

Attention Mr. Scott

GeoScience & Technology, P.A.

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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

Geoscience and Technology, P.A.

Form revised 8/4/16 JRP

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

| | | | |
|-------------------|-----------------------|----------------------|---------|
| Project Name | Vega 419 Collins Rd | Date | 2.14.20 |
| Project No. | 20.140 | Tester | WVP |
| Project Location | Lillington, NC | Scale No. | |
| Air Temperature | | Date last calibrated | |
| Humidity (circle) | High (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) = #/cf g/cc
Optimum moisture content =

S# = Sample No.
Sample Location (attach description or sketch as necessary)
Sd = sample depth below subgrade
M1 = mass of cylinder and wet soil sample
M2 = mass of drive cylinder
M3 = mass of small, wet sample + pan
M4 = mass of small, dry sample + pan
Mpan = mass of drying pan (g) = 589 179
w = % water content (use Method D4643 or D 4959)
M5 = mass of dry sample = (M1-M2)/(1+w)
V = cylinder volume (cc) = 963 283
Dd = sample dry density = M: (#/cf=g/cc X 62.43)

| S# | Sd (ft) | Date | M2 (g) | M1 (g) | M3 (g) | M4 (g) | w % | M5 (g) | Dd (g/cc) | Dd (#/cf) | Proctor % | Location |
|----|---------|---------|--------|--------|--------|--------|-------|--------|-----------|-----------|-----------|-------------------------|
| 1 | 0 | 2.10.20 | 248 | 612 | 167 | 194 | 20.0% | 470.00 | 1.681 | 103.68 | 101.2% | Pad of a garage or shed |
| 2 | 0 | 2.10.20 | 247 | 813 | 192 | 180 | 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.