11917 NE 95 Street, Vancouver, Washington 98682 Phone: 360-823-2900, Fax: 360-823-2901 www.columbiawestengineering.com

March 31, 2016

Ms. Anita Ashton City of Camas Department of Public Works - Engineering 616 Northeast Fourth Avenue P.O. Box 1055 Camas, Washington 98607 Phone: 360-817-7231

Email: aashton@cityofcamas.us

Re: **Contract for Construction Testing Services** Cooper's View Park - Project No. P-890

Camas, WA

Ms. Ashton:

Columbia West Engineering, Inc. (Columbia West) is pleased to provide this proposal agreement / contract with attached standard terms and conditions and fee schedule (Exhibits A and B, 3 pages) for requested testing services.

It is our understanding that you are requesting the following testing services for the above-referenced project located in Camas, WA. The terms and conditions set forth in this contract are to provide the basis for the relationship between Columbia West and City of Camas Department of Public Works - Engineering.

Scope of Services.

Provide on call construction testing to include, but not be limited to: Field and laboratory testing of soil, aggregate, asphaltic and PCC concrete. Services will be provided on an on-call basis. Electronic copies of reports will be distributed to relevant and requested parties.

Payment. Services will be conducted on a time-and-expense basis in accordance with the schedule of fees and billing rates provided in the attached Professional Services Schedule of Fees (Exhibit B, 2 pages). The estimated fee for work performed above and identified in Exhibit C is \$14,625.00. Please note this is not a fixed lump sum, but rather a best estimate based upon the anticipated scope of services. If unforeseen circumstances arise and warrant additions to the scope of services, Columbia West will contact you prior to performing further efforts. Columbia West will send an invoice on a monthly basis and be compensated in full within 30 days of receipt of the invoice.

Start Time/Completion Time/Schedule. Services will be performed at an on-call basis according to your request and schedule.

Limitation of Remedy. By signing this proposal agreement / contract, you agree to have read this document and the attached standard contract terms and provisions, including the limitation of remedy paragraph, and agree to be bound by all of the terms. The undersigned certifies that he/she is authorized to act on behalf of City of Camas Department of Public Works - Engineering.

This proposal and the attached terms and conditions constitute the entire agreement between the parties.

Date:	Date: May 2, 2016
Columbia West Engineering, Inc.	City of Camas Dept. of Public Works – Engineering.
Columbia West Engineering, Inc. Name and Title: Lance V. Lehto, PE, GE, President Signature:	Name and Title: <u>Scott Higgins</u> , Mayor
Signature: W.	Signature:
	2 FULL

