## **AMENDMENT NUMBER 4**

## CONTRACT NUMBER 30002642

### FOR

### On Call Geotechnical Services

Pursuant to Ordinance Number \_\_\_\_\_

and th	Contract was made and entered by and between Hart Crowser, Inc., ne City of Portland, a municipal corporation of the State of Oregon, b rized representatives, hereinafter called City.	herei	nafter called ( through its d	Contra uly	ictor,
1.	This contract is hereby extended through March 31, 2015.				
2.	Additional work is necessary as described in the Scope of Work a	s follo	ws:		
1	Geotechnical Services for the South Waterfront Greenway – project, Phase 2 extending from February through December of 2 and reports, testing and project management services that are inspections program for the project.	014. ir	ncludina: fiel	d inspe	ections
3.	Additional compensation is necessary and shall not exceed \$14,00	00.00.			
4.	New City Project Manager is Brett Horner.				
CONTR This con an origin	er terms and conditions shall remain unchanged and in full force and RACTOR SIGNATURE:  Intract amendment may be signed in two (2) or more counterparts, e nal, and which, when taken together, shall constitute one and the satisfies agree the City and Contractor may conduct this transaction by electronic signatures.	each of	f which shall l ontract amend	dment.	
Hart Cro	owser, Inc.				
Ву:	D	ate:	January	28,	2014
Name:	Fimothy W. Blackwood				
	Principal				
Address:_	8910 SW Gemini Drive, Beaverton, OR 97008				
	e:				

0.516.82

Contract Number: 30002642

Amendment Number: 4

Contract Title: On Call Geotechnical Services

CITY OF PORTLAND SH	GNATURES:
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Ву:		Date:	
	Chief Procurement Officer		And the control of th
Ву:	n/a Elected Official	Date:	
Appro	ved:		
Ву:	Office of City Auditor	Date: _	
	APPROVED AS TO FORM		
Approv	ved as to Form:		,
Ву:	Office of City Attorney A THOUNTY	Date: _	1-27-14



# HARTCROWSER

## EXHIBIT A – SCOPE OF WORK AND FEE SCHEDULE Phase II Geotechnical Construction Monitoring Services South Waterfront Greenway Park

January 14, 2014

City of Portland Parks and Recreation 1120 SW 5th Avenue, Room 1302 Portland, Oregon 97204

Hart Crowser Project No. 15926-01

### Dear Allison Rouse:

Hart Crowser, Inc. (Hart Crowser) presents this proposed scope of work and fee schedule to the City of Portland Parks and Recreation (PPR) for geotechnical construction monitoring services for the South Waterfront Greenway Park, Phase II project. Hart Crowser provided geotechnical construction observations for Phase I of the project under amendments to our Contract No. 30002642 with PPR. Phase I of the project is now complete, and we understand that PPR plans to begin construction on Phase II of the project. Phase II will include the remaining work not completed during the Phase I build out, per the March 14, 2012 Permit Set Drawings, which were approved by the City of Portland (City) in June 2012. In general, this work will include upland grading, pathway construction and paving, an MSE wall at the south end of the project, and lightly loaded foundations for structures, such as short cantilever walls and art installations. Hart Crowser will provide geotechnical construction observations required by the City's Soils Special Inspection Program and the project specifications. The remaining Special Inspections generally include the following:

- Grading and Site Preparation,
- Fill Placement and Compaction,
- Southern MSE Retaining Wall,
- Site Pavements, and



South Waterfront Greenway Park Phase II - Geotechnical Special Inspections January 14, 2014

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Shallow Foundation Subgrades.

In preparing this proposal, we have used an April through October construction schedule, which will most likely allow for the use of moisture sensitive on-site soils as structural fill. We have assumed part-time on call inspections, except for pavements, which would be monitored full time. Based on this understanding, the following scope of services is proposed.

- 1. Attend a project Phase II pre-construction meeting.
- 2. Provide geotechnical project management, including communication with team members, scheduling site visits, and other tasks, as they pertain to Special Inspections.
- 3. Provide site geotechnical construction observations as required by the City and project specifications to include the following items.
  - Grading and Site Preparation Observe site stripping, temporary and permanent slopes, and other design grading requirements.
  - Fill Placement and Compaction Review material submittals for compliance with project requirements, approve fill subgrades, and conduct in-place density testing or performance testing, as appropriate for mass fill and utility backfill.
  - MSE Walls Verify subgrade, embedment, grid type and length, and other requested parameters; conduct density testing of backfill.
  - Pavements Conduct density testing on base rock for asphalt concrete (AC) and Portland cement concrete (PCC) pavements, as well as AC pavement density testing.
  - Shallow Foundations Observe foundation subgrades for art installations, short concrete retaining walls, and other small structures supported at grade.
- 4. Conduct laboratory tests on submitted material samples, including gradation, percent fines, and maximum density tests, in general accordance with ASTM standards.
- 5. Respond to requests from the project team as they relate to Special Inspections.
- 6. Complete field reports for each visit and provide copies to the design and construction team and the City.
- 7. Attend meetings as requested.
- 8. Provide a final letter of compliance for geotechnical elements of construction.



