

EXHIBIT A**Statement of Work and Payment Schedule**

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I. Statement of Work

The CBWTP Renewable Natural Gas Facility Project, previously call the CBWTP Biogas Utilization Project, (BES Project E10033) is being implemented to increase the portion of biogas that is beneficially used by the plant to offset energy consumption, reduce operational costs, and to promote sustainability practices. The first phase of the project was completed to evaluate the feasibility of different biogas use alternatives and select the alternative which provides the City the best return on investment from a financial, social, and environmental perspective. The second phase of the project is to complete design of the selected alternative for biogas use and the implementation of a renewable natural gas facility (RNGF).

The scope of services outlined in Amendment 2 (dated October 2014) was based on the assumption of a RNGF size of 400 scfm. Through the development of the project during the design phase, the size of the facility was increased to 1,100 scfm. This Amendment 4 describes the additional scope to be provided through the completion of the project, through December 31, 2019.

VII. Scope of Work

Task 1 — Project Management

Subtask 1.1 – Project Administration

Subtask is on-going. Prepare and distribute a project management plan to include schedule, budget, roles, contacts, and procedures. Prepare and execute subconsultant agreements. Prepare monthly invoices and subconsultant payment and utilization report.

Subtask 1.2 – Progress Reporting

Subtask is on-going. Prepare monthly progress reports to advise BES project manager of project status. The report will accompany invoices and will include monthly progress by task, task budget status, and estimated percentage complete. A decision log, list of outstanding issues, and updated schedule will also be included.

Subtask 1.3 – Coordination Meetings

No additional work included in this amendment.

Task 1 Deliverables:

No change in Task deliverables.

Task 1 Assumptions:

No change in Task deliverables.

Task 3 — Design Services

Task complete. No additional work.

Task 4 — Bid Phase Services

Task complete. No additional work.

Task 5 — Services during Construction

Subtask 5.1 – Design Support Services

Additional work to include:

- Support and coordination in obtaining City permits
- RFI responses
- Shop drawing and submittal reviews and responses
- Development of Design Clarifications to assist change order proposal requests and work change directives
- Attend construction coordination meetings
- Make site visits to observe construction
- Update design files in CAD for Design Clarifications (does not include development of record drawings)
- Participation in the process flow, HAZOP, and startup workshop (fee assumes 3 HDR staff and 1 MEC staff for four day workshop)
- Permitting assistance

Subtask 5.1 Deliverables:

No change in Task deliverables.

Subtask 5.2 – Electrical, I&C Assistance

Subtask is not yet complete. For this amendment, additional effort is included to complete the subtask deliverables. Amendment 2 included only up to 40 hours allowance for support of BES staff in integrating instrumentation and control for the system into the Plant SCADA system.

Subtask 5.2 Deliverables:

No change in Task deliverables. Per Amendment 2, provide final electrical coordination study report, fault settings, and arc flash label messages for electrical equipment.

Subtask 5.3 – Final Field Inspection

Subtask is not yet complete. No additional work or effort is included in this amendment.

Subtask 5.3 Deliverables:

No change in Task deliverables.

Subtask 5.4 – O&M Manual Assistance and Start-up Training

Subtask is not yet complete. No additional work or effort is included in this amendment.

Subtask 5.4 Deliverables:

No change in Task deliverables.

Task 6 — Quality Control Activities

Subtask 6.1 – Design Phase Project Guide and QC Plan

Subtask complete. No additional work.

Subtask 6.2 – Design Phase Management Reviews (60%, 90%)

Subtask complete. No additional work.

Subtask 6.3 – Phase II Project Approach and Resource Review (PARR)

Subtask complete. No additional work.

Subtask 6.4– Quality Control Reviews

Subtask is on-going. Each deliverable will receive a quality control review prior to submittal. A quality control lead will perform an overall review, while discipline specific leads will review for technical

Subtask 6.5 – Construction Phase Project Guide and QC Plan

Subtask complete. No additional work.

Subtask 6.6 – Construction Phase Management Reviews (0%, 50%, 90%)

Subtask is on-going. No additional work or effort is included in this amendment.

Task 6 Deliverables:

No change in Task deliverables.

Task 7 — Additional Services

The following additional services have been identified for this project scope of work. If BES requires these services to be completed the BES project manager will notify the HDR project manager in writing to request any of these services be completed.

Subtask 7.1 – Intraday Gas Production and Storage Evaluation

Subtask complete. No additional work.

Subtask 7.2 – Gas storage specification development

Subtask complete. No additional work.

Subtask 7.3 – Co-digestion Financial Evaluation

Subtask complete. No additional work.

Subtask 7.4 – Biogas Management Review and Optimization Support

New subtask. Provide support to BES staff in the integration of the RNG facility into the existing biogas system. An allowance of \$22,000 has been established for this subtask.

Task 7 Deliverables:

No change to existing Task deliverables.

AMENDMENT NUMBER 4
CONTRACT NUMBER 30003218
FOR
CBWTP Renewable Natural Gas Facility

This Contract was made and entered by and between HDR Engineering, Inc., hereinafter called Contractor, and the City of Portland, a municipal corporation of the State of Oregon, by and through its duly authorized representatives, hereinafter called City.

1. Pursuant to Ordinance No. 185872 and 187022, additional work necessary to complete project construction and startup support services is summarized in the attached Exhibit A.
2. Additional compensation is necessary and shall not exceed \$222,800, which total to revised contract amount of \$1,516,810.
3. This contract is hereby extended through December 31, 2019.

