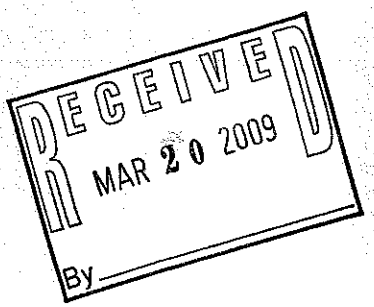
S&ME

County Copy



To: Iredell County Environmental Health Department

From: Paul G. Penninger, LSS
Kathleen Saunders, LSSIT

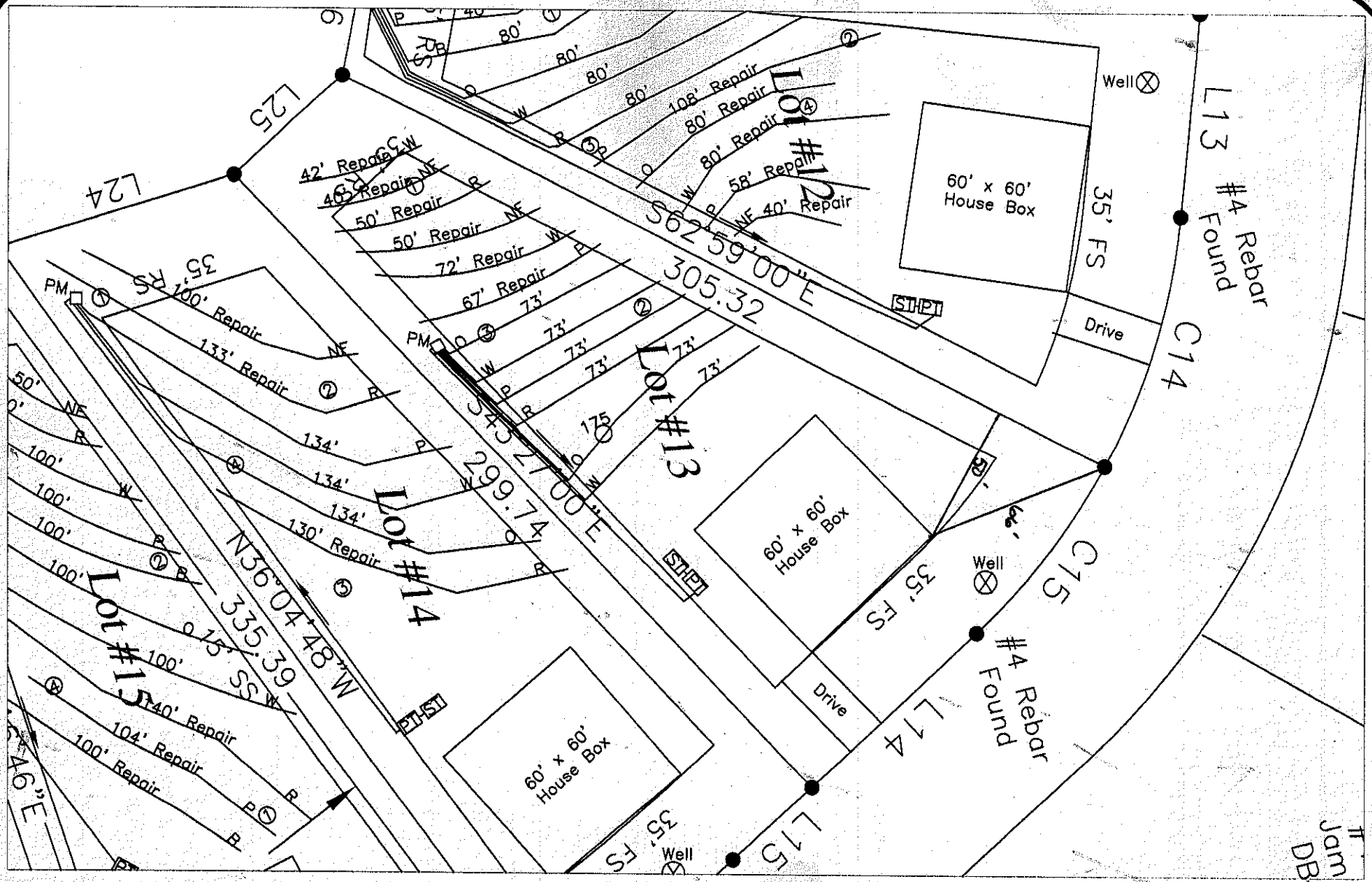
RE: Fernleaf Subdivision – Woodbridge Partners, LLC – Lot 13 Fast Track

Date: March 13, 2009

Attached is the Fast Track information required to place Lot 13 Fernleaf Subdivision on your developer work list to review the septic system layouts. Please call when you are ready to review the lot and we will meet you on the site.

The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist the Iredell County Environmental Health Department (ICHD) with the site evaluation. The ICHD has to approve each lot and only the ICHD can issue these permits. The system should be installed according to the ICHD permits, policies, and NC rules. If the ICHD wishes to change tank locations, distribution devices, etc., this can be shown on the Improvement Permit.

All information and specifications were prepared in conjunction with the Fast Track Program for Iredell County and are for the use of Woodbridge Partners, LLC in acquiring permits under the Fast Track Program. It is ultimately the Iredell County Health Department's responsibility to verify all specifications before permitting and/or septic system installation.



