IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 223188

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

PIN # 4769627226 - 2463

APPLICANT: Patrick Waldon APPLICANT ADDRESS: 2463 Turnersburg Hwy

SITE ADDRESS: 2463 Turnersburg Hwy - Harmony PHONE: 704-546-7295 ALT. PHONE: 704-437-1710

SITE DIRECTIONS: 77N TR Hwy 21 Property on left

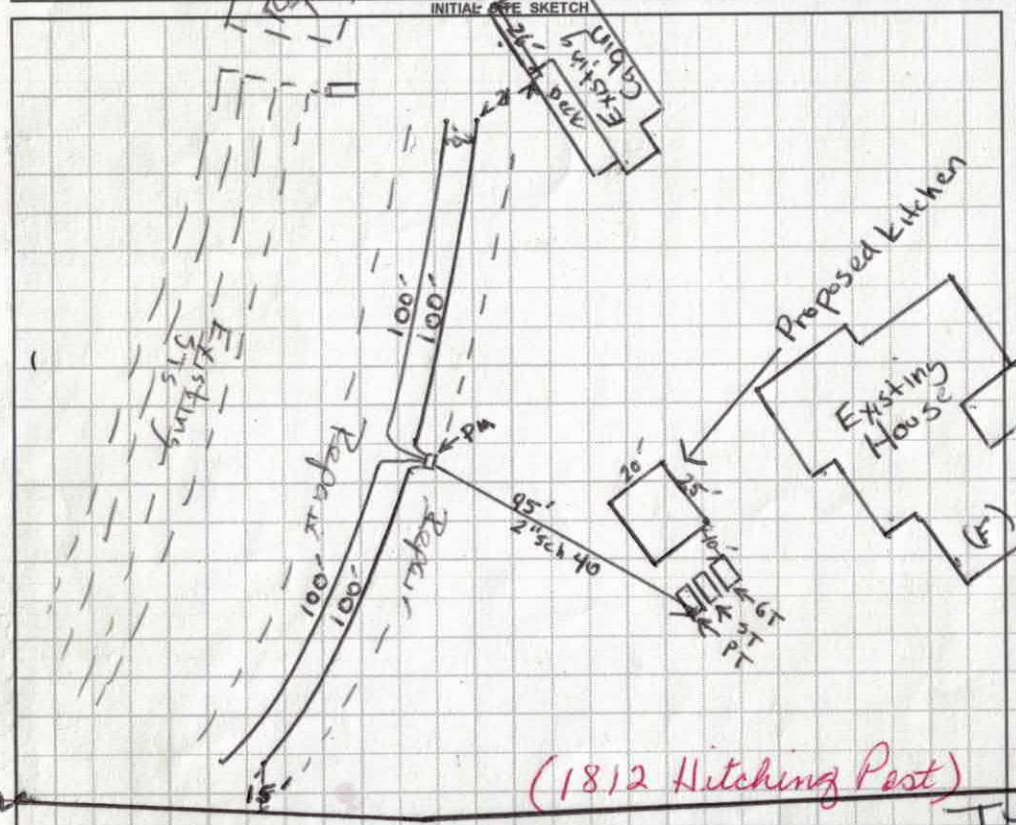
SUBDIVISION: N/A SECTION: N/A LOT # N/A LOT AREA: 7.02ac DESIGN FLOW: 1000 Flow Eq L.T.A.R.: 0.25

Septic Tank	2000	(gal)	STB	2102	Date	9-3	☒ New System	☐ Repair	☐ Expansion	System Type: I II III IV (V) VI	☐ Residence	No. Bedrooms		Water Supply
Pump Tank	3000	(gal)	PT	2104	Date	1-23	System Description:	25% reduction - Flow Eq			☐ Business	No. Persons	100	☐ Private
Pump Make			Model		Serial #		Repair System Description:	25% reduction - Flow Eq			☒ Other	No. Employees		☒ Public
# Nitrification Fields	1		# Lines	4	Linear Ft:	400	Maintenance Agreement Required:	☒ YES	☐ NO		☒ Slab	☐ Crawl Space		☐ Community
Trench Width	36"		Max. Trench Bottom Depth	36"	Gravel Depth	N/A		☐ GRAVITY	☒ PRESSURE		☐ Basement w/plumbing		☐ Basement w/o plumbing	

