## MEMORANDUM

## To: Matt Rasmussen <br> From: J. Scott Seal, P.E. Mark Christensen, P.E. Timothy Thompson, P.G. <br>  <br> Subject: Review of Proposed Residential Development - Dauphine-Savory Piedmont Subdivision, GeoStrata Project \# 910-001

The memorandum has been completed as a response to a request by Matt Rasmussen to assess construction plans submitted to GeoStrata for a proposed single family residence on Lot 2R within the proposed Dauphine-Savory Piedmont Subdivision in unincorporated Weber County, Utah. GeoStrata previously completed a geotechnical and geological assessment of the subject property, the results of which may be found in two separate reports dated December 10, 2013. The purpose of this memorandum is to assess if the proposed site plan meets the recommendations made within our 2013 report. Construction plans for the proposed residential structure were provided by the Client, and were prepared by David E. Wiggins Architect. These plans are entitled S'Fondare Estate and are dated August 12, 2012.

As part of our assessment, the geological report completed by GeoStrata was reviewed. A summary of the pertinent conclusions and recommendations within the report are as follows:

1) The subject building lot is not located within a surficial faulting special study zone. As such, no fault trenches were excavated. Rather subsurface soil conditions were investigated through the excavation of two exploratory test pits.
2) The subject building lot was identified as being at an elevated risk of being impacted by alluvial fan flooding/debris flows.
3) It is recommended that strategic site grading and catchment basins/earthen barriers be utilized to minimize the risk of the proposed development being impacted by alluvial fan flooding/debris flow events.

In addition, the geotechnical report completed by GeoStrata was reviewed. A summary of pertinent conclusions and recommendations within the report are as follows:

1) Due to the presence of highly collapsible soils, the proposed structure should be founded upon a minimum of 24 inches of properly placed and compacted structural fill.
2) Strip and spread footings should be a minimum of 18 and 36 inches wide, respectively, and exterior shallow footings should be embedded at least 30-inches below final grade for frost protection and confinement.

These summaries are not all-inclusive. A full review of the subject reports should be made prior to the initiation of construction activities.

The plans submitted to GeoStrata do not appear to include proposed grading plans, and as such it is not possible to assess if the proposed development will meet the recommendations made in our geologic report.

The plans do include recommendations concerning the embedment and size of the foundation elements. Based on our review, the proposed footings meet or exceed the recommendations made in our geotechnical report. The plans do not indicate that the footing elements will need to be placed upon a minimum of 24 inches of properly placed and compacted structural fill. This requirement should be incorporated into the construction of the residence.

The conclusions and recommendations contained in this memorandum which include professional opinions and judgments, are based on the information available to us at the time of our evaluation, the results of our field observations, our limited subsurface exploration and our understanding of the proposed site development. This memorandum was prepared in accordance with the generally accepted standard of practice at the time the report was written. No warranty, expressed or implied, is made.

This memorandum was written for the exclusive use of Matt Rasmussen and only for the proposed project described herein. It is the Client's responsibility to see that all parties to the project including the Designer, Contractor, Subcontractors, etc. are made aware of this memorandum in its entirety. We are not responsible for the technical interpretations by others of the information described or documented in this memorandum.

