Gravity 25% Reduction
FOR WASTEWATER TREATMENT

Owner: IREDELL GROUP

Address: 109-C Williamson Road
Mooresville, NC 28115

Phone: 704-663-4050

County: Iredell

Location: Walden Ridge Subdivision Lot #59

Source of Wastewater Flow: 4 Bedroom Single Family Residence

Estimated Daily Wastewater Production: 480 gpd

System Flow: NA

Design Specifications

Drainfield Size: 480

Loading Rate: 0.25

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: N/A

Estimated Supply Line Length: 20

Supply Line Diameter: 3 in. SCH 40 PVC

Supply Line Volume: 3.48

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 59

DESIGN FLOW:	480
SOIL APPLICATION RATE:	0.25
TOTAL AREA TRENCH BOTTOM:	1440
TOTAL LATERAL LENGTH:	480
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	600
SUPPLY LINE LENGTH:	20
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	N/A

WALDEN RIDGE LOT #59

Project #: 01-1069

LAYOUT FOR 4 BEDROOM HOME

March 23, 2006

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		N/A			100.00		
TANK		N/A	N/A				
HOUSE		N/A	N/A				
INSTR. 1			N/A				
1	RED			N/A	N/A	103	103
2	PINK			N/A	N/A	125	125
3	BLUE			N/A	N/A	143	143
4	ORANGE			N/A	N/A	172	172
5	***RED***			***N/A***	***N/A***	***190***	***120***
6	***PINK***			***N/A***	***N/A***	***182***	***120***
7	***BLUE***			***N/A***	***N/A***	***192***	***120***
8	***ORANGE***			***N/A***	***N/A***	***181***	***120***
					Total	**1288**	**1023**

* *System*	LINE LENGTH *480*	LTAR GPD/FT² *0.25*	SYSTEM TYPE *ACCEPT.*	SOIL LTAR GPD/FT² *0.25*	TRENCH SYSTEM *25% RED.*	DISTRIBUTION GRAVITY
Repair	543	0.25	*ACCEPT.*	0.25	25% RED.	DISTRIBUTION PRESSURE MANIFOLD