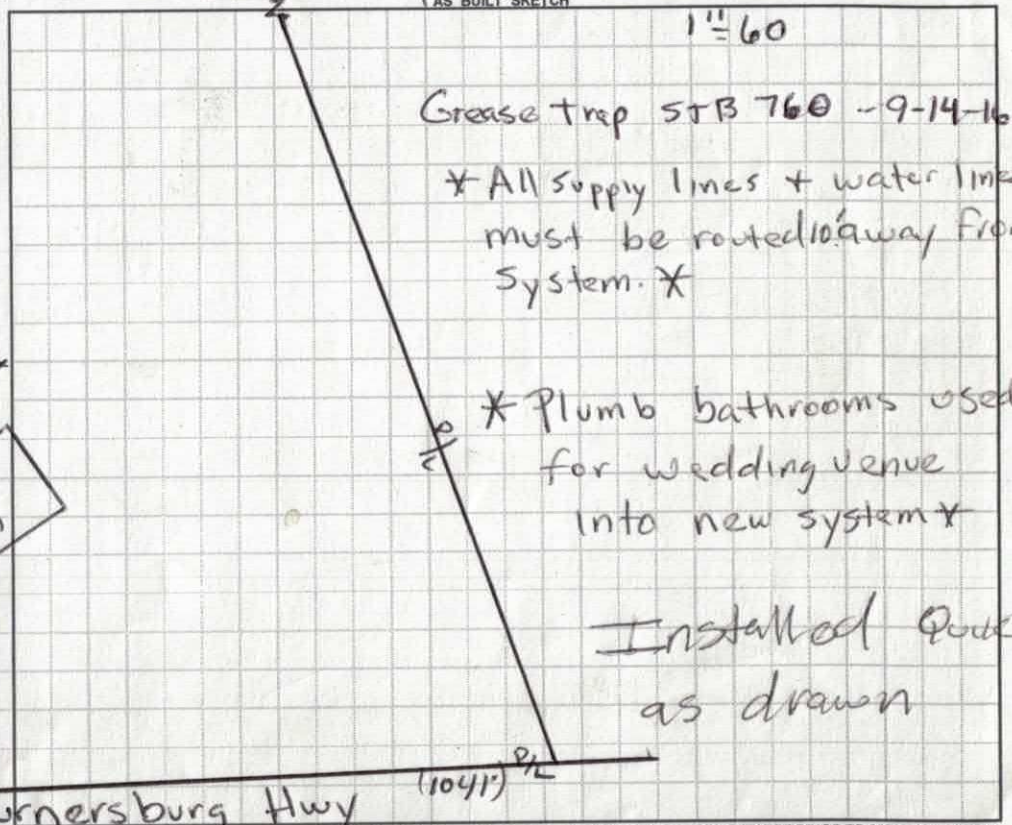
Comments / Conditions: Install 25% reduction on contour with Pressure distribution. Use Flow equalization control Panel. * Install 1000 gallon grease trap. *

* See spec sheet attached *
This permit is for 100 person wedding venue per weekend with Kitchen
Use 25% reduction product or conventional - No reduction

INITIAL SITE SKETCH



AS BUILT SKETCH



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:

IMPROVEMENT PERMIT by: Date: 03/17/17

AUTHORIZATION TO CONSTRUCT by: Date: 03/17/17

Installed by: A-1 Backhoe

OPERATION PERMIT by: Date: 03/14/18

Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	SEXP (Slightly Expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			EXP (Expansive)	M (Massive)
D (Drainage Way)						CR (Crumb)
DS (Debris Slump)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular)
FP (Flood Plain)		L (Loam)				SBK (Subangular Blocky)
FS (Foot Slope)						ABK (Angular Blocky)
H (Head Slope)	III	Si (Silt)	0.6 - 0.3	0.3 - 0.15		PL (Platy)
L (Linear Slope)		SiCL (Silty Clay Loam)				PR (Prismatic)
N (Nose Slope)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			MOIST	WET
S (Shoulder Slope)		SiL (Silt Loam)				
T (Terrace)					VFR (Very Friable)	NS (Non-sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SiC (Silty Clay)			FI (Firm)	S (Sticky)
		C (Clay)			VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		O (Organic)	None	None	EFI (Extremely Firm)	NP (Non-plastic)
						SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

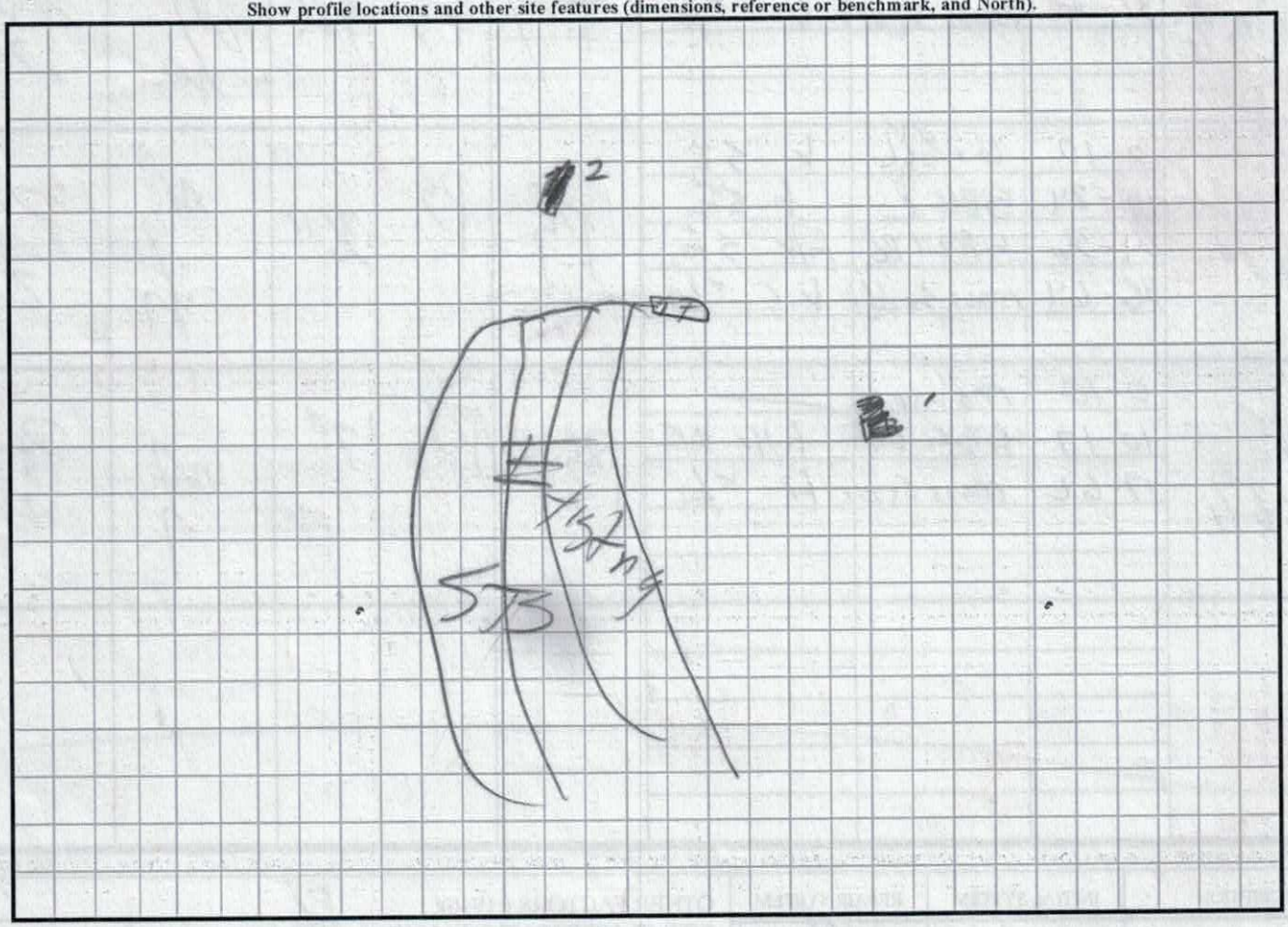
NOTES

HORIZON DEPTH	In inches below natural soil surface
DEPTH OF FILL	In inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S(suitable) or U(unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).



