits are dug. Call NC 811 for this service.**
- **The applicant/agent is responsible for securing these services**
- **Backhoe pits are to be dug at the locations and depths determined by the Environmental Health Specialist or a NC Licensed Soil Scientist. A minimum of four pits must be dug.**
- **The EH specialist will contact you when your application is ready to be processed for pit scheduling.**
- **Your backhoe operator must be on site during the EH Specialist's evaluation to prevent your operator from having to return to the property for additional work.**

By signing below I am acknowledging the above specifications have been met and the site is READY to be evaluated AND I understand the backhoe pit requirement and will secure these services (if applicable).

Signature Daniel A Kallam **Date** 11/4/21

Questions? Contact the Environmental Health Offices below:

Statesville Office
349 North Center Street (2nd Floor Building Standards)
Statesville, NC 28677-4063
Phone: (704)878-5305 ext. 3456

Mooresville Office
610 East Center Avenue (2nd Floor Govt. Center South)
Mooresville, NC 28115-2548
Phone: (704)660-3625

IREDELL COUNTY · NC

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

APPLICATION NUMBER
327420
Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4774191781.000	110 SALEM SPRINGS LN	Iredell County

Owner Information	Applicant Information
Name: SALEM SPRINGS DEV LLC	Name: HELMSMAN HOMES, LLC 236 RACEWAY DR STE 7
Address:	Address: PO BOX 3965 MOORESVILLE, NC 28117
Phone:	Phone: (704)363-6038

Use Requested	Zone Code
Single Family Dwelling	R20

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
1.162	35	35	15	15	N/A	NO

Remarks
Single Family Residence - New Construction

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: 04/06/2022

Signature of Owner/Contractor

Permit Number	327420	TOTAL FEES:	$77.25

327420

500

DEPARTMENT OF PLANNING & DEVELOPMENT
PO BOX 788, STATESVILLE NC 28687-0788
349 N. Center Street / Building Standards Center
(704) 878-3118 / FAX 928-2025

Residential Zoning Permit Application

What are you building? (Please check)

Stick built__X__ Modular___ Duplex___ Singlewide___ Doublewide___ Pier___ Addition___ Bedroom addition___

Accessory dwelling (ie: M-I-L Suite, guest house)___ Accessory building (ie: garage, shed)___ Swimming pool___

Are there any other structures currently on the property such as dwellings, sheds, garages? (Please list type below)

_____

Is there a septic tank on the property? Yes (No) If residence how many bedrooms? ___ and stories?___

If an addition, please describe project: _____

Please list square footage of project (Pier, Addition, Accessory Dwelling, Accessory Building only): _____

Does the property have community water? Yes (No) If yes, please list who provides it: _____

Does the property have community sewer? Yes (No) If yes, please list who provides it: _____

Owner Information

Property Owner's Name Helmsman Homes Phone # 704-208-4251

Owner's Current Address 236 Raceway Dr, Suite 7, Mooresville NC

Property Information

Property Address 110 Salem Springs Ln, Statesville, NC Parcel # 4774191781

Subdivision: Salem Springs Lot: 3 Zoning:___ Watershed: Y or (N) Flood Plain: Y or (N) Township: 13

Directions to property (from a MAIN ROAD) I-77 to Exit 50 E Broad St to US-64E to New Salem Rd

_____

_____

Application Information

Applicant's Name or Company Helmsman Homes Applicant's Phone # 704-208-4251

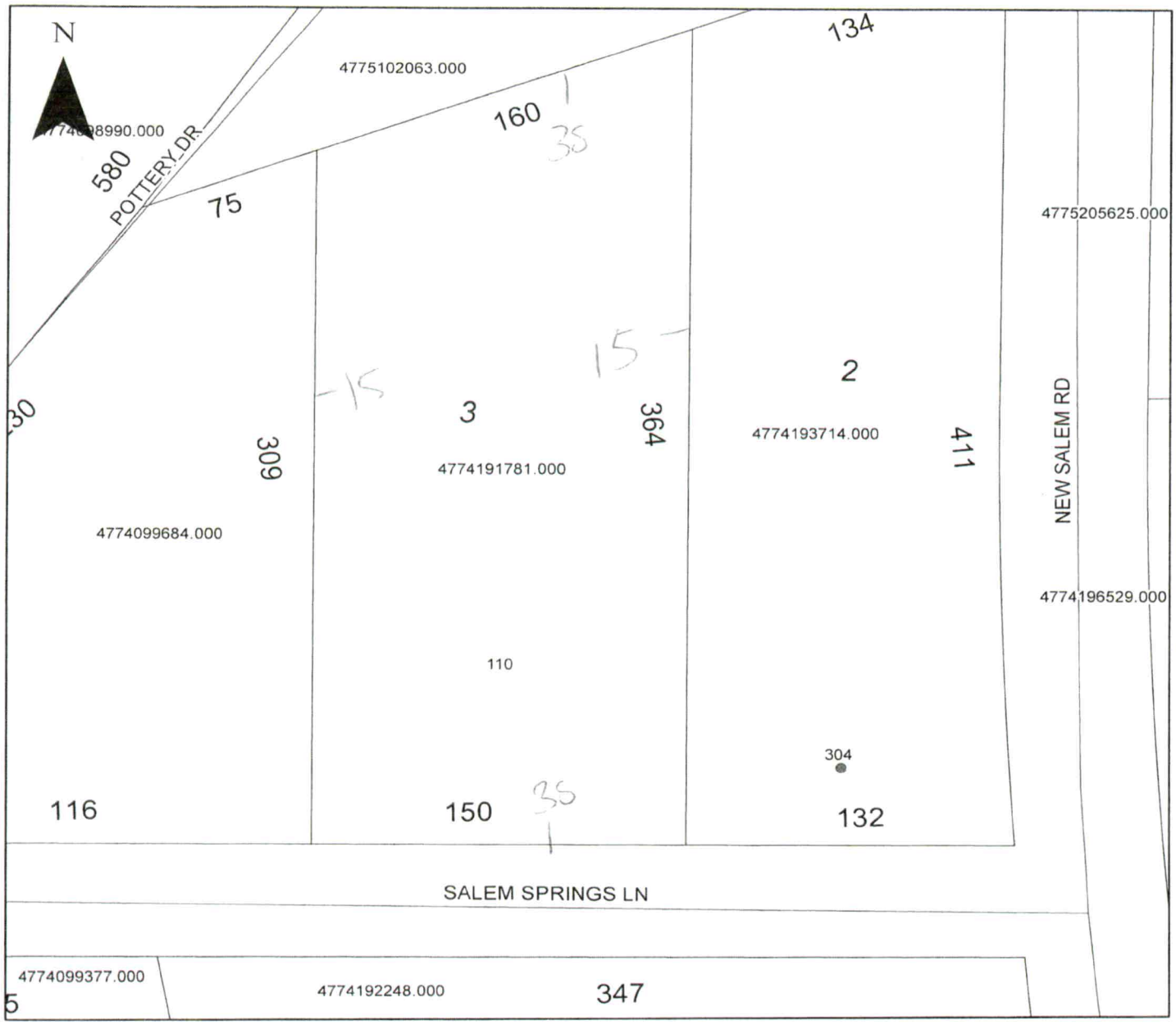
Applicant's Address 236 Raceway Dr, Suite 7, Mooresville NC

If Company, Representative's Name and Title Tood Jason Farlow, EVP General Counsel

IN APPLYING FOR A ZONING PERMIT I CERTIFY THAT ALL INFORMATION ON THIS APPLICATION IS CORRECT AND THAT ALL WORK WILL COMPLY WITH IREDELL COUNTY ZONING REGULATIONS. THE IREDELL COUNTY ZONING DEPARTMENT WILL BE NOTIFIED OF ANY CHANGES THAT ARE MADE TO THIS PROJECT. I AM AWARE THAT THIS IS AN APPLICATION ONLY - NOT A PERMIT - AND DOES NOT CONSTITUTE APPROVAL OF THIS PROJECT. HOWEVER, IF THIS PROJECT IS APPROVED, THIS SIGNATURE IS VALID FOR MY PERMIT

SIGNATURE OF APPLICANT _____ DATE 3/3/22

ZONING DISCLAIMER



Property Address 110 Salem Springs Ln.

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 · NC

Cash Register Receipt

Iredell County

Receipt Number
R16037

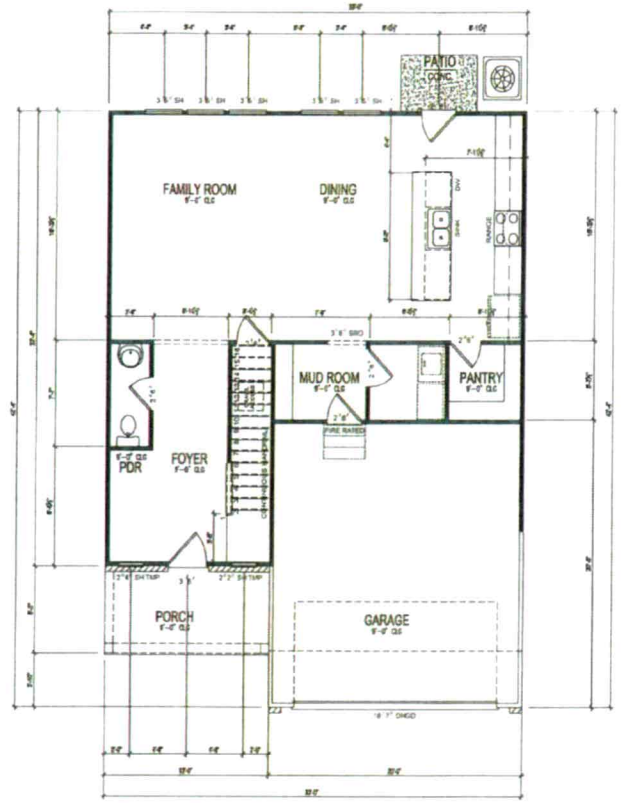
DESCRIPTION	ACCOUNT	QTY	PAID
PermitTRAK			**$577.25**
AP-327420 Address: 110 SALEM SPRINGS LN APN: 4774191781.000			**$577.25**
EH NEW SYSTEM PERMITS			$500.00
GRAVITY SYSTEM	10492751-447004	0	$500.00
ZONING			$77.25
TECH FEE ZONING	104563-460450	0	$2.25
ZONING PERMIT	104563-472223	0	$75.00
TOTAL FEES PAID BY RECEIPT:R16037			**$577.25**

