187451

AMENDMENT NUMBER 5

CONTRACT NUMBER 30003097

FOR

Tryon Creek Trunk Sewer Upgrade

This Contract was made and entered by and between BergerABAM, Inc., hereinafter called Consultant, 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 **$325,024.80**. The amended not-to-exceed total contract amount is $**1,069,353.54**.

2. The Scope of Work is amended to include the following additional work:

General Notes

This amendment is based on the following assumptions:

- Services will resume on or about 1 September 2015 and design phase services will be complete by 30 April 2016.
- The project will advertise for bids in spring 2016.
- Construction will occur in summer 2016.
- Prior to this amendment, Consultant submitted 60% design documents to the City, and was near complete with the 90% design documents.
- This amendment includes new design elements related to stream habitat enhancements. These new design elements are a relatively significant part of the new scope of the project, therefore, an additional submittal will be required to allow City review of the design. This will be known as the 75% submittal and will be in addition to submittals previously scoped.

Task 1.8 – Amendment 4 - Project Meetings

This task includes additional 34 weeks of design phase team meetings (reference Task 1.4). It is anticipated that 18 such meetings will occur over the additional 39 week design period through 30 April 2016.

Deliverables: *Meeting agendas and minutes*

Task 1.9 – Amendment 4 - Project Management and Coordination

This task includes the additional project management and coordination services (reference Task 1.2) required due to an extension of the design phase an additional 34 weeks. This includes updates to the project schedule.

Deliverables: *Monthly invoices and project schedule updates*

Task 3.5.1 – Update Joint Permit Application

The project team will develop design graphics for the stream enhancement techniques in support of the Joint Permit Application (JPA) for submittal to the USACE and DSL. The design team will collaborate in development of stream enhancement design. Design graphics will include project location, pre- and post-construction plan views, cross-sections, restoration plans, plantings plans, and erosion control plans. Design graphics will be 8 ½ by 11 inches in size as required for submittal to the Corps.

After design development plans have been completed for the project, Consultant will update the Joint Permit Application (JPA) to address project descriptions, anticipated temporary stream impacts, quantities of fill, etc. associated with the stream enhancements. Once updated, the JPA form will be submitted to the USACE, DEQ, and DSL for application of the Section 404 Nationwide Permit/Section 401 Water Quality Certification and DSL Removal/Fill permits.

The Corps' Section 404 Nationwide permit application will include necessary USACE forms, background information in the form of supporting documents (wetland and other waters delineation report, hydraulic analysis, biological assessment, and others), and associated graphics. This task assumes that the stream enhancements are eligible for a Nationwide #27 – Aquatic Habitat Restoration, Establishment, and Enhancement Activities permit that addresses stream restorations provided the proposed activities results in a net increase in aquatic resource functions and services.

Applicants receiving a Section 404 permit from the Corps are required to obtain section 401 water quality certification from DEQ. Under this task, Consultant will forward applicable application material to DEQ in advance of the Section 404 authorization from the USACE for the issuance of the Section 401 permit. Upon receipt of the Section 404 and Section 401 permits, Consultant will distribute copies of the documents to the project team for reference and incorporation into any final construction documents and bid specifications.

The updated JPA packet will also be submitted to DSL for a removal/fill permit request. This removal/fill permit regulates activities that involve fill and/or removal of more than 50 cubic yards in waters of the state (wetlands and waterways) or any amount of removal/fill in a stream designated as essential salmon habitat (e.g. Tryon Creek). Under this task, Consultant will coordinate with DSL for the issuance of the removal/fill permit. Upon receipt of the removal/fill permit, Consultant will distribute copies of the document to the project team for reference and incorporation into any final construction documents and bid specifications.

Assumptions:

- Proposed stream enhancements will compensate for trunk sewer upgrade elements and a compensatory mitigation plan will not be required
- Application fees will be paid by the client
- One round of client review will occur prior to application submittal
- 75 percent design drawings is sufficient to initiate permit documents and determine project impacts to regulated waters of the US
- Fee includes up to 10 hours of senior scientist coordination with agency staff after submittal, including but not limited to Corps, DSL, DEQ, and ODFW staff.
- No new archaeological or cultural resource investigations will be required for the Oregon State Historic Preservation Office (SHPO) Section 106 consultation with the Section 404 permit. If SHPO requires additional information regarding potential cultural resources within the project area, this information will come from past studies conducted by the Oregon State Parks Department, City of Portland, City of Lake Oswego or other available sources.

