PREPARED 6/16/17, 11:29:08 INSPECTION TICKET PAGE Harnett County INSPECTOR: IVR DATE 6/16/17 ADDRESS . : 94435 *UNASSIGNED SUBDIV: ROLLING SPRINGS CONTRACTOR : WELLCO CONTRACTORS, INC. PHONE: (910) 436-3131 OWNER . . : WELLCO CONTRACTORS INC PHONE : (910) 436-3131 PARCEL . . : 01-0506- - -0068- -07-APPL NUMBER: 17-50040804 CP NEW RESIDENTIAL (SFD) DIRECTIONS: T/S: 02/22/2017 04:38 PM JBROCK ----ROLLING SPRINGS LOT#64 OFF NURSERY RD T/S: 04/04/2017 02:59 PM TJONES ----STRUCTURE: 000 000 35X39 4BDR SLAB W/ GARAGE & DRCK FLOOD ZONE . . . : FLOOD ZONE X # BEDROOMS 4000000.00 PROPOSED USE : SFD SEPTIC - EXISTING? : NEW TANK WATER SUPPLY : COUNTY __________ PERMIT: CPSF 00 CP * SFD REQUESTED INSP DESCRIPTION TYP/SQ COMPLETED RESULT RESULTS/COMMENTS -----ADDRESS CONFIRMATION TIME: 17:00 VRU #: 002954402 4/04/17 AP 144 MAGNOLIA DR SPRING LAKE 28390

A814 01 4/04/17 SB T/S: 04/04/2017 02:57 PM SBENNETT --------B101 01 4/19/17 JH R*BLDG FOOTING / TEMP SVC POLE VRU #: 002961012 4/19/17 ΑP NO T-POLE B103 01 5/18/17 JH R*BLDG FOUND & TEMP SVC POLE VRU #: 002973955 5/18/17 AP P309 01 6/14/17 JH R*PLUMB UNDER SLAB VRU #: 002983873 6/14/17 AP

B111 01 6/16/17 TI R*BLDG SLAB INSP/TEMP SVC POLE TIME: 17:00 VRU #: 002986198
T/S: 06/16/2017 11:28 AM JBROCK ------

----- COMMENTS AND NOTES --------



Wellco Contractors P O Box 766 Spring Lake, NC 28390

06/12/2017

Attention: Jason Wellons

RE: Daily Field Report for 06/09/2017

Lot 64 Hidden Lakes (CMT) Spring Lake, NC Building & Earth Project No : RD170321

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-1: Field Observations made on this date.

DCPs and Hand AugersProject Management Review

Passed

Passed

ST-1: 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.

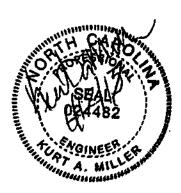
Closing

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-1, ST-1

610 Spring Branch Road Dunn, NC 28334 Phone 910-292-2085 Fax 910-292-2192 www.BuildingandEarth.com



Rochael Heath



Field Observations Report

Project Name:

Lot 64 Hidden Lakes (CMT) Spring Lake, NC Project Number:

RD170321

Client Name:

Wellco Contractors

Placement#: i

FO-1

Contractor:

Wellco Contractors

Technician:

Mark Baum

Monitoring;

DCP

1: DCPs and Hand Augers

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. Upon arrivat, the contractor had not finished excavating the footings. 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 is relatively flat. Building locations are referenced from the street looking at the front of the residence. Maximum relief across the lot is approximately 4 feet. Surface water runoff appears to drain to the road.

Section———Thickness of Cut or Fill Left Front———12-24 inches of fill Left Rear———12-24 inches of fill Center————12-24 inches of fill Right Front—————12-24 inches of fill Right Rear————12-24 inches of fill

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 1-2 inches. Our representative did not observe standing water or evidence of standing water on the footing's bearing surface.