South Waterfront Greenway Park Phase II - Geotechnical Special Inspections January 14, 2014

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The following table summarizes the estimated visits to be completed.

Type of Observation	Estimated Duration	Frequency of Visits	Part-time	Full-time
Site Prep & Grading	2 months	Weekly	8	
Fill & Compaction	2 months	Twice Weekly	8	**************************************
MSE Wall	2 Months	Weekly	8	
Pavements	Intermittent	Intermittent	4	2
Foundation Subgrade	2 months	Weekly	. 8	
Total			36	2

The professional services listed above will be provided in accordance with an Amendment to our on-call contract with Portland Parks and Recreation. The table above provides the number of visits and durations we have budgeted. To reach the above estimate, we have assumed that some visits can be conducted simultaneously, and we will coordinate visits as much as possible to reduce the number of visits and resulting costs. The attached spreadsheet summarizes our fees for the above visits, as well as project management, laboratory testing, final letters of compliance, and engineering support. We have credited the estimated remaining Phase I budget in the fee schedule. For the scope of work noted above, we estimate additional fees of approximately \$23,000, which requires an additional \$14,000 budget after the Phase I credit is applied per the attached Fee Schedule. Note that these amounts are approximate and the actual charges will depend on the contractor's schedule, number of visits required, etc.

We appreciate this opportunity to submit this proposal and look forward continuing to assist you on this project. If we may provide additional information or clarification of this proposal, please call us.

Sincerely,

HART CROWSER, INC.

TIMOTHY W. BLACKWOOD, PE, GE, CEG

Principal

Attachment: Fee Schedule

J. L. 722

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### EXHIBIT A - FEE SCHEDULE

Budgeted Visits				
Task	Full-time visits	Part-time visits		
Grading/Site Prep	0	8		
Fill and Compaction	0	8		
MSE Wall	0	8		
Pavements	2	4		
Foundations	0	8		
Total Visits	2	36		

Client:	Portland Parks	Job #			uth Waterf	ront
Task	Item	Units Rate			xt Price	Subtotal
Full time Visit	Principal	0 hr \$	140	\$	•	
	Project	0.5 hr \$	120	\$	60	
	Staff	8 hr \$	95	\$	760	
·	Project Assistant	0.5 hr \$	45	\$	23	
	Mileage	0 mi \$	0.60	\$		
	Field Expenses	1 dy \$	40	\$	40	
		Subtotal	per Visit	\$	883	1,765
Part time Visit	Principal	0 hr \$	140	\$	-	
	Project	0.5 hr \$	120	\$	60	
	Staff	3.5 hr \$	95	\$	333	
	Project Assistant	0.5 hr \$	45	\$	23	
	Mileage	0 mi \$	0.60	\$	••	
•	Field Expenses	0.5 dy \$	40	\$	20	
		Subtotal	per Visit	\$	435	15,660
Laboratory	Proctor	6 ea \$	225	\$	1,350	
	Atterberg	0 ea \$	135	\$	-	
	Seive	2 ea \$	75	\$	150	
	Hydrometer	3 ea \$	150	\$	450	
	Consolidation	0 ea \$	300	\$	-	
	Organic	0 ea \$		\$	-	
	Subcontracted	2 ea \$	300	\$	600	
		Subtotal fo	r Lab Svcs	\$	2,550 💲	2,550
Pre-con meeting, PM, Final, etc.	Principal	8 hr \$		\$	1,120	
	Project	12 hr \$	120	\$	1,440	
	Staff	2 hr \$	95	\$	190	
	CAD Operator	0 hr \$	. 70	\$		
	Project Assistant	6 hr \$	45	\$	270	
	Mileage	0 0 \$	0.60	\$		
		Subtotal Support		\$	3,020 \$	3,020
Unused Phase I Budget	(Approximate)	1 ea \$	9,000	\$	(9,000)	
				\$	(9,000) \$	(9,000)
Total Fee					\$	13,995