

AGEC

Applied GeoTech

August 8, 2016

Santa Clara City
2603 Santa Clara Drive
Santa Clara, Utah 84765

Attention: Edward Dickie (City Manager)
EMAIL: edickie@sccity.org

Subject: Proposal for Professional Geotechnical Services
Truman Drive Landslide
Santa Clara, Utah
Proposal No. 1140436A

Gentlemen:

Applied Geotechnical Engineering Consultants, Inc. is pleased to provide a proposal to continue our investigation into the performance and stability of the Truman Drive landslide area.

AGEC previously conducted a preliminary stability analysis of the Truman Drive area and submitted our findings and recommendations in a letter dated July 11, 2014.

Included with the letter is our recommendation that additional investigation be conducted in order to focus on the land behind the landslide mass.

As indicated in the above-referenced letter, a major contributing factor in the stability of the hillside is the moisture and weathering conditions of the clay like materials. The stability analysis conducted in 2014 assumed moist soil conditions on the southeast facing slopes and only extended a few feet below the clay/bedrock surface along the southwest facing slopes. In order to improve the reliability of the stability analysis, we recommend that the moisture and weathering conditions of the soil and bedrock behind the landslide mass be further defined.

PROPOSED STUDY

Based on the existing conditions and performance of the slope, we recommend that subsurface exploration, laboratory testing and engineering analysis be conducted. A summary of our Scope of Services is included in Exhibit A.

FEE

Due to the uncertainty of what we may find during our evaluation, we propose that our fee be based on hourly and unit costs in accordance with the attached fee schedule. We estimate that our fee will fall within the ranges indicated below:

Task	Estimated Fee
Exploration	\$ 50,000
Laboratory testing	\$ 15,000
Engineering analysis	\$ 25,000
Survey Support	<u>\$ 6,000</u>
Total	<u>\$ 96,000</u>

We will not exceed the estimate without prior approval.

We appreciate the opportunity of providing this proposal to you and look forward to working with you on the project. If this proposal meets with your approval, please sign both copies of the Engineering Services Agreement and return one copy to this office. Issuance of our report is dependant on our receiving an executed copy of this agreement.

Sincerely,

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.

James E Nordquist
James E. Nordquist, P.E. *by rs*

JEN/rs
Enclosures

EXHIBIT A - SCOPE OF SERVICES
APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.

Based on our understanding of the slope conditions, the anticipated subsurface conditions and our experience in the area, we propose the following Scope of Service.

1. Current Ground Surface Profile

Based on the movement of the slope and the need to evaluate the existing conditions, we propose that one to four slope profiles be defined by survey methods. We propose that these services be provided by Rosenberg Associates.

2. Subsurface Exploration

The subsurface conditions will be investigated by auger drilling and coring. The claystone would be cored in order to obtain continuous samples of this critical material. Piezometer(s) would be installed in each boring. We propose to install as many piezometers in the cored hole as possible.

We propose the following boring locations and depths:

Location	Depth (ft)
In front of the Hafen home (Cinnamon Circle)	140
Intersection of Snow Canyon Drive and Desert Dawn Drive	140
The crest of Profile G (July 11, 2014 letter) - behind home at 2891 Crestview Drive	100
Southwest of Circle Drive cul-de-sac	100
Crest between Profiles D & E (July 11, 2014 letter) - behind the home at 3001 Crestview Drive.	100

3. Laboratory Testing

Conduct a laboratory testing program to determine the following characteristics of the subsurface soil and bedrock:

- a. Moisture and Density with depth
- b. Grain Size Distribution
- c. Atterberg Limits
- d. Specific Gravity
- e. Strength
 - i.* in-situ
 - ii.* saturated
 - iii.* fully softened
 - iv.* residential

Executive Summary (continued)

4. Engineering Analysis

Analyze the results of the field and laboratory investigations to determine the following items:

- Characteristics of the subsurface materials.
- Soil strengths for stability modeling.
- Stability analysis.
- Setback distances for a safety factor of 1, 1.3 and 1.5 from the crest of the slope.
- Alternatives to improve the stability of the slope.

