1801 19th Street Golden, Colorado 80401 303.384.2655



Karen Berry State Geologist

May 21, 2018

Kari Parsons El Paso County Development Services Dept. 2880 International Circle, Suite 110 Colorado Springs, CO 80910 Location: Portions of Lot 2 and 3 of Sec 7 and SE NE and NE SE of Sec 12 T13S, R64W of the 6th PM 38.933°, -104.608°

Subject: Largent Subdivision, El Paso County, CO <u>File Number SF183; CGS Unique No. EP-18-0043_2</u>

Kari:

Colorado Geological Survey has reviewed the subject resubmittal. We initially reviewed this submittal in our review letter dated 2.19.18. New documents received for this second review: Final Drainage Report (JPS Engineering, Revised 4.18.18), Erosion Control Plan and Map (JPS Engineering, Revised 4.18.18), and Soil, Geology and Geologic Hazard Evaluation (Entech, 3.28.18).

<u>Geologic Hazards</u>: The hazards identified by CGS review in our letter dated 2.19.18 include collapsible and/or loose soils, erosion, undocumented fill, and the potential for shallow groundwater and expansive clays. All of these identified geologic hazards can be mitigated through avoidance (shallow groundwater) and with specific engineering (loose soils, erosion, undocumented fill and potential for expansive clays) as outlined in the soils and erosion reports).

Per El Paso County Land Development Code 8.4.2 (B) *"Lots or tracts subject to natural hazards which may be eliminated through specialized engineering shall be identified on the plat."* The plat should include the listing of these identified geologic hazards (potential for shallow groundwater, potential for expansive clays, loose soils, erosion, and undocumented fill). The soils report includes engineering mitigation for these and provides surface and subsurface drain recommendations for shallow groundwater. Entech's recommendations on perimeter drains must be strictly adhered to. The erosion control plan and map includes design to control erosion.

<u>Geotechnical observation</u>: As stated on page 5 of Entech's Subsurface Soils Investigation, observation by the geotechnical engineer of overall foundation excavation and any overexcavated subgrade is critical to determine specific engineering requirements that may be necessary for the long-term performance of the foundation system.

Provided the recommendations of this letter and those of the geotechnical engineer are followed, CGS has no objections to this plat request.

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Thank you for the opportunity to review and comment on this project. If you have questions or need additional review, please call at (303) 384-2643, or e-mail jlovekin@mines.edu.

Sincerely,

Jonathen R. Jonal

Jonathan R. Lovekin, P.G. Senior Engineering Geologist