



Simon Associates LLC

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August 28, 2015

Ms. Dana Shuler, P.E.
Weber County Engineering Department
2380 Washington Boulevard, Suite 240
Ogden, Utah 84401

Subject: Second Geologic Review
Lot 15 Ski Lakes Estates No. 3
6640 East 1100 South Street
Huntsville, Utah
SA Project No: 15-142

Report: Engineering Geology Assessment-Addendum I, Lot 15, Ski Lake Estates No. 3,
6640 East 1100 South, Huntsville, Utah (Job No, 145150), dated August 14, 2015;
prepared for Mr. Marlin Nobs, 50 River Bluff Road, Elgin, IL 60120.

Geologic Submittal Status: **INCOMPLETE SUBMITTAL**

Dear Ms. Shuler,

At your request, Simon Associates, LLC (SA) reviewed the above referenced August 14, 2015, Earthtec Engineering Inc. (EEI) addendum. The August 14, 2015, EEI addendum was submitted in response to:

SA Geologic Review, Lot 15 Ski Lakes Estates No. 3, 6640 East 1100 South Street, Huntsville, Utah (SA Project No: 15-142), dated August 6, 2015: prepared for Ms. Dana Shuler, P.E., Weber County Engineering Department, 2380 Washington Boulevard, Suite 240, Ogden, Utah 84401.

The August 6, 2015, SA review letter was submitted in response to:

Earthtec Engineering Inc. Report - Engineering Geology Assessment, Lot 15, Ski Lake Estates No.3, 6640 East 1100 South, Huntsville, Utah (EEI Job No, 145150), dated July 13, 2015, prepared for Mr. Marlin Nobs, 50 River Bluff Road, Elgin, IL 60120.

The July 13, 2015, EEI report was submitted in response to a May 29, 2015, SA project memorandum, written in response to a request from Weber County Engineering Department to evaluate whether or not the site is located in a geologically sensitive area. The May 29, 2015, SA memorandum was based on review of the following EEI report:

Report - Geotechnical Study, Lot 15 Ski Lake Estates No.3, 6640 East 1100 South, Huntsville, Utah, prepared by Earthtec Engineering Inc. (project no. 145150G), dated June 23, 2014, prepared for Mr. Martin Nabs, 50 River Bluff Road, Elgin, IL 60120.

The purpose of SA's review is to evaluate whether or not the EEI documents adequately address geologic conditions at the site, consistent with concerns for public health, safety, and welfare; reasonable professional standards-of-care, and; Weber County Hillside Development Review Procedures and Standards.

SA Conclusions and Recommendations

Based on concerns for public health, safety, and welfare; reasonable professional standards-of-care, and; Weber County Hillside Development Review Procedures and Standards, SA recommends Weber County not consider the August 14, 2015, EEI addendum complete from a geologic perspective until the following are adequately addressed:

1. The July 13, 2015, addendum was submitted by Mr. Mark Larson, P.G., whose qualifications to practice as an engineering geologist were known to Weber County. At the project scoping meeting on June 15, 2015, Mr. Larson was designated as the professional geologist in "responsible charge" of the project¹.

The August 14, 2015, EEI Addendum was signed and sealed by Mr. Frank Namdar, P.G. Apparently the geologist in responsible charge of the project has changed. Chapter 27 of the Weber County Hillside Development Review Procedures and Standards defines engineering geologist as:

¹ Responsible charge means the independent control and direction by use of initiative, skill, and independent judgment of geological work or the supervision of the work (Section 58-76-102, Utah Professional Geologist Licensing Act, Title 58, Chapter 76).

"Engineering geologist means a geologist who, through education, training and experience, is able to assure that geologic factors affecting engineering works are recognized, adequately interpreted and presented for use in engineering practice and for the protection of the public. This person shall have at least a four-year degree in geology, engineering geology, or a related field from an accredited university and at least three full years of experience in a responsible position in the field of engineering geology."