DCP Testing: Our representative performed Dynamic Cone Penetration (DCP) testing in general accordance with ASTM STP-399 at four representative locations to a depth of 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

-- Depth---"N"----Soil Color---USCS------ ESG - 10 -- Dark Brown --- SM ----- -1' --- 15 --- Light brown ---- SM ----- -2' --- 15 --- Tan ----- SM ----- -3' --- 13 --- Grey ------ SM ----

610 Spring Branch Road Dunn, NC 28334 Phone 910-292-2085 Fax 910-292-2192 www.BuildingandEarth.com Rochael Heath



Field Observations Report

Project Name:

Lot 64 Hidden Lakes (CMT) Spring Lake, NC Project Number:

RD170321

Client Name:

Wellco Contractors

Placement#:

FO-1

Contractor:

Wellco Contractors

Technician:

Mark Baum

Monitoring:

DCP

Test 2: Rear Left

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 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.

Recommendations:

To minimize the potential for future softening of the bearing materials due to water infiltration, the surface soils should be protected from construction traffic and inclement weather. The construction of the footings and structure should commence without delay. In the event that the subgrade soils become wet, or otherwise compromised from their current condition, should be observed and retested as necessary by Building and Earth Sciences.

We note that our lesting 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.

2: Project Management Review

Passec

Our client has authorized Building & Earth Sciences to perform an evaluation of the prepared building pad for this project. The structure has a stem wall foundation, and the foundation walls have been backfilled to the slab grade using structural fill soils. It appears that between 1 and 2 feet of structural fill soils have been placed to achieve the slab grade. The intent of our testing was to determine if the newly placed structural fill soils have been compacted to 95% to support the floor slab and the interior tug footings.

Our evaluation included hand rod probing the entire area for consistency, performing hand auger borings with DCPs, and performing in place density tests to confirm compaction. Based upon our hand rod probing, the surface soils are firm and resistant to penetration. At selected locations, hand auger borings were advanced at 2 locations within the backfilled area. At 12-inch increments in the hand auger boring, to a depth of 3 feet, Dynamic Cone Penetrometer (DCP) Testing was performed in accordance with ASTM STP-399. With proper evaluation, DCP Testing can be correlated to both bearing capacity and percent compaction. Based upon our testing, the soils below the surface have been compacted properly at the locations tested.

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Rochard Heath



Field Observations Report

Project Name:

Lot 64 Hidden Lakes (CMT) Spring Lake, NC Project Number:

RD170321

Client Name:

Wellco Contractors

Placement#:

FO-1

Contractor:

Wellco Contractors

Technician:

Mark Baum

Monitoring:

DCP

While on site, our representative also performed in place density testing to confirm compaction of the surface soits. Our testing was performed using the sand cone method in general accordance with ASTM D-1556. Our results were compared to an in-field proctor that was performed in general accordance with ASTM D-698.

Therefore based upon the results of our testing, the newly placed fill soils have been compacted adequately to provide support for the interior lug foundations and the floor slab. 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.



ST-1

Test Date: 06/09/2017 Field Technician: Mark Baum

Tests requested by: N/R Results provided to: N/R

Report of Field Density Testing

Project Name: Lot 64 Hidden Lakes (CMT) Spring Lake, NC Ambient Temperature:

Project Number: RD170321

Weather:

Partly Cloudy

Project Location:

Spring Lake, NC Client:

Wind Conditions: Breezy

Results Provided To: N/R

Contractor: Wellco Contractors

Wellco Contractors

Superintendant: N/R

Notes:

1 Test location by technician

Elevation by Technician

Fill/backfill placed prior to technician arriving

Design & Specification Data

Area ID	Area Description	Depth (ft)	Test Method	% Compaction	Rai	sture nge
FSG-Bldg	Finished Subgrade Soils -Building	0.0 - 2.0	ASTM D-698	95 %	Min	Max
	- marica saugrade sons -ballaning	0.0 - 2.0	W211A1 D-038	מל כני	- 10.0	+ 10,0

Laboratory Proctors

Proctor ID	Description of Material	USCS/AASHTO	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
00-2017	Princeton Quarry	ABC	146.7	5.1%

Density Test Data

Test #	Area	Proctor Proctor	Test Type	Location	Elev. (ft)	Dry Density(pcf)	% Moisture	% Compaction	Result
1.	FSG-Bldg	00-2017	ASTMD1556	Finished Subgrade Soils -Building : Center of pad :	FSG	123,8	7.1	100+	PASS

Equipment Used: Last Calibration:

Standard Counts:

Density: Moisture:

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Rachael Heath

Page 5 of 5