

Architecture
Structural
Geotechnical



Materials Testing
Forensic
Civil/Planning

ROCKY MOUNTAIN GROUP

Job No. 156158

October 30, 2017

Landhuis Company
212 N. Wahsatch Ave. Ste 301
Colorado Springs, CO

Re: Cement Treated Subgrade Test Results (Sets 5 through 8)
Paint Brush Hills, Filing No. 13B and 13C
El Paso County, Colorado

Gentlemen:

RMG – Rocky Mountain Group sampled cement-treated subgrade (CTS) soils during placement and compaction during construction of the streets in the above referenced subdivision. Our sampling and testing consisted of preparation of three CTS “pucks” for each sample location. Pucks were prepared by compacting sampled CTS materials in the Standard Proctor mold utilizing Standard Proctor compactive effort (ASTM D-698). The pucks were extruded from the mold and moist-cured in the laboratory for seven days prior to testing for compressive strength.

The compressive strength for each puck was determined at seven days after placement to verify that the minimum required compressive strength of 125 psi was obtained prior to placement of hot-mix bituminous pavements. The results of our testing are presented in the table below:

Sample Location	Date Prepared	Puck #	7-Day Compressive Strength	
			Tested Strength, psi	Average 7-Day Compressive Strength, psi
Right of Ctr. of Jaggar Way, Sta. 9+00	10/17/17	5A	189	208
		5B	201	
		5C	234	
Left of Ctr. of Jaggar Way, Sta. 6+40	10/17/17	6A	258	239
		6B	209	
		6C	250	

Sample Location	Date Prepared	Puck #	7-Day Compressive Strength	
			Tested Strength, psi	Average 7-Day Compressive Strength, psi
Rt. of Ctr. of Beckham St., Sta. 18+60	10/17/17	7A	314	331
		7B	330	
		7C	350	
Lt. of Ctr. of Aberdeen Terr., Sta. 5+70	10/17/17	8A	242	326
		8B	411	
		8C	Broken Sample	

Based upon our test results, the cement-treated subgrade that was placed and compacted at the locations tested on October 17, 2017 exhibited areas that exceeded the maximum design strength as recommended in *Table D-3 of El Paso County Engineering Criteria Manual, Appendix D, Pavement Design Manual*. It is recommended that the subgrade of all of Beckham Street and Aberdeen Terrace be micro-fractured prior to paving.

I hope this provides the information you have requested. Should you have questions, please feel free to contact our office.

Cordially,

RMG – Rocky Mountain Group



Don Peach, P.E.
 Geotechnical Project Manager