Date Paid: Wednesday, April 13, 2022

Paid By: HELMSMAN HOMES, LLC 236 RACEWAY DR STE 7

Cashier: DMW

Pay Method: CHECK 4060



FIRST FLOOR PLAN

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

WALL STUD REQUIREMENTS	
EXT. WALL HEIGHT (h)	STUD SIZE AND SPACING
h = 10'-0"	2x4 @ 16" O.C.
10'-0" < h < 11'-0"	2x4 @ 12" O.C.
11'-0" < h < 16'-0"	2x6 @ 16" O.C.
h > 16'-0"	CONSULT ENGINEER

SQUARE FOOTAGE	
FIRST FLOOR (HEATED)	83'
SECOND FLOOR (HEATED)	1187
TOTAL (HEATED)	2018

I-JOIST NOTES

FRAMING CONSTRUCTION NOTES

BRACED WALL LINE NOTE
THIS STRUCTURE HAS BEEN ANALYZED FOR LATERAL LOADING USING CONTINUOUSLY SHEATHED WALL SHEATHING AS INDICATED IN THE GENERAL NOTES. WHERE BRACED WALLS DO NOT MEET THE PRESCRIPTIVE REQUIREMENTS OF SECTION R602.10 OF THE CODE, IT HAS BEEN ANALYZED BY ENGINEERING APPLYING INCORPORATING ENGINEERED LATERAL BRACING ELEMENTS WHERE NEEDED TO MEET THE INTENT OF THE CODE

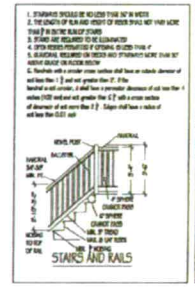
1. I-JOIST'S ARE DESIGNED TO BE CONTINUOUS IN MORE AREAS. I-JOIST MANUFACTURER TO STOP AND START JOIST'S WHERE SHOWN ON PLAN TO ALLOW FOR CONTINUOUS ACTION
2. "DBL" INDICATES DOUBLE JOIST
3. RIM BOARDS AND BANDS PARALLEL TO FLOOR FRAMING TO BE DOUBLED
4. ALL LOAD BEARING HEADERS SHALL BE (2)2X8 SPF#2 UNLESS OTHERWISE NOTED ON THE PLAN
5. WHERE DIMENSIONS ARE NOT INDICATED BEAMS THAT RUN PARALLEL TO FLOOR JOISTS ARE INTENDED TO ALIGN UNDER LOAD BEARING WALLS. SEE THE ARCHITECTURAL PLANS FOR DIMENSIONS TO WALLS
6. ALL WALLS UP TO 10'FT. TALL SHALL BE 2X4 SPF #2 @ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLAN. TALLER WALLS SHALL COMPLY WITH TABLE R602.3(5) OF THE CODE OR AS NOTED ON THE PLAN
7. WOOD BEAMS SHALL BE SUPPORTED BY METAL HANGERS OF ADEQUATE CAPACITY WHERE FRAMING INTO BEAMS OR LEDGERS. THE FOLLOWING HANGER SCHEDULE MAY BE USED UNLESS NOTED OTHERWISE ON THE PLAN

MEMBER SIZE	SIMPSON HANGERS
(2) 2X8	LSS 28-2
(2) 2X10	LSS 210-2
(2) 2X12	LSS 212-2
(2) 1¾" X 9¼" LVL	HUS 410
(2) 1¾" X 11⅞" LVL	HUS 412
(2) 1¾" X 14" LVL	HUS 412
ALL TRIPLE LVLs	HHUS 5.50/10

