

RESOLUTION NO. 16-1101

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, KING COUNTY, WASHINGTON AUTHORIZING THE MAYOR TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH PARAMETRIX, INC. FOR THE DESIGN OF THE COVINGTON CREEK CULVERT REPLACEMENT PROJECT

**WHEREAS**, the City has planned for capital improvements to the Covington Creek Culvert; and

**WHEREAS**, Public Works staff was successful in receiving a Flood Reduction Grant from King County to fund the design for the Covington Creek Culvert Replacement project; and

**WHEREAS**, the City is in need of design services for the Covington Creek Culvert Replacement project; and

**WHEREAS**, the City went through a competitive selection process to select a consultant to perform the design services for the Covington Creek Culvert Replacement project; and

**WHEREAS**, Parametrix, Inc. was selected as the most qualified to complete the design work associated with the Covington Creek Culvert Replacement project;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, DOES RESOLVE AS FOLLOWS:**


**Section 1.** The Mayor is hereby authorized to execute a professional services agreement with Parametrix, Inc. for the development of design and bid materials for the Covington Creek Culvert Replacement project; substantially in the form attached hereto.

**PASSED BY THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 16TH DAY OF JUNE, 2016.**

CITY OF BLACK DIAMOND:

  
\_\_\_\_\_  
Carol Benson, Mayor

Attest:

  
\_\_\_\_\_  
Brenda L. Martinez, City Clerk

**CITY OF BLACK DIAMOND PROFESSIONAL SERVICES AGREEMENT**

THIS Agreement is made effective as of the 17<sup>th</sup> day of June, 2016, by and between the City of Black Diamond, a municipal corporation, organized under the laws of the State of Washington, whose address is:

CITY OF BLACK DIAMOND, WASHINGTON (hereinafter the "CITY")  
24301 Roberts Drive  
Black Diamond, WA 98010  
Contact: Mayor Carol Benson Phone: 360-886-5700 Fax: 360-886-2592

and Parametrix, Inc., a Corporation, organized under the laws of the State of Washington, doing business at:

PARAMETRIX, INC. (hereinafter the "CONSULTANT")  
1019 39th Avenue SE, Suite 100  
Puyallup, WA 98374

Contact: Austin R. Fisher, P.E. Phone: 253-604-6600 Fax: 855-542-6353

for professional services in connection with the following Project:

Covington Creek Culvert Replacement

**TERMS AND CONDITIONS**

**1. Services by Consultant.**

A. Consultant shall perform the services described in the Scope of Work attached to this Agreement as Exhibit "A." The services performed by the Consultant shall not exceed the Scope of Work without prior written authorization from the City.

B. The City may from time to time require changes or modifications in the Scope of Work. Such changes, including any decrease or increase in the amount of compensation, shall be agreed to by the parties and incorporated in written amendments to the Agreement.

**2. Schedule of Work.**

A. Consultant shall perform the services described in the Scope of Work in accordance with the Schedule attached to this contract as Exhibit "A." If delays beyond Consultant's reasonable control occur, the parties will negotiate in good faith to determine whether an extension is appropriate.

B. Consultant is authorized to proceed with services upon receipt of a written Notice to Proceed.

3. **Terms.** This Agreement shall commence on June 17, 2016, (“Commencement Date”) and shall terminate on June 30, 2017, unless extended or terminated in writing as provided herein.

4. **Compensation.**

X TIME AND MATERIALS NOT TO EXCEED. Compensation for these services shall not exceed \$108,874.50 without written authorization and will be based on billing rates and reimbursable expenses attached hereto as Exhibit B.

5. **Payment.**

A. Consultant shall maintain time and expense records and provide them to the City monthly after services have been performed, along with monthly invoices in a format acceptable to the City for work performed to the date of the invoice.