Deliverables:

- Joint Permit Application form, including supporting information, area map, and permit graphics set (8 ½ x 11 inch set).

Task 3.6.1 – Update Biological Assessment/Essential Fish Habitat Analysis

In our initial scope of services, a biological assessment (BA) with Essential Fish Habitat (EFH) analysis was prepared for the project to address project effects on Endangered Species Act (ESA) listed species and/or critical habitat. The EFH analysis assessed project impacts on species with commercial and recreational importance that are federally managed under a fishery management plan under the Magnuson-Stevens Act. The BA and EFH analysis will be updated to reflect the project effects from the proposed stream enhancements, including construction methods and project elements. Based on the proposed stream enhancements the BA will be updated for review by the USACE and consultation with USFWS and NMFS.

Assumptions:

- The agencies will not require formal species specific protocol surveys to determine species presence.

Deliverables:

- Preparation of one updated draft BA with EFH analysis for Client review
- Preparation of one updated final BA with EFH analysis based on Client comments

Task 3.7.1 – Updated Lake Oswego Land Use Permitting

In our original scope of services, BergerABAM anticipated that a Type 2 (Minor) Tree Permit would be required of the project due to tree removal necessary to establish construction access to the work zone. The project narrative and tree cutting permit application form will be updated to include the stream enhancement elements and revise the number, species, and location of any additional trees that will need to be removed as part of the stream enhancements. Upon receipt of the final staff report Consultant will distribute copies of the document to the project team for reference and incorporation into any final construction documents and bid specifications.

Assumptions:

- Permit application fees are the responsibility of BES.
- No neighborhood meetings will be conducted under this task. If a neighborhood meeting is required by the City prior to permit submittal, a public meeting held following the 75% design stage will satisfy this requirement.
- BES review of the updated permit application and project narrative will be limited to one round of review
- Coordination with Oregon Parks and Recreation Department for application review and signature is the responsibility of BES
- Any efforts to address project appeals, if filed, will be handled by BES unless Consultant is authorized under a separate scope of services.

Deliverables:

- Draft Type II Tree Removal Permit Application Form provided to BES for review
- Final Type II Tree Removal Permit Application Form provided to BES
- Draft Project Narrative provided to BES for review
- Final Project Narrative
- Tree Removal Permit Plans
- Distribution of final staff report and decision to the project team

Task 3.7.2 – Lake Oswego Floodplain Permitting and CLOMR Submittal

In our second contract amendment, BergerABAM anticipated a net fill in the floodplain, but the fill would not result in a net rise in the base flood elevation. It was anticipated that the net fill within the 100-year floodplain would result in the need for a development review for consistency with the Floodplain Management Area provisions in LOC 50.05.011. As determined through preliminary design, it is now expected that the NW Section of the project will require net fill within the 100-year floodplain for various stream enhancement projects that will result in a net rise in base flood elevation of more than one foot. As a result of this anticipated rise in the base flood elevation, a Conditional Letter of Map Revision (CLOMR) and a Letter of Map Revision (LOMR) will be required. The CLOMR determines what affect the project will have on neighboring properties and endangered species and the LOMR revises the Flood Insurance Rate Maps and Flood Insurance Study to reflect the actual as-built change in the Special Flood Hazard Area and any change in base flood elevation. Lake Oswego allows development permits to be submitted concurrently with the CLOMR submittal to FEMA, but any approval would be conditioned upon FEMA's determination in the CLOMR process.

A minor development review will be required with Lake Oswego for a resource enhancement project and fill in the Flood Management Area greater than 10 cubic yards. This will include a revision to the permit application prepared in July 2014 and subsequent submittal and coordination with the City of Lake Oswego. Upon receipt of the final staff report issued by the City of Lake Oswego, the Consultant will distribute copies of the document to the project team for reference and incorporation into any final construction documents and bid specifications. City provisions included in LOC 50.07.003.1.g(iii) and state provisions codified in ORS 227.178 requires that a final local decision is issued on the minor development review request within 120-days of the date in which the application is deemed complete.

Given the significance of the changes in the project and the time that has passed since the Pre-Application Conference in October 2013, it is assumed that another Pre-Application Conference or a coordination meeting will be required with the City of Lake Oswego.

Assumptions:

- Total net fill below the base flood elevation in the NW section will be greater than 10 cubic yards.
- Application fees will be paid by BES
- Public outreach efforts will be covered by BES staff or addressed in a separate scope of services.
- If an appeal is filed, BergerABAM public outreach efforts to address the appeal(s) will be covered in a separate scope of services.
- BES review of the updated permit application and project narrative will be limited to one round of review
- Coordination with Oregon Parks and Recreation Department for application review and signature is the responsibility of BES
- LOMR submittal is not included in this scope of services.
- Construction/grading permits are not included in this scope of services

Deliverables:

- Submittal of Pre-Application Conference request to the City of Lake Oswego
    - Draft and Final Pre-Application Conference Application Form and Materials provided to BES for review and signature
- Attendance by 1 Planner and 1 Engineer at Pre-Application Conference or project coordination meeting with City of Lake Oswego staff.
- Submittal of CLOMR to FEMA, including coordination with City of Lake Oswego staff.
    - Draft and Final Application Forms provided to BES for review and signature
- Minor Development Application Revision and submittal
    - Draft and Final Project Narratives provided to BES for review
    - Draft and Final Application Forms provided to BES for review and signature
- Distribution of final staff report and decision to the project team

Task 6.2.1 – 75% Design (PS&E)

The Consultant will develop ten new habitat enhancement schemes and modify one of the two current habitat enhancement schemes. The ten new habitat enhancement schemes are currently at the 0%

design stage and will be advanced to 75%, integrated with the balance of the project, and submitted as a complete project review set at the 75% level of completion. The subtasks necessary to accomplish this are given below.

Task 6.2.1.1 – Field Investigations

The project team will perform up to two site visits for the purpose of site reconnaissance in the vicinity of the proposed habitat enhancements, and to establish the scope of additional topographic survey that may be required.

The consultant will provide BES with up to two survey requests. Surveying services are to be performed by others.

Field investigation notes will be compiled for inclusion with deliverables described in other tasks.

Deliverables: None. This is an activity task. Field investigation notes will be incorporated into deliverables elsewhere (i.e., Geotechnical Report Addendum and Final Design Report)

Task 6.2.1.2 – Habitat Enhancement Schematic Design

The following table lists the twelve different habitat enhancement elements that will be advanced to 75% design.

No.	Approx. Location (Pipe Stations)	Description	Primary Design	Contributing Design	Status
1	Lwr. Access Rd. Sta. 22+50	LWD	Henderson	GRI, ABAM	New
2	Near MH C-12 Sta. 24+25	LWD	Henderson	GRI, ABAM	New
3	Near MH C-12a Sta. 25+60	Low-flow channel cut + rock weir	Henderson	GRI, ABAM	New
4	Sta. 26+00	Remove concrete debris	ABAM	N/A	New
5	Sta. 27+00 to Sta. 28+00	Large rock grade control	Henderson	GRI, ABAM	New
6	Sta. 27+60	Cable Crossing Removal	ABAM	N/A	Current
7	Sta. 28+50 to Sta. 29+50	Rock grade control	Henderson	GRI, ABAM	New
8	Sta. 29+00 to Sta. 30+00	Low-flow channel cut	Henderson	GRI, ABAM	New
9	Sta. 29+50	Fish hazard refugia	Henderson	GRI, ABAM	Modification
10	Sta. 30+50	Rock outcrop cut	GRI	Henderson, ABAM	New
11	Opposite Upper Access Rd.	Mitigation tree planting for creek shading	ABAM	N/A	New
12	Upper Access Rd.	LWD	Henderson	GRI, ABAM	New

Because of the confined channel and the presence of the trunk sewer and its supporting structures, it will almost certainly not be possible to design the habitat enhancements to meet published fish passage design guidelines as they pertain to Endangered Species Act (ESA) listed species. Instead, the habitat enhancement elements will be designed to aspire to provide additional fish rearing opportunities. These

rearing opportunities will be primarily in the form of refuge during high flow events.

Increased passage opportunities may be possible for resident (non-listed) trout that may be in the reach year-round. In this case, enhancement elements will be designed to increase the possibility of passage during creek flows in the range of 0.5 cubic feet per second (cfs) to 4 cfs. For these new elements, the design will attempt to limit the fish jump height to 6 inches or less, however, design for limitation of jump height must be compatible with the project goal of protecting the trunk sewer from scour. In other words, design features that benefit passage but put the trunk sewer at increased risk of scour will not be included in the design.

Deliverables: None. This is an activity task.

Task 6.2.1.3 – Geotechnical Report Addendum – Habitat Enhancements

Items to be addressed will be stability of banks in areas where LWD will be installed, anchoring of LWD to resist creek shear forces determined by the Shear Force Hydraulic Analysis, stability of creek bed in areas where low-flow channels will be cut, and constructability of habitat enhancements in terms of probable equipment that will be used to perform the geotechnical related portions of the habitat enhancements.

Deliverables: Draft and Final Geotechnical Report Addendum Memorandum

Task 6.2.1.4 – Shear Force Hydraulic Analysis

The consultant will perform a shear force hydraulic analysis for the purpose of determining anchorage demands for LWD, rock weirs, grade control, or other features related to the habitat enhancement elements.

Deliverables: Shear Force Hydraulic Analysis Technical Memorandum

Task 6.2.1.5 – Conceptual Design Memorandum – Habitat Enhancements

Consultant will prepare a brief memorandum containing a description of all 12 habitat enhancement elements, with accompanying conceptual sketches. This memorandum will be submitted to BES in draft form for review and comment. The consultant will revise the memorandum based on comments received from BES and will finalize and submit the memorandum to BES. This memo will subsequently be used by the consultant team as part of the presentation at Streamlining Committee Meeting #4 (scoped previously) and by the City at public or stakeholder meetings.

After submittal of the final memo to BES, any modification to the habitat enhancement concepts, including, but not limited to, the number of enhancements, their locations, the type of enhancement, or the purpose of the enhancement, will require a modification to this scope of services.

Deliverables: Draft and Final Conceptual Design Memorandum – Habitat Enhancements

Task 6.2.1.6 – 75% Design Submittal

75% documents will consist of plans, specifications, a bid item list, and an opinion of probable construction cost. All habitat enhancement elements will be incorporated into the overall project documents and submitted to BES at the 75% stage of completion for review and comment.

Deliverables: 75% design documents in Adobe pdf, MS Word, and MS Excel formats

Task 6.3 – 90% Design (PS&E and Draft Final Design Report)

Consultant will incorporate habitat enhancement elements into project documents and will submit 90%

documents according to the original scope of services.

Deliverables: Same as original scope of services.

Task 6.4 – 100% Design (PS&E and Final Design Report)

Consultant will incorporate habitat enhancement elements into project documents and will submit 100% documents according to the original scope of services.

Deliverables: Same as original scope of services.

Task 7 – Services during Construction

The scope of services during construction was initially established in Amendment No. 2. This amendment establishes the additional scope of services during construction associated with the addition of the 10 new habitat enhancement elements.

The scope includes the review of up to 20 additional submittals and up to 20 additional RFIs for the Trunk Sewer Upgrade construction contract. Also included are up to two (2) additional site visits, review of special inspection reports, and attendance at up to four (4) additional construction meetings.

Additional geotechnical services during construction will include on-site observation of rock excavation for low-flow channels, excavation of the rock outcrop, and anchorage of LWD and boulders.

Construction services may include the need for on-site direction of contractor activities, by the consultant, regarding placement of boulders, large woody debris, or other stream enhancement elements.

Assumptions:

- BES will provide all construction management and the City of Portland will provide all special inspection services. Consultant services will be performed only at the direction of the BES construction manager or project manager.
- The extent of consultant services required during construction is highly dependent upon the experience and skill of the general contractor selected to build the project. As such, the fee budget provided is an estimate.