8. NOTE: FILL ALL OF THE HOLES IN HANGERS WITH 10d x 3" COMMON NAILS (3" x 0.162") OR 16d (3½" x 0.162") NAILS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. DO NOT BEND OR MODIFY THE HANGER OR USE INAPPROPRIATE FASTENERS. DO NOT USE 10d (3" "HANGER NAILS" UNLESS OTHERWISE NOTED ON THE PLANS OR IN SITUATIONS WHERE ONLY 6" OR LESS OF WOOD IS PROVIDED TO NAIL INTO
9. STEEL BEAMS MUST HAVE (3) 2X4 OR (4) 2X4 STUDS UNDER EACH END SUPPORT UNLESS NOTED OTHERWISE
10. "LVL" AND GLU LAM BEAMS MUST HAVE SQUASH STUDS TO SUPPORT ALL PLIES AT EACH END WITH A MINIMUM OF (3) 2X4 OR (2) 2X6 STUDS UNDER EACH END UNLESS NOTED OTHERWISE
11. ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, BEAM SUPPORTS- WHETHER WOOD OR STEEL- CANNOT BEAR ON SHEATHING ALONE. BLOCKING EQUAL TO OR BETTER THAN THE POINT LOAD SUPPORTS ABOVE MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION. INSTALL 2X4 SQUASH BLOCKS (3 EA) OF EQUAL NUMBER TO COLUMN ABOVE BETWEEN SUBFLOOR AND FOUNDATION WALL OR LOWER PLATE. RIM BOARDS AND I-JOIST BLOCKING SHALL NOT BE CONSIDERED AS AN ACCEPTABLE MEANS OF SUPPORT UNDER CONCENTRATE POINT LOADS FROM LVL AND STEEL BEAMS OR WHERE S.E.E IS INDICATED ON THE PLAN
12. FASTEN ALL TRIPLE PLY LVLs TOGETHER WITH TWO ROWS OF 5" LONG TRUSSLOK OR SIMPSON SDS SCREWS @ 16" O.C. AND FOUR PLY LVLs WITH TWO ROWS OF SDS TRUSS OR SCREWS @ 16" O.C. U.N.L.E.S.S NOTED OTHERWISE ON THE PLANS. THE SCREWS SHALL BE LOCATED A MINIMUM OF 3" AND A MAXIMUM OF 3" FROM THE TOP OR BOTTOM OF THE BEAM
13. FASTEN FIRST KING STUD TO LUMBER HEADER WITH AT LEAST THREE 16D (3½" 0.162") IN EACH PLY
14. JACK AND KING STUD SCHEDULE AT WALL OPENINGS

TO BE INSTALLED AT EACH END OF OPENING UNLESS OTHERWISE NOTED AS "W" OR "WK" ON PLANS

SPANS UP TO 4'-0"	1 JACK, 1 KING
SPANS >4'-0" TO 8'-0"	1 JACK, 2 KINGS
SPANS >8'-0" TO 8'-6"	2 JACK, 2 KINGS
SPANS >8'-6"	SEE PLAN



ELEVATION "A" - FARMHOUSE

1128 Kenmore Drive Suite J
Mooresville, NC 28117
PH. 704 658-4251

Township/County

Engineer

Stamp/seal

Project name/scope

2018 REEF PLAN

HELMSMAN HOMES
236 RACEWAY DR
MOORESVILLE, NC
28117
PH. 704 208-4251

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Date: April 5, 2022

Drawn by: MCML

Reviewed by: HELMSMAN

Plan set scale:
24x36 sheet
1/4" = 1'-0"
11x17 sheet
1/8" = 1'-0"

Project/plan code: XX.XX.XXXX

Drawing set: FOR CONSTRUCTION

Sheet title/description

Sheet no: A-3.0A

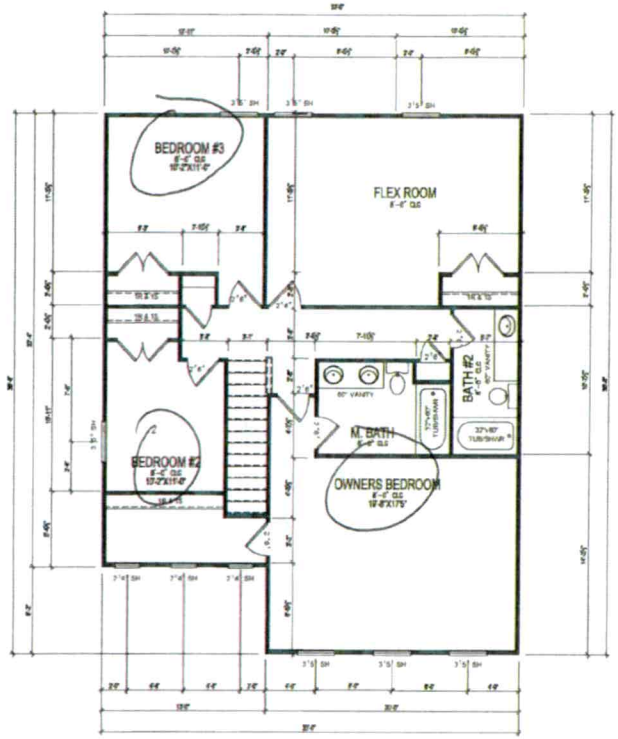
Master plan version: REVISED 11-14-2021

Acknowledgement Of
Plans Submittal ONLY!