5. Report

Prepare a report that summarizes the information obtained from the study and presents our conclusions and recommendations. The study will be conducted under the supervision of a registered professional engineer.

**APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.
GEOTECHNICAL ENGINEERING SERVICES AGREEMENT**

THIS GEOTECHNICAL ENGINEERING SERVICES AGREEMENT (this "AGREEMENT") is made and entered into as of August 8, 2016, by and between SANTA CLARA CITY ("CLIENT"), and APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC., a Utah professional corporation ("AGEC"), who agree as follows:

1. PROJECT. CLIENT desires to engage AGECE to provide geotechnical engineering, technical services, and other services as described below in connection with CLIENT'S project (the "PROJECT"). The PROJECT is described as follows: Proposed Truman Drive Landslide Proposal No. 1140436A.

The site of the PROJECT (the "PROJECT SITE") is located as follows: Santa Clara, Utah.

2. FEES. Specific fees for the PROJECT are as follows:

- | | |
|--|---|
| <input type="checkbox"/> Hourly Billing Rates plus Reimbursable Expenses | Estimated Fee: Please see letter for fees |
| <input checked="" type="checkbox"/> Lump Sum | |
| <input type="checkbox"/> Other (Attach Addendum specifying compensation) | Lump Sum Amount: |

The AGECE fee schedule (the "FEE SCHEDULE") has been provided to and received by CLIENT. A copy of the FEE SCHEDULE is attached hereto within the standard proposal as Exhibit B. This Agreement may be withdrawn by AGECE if not signed by client within 90 days from the date of this Agreement. CLIENT hereby agrees that all fees and charges set forth in the FEE SCHEDULE are acceptable to CLIENT, and CLIENT further agrees to pay all fees and charges to AGECE in accordance with this AGREEMENT and the FEE SCHEDULE. A FEE SCHEDULE is not attached for a Lump Sum.

3. SCOPE OF SERVICES. AGECE shall provide certain specified services (the "SERVICES") on the PROJECT in accordance with this AGREEMENT, the Applied Geotechnical Engineering Consultants, Inc. Standard Terms and Conditions ("STANDARD TERMS") attached hereto, and the Scope of Services ("SCOPE OF SERVICES") attached hereto as Exhibit A or as described in the cover letter. AGECE shall not be responsible to provide any services not expressly contained in the SCOPE OF SERVICES or the STANDARD TERMS.

4. HAZARDOUS SUBSTANCES AND HAZARDOUS CONDITIONS. CLIENT hereby represents, warrants, and covenants to and with AGECE that:

- a. No HAZARDOUS SUBSTANCES (as defined in the STANDARD TERMS) or HAZARDOUS CONDITIONS (as defined in the STANDARD TERMS) exist on the PROJECT or at the PROJECT SITE, except as specified as follows: _____
- b. AGECE is entitled to rely upon the above-stated representations, warranties and covenants in performing the SERVICES.

CLIENT acknowledges and confirms that AGECE is relying upon the above warranties in undertaking to perform the services described in this AGREEMENT.

5. ATTACHMENTS AND EXHIBITS. All attachments and exhibits referenced in or attached to this AGREEMENT are incorporated herein and are made a part of this AGREEMENT.
6. CLIENT has read and understood the terms and conditions set forth on this and the reverse side hereof and agrees that such items are hereby incorporated into and made a part of this agreement.

IN WITNESS WHEREOF, CLIENT and AGECE have executed this AGREEMENT as of the date first-above written.

CLIENT: SANTA CLARA CITY _____
By: _____ Print Name _____
Its: _____ Federal ID No. or Social Security No. _____

AGECE: Applied Geotechnical Engineering Consultants, Inc.
600 West Sandy Parkway
Sandy, Utah 84070
Phone: (801) 566-6399
Fax: (801) 566-6493

By: James E Nordquist byrs
Its: Engineer

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.
GEOTECHNICAL STANDARD TERMS AND CONDITIONS

The standard terms and conditions set forth herein are attached to and made a part of the Geotechnical Engineering Services Agreement (the "AGREEMENT") between Applied Geotechnical Engineering Consultants, Inc. ("AGEC"), a Utah corporation and CLIENT (as defined in the AGREEMENT).

All capitalized terms which are not specifically defined herein shall have the meanings assigned to such terms in the AGREEMENT.

ARTICLE 1. SERVICES. The SERVICES to be provided by AGECE are limited to and shall be as set forth in the SCOPE OF SERVICES attached to the AGREEMENT as Exhibit A.

ARTICLE 2. STANDARD OF CARE--LIMITATION OF DAMAGES. The SERVICES will be performed in accordance with generally accepted engineering principles and practices existing at the time of performance for the locality where the SERVICES were performed. AGECE will re-perform, without additional charge, any SERVICE which does not meet this standard. EXCEPT AS EXPRESSLY PROVIDED IN THIS ARTICLE 2, AGECE MAKES NO GUARANTEES OR WARRANTIES CONCERNING SERVICES, AND NO OTHER GUARANTEES OR WARRANTIES MAY BE IMPLIED. IN ADDITION, NOTWITHSTANDING ANY AGREEMENT TO THE CONTRARY, AGECE SHALL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

ARTICLE 3. RIGHT OF ENTRY. CLIENT grants a right of entry to the PROJECT SITE to AGECE, its employees, agents, consultants, contractors, and subcontractors, for the purpose of performing SERVICES, and all acts, studies, and research in connection therewith, including without limitation the obtaining of samples and the performance of tests and evaluations.

ARTICLE 4. PERMITS AND LICENSES. CLIENT represents and warrants that it possesses all necessary permits and licenses required for the performance of the SERVICES and the continuation of CLIENT and AGECE's activities at the PROJECT SITE.

ARTICLE 5. SAMPLING AND TESTING. Field tests or boring locations described by AGECE in any reports or shown on sketches are based on information furnished by others or estimates made in the field by AGECE. Any dimensions, depths or elevations in connection therewith are approximations and are not warranted to be exact.

ARTICLE 6. DOCUMENTS. CLIENT shall furnish, or cause to be furnished, such reports, data, studies, plans, specifications, documents and other information deemed necessary by AGECE for the proper performance of the SERVICES. AGECE shall be entitled to rely upon documents provided by the CLIENT in performing the SERVICES. All documents provided by CLIENT shall remain the property of CLIENT; provided, that AGECE shall be permitted at AGECE's discretion to retain copies of such documents for AGECE's files. All documents prepared by AGECE in connection with the performance of the SERVICES, including but not limited to drawings, specifications, reports, boring logs, field notes, laboratory test data calculations and estimates, shall remain the exclusive property of AGECE. CLIENT agrees that all documents of any nature furnished to CLIENT or CLIENT's agents or designees, if not paid for by CLIENT, will be returned to AGECE upon demand and will not be used by CLIENT for any purpose whatsoever. CLIENT further agrees that under no circumstances shall any documents produced by AGECE pursuant to this AGREEMENT be used at any location or for any project not expressly provided for in this AGREEMENT without AGECE's prior written permission. If CLIENT has used or uses any portion of AGECE's work without AGECE's consent, CLIENT shall indemnify and save AGECE harmless from and all claims arising from or relating to, in any way, such unauthorized use. No part of any document AGECE delivers to CLIENT shall be reproduced or distributed, whether for advertising or any other purpose, without AGECE's prior written consent.

ARTICLE 7. AGECE PERSONNEL. AGECE's personnel shall be present either full or part-time as determined by AGECE to provide observation and field testing of specific parts of the PROJECT (in accordance with the SCOPE OF SERVICES).

ARTICLE 8. CONTRACTORS. If contractor(s) are involved in the PROJECT, AGECE shall not be responsible for the supervision or direction of any contractor or its employees or agents, and CLIENT shall so advise the contractor(s). Neither the presence of AGECE's personnel nor any observation or testing by AGECE shall excuse any contractor in any way for the acts or omissions of the contractor. AGECE shall not be responsible for job or site safety on the PROJECT or at the PROJECT SITE, and AGECE shall not have the right or obligation to stop the work of any contractor or other person at the PROJECT SITE.