- 1. General. Columbia West Engineering, Inc. ("Columbia West") shall perform for Client the professional engineering services as outlined in the body of the Letter Agreement/Contract to which this applies. No additional services shall be performed nor required of Columbia West absent written agreement of the parties.
- 2. Client's Responsibilities. Client shall provide all reasonable information as to Client's requirements for the Project, and will designate a person to act with authority on Client's behalf for all aspects of the Project. Said person will examine and promptly respond to Columbia West's submissions and requests for information, and shall give prompt written notice to Columbia West should Client observe or otherwise become aware of any defect in the work performed under this Agreement. Columbia West shall be entitled to reasonably rely on all information provided to it by Client.
- 3. Payment. Fees and other charges will be billed in accordance with the terms and conditions outlined in the letter agreement. Additionally, the amount of each billing shall be due and payable 30 days after the date of such billing. Any portion of a billing not paid within thirty days of the billing date shall be delinquent and shall bear a service charge of one and one-half percent per month on the unpaid balance. If any billing is not paid within thirty days after the billing date, then in addition to any other remedies as may be available to Columbia West, it may cease performing work upon delivery of written notice to Client of its intention to do so. Columbia West shall additionally have the right but not the obligation to cease performing work under any other contract as may then be outstanding between Client and Columbia West.
- 4. Limitation of Remedy. To the fullest extent permitted by law, and not withstanding any other provision of this contract, the total liability, in the aggregate, of Columbia West and its officers, directors, partners, employees, agents and subconsultants, and any of them, to the Client and anyone claiming by or through the Client, and all other contractors, subcontractor, consultants or others providing services for the project for any and all claims, losses, costs of damages, including attorneys' fees and costs and expert-witness fees and costs of any nature whatsoever or claims expenses resulting from or in any way related to the project from any cause or causes arising out of Columbia West's services on the project (whether described in this agreement or any subsequent agreement between the parties, except as expressly agreed otherwise), including any indemnity obligation owed hereunder or otherwise, shall not exceed \$50,000.00 or the compensation received under this contract, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, including negligence, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or other acts giving rise to liability based on contract, tort, or statute, unless otherwise prohibited by law.
- 5. Standard of Care. Columbia West will provide its services under this agreement in a manner consistent with that level of care and skill ordinarily exercised by members of its profession currently practicing under similar conditions and time period in the locality of the project. Columbia West makes no other representation regarding its services, and no guarantee or warranty, express or implied, is included or intended as to any findings, recommendations, specifications, reports, opinions, documents or other instruments of service prepared by Columbia West. No agent or representative of Columbia West has any authority to modify this disclaimer of warranty. Client recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys or explorations are to be made by Columbia West. Client acknowledges that the interpretations and recommendations made by Columbia West are based solely on the information available to Columbia West. Client agrees that Columbia West has been engaged to provide technical professional services only, and that Columbia West does not owe any fiduciary responsibility to the Client, or the project Owner, if different from Client.
- 6. Client's Termination of Work. Client may, by written notice, terminate Columbia West's work prior to completion. Columbia West shall nevertheless be entitled to payment of all fees and expenses incurred up to termination, and may additionally complete such work as may be necessary to place its files in order and to complete a report on work performed to date of termination. A termination charge to cover the costs thereof may be imposed at the discretion of Columbia West, said termination charge not to exceed ten percent of all charges incurred up to the date of notice of termination.
- 7. Utilities. In the prosecution of its work, Columbia West will take reasonable precautions to avoid any injury or damage to underground structures or utilities. Client agrees to defend, indemnify and hold Columbia West harmless for any damages or claims of damage to any such underground structures or utilities not called to Columbia West's attention or incorrectly shown on surveys or plans furnished to Columbia West.
- 8. Samples. Columbia West will retain uncontaminated samples of soil or rock taken in connection with this work. [Columbia West will retain such samples for thirty days. Retention of such samples beyond thirty days will occur only at Client's request and in return for payment of storage charges incurred.] All contaminated or environmentally impacted material or samples are the sole property of the client. Client maintains responsibility for proper disposal.
- 9. Right of Entry. Client will provide for the right of entry to Columbia West, its employees, agents or consultants, and for all equipment reasonably necessary to complete the work. Columbia West will take reasonable precautions in accordance with the Standard of Care to minimize any damage to property. It is understood by Client, however, that in the normal course of work, some damage may occur, in which event Columbia West is not obliged to restore the property to its state prior to the performance of such work.

