S&ME

Health
Dept
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To: Iredell County Environmental Health Department

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

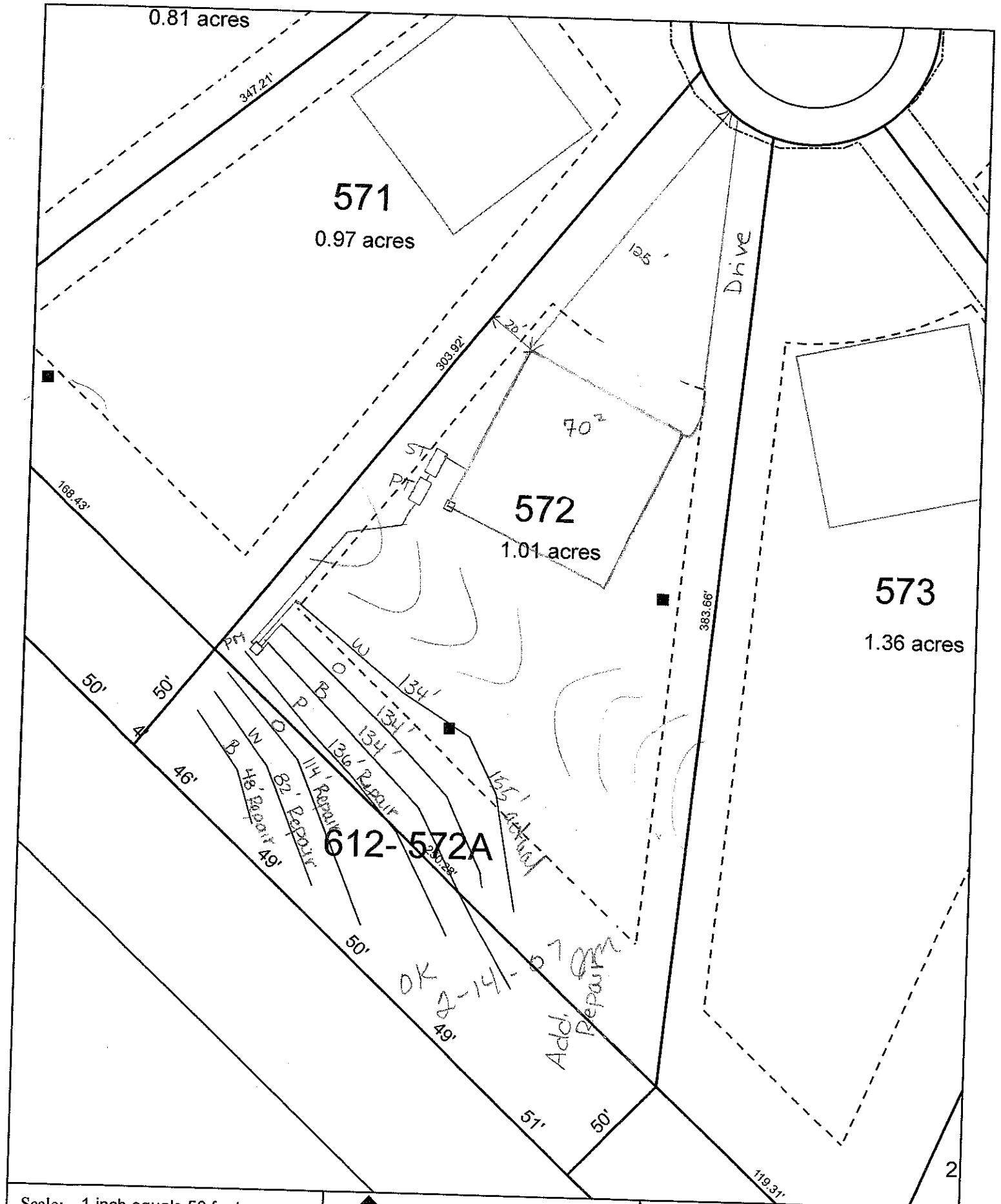
RE: Farms Phase V – Crescent Resources, LLC – Lot 572 Fast Track

Date: February 12, 2007

Attached is the Fast Track information required to place Lot 572 Farms Phase 5 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 Crescent Resources, LLC in acquiring permits under the Fast Track Program. All soil work has been approved by David Hinson of the Iredell County Health Department. It is ultimately the Iredell County Health Department's responsibility to verify all specifications before permitting and/or septic system installation.



Scale: 1 inch equals 50 feet	S&ME	The Farms - Phase V	FIGURE
Drawn by: JBP		Lot 572	1
Reviewed by: KS		Iredell County, NC	
Date: February, 2007	ENVIRONMENTAL SERVICES · ENGINEERING · TESTING	S&ME Project #1588-05-070	

Lot 572 The Farms Fast Track Septic System Information

Number of Bedrooms	**4**
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.3**
Primary System Type	**25% Reduction**
No. Lines	3 (See Table)
Total Linear Feet	402
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	100' of 2" SCH 40 PVC
Flow Rate through the system	16.5 gpm
Elevation head	Approx. 8.8'
Pressure head	2.0'
Friction head	1.0'
20% Contingency	2.4'
Total Head	14.2'
Pump Requirements	16.5 gpm @ 14.2' 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. 14.5 min.
Check Valve	Yes
Siphon Break hole	Yes
Repair System	**LP PPBPS**
Total Linear Feet	380
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	Blue	LP PPBPS	48	2.8
2	Repair	White	LP PPBPS	82	
3	Repair	Orange	LP PPBPS	114	
4	Repair	Pink	LP PPBPS	136	
5	System	Blue	25% Reduction	134 endfed	
6	System	Orange	25% Reduction	134 endfed	
7	System	White	25% Reduction	134 endfed	7.6
				Total System: 402'	
				Total Repair: 380'	

Tank	Red	1500 gal (2 compartment)	5.6
Pump Tank	Red	1500 gal.	5.6
House	Blue		5.2

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	3
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

Note: Partial system and repair located on Septic Easement 612-572A.