PREPARED 8/09/17, 14:49:15 Harnett County	INSPECTION TICKET INSPECTOR: IVR	PAGE 19 DATE 8/10/17
	DRS, INC. PHONE : (910) 436-313 DRS INC PHONE : (910) 436-313 D6810- PHONE : (910) 436-313 NEW RESIDENTIAL (SFD)	1
	-	
PERMIT: CPSF 00 CP * SFD REQUESTED INSP TYP/SQ COMPLETED RESULT		
A814 01 4/04/17 SB 4/04/17 AP	ADDRESS CONFIRMATION TIME: 17:00 VRU # 151 MAGNOLIA DR SPRING LAKE 28390 T/S: 04/04/2017 11:27 AM SBENNETT	
B101 01 8/10/17 TI 5-10-17 4/14	R*BLDG FOOTING / TEMP SVC POLE VRU #: 00	3010217

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07/31/2017

Wellco Contractors P O Box 766 Spring Lake, NC 28390

Attention : Jason Wellons

RE: Daily Field Report for 07/26/2017 Lot 69 Hidden Lakes (CMT) Spring Lake, NC Building & Earth Project No : RD170303

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:

ST-3 : In place field density testing was performed for Finished Subgrade Soils -Building. The field density testing was performed in general accordance with ASTMD6938, using values from 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 : ST-3

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Juto Wills Reviewed By

		NG & EAR		ST-3		Tests re		-	
		<u> </u>	Report of	f Field Den	sity To	esting			
Project Project Co Notes:	Number: Location: Client: ontractor: 1 Test loc 2 Elevatio	RD170303 Spring Lake, N Wellco Contra Wellco Contra cation by techr on by Technicia	ctors ctors nician	-	Wi Result	Temperat Weat nd Conditions Provided uperintend	her: Clea ons: Cali To: N/R	ar m	
			Design	& Specific	ation I	Data			
Area ID		Area	Description		Depth	(ft) Test	Method	% Compact	tion Ri Min
FSG-Bldg	<u> </u>	Finished Sub	grade Soils -Buildi		0.0 - 2		M D-698	95 %	- 10.0
<u> </u>		<u></u>	Lab	oratory Pr	octors			·····	1
Proctor ID		Des	cription of Materia	1		USCS/AAS		laximum Dry Density (pcf) 111.4	Opti Moi Conte
1 point	<u> </u>		De	nsity Test	Data		L		
Test # Area	IDs Proctor	Test Type		ocation		Elev. (ft)	Dry Density(po	% Moisture	% Compactio
1 FSG-BI	dg 1-point	ASTMD6938	Finished Subgrade Center of Pad :	Soils -Building : I	.ot #69	FSG	109.6	9.9	98%
	Calibration:	33219-3430 07/26/2017						Density: Moisture:	



Wellco Contractors P O Box 766 Spring Lake, NC 28390 07/31/2017

Attention : Jason Wellons

RE: Daily Field Report for 07/21/2017 Lot 69 Hidden Lakes (CMT) Spring Lake, NC Building & Earth Project No : RD170303

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:

ST-2: In place field density testing was performed for Existing Subgrade Soils - Building. The field density testing was performed in general accordance with ASTMD1556 and ASTMD6938, using the results of field one-point as compared to the laboratory proctors. A total of 4 in-place field density tests were 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 : ST-2

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ESG-Bldg Existing Subgrade Soils - Building 0.0 - 2.0 ASTM D-698 95 % - 10.0 + 10. Laboratory Proctors Proctor ID Description of Material USCS/AASHTO Maximum Dry Density (pcf) Optimum Moisture Content (%) 1-point 1-point 111.4 13.5% Section of Material USCS/AASHTO Maximum Dry Density (pcf) Optimum Moisture Content (%) 1-point Test Location 111.4 13.5% Test # Area Proctor Test Right Corner Subgrade Soils - Building : Back -3 Feet 107.0 13.5 96% PASS 2 ESG-Bldg 1-point ASTMD6938 Existing Subgrade Soils - Building : Back -2 Feet 110.7 13.0 99% PASS 3 ESG-Bldg 1-point ASTMD6938 Existing Subgrade Soils - Building : Back -2 Feet 110.7 13.0 99% PASS	BUILDING & EARTH Geotechnical, Environmental, and Materials Engineers			ST-2	Test Date: 07/21/2017 Field Technician: William Cook Tests requested by: N/R Results provided to: N/R									
Project Number: RD170303 Weather: Partly Cloudy Project Location: Spring Lake, NC Wind Conditions: Calm Client: Wellco Contractors Results Provided To: N/R Notes: 1 Test location by technician Superintendant: N/R 2 Elevation by Technician Elevation by Technician Moisture Area ID Area Description Depth (ft) Test Method % Compaction Moisture Area ID Area ID Area Description of Material USCS/AASHTO Maximum Dry Density (pcf) Moisture Proctor ID Description of Material USCS/AASHTO Maximum Dry Density (pcf) Optimum Compaction (%) 1 ESG-Bldg 1:point Area Proctor Type Location Elev. (ft) Density(pcf) Moisture 2 ESG-Bldg 1-point ASTMD1556 Existing Subgrade Soils - Building : Back -3 Feet 107.0 13.5 96% PASS 2 ESG-Bldg 1-point ASTMD6938 Right Corner -3 Feet 107.5 13.5 <td< th=""><th></th><th></th><th></th><th></th><th>Report of</th><th>f Field Den</th><th>sity T</th><th>est</th><th>ing</th><th></th><th></th><th></th><th></th><th></th></td<>					Report of	f Field Den	sity T	est	ing					
Design & Specification DataArea IDArea DescriptionDepth (ft)Test Method% CompactionMoisture RangeESG-BldgExisting Subgrade Soils - Building0.0 - 2.0ASTM D-69895 %- 10.0+ 10.Laboratory ProctorsProctor IDDescription of MaterialUSCS/AASHTOMaximum Dry Density (pcf)Optimum Moisture Content (%)1-pointDescription of MaterialUSCS/AASHTOMaximum Dry Density (pcf)Optimum Moisture Content (%)TestLocationElev. (ft)Dry Density(pcf)% Moisture CompactionResult111.413.5%Test TestLocationElev. 	Ρ	Project N Project Lo Con es: 1 2	umber: ocation: Client: tractor: Test lo Elevatio	RD170303 Spring Lake, N Wellco Contra Wellco Contra cation by tech on by Technici	NC actors actors nician an		W Resul	ind C Its Pr	Weat Onditic ovided	her: ons: To:	Partly Calm N/R	Cloudy		
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ProceedingDescription of MaterialOSCS/AASHTODensity (pcf)Monsture Content (%)1-point11-point111.413.5%Density Test DataTest #IDsTest TypeLocationElev. (ft)Dry Density(pcf)% MoistureResult1ESG-Bldg1-pointASTMD1556Existing Subgrade Soils - Building : Back i Existing Subgrade Soils - Building : Existing Subgrade Soils - Building : Back Bilding : Back Bilding : Existing Subgrade Soils - Building : Back Bilding : Back Bilding : Existing Subgrade Soils - Building : Back Bilding : Back Bilding : Existing Subgrade Soils - Building : Back Bilding : Back Bilding : Back Bilding : Existing Subgrade Soils - Building : Back Bilding	Droct			Des			octor				Max	kimum Dry		
IDs AreaTest TypeLocationElev. (ft)Dry Density(pcf)% MoistureResult1ESG-Bldg1-pointASTMD1556Existing Subgrade Soils - Building : Back i-3 Feet107.013.596%PASS2ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Informational Purposes107.513.596%PASS3ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Informational Purposes-2 Feet110.713.099%PASS3ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 3' Forward : 7' Left-2 Feet110.713.099%PASS4ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 1' Forward : 7' Left-1 Foot109.613.798%PASS4ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 1' Forward : 20' Left-1 Foot109.613.798%PASS5Equipment Used:21758-3440Standard Counts:Density:19261926									Densit			isity (pcf) Content		nt (%)
Test #AreaProctorTypeLocationClev. (ft)Dry Density(pc)MoistureCompactionResult1ESG-Bldg1-pointASTMD1556Existing Subgrade Soils - Building : Back right Corner :-3 Feet107.013.596%PASS2ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Informational Purposes :107.513.596%PASS3ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Informational Purposes :107.513.596%PASS3ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 3' Forward : 7' Left-2 Feet110.713.099%PASS4ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 10' Forward : 7' Left-1 Foot109.613.798%PASS4ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 10' Forward : 20' Left-1 Foot109.613.798%PASSEquipment Used: 21758-3440Standard Counts:Density: 1926					De	ensity Test	Data							
1ESG-Bldg1-pointASTMD1556Right Corner :-3 Feet107.013.596%PASS2ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Informational Purposes :107.513.596%PASS3ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 3' Forward : 7' Left-2 Feet110.713.099%PASS4ESG-Bldg1-pointASTMD6938Existing Subgrade Soils - Building : Back Right Corner 3' Forward : 7' Left-1 Foot109.613.798%PASS4ESG-Bldg1-pointASTMD6938Right Corner 10' Forward : 20' Left-1 Foot109.613.798%PASSEquipment Used: 21758-3440Standard Counts:Density: 1926	Test #				Location							-	-	Result
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3 ESG-Bldg 1-point ASTMD6938 Right Corner 3' Forward : 7' Left -2 Feet 110.7 13.0 99% PASS 4 ESG-Bldg 1-point ASTMD6938 Existing Subgrade Soils - Building : Back Right Corner 10' Forward : 20' Left -1 Foot 109.6 13.7 98% PASS Equipment Used: 21758-3440	2	ESG-Bldg	1-point	ASTMD6938						107.5		13.5	96%	PASS
4 ESG-Bldg 1-point ASTMD6938 Right Corner -1 Foot 109.6 13.7 98% PASS Equipment Used: 21758-3440 Standard Counts: Density: 1926	3	ESG-Bldg	1-point	ASTMD6938	Right Corner	oils - Building : B	ack	-2	Feet	110.7		13.0	99%	PASS
	4	ESG-Bldg	Existing Subgrade Soils - Building : Back 1-point ASTMD6938 Right Corner				-1	Foot	109.6		13.7	98%	PASS	
	1							S	standard	d Coun	ts:			L

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Justo Wills Reviewed By



07/31/2017

Wellco Contractors P O Box 766 Spring Lake, NC 28390

Attention : Jason Wellons

RE: Daily Field Report for 07/20/2017 Lot 69 Hidden Lakes (CMT) Spring Lake, NC Building & Earth Project No: RD170303

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:

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. A total of 9 in-place field density tests were 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.

Comment 1 : Test ST1-2 is a sand cone correlation for uncorrected nuclear test ST1-1. Based on the results of these tests, neither a moisture offset, nor a wet density offset were required on this date, for this material.

Comment 2 : ST1-3 is a retest of ST1-2.

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 : ST-1

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			NG & EAF		ST-1			Tests r	Test D d Technic equested provided	ian: Le by: N/	′R		
					f Field Den								
		umber: cation: Client: tractor:	Lot 69 Hidder RD170303 Spring Lake, N Wellco Contra Wellco Contra cation by tech	ictors ictors	ig Lake, NC		ent Ter Wind C sults Pr Super	Weat Conditi	:her: Cle ons: Ca I To: N/	lm R			
	2	Elevatio	on by Technici										
					& Specific	atio	n Dat	a					
Are	Area ID Area Description				Dep	th (ft)	Test	t Method	% C(ompact	_	isture nge Ma	
FSG	Bldg		Finished Sub	grade Soils -Build	ng	0.0	- 2.0	AST	M D-698		95 %	- 10.0	+ 10
				Lab	oratory Pr	octo	ors						
Proctor ID Description of Materia			ıl		USC	S/AAS		Maximu Density 111	y (pcf)	Optin Mois Conter 14.0	ture nt (%		
1-p	oint			De	ensity Test	Dat	a					14.0	J 70
Test #	I Area	Ds Proctor	Test Type		ocation			Elev. (ft)	Dry Density(p	ocf) Mo	% pisture	% Compactior	Res
1	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S	-			5 FSG	96.0		9.6	86%	WAI
2	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S			-	6 FSG	96.0		9.6	86%	WAI
3	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade ST 1-1 :	_				108.8		9.9	98%	PA
4	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S	-		-	5 F SG	111.1		11.0	100%	PA
5	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S	_			4 FSG	118.5		9.2	100+	PA
6	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S	2		-	B FSG	112.4		9.4	100+	PA
7	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S	-			2 FSG	111.4		10.5	100%	PA
8	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Building Corner 45'W : 15'S Finished Subgrade			-	1 FSG	109.1		11.0	98%	PA
9	FSG-Bldg	1-point	ASTMD1556	Building Corner 45'W : 15'S	oons -bunding :)	nedi Kl		FSG	111.8		10.4	100+	PA

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ST-1

Comments

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Comments

Test ST1-2 is a sand cone correlation for uncorrected nuclear test ST1-1. Based on the results of these tests, neither a moisture offset, nor a wet density offset were required on this date, for this material. ST1-3 is a retest of ST1-2.

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Page 3 of 3



Geotechnical Engineering Services Construction Material Civil Quality Control

07/31/2017

Wellco Contractors P O Box 766 Spring Lake, NC 28390

Attention : Jason Wellons

RE: Daily Field Report for 07/18/2017 Lot 69 Hidden Lakes (CMT) Spring Lake, NC Building & Earth Project No : RD170303

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. • Observe ponding water in undercut

For Information Only

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

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Field Observations Report

Project Name:	Lot 69 Hidden Lakes (CMT) Spring Lake, N	RD170303	
Client Name:	Wellco Contractors	Placement#:	FO-2
Contractor:		Technician:	William Bailey
Monitoring:			

1: Observe ponding water in undercut

As requested, a Building and Earth representative was on site to observe the undercutting of unsuitable material. The excavation had been completed as per the previous recommendation. The excavation was 4 or 5 feet deep at the deepest part. Water was up to 2 feet deep in the right rear and left rear corner of the excavation. It was recommended that the water be removed, wet/soft soils then be removed, and after removal of water and soft materials a technician should probe the exposed soil to ensure good material before filling. It was advised that water should not be allowed to pond in the excavation during filling and compaction. It was also suggested that pumping should begin asap to ensure that the water can be removed.

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