Date 6-1-2022

Date 6-2-22

Lot 3



SECOND FLOOR PLAN

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

WALL STUD REQUIREMENTS	
EXT. WALL HEIGHT (ft)	STUD SIZE AND SPACING
9 < 10'-0"	2x4 @ 16" O.C.
10'-0" < h ≤ 11'-0"	2x4 @ 12" O.C.
11'-0" < h ≤ 18'-0"	2x6 @ 16" O.C.
h > 18'-0"	CONSULT ENGINEER

SQUARE FOOTAGE	
FIRST FLOOR (HEATED)	831
SECOND FLOOR (HEATED)	1187
TOTAL (HEATED)	2018

I-JOIST NOTES

FRAMING CONSTRUCTION NOTES

BRACED WALL LINE NOTE:
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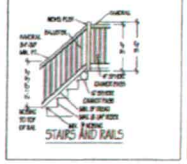
1. I-JOISTS ARE DESIGNED TO BE CONTINUOUS IN SOME AREAS. I-JOIST MANUFACTURER TO STOP AND START JOISTS WHERE SHOWN ON PLAN TO ALLOW FOR CONTINUOUS ACTION.
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6. ALL WALLS UP TO 10'-1" TALL SHALL BE 2X4 SPF#2 @ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLAN. TALLER WALLS SHALL COMPLY WITH TABLE R602.3(5) OF THE CODE OR AS NOTED ON THE PLAN.
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MEMBER SIZE	SIMPSON HANGERS
(2) 2X8	LUS 28-2
(2) 2X10	LUS 210-2
(2) 2X12	LUS 210-2
(2) 1¾" X 9⅞" LVL	HUS 410
(2) 1¾" X 11⅞" LVL	HUS 410
(2) 1¾" X 14" LVL	HUS 412
ALL TRIPLE LVLs	HHUS 5.5/10

8. NOTE: FILL ALL OF THE HOLES IN HANGERS WITH 10d x 3½" COMMON NAILS (0.148" DIA) OR 16d (3½" (3") x 0.162") NAILS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. DO NOT BEND OR MODIFY THE HANGER OR USE INAPPROPRIATE FASTENERS. DO NOT USE 10dx 1½" "HANGER NAILS" UNLESS OTHERWISE NOTED ON THE PLANS OR IN SITUATIONS WHERE ONLY ½" OR LESS OF WOOD IS PROVIDED TO HANG INTO.
9. STEEL BEAMS MUST HAVE (3) 2X4 OR (4) 2X6 STUDS UNDER EACH END. SUPPORT UNLESS NOTED OTHERWISE.
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13. FASTEN FIRST KING STUD TO LUMBER HEADER WITH AT LEAST THREE 16D (3½" 162") IN EACH PLY.
14. JACK AND KING STUD SCHEDULE AT WALL OPENINGS

TO BE INSTALLED AT EACH END OF OPENING UNLESS OTHERWISE NOTED AS "KX" OR "MK" ON PLAN.

SPANS	
SPANS UP TO 4'-0"	1 JACK, 1 KING
SPANS >4'-0" TO 6'-6"	1 JACK, 2 KINGS
SPANS >6'-6" TO 8'-6"	2 JACK, 2 KINGS
SPANS >8'-6"	SEE PLAN



ELEVATION "A" - FARMHOUSE

238 Rockaway Drive Suite J
Mooresville, NC 28117
PH: 704-209-4251

Township/County:

Engineer:

Stamp/seal:

Project name/owner:

2018 REEF PLAN

HELMSMAN HOMES
236 RACEWAY DR
MOORESVILLE, NC
28117
PH: 704-209-4251

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Date: April 6, 2021

Drawn by: MCML

Reviewed by: HELMSMAN

Plan set scale:
24x36 sheet
1/4" = 1'-0"
11x17 sheet
1/8" = 1'-0"

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Sheet title/description:

Sheet no:
A-4.0A

Master plan version:
REVISED 11-14-2021

Acknowledgement Of
Plans Submittal ONLY!

BMB Date 6-1-2022.

Date 6-2-22

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 21-0029
November 4th, 2021

NEST HOMES
Attn: *Michael Wetter*
Email: mwetter@nesthomes.com

RE: Soil & Site Evaluation for a 4 Bedroom Residence on Lot 3 Salem Springs Subdivision, 1.162 [redacted] ac Parcel, PIN# 4774086641, Salem Springs Way, Statesville, NC 28625.

Mr.Wetter:

At your request Soil & Forestry Services of the Carolinas (S&FS) has performed soil/site evaluations on parcel noted above.The Lot size is noted on the attached survey map & soil evaluation form. The purpose of our work was to identify soil areas with potential to support subsurface wastewater disposal systems and provide design details for Session Law submittal to Iredell County Health Department.