- 10. Re-use of Documents. Any reuse or modification of documents by Client or anyone obtaining it through Client will be at Client's sole risk and without liability to Columbia West. Client will defend, indemnify and hold Columbia West harmless from all third party claims, demands, actions, and expenses (including reasonable attorney's fees, expert fees, and other costs of defense) arising out of or in any way related to the reuse or modification of the Work by Client or anyone obtaining it through Client.
- 11. Cost and Other Estimates. Client recognizes that Columbia West has no control over the cost of labor, materials, equipment or services provided by others, or over the contractor's methods of determining prices, or of market conditions. Any cost estimates as may be provided are made only on the basis of Columbia West's experience and judgment. No warranty is given, express or implied, that proposals or bids or actual project construction costs will not vary from cost estimates provided by Columbia West. Additionally, Columbia West makes no representations concerning estimates of area or volumes. Such estimates are estimates only. No warranty is made that estimates of areas or volumes will not be different from actual quantities.
- 12. Construction Monitoring. If Columbia West is retained by Client to provide services to monitor or observe portions of construction work, foundation excavations, or other field activities, Columbia West will report its observations and opinions to Client or Client's designated agent. Columbia West will report any observed geotechnically-related work that, in Columbia West's opinion, does not conform to plans or specifications. Client acknowledges that Columbia West has no right to reject or stop work of any contractor, subcontractor or agent of the Client. Columbia West's construction monitoring or foundation observation does not include nor consist of exploratory investigation, subsurface evaluation, seismic evaluation, groundwater analysis or any other activities associated with site investigation. Construction monitoring is limited to materials tested and observed during the construction phase of the project and is not a warranty or evaluation of subsurface conditions. Columbia West claims no past or prior knowledge of site conditions other than those documented in our reports. Should Columbia West not be retained by Client for the purpose of monitoring construction work or field activities, Columbia West shall not be held liable or responsible for any such activities, or for the geotechnical performance of the completed Project. Monitoring of construction work or field activities and the performance of the complete Project will then be the sole responsibility of Client or of any other parties designated by Client. Client in such event agrees to defend, indemnify and hold harmless Columbia West from any loss or judgment incurred by Columbia West as a result of a claim or lawsuit resulting from Client's failure to monitor construction work or field activities for which Columbia West has not been retained.
- 13. Means, Methods and Techniques; Safety. Columbia West is not responsible for and will not have control of means, methods, techniques, sequences or procedures of construction or other field activities of any contractor, subcontractor, agent or representative of Client. It is agreed that Columbia West has no control over any person or parties not employees or consultants of Columbia West. Columbia West has not been engaged and is not responsible for any safety precautions or programs related to construction for non-employees or non-consultants of Columbia West
- 14. Assignments. During the term of this Agreement and following its expiration or termination for any reason, neither Client nor Columbia West shall transfer, assign, convey or sublet any right, claims, duty or obligation under it, nor any other interest therein without the prior written consent of the other party.
- 15. Disputes. In the event of a disagreement, Client and Columbia West agree that they will use their best efforts to resolve same in good faith negotiations or discussions with one another. If unsuccessful in resolving the dispute, the parties shall mediate any dispute prior to and as a precondition to commencement of a lawsuit by either.
- 16. Certifications: Client agrees not to require that Columbia West execute any certification with regard to services performed or work tested and/or observed under this agreement unless: (1) Columbia West believes that it has performed sufficient services to provide a sufficient basis to issue the certification, (2) Columbia West believes that the services performed or work tested and/or observed meet the criteria of the proposed certification, and (3) Columbia West has reviewed and approved in writing the exact form of such certification prior to execution of this agreement. Any certification by Columbia West is limited to an expression of professional opinion based upon the services performed by it, and does not constitute or imply a warranty or guarantee of any kind.
- 17. No Personal Liability: Client expressly waives any right to sue, or otherwise make any claim against, any of Columbia West's officers or employees, past or present, as individuals, for any cause.
- **18. Consequential Damages:** Neither Client nor Columbia West will be liable to the other for any special, consequential, incidental or penal losses or damages including but not limited to losses, damages or claims related to the unavailability of property or facilities, shutdowns or service interruptions, loss of use, profits, revenue, or inventory, or for use charges, cost of capital, or claims of the other party and/or its customers.
- **19. No Third Party Beneficiaries:** Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Client and Columbia West. No third party beneficiaries are created or intended by this Agreement.



