Architecture Structural Geotechnical



Materials Testing Forensic Civil/Planning

Job No. 181479

November 23, 2021

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

Re: Cement Treated Subgrade Test Results (Set 61)

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 three (3) days prior to testing for compressive strength.

The compressive strength for each puck was determined at three (3) 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<br>Prepared | Puck # | <b>3-Day Compressive Strength</b> |   |
|--------------------------------------|------------------|--------|-----------------------------------|---|
|                                      |                  |        | Tested<br>Strength,<br>psi        | Average 3-Day<br>Compressive<br>Strength, psi |
| Rushpink STA 12+25 (Right of median) | 11/20/2021       | A61    | 272                               | 261   |
|                                      |                  | B61    | 296                               |   |
|                                      |                  | C61    | 227                               |   |
|                                      |                  | D61    | 249                               |   |

Based upon our test results, the cement treated subgrade that was placed and compacted at the locations tested on November 23, 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



Tony Munger, P.E. Geotechnical Project Manager

2