

April 29, 2016

Via fastorga@parkcity.org

Francisco Astorga Park City Planning Department 445 Marsac Ave Park City, UT 84060

#### Re: Alice Claim Applications for Subdivision, Plat Amendment, and Conditional Use Permit

Dear Mr. Astorga:

In response to concerns raised by the Planning Commission during the April 8<sup>th</sup> 2015 public hearing questioning the 'build-ability' of the site for the development plan specific to the LMC. Title 15 of the LMC, Chapter 7.3 – "Requirements for Improvements, Reservations, and Design" specifies the potential site hazards that could not allow approval of a development plan. That section reads:

(D) **RESTRICTIONS DUE TO CHARACTER OF THE LAND**. Land which the Planning Commission finds to be unsuitable for Subdivision or Development due to flooding, improper drainage, Steep Slopes, rock formations, Physical Mine Hazards, potentially toxic wastes, adverse earth formations or topography, wetlands, geologic hazards, utility easements, or other features, including ridge lines, which will reasonably be harmful to the safety, health, and general welfare of the present or future inhabitants of the Subdivision and/or its surrounding Areas, shall not be subdivided or developed unless adequate methods are formulated by the Developer and approved by the Planning Commission, upon recommendation of a qualified engineer, to solve the problems created by the unsuitable land conditions. The burden of the proof shall lie with the Developer. Such land shall be set aside or reserved for Uses as shall not involve such a danger.

Set forth below is King Development's response to each of the hazards listed above in the LMC. Some items have been previously noted by Staff as potential hazards and have already been addressed for future verification in the Conditions of Approval.

#### -Flooding: No Flooding

FEMA mapping does not show flood hazard on the site. The Applicant's Engineer does not believe there is a flood hazard on this site. No flooding has been reported or seen in this location.

The applicant has agreed to a study extending the FEMA Flood Plains through this development prior to plat recordation. Any lots located in a FEMA Zone A will require an Elevation Certificate showing the lowest occupied floor is at or above base flood elevation prior to building permit approval. The Applicant accepts and expects to satisfy this condition.

## DHM DESIGN

#### -Improper Drainage: Drainage is correct

See attached memo by Stantec titled Alice Claim Drainage Narrative. The site currently drains down into the reconstructed (as part of the remediation project) channel that runs south to north through the site. That channel carries small volumes of spring runoff and the drainage from the site and the small basin above the site. Minor drainage alterations are proposed to accommodate site development, but generally proposed site drainage remains consistent with existing conditions. A portion of the existing drainage channel will be carried in a culvert pipe as shown on the Engineering Plans prepared by Stantec Engineers.

The Applicant has agreed to prepare a "Debris Flow Study" to be completed for the stream to determine if a debris basin is required.

The Applicant also understands that the City Engineer will review and approve the final form and content of the plat amendment for compliance with State law, the Land Management Code, and the conditions of approval, prior to recordation of the plat.

## -Slopes: No Issues were identified that would prohibit development

This item is addressed in the Geotechnical report which states: Active landslides were not identified in the office studies or during the field reconnaissance completed for the project. While each specific site was not addressed, the site as a whole was inspected and soil borings and sampling were taken. It is more appropriate to address specific site issues unique to each lot and mitigation of those issues, which may vary depending on the house design, after plat approval.

The Applicant suggests that a Geotechnical Engineer review each home design and site prior to issuance of a building permit by the City to determine if any additional measures and/or mitigation are needed.

#### -Rock Formations: No Development is proposed below rock outcrops

This item is addressed in the Geotechnical report that cautions development below rock outcrops. A small rock outcrop is located on this site within the Estate Lot, but on the other side of the gully from the proposed home site. We do not believe there is any instability and/or risk from this outcrop; however, there will be no development below this outcrop. A Geotechnical Engineer will review each home site development prior to and during construction to determine if there are any specific measures and/or mitigation needed.

#### -Mine Hazards: Have all been addressed

This item is addressed in the 2006 Geotechnical Report which recommends filling of the mine shaft as well as the follow up report from AGEC dated Dec 13, 2006, which outlines procedures for safely filling the mine shaft. The mine shaft was subsequently filled and compacted during the site remediation project in 2008 and is included in the mitigation report. As recommended by the AGEC report, home sites will be setback a minimum 10' from the mine shaft. All other mine related hazards were remediated in 2008.

#### -Potentially Toxic Wastes: Have all been addressed

In 2008, the Applicant's property, and the City's property that bisects the project site, was remediated in the VCP to levels necessary for the proposed residential subdivision. Alice Claim investigation and cleanup activities are being completed under the Utah Division of Environmental Response and Remediation Voluntary Cleanup

# DHM DESIGN

Program. Mitigation of mine impacted soil was completed from July 2008 through September 2008 primarily by removal and proper disposal.

## -Adverse Earth Formations or Topography: We do not believe exists.

The Geotechnical Report identifies "Surface Fault Rupture" and "Liquefaction" as two additional hazards for some developments but concludes that the conditions do not exist for either of these hazards. The geo-tech report for each home will review these issues as well as evaluate avalanche potential and develop appropriate design impact pressures for structures.

#### -Wetlands There are none

In 2006, as part of the Stream Alteration Permit, the U.S. Army Corps of Engineers issued an email dated July 25, 2006 confirming that there are no wetlands onsite and that a wetland delineation is not required.

## -Geologic Hazards; Have been identified and accounted for by planned subdivision

This item is addressed in the specific items above. The Engineering Geology and Geotechnical Engineering Report prepared by AMEC dated October 21, 2014 reviews many of the specific items listed above and provides guidance for construction specifications to address any potential concerns.

## -Utility Easements: All Accounted for

All existing and proposed utility and access easements are included on the Plat that will be reviewed by the City Engineer in its final format prior to recordation. The City Engineer has not provided any negative reviews of the proposed easements.

## -Ridgelines: No Development on Ridgelines

The City's Ridgeline Map indicates that there are no ridgelines within the property as defined by the Land Management Code. All homes have been moved to the bottom of the gully.

Thank you for your consideration on this item. Respectfully, DHM Design Corporation

miniemen

Marc Diemer Associate Principal