

Architectural
Structural
Geotechnical



Materials Testing
Forensic
Civil/Planning

Job No. 181479

December 27, 2021

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

Re: Cement Treated Subgrade Test Results (Set 78)
The Hills at Lorson Ranch – Areas "E" and "G"
El Paso County, Colorado

Dear Landhuis Company:

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 six (6) 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 four (4) days and seven (7) days prior to testing for compressive strength.

The compressive strength for each puck was determined at four (4) days and seven (7) 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 tables below:

Sample Location	Date Prepared	Puck #	4-Day Compressive Strength	
			Tested Strength, psi	Average 4-Day Compressive Strength, psi
Lorson Blvd. STA 107+00 (Left of median)	12/13/2021	78A	220	220

Sample Location	Date Prepared	Puck #	7-Day Compressive Strength	
			Tested Strength, psi	Average 7-Day Compressive Strength, psi
Lorson Blvd. STA 107+00 (Left of median)	12/13/2021	78B	230	220
		78C	210	
		78C	190	
		78D	220	
		78E	230	

Based upon our test results, the cement treated subgrade that was placed and compacted at the locations tested on December 13, 2021 met the minimum design strength requirements as recommended in *RMG's Pavement Design Report, The Hills at Lorson Ranch – Areas "E" and "G", El Paso County, Colorado, Job No. 181479, last dated November 6, 2021.*

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



Cory Ramsey, P.E.
 Geotechnical Project Manager