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ROCKY MOUNTAIN GROUP
EMPLOYEE OWNED

Job No. 163344

September 19, 2019

Challenger Communities
8605 Explorer Drive, Suite 250
Colorado Springs, CO 80920

Re: Limited Geologic Hazard Review
Sorpresa East Addition
Colorado Springs, Colorado

Dear Jim Byers:

RMG - Rocky Mountain Group was requested to provide a limited geologic hazard review of the above-referenced site. The purpose of the review was to identify whether the site is subject to geologic hazards relating to slopes exceeding 33 percent, underground mining or subsidence, or a history of landfill or undocumented/uncontrolled fill activity. Our findings are provided in this letter.

The following is excluded from the scope of this report including (but not limited) seismicity, snow avalanches, water flooding, corrosive soils, erosion, radon, wild fire protection, hazardous waste, natural resources, geologic and natural hazards such as landslides, dipping bedrock, rockfall and unstable slopes.

Existing Site Conditions

The parcels included are addressed as:

1. 6435 Sorpresa Lane, Schedule No. 53060-00-048, consists of 6.42 acres (Parcel A)
2. 7770 Ski Lane, Schedule No. 53060-00-047, consists of 2.19 acres (Parcel B), and

Both parcels are currently County zoned RR-5 CAD-O – *"Residential Rural, Commercial Airport District"*. It is our understanding the parcels are to be annexed into the City of Colorado Springs. The proposed City zoning is to be PUD - *"Planned Unit Development"*. The property is to consist of 8.8929 acres as noted on the Annexation Plat, Sorpresa East Addition, prepared by M&S, Inc., Job No. 70-063, last dated June 28, 2018.

A site visit was performed on September 11, 2019. Sorpresa Lane is partially paved along the northern portion of the site. The remainder of Sorpresa Lane and Ski Lane are gravel roads. Parcel A is vacant. Parcel B currently contains an existing single family residence with a well and a septic system near the northwestern corner of the property. It is our understanding that the residence, well, and septic system are to be demolished and removed prior to any new development.

Cumbre Vista subdivision resides to the north of Parcel A, rural residences reside to the north of Parcel B and east of Parcel A, and Woodmen Vistas resides to the west of Parcel B. The topography across the site is gently rolling hills, with an overall slope down to the southwest at approximately 3 to 5 percent.

Proposed Construction

Based on the preliminary concept plan provided by Dave Morrison with Land Patterns, Inc., received via electronic mail on September 9, 2019, a 72 lot single-family development is proposed.

Previous Studies and Field Investigation

Previous geotechnical engineering/geologic investigation reports specifically addressed to the surrounding area were available for our review and are listed below:

1. *Preliminary Subsurface Soil Investigation, Dos Sorpresa, Colorado Springs, Colorado*, prepared by RMG – Rocky Mountain Group, Job No. 163344, last dated May 22, 2018.

Geologic Conditions

Based upon our review of the *Colorado Springs Subsidence Investigation, State of Colorado Mined Land Reclamation*, by Dames and Moore, 1985, the site exhibits the following characteristics with regard to the requested conditions:

- **Does not** have slopes (existing or proposed) exceeding thirty three percent or which are otherwise unstable or potentially unstable,
- **Does not** lie within a known area of underground mining, and
- **Does** have a history of undocumented fill activity (see Note) and **does not** have a history of landfill activity.

Note, fill soils maybe encountered in the vicinity of the existing structures. If such fill is encountered, it is considered unsuitable for support of foundations. If unsuitable fill soils are encountered construction, they should be removed (overexcavated) and replaced with compacted structural fill. The zone of overexcavation shall extend to the bottom of the unsuitable fill zone and shall extend at least that same distance beyond the building perimeter (or lateral extent of the fill, if encountered first). Provided that this recommendation is implemented, the presence of this fill is not considered to pose a risk to the proposed structures.

Based upon review of the *Geologic Map of the Falcon NW 7.5 Minute Quadrangle, El Paso County, Colorado*, prepared by the Colorado Geological Survey, dated 2003, the site is underlain by the Dawson formation.

As part of our review, we also reviewed the following documents:

1. Federal Emergency Management Agency (FEMA), December 7, 2018, *Flood Insurance Rate Map, El Paso County, Colorado and Unincorporated Areas, Community Panel No. 08041C0529G*.
2. City of Colorado Springs, Colorado, *Map of Areas Susceptible to Differential Heave in Expansive, Steeply Dipping Bedrock*, by John Himmelreich, Jr. and David C. Noe.
3. City of Colorado Springs, Assessor, Public Record Property Information, *City Zoning Map*.

Based on our review, the site:

- **does not** lie within the 100-year floodplain of Cottonwood Creek;
- **does not** appear to be underlain by steeply dipping bedrock;

- **does not** lie within an area considered potentially susceptible to landslides;
- **does not** lie in a rockfall hazard zone, and;
- **does not** lie within the city of Colorado Springs Hillside Overlay Zone.

RMG did not identify any conditions at this site that are anticipated to preclude the proposed development.

Closing

Our professional services were performed using that degree of care and skill ordinarily exercised, under similar circumstances, by geotechnical engineers practicing in this or similar localities. RMG does not warrant the work of regulatory agencies or other third parties supplying information which may have been used during the preparation of this report. No warranty, express or implied is made by the preparation of this report. Third parties reviewing this report should draw their own conclusions regarding site conditions and specific construction techniques to be used on this project.

The scope of services for this project does not include, either specifically or by implication, environmental assessment of the site or identification of contaminated or hazardous materials or conditions. Development of recommendations for the mitigation of environmentally related conditions, including but not limited to biological or toxicological issues, are beyond the scope of this report. If the Client desires investigation into the potential for such contamination or conditions, other studies should be undertaken.

I hope this provides the information you have requested. Should you have questions, please feel free to contact our office.

Cordially,

Reviewed by,

RMG – Rocky Mountain Group

RMG – Rocky Mountain Group



Kelli Zigler
Project Geologist

Tony Munger, P.E.
Geotechnical Project Manager

