A & G Residential
916 Arsenal Ave
Suite B
Fayetteville, NC 28305

01/02/2023

Attention : Chad Stewart
Jamie Godwin
Jenn Wagner

RE: Daily Field Report for 12/28/2022
Lot 2 Liberty Meadows (CMT) Cameron, NC
Building & Earth Project No : RD220778

Ladies and Gentlemen:

On this date, representative(s) of Building & Earth were present to perform construction material testing services at this project site. Our testing and observations for this date include the following:

FO-2 : Field Observations made on this date.

• Foundation Inspection	Passed
• Project Management Review	Passed

ST-2 : In place field density testing was performed for Finished Subgrade Soils -Building. The field density testing was performed in general accordance with ASTMD1556, using the results of field one-point as compared to the laboratory proctors. One(1) in-place field density test was performed on this date. The testing results indicate that in-place compaction and moisture content at the location and depth tested meet or exceed the specified requirements outlined in the project plans and specifications. For additional details of our testing, please refer to the attached Field Density Test Report.

Closing

The testing and observations identified above have been reviewed by our project manager. If you have questions regarding this information, please do not hesitate to contact us.

Respectfully Submitted,
Building & Earth Sciences, LLP

Enclosures : FO-2, ST-2

NORTH CAROLINA PROFESSIONAL SEAL 024482 ENGINEER KURT A. MILLER

610 Spring Branch Road
Dunn, NC 28334
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Rachael Heath
Reviewed By

Field Observations Report

Project Name:	**Lot 2 Liberty Meadows (CMT) Cameron, NC**	Project Number:	**RD220778**
Client Name:	**A & G Residential**	Placement#:	**FO-2**
Contractor:	**A & G Residential**	Technician:	**Justin Burbank**
Monitoring:	**Shallow Foundation Inspection**		

1 : Foundation Inspection Passed

We arrived onsite to evaluate the building pad area for this residential lot. We understand the residence has been designed to be supported on a stem wall foundation. Our evaluation as documented in this report includes:

1) A visual description of the residential lot
2) Comments on any improvements that hat affect the foundations of the residence
3) Hand rod probing of the footing excavations
4) Performing Dynamic Cone Penetration (DCP) tests at representative locations
5) Soil Density tests on fill, if applicable.

Visual Description of the Lot:

The lot generally slopes. The site slopes downward from back to front. Building locations are referenced from the street looking at the front of the residence. Maximum relief across the lot is approximately 2 feet. Surface water runoff appears to drain to the front of the lot.

Comments on Improvements:

The site has been stripped of surface cover and topsoil. It appears that 4 inches of topsoil has been removed from the building pad area.

Structural fill has been placed at the site to level the building pad. Based on our observations, we understand the pad has been filled according to the following:

Section----------Thickness of Fill
Left Front----------24 inches of fill
Left Rear----------18 inches of fill
Center----------20 inches of fill
Right Front----------24 inches of fill
Right Rear----------18 inches of fill

Measurements:
1) How far is the nearest slope from the edge of the foundation? Nearest slope is 10'+ away.

Future Footing Tests

Hand Rod Probing: Our representative performed hand rod probing of the surface of the building pad. Hand rod probing of the bearing material generally showed an average penetration of approximately 3 to 4 inches.

DCP Testing: Our representative performed Dynamic Cone Penetration (DCP) testing in general accordance with ASTM STP-399 at three representative locations to a depth of 24 to 36 inches. Our representative did not observe water within the DCP boreholes as noted below.

The following information provides the results of our hand auger borings and DCP testing:

Test 1: [Front Right Corner]

-- Depth----"N"------Soil Color---USCS--------

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--- FSG ---- 7.5 ------ red/yellow ----- SC ------ Moist
--- -1' ------ 8 -------- red/yellow ----- SC ----- Moist
--- -2' ------ 9 ---------- yellow ------ SP ----- Moist

Test 2: [Front Left Corner]

-- Depth----"N"------Soil Color---USCS--------
--- FSG ---- 8 ------ red/yellow ----- SC -------- Moist
--- -1' ------ 9 ------ red/yellow ----- SC --------- Moist
--- -2' ------ 9 ------ red/yellow ----- SC to SP ----- Moist

Soil Density Testing:

Soil density testing was performed using the sand cone method of compaction in general accordance with ASTM D1556. The results of our tests are attached as ST-1.

Results:

Based on our observations and test results, the newly placed fill/existing soils appear to be suitable to provide support for the floor slab and footings, provided the floor slab has a loading of less than 150 pounds per square foot, and the footings have a design bearing capacity of 2,000, or less.

We note that our testing was isolated to the upper 3 feet of the soil profile from the finished subgrade elevation as observed on this date. As such, we cannot be aware of any soil or groundwater conditions below this depth that could adversely affect the support of the new construction. If additional information is required, please contact our office.

We are also not aware of any geotechnical work that may have been performed prior to our arrival onsite. If a geotechnical report is available, please forward it to our office for review. If no report is available, our client accepts all liability for long and short term performance of the foundations.

2 : Project Management Review Passed

On this date, our representatives returned to the site for re-testing. Based upon our re-testing, the recommended repairs have been accomplished, and the building pad is now acceptable for the placement of concrete.

Additionally, inclement weather (rain or snow), as well as construction traffic across the pad, can compromise the stability and support characteristics of the surface soils. If the surface soils become compromised, it will be necessary to return to the site for re-testing. This decision should be executed by your onsite Quality Control and Superintendents.

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Photographs

Picture ID	
51342	

Picture ID	
51343	

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Rachael Heath
Reviewed By

BUILDING & EARTH
Geotechnical, Environmental, and Materials Engineers

ST-2

Test Date: 12/28/2022
Field Technician: Justin Burbank
Tests requested by: N/R
Results provided to: N/R

Report of Field Density Testing

Project Name:	Lot 2 Liberty Meadows (CMT) Cameron, NC	Ambient Temperature:	35-45
Project Number:	RD220778	Weather:	Partly Cloudy
Project Location:	Cameron, NC	Wind Conditions:	Breezy
Client:	A & G Residential	Results Provided To:	N/R
Contractor:	A & G Residential	Superintendent:	N/R

Notes:
1 Test location by technician
2 Elevation by Technician
3 Fill/backfill placed prior to technician arriving

Design & Specification Data

Area ID	Area Description	Depth (ft)	Test Method	% Compaction	Moisture Range	
					Min	Max
FSG-Bldg	Finished Subgrade Soils -Building	0.0 - 2.0	ASTM D-698	95 %	- 10.0	+ 10.0

Laboratory Proctors

Proctor ID	Description of Material	USCS/AASHTO	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
1-point			111.2	13.0%

Density Test Data

Test #	IDs		Test Type	Location	Probe Depth (in)	Elev. (ft)	Dry Density(pcf)	% Moisture	% Compaction	Result
	Area	Proctor								
1	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Soils -Building : Front right corner 5' back : 5' left		FSG	105.8	14.6	95%	PASS

Equipment Used:
Last Calibration:
Standard Counts:
Density:
Moisture:

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