Gravity 25% Reduction
FOR WASTEWATER TREATMENT

Owner:	IREDELL GROUP Attention: George Shirey
Address:	109-C Williamson Road Mooresville, NC 28115
Phone:	704-663-4050
County:	Iredell
Location:	Walden Ridge Subdivision Lot #43
Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	480 gpd
System Flow:	NA

Design Specifications

Drainfield Size:	400
Loading Rate:	.3 GPD/FTSQ
Depth of Gravel in Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Trench Depth:	36 in.
Trench Width:	36 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	50
Supply Line Diameter:	3 in. SCH 40 PVC
Supply Line Volume:	8.70
Dosing Volume:	NA
Supply Manifold:	DROP BOX
Supply Manifold Length:	NA
Supply Manifold Volume:	N/A
Recommended Float Controls:	NA
Recommended Control Panel:	NA
Pressure Head:	NA
Friction Head:	NA
Elevation Head:	NA
Total Dynamic Head:	NA
Threaded Union:	NA
Gate Valves:	NA NA
Check Valves:	NA
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Rollans Soil & Environmental Services.

WALDEN RIDGE SUBDIVISION LOT 43

DESIGN FLOW:	480	
SOIL APPLICATION RATE:	.3 GPD/FTSQ	
TOTAL AREA TRENCH BOTTOM:	1200	
TOTAL LATERAL LENGTH:	400	
NUMBER OF FIELDS:	1	
LATERAL LENGTH REQUIRED PER FIELD:	400	
SUPPLY LINE LENGTH:	50	
TOTAL DYNAMIC HEAD:	NA	
MANIFOLD SIZE:	NA	
DOSING VOLUME:	NA	
PUMP TANK DRAW DOWN*:	NA	
SEPTIC TANK SIZE:		1000
PUMP TANK SIZE:		1000

