ENTECH
ENGINEERING, INC.
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June 17, 2024

TimberRidge Development Group, LLC
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Attn: Loren Moreland

Re: Response to Review Comments
Retreat at TimberRidge Filing No. 4
El Paso, Colorado
Entech Job No. 231468

Ref: Entech Engineering, Inc., revised date June 17, 2024. *Soils and Geology Study, Retreat at TimberRidge Filing No. 4, Parcel No. 52220-00-023, El Paso County*, *Colorado*. Entech Job No. 231468.

Colorado Geological Survey, date June 4, 2024. *Review Comments by the Colorado Geological Survey, Retreat at TimberRidge Filing No. 4 (AKA TimberRidge Estates)*.

Dear Mr. Moreland:

Entech Engineering, Inc. (Entech) has reviewed the CGS comments dated June 4, 2024 on the TimberRidge Filing No. 4. This letter presents our responses to the CGS comments. The CGS comments are attached to this letter. The responses to their comments are presented below:

ENTECH ENGINEERING, INC. RESPONSES

Entech Response to Comment 1: General note 16 should reference the *Soils and Geology Study*, revised date June 14, 2024 for the geologic hazards and mitigation measures.

Entech Response to Comment 2: The proposed grading plans indicate grading operations for TimberRidge Filing No. 4 will primarily be for roadway and drainage improvements. Overlot grading operations are not planned for the lots. Lot specific soil investigations will be needed prior to permitting, basement feasibility should be determined following these specific soil investigations. Foundations should be a minimum of 3 feet above groundwater for typical construction practices. Mitigation measures may include diversion swales, raising the site grades, and/or interceptor drains. Due to the size of the proposed lots specific mitigation recommendations should be made once building locations are determined and additional investigation is completed. Shallow groundwater is not expected to affect the anticipated building areas.

Entech Response to Comment 3: An underdrain system is not proposed for TimberRidge Filing No. 4. Individual building drains should be connected to a sump/pump system or be daylighted on the property.

We trust this has provided you with the information you require. If you have any questions or need additional information, please do not hesitate to contact us.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G.
Sr. Geologist

Reviewed by:

Digitally signed by Joseph C. Goode Jr.
Date: 06/17/24

Joseph C. Goode, Jr., P.E.
President

LLL:JCG/ed
Encl.
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…Colorado Geological Survey	The available referral documents include a Soils and Geology Study (Entech Engineering, Inc., December 21, 2023), Final Plat (Classic Consulting, February 22, 2024), and other documents. We offer the following comments and recommendations.
6/4/2024 10:46:40 AM	1. General note 16 of the final plat (Classic Consulting, February 22, 2024) indicates that geologic hazards and mitigation measures can be found in the Wastewater Study (Entech Engineering, Inc., December 21, 2023). However, mitigation measures for geologic constraints associated with Filing 4 were not included in this study. The final plat should be updated to reference the Soils and Geology Report. 2. Entech states in their wastewater study (page 6), “Groundwater was encountered in the test borings which were drilled to depths of 15 to 20 feet. Signs of seasonally occurring groundwater were observed in TP-2 at a depth of 5 feet.” Groundwater was encountered in Entech’s previous study during the preliminary plan application (Entech Job No. 170020) at depths of 5 to 17.5 feet below existing grades. If basements are planned or overlot grading operations result in deep cuts, CGS recommends the county require a groundwater monitoring/observation program. This program should include measurements through all four seasons combined with a discussion of regional precipitation trends that can periodically increase the fluctuations expected in groundwater elevations. 3. An underdrain system should be allowed ONLY if it can gravity discharge to a daylight outfall or is connected to an existing underdrain system that gravity discharges to a daylight outfall. Individual foundation perimeter drains are intended to handle small amounts of intermittent, perched water and may NOT be used as the sole mitigation of persistent shallow groundwater conditions. Reviewed on 6/4/2024 by Amy Crandall, Engineering Geologist (acrandall@mines.edu, 303-384-2632)