

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Applicant: 24464
 Address: Date Evaluated: 5-24-10
 Proposed Facility: Design Flow (.1949): 480
 Location of Site: Property Recorded: Property Size:
 Water Supply: Public Individual Well Spring Other
 Evaluation Method: Auger Boring Pit Cut
 Type of Wastewater: Sewage Industrial Process Mixed

| P R O F I L E # | .1940 Landscape Position/ Slope % | Horizon Depth (In.) | SOIL MORPHOLOGY .1941 | | OTHER PROFILE FACTORS | | | | Profile Class & LTAR |
|--------------------------------------|--|---------------------------|--------------------------------|------------------------------------|------------------------------------|------------------------------|-------------------------|-------------------------|----------------------------|
| | | | .1941 Structure/ Texture | .1941 Consistence Mineralogy | .1942 Soil Wetness/ Color | .1943 Soil Depth (IN.) | .1956 Sapro Class | .1944 Restr Horiz | |
| 2 | L 4% | 0-24 | SL | FR GR N&NP | | | | | |
| | | 24-38 | SC-CL | FR 1/2" 35SP | 34"-36" 28g | - wet water in holes | | | .35 |
| 2 | L 4% | 0-24 | SL | FR GR N&NP | | | | | |
| | | 24-36 | SC-CL | FR 1/2" 35SP | 34"-35" 28g | - wet water in holes | | | .35 |
| 3 | L 5% | 0-20 | SL | FR GR N&NP | | | | | |
| | | 20-36 | SC-CLAY | FR 1/2" 35SP | 32" 7.5g | | | | .3 |

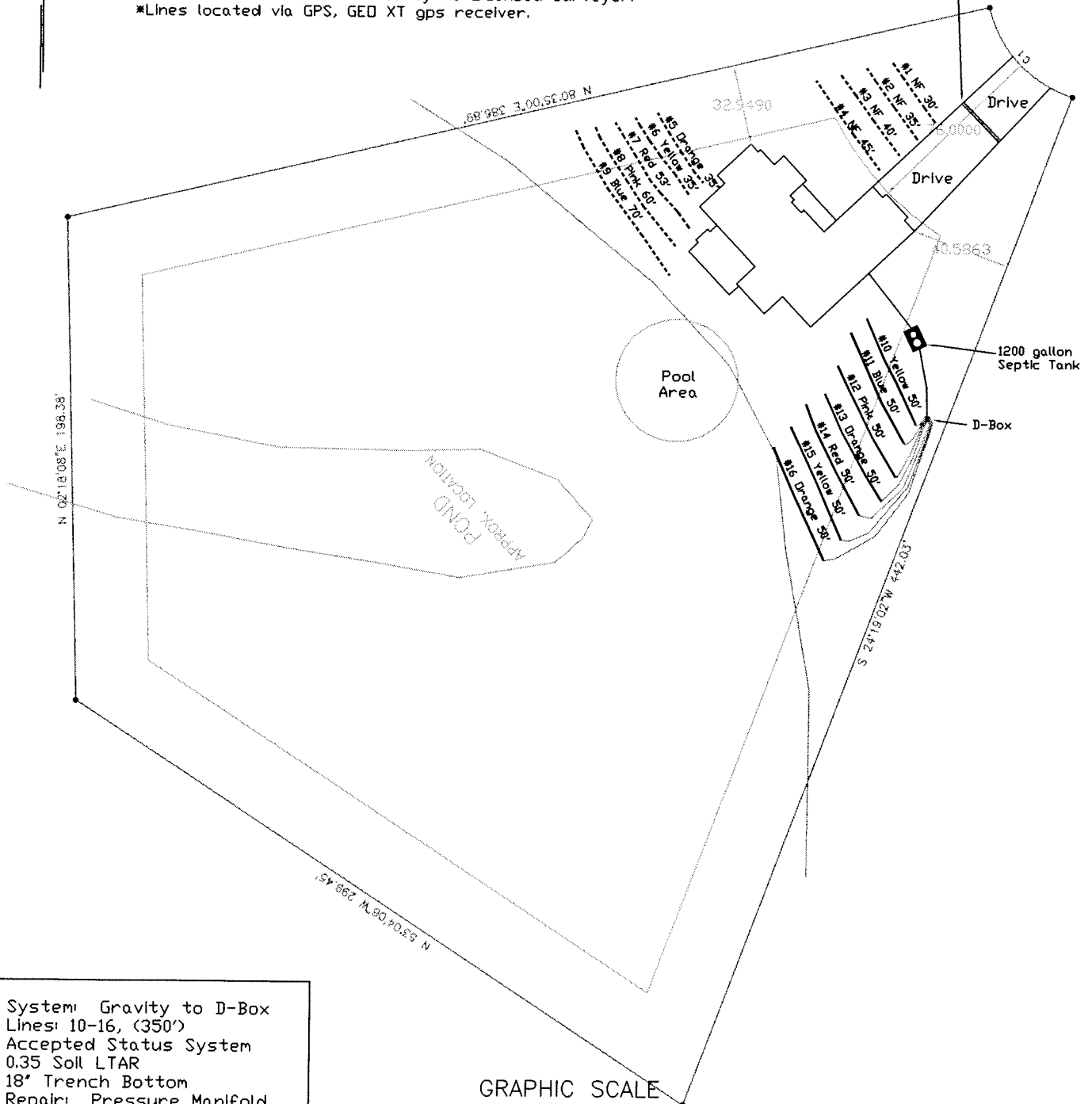
| | | | |
|-------------------------|----------------|---------------|--|
| Description | Initial System | Repair System | Other Factors (.1946): Site Classification (.1948): Evaluated By: Others Present: |
| Available Space (.1943) | | | |
| System Type(s) | 25" | 25" Pass | |
| Site LTAR | .35 | .3 | |

PS
 2

Regal Crest Subdivision
 Lot # 6
 NC Custom Homes
 4-Bedroom Home

*Some lines flagged longer or shorter than lengths indicated on site plan. Install at lengths indicate don site plan.
 *House will need to be staked by NC Licensed Surveyor.
 *Lines located via GPS, GED XT gps receiver.

6' ductile iron under drive to sleeve 2" SCH 40 supply line for future repair system.



System: Gravity to D-Box
 Lines: 10-16, (350')
 Accepted Status System
 0.35 Soil LTAR
 18" Trench Bottom
 Repair: Pressure Manifold
 Lines: 1-9, (403')
 Accepted Status System
 18" Trench Bottom
 0.3 Soil LTAR

GRAPHIC SCALE
 1" = 60'

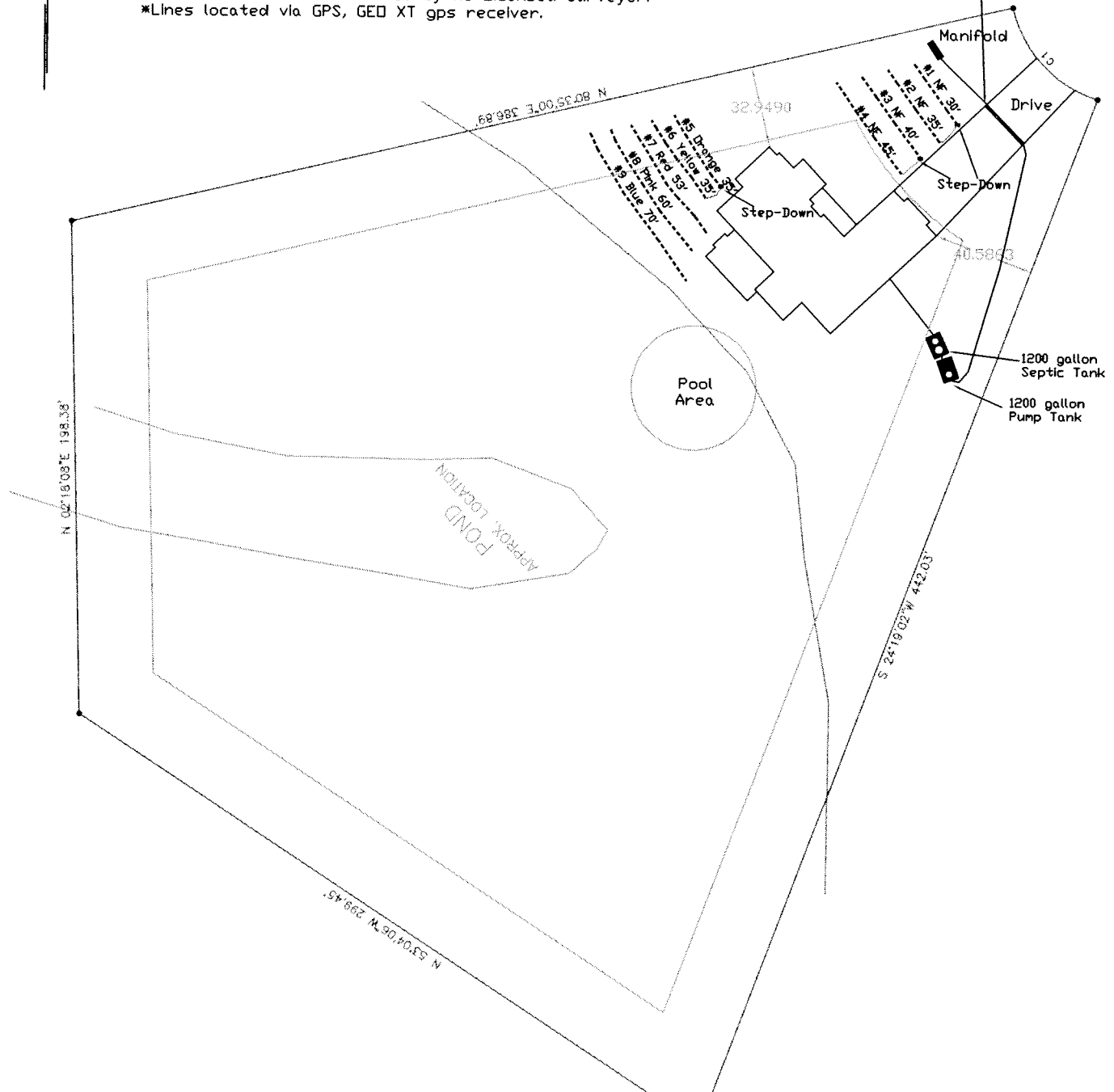


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 Soil Consulting
 919-569-6704
 Project # 860

Regal Crest Subdivision Lot # 6 NC Custom Homes 4-Bedroom Repair Layout

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6" ductile iron under drive to sleeve 2" SCH 40 supply line for future repair system.



Repair: Pressure Manifold
 Lines: 1-9, (403')
 Accepted Status System
 18' Trench Bottom
 0.3 Soil LTAR

GRAPHIC SCALE
 1" = 60'

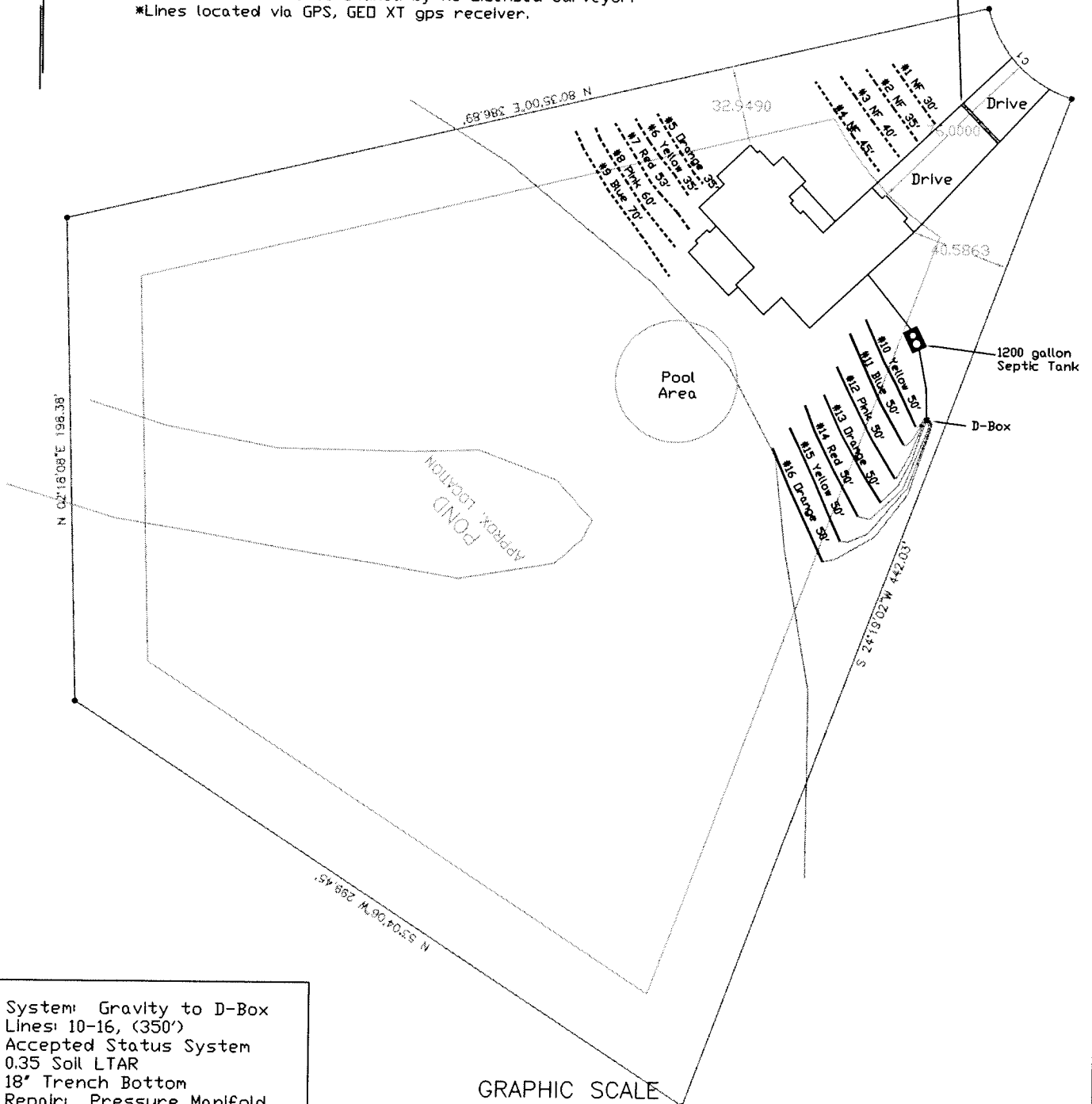


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Regal Crest Subdivision
 Lot # 6
 NC Custom Homes
 4-Bedroom Home

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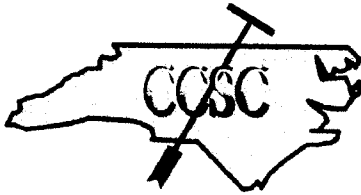


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**Regal Crest Subdivision, Lot 6
Repair Tap Chart**

| | | | | | | | | | |
|------------------------|--------------|-----------------|-------------------|----------------|-----------------------|-----------------------|----------------|--------------------|------------------|
| Bench Mark | 0.00 | is = 100.00 | | Location of BM | | Elevation Head | | | 13.00 |
| Pump tank elev. | 8 | 92.00 | Pump elev. | 87.00 | Manifold elev. | | | 100.00 | |
| line | color | rod read | Elevation | length | hole size | flow/tap | gal/day | trench area | LINE LTAR |
| 1 & 2 | Not Flagged | 1.00 | 99.00 | 65 | 1/2in SCH 40 | 7.11 | 86.62 | 195 | 0.4442 |
| 3 & 4 | Not Flagged | 2.80 | 97.20 | 85 | 1/2in SCH 40 | 7.11 | 86.62 | 255 | 0.3397 |
| 5 & 6 | Org/Yel | 6.10 | 93.90 | 70 | 1/2in SCH 40 | 7.11 | 86.62 | 210 | 0.4125 |
| 7 | Red | 6.70 | 93.30 | 53 | 1/2in SCH 80 | 5.48 | 66.76 | 159 | 0.4199 |
| 8 | Pink | 7.00 | 93.00 | 60 | 1/2in SCH 80 | 5.48 | 66.76 | 180 | 0.3709 |
| 9 | Blue | 7.30 | 92.70 | 70 | 1/2in SCH 40 | 7.11 | 86.62 | 210 | 0.4125 |

| | | | | | | | |
|---------------------------|--------------|--------------------|------------|----------------------------|-------------|------------------|---------------|
| | total | feet = | 403 | gal/min = | 39.4 | LTAR = | 0.3000 |
| | | | | | | LTAR + %5 | 0.3150 |
| % of Dose Vol. | 80 | Des. Flow | 480 | (ltar W/ INOV) | | | 0.4000 |
| Dose Volume | 209.56 | Pump Run= | 12.18 | (ltar W/ INOV + 5%) | | | 0.4200 |
| Dose Pump Time | 5.32 | Tank Gal/IN | 21 | | | | |
| Drawdown in Inches | 9.98 | | | | | | |



Central Carolina Soil Consulting, PLLC

329 South White Street
Wake Forest, NC 27587
919-569-6704

May 26, 2010
Project # 860

NC Custom Homes, LLC.
David Dozier
1508 Mycenae Place
Fuquay-Varina, NC 27526

RE: Soil/site evaluation and septic system layout on lot 6 in Regal Crest Subdivision, Harnett County.

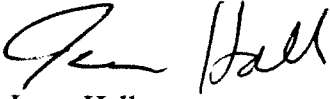
Dear Mr. Dozier:

Central Carolina Soil Consulting completed a soils evaluation and septic system layout per your request on lot 6 in Regal Crest subdivision to determine soil suitability for a 4-bedroom septic system and repair area. The soil site evaluation was performed using hand auger borings, under moist soil conditions, based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". The soils on 6 are provisionally suitable for modified conventional type septic system and repair area for the proposed 4-bedroom home utilizing Accepted Status Product with a 25% area reduction. The proposed primary system is a gravity system (Lines 10-16) requiring an 18" trench bottom on contour. The soils in this area had a sandy loam surface over a sandy clay loam subsoil suitable to at least 30-36" over the proposed drainfield area with a site LTAR of 0.35 gal/day/ft². The repair area shall be a pressure manifold (Lines 1-9) which will use suitable soil in the front yard and back right corner of the yard behind the house. The soils in the back yard contained a sandy loam surface over a sandy clay loam subsoil (0.35 gal/day/ft²) and the soils in the front yard contained a sandy loam surface over a clay subsoil (0.3 gal/day/ft²) with a soil wetness condition at 32". The soil LTAR for the repair area is the lower of the two LTAR's (0.3 gal/day/ft²). The specific septic systems and loading rates for this lot will be permitted by the Harnett County Health Department. The area for the proposed septic fields shall not be impacted by home sites, pools, garages and shall not be mechanically altered from the natural lay of the land during construction of the house and should be fenced off to prevent compaction of the soil.

This lot will require a detailed soils evaluation by the Harnett County Health Department prior to issuance of any permits. Due to the subjective nature of the permitting process and the variability of naturally occurring soils, CCSC cannot guarantee that areas delineated as suitable for on-site wastewater disposal systems will be permitted by the governing agency.

Please give me a call if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Hall". The signature is written in a cursive style with a large initial "J" and "H".

Jason Hall

NC Licensed Soil Scientist 1248