

August 3, 2018

Plumb Holdings, LLC. 201 South Main, Suite 2000 Salt Lake City, Utah 84111

Attention:

Walter Plumb

Subject:

Rockfall-hazard Study

Moccasin Flats Subdivision

East of Sky Ranch Hurricane, Utah Project No. 2181393

Gentlemen:

Applied Geotechnical Engineering Consultants, Inc. (AGEC) was requested to perform a rockfall-hazard study for the proposed Moccasin Flats subdivision located east of Sky Ranch in Hurricane, Utah (see Figure 1).

PROPOSED CONSTRUCTION

We understand the area is planned for single-family residences. The approximate area planned for development is shown on Figure 1.

GEOLOGY

The geology for the area was mapped by Hayden (2004) to consist of Quaternary alluvial-fan deposits overlying Permian and Triassic sedimentary bedrock. The bedrock is mapped to dip gently down to the east. It consists predominantly of sandstone and limestone.

ROCKFALL-HAZARD EVALUATION

Low-sun-angle aerial photographs from 1981 and aerial photographs from 2000 were reviewed along with site reconnaissance on July 31, 2018 to determine what potential rockfall hazard may affect the proposed development.

Source boulders for rockfall hazard originate from the sandstone and limestone outcrops above the site. The rockfall appears to be relatively infrequent, typically with the limestone rocks traveling the farthest from the toe of the steep slope. The sandstone generally breaks into smaller particles and weathers fairly rapidly.

Plumb Holdings, LLC. August 3, 2018 Page 2

The approximate limit of most of the rockfall runout is presented on Figure 1. We expect that most rocks will stop well before this rockfall-limit line and it is possible that in rare cases, a rock could roll beyond this line. The farther houses are kept west of this line, the lower the risk that houses could be aversely affected by rockfall.

LIMITATIONS

This letter has been prepared in accordance with generally accepted geologic engineering practices in the area for the use of the client. The conclusions and recommendations included in the letter are based on conditions observed during our field study and the topographic information provided. If conditions are significantly different from those described in this letter, we should be notified to reevaluate the recommendations given. There may be rockfall hazard beyond the rockfall zone shown on Figure 1 and this hazard should be disclosed to potential home buyers.

If you have questions or if we can be of further service, please call.

Sincerely,

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.

OF UTAN

Reviewed by JEN, P.E.

Enclosure

Reference:

Hayden, J.M., 2004; Geologic map of the Divide quadrangle, Washington County, Utah, Utah Geological Survey Map 197.

Utah Geological Survey, 1981; Low-sun-angle aerial photographs PM 10-5 and 6, dated October 25, 1981.

Utah Geological Survey, 2000; Aerial photographs 1-18-07 and 08, dated July 19, 2000.

