

30 August 2010

CG Engineering
250 - 4th Avenue South, Suite 200
Edmonds, Washington 98020

DRAFT

Attention: Mr. Chevy Chase, PE

Subject: Scope of Limited Geotechnical Engineering Services and Fee Estimate - **DRAFT**
North Copalis Rock Lane Evaluation
Copalis Beach, Washington
Proposal No. P81100196

Dear Chevy

In accordance with your recent request, Terracon Consultants, Inc. has prepared a scope of services and fee estimate for providing limited geotechnical engineering services to provide a preliminary evaluation of conditions along a distressed portion of North Copalis Rock Lane in Copalis Beach, Washington. We have not visited the site. This proposal is based upon site information provided by you and our review of published geologic maps and other readily available data sources.

A. PROJECT INFORMATION

We understand that North Copalis Rock Lane provides access to your beach community, descending from SR 109 at the east to the single-family residential properties to the west. The road is privately owned by the community. The ground surface elevation at the intersection with SR 109 is approximately 178 feet. Published geologic maps indicate that the site vicinity is underlain by normally consolidated alluvium consisting of weathered sand and gravel.

You have indicated that the upper portion of the road descends along a ravine side slope, and that the pavement is locally settling and cracking. This condition is frequently observed in areas where sidecast fill methods were used to construct roads in steep terrain. You have requested that Terracon provide a scope of services and fee estimate for evaluating conditions along the distressed portion of the road and to provide recommendations for mitigation of the settlement and/or displacement of the road embankment.

B. PROPOSED SCOPE OF LIMITED GEOTECHNICAL SERVICES

Our proposed scope of services includes completing a field reconnaissance, preliminary



Terracon Consultants, Inc. 21905 - 64th Avenue West, Suite 100 Mountlake Terrace, Washington 98043

P [425] 771 3304 F [425] 771 3549 terracon.com

Geotechnical



Environmental



Construction Materials



Facilities

geotechnical analysis, and preparation of a written report. A summary of these scope items is presented below.

Field Reconnaissance

The initial field evaluation will comprise a reconnaissance of surface conditions along the road and the slopes above and below. The purpose of the reconnaissance is to characterize the geometry and surface conditions of the road and the adjacent slopes and to characterize the nature of the settlement and/or displacement. We will supplement the surface reconnaissance with shallow hand explorations on the slopes above and below the road in order to verify shallow soil conditions. The reconnaissance will be completed by an engineering geologist or geotechnical engineer from our firm.

Preliminary Geotechnical Analysis and Report Preparation

The information gathered during the field reconnaissance will be utilized in preliminary geotechnical engineering analysis pertinent to identifying conceptual alternatives for mitigation of the settlement and/or displacement that characterizes the road and to develop recommendations for a formal subsurface exploration, if warranted. Our preliminary conclusions and recommendations will be presented in a draft technical memorandum. Information contained in the technical memorandum will include:

- A site plan showing pertinent surface features;
- A description of surface conditions based on the findings of the reconnaissance and subsurface conditions based up readily available geologic information sources and the shallow hand excavations;,,
- A discussion regarding the mechanism(s) likely responsible for distress of the road embankment;
- A discussion regarding conceptual road restoration alternatives;
- Recommendations for additional exploration and analysis, if required.

Meeting

We have included in our fee estimate the cost of attend one meeting at your office to discuss the findings of the field evaluation and our preliminary conclusions and recommendations.

D. COMPENSATION

We anticipate that a budget of \$4,500 will be adequate for the scope of services described herein: Our services will be invoiced on a time and expenses basis in accordance with the rates presented in the table below and in accordance with the attached *Agreement for Services*. Additional services not described herein that are provided at your request would be invoiced on a time and expenses basis.

2010 Fee Schedule

Clerical / Administrative	\$ 60/hour	Expert Witness (4-hr min)	175% Base Rate
Laboratory Technician	\$ 60/hour	Equipment Rental	Cost + 10%
Field Technician	\$ 70/hour	Mileage	IRS Rate + 15%
CAD Drafter	\$ 70/hour	Outside Copies	Cost + 15%
Field Engineer / Geologist	\$ 80/hour	Transportation by Public Carrier	Cost + 15%
Staff Engineer / Geologist	\$ 90/hour	Outside Services or Subcontractors	Cost + 15%
Sr. Staff Engineer / Geologist/ Scientist	\$100/hour	Materials and Supplies	Cost + 15%
Project Manager	\$110/hour		
Project Engineer / Geologist	\$120/hour		
Senior Project Manager I	\$130/hour		
Senior Project Manager II	\$150/hour		
Principal	\$160/hour		
Senior Principal/ Senior Consultant	\$170/hour		

E. ADDITIONAL CONSIDERATIONS

We have also considered that CG Engineering will provide a topographic plan of the site for our use prior to initiating the field reconnaissance if one is available.

