



**ECS Southeast, LLP**

6151 Raeford Road  
Suite A  
Fayetteville, NC 28304  
(910) 401-3288 [Phone]  
(910) 323-0539 [Fax]

**LETTER OF TRANSMITTAL**

April 6, 2020  
W.S. Wellons Realty  
PO Box 766  
Spring Lake, NC 28390  
ATTN: Jason Wellons

RE: **Lot 12-41 Raintree Ln**  
ECS Job # **5190-C**  
  
Permits:  
Location: **Raintree Ln**  
**Spring Lake, NC 28390**

CC:

ENCL: Field Report # 1 4/3/2020

Mingo Crowley  
Office Manager

Ryan H. Parrish  
Construction Materials Project Manager

*Disclaimer*

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for supersequent laboratory testing will be presented in separate reports/documents.



**ECS Southeast, LLP**

6151 Raeford Road  
 Suite A  
 Fayetteville, NC 28304  
 (910) 401-3288 [Phone]  
 (910) 323-0539 [Fax]

**FIELD REPORT**

Project **Lot 12-41 Raintree Ln**  
 Location **Spring Lake, NC**  
 Client **W.S. Wellons Realty**  
 Contractor **None Listed**

Project No. **5190-C**  
 Report No. **1**  
 Day & Date **Friday 4/3/2020**  
 Weather **50 °/ Sunny**  
 On-Site Time **1.50**  
 Lab Time **0.25**  
 Travel Time\* **1.00**  
 Total **3.25**  
 Re Obs Time **0.00**

Remarks

Trip Charges*	Tolls/Parking*	Mileage*	<b>35</b>	Time of Arrival	<b>8:00A</b>	Departure	<b>9:30A</b>
Chargeable Items	<b>5000</b>						

\* Travel time and mileage will be billed in accordance with the contract.

**Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.**

The undersigned arrived on site, as requested, to observe:

1. The placement and compaction of soils for the top 12 inches of the building pad. Please see the attached sketch.

Utilizing the nuclear test method to check the compaction of soils; test results indicated that the compacted material, at the areas and elevations tested, met or exceeded the project requirements of 98% of the maximum dry density as obtained in our laboratory using the Standard Proctor Method (ASTM D-698). Locations and elevations of all tests are based on stakeout provided by others. We cannot be responsible for structures located off of the observed engineered pad, misaligned utilities or stakeout errors causing uncontrolled fill to be placed in structural areas. The soils observed on this date appeared to be placed in accordance with project drawings and specifications with regard to lift thickness and moisture content.

2. To check the bearing capacity of soils via hand auger/dcp method for the building pad. Please see the attached sketch. A hand auger was used to advance the boreholes to different depths noted on the boring logs. Dynamic Cone Penetrometer (DCP) test were performed in the hand auger boreholes by a 1.5 inch diameter cone driven into the soil by a 15 pound ring weight with a free fall of 20 inches. The number of blows required to drive the cone into the soil a distance of 1.75 inches is termed the DCP Value and is indicated for each test on the hand auger.

A total of 4 hand auger/DCP evaluations were performed to a depth of approximately 3 feet below the bottom of footing. DCP blow counts ranged from 4 to 8 blows per increment.

It is to the opinion of ECS that the materials in place at the locations and elevations tested appear to be suitable to support the design bearing capacity of 2000 psf.

**By Charlie Alingbas Langbis, --- Field Technician**

1800



# Dynamic Cone Penetrometer Test Report

Project : Lot 12-41 Raintree lane

Project #: 5190-C

Technician: C. Langbis

Temp/Weather: 50/sunny

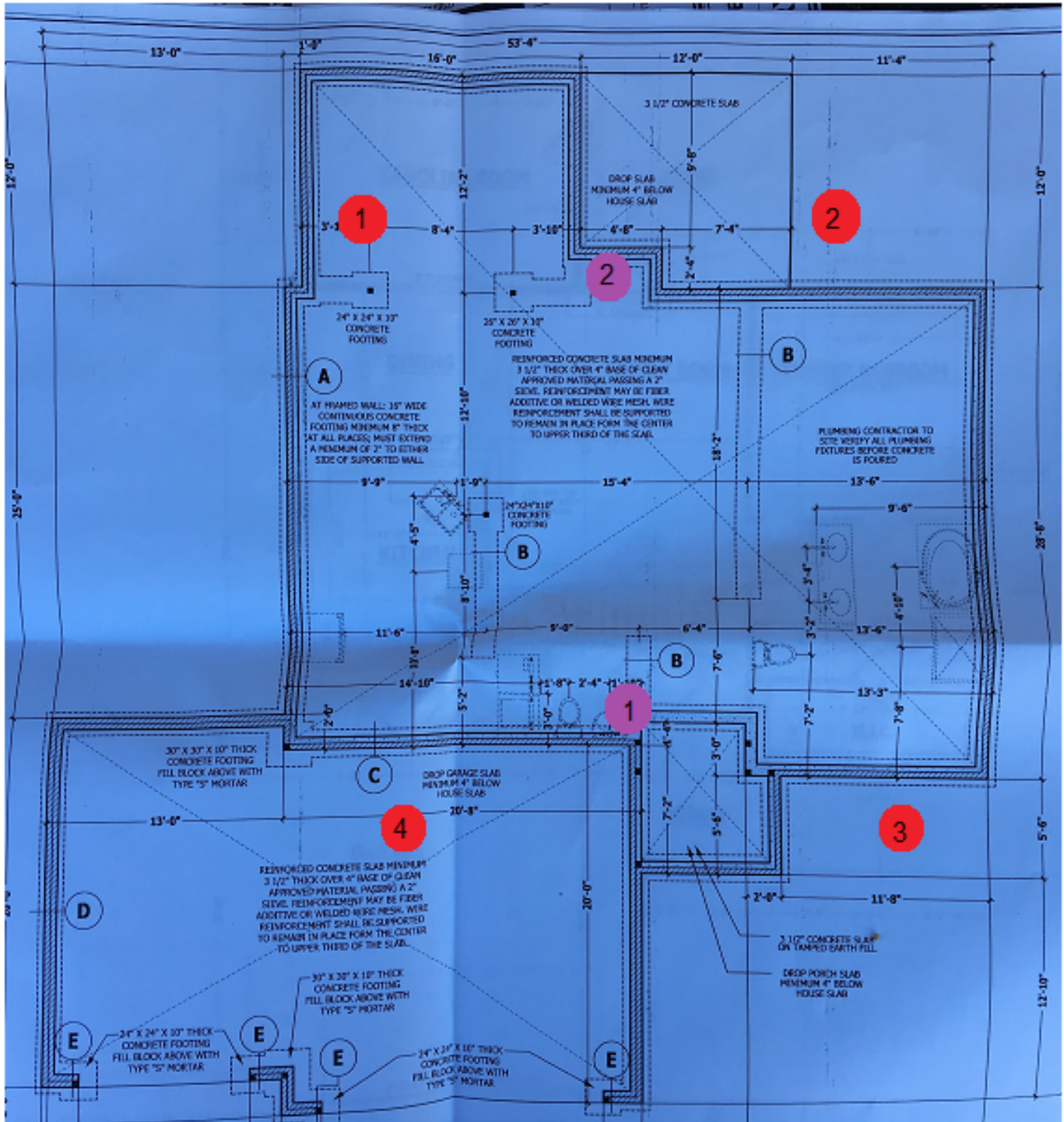
Date: 04/03/20

Top Soil Depth:

Asphalt Depth:

Test Location	Test Depth	Penetrometer Blow Counts			Soil Descriptions													Remarks	
		1 ¾"	1 ¾"	1 ¾"	Top Soil	Stained Sands	orange	Tan	Brown	Red	Clayey	Sandy	Silty	CLAY	SAND	SILTS	with Silts		
1	(BOF)(Subgrade)	5	4	6						√	√					√			
	-1	6	6	5		√			√	√						√			
	-2	5	6	6				√	√		√					√			
	-3	7	6	7				√	√		√					√			
	-4																		
	-5																		
2	(BOF)(Subgrade)	4	5	6						√	√					√			
	-1	6	7	8		√			√	√						√			
	-2	6	6	8				√	√		√					√			
	-3	5	8	7				√	√		√					√			
	-4																		
	-5																		
3	(BOF)(Subgrade)	4	5	7						√	√					√			
	-1	5	6	6		√			√	√						√			
	-2	6	8	6				√	√		√					√			
	-3	5	7	7				√	√		√					√			
	-4																		
	-5																		
4	(BOF)(Subgrade)	4	5	7						√	√					√			
	-1	5	7	6		√			√	√						√			
	-2	6	7	6				√	√		√					√			
	-3	5	7	8				√	√		√					√			
	-4																		
	-5																		
	(BOF)(Subgrade)																		
	-1																		
	-2																		
	-3																		
	-4																		
	-5																		

● DCP bore holes      ● Density Tests





## Field Compaction Summary, ASTM Nuclear

Project No: 5190-C

Project Name: Lot 12-41 Raintree Ln

Date: 4/3/2020

**ECS Southeast, LLP**

Client: V.I. Management Group, LLC

Contractor: None Listed

Technician: Charlie Alingbas Langbis

Test Method ASTM Nuclear			
Nuclear Gauge No. 28048			
Make	Troxler	Density Std	1896
Model		Moisture Std	649
Ser. No.	28048		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-1	Yellow/Tan Clayey SANDS	Standard Proctor Method (ASTM D-698)	115.50	13.50

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1	12	DT	8	1	subbase	D4S-1	0.00	115.50	13.50	129.5	114.8	12.8	99.4	P	
2	12	DT	8	2	subbase	D4S-1	0.00	115.50	13.50	128.5	113.5	13.2	98.3	P	