

COLORADO GEOLOGICAL SURVEY

1801 Moly Road
Golden, Colorado 80401



Matthew L. Morgan
State Geologist and
Director

March 10, 2025

BrieAnna Simon
Development Services, Planning Division
Town of Castle Rock
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Location:
3161 N. Castleton Court
39.4085, -104.8686

Subject: Castleton Heights Multi-Family – SDP25-0002
Town of Castle Rock, Douglas County, CO; CGS Unique No. DU-25-0019

Dear BrieAnna:

At your request (February 4, 2025), the Colorado Geological Survey has reviewed the Castleton Heights Site Development Plan SDP25-0002 referral. I understand the applicant proposes a four-story, 80-unit multi-family housing development on 3.1 acres.

This is an infill site, surrounded by existing commercial and light industrial development. At least one steep slope exists within the site where a grading cut appears to have been excavated, and a fill pile is present in the northeastern corner. Another steep slope separates the subject site from the property to the west. The Site Development Plans (Kimley-Horn, January 17, 2025) indicate that a retaining wall will be constructed between the western property boundary and the western edge of the planned parking lot.

No geologic or geotechnical information is among the available referral documents. The Analysis Report (Gill Group, December 31, 2024) provides only general information on publicly available 1:24,000 geologic mapping, and the "Approximate Site Location Map is incorrect by about 1000 feet. **CGS recommends that the town require a site investigation and recommendations based on current development plans, if this already.**

KH: Site-specific geotechnical report will be provided with construction documents as agreed in 4/9/256 correspondence

Underground stormwater detention is proposed. The SDPs and Phase II Drainage (January 16, 2025) do not indicate whether the proposed underground detention vault is designed to allow infiltration into the surrounding soils and underlying, potentially expansive Dawson.

Infiltrating systems are NOT recommended in areas of moisture-sensitive (expansive) and expansive bedrock such as are present in the project area. Excessive wetting, and drying cycles, of moisture-sensitive soils and bedrock can adversely affect the performance of foundations, floor slabs, pavements, and exterior flatwork. **CGS recommends that the town request verification that the proposed underground stormwater detention vault will be fully non-infiltrating.**

KH: confirmed - no infiltration is proposed on this site to avoid potential interactions with the retaining wall

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,

Jill Carlson, C.E.G.
Engineering Geologist

A handwritten signature in black ink, appearing to read "Jill Carlson", is written over the typed name and title.