EXHIBIT B - Professional Services Schedule of Fees

SPECIAL INSPECTION AND CONSTRUCTION MONITORING		
> Services	TYPE	RATE
Laboratory Technician	hourly	\$40.00
Concrete Testing Technician (ACI-certified concrete testing)	hourly	\$50.00
Engineering Technician (compaction testing soil & asphalt)	hourly	\$50.00
Special Inspection (reinforced concrete)	hourly	\$50.00
Special Inspection (proprietary anchors, lateral wood, and cold-formed steel)	hourly	\$50.00
Special Inspection (masonry, grout, CMU)	hourly	\$50.00
Special Inspection (fireproofing)	hourly	\$50.00
Special Inspection (structural steel, bolting, and welding)	hourly	\$55.00
Non-Destructive Testing Inspector	hourly	\$60.00
Floor Flatness Technician.	hourly	\$55.00
Senior Engineering Technician	hourly	\$55.00 \$65.00
Asphalt Coring and Concrete Coring	hourly	\$55.00
	hourly hourly	\$70.00
Concrete Strength-Maturity Testing	•	\$65.00
Subgrade Evaluation	hourly	\$80.00
Laboratory ManagerProject Manager	hourly hourly	\$80.00
Administrative Assistant.	hourly	\$40.00
Skidmore Wilhelm – Bolt Testing (equipment fee).	per day	\$45.00
Floor Flatness (equipment fee).	per day	\$185.00
Anchor Proof Loading Hydraulic Ram and Deflection Gauges (equipment fee)	per day	\$240.00
Ultra-Sonic Testing Equipment (equipment fee)	per day	\$15.00
Concrete Strength-Maturity Electronic Meter/Reader (equipment fee)	per day	\$35.00
Strength-Maturity Loggers	each	\$95.00
ENGINEERING CONSULTING		
> Personnel	<u>TYPE</u>	RATE
Personnel Principal Engineer	TYPE hourly	RATE \$125.00
	hourly hourly	\$125.00 \$95.00
Principal Engineer Project Engineer Senior Staff Engineer	hourly hourly hourly	\$125.00 \$95.00 \$80.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer	hourly hourly hourly hourly	\$125.00 \$95.00 \$80.00 \$75.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist	hourly hourly hourly hourly hourly	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist	hourly hourly hourly hourly hourly hourly	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer	hourly hourly hourly hourly hourly hourly hourly	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer	hourly hourly hourly hourly hourly hourly	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis	hourly hourly hourly hourly hourly hourly tourly TYPE site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Ceotechnical Services Bearing Capacity and Settlement Analysis Foundation Design	hourly hourly hourly hourly hourly hourly TYPE	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Staff Geologist Environmental Engineer > Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review	hourly hourly hourly hourly hourly hourly tourly TYPE site specific site specific hourly	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer > Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation	hourly hourly hourly hourly hourly hourly tourly TYPE site specific site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design	hourly hourly hourly hourly hourly hourly tourly TYPE site specific site specific hourly	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted \$90.00
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design	hourly hourly hourly hourly hourly hourly tourly hourly TYPE site specific site specific hourly site specific site specific site specific site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted \$90.00 quoted quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer > Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis	hourly hourly hourly hourly hourly hourly hourly TYPE site specific site specific hourly site specific site specific site specific site specific site specific site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted quoted quoted quoted quoted quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing	hourly hourly hourly hourly hourly hourly hourly TYPE site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer > Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis	hourly hourly hourly hourly hourly hourly hourly thourly hourly TYPE site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted quoted quoted quoted quoted quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing	hourly hourly hourly hourly hourly hourly hourly TYPE site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Ceotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design Environmental Services Stormwater Sampling – 1200 COLS	hourly hourly hourly hourly hourly hourly hourly thourly hourly TYPE site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design Fuvironmental Services Stormwater Sampling – 1200 COLS Stormwater Sampling – 1200 A	hourly hourly hourly hourly hourly hourly hourly tourly hourly TYPE site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer ➤ Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design. ➤ Environmental Services Stormwater Sampling − 1200 COLS Stormwater Sampling − 1200 A Stormwater Sampling − 1200 Z	hourly hourly hourly hourly hourly hourly hourly hourly thourly hourly site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Staff Geologist Environmental Engineer Ceotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design. Environmental Services Stormwater Sampling – 1200 COLS Stormwater Sampling – 1200 Z Monthly Stormwater Monitoring	hourly hourly hourly hourly hourly hourly hourly hourly thourly hourly site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design. Environmental Services Stormwater Sampling – 1200 COLS Stormwater Sampling – 1200 Z Monthly Stormwater Monitoring Stormwater Pollution Control Plan	hourly hourly hourly hourly hourly hourly hourly hourly thourly hourly site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted q q q q q q q q q q q q q q q q q q q
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design. Environmental Services Stormwater Sampling – 1200 COLS Stormwater Sampling – 1200 A Stormwater Sampling – 1200 Z Monthly Stormwater Monitoring Stormwater Pollution Control Plan Spill Prevention / Accidental Spill Plans	hourly hourly hourly hourly hourly hourly hourly hourly thourly hourly site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design. Environmental Services Stormwater Sampling — 1200 COLS Stormwater Sampling — 1200 A Stormwater Sampling — 1200 Z Monthly Stormwater Monitoring Stormwater Pollution Control Plan Spill Prevention / Accidental Spill Plans Critical Aquifer Recharge Area (CARA) Site Evaluation Report	hourly hourly hourly hourly hourly hourly hourly hourly thourly hourly site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted
Principal Engineer Project Engineer Senior Staff Engineer Staff Engineer Project Geologist Staff Geologist Environmental Engineer Geotechnical Services Bearing Capacity and Settlement Analysis Foundation Design Geotechnical Plan Review Geotechnical Site Investigation Retaining Wall Design Rigid and Flexible Pavement Design Slope Stability Analysis Soil Infiltration Testing Deep Foundation and Pile Design. Environmental Services Stormwater Sampling – 1200 COLS Stormwater Sampling – 1200 A Stormwater Sampling – 1200 Z Monthly Stormwater Monitoring Stormwater Pollution Control Plan Spill Prevention / Accidental Spill Plans	hourly hourly hourly hourly hourly hourly hourly hourly thourly hourly site specific	\$125.00 \$95.00 \$80.00 \$75.00 \$95.00 \$75.00 \$85.00 RATE quoted

