

COLORADO GEOLOGICAL SURVEY

1801 19th Street
Golden, Colorado 80401



Karen Berry
State Geologist

November 28, 2017

Nina Ruiz
El Paso County
Planning and Community Development
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Location:
W½ Section 9,
T15S, R65W of the 6th P.M.
38.7562, -104.6777

Subject: Springs East at Waterview, Preliminary Plan (SP-17-010)
El Paso County, CO; CGS Unique No. EP-18-0011

Dear Ms. Ruiz:

Colorado Geological Survey has reviewed the Springs East at Waterview preliminary plan referral. I understand the applicant proposes 713 residential lots and 20.5 acres of commercial development on approximately 195 acres located southeast of S. Powers Blvd. and Bradley Road, east of Security-Widefield.

The available referral documents include:

Letter of Intent, Waterview East Preliminary plan (P.A. Koscielski, CPR Entitlements, LLC, May 2017),
Soil, Geology, and Geologic Hazard, Springs at Waterview East (Entech, April 27, 2017),
Set of nine Waterview East preliminary plans (Stantec, April 3, 2017),
and other documents.

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 and commercial uses and density. However, we have several comments:

Entech's ten borings were drilled to a depth of 20 feet. The Waterview East Grading and Erosion Control Plan (Stantec, April 3, 2017) indicates that significant cuts and fills are planned, with cuts exceeding 20 feet in some areas. Some of Entech's borings, including but not necessarily limited to TB-1 in the northeastern area of the site, therefore may not extend to sufficient depths to provide meaningful information about soil and bedrock engineering properties and groundwater levels. Additional investigation, sampling, testing and analysis are needed, based on the project grading plans, to characterize subsurface conditions, determine depth and extent of overexcavation, if overexcavation is planned to reduce the use of drilled pier foundations, and to determine basement feasibility in areas of significant cuts where Entech's borings did not extend to sufficient depth below planned basement floor and foundation bearing depths.

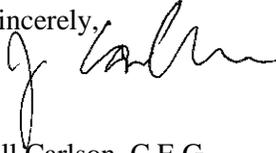
Entech states (page 7) "Overexcavation depths of 4 to 6 feet are anticipated for the site." It is unclear whether Entech means 4 to 6 feet below surface grades, or below foundation bearing elevations. If full-depth basements are planned and are determined to be feasible, based on shallowest anticipated groundwater levels, then overexcavation to 4-6 feet below the ground surface is insufficient. **Entech should clarify their expansive soil and bedrock mitigation recommendations.** For a development of the proposed density, overexcavation should be performed over the entire area within a specific construction phase determined to require overexcavation, at the grading phase of development, before wet utilities are installed. In areas of

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expansive soils, significant cuts and/or shallow claystone bedrock, roads will require overexcavation as well.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Jill Carlson". The signature is fluid and cursive, with a large initial "J" and "C".

Jill Carlson, C.E.G.
Engineering Geologist