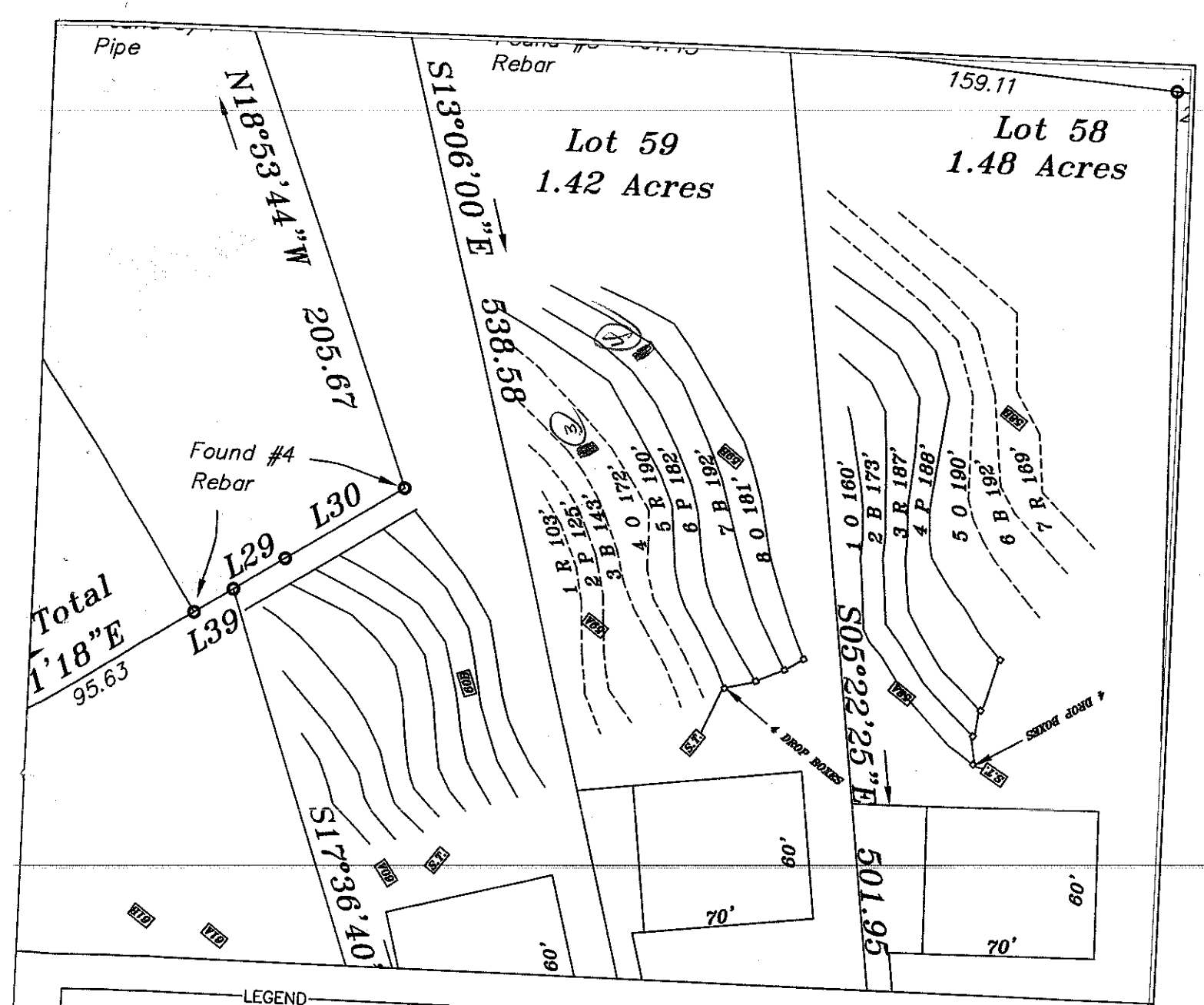
Notes:

** TBM NOT REQUIRED

**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" = 60'

60 0 60 120

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 - 0589
ASHLEY ROLLANS, NC LICENSED SOIL SCIENTIST
MOBILE: (704) 746 - 5046
EMAIL: ROLLANSFORTCJ@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: CBP 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 3/06
PROPOSED FACILITY: RES — PROPOSED DESIGN FLOW (.1949): 480 — DATE EVALUATED: 3/06
LOCATION OF SITE: Walden Ridge Lot 59 — PROPERTY SIZE: ___ AC
WATER SUPPLY: X Private ☐ Public ☐ Well ☐ Spring ☐ Other — PROPERTY RECORDED: Y
EVALUATION METHOD: ☐ Auger Boring X Pit ☐ Cut — TYPE OF WASTEWATER: X 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
59A	LSS 5-10%	0-12	B SCL WSBk	SS,SP,Fr SEXP	N/A	60"	N/A	N/A	PS
		12-60	RC MSBk/ABk	S,P, Fi					
				Common YB mottles					.25 gpd/ft²
				>36"					
59B	LSS 5-10%	0-20	B SCL WSBk	SS,SP,Fr SEXP	Chr 2 @ 48"	48"	N/A	N/A	PS
		20-32	BSC WSBk	SS,SP,Fr SEXP					
		32-53	RC ABk	S,P, Fi					
				few YB mottles					.25gpd/ft²
				Chrom 2 mottles	@ 48"				
3	4-7%	0-8	wksokabonsol	frssSp					.25-.3
		8-52	ABk rdc	fr SSSp SEXP					
				-Sp					
D	10%	0-9	gr brnsol	frssSp					.25
		9-53	ABk rdc	Fr Sp SEXP					
				few yel brn mottles	few faint.				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	1440 ft²	1440 ft²
System Type(s)	25% Red	25% Red
Site LTAR	.25	.25

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

COMMENTS: