

Attention Mr. Scott

GeoScience &
Technology, P.A.

"Practical Engineering &
Environmental Solutions"

2050 Northpoint Drive • Suite A
Winston-Salem, NC 27106
Phone: (336) 896-1300
Fax: (336) 896-1020
geosci@geotec.com
www.geotec.com

February 17, 2020

Cathy Vega
Vega Metal Structures
3281 Skyhaven Road
Randleman, NC 27317

419 Collins Road, Lillington
Construction & Materials Testing
Our Project #20.140

Ms. Vega,

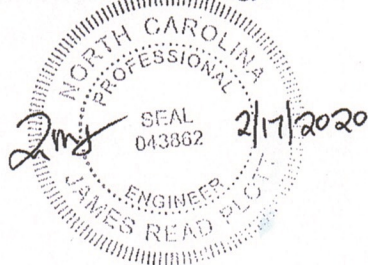
On February 10th, 2020, a Geoscience & Technology, PA representative visited the subject site to test the compaction of the engineered fill placed within the light framed metal structure's building pad. There appears to be a maximum of approximately 36" of engineered fill within the building pad consisting of a reddish brown sandy loam.

We performed a Standard Proctor Test on the soil, as well as two in-situ compaction tests at finished grade using the drive cylinder method. The compaction tests resulted in dry densities of 101.2% and 103.1% of the maximum attainable in a Standard Proctor Test, both of which exceed the 95% required.

Please call if you have any questions.

Thank you for allowing us to be of service.

Sincerely,
Geoscience & Technology, PA



Read Plott, PE
Civil Engineer

Attachment

**Test Method ASTM D 2937-83 & D 6938
Density of Soil in Place by the Drive Cylinder Method or Nuclear Densometer**

Project Name	<u>Vega 419 Collins Rd</u>	Date	<u>2.14.20</u>
Project No.	<u>20.140</u>	Tester	<u>WVP</u>
Project Location	<u>Lillington, NC</u>	Scale No.	<u> </u>
Air Temperature	<u> </u>	Date last calibrated	<u> </u>
Humidity (circle)	<u>High</u> (Med) Low		
Rain (circle)	Yes Drizzle to (None)		

Corelated to proctor tests, soil description : Reddish brown sandy loam

100% Density Standard or Modified (circle one) = 102.50 #/cf 1.64 g/cc
 Optimum moisture content = 21.4%

S# = Sample No.	M4 = mass of small, dry sample + pan
Sample Location	Mpan = mass of drying pan (g) = <u>589</u> <u>179</u>
(attach description or sketch as necessary)	w = % water content (use Method D4643 or D 4959)
Sd = sample depth below subgrade	M5 = mass of dry sample = (M1-M2)/(1+w)
M1= mass of cylinder and wet soil sample	V = cylinder volume (cc) = <u>953</u> <u>283</u>
M2= mass of drive cylinder	Dd = sample dry density = M: (#/cf=g/cc X 62.43)
M3 = mass of small, wet sample + pan	

S#	Sd (ft)	Date	M2 (g)	M1 (g)	M3 (g)	M4 (g)	w %	M5 (g)	Dd (g/cc)	(#/cf)	Proctor %	Location
1	0	2.10.20	248	812	197	194	20.0%	470.00	1.661	103.68	101.2%	Pad of a garage or shed
2	0	2.10.20	247	813	192	190	18.2%	478.92	1.692	105.65	103.1%	Pad of a garage or shed
3												
4												
5												
6												
7												
8												
9												
10												

Comments: Both tests performed using the drive cylinder method.