

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 5.26 acre site located Deer Mountain Lot 27
in Chatham County. It is specifically issued for the following facility:

Facility: Residential () Non-Residential ()
 No. Bedrooms 4 No. Residents/Employees 8 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 480 EGPL Application Rate .3 GPD/ft²
 Size Tank(s) w/Risers and Effluent Filter ST 1000 Gal PT 1000 Gal
 Nitrification Line (Length/Width/Max Depth) 400' x 3' x 18"

(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 Rutter P.S.
Environmental Health Specialist

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

Name Deer Mountain Lot 27 911 Address

Sheet1

**Selinca, LTD
Deer Mountain, Lot 28
Repair, Tap Chart**

| Bench Mark | 2.30 | is = 100.00 | Location of BM | | Elevation Head | 22.40 | | | |
|-----------------|--------|-------------|----------------|------------|----------------|----------------|---------|-------------|-----------|
| Pump tank elev. | 4 | rod read | Elevation | Pump elev. | 93.30 | Manifold elev. | 115.70 | | |
| line | color | rod read | Elevation | length | hole size | flow/tap | gal/day | trench area | LINE LTAR |
| 1 | Blue | -13.8 | 116.10 | 90 | 1/2in SCH 40 | 7.11 | 99.15 | 270 | 0.3672 |
| 2 | Pink | -12.40 | 114.70 | 100 | 1/2in SCH 40 | 7.11 | 99.15 | 300 | 0.3305 |
| 3 | Yellow | -10.80 | 113.10 | 115 | 3/4in SCH 80 | 10.1 | 140.85 | 345 | 0.4083 |
| 4 | Red | -9 | 111.30 | 115 | 3/4in SCH 80 | 10.1 | 140.85 | 345 | 0.4083 |

total feet = 420 gal/min = 34.42 LTAR = 0.3000

| | | | | | |
|--------------------|--------|------------------|-------|---------------------|--------|
| % of Dose Vol. | 65 | <u>Des. Flow</u> | 480 | <u>LTAR + %5</u> | 0.3150 |
| Dose Volume | 177.45 | Pump Run= | 13.95 | (ltar W/ INOV) | 0.4000 |
| Dose Pump Time | 5.16 | Tank Gal/IN | 21 | (ltar W/ INOV + 5%) | 0.4200 |
| Drawdown in Inches | 8.45 | | | | |

Selinco, LTD
Deer Mountain Subdivision Lot 27
 4-Bedroom Home (480 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 | Yellow | | | 0.8 | 101.5 | 111 | 100 |
| 2 | Red | | | 2.2 | 100.1 | 110 | 100 |
| 3 | Orange | | | 3.4 | 98.9 | 114 | 100 |
| 4 | Blue | | | 4.8 | 97.5 | 114 | 100 |
| 5 | Pink | | | 5.9 | 96.4 | 117 | 100 |
| 6 | Yellow | | | 7.2 | 95.1 | 103 | 100 |
| 7 | Red | | | 8.2 | 94.1 | 101 | 100 |
| 8 | Orange | | | 9.5 | 92.8 | 402 | 100 |
| Total | | | | | | 872 | 800 |

| <u>System Type</u> | <u>System</u> | <u>Repair</u> |
|--|------------------------|------------------------|
| | Lines 1-4 | Lines 5-8 |
| | Accepted Status System | Accepted Status System |
| | EZ-FLOW | EZ-FLOW |
| Suggested Soil LTAR (gal/day/ft ²) | 0.30 | 0.30 |
| System Installation LTAR | 0.30 | 0.30 |
| Total Line Length | 400 | 400 |
| Square Footage | 1200 | 1200 |
| Proposed Trench Bottom | 18" 19" | 18" 19" |
| Distribution Method | Pressure Manifold | Pressure Manifold |

Notes: TBM is top of cut tree between lines 3 and 4.

Sheet1

**Selinca, LTD
Deer Mountain, Lot 27
Initial, Tap Chart**

| Bench Mark | 2.30 | is = 100.00 Location of BM | | Pump elev. | | Manifold elev. | | Elevation Head | 7.80 |
|-----------------|--------|----------------------------|------------|------------|----------------|----------------|---------|----------------|-----------|
| Pump tank elev. | 4 | 98.30 | Pump elev. | 93.30 | Manifold elev. | | 101.10 | | |
| line | color | rod read | Elevation | length | hole size | flow/tap | gal/day | trench area | LINE LTAR |
| 1 | Yellow | 0.8 | 101.50 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |
| 2 | Red | 2.20 | 100.10 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |
| 3 | Orange | 3.40 | 98.90 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |
| 4 | Blue | 4.8 | 97.50 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |

| | | | | | | |
|---------------------------|---------------|--------------------|------------------|----------------------------|---------------|---------------|
| total | feet = | 400 | gal/min = | 40.4 | LTAR = | 0.3000 |
| % of Dose Vol. | 80 | Des. Flow | 480 | LTAR + %5 | 0.3150 | |
| Dose Volume | 208.00 | Pump Run= | 11.88 | (ltar W/ INOV) | 0.4000 | |
| Dose Pump Time | 5.15 | Tank Gal/IN | 21 | (ltar W/ INOV + 5%) | 0.4200 | |
| Drawdown in Inches | 9.90 | | | | | |

**Selinca, LTD
Deer Mountain, Lot 27
Repair, Tap Chart**

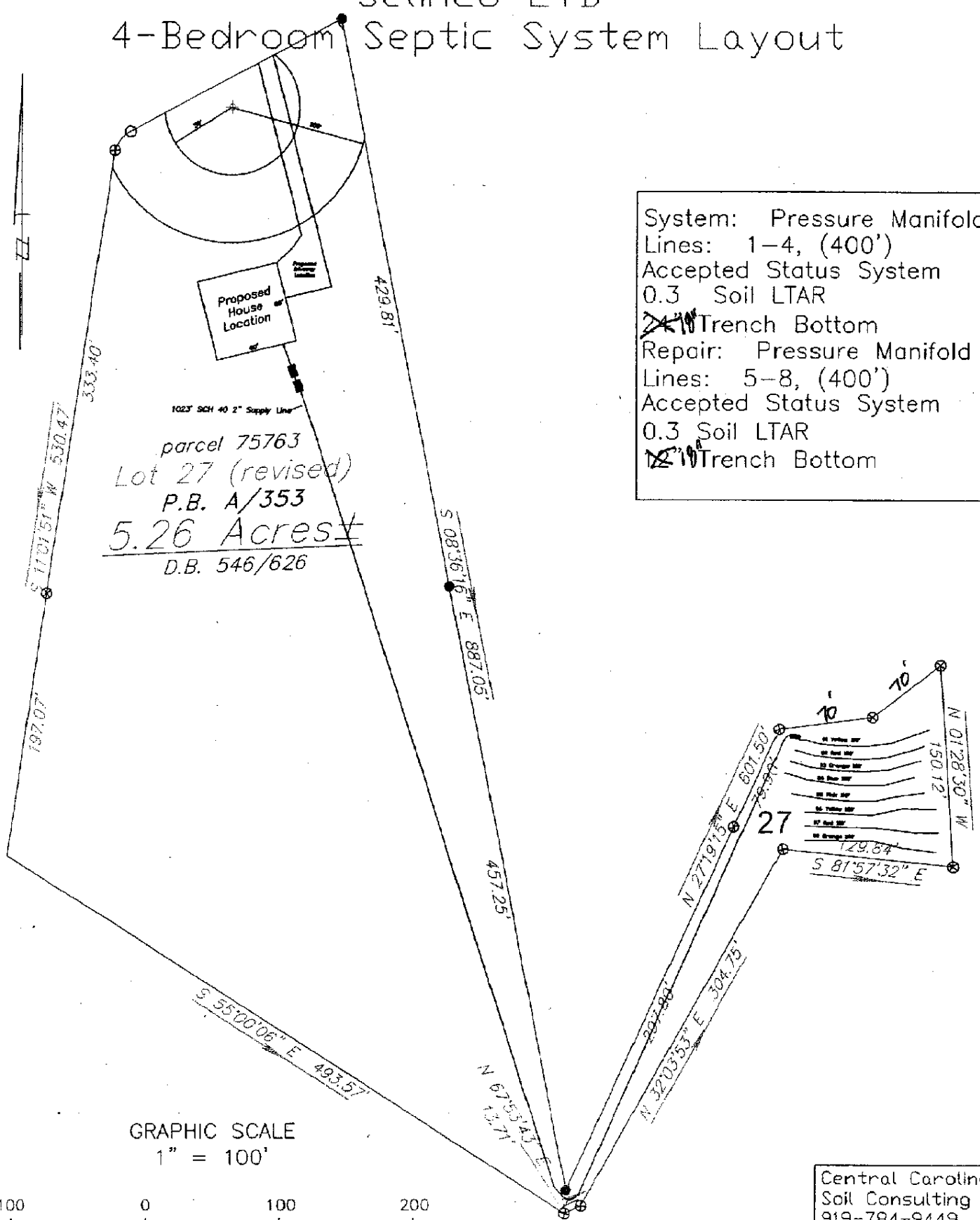
| Bench Mark | 2.30 | is = 100.00 | Location of BM | | Elevation Head | 2.80 | | | |
|-----------------|--------|-------------|----------------|--------|----------------|----------|---------|-------------|-----------|
| Pump tank elev. | 4 | 98.30 | Pump elev. | 93.30 | Manifold elev. | 96.10 | | | |
| line | color | rod read | Elevation | length | hole size | flow/tap | gal/day | trench area | LINE LTAR |
| 5 | Pink | 5.9 | 96.40 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |
| 6 | Yellow | 7.20 | 95.10 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |
| 7 | Red | 8.20 | 94.10 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |
| 8 | Orange | 9.5 | 92.80 | 100 | 3/4in SCH 80 | 10.1 | 120.00 | 300 | 0.4000 |

total feet = 400 gal/min = 40.4 LTAR = 0.3000

LTAR + %5 0.3150

| | | | | | |
|--------------------|--------|------------------|-------|---------------------|--------|
| % of Dose Vol. | 80 | <u>Des. Flow</u> | 480 | (ltar W/ INOV) | 0.4000 |
| Dose Volume | 208.00 | Pump Run= | 11.88 | (ltar W/ INOV + 5%) | 0.4200 |
| Dose Pump Time | 5.15 | Tank Gal/IN | 21 | | |
| Drawdown in Inches | 9.90 | | | | |

Deer Mountain, Lot 27 Selinco LTD 4-Bedroom Septic System Layout



System: Pressure Manifold
 Lines: 1-4, (400')
 Accepted Status System
 0.3 Soil LTAR
~~X~~ Trench Bottom
 Repair: Pressure Manifold
 Lines: 5-8, (400')
 Accepted Status System
 0.3 Soil LTAR
~~X~~ Trench Bottom

parcel 75763
 Lot 27 (revised)
 P.B. A/353
 5.26 Acres ±
 D.B. 546/626

GRAPHIC SCALE
 1" = 100'



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