SA recommends Weber County request EEl provide:

- a. Mr. Namdar's engineering geologic qualifications (with complete references), particularly documentation of at least three full years of experience in a responsible position in the field of engineering geology.
 - b. An outline of Mr. Namdar's knowledge of the subject site and project parameters such that he qualifies to assume responsible charge of the project.
2. Item 1 of the August 6, 2015, SA review letter stated: "EEl repeatedly refers to the various geologic hazards as 'relatively low,' SA recommends Weber County request EEl defines the term 'relatively.'

EEl's response follows: "This is a typical term used by geologists and engineers practicing in this geographic region, The investigation performed outlines the conditions, and presence of evidence for potential hazards, or lack thereof. The potential hazards described in the 'Geologic Hazards' section provides Earthtec's opinion for the site in relation, or relative to properties in the general area of the site. Such areas are indicated to have been mapped as landslides (Map Units Qmsy and Qms), located approximately 200 to 360 feet to the east of the site.

The English Dictionary² defines the adverb "relatively" as "in comparison or relation to something else; not absolutely;" synonyms include comparatively, rather, somewhat, to some extent, and in or by comparison.

² <http://www.collinsdictionary.com/dictionary/english>

If such is a "...typical term used by geologists and engineers practicing in this geographic region," the term is used when there remains uncertainty with the conclusions of the particular investigation. SA recommends Weber County not consider EEI's response adequate until EEI has obtained sufficient data such that EEI can state, without qualification (i.e., uncertainty), that the various geologic hazards are either "low," "moderate," or "high."

3. Item 2 of the August 6, 2015, SA review letter stated: "EEI uses terms such as 'appears' and 'may be.' Are these terms being used to denote a conclusion based on conjecture rather than a conclusion based on sufficient data, particularly subsurface data? Is EEI suggesting that additional data be obtained? SA recommends EEI clarify their use of the word 'appears' and 'may be'."

EEI's response follows: "This is a typical term used by geologists and engineers practicing in this geographic region. The words are used to form a conclusion based on the data that was obtained in the field investigation and no additional testing is needed."

Such terms indicate conjecture and uncertainty. If such are "...typical term[s] used by geologists and engineers practicing in this geographic region," the terms are used when there remains uncertainty and/or conjecture with the conclusions of the particular investigation. SA recommends Weber County not consider EEI's response adequate until EEI has obtained sufficient data such that EEI can present their conclusions in a definitive manor, without the use of qualifying verbs indicating uncertainty and/or conjecture.

4. Item 3 of the August 6, 2015, SA review letter recommended Weber County request annotated photographs of TP-5 and the extension of TP-3 excavated on 6-22-15. The photographs submitted with the August 14, 2015, EEI addendum were not annotated. SA recommends Weber County request annotated photographs of TP-5 and the extension of TP-3 excavated on 6-22-15.

Closure

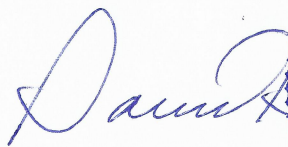
Comments and recommendations in this review are based on data presented in the referenced Consultant's report. SA accordingly provides no warranty that the data in the Consultant's report or any other referenced reports are correct or accurate. SA has not performed an independent site evaluation. Comments and recommendations presented herein are provided to aid Weber County in reducing risks from geologic hazards and to protect public health, safety, and welfare. There is no other warranty, either express or implied.

All services performed by SA for this review were provided for the exclusive use and benefit of Weber County; no other person or entity may or is entitled to use or rely upon any of the information or reports generated by SA as a result of this review. SA would be pleased to meet with Weber County and/or the Consultant, at a mutually convenient time, to discuss any of the issues presented herein.

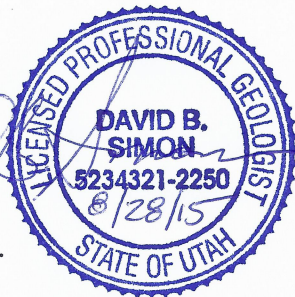
This is the second review letter written for the project. In order to expedite the approval process and to clarify remaining issues, SA recommends Weber County consider a project meeting with the consultant and applicant to discuss the remaining issues prior to EEI submitting a response. In the meantime, should you have any questions, please feel free to contact the undersigned. The opportunity to be of service to Weber County is appreciated.

Very truly yours,

SA



David B. Simon, P.G.
Principal Geologist



Dist: 1/addressee