SCALE: 1" = 50'	DATE: March, 2009	S&ME 3718 OLD BATTLEGROUND ROAD GREENSBORO, NC 27410 PH: 336-288-7180 FAX: 336-288-8980 WWW.SMEINC.COM	Lot 13 Fern Leaf Subdivision – Kenway Loop. Iredell County, NC
PROJECT NO. 1588-09-012	DRAWN BY: KMS		FIGURE NO. 1
	CHECKED BY: PGP		

Lot 13 Fern Leaf Subdivision Individual Lot Fast Track Septic System Information

Number of Bedrooms	**4**
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.275**
Primary System Type	**25% Reduction**
No. Lines	6 (See Table)
Total Linear Feet	437
Trench Width	3' min.
Trench Spacing	9' min.
Pump Required	Yes
Distribution Device	Pressure Manifold
Maintenance Agreement Required	No
Length and Diameter of Supply Pipe	130' of 2" SCH 40 PVC
Flow Rate through the system	33 gpm
Elevation head	Approx. 17.8'
Pressure head	2.0'
Friction head	2.8'
20% Contingency	4.5'
Total Head	27.1'
Pump Requirements	27.5 gpm @ 27.1' of head; To be designed by installer.
Maximum Dosing Volume	240 gal -2.0 doses/day @ design flow
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 7.2 min.
Check Valve	Yes
Siphon Break hole	No
Repair System	**LP PPBPS**
Total Linear Feet	321
Repair Loading Rate	0.3

Table: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elevation (Ft.)
1	Repair	White	LPPPBPS	42	3.6
2	Repair	NF	LPPPBPS	40	
3	Repair	Red	LPPPBPS	50	4.3
4	Repair	NF	LPPPBPS	50	
5	Repair	White	LPPPBPS	72	4.4
6	Repair	Pink	LPPPBPS	67	
7	System	Orange	25% Reduction	72 endfed	
8	System	White	25% Reduction	73 endfed	
9	System	Pink	25% Reduction	73 endfed	
10	System	Red	25% Reduction	73 endfed	
11	System	Orange	25% Reduction	73 endfed	
12	System	White	25% Reduction	73 endfed	8.4
				Total System: 437'	
				Total Repair: 321'	

Tank	Red	1000 gal (2 compartment)	13.4
Pump Tank	Red	1000 gal.	13.4
House	Blue		

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	6
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

Note: Elevations should be verified prior to system installation.
Lot requires slight shaping to remove old berms

S&ME, INC.
SITE/SOIL EVALUATION

Project No. _____ **Phone No.** _____ **Date:** 2-16-09
Location Lot 13 **Pin** _____ **County:** _____ **Property Size** _____

Proposed Facility: _____ **Water Supply:** On-Site Well ☐ **Evaluation:** Auger Boring ☒
Community ☐ Pit ☐
Described By: JBP; PGP Public ☐ Cut ☐
Weather: _____ **Antecedent Moisture** _____ **Surface Water:** _____

FACTORS	PROFILE 1	PROFILE 2	PROFILE 3	PROFILE
Landscape Position %				Old Hwy 175
Horizon Depth I	0-8	0-24	0-8	on lot
Color Munsell	Br	Br	Br	
Texture	scl	scl	scl	0-5
Structure	gr	wsbk	gr/wsbk	Br Red
Consistence	Fr	SS SP Fr	SS SP Fr	scl
				wk sbk
				Fr ss/sp
Boundary				
Horizon Depth II	8-23	24-34	8-32	
Color – Munsell	R	R	R	
Texture	C	C	C	5-22
Mottles	-	-	-	Red
Structure	msbk	msbk	msbk	C
Consistence	SS SP Fi	SS SP Fi	SS SP Fi	Mo sbk
				Fr ss/sp
Boundary				
Horizon Depth III	23-48	34-48	32-44	22-48
Color – Munsell	YR	R	R	Red
Texture	cl	cl/scl	cl/scl	C
Mottles	F to C Sap	F to C Sap	F to C Sap	Mo sbk
Structure	vsbk	wsbk	wsbk	Fr ss/sp
Consistence	SS SP Fr	SS SP Fr	SS SP Fr	F yel Br, F Sap
Boundary				
Horizon Depth IV				
Color – Munsell	3/24/09	Soils ver. field by ICHD AC.		
Texture				
Mottles				
Structure				
Consistence				
Boundary				
Soil Wetness				
Restrictive Horizon				
Saprolite				
LTAR				
Classification	PS to 48"	PS to 48"	PS to 48"	0.25-0.3

LEGEND

LANDSCAPE POSITION

R	Ridge Interfluve
S	Shoulder
L	Linear Slope
S	Foot Slope
N	Nose Slope
H	Head Slope
Cc	Concave Slope
Cv	Convex Slope
T	Terrace
P	Flood Plain

TEXTURE

s	sand
ls	Loamy sand
sl	sandy loam
l	loam
si	silt
sil	silt loam
sicl	silty clay loam
cl	clay loam
scl	sandy clay loam
sc	sandy clay
sic	silty clay
c	clay

CONSISTENCE WET

Ns	non-sticky
Ss	slightly sticky
S	sticky
Vs	very sticky
Np	non-plastic
Sp	slightly plastic
P	plastic
Vp	very plastic

MOIST

vfr	Very friable
fr	friable
fi	finn
vfi	Very firm

STRUCTURE

sg	single grain
m	massive
cr	crumb
gr	granular
sab	subangular blocky
ab	angular blocky
pl	platy
pr	prismatic