



ENTECH
ENGINEERING, INC.

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September 1, 2021

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Attn: Adam Doyle

Re: Cement Stabilized Subgrade Results - Laboratory Testing
Midtown at Hannah Ridge, Filing No. 2
El Paso County, Colorado

Ref: Pavement Recommendations Report by Entech Engineering, Inc., dated September 1, 2021, Entech Job No. 212277.

Dear Mr. Doyle:

As requested, personnel of Entech Engineering, Inc. have performed strength testing on two sets of three soil/cement composite samples of Soil Type 1 for the above reference project. Testing was performed on soil samples prepared with 2% and 4% Portland Cement Type 1/2, from Martin Marietta, near Pueblo, Colorado.

A compression strength of 160 psi is recommended for cement stabilized subgrade. The 5-day average strength value of the 2% mix was 219 psi. The 5-day average strength value of the 4% mix was 230 psi. A 2% mix is recommended based on the laboratory test results. A summary of the testing results is attached.

Pending the results of the field density testing, microfracturing of the stabilized subgrade may be required. Soil strengths in excess of 200 psi require microfracturing.

We trust this has provided you with the information you required. If you have any questions or need additional information, please do not hesitate to contact us.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Daniel P. Stegman

DPS/bs

Encl.

Entech Job No. 212277
AAprojects/2021/212277 cssr - lab



Reviewed by:

Mark H. Hauschild, P.E.
Senior Engineer

El Paso County File No. CON-207

SUMMARY OF CTS TEST RESULTS
LAB TESTING

CLIENT CLASSIC COMMUNITIES
 PROJECT MIDTOWN, HANNAH RIDGE, F-2
 FIELD SAMPLE ID TB-2 @ 0-3'
 SOIL ADDITIVE TYPE I/II CEMENT

JOB NO 211794
 DATE 8/26/21
 BY BL

<i>ADDITIVE %</i>	<i>WATER %</i>	<i>DENSITY (dry)</i>	<i>AGE (days)</i>	<i>STRENGTH (psi)</i>
2	17.7	101.3	5	182
2	17.7	101.4	5	225
2	17.7	101.1	5	250
AVERAGE:				219
4	17.7	100.8	5	216
4	17.7	101.0	5	224
4	17.7	101.1	5	250
AVERAGE:				230

CURING METHOD
 100° HUMIDIFIED OVEN