LEGEND

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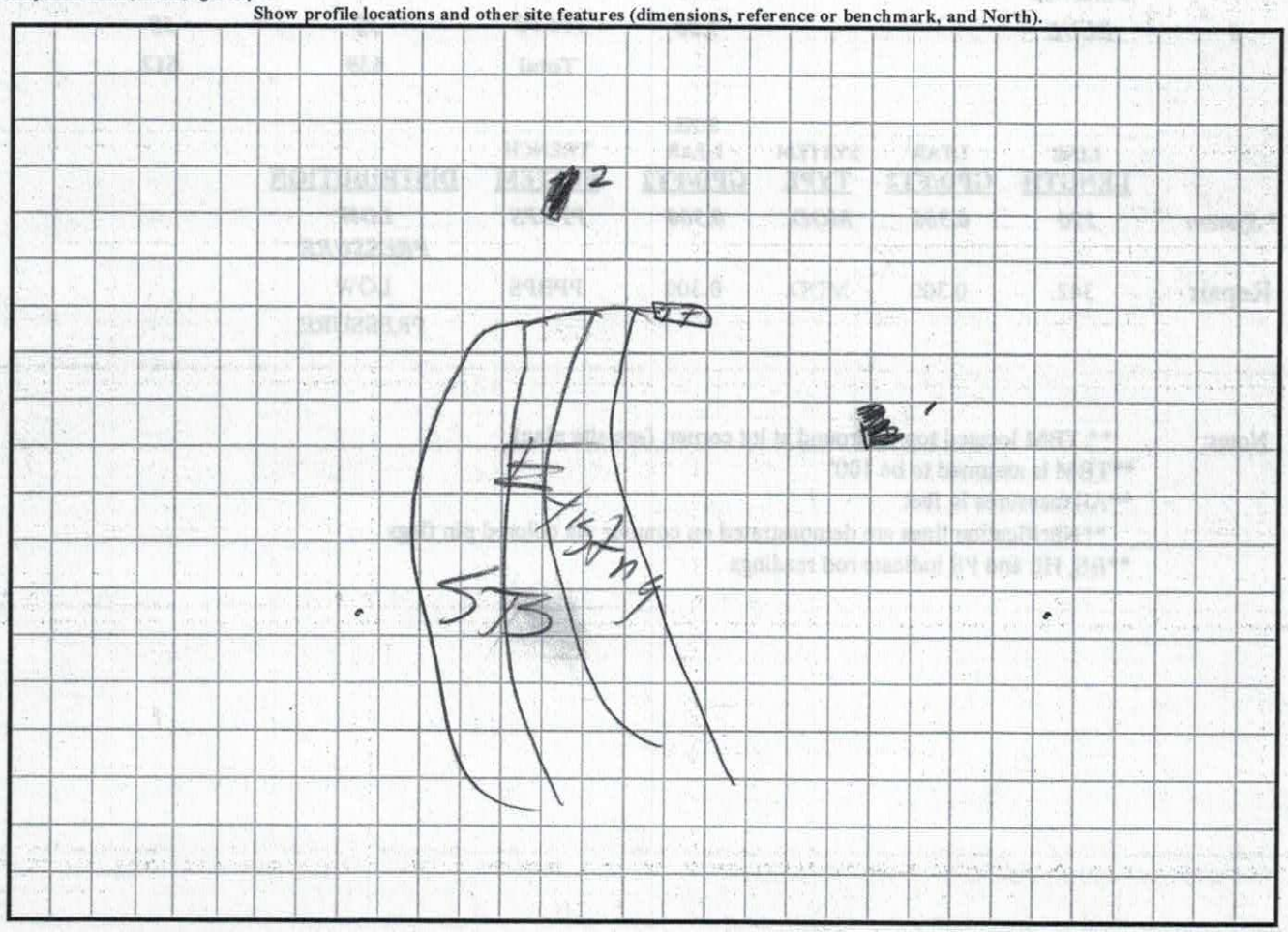
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DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 2
PROPERTY ID #: 4769627724
COUNTY: Iredell

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

OWNER: Patrick Waldon
ADDRESS: 2463 Turnpike Hwy
PROPOSED FACILITY: Wedding Venue PROPOSED DESIGN FLOW (.1949): 1000
LOCATION OF SITE: 21

