COLORADO GEOLOGICAL SURVEY

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Karen Berry State Geologist

February 6, 2018
Kari Parsons
El Paso County
Planning and Community Development
2880 International Circle
Colorado Springs, CO 80910

NE $\frac{1}{4}$, Section 23, T11S, R66W of the 6th P.M. 39.078°, -104.7443°

Location:

Subject: Settlers View Subdivision (EA Number EA16-43, File Number SP17006), El Paso County, CO; CGS Unique No. EP-17-0060_2

Dear Kari,

Colorado Geological Survey has reviewed the resubmittal for Settlers View Subdivision Preliminary Plan. We previously reviewed this referral in our letter on August 8, 2017. We understand the applicant proposes 14 residential lots on 40.61 acres. The proposed subdivision is located in the Black Forest region in the general area northeast of Hodgen Road and the intersection Timber Meadow Drive which is east of Highway 83. There is an existing residence on Lot 2 and an existing driveway on Lot 14, otherwise the property is undeveloped. With the resubmittal we received, an updated letter of intent (Hannigan and Associates, Inc, 1.8.18), a revised Preliminary Drainage Report (JPS Engineering, 11.16.17), and a Preliminary Plan (Hannigan and Associates, Inc, revised 9.8.17 and 12.30.17).

Geologic Hazards. The geologic hazard report identified shallow groundwater, seasonally shallow groundwater, erosion, expansive clayey sandstone and claystone and conditions favorable for "perched" groundwater to develop at the soil/bedrock interface as potential geologic hazards at this location. We concur with the geologic hazards identified by Entech and offer the following comments.

Soil and bedrock engineering properties. Entech's geologic hazard study contains appropriate *preliminary* recommendations for mitigating the potential hazards at the site based on three profile holes, three test pits, and limited laboratory testing. As recommended by Entech, site-specific investigations should be conducted for each lot. The additional geotechnical investigations and analysis is necessary to more accurately characterize lot-specific soil and engineering properties such as expansion/consolidation potential, density, corrosion potential, etc. This information is needed to determine subgrade preparation requirements and to design individual foundations, and floor systems.

Erosion has been identified as a significant geologic hazard on this property. Recommendations in the drainage report for the control of drainage and erosion include implementation and maintenance of erosion control measures, as specified in Section F (page 9-10). These recommendations must be strictly adhered to.

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Summary. Our previous comments on Groundwater and Site Drainage have been addressed on the revised Preliminary Plan. The site is not undermined, does not contain steep slopes, and does not appear to contain or be exposed to any geologic hazards that would preclude the proposed residential use and density. Provided the recommendations of this letter and those of the Geologic Hazard and Drainage Reports are strictly adhered to CGS has no objection to approval of the Preliminary Plan of the minor subdivision.

Thank you for the opportunity to review and comment on this project. If you have questions or require further review, please call me at 303-384-2654, or e-mail ilovekin@mines.edu.

Sincerely,

Jonathan R. Lovekin, P.G.

Senior Engineering Geologist

Jonatha R. Lovel