



# UNITED SOIL ENGINEERING, INC.

Geotechnical and Environmental Consultants

# INVOICE

DATE	INVOICE NO.
7/1/2008	5931.GI

BILL TO
Mr. Fatekh Vergasov 470 Ruthven Avenue Palo Alto, CA 94301

PROJECT
Proposed New Two-Story Residence 470 Ruthven Avenue Palo Alto, California

P.O. NO.	TERMS	USE FILE NO.
N/A	Due on receipt	5931

DESCRIPTION	HOURS	RATE	AMOUNT
GEOTECHNICAL INVESTIGATION			
As reported on June 24, 2008			
Geotechnical Investigation		3,300.00	3,300.00
Less Retainer paid with Check No. 1763 on June 17, 2008		-1,650.00	-1,650.00

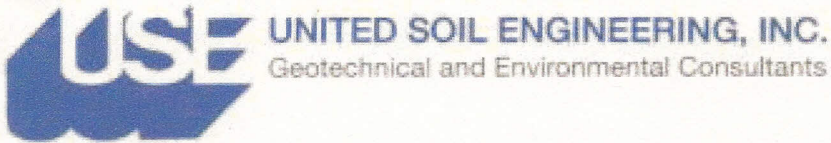
*Paid by  
check # 1770  
07-07-08*



*Paid in full*

Please remit to address below. Unpaid accounts bear interest at 1.5% per month until paid	<b>Total</b>	\$1,650.00
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File No. 08-P-45  
April 14, 2008

Mr. Fatekh Vergasov  
21921 McClellan Road  
Cupertino, CA 95014

Subject: Proposed New Two-Story Residence with Basement  
470 Ruthven Avenue  
Palo Alto, California  
**PROPOSAL TO PERFORM A  
GEOTECHNICAL INVESTIGATION**

Dear Mr. Vergasov:

Pursuant to your request, we are pleased to present herein our proposal to perform a geotechnical investigation for the proposed new two-story residence with basement. The subject site is located at 470 Ruthven Avenue in Palo Alto, California.

Representatives from United Soil Engineering, Inc. have performed various geotechnical investigations in the vicinity of the subject site. The site is located within the State of California Seismic Hazard Zone - "Moderate" ([www.abaq.ca.gov/bayarea/eqmaps/liquefac/liquefac.html](http://www.abaq.ca.gov/bayarea/eqmaps/liquefac/liquefac.html) "Interactive (GIS) SUSCEPTIBILITY Map"). To address the potential hazard of liquefaction, the explored depth of one of the soil borings should extend to 50 feet. The investigation should also be consistent to the 2002 guidelines published by the State of California (CDMG Special Publication 117) and the Southern California Earthquake Center ("SCEC" report).

Based on our past experience, we anticipate the cost of the above-mentioned investigation to be \$3,300.00 and will include the following:

**A. SOIL INVESTIGATION**

1. Drilling of two exploratory borings to the depths ranging from 10 to 50 feet below the existing ground surface.
2. Sampling surface and subsurface soil (at 3 feet, 5 feet, and at 5 foot intervals thereafter) for laboratory analysis.



3. Determining groundwater level if it is within the depth of our borings.
4. Sampling near-surface soil for laboratory analyses (Atterberg Limits Tests and Compaction Test).

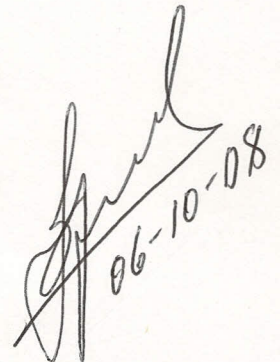
**B. LABORATORY INVESTIGATION**

1. Determining moisture and density of relatively undisturbed soil samples. If any soils are too dense or gravelly to retrieve, the Standard Penetration Test will be substituted.
2. Determining strength of relatively undisturbed soil samples, direct shear testing and/or unconfined compression test.
3. Performing Atterberg Limits Tests on the near-surface soil samples.
4. Performing compaction tests utilizing the ASTM D1557-91 procedure.
5. Performing gradation/sieve analysis on potentially liquefiable samples, if encountered.
6. Performing consolidation tests on soft clayey strata, if encountered.

The results of our investigation will be presented to you in a formal report, which will include the following:

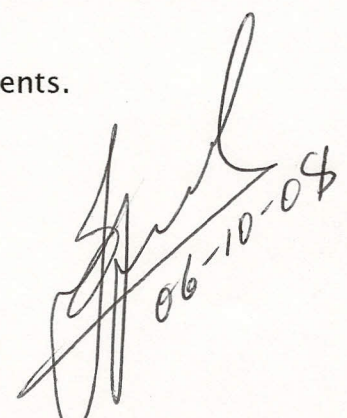
**C. FINAL REPORT**

1. Review existing data pertaining to the subject site and vicinity.
2. Site location and description (drainage pattern, existing facility, old fill, debris, etc.).
3. General geology of the site and its vicinity.



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4. Recommendations for proper type of foundation and allowable bearing values at various depths including minimum foundation depth.
5. Recommended design for active and passive pressure for soil retaining structures.
6. Overall recommendations for site preparation and foundation structures, including the import fill material specifications, and soil compaction requirements.
7. Excavation and shoring recommendations for the basement.
8. Recommendations for basement slab including the moisture barrier and baserock/drain rock specifications, if required.
9. Recommendations for proper drainage.
10. Anticipated total and differential settlement for the proposed structures, if required.
11. Treatment of expansive soils, if encountered.
12. Grading specifications including the backfill and compaction of utility trenches and water well/monitoring well capping.
13. Lime treatment recommendations, if required
14. Shallow excavation recommendations.
15. Liquefaction potential study as set in the guidelines published by the State of California (CDMG Special Publication 117) and the Southern California Earthquake Center ("SCEC" report).
16. Graphic presentation of boring logs, including soil classification, depth to water table, and location of the borings on site plan.
17. 2007 CBC soil type profiles and seismic coefficients.
18. Laboratory test data.



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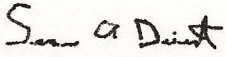


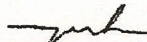
We will inform the underground service alert for the location of public utility lines. However, we will require that the owner to locate the private underground utility lines for our reference prior to the commencement of drilling operations.

We will require a retainer equal to 50% of the total cost. The balance will be due at the time of completion of the report. In the event of any grievance against United Soil Engineering, Inc., the maximum amount of damages will not exceed the original consulting fees charged for the subject project indicated in this proposal.

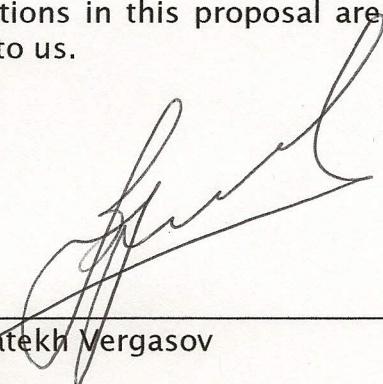
Based on our extensive knowledge of the subsurface soil at the site and its vicinity, we are confident that United Soil Engineering, Inc. can provide you with premium service and quality work. If you have any questions or require additional information, please feel free to contact our office at your convenience.

Very truly yours,  
UNITED SOIL ENGINEERING, INC.

  
Sean A. Deivert  
Project Manager

  
Vien Vo, P.E.

This proposal is valid for 60 days from the date of issuance. If all terms and limitations in this proposal are acceptable to you, please sign and return one copy to us.

  
\_\_\_\_\_  
Mr. Fatekh Vergasov

06-10-08  
Date

Copies: 2 to Mr. Fatekh Vergasov