APPLICATION DATE: 1-15-17
DATE EVALUATED: 02/14/17
PROPERTY SIZE: 7.02 ac
PROPERTY RECORDED: Y05

WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other W/P
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L 5%	0-6	GrSCL	fr SE	PS	PS	W/P	W/P	PS .25
		6-32	SBK C	fi SE					
		32-48	WSBK BC	fi/fr SE					
2	L 6%	0-22	WSBK BC	fi/fr SE	PS	PS	22"	W/A	PS .25
		22-48	Mass Sap						
3	L 8%	0-12	Man/P	—	PS	PS	43"	W/A	PS .25
		12-32	SBK C	fi SE					
		32-43	WSBK BC	fi/fr SE					
		43-48	Sap						
4	L 5%	0-24	WSBK BC		PS	PS	24"	W/A	PS .25
		24-48	Mass Sap						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	—	—
Site LTAR	.25	.25

OTHER FACTORS (.1946): PS
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: H. Snow
OTHER(S) PRESENT:

COMMENTS:

LEGEND

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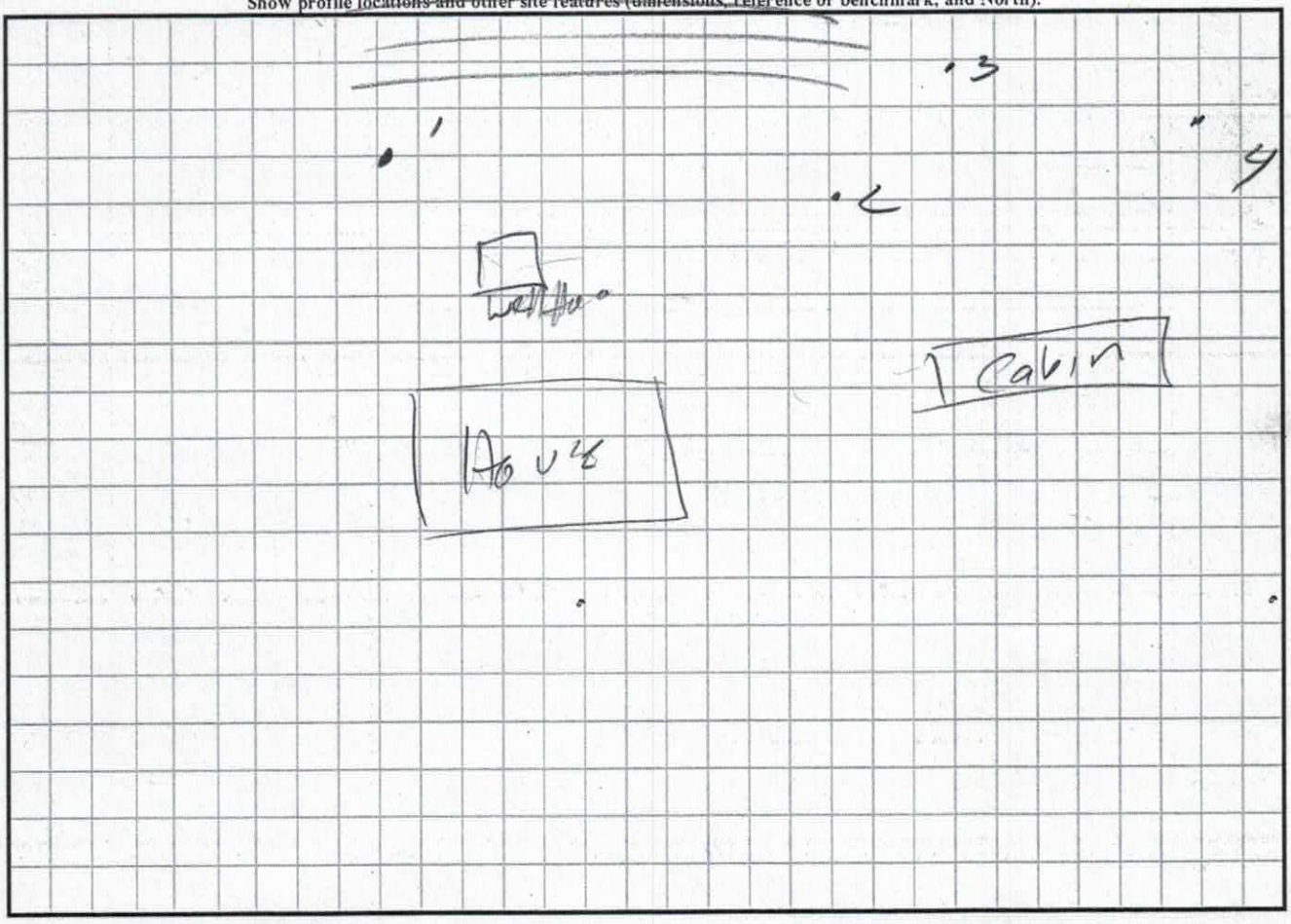
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Hitching Post