WALDEN RIDGE LOT #43

Project #: 01-1069

LAYOUT FOR 4 BEDROOM HOME

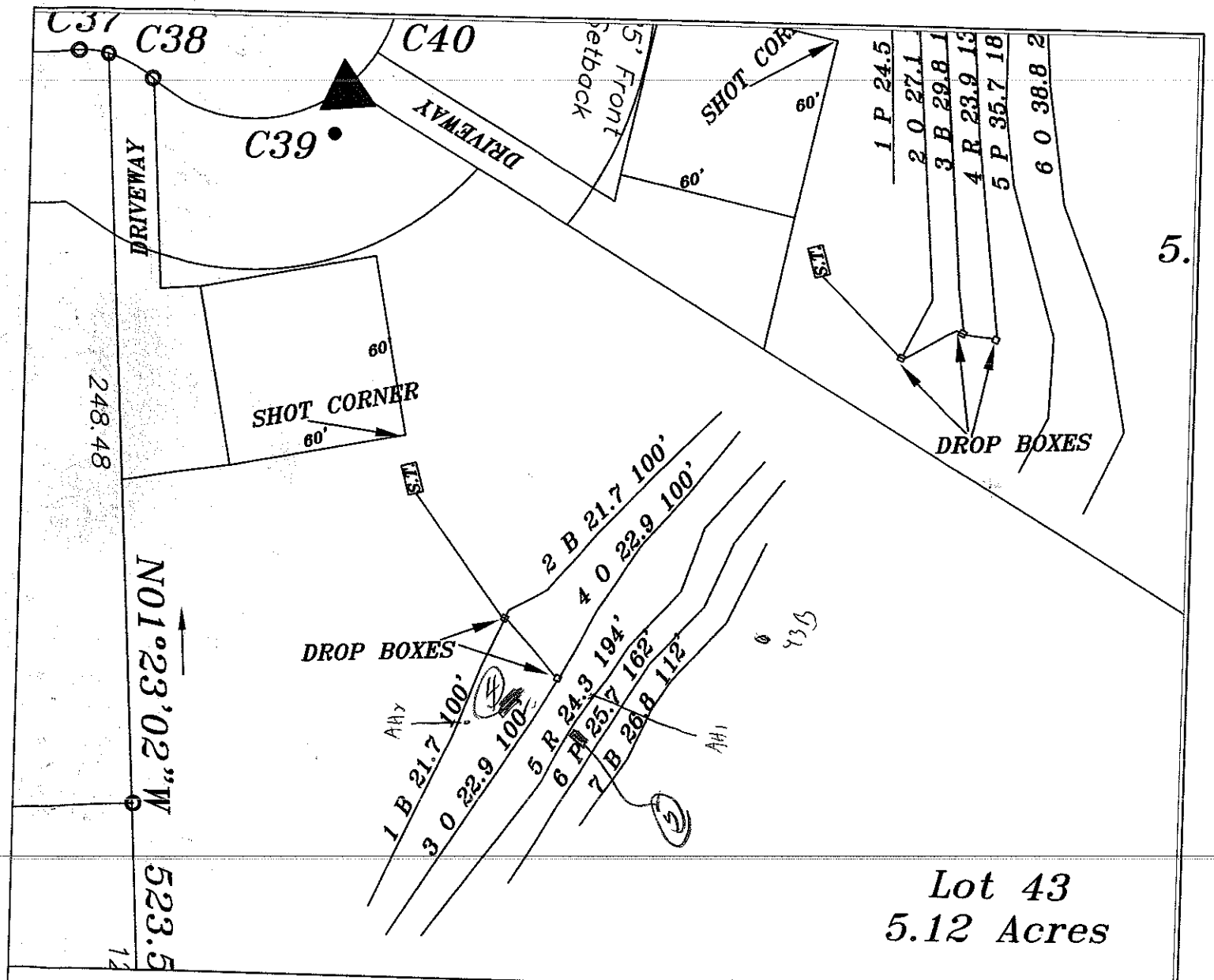
December 9, 2005

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		3.2			100.00		
TANK		15.70	87.50				
HOUSE		14.60	88.60				
INSTR. 1			103.20				
1	***BLUE***			***21.70***	***81.50***	***100***	***100***
2	***BLUE***			***21.70***	***81.50***	***100***	***100***
3	***ORANGE***			***22.90***	***80.30***	***100***	***100***
4	***ORANGE***			***22.90***	***80.30***	***100***	***100***
5	RED			24.30	78.90	194	194
6	PINK			25.70	77.50	162	162
7	BLUE			26.80	76.40	112	112
					Total	**868**	**868**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
* *System*	*400*	*0.30*	*ACCEPT.*	*0.30*	*25% RED.*	**GRAVITY**
Repair	468	0.30	*ACCEPT.*	0.30	25% RED.	**DISTRIBUTION** GRAVITY DISTRIBUTION

Notes:

** TBM located AT CORNER ON PROPERTY (see site plan)
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings



LEGEND

- Areas contain soils with 24 inches or more of useable material and have potential for conventional, modified conventional and low-pressure pipe (lpp) septic systems.
- Unsuitable areas.
- System lines.
- Repair lines.
- Temporary Bench Mark (TBM)
- Well Location.

GRAPHIC SCALE
1" = 50'

50 0 50 100

FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE FINAL APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND COMPLEX TOPOGRAPHIC FEATURES. THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS.

PLEASE REFER TO ATTACHED SOIL REPORT FOR ADDITIONAL SITE SPECIFIC INFORMATION

ROLLANS SOIL & ENVIRONMENTAL SERVICES
2120 GRAHAM ROAD
MOUNT ULLA, NC 28125
PHONE/FAX: (704) 278 - 0989
ASHLEY ROLLANS, NC LICENSED SOIL SCIENTIST
MOBILE: (704) 746 - 5046
EMAIL: ROLLANSPORTC@AOL.COM

MAP TITLE: SITE PLAN & DRAINFIELD AREAS

PROJECT NAME: IREDELL GROUP LLC/WALDEN RIDGE SUBDIVISION

LOCATION/DATE: TEETER ROAD IREDELL COUNTY, NORTH CAROLINA DECEMBER 2005

JOB # : 01-1069
FILE: C:\JOBS\01-1069
PROJECT MGR.: CBF
FIELD WORK: CBF AND AP
DRAWN BY: CBF AND AP

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ____ *of* ____
PROPERTY ID #: ____
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: IREDELL GROUP
ADDRESS: 109-C WILLIAMSON ROAD MOORESVILLE — APPLICATION DATE 12/05
PROPOSED FACILITY: RES — PROPOSED DESIGN FLOW (.1949): 480 — DATE EVALUATED: 12/05
LOCATION OF SITE: LOT 43 WALDEN RIDGE — PROPERTY SIZE: 5.12AC
WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other — PROPERTY RECORDED: Y
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut — TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
AH 1	LINEAR	0-8	BSCL GR	FRI SS SP SEXP	N/A	48	PS	N/A	PS
1	5-10%	8-48	RC SBK	FRI SS SP SEXP					.3 GPD/FTSQ
AH 2	LINEAR	0-3	BSCL GR	FRI SS SP SEXP	N/A	48	PS	N/A	PS
2	5-10%	3-18	RBCL WSBK	FRI SS SP SEXP					.3 GPD/FTSQ
		18-26	BSCL WSBK	FRI SS SP SEXP					
		26-48	RYC MFSBK	FRI SS SP SEXP					
43 B	LINEAR	0-36	RC SBK	FRI SS SP SEXP	N/A	56	PS	N/A	PS
3	5-10%	36-56	RCL MFSBK	FI SP SEXP					.3 GPD/FTSQ
4	12-14-05 10% L	0-10	wk sbk brn sdl	fr ss sp					-3
		10-31	sbk red c	fr ss sp sexp					
		31-53	w/ss bk ly c	fr ss sp fr ss sp					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1200 SQFT	1200 SQFT
System Type(s)	ACCEPT	ACCEPT
Site LTAR	.3 GPD/FTSQ	.3 GPD/FTSQ

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: ROLLANS SOIL & ENVIRONMENTAL SERVICES
OTHER(S) PRESENT:

COMMENTS: