AMENDMENT NO. 4

CONTRACT NO. 30002215

FOR

SW 86TH AVENUE PUMP STATION AND APPURTENANCES

This Contract was made and entered by and between Brown and Caldwell, 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. Additional compensation is necessary and shall not exceed \$164,634. The amended not-to-exceed contract amount is \$3,096,180.
- 2. Additional work is necessary and is described in the following modifications to the Scope of Work:

PROJECT E09051 SW 86th Avenue Pump Station and Appurtenances

E09051 – Task 1.0 Project Management

Additional work is required to complete the Project Management task due to the additional work described in this contract amendment.

E09051 – Task 3.0 Permitting and Public Outreach

Additional services are required to complete the Permitting and Public Outreach task. These services include the following activities:

E09051 – Task 3.1 Permitting

Washington County changed out staff assigned to the building permitting plan reviews on two occasions during the permit review process and during one of the changes, lost supplemental information that had been supplied to the County in support of the application. As a result the completion of the permit review process required significant additional effort on the part of the Contractor to brief the Washington County replacement staff about the project and provide or replace additional information required by the Washington County reviewers.

E09051 – Task 4.0 Final Design

Additional services are required to complete the Final Design task. These services include the following activities:

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E09051 – Task 4.9 SW 86th & SW 84th Avenue Road Improvement Designs

Geotechnical investigations are required to complete the design of the SW 86th & SW 84th Avenue road improvements. The purpose of these investigations is to identify any geotechnically related design and construction issues associated with the site relative to the proposed project.

Office Review: Prior to conducting the field exploration portion of the project, a review of existing geotechnical and geological information available shall be undertaken. Review shall include published geology maps, NRCS soil surveys, and past geotechnical reports for the area.

Field Reconnaissance: After completing the document review, a surface geologic reconnaissance of the site shall be undertaken. Available portions of the site shall be walked to observe surface manifestations of geotechnically related issues associated with the proposed site development. This reconnaissance shall include the condition of surface improvements (evidence of past settlement or failure), surface vegetation, surface fills, soil exposures, springs or seeps, soft ground, and evidence of slope movement.

Subsurface Explorations: Complete a series of boring explorations to evaluate existing pavements and soils and groundwater at depth. Drilling shall be conducted with a trailer mounted, solid-stem drilling rig. Borings shall be advanced to a depth of 10 feet below the ground surface. As the borings will be located in the Washington County right-of-way, a street use permit which shall be obtained that will entail preparing a traffic control plan and providing traffic control during drilling. It is anticipated that two to five borings will be completed in a day of drilling.

Analysis and Report: Comprehensive descriptions of subsurface conditions shall be prepared by a Geologist or Engineer. The information developed from these logs will be used in the evaluation of site soil conditions. Subsequent to design and analysis, a geotechnical report for the project shall be prepared. The report shall include a description of native and fill soils present on the site and their potential impacts on subgrade preparation and pavement design. Issues to be addressed include stormwater disposal, site preparation, stripping depths, wet weather and dry weather grading, subgrade preparation, foundation support, and pavement designs prepared in accordance with Washington County requirements.

Additional E09051 - Task 4 Deliverables:

Geotechnical report

E09051 – Task 6.0 Services during Construction

Additional services are required to complete the Services during Construction task. After the bids have been opened and the Construction Contractor selected, Contractor shall generate conformed drawings and specifications incorporating changes made to the contract drawings by addendum.

At the request of the BES Project Manager, Contractor shall prepare a plan and details for a temporary construction sound mitigation wall. Effort shall include modeling by acoustical engineering firm to develop wall height and density.

Additional E09051 – Task 6 Deliverables:

- Conformed Drawings and Specifications
- Sound wall plan and design details for construction

E10317 – Task 10.0 Garden Home FM Repairs

The major items of work included in Task 10.0 are:

- Review of the existing installed Garden Home section of the Fanno Basin (FABA) pressure pipeline system to identify deficiencies for use with the existing and proposed pumping stations and surge tanks. Review to include an evaluation of the risk of leaving access riser sections in place in either the A (southerly) or B (northerly) pressure line.
- 2. Develop construction documents for the replacement of access riser sections determined to be deficient in Item 1 with an engineered solution compatible with the demands of the current and future pumping stations and surge tanks.
- 3. Develop construction documents for installation of one new pressure monitoring station at about Garden Home STA 39+07 along the 'A' line alignment, approximately 30-feet east of the SW 77th Ave ROW, with connections to both the 'A' and 'B' pressure lines.
- 4. Develop construction documents for all three pressure monitoring stations (one new described in Item 4 above and two existing). These must include:
 - a. Installation of Owner furnished COMM cabinets that will house the pressure monitoring equipment. The Owner furnished COMM cabinets will each contain a fiber patch panel, a power supply, a Hirschman switch, and two data accumulators.
 - b. Two 2" conduits from the pressure monitoring MH to the location of the COMM cabinet. BES staff will install the two pressure transducers and wiring to the COMM cabinet at each pressure monitoring station.
 - c. One 2" conduit with innerducts from the COMM panel to the nearest fiber optic vault.

- d. The fiber drop connection of all three pressure monitoring stations to the FABA PS fiber optic communications cable will be performed by the Owner.
- 5. Installation of PGE power service to all three (one new, two existing) pressure line monitoring stations. Contractor will coordinate with PGE to provide service to the sites, the drawings must include:
 - a. Underground conduit or service drop.
 - b. Meter main/base.
 - c. Any other elements required to complete the PGE service installation.
- 6. Services during bidding and construction of the access riser replacements and pressure monitoring stations. Work to include:
 - a. Services during Bidding. Provide written responses to all questions and requests for information or clarifications, and assist BES with the preparation of any required addenda to the Contract Documents.
 - Services during Construction. Provide construction submittal reviews with written responses, review and respond to construction contractor requests for information / clarification (RFI/RFC), and prepare any required design clarifications.

E10317 – Task 10 Assumptions:

- Access risers will be replaced with straight pipe spools similar to Detail A, STEEL SPOOL INSERT on Sheet C402 from Project E10477.
- The installation of the new pressure monitoring station will be similar to Detail 3 PRESSURE MONITORING STATION on Sheet D02 from Project E09115
- City staff are available to review Contractor work deliverables in a timely fashion
- City to prepare front end documents, Contractor to prepare Division 1 and technical specs.
- City to administer the bid phase.
- City to administer the construction contract including inspections and record keeping.
- Submittal reviews assumed to require 60 hours of effort and RFIs/RFCs to require 60 hours of effort.

E10317 – Task 10 Deliverables:

- Technical Memorandum recommending access riser replacement strategy (draft and final).
- Construction document packages for the access riser replacements, new pressure monitoring station, modifications to two existing pressure monitoring stations, and PGE service to all three pressure monitoring stations. Packages to be prepared for review at the 30% and 90% levels.
- One camera-ready set of construction documents.
- Text providing responses to clarifications and addenda items.
- Submittal reviews and responses to RFIs and RFCs.

The payment schedule is revised as follows:

Task #	Task Name/Description	Current Budget Amounts	Amendment No. 4 Amounts	Adjusted Task Budget Amounts
1.0	Project Management	\$98,671	\$14,129	\$112,800
2.0	Basis of Final Design	\$32,751	\$0	\$32,751
3.0	Permitting and Public Outreach	\$326,800	\$13,400	\$340,200
4.0	Final Design	\$1,698,000	\$7,145	\$1,705,145
5.0	Services During Bidding	\$25,210	\$0	\$25,210
6.0	Services During Construction	\$275,842	\$9,460	\$285,302
7.0	Services During Startup/Closeout	\$116,472	\$0	\$116,472
8.0	FABA Submersible Pump Replacement	\$93,500	\$0	\$93,500
9.0	FABA PS FM Hydraulic Surge Tank	\$264,300	\$0	\$264,300
10.0	Garden Home FM Repairs	\$0	\$120,500	\$120,500
	TOTALS	\$2,931,546	\$164,634	\$3,096,180

Payment Schedule – Project & Project Task Budget Adjustments

3. <u>M/W/ESB Participation:</u>

The following table summarizes the Contractor's amended M/W/ESB subconsultant participation

Subconsultant	M/W/ESB Certifications	Scope/Type of Work	Current Subcontract Amounts	Amendment No. 4 Amended Subcontract Amounts
Greenbusch Group	WBE	Acoustical Engineering	\$24,835	\$26,835
JLA Public Involvement	DBE/WBE	Public Involvement	\$84,000	\$84,000
MEC Electrical Engineering	ESB	Electrical CADD	\$142,340	\$142,340
Shur Architects	ESB	Architectural Design	\$183,542	\$183,542
Superelevation	DBE/MBE/ESB	CADD	\$144,160	\$169,160
Vigil-Agrimis ¹	DBE/MBE	Civil Design and Permitting	\$497,860	\$497,860
	M/W/ESE	\$1,076,737	\$1,103,737	
	Amended Co	\$2,931,546	\$3,096,180	
M/W/ESB Perce	entage of the Ame	36.7%	35.7%	

¹Vigil-Agrimis was purchased by Environmental Science Associates in June 2013 and as a result, ESA Vigil-Agrimis, no longer qualifies as a DBE/MBE. Their contract amounts are shown on this table as they did qualify when their contract for this work was authorized.

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

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Contract No. 30002215 Amendment/Change Order No. 4

Contract Title: SW 86th Avenue Pump Station and Appurtenances

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.

BROWN AND CALDWELL

By:

Name:__ Terry C. Gould

Title: Vice President

Date:

Contract No. <u>30002215</u> Amendment/Change Order No. <u>4</u>

Contract Title: SW 86th Avenue Pump Station and Appurtenances

CITY OF PORTLAND SIGNATURES:

By:	n G Bureau Director	Date:	
By:	Purchasing Agent	Date:	
By:	Elected Official	Date:	
Approv	ed:		
By:	Office of the City Auditor	Date:	<u>.</u>
Approve	ed as to Form:		
By:	Office of City Attorney	Date: 12/18/	13