F. CLOSURE

We appreciate the opportunity to submit this proposal, and we hope that it meets your current needs. If you agree to authorize the proposed scope of services and fee, please sign the enclosed Agreement for Services and forward the signed copy to office as authorization to proceed. Please do not hesitate to contact us should you have any questions.

Respectfully submitted,
Terracon Consultants, Inc.

David C. Williams, LEG
Senior Engineering Geologist

DRAFT

John E. Zipper, PE
Senior Principal

Enclosure: Agreement for Services for Proposal P81100196, dated 30 August 2010

Distribution: Addressee (1)

This AGREEMENT is between CG Engineering ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the North Copalis Rock Lane Evaluation project ("Project"), as described in the Project Information section of the Consultant's Proposal dated 30 August 2010 ("Proposal") unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

1. **Scope of Services.** The scope of Consultant's services is described in the Scope of Services section of the Proposal ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
2. **Acceptance.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party.
3. **Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Compensation section of the Proposal unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment.
5. **Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties. For a limited time period not to exceed three months from the date of the report, Consultant will issue additional reports to others agreed upon with Client, however Client understands that such reliance will not be granted until those parties sign and return Consultant's reliance agreement and Consultant receives the agreed-upon reliance fee.
6. **LIMITATION OF LIABILITY.** CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$10,000 OR ITS FEE FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.
7. **Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other, their agents, and employees, from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles; provided however, Client shall indemnify, defend and hold harmless Consultant and its employees, from and against any and all liabilities for any third party claim arising from or alleged to arise from Consultant's performance under this Agreement, except to the extent such claims directly result from Consultant's negligence. Client's duty to defend Consultant for third-party claims shall arise at the time of a filing of a notice of claim or litigation. Consultant shall reimburse Client for reasonable costs of Consultant's defense only if Consultant is adjudicated as negligent by a trier of fact. Causes of action arising out of Consultant's services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of services on the project.
8. **Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
9. **Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$1,000,000 occ / \$2,000,000 agg); (iii) automobile liability insurance (\$1,000,000 B.I. and P.D. combined single limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

10. **CONSEQUENTIAL DAMAGES.** NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.
11. **Dispute Resolution.** Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Rules, provided that any award is subject to the specific terms and conditions of this agreement, including Section 6. Limitation of Liability and Section 7. Indemnity/Statute of Limitations. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies under this provision. This Agreement shall be governed by and construed according to Kansas law.
12. **Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
13. **Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client agrees to the level or amount of testing performed and the associated risk. Client is responsible (even if delegated to contractor) for notifying and scheduling Consultant so Consultant can perform these Services. Consultant shall not be responsible for the quality and completeness of contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by contractor or its subcontractors and is not responsible for their means and methods.
14. **Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of tests (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Material unless specifically provided in the Services, and that Client is responsible for directing such disposition. In the event that test samples obtained during the performance of Services (i) contain substances hazardous to health, safety, or the environment, or (ii) equipment used during the Services cannot reasonably be decontaminated, Client shall sign documentation (if necessary) required to ensure the equipment and/or samples are transported and disposed of properly, and agrees to pay Consultant the fair market value of this equipment and reasonable disposal costs. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site. Accordingly, Client waives any claim against Consultant and agrees to indemnify and save Consultant, its agents, employees, and related companies harmless from any claim, liability or defense cost, including attorney and expert fees, for injury or loss sustained by any party from such exposures allegedly arising out of Consultant's non-negligent performance of services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
15. **Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
16. **Utilities.** Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
17. **Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site.
18. **Termination.** Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the project.

Consultant: **Terracon Consultants, Inc.**

By: _____ Date: **8/30/2010**

Name/Title: **David C. Williams/Sr. Engineering Geologist**

Address: **21905 64th Ave. W., Suite 100**

Mountlake Terrace, Washington 98043

Phone: **425.771.3304** Fax: **425.771.3549**

Client: **CG Engineering**

By: _____ Date: _____

Name/Title: _____

Address: **250 - 4th Avenue, Suite 200**

Edmonds, Washington 98020

Phone: **425-778-8500** Fax: **425-778-5536**

Agreement Reference Number (Terracon Proposal or Project Number): P81100196