MATERIALS TESTING SERVICES

MATERIALS TESTING SERVICES		
> Soils & Aggregate	TYPE	RATE
Atterberg Limits	each	\$105.00
Direct Shear	each	\$425.00
California Bearing Ratio	each	\$425.00
One-dimensional Consolidation	each	quoted
Fractured Face Determination	each	\$50.00
Flat & Elongated particles	each	\$125.00
Hydrometer Analysis	each	\$135.00
Moisture Content	each	\$25.00
Organic Content	each	\$75.00
Organic Impurities	each	\$75.00
pH (soil)	each	\$50.00
Permeability (Constant Head)	each	\$350.00
Permeability (Falling Head)	each	\$250.00
Percent Wood Waste	each	\$50.00
Proctor Moisture-Density	each	\$200.00
Proctor Moisture-Density with oversize	each	\$220.00
Sand Equivalent	each	\$95.00
Sieve Analysis < ¾ inch maximum particle size	each	\$105.00
Sieve Analysis ¾ inch to 2-inch maximum particle size	each	\$135.00
Sieve Analysis > 2-inch maximum particle size	each	\$250.00
Specific Gravity of Coarse Aggregate	each	\$85.00
Specific Gravity of Fine Aggregate	each	\$130.00
Uncompacted Void Content	each	\$125.00
Unconfined Compression	each	\$150.00
Soil Classification	each	\$25.00
> Treated Soils	TYPE	RATE
Proctor Moisture-Density	each	\$250.00
CBR (7-day cure)	each	\$560.00
Compressive Strength Test	per set	\$300.00
Portland Cement Concrete / Masonry / Rock	TYPE	RATE
Concrete Cylinder Compressive Strength	each	\$20.00
Mortar/Grout 2 inch Cube Compressive Strength	each	\$18.00
Mortar Cylinder Compressive Strength	each	\$18.00
Core Compressive Strength (peak strength only)	each	\$55.00
Core Unconfined Compressive Strength (stress-strain relationship)	each	\$145.00
Grout Prism Compressive Strength Test	each	\$40.00
CMU Prism Compressive Strength Test	each	\$125.00
Calcium Chloride Moisture Kit	each	\$20.00
> Asphalt Concrete	<u>TYPE</u>	RATE
Rice Density	each	\$95.00
Core Density and Thickness	each	\$45.00
Oil Content Calibration - Ignition	each	\$400.00
Oil Content & Gradation - Ignition	each	\$195.00
Moisture Content of Bituminous Mixtures	each	\$20.00
MISCELLANEOUS	TYPE	<u>RATE</u>
Concrete Equipment Fee	daily	\$00.00
Coring Equipment Fee	daily	\$90.00
Corning Equipment ree.	per core	\$4.00
Nuclear Densometer	daily	\$00.00
Vehicle Fee	daily	\$20.00
Mileage (outside of service area)	mile	\$20.00
Outside Services	each	cost + 20%
Outside Oci vices	Gauli	0001 1 20 /0