Site Conditions

At the time of our evaluation land cover on the property was mostly mixed pine/hardwood. Topography within the evaluated area was gently slope near the house site and proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Jordan Grant & Associates Land Surveying. The client provided an Autocad File of a survey as a basemap. The proposed septic layout was located via Trimble Submeter GPS/tape measures and used to produce the attached *Site Plan*. The house envelope was located via Autocad and needs to be surveyed prior to construction.

Methodology

We evaluated soil areas through the use of backhoe pits. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with eight pitlocations on the property flagged and located via GPS. Seven of the eight backhoe pits are located in or adjacent to the proposed septic layout/drip repair. Soil suitability was determined by referencing 15A NCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems".*Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each pit. The house envelope was located via survey. An on-ground layout of system was performed using a laser level. Pin flag locations of the layout were also located by GPS and tape measures. The Drip Repair area was established based on square footage. Detailed system & repair information is summarized in the following paragraph for this Lot.

Salem Springs Lot 3 (*See Attached Design*)
The septic layout for this lot (9' centers) yielded a total of 732 linear feet of line. The primary system is proposed as 672 linear feet of Conventional Gravel drainfield with gravity distribution (DBOX). Trench depth (LOW SIDE) is specified at 48 inches. The repair system is proposed as approximately 5700 SFT of Drip Irrigation drainfield with low pressure distribution. Trench depth is specified at 6 inches for drip irrigation repair drainfield.

Session Law Requirements

An LSS Evaluation may be submitted in conjunction with a complete application to the LHD. The application shall include all information described in 15A NCAC 18A .1937(d) and be accompanied by a signed and dated statement from the applicant (owner or owner's legal representative) that reads as follows:

"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).".

Owner Date

* Print Name Ernest M. Lyons
* Signature [signature] 3/2/22

The LSS Evaluation shall include a statement bearing the LSS seal and signature that reads as follows:

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

Disclaimer
This report reflects the findings of S&FS, PA. *This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).* Any site modifications that impact the proposed septic areas on Lot 3 of Salem Springs Subdivision may nullify this design. System design requirements and site requirements shall be adhered to for installation and Operations Permits to be issued by the local Health Department. If you have questions regarding these requirements a Pre-Construction meeting should be scheduled to discuss.Please contact S&FS if you have any questions regarding this report or the attached information. S&FS also offers septic system inspection, wetland delineation and forestry services.

Sincerely,

[signature]

S. Ashley Rollans, LSS
Attachment: *Septic Design*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for a Conventional Septic System with gravity dist. for a 4 bedroom single family residence on Lot 3, Salem Springs Subdivision, Statesville 28625, Iredell County, NC. PIN#: 4774086641

Contents: **Page**

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

Design Information
- Design Specifications---------- 2-3
- Layout Specifications---------- 4

Site Plan/System Plan---------- 5

Calculations---------- 6

Profile Descriptions---------- 7-8

Zoning Permit & Receipt---------- 9-11

Application---------- 12-13

Green Sheet---------- 14

Agent Authorization Form---------- 15

11/3/2021
Project #: 21-0029
Design By: Soil & Forestry Services of the Carolinas, PA

INFORMATION FOR THE INSTALLER:

The permit should be read very carefully prior to bidding. 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.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate 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 is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as Conventional Gravel with Gravity Distribution (DBOX)
- Repair is specified as a drip irrigation w/ low pressure installation .

GRAVITY CONVENTIONAL SYSTEM FOR WASTEWATER TREATMENT

Owner/Applicant: Magnolia Lakes Partners LLC

Address: P.O. Box 3965
Mooresville, NC 28117
Phone: 704.202.1524
County: Iredell
Location: New Salem Rd
Lot 3
Source of Wastewater Flow: 4 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 480
System Flow: N/A

Design Specifications

Drainfield Size: 672
Loading Rate (gpd/ft.^{2}): 0.25
Depth of Gravel in Trench: 12"
Gravel Size: 3,4,57, or 6 ASTM
Max.Trench Depth (LOW SIDE): 48 in. Repair Trench Bottom 6 in.
Trench Width: 36 in.
Septic Tank Size: 1000

Estimated Supply Line Length: 4
Supply Line Diameter: 4 in. SCH 40 PVC
Supply Line Volume: 2.61
Dosing Volume: N/A
Supply Manifold: N/A
Supply Manifold Length: N/A
Supply Manifold Volume: N/A

Recommended Float Controls: N/A

Recommended Control Panel: N/A

Pressure Head: N/A
Friction Head: N/A
Elevation Head: N/A
Total Dynamic Head: N/A

Threaded Union: N/A
Gate Valves: N/A

Check Valves: N/A
Anti-Siphon Hole: N/A
Additional Comments: Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA

New Salem Rd

CONVENTIONAL SYSTEM

DESIGN FLOW (gpd):	480
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.25
TOTAL AREA TRENCH BOTTOM:	2016
TOTAL LATERAL LENGTH:	672
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	640
SUPPLY LINE LENGTH:	4
TOTAL DYNAMIC HEAD:	N/A
MANIFOLD SIZE:	N/A
DOSING VOLUME:	N/A
PUMP TANK DRAW DOWN*:	N/A
SEPTIC TANK SIZE:	1000

Layout Specifications - - Salem Springs Lot 3

Project #: 21-0029

LAYOUT FOR 4 BEDROOM HOME 11/3/2021

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
REPAIR	DRIP IRRIG.					~5700 SFT	~5700 SFT
1	***PINK***					***135***	***112***
2	***RED***					***130***	***112***
3	***ORANGE***					***120***	***112***
4	***YELLOW***					***120***	***112***
5	***BLUE***					***114***	***112***
6	***PINK***					***113***	***112***
					Total	732	672

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	(LOW SIDE) TRENCH DEPTH
** System*	*672*	*0.250*	*CONV.*	*0.250*	*GRAVEL*	*GRAVITY*	48"
Repair	~5700 SFT	0.100	INNOV.	0.100	DRIP IRRIG.	LOW PRESSURE	6"

Notes: **All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**Nitrification lines were located by GPS and tape measure.

**House Envelope, Property corners & lines located by survey (Jordon Grant & Associates)

IREDELL COUNTY HEALTH DEPARTMENT

JANE HINSON, MS, BSN, RN

HEALTH DIRECTOR

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

Operation Permit Inspection Checklist

The following items are on file and part of this permitting process:

☑ GPS/GIS	☑ IP/CA	☑ Map	☐ Engineer's Plans & Specs
☑ Application	☑ Soil Sheet	☐ Plat Map	☐ O & M Manual

1. LOCATIONS AND SEPARATION DISTANCES	Satisfactory	N/A	Problem
System meets Rule .1950 setback requirements	☑	☐	☐
Distance from system to any wells	☑	☐	☐
Distance from septic tank to foundation	☑	☐	☐
Distance from system to all property lines	☑	☐	☐

2. BUILDING SANITARY SEWER	Satisfactory	N/A	Problem
Wastewater pipes connected to system per approved plans	☑	☐	☐
Wastewater piping materials and ratings meet Rule .1955	☑	☐	☐
Cleanouts provided and located per approved plans	☑	☐	☐
Backfill material clean	☑	☐	☐

3. SEPTIC TANKS

	Tank #1	Tank #2	Tank #3	Tank #4
Tank serial number *(i.e., PT-XXXX per manufacturer imprint)*	760			
Tank manufacture date *(per manufacturer imprint)*				
Approved tank liquid capacity, gallons *(per manufacturer's imprint)*	1000			
Gallons per inch, gpi *(based on approved tank liquid capacity)*				
Concrete compressive strength, psi *(per manufacturer)*				

Leak test date _____ Test start time _____ Test end time _____

Static Test			Vacuum Test *(Minimum Hold Time = 2 mins)*		
Starting water level	_____	inches	Starting negative pressure	_____	inches of Hg
Ending water level	_____	inches	Ending negative pressure	_____	inches of Hg
Water level difference	_____	inches	Negative pressure difference	_____	inches of Hg
1% of tank liquid capacity	_____	inches	10% of starting negative pressure		

SEPTIC TANKS *(continued)*

Septic Tank Conditions	Satisfactory	N/A	Problem
Tanks are required size/loading per approved plans and specifications	☑	☐	☐
Condition of the exterior walls and top of the tanks	☑	☐	☐
Air vents present and open	☑	☐	☐
Condition of risers and access lids	☑	☐	☐
Condition of the interior walls (inlet, outlet, baffle, and bottom)	☑	☐	☐
Tanks are watertight *(no evidence of infiltration)*	☑	☐	☐
Inlets and outlets are at proper location	☑	☐	☐
Inlet and outlet tees on center line	☑	☐	☐
Approved filter devices placed at outlets	☑	☐	☐

Inlet elevation _____ feet

Outlet elevation _____ feet *(must be 2" lower than inlet w/ 9" freeboard present)*

4. SYSTEM TYPE

Distribution Type ☑ Gravity ☐ Pump ☐ Siphon

Controls Type ☐ Control Panel ☐ Piggyback

5. PUMP TANKS

	Tank #1	Tank #2	Tank #3	Tank #4
Tank serial number *(i.e., PT-XXXX per manufacturer imprint)*				
Tank manufacture date *(per manufacturer imprint)*				
Approved tank liquid capacity, gallons *(per manufacturer's imprint)*				
Gallons per inch, gpi (based on approved tank liquid capacity)				
Concrete compressive strength, psi *(per manufacturer)*				
Design pump rates, gallons per minute (gpm)				

