

# CHATHAM COUNTY HEALTH DEPARTMENT ENVIRONMENTAL HEALTH DIVISION

80 East Street ▪ P. O. Box 130 ▪ Pittsboro, NC 27312-0130  
Phone (919) 542-8208 ▪ Fax (919) 542-8288

OFFICE USE ONLY	
TPN	_____
Permit No.	_____
Date	_____
EHS	_____
System Type	_____

## Improvement Permit for Wastewater Systems ARTICLE II-CHAPTER 130A OF THE NC GENERAL STATUTES

NEW  REPAIR  EXPANSION  REVISED

An Improvement Permit is issued to Selenco, Ltd. for  
a 4.06 acre site located Deer Mountain Lot 15

in Chatham County. It is specifically issued for the following facility:

Facility: Residential (  ) Non-Residential ( )  
 No. Bedrooms 3 No. Residents/Employees 6 max  
 Type Wastewater: Residential (  ) Commercial ( )  
 Initial System Type: I ( ) II ( ) III (  ) IV ( ) V ( ) VI ( )  
 Description \_\_\_\_\_

Type System: Shallow Conventional ( ) LPP ( )  
 Other Pump to Accepted 25% Reduction  
 Design Flow 360 EGD Application Rate .3 GPD/ft<sup>2</sup>  
 Size Tank(s) w/Risers and Effluent Filter ST 1000 Gal PT 1000 Gal  
 Nitrification Line (Length/Width/Max Depth) 300' x 3' x 16"  
Additional soil cover may be required to achieve final 6" cover

(On contour in approved septic area; sch. 40 PVC required over step-downs)  
 Repair System Type: I ( ) II ( ) III (  ) IV ( ) V ( ) VI ( )  
 Description Pump to Accepted 25% Reduction  
 Special Conditions \_\_\_\_\_

A plat with site plan showing specific location of the facility, the site for the proposed wastewater system, existing buildings, property lines, water supplies, surface waters, the conditions for any site modifications; and any other information required by the department must be attached to be valid.  
Septic tank riser 6" above grade required over outlet access port as a visible marker for the septic tank.  
Solid PVC with elbows must be used to construct conveyance over dams or stepdowns.

This permit is valid [ ] without expiration [  ] for five years but is subject to revocation if the site is altered, soil disturbed, set-backs violated, or the plans of intended use are changed.  
The Improvement Permit shall not be affected by change in ownership.

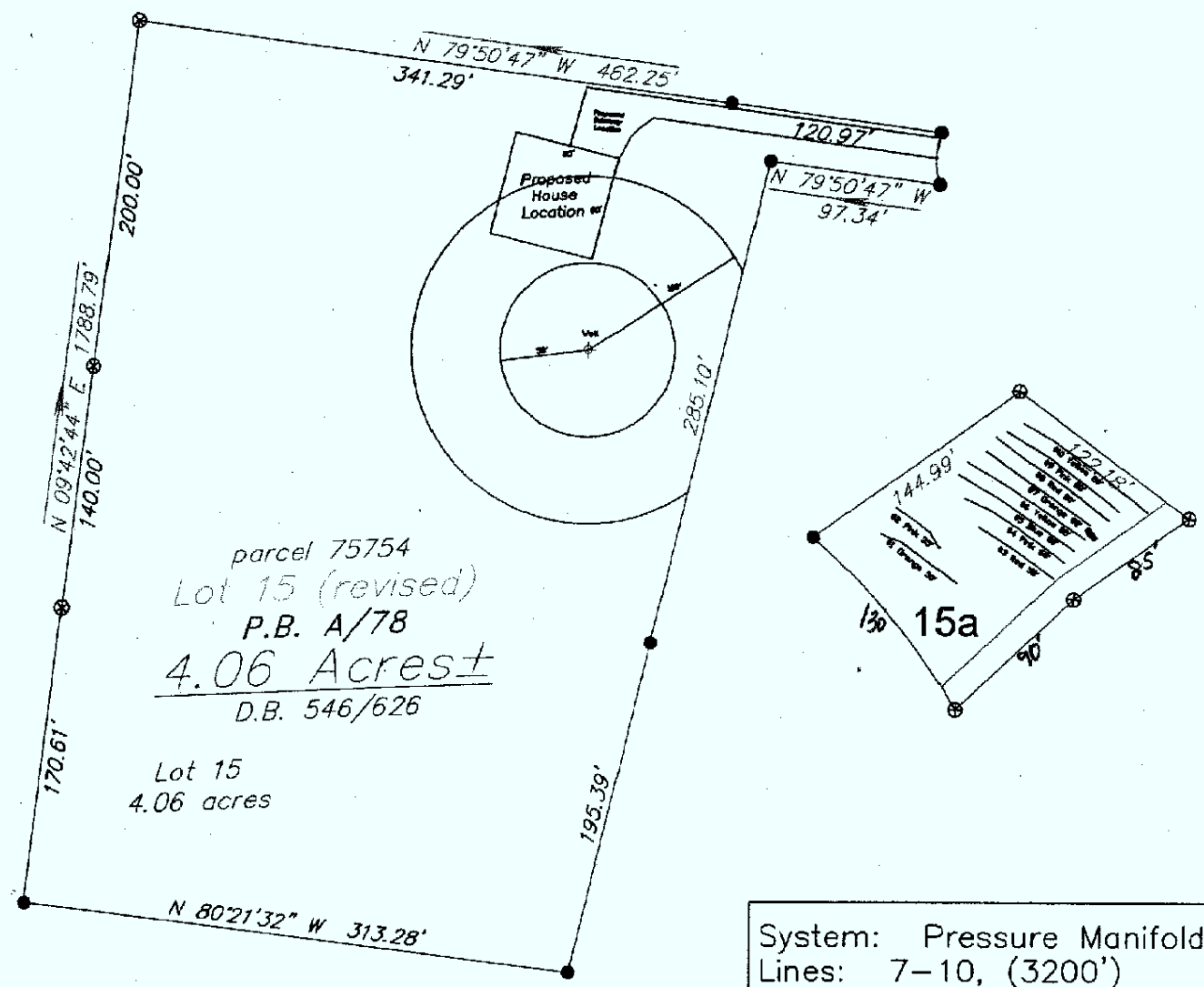
**THIS IS NOT AUTHORIZATION TO INSTALL.** An authorization for Wastewater Construction must be obtained from this department before installation.

Issued by Tom C. Rutter P.S.  
Environmental Health Specialist

N.C. Registration Number 1991  
Date 2-8-08

Name Deer Mountain Lot 15 911 Address

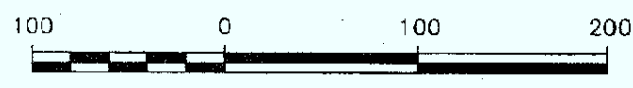
# Deer Mountain, Lot 15 Selinco LTD 3-Bedroom Septic System Layout



System: Pressure Manifold  
Lines: 7-10, (3200')  
Accepted Status System  
0.3 Soil LTAR  
12" Trench Bottom

Repair: Pressure Manifold  
Lines: 1, 3-6, (325')  
Accepted Status System  
0.3 Soil LTAR  
~~12"~~ Trench Bottom 16"

GRAPHIC SCALE  
1" = 100'



Central Carolina  
Soil Consulting  
919-784-9449  
Project # 331

Sheet1

**Selinca, LTD  
Deer Mountain, Lot 15A  
Repair, Tap Chart**

Bench Mark	2.30	is = 100.00	Location of BM					Elevation Head	1.90
Pump tank elev.	4		98.30	Pump elev.	93.30	Manifold elev.			95.20
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Orange	2.2	100.10	50	1/2in SCH 80	5.48	61.10	150	0.4073
3	Red	8.10	94.20	50	1/2in SCH 80	5.48	61.10	150	0.4073
4	Pink	9.70	92.60	65	1/2in SCH 40	7.11	79.27	195	0.4065
5	Blue	11.3	91.00	80	1/2in SCH 40	7.11	79.27	240	0.3303
6	Yellow	13	89.30	80	1/2in SCH 40	7.11	79.27	240	0.3303
		<b>total</b>	<b>feet =</b>	<b>325</b>	<b>gal/min =</b>	<b>32.29</b>		<b>LTAR =</b>	<b>0.3000</b>
								<b>LTAR + %5</b>	<b>0.3150</b>
<b>% of Dose Vol.</b>	80			<b>Des. Flow</b>	360			<b>(ltar W/ INOV)</b>	<b>0.4000</b>
<b>Dose Volume</b>	169.00			<b>Pump Run=</b>	11.15			<b>(ltar W/ INOV + 5%)</b>	<b>0.4200</b>
<b>Dose Pump Time</b>	5.23			<b>Tank Gal/IN</b>	21				
<b>Drawdown in Inches</b>	8.05								

Sheet1

**Selinca, LTD  
Deer Mountain, Lot 15A  
Initial, Tap Chart**

Bench Mark	2.30	is = 100.00	Location of BM		Elevation Head	-5.60			
Pump tank elev.	4	98.30	Pump elev.	93.30	Manifold elev.	87.70			
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
7	Orange	14	88.30	80	1/2in SCH 40	7.11	95.47	240	0.3978
8	Red	15.60	86.70	70	1/2in SCH 80	5.48	73.58	210	0.3504
9	Pink	17.30	85.00	80	1/2in SCH 40	7.11	95.47	240	0.3978
10	Yellow	19	83.30	80	1/2in SCH 40	7.11	95.47	240	0.3978
		<b>total</b>	<b>feet =</b>	<b>310</b>	<b>gal/min =</b>	<b>25.81</b>	<b>LTAR =</b>	<b>0.3000</b>	
							<b>LTAR + %5</b>	<b>0.3150</b>	
<b>% of Dose Vol.</b>	80		<b>Des. Flow</b>	<b>360</b>			<b>(ltar W/ INOV)</b>	<b>0.4000</b>	
<b>Dose Volume</b>	161.20		<b>Pump Run=</b>	<b>13.43</b>			<b>(ltar W/ INOV + 5%)</b>	<b>0.4200</b>	
<b>Dose Pump Time</b>	6.01		<b>Tank Gal/IN</b>	<b>21</b>					
<b>Drawdown in Inches</b>	7.68								

**Selinco, LTD**  
**Deer Mountain Subdivision Lot 15 A**  
 3-Bedroom Home (360 gal./day)

<u>LINE #</u>	<u>COLOR</u>	<u>BS</u>	<u>HI</u>	<u>FS</u>	<u>ELEVATION</u>	<u>LINE LENGTH</u>	<u>Design Length</u>
TBM		2.3		100.0		<u>in field</u>	<u>installation</u>
INST. 1			102.3				
1	Orange			2.2	100.1	55	50
2	Pink			3.5	98.8	35	not used
3	Red			8.1	94.2	50	50
4	Pink			9.7	92.6	65	65
5	Blue			11.3	91	85	80
6	Yellow			13	89.3	85	80
7	<i>Orange</i>			<i>14</i>	<i>88.3</i>	<i>80</i>	<i>80</i>
8	<i>Red</i>			<i>15.6</i>	<i>86.7</i>	<i>80</i>	<i>80</i>
9	<i>Pink</i>			<i>17.3</i>	<i>85</i>	<i>80</i>	<i>80</i>
10	<i>Yellow</i>			<i>19</i>	<i>83.3</i>	<i>80</i>	<i>80</i>
					Total	695	645

<b>System Type</b>	<u>System</u>	<u>Repair</u>
	Lines 7-10	Lines 1, 3-6
	Accepted Status System	Accepted Status System
	EZ-FLOW	EZ-FLOW
<b>Suggested Soil LTAR</b> (gal/day/ft2)	0.300	0.3
System Installation LTAR	0.380	0.38
<b>Total Line Length</b>	320	325
<b>Square Footage</b>	960	975
<b>Proposed Trench Bottom</b>	12"	12"
<b>Distribution Method</b>	Pressure Manifold	Pressure Manifold
Notes:		