COLORADO GEOLOGICAL SURVEY

1801 19th Street
Golden, Colorado 80401
303.384.2655

Karen Berry
State Geologist

December 12, 2017

Nina Ruiz
El Paso County Development Services Dept.
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Location:
SE ¼ of SE ¼ of Section 3
T11S, R67W of the 6th PM
38.1157°, -104.8683°

Subject: **Arvidson Subdivision,**
File Number SP-17-011; El Paso County, CO; CGS Unique No. EP-18-0020

Dear Nina:

Colorado Geological Survey has reviewed the submittal for this property. We understand that the applicant proposes a two lot subdivision on 5.45 acres. The existing zone of the property is RR-5. The Letter of Intent states the site is proposed to be rezoned to RR-2.5 and platted into two single family lots. There is an existing house that will remain. The available referral documents include: request for review (El Paso County, 11.22.17), Final Drainage Report (MVE, 6.12.17), a Soil, Geology, Geologic Hazard, and Wastewater Study, (Entech, 9.14.17) and other documents.

Entech's report provides a valid description of surface conditions and potential development constraints. They have identified steep slopes within the proposed lot and near the possible house location. Otherwise CGS agrees that the site does not contain surface conditions or geologic hazards that would preclude the proposed use. The site specific foundation investigation needed for the proposed structure must evaluate cuts and fills associated with preparation of the lot. Cuts in the bedrock can create a potentially unstable or unstable condition as noted with the road cut in the southern portion of the site. **CGS has no objection to approval of the subdivision as proposed provided stability of any proposed cuts and fills is addressed during the site-specific soils and foundation investigation for the proposed house.**

Soil and bedrock engineering properties. A foundation investigation, including drilling, sampling, lab testing and analysis will be needed, once the building location is finalized, to more accurately characterize site-specific soil and bedrock engineering properties such as expansion/consolidation potential, density, corrosion potential, etc. and determine depths to groundwater and bedrock. This information is needed to determine subgrade preparation requirements, design foundation and floor systems, and evaluate depth and stability of cuts and fills.

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,

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