ARTICLE 9. PUBLIC LIABILITY. AGECE maintains workers' compensation and employer's liability insurance for AGECE personnel, as may be required by state law. AGECE also maintains liability and auto liability insurance as required by state law. A Certificate of Insurance evidencing the coverage currently held by AGECE may be supplied upon written request by CLIENT.

Notwithstanding any provision of the AGREEMENT to the contrary, AGECE shall not be liable or responsible for any costs, expenses, losses, damages, or liability beyond the amounts, limits, coverage, or conditions of the insurance held by AGECE. In the event any third party brings suit or claim against AGECE for any matter relating to or arising from the SERVICES, the PROJECT, or the PROJECT SITE (including, without limitation any suit alleging exposure to or damage from material, elements or constituents at or from the PROJECT or the PROJECT SITE or which is alleged to have resulted in or caused disease or any adverse health condition to any third party, or resulted in costs for remedial action, uninhabitability of the property, or other property damage), before, during or after the performance of the SERVICES, CLIENT agrees, at its sole cost and expense, to indemnify, defend and hold AGECE and its officers, employees, contractors, and representatives harmless from all costs (including without limitation attorneys fees, witness costs and court costs), expenses, losses and judgements. CLIENT shall have the right to investigate, negotiate and settle, with AGECE's concurrence, any such suit or claim, and AGECE shall cooperate in the defense of any such suit or claim.

ARTICLE 10. PROFESSIONAL LIABILITY. Unless otherwise agreed in writing by CLIENT and AGECE, AGECE liability to CLIENT or any third party in connection with or arising from any act, omission or error (including negligent or other acts, omissions or errors) for any cause and based upon any legal theory (including without limitation strict liability) shall not exceed, in the aggregate, \$50,000 or the total fee received by AGECE pursuant to this AGREEMENT, whichever is greater.

ARTICLE 11. SAMPLE HANDLING AND RETENTION. Test samples or specimens ("SAMPLES") obtained by AGECE may be consumed or substantially altered during testing and AGECE, at its sole discretion, shall dispose of any remaining residue immediately upon completion of tests, subject to the following:

- a. NON-HAZARDOUS SAMPLES. At CLIENT's written request, AGECE shall maintain preservable SAMPLES for 30 days after the report date, free of storage charges. After the initial 30 days, upon written request AGECE will retain SAMPLES for a storage charge and time period reasonably established by AGECE. AGECE shall not be responsible or liable for the loss of any SAMPLES retained in storage.
- b. HAZARDOUS OR POTENTIALLY HAZARDOUS SAMPLES. In the event that SAMPLES contain substances or constituents deemed hazardous or detrimental to health, safety, or the environment as defined by federal, state or local statutes, regulations or ordinances ("HAZARDOUS SUBSTANCES"), AGECE (i) shall after completion of testing and at client's expense return such SAMPLES to CLIENT, or (ii) using a manifest signed by CLIENT as generator, AGECE shall have such SAMPLES transported to a location selected by CLIENT for final disposal. CLIENT agrees to pay all costs associated with the storage, transport, and disposal of such SAMPLES, plus a reasonable handling charge to AGECE. CLIENT recognizes and agrees that AGECE is acting only as a bailee of SAMPLES in possession of AGECE, and AGECE has not and shall not at any time assume title to any SAMPLES, including without limitation SAMPLES containing HAZARDOUS SUBSTANCES.

ARTICLE 12. HAZARDOUS SUBSTANCES AND HAZARDOUS CONDITIONS. CLIENT represents and warrants that upon or prior to the execution of the AGREEMENT, it has advised AGECE of any and all (i) HAZARDOUS SUBSTANCES and (ii) conditions existing in, on or near the PROJECT SITE which pose a potential danger to human health, the environment, or equipment ("HAZARDOUS CONDITIONS"). CLIENT agrees to immediately advise AGECE of the existence of any HAZARDOUS SUBSTANCES or HAZARDOUS CONDITIONS of which it becomes aware during or after the performance of the SERVICES. To the maximum extent permitted by law,

CLIENT shall indemnify, defend and hold AGECE harmless from and against any and all claims and liabilities resulting from:

- a. the violation by CLIENT or any other party of any federal, state or local statute, regulation or ordinance relating to the disposal or handling of HAZARDOUS SUBSTANCES;
- b. the undertaking by CLIENT or any other party of, or the arrangement for, the handling, removal, treatment, storage, transportation or disposal of HAZARDOUS SUBSTANCES;
- c. changed conditions, HAZARDOUS SUBSTANCES or HAZARDOUS CONDITIONS introduced at the PROJECT SITE by CLIENT or any other party before, during or after the performance of the SERVICES;
- d. any allegation(s) that AGECE is a handler, generator, operator, treater, storer, transporter, or disposer under the Resources Conservation and Recovery Act of 1976, as amended, the Comprehensive Environmental Response Compensation and Liability Act, or any other similar federal, state or local regulation or law;
- e. any costs, losses, damages, claims, causes of action or liability which may be asserted against AGECE or which may arise out of any environmental clean up or response, including without limitation all attorneys fees, witness costs and court costs;
- f. any claims, causes of action or liability which may be asserted against AGECE or which may arise out of any alleged contamination of any aquifer (including without limitation any such claim which may arise as a result of contamination of certain subsurface areas, as for example when a probe, boring device or well device moves through a contaminated area, linking it to an aquifer, underground stream, or other hydrous body not previously contaminated and which allegedly results in the spreading of HAZARDOUS SUBSTANCES to any other areas or hydrous bodies).

ARTICLE 13. NO SUPERVISION OR REPORTING DUTIES. AGECE shall not, under any circumstances, assume control of or responsibility for the PROJECT SITE or the persons operating on the PROJECT SITE nor shall AGECE be responsible for reporting to any federal, state or local agencies any conditions at the PROJECT SITE that may present potential dangers to public health, safety or the environment. CLIENT shall promptly notify the appropriate federal, state or local agencies, or otherwise disclose, any information that may be necessary to prevent any danger to health, safety or the environment, in accordance with applicable law and in a timely manner.

ARTICLE 14. CONTAMINATED EQUIPMENT. Upon notification by AGECE to CLIENT, all laboratory and field equipment used in performing the SERVICES which, at any time and in AGECE's sole discretion, is determined to be contaminated and which, in AGECE's sole discretion, cannot be reasonably decontaminated (the "CONTAMINATED EQUIPMENT") shall become the property and responsibility of CLIENT. Upon notification, AGECE shall deliver all CONTAMINATED EQUIPMENT to CLIENT, and CLIENT shall be solely responsible for the disposal, in accordance with law, of the CONTAMINATED EQUIPMENT. CLIENT shall pay AGECE for the fair market value to AGECE of any CONTAMINATED EQUIPMENT within 45 days from the date of the notice provided in this ARTICLE 14.

ARTICLE 15. UNFORSEEN OCCURRENCES. If, during the performance of services, any unforeseen HAZARDOUS SUBSTANCES or other unforeseen conditions or occurrences ("UNFORSEEN CONDITIONS") are encountered which, in AGECE's sole judgement significantly affect or may affect the SERVICES, the risk involved in providing the SERVICES, or the SCOPE OF SERVICES, CLIENT and AGECE hereby agree to reasonably modify the AGREEMENT, including the SCOPE OF SERVICES and the FEE SCHEDULE. AGECE further agrees to provide an estimate of additional charges relating to the UNFORSEEN CONDITIONS. Any modification of the AGREEMENT shall be in writing and shall be signed by CLIENT and AGECE. If CLIENT and AGECE cannot come to a reasonable agreement with respect to a modification of the AGREEMENT as provided in this ARTICLE 15, AGECE shall have the right to terminate this AGREEMENT and to receive payment from CLIENT for all SERVICES performed by AGECE prior to the date of such termination.

