ENTECH
ENGINEERING, INC.

505 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
PHONE (719) 531-5599
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July 31, 2023

Tech Contractors
3575 Kenyon Street, Suite 200
San Diego, California 92110

Attn: Raul Guzman

Re: Cement Stabilized Subgrade Results - Laboratory Testing
Estates at Rolling Hills Ranch at Meridian Ranch Filing No. 2
El Paso County, Colorado

Approved
By: Gilbert LaForce, P.E.
Engineering Manager
Date: 08/04/2023 8:12:19 AM
El Paso County Department of Public Works

Dear Mr. Guzman:

As requested, personnel of Entech Engineering, Inc. have performed strength testing on two sets of three soil/cement composite samples for the above reference project. Testing was performed on both soil types used in the pavement design prepared with 2% and 4% Portland Cement Type 1L.

A minimum compression strength of 125 psi is recommended for cement stabilized subgrade. The 5-day average strength value of the 2% mix was 223 psi. The 5-day average strength value of the 4% mix was 336 psi. A 3% mix is recommended based on the laboratory test results and field variability in the soils. A summary of the testing results is attached.

Pending the results of the field density testing, microfracturing of the stabilized subgrade will likely be required. Soil strengths in excess 275 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/dps

Encl.

Reviewed by:

COLORADO LICENSED
JOSEPH COLLIN GOODE JR
23725
PROFESSIONAL ENGINEER
11/3/23

Joseph C. Goode, Jr., P.E.
President

Entech Job No. 221676
AAprojects/2022/221676 - cssr — lab1L

SUMMARY OF CTS TEST RESULTS

LAB TESTING

CLIENT TECH CONTRACTORS
PROJECT ROLLING HILLS ETATES, F-2
FIELD SAMPLE ID SAND, SILTY, BROWN
SOIL ADDITIVE TYPE 1L CEMENT

JOB NO 221676
DATE 7/19/23
BY BL

ADDITIVE %	*WATER %*	*DENSITY (dry)*	*AGE (days)*	*STRENGTH (psi)*
2	8.8	112.8	5	237
2	8.8	112.5	5	207
2	8.8	113.4	5	224
			AVERAGE:	**223**
4	8.8	112.8	5	396
4	8.8	112.9	5	328
4	8.8	113.2	5	285
			AVERAGE:	**336**

CURING METHOD

100° HUMIDIFIED OVEN