Health Dept. copy

S&ME

To: Iredell County Environmental Health Department

From: Paul G. Penninger, LSS
Kathleen Saunders, LSSIT
Martin Mabe, Project Manager

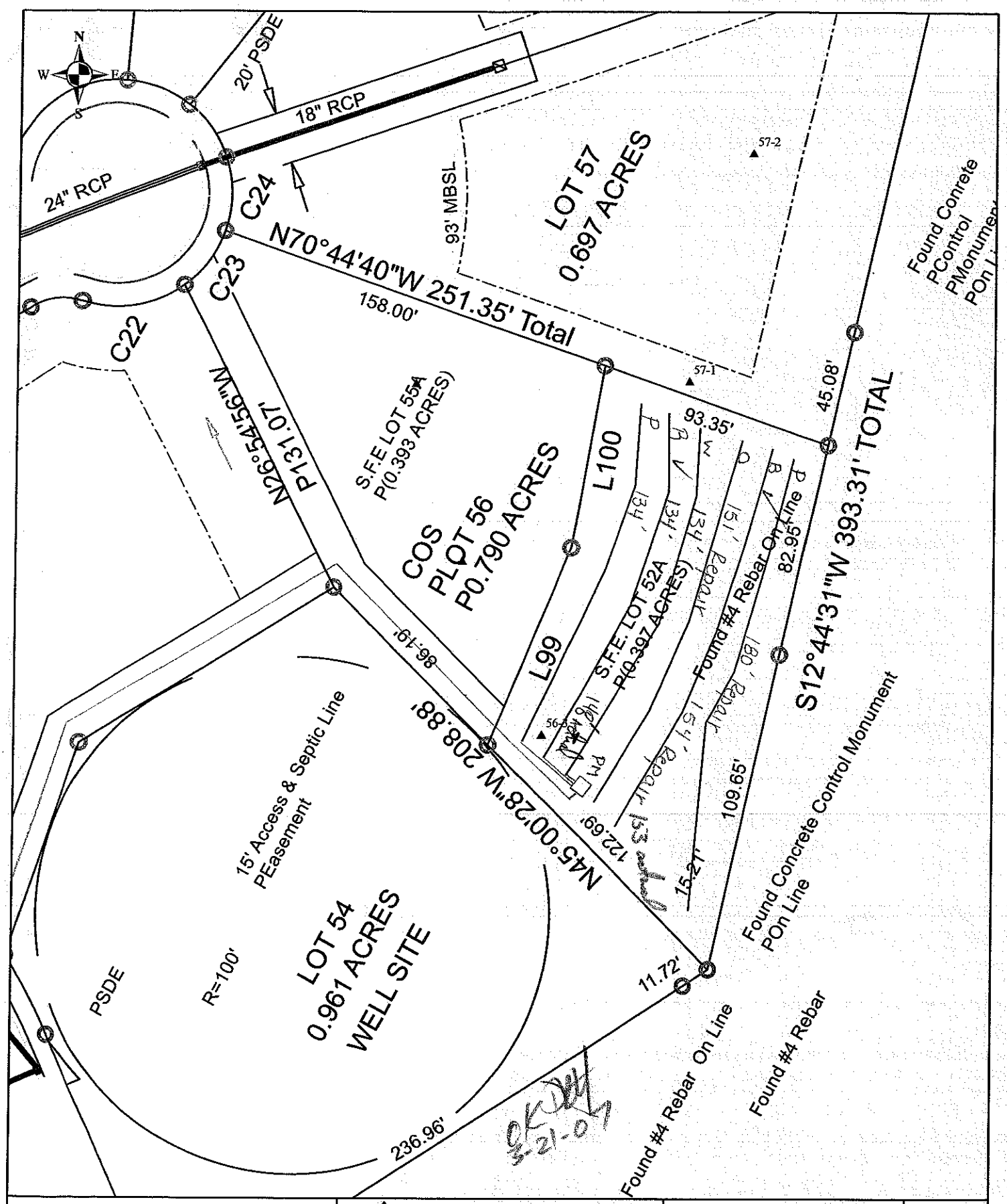
RE: Chesapeake Pointe Subdivision - Chesapeake Pointe, LLC - Lot 52 Fast Track

Date: March 12, 2007

Attached is the Fast Track information required to place Lot 52 Chesapeake Pointe 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 sole use of Chesapeake Pointe, 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 | S.F.E. Lot 52A Chesapeke Point | FIGURE |
| Drawn by: JBP | | Detailed, Scaled Site Plan | 1 |
| Reviewed by: KS | | Iredell County, NC | |
| Date: December, 2006 | ENVIRONMENTAL SERVICES · ENGINEERING · TESTING | S&ME Project #1588-04-011 | |

## Lot 52 Chesapeake Pointe Fast Track Septic System Information

| | |
|---|---|
| **Number of Bedrooms** | **4** |
| **Basement or Crawl** | **Basement w/ Plumbing** |
| **Design Flow (gpd)** | **480** |
| **Primary System LTAR (gpd/ft2)** | **0.3** |
| **Primary System Type** | **25% Reduction** |
| No. Lines | (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 | 460' of 2" SCH 40 PVC |
| Flow Rate through the system | 16.5 gpm |
| Elevation head | Approx. 42.01' |
| Pressure head | 2.0' |
| Friction head | 4.4' |
| 20% Contingency | 9.7' |
| Total Head | 58.11' |
| Pump Requirements | 16.5 gpm @ 58.11' of head; use Goulds<br>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** | **25% Reduction** |
| Total Linear Feet | 485 |
| 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 | Pink | 25% Reduction | 180 | 826.8 |
| 2 | Repair | Blue | 25% Reduction | 154 | |
| 3 | Repair | Orange | 25% Reduction | 151 | |
| 4 | System | White | 25% Reduction | 134 | |
| 5 | System | Red | 25% Reduction | 134 | |
| 6 | System | Pink | 25% Reduction | 134 | |
| | | | | Total System: 402' | |
| | | | | Total Repair: 485' | |

| | | | |
|---|---|---|---|
| Tank | White | 1000 gal (2 compartment) | 792.75 |
| Pump Tank | White | 1000 gal. | 792.75 |
| House | Yellow | | 793.17 |

| 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 |