Deliverables:

- Submittal review responses and responses to RFIs.
- Structural observation reports.

Task 8 – Conditional Letter of Map Revision (CLOMR)

Consultant will Review available hydrologic data and prepare for use in the hydraulic model. Provide detailed and updated existing conditions and proposed conditions hydraulic modeling of project reach, prepare a floodplain map, and prepare and submit to FEMA documents necessary to apply for a Conditional Letter of Map Revision (CLOMR).

Assumptions:

- Hydrologic data will be provided by the City of Portland and/or the City of Lake Oswego
- City of Portland will provide all necessary topographic survey and mapping of project reach

- Topographic survey will be detailed with contour intervals no greater than one foot
- Project reach for the CLOMR will extend upstream and downstream of the actual project boundaries

Deliverables:

- Hydrologic data summary for inclusion in the hydraulic model and technical memorandum
- Existing conditions hydraulic model for project reach (electronic files)
- Proposed conditions hydraulic model for project reach (electronic files)
- Existing and proposed conditions floodplain maps for project reach
- FEMA CLOMR document preparation and submittal

Task 12 - BES Managed Foreseen Additional Work Items

This task is provided to respond to foreseen additional tasks. The funds in this task may be authorized by BES for additional work if needed as follows:

12.1 - Discretionary Workshop

If needed, an additional workshop will be conducted to complete design evaluation and/or value engineering.

12.2 - Additional Meetings

This task provides for additional meetings in relation to permits that may be required with regulatory agencies or City personnel.

12.3 - Additional reports or design revisions

This task provides for additional reports or engineering design associated with addressing permit conditions.

12.4 - Additional Services During Construction

The base assumption is that construction can be completed during one summer season (summer 2016). However, if two seasons are required, this task provides the additional time needed to support the activities during the second construction season, and/or if differing site conditions are uncovered during construction that require additional engineering analysis and design.

3. The Project Task Budget amounts are adjusted as shown in the table below:

Task	Description	Original Task Budget Amounts	Amend. No. 1 Amounts	Amend. No. 2 Amounts	Amend. No. 4 Amounts	Amend. No. 5 Amounts	Adjusted Task Budget Amounts
1	Project Management	$54,532.14	$650.53	$13,426.00	$4,489.98	$27,798.74	$100,897.39
2	Public Outreach	$47,938.43	($15,413.81)	-	-	-	$32,524.62
3	Permitting	$76,680.74	-	$43,951.49	$2,671.20	$39,878.34	$163,181.77
4	Field Investigation	$72,688.57	($3,121.21)	-	-	-	$69,567.36
5	Alternatives Analysis	$84,957.96	$18,535.02	-	-	-	$103,492.98
6	Final Design	$134,612.15	$5,001.66	$81,232.34	$25,059.14	$128,980.34	$374,885.63
7	Construction Services	-	-	$119,911.98	($32,220.32)	$44,822.56	$132,514.22
8	CLOMR	-	-	-	-	$25,731.39	$25,731.38
11	Justification for Design Change	-	-	$8,744.75	-	-	$8,744.75
12	BES Managed Foreseen Additional Work	-	-	-	-	$57,813.44	$57,813.44
Total Contract Amount		**$471,409.99**	**$5,652.19**	**$267,266.56**	**-**	**$325,024.80**	**$1,069,353.54**

Amendment No. 3 extended the contract end date to August 31, 2016, with no adjustment to the fee.

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 Consultant may conduct this transaction by electronic means, including the use of electronic signatures.

BergerABAM, Inc.

By: _____ Date: _____

Name: _____

Title: _____

Contract Number: 30003097 **Amendment Number:** 5

Contract Title: Tryon Creek Trunk Sewer Upgrade

CITY OF PORTLAND SIGNATURES:

By: _____ Date: _____
Chief Procurement Officer

By: _____ Date: _____
Elected Official

Approved:

By: _____ Date: _____
Office of City Auditor

Approved as to Form:

By: _____ Date: _____
Office of City Attorney