Personnel rates are portal to portal. All requested geotechnical observations, inspections, and/or testing have a 3-hour minimum charge. Hours in excess of eight per day and all work on weekends will be invoiced at 1.5 times the quoted rate. Work on holidays will be invoiced at two times the quoted rate. Rushed laboratory testing (turnaround less than two days) will be invoiced at 1.5 times the indicated rate. Laboratory rates do not include pick up or delivery to Columbia West's laboratory. (514)

Exhibit C Cooper's View Park Camas, Washington Construction Testing Estimate



ESTIMATE BASED ON ASSUMED NUMBER OF SITE VISITS

Item	MILD NOMBLIC	OF OFFE VIOLES			Billing Rate	Estimated Total
Compaction Soil/ Agg Technician Asphalt Technician	22 trips at trips at	4 hours/ea 8 hours/ea	\$20 mileage \$20 mileage	\$0 dens/equip fee \$0 dens/equip fee	\$50 /hr \$50 /hr subtotal =	\$4,840.00 \$1,260.00 \$6,100.00
Concrete Concrete Technician Sample Pick-up	8 trips at	5 hours/ea 6 trips	\$20 mileage \$20 mileage	\$0 dens/equip fee 3 hours	\$50 /hr \$50 /hr subtotal =	\$2,160.00 \$1,020.00 = \$3,180.00
Laboratory Services Concrete Compressive Streng Sand Equivalent Fracture Face Count Moisture Density Relationship Coarse Agg Spec Gravity Sieve Analysis 0-3/4" Rice Density Moisture Content Fine Agg Spec Gravity Uncompacted Void Content Asphalt Ignition Oven Calibrati Asphalt Ignition/Gradation			4 per set	8 sets 2 tests 4 tests 1 tests 1 tests 2 tests 4 tests 1 tests	\$20.00 /ea \$95.00 /ea \$50.00 /ea \$220.00 /ea \$85.00 /ea \$105.00 /ea \$95.00 /ea \$25.00 /ea \$130.00 /ea \$125.00 /ea \$195.00 /ea \$ubtotal =	\$640.00 \$190.00 \$100.00 \$880.00 \$210.00 \$380.00 \$25.00 \$130.00 \$125.00 \$400.00 \$390.00
Miscellaneous Services Material Sampling (ac/agg) Administrative Support Laboratory Manager Project Management / Meeting	3 trips at	3 hours/ea	\$20 mileage	\$0 dens/equip fee 8 hours 4 hours hours	\$50 /hr \$40 /hr \$80 /hr \$80 /hr subtotal =	\$510.00 \$320.00 \$320.00 \$640.00 \$1,790.00

TOTAL ESTIMATED COST:

\$14,625.00