



PL-92-1104

Applied Geotechnical Engineering Consultants, Inc.

January 12, 1993

Reneé Query
3330 South 2700 East, Apt. 9
Salt Lake City, Utah 84109

Subject: Geotechnical Consultation
Proposed Residence
3072 East Millcreek Canyon Rd.
Salt Lake County, Utah
Project No. 10293

Dear Ms. Query:

Applied Geotechnical Engineering Consultants, Inc. was requested to provide slope setback recommendations for the proposed residence to be constructed at 3072 East Millcreek Canyon Rd. in Salt Lake County, Utah. The Salt Lake County Planning Division has recommended that the proposed structure be setback at least 15 feet from the top of the existing slope on the southern portion of the lot.

OBSERVED CONDITIONS

AGEC visited the property on November 30, 1992 to observe conditions at the site. At that time, the site was partially snow covered. The property is a roughly triangular shaped piece of ground which encompasses an area of approximately one-fifth of an acre. Millcreek Canyon Road borders it on the north and a narrow asphalt paved road borders it along the west and south. There is a house to the east.

A single-story brick garage is located on the east side of the property. There is open undeveloped area on the west side of the property.

The ground surface slopes gently to the south, except along the south edge of the property, which slopes down to the south on an approximately 1.8:1 (horizontal to vertical). The slope reaches a maximum height at the southeast property corner of approximately 13 feet, and decreases in height and slope to the west. The slope is approximately 4 feet high and has an approximate 4:1 slope at the west edge of the property. The slope continues down to the base of the Millcreek drainage on a similar slope south of the small road. There is an approximate elevation difference of 50 feet between Millcreek Canyon Road and the base of the Millcreek drainage. This results in a 45 foot elevation difference between the crest and toe of the slope.

The cut slope for the narrow road exposes silty sand and gravel with some cobbles.

Vegetation consists of sparse grass, brush and a few small trees.

Page 2
Raneé Query
January 12, 1993

PROPOSED CONSTRUCTION

The house to be constructed at the site will be a single-story frame structure with a full depth basement. The building will have approximately 1,000 square feet per floor. The basement footing base is planned to be 8 feet below the crest of the south slope.

RECOMMENDATIONS

Based on the conditions observed at the site, the soils exposed within the cut slope along the south portion of the property and the proposed construction, we recommend that footings for the structure be founded on the undisturbed natural soils and a minimum horizontal setback of 15 feet be maintained from the outside footing edge and the slope face. This setback distance has been calculated in accordance with the Uniform Building Code using a slope height (H) of 45 feet as measured from crest to toe of slope. The minimum horizontal setback distance, measured from outside footing edge to the slope face, is $H/3$ which is equal to 15 feet.


A smaller setback distance may be possible, however, additional geotechnical investigation would be required.

The existing south slope should not be steepened. The ground surface surrounding the house should be sloped to drain away from the house and the south slope.

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

Sincerely,

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.


Douglas R. Hawkes, P.G.

Rev. by JEN, P.E.
DRH/cs