ARTICLE 16. DAMAGE AT PROJECT SITE. AGECE shall not be liable for any property damage or bodily injury arising from damage to or interference with surface or subterranean structures (including without limitation pipes, tanks, telephone cables, and the like) which are not called to AGECE's attention in writing and correctly shown on the plans furnished by CLIENT in connection with the SERVICES. CLIENT acknowledges and accepts that the performance of the SERVICES, including without limitation the use of exploration and test equipment, may unavoidably affect, alter, or damage the terrain and affect subsurface, vegetation, buildings, structures and equipment at or under the PROJECT SITE. CLIENT accepts and agrees to bear all risks inherent with the performance of the SERVICES and shall not hold AGECE liable or responsible for any such effect, alteration or damage.

ARTICLE 17. FORCE MAJEURE. AGECE is not responsible for damages or delays in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the control of AGECE.

ARTICLE 18. LITIGATION ASSISTANCE. THE SCOPE OF SERVICES does not include costs of AGECE for required or requested assistance to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the CLIENT. All such services required or requested of AGECE except for suits or claims between the parties to the AGREEMENT will be reimbursed as mutually agreed, and payment for such services shall be in accordance with this AGREEMENT, unless and until otherwise required by a court or arbitrator.

ARTICLE 19. CHANGES. CLIENT may make or approve changes within the SCOPE OF SERVICES. CLIENT shall pay any additional costs of such changes at the rates set forth in the FEE SCHEDULE.

ARTICLE 20. NO THIRD PARTY BENEFICIARIES. No rights or benefits are provided by the AGREEMENT to any person other than the CLIENT and AGECE and the AGREEMENT has no third-party beneficiaries.

ARTICLE 21. LEGAL ACTION. All legal actions by either party against the other arising from the AGREEMENT, or for the failure to perform in accordance with the applicable standards of care provided in the AGREEMENT, or for any other cause of action, shall be barred 2 years from the date the claimant knew or should have known of its claim; provided, however, no legal actions shall be asserted by CLIENT or AGECE after 4 years from the date of substantial completion of the SERVICES.

ARTICLE 22. BILLING. Unless otherwise expressly provided in the AGREEMENT, billings will be based on actual accrued time, test costs and expenses. CLIENT agrees to pay invoices upon receipt. If payment is not received by AGECE within 30 days of the invoice date, the amount due shall bear interest at a rate of 1.5 percent per month (18 percent per annum), before and after judgement and CLIENT shall pay all costs of collection, including without limitation reasonable attorneys' fees (provided, however, if interest provided in this ARTICLE 22 exceeds the maximum interest allowable under any applicable law, such interest shall automatically be reduced to the maximum interest allowable by applicable law). If CLIENT has any objection to any invoice or part thereof submitted by AGECE, CLIENT shall so advise AGECE in writing, giving CLIENT's reasons, within 14 days of receipt of such invoice. Payment of the invoice shall constitute final approval of all aspects of the work performed to date as well as the necessity thereof. If the PROJECT or the AGREEMENT is terminated in whole or part prior to the completion of the SERVICES, then AGECE shall be paid for work performed prior to AGECE's receiving or issuing written notice of such termination and in addition AGECE shall be reimbursed for any and all expenses associated with the termination of the PROJECT or the AGREEMENT, including without limitation any "shut-down" costs.

ARTICLE 23. SURVIVAL. All obligations arising prior to the termination of the AGREEMENT and all provisions of the AGREEMENT allocating the responsibility or liability between CLIENT and AGECE shall survive the completion of the SERVICES and the termination of the AGREEMENT.

ARTICLE 24. INTEGRATION. The AGREEMENT and all the exhibits and attachments thereto constitute the entire agreement between the parties and cannot be changed except by a written instrument signed by all parties thereto.

ARTICLE 25. GOVERNING LAW. The AGREEMENT shall be governed in all respect by the laws of the State of Utah unless otherwise agreed in writing between the parties.