Drainfield line lengths

L1	100 ft
L2	100 ft
L3	100 ft
L4	100 ft

Total line length – 400 ft

Design flow – 100 people x 10 gal/person + 40 gallons/laundry load = 1,040

Grease tank size – 1,000 gallons

Septic tank size – 1,717 gallons (probably an 1,800 or 2,000 gallon tank)

Pump tank size – 3,000 gallons

Option A

Pressure manifold design at two feet of pressure head

	Tap size	Tap flow
L1	½ Sch 40	7.11 gpm
L2	½ Sch 40	7.11 gpm
L3	½ Sch 40	7.11 gpm
L4	½ Sch 40	7.11 gpm
Total		29 gpm

TDH = 2 ft of pressure head + 10 feet of elevation head + 10 feet of friction loss = 22 ft

Pump – 30 gpm at 22 ft of TDH

The tank size is based on the following (45 gallons/inch – based on SHOAF PT-2014):

4 inches	block under pump
13 inches	pump submergence (I looked up some pumps that would operate at 30 gpm and 22 feet of TDH and this was the pump height)
4 inches	dose volume (150 gallons)
19 inches	equalization volume (from the table below)
24 inches	emergency storage volume
64 inches	Total

64 inches x 45 gallons/inch = 2,880 gallons or a 3,000 gallon pump tank

Float elevations for Option A would be as follows:

Off float – 17 inches from tank bottom (just above pump)
On float – 21 inches from tank bottom
High level alarm float – 40 inches from tank bottom
Override float – at or above high level alarm float

Flow Balance Table

	Into Pump Tank	Pumped Out	Remainder
Saturday	1,000 gallons	150 gallons	850 gallons
Sunday	40 gallons	150 gallons	740 gallons
Monday	0 gallons	150 gallons	590 gallons
Tuesday	0 gallons	150 gallons	440 gallons
Wednesday	0 gallons	150 gallons	290 gallons
Thursday	0 gallons	150 gallons	140 gallons
Friday	0 gallons	150 gallons	0 gallons

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

(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)

1. APPLICATION FOR: ___Improvement Permit ___Authorization To Construct _X_Existing System Inspection

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
   The following optional attachments may also be submitted: ___Survey Plat, Scaled no more than 1 Inch = 60 Feet
   Place check ( ) beside whichever is submitted if applicable ___Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. **Applicant Information:**

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Patrick D. Waldron	2463 Turnersburg Hwy	704-546-7295	704 437-1710
Owner Name	**Mailing Address**	**Home Phone #**	**Alternate Phone #**
Patrick D Waldron	Same	Same	Same

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
2463 Turnersburg Hwy		

Driving Directions: N on Hwy 21 just past Noel Rd.

5. **RESIDENTIAL Site Development Information:** *(Check or Complete ALL that apply)*

( ) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
( ) Repair To Failing Septic System due to _____
( ) Other _____

Maximum Number of Bedrooms ___
Maximum Number of Occupants ___
If Expansion, Current Number of Bedrooms ___

( ) Crawl Space Foundation?
( ) Concrete Slab Foundation?
( ) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non-Residential Site Development:

Type of Business	Catering Commissary upfit
Square Footage of Building	3500 ±
Maximum Number of Employees	
Maximum Number of Seats	100 ±

6. **Proposed Water Supply:**

( ) New Well ( ) Existing Well ( ) Community Well (X) City Water ( ) Other Public Water

7. **Desired Septic System Type:** *(You may rank in order of preference, if any)* (X) EXISTING SYSTEM installed 2002 *Year*