All other terms and conditions shall remain unchanged and in full force and effect.

CONSULTANT SIGNATURE:

This contract amendment may be signed in two (2) or more counterparts, each of which shall be deemed an original, and which, when taken together, shall constitute one and the same contract amendment.

The parties agree the City and Contractor may conduct this transaction by electronic means, including the use of electronic signatures.

HDR ENGINEERING, INC.

By: _____

Date: _____

Name: _____

Title: _____

189431

Contract Number: 30003218 Amendment Number: 4

Contract Title: CBWTP Renewable Natural Gas Facility

CITY OF PORTLAND SIGNATURES:

By: _____ Date: _____
Bureau Director

By: N/A Date: _____
Chief Procurement Officer

By: N/A Date: _____
Elected Official

Approved:

By: _____ Date: _____
Office of City Auditor

Approved as to Form:

By: _____ Date: _____
Office of City Attorney

Level of Effort	HDR Engineering															MEC Electrical Engineering					Akana (previously Cascade Design Professionals)			Total Fee (includes sub-consultant mark-up and escalation)										
	Principal / Program Manager	Technical Advisor / QC	Project Manager	Project Engineer	Project EIT	Fire and Life Safety Specialist	Start Up and Operations	CAD Manager	Project Coordinator	Project Accountant	Hours	Labor	Misc. Expenses (as a % of Labor)	Total Expenses	HDR Fee	Senior Engineer	Design Tech	Project Admin	Labor	Subconsultant Total	Project Manager	Project Engineer	Drafter		Labor	Subconsultant Total								
Billable Rates	\$ 238.00	\$ 217.00	\$ 257.00	\$ 138.00	\$ 101.00	\$ 118.00	\$ 198.00	\$ 155.00	\$ 125.00	\$ 82.00						\$ 150	\$ 60	\$ 60			\$ 140	\$ 103	\$ 80											
Task Description																																		
Task 1 - Project Management																																		
	1.1 Project Administration	5		34	20					30	89	\$ 15,148	\$ 151	\$ 151	\$ 15,299					\$ -	\$ -				\$ -	\$ -	\$ 15,830							
	1.2 Progress Reporting			5	10				10	10	35	\$ 4,735	\$ 47	\$ 47	\$ 4,782					\$ -	\$ -				\$ -	\$ -	\$ 4,948							
	1.3 Coordination Meetings										0	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -	\$ -	\$ -							
	Sub-total	5	0	39	30	0	0	0	10	40	124	\$ 19,883	\$ 199	\$ 199	\$ 20,082	0	0	0	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ 20,778								
Task 5 - Services During Construction																																		
	5.1 Design Support Services			82	432	120	60	112	40		846	\$ 128,266	\$ 1,283	\$ 1,283	\$ 129,549	99	20	10	\$ 16,650	\$ 16,650	60	75	10	\$ 16,925	\$ 16,925	\$ 169,292								
	5.2 Electrical, I&C Assistance										0	\$ -	\$ -	\$ -	\$ -	50			\$ 7,500	\$ 7,500				\$ -	\$ -	\$ 7,875								
	5.3 Final Field Inspection										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	5.4 O&M Manual Assistance and Start-up Training										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	Sub-total	0	0	82	432	120	60	112	40	0	846	\$ 128,266	\$ 1,283	\$ 1,283	\$ 129,549	149	20	10	\$ 24,150	\$ 24,150	60	75	10	\$ 16,925	\$ 16,925	\$ 177,167								
Task 6 - Quality Control Activities																																		
	6.1 Design Phase Project Guide and QC Plan										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	6.2 Design Phase Management Reviews										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	6.3 Design Phase PARR										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	6.4 Quality Control Reviews		10								10	\$ 2,170	\$ 22	\$ 22	\$ 2,192				\$ -	\$ -				\$ -	\$ -	\$ 2,268								
	6.5 Construction Phase Project Guide and QC Plan										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	6.6 Const Phase Management Reviews										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	Sub-total	0	10	0	0	0	0	0	0	0	10	\$ 2,170	\$ 22	\$ 22	\$ 2,192	0	0	0	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ 2,268								
Task 7 - Additional Services																																		
	7.1 Intraday Gas Production and Storage Evaluation										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	7.2 Gas storage specification development										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	7.3 Co-digestion Financial Evaluation										0	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -				\$ -	\$ -	\$ -								
	7.4 Biogas Management Review and Optimization Support		12	20	40	15	32		4		123	\$ 21,615	\$ 216	\$ 216	\$ 21,831				\$ -	\$ -				\$ -	\$ -	\$ 22,588								
	Sub-total	0	12	20	40	15	0	32	0	4	0	123	\$ 21,615	\$ 216	\$ 216	\$ 21,831	0	0	0	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ 22,588							
Hours		5	22	141	502	135	60	144	40	14	40	1,103							149	20	10				60	75	10							
Fee		\$ 1,190	\$ 4,774	\$ 36,237	\$ 69,276	\$ 13,635	\$ 7,080	\$ 28,512	\$ 6,200	\$ 1,750	\$ 3,280		\$ 171,934	\$ 1,719	\$ 1,719	\$ 173,653	\$ 22,350	\$ 1,200	\$ 600	\$ 24,150	\$ 24,150	\$ 8,400	\$ 7,725	\$ 800	\$ 16,925	\$ 16,925								
Escalation												\$ 6,018																						
Sub-consultant Budget w/ Mark-up																											\$ 25,358						\$ 17,771	
Total Non-Contingency																																		\$ 222,800