Leak test date _____ Test start time _____ Test end time _____

Static Test	Vacuum Test *(Minimum Hold Time = 2 mins)*
Starting water level _____ inches	Starting negative pressure _____ inches of Hg
Ending water level _____ inches	Ending negative pressure _____ inches of Hg
Water level difference _____ inches	Negative pressure difference _____ inches of Hg
1% of tank liquid capacity _____ inches	10% of starting negative pressure
Difference ≤ 0.5" or 1% of tank capacity ☐ Yes ☐ No	Difference ≤ 10% of starting pressure ☐ Yes ☐ No

PUMPS *(continued-2)*

Dosing Design Parameters

Tank & Pump #	Demand Dosing	Timed Dosing	Dosing Volume
_____	☐	☐	_____ gals
_____	☐	☐	_____ gals
_____	☐	☐	_____ gals
_____	☐	☐	_____ gals
_____	☐	☐	_____ gals
_____	☐	☐	_____ gals

Pump Rate Measurements

Ending Depth – Beginning Depth = Drawdown, inches

Drawdown, inches X Tank gpi = Drawdown, gallons

Drawdown, gallons ÷ Pump Run, minutes = Pump, gpm

Pump #	Beginning Depth	Ending Depth	Drawdown, inches	Tank gpi	Drawdown, gallons	Pump Run, minutes	Pump, gpm

9. SUPPLY LINES TO DISPERSAL AREAS

	Line #1	Line #2	Line #3	Line #4
Grade, foot/foot *(1/8 inch per foot minimum)*				
Material *(e.g., Schedule 40 PVC, ductile iron, etc.)*				
Diameter, inches				
Length, feet	~~68'~~			
Distance from tank to dispersal area/distribution device	68'			
Pressure head at discharge point, feet				

10. DISPERSAL METHOD

Dispersal Type ☑ Gravity ☐ LPP ☐ Drip

☐ Other *(please specify)* _____

Operation Permit Inspection Checklist

11. DISTRIBUTION DEVICES

Number of distribution devices: 1

	Device #1	Device #2	Device #3	Device #4
Type *(e.g., d-box, pressure manifold, other)*	D-Box			
Number of outlets/laterals per distribution device	6			
Device serves which dispersal areas?				

Distribution Device Conditions	Satisfactory	N/A	Problem
Distribution devices are watertight	☑	☐	☐
Minimum of 2 feet undisturbed soil to trench	☑	☐	☐
Proper center to center trench spacing maintained	☑	☐	☐
Devices installed on solid foundations	☐	☐	☐
All outlet inverts properly adjusted	☑	☐	☐
Turnups/cleanouts/valves are accessible	☑	☐	☐
Devices perform according to design specifications	☐	☐	☐

Lateral Elevations

		Device #1		Device #2		Device #3		Device #4	
Lateral #	Lateral Length, feet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

12. DISPERSAL AREAS/FIELDS

Trench depth 48" feet Trench width 36" feet Trench spacing 10' feet

Aggregate depth 12" inches

Aggregate material ☑ Rock ☐ Polystyrene ☐ Tire chip

☐ Other *(please specify)* _____

Operation Permit Inspection Checklist

DISPERSAL AREAS/FIELDS *(continued)*

Trench Product

Manufacturer name _____

Product name and model Conventional

Trench Conditions	Satisfactory	N/A	Problem
Installation depth per approved plans and specifications	☑	☐	☐
Soil cover adequate and per approved plans and specifications	☑	☐	☐
Trench spacing per approved plans and specifications	☑	☐	☐
Proper effluent distribution	☑	☐	☐
Pressure head meets parameters in approved specifications	☑	☐	☐
Product installation meets manufacturers specifications	☑	☐	☐

Stepdown Conditions	Satisfactory	N/A	Problem
Constructed of minimum 2 linear feet of undisturbed soil	☑	☐	☐
Proper rise over stepdowns	☑	☐	☐
Constructed height fully utilizes the upstream trench	☑	☐	☐
Backfilled with compacted soil	☑	☐	☐
Solid (non-perforated) pipe used between stepdowns	☑	☐	☐
Supply pipe inlet invert 1" above supply pipe outlet invert	☑	☐	☐
Top of trench outlet 2" below supply pipe outlet invert	☑	☐	☐

Stepdown #	Elevation		Dispersal Field ID	Connected Lateral #
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____
_____	_____	feet	_____	_____

14. ADVANCED PRE-TREATMENT

Manufacturer name _____

Product name and model _____

NOTE: Refer to the advanced pre-treatment product approval and manufacturer's product manuals for specific installation and O&M requirements

Advanced Pretreatment Conditions	Satisfactory	N/A	Problem
Units installed per manufacturer specifications and approved plans	☐	☐	☐
Signed copy of installation certification received from system designer	☐	☐	☐
System ORC is present at the site	☐	☐	☐
O & M procedures have been provided	☐	☐	☐
Sampling and monitoring requirements are in place	☐	☐	☐
Sample collections locations identified	☐	☐	☐
System operation checks performed	☐	☐	☐

15. ADDITIONAL COMMENTS:

See "as-built" plan on attached sheet