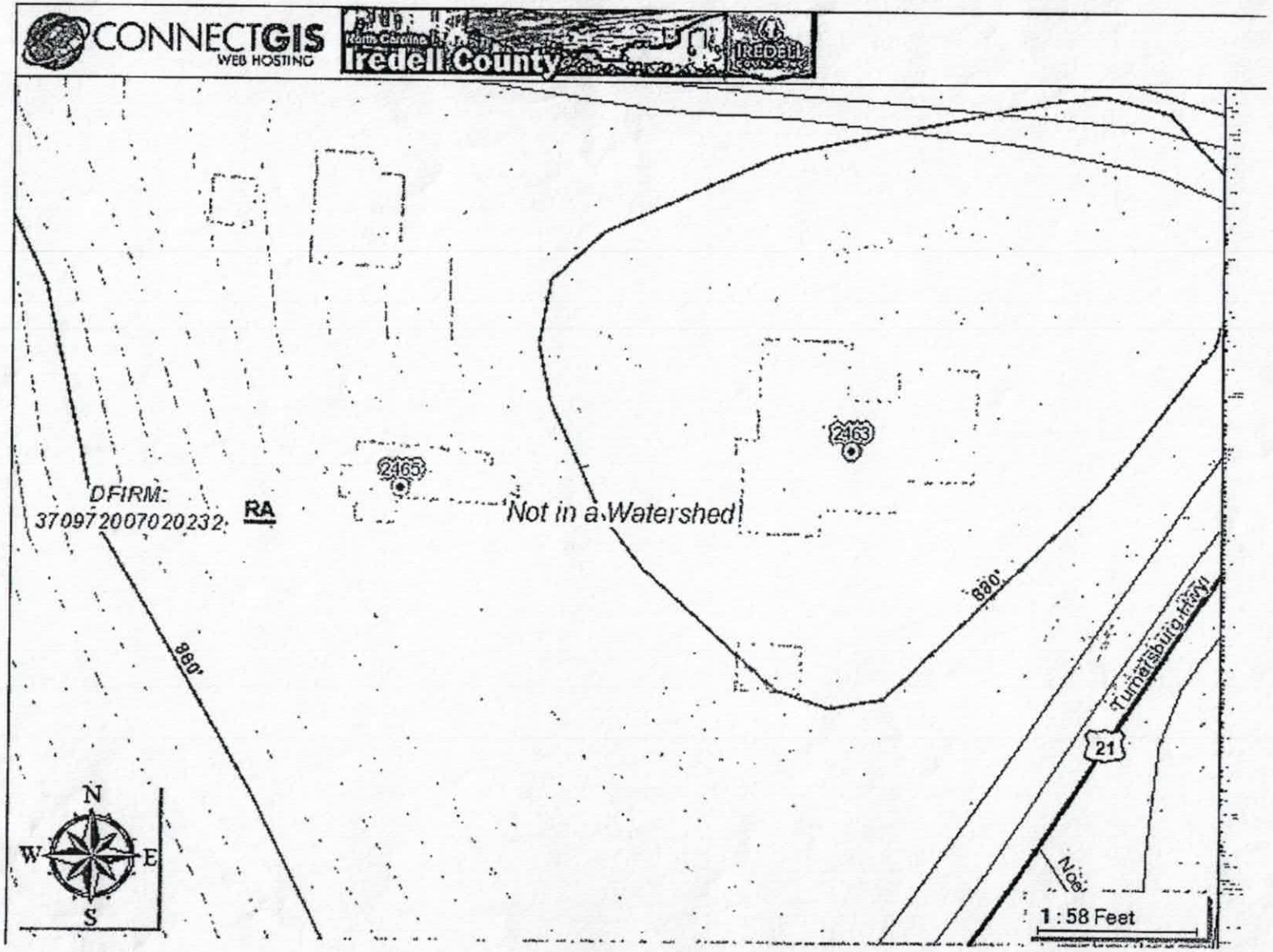
( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other_____

8. **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. industry) 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.

9. **Signature:** Patrick D Waldron
   Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

1-15-2017
DATE


CONNECTGIS
WEB HOSTING
North Carolina
Iredell County
IREDELL
2463
2465
DFIRM:
3709720070202 32
RA
Not in a Watershed
880'
880'
Turnersburg Hwy
21
N
W
E
S
1 : 58 Feet