B. All invoices shall be paid by City warrant within sixty (60) days of receipt of a proper invoice. If the City objects to all or any portion of any invoice, it shall so notify the Consultant of the same within fifteen (15) days from the date of receipt and shall pay that portion of the invoice not in dispute, and the parties shall immediately make every effort to settle the disputed portion.

C. Consultant shall keep cost records and accounts pertaining to this Agreement available for inspection by City representatives for three (3) years after final payment unless a longer period is required by a third-party agreement. Copies shall be made available on request.

D. On the effective date of this Agreement (or shortly thereafter), the Consultant shall comply with all federal and state laws applicable to independent contractors, including, but not limited to, the maintenance of a separate set of books and records that reflect all items of income and expenses of the Consultant’s business, pursuant to Revised Code of Washington (RCW) 51.08.195, as required by law, to show that the services performed by the Consultant under this Agreement shall not give rise to an employer-employee relationship between the parties, which is subject to Title 51 RCW, Industrial Insurance.

E. If the services rendered do not meet the requirements of the Agreement, Consultant will correct or modify the work to comply with the Agreement. City may withhold payment for such work until the work meets the requirements of the Agreement.

6. **Discrimination and Compliance with Laws**

A. Consultant agrees not to discriminate against any employee or applicant for employment or any other person in the performance of this Agreement because of race, creed, color, national origin, marital status, sex, age, disability, or other circumstance prohibited by federal, state, or local law or ordinance, except for a bona fide occupational qualification.

B. Even though the Consultant is an independent contractor with the authority to control and direct the performance and details of the work authorized under this Agreement, the work must meet the approval of the City and shall be subject to the City’s general right inspection to secure the satisfactory completion thereof. The Consultant agrees to comply with all federal, state and municipal laws, rules and regulations that are now effective or become applicable within the terms of this Agreement to the

Consultant's business, equipment and personnel engaged in operations covered by this Agreement or accruing out of the performance of such operations.

C. Consultant shall obtain a City of Black Diamond business license prior to receipt of written Notice to Proceed.

D. Violation of this Paragraph 6 shall be a material breach of this Agreement and grounds for cancellation, termination, or suspension of the Agreement by City, in whole or in part, and may result in ineligibility for further work for City.

7. **Relationship of Parties.** The parties intend that an independent contractor-client relationship will be created by this Agreement. As the Consultant is customarily engaged in an independently established trade which encompasses the specific service provided to the City hereunder, no agent, employee, representative or sub-consultant of the Consultant shall be or shall be deemed to be the employee, agent, representative or sub-consultant of the City. In the performance of the work, the Consultant is an independent contractor with the ability to control and direct the performance and details of the work, the City being interested only in the results obtained under this Agreement. None of the benefits provided by the City to its employees including, but not limited to, compensation, insurance, and unemployment insurance are available from the City to the employees, agents, representatives or sub-consultants of the Consultant. The Consultant will be solely and entirely responsible for its acts and for the acts of its agents, employees, representatives and sub-consultants during the performance of this Agreement. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

## 8. Suspension and Termination of Agreement

A. Termination without cause. This Agreement may be terminated by the City at any time for public convenience, for the Consultant's insolvency or bankruptcy, or the Consultant's assignment for the benefit of creditors.

B. Termination with cause. The Agreement may be terminated upon the default of the Consultant.

C. Rights Upon Termination.

1. *With or Without Cause.* Upon termination for any reason, all finished or unfinished documents, reports, or other material or work of Consultant pursuant to this Agreement shall be submitted to City, and Consultant shall be entitled to just and equitable compensation for any satisfactory work completed prior to the date of termination, not to exceed the total compensation set forth herein. Consultant shall not be entitled to any reallocation of cost, profit or overhead. Consultant shall not in any event be entitled to anticipated profit on work not performed because of such termination. Consultant shall use its best efforts to minimize the compensation payable under this Agreement in the event of such termination. Upon termination, the City may take over the work and prosecute the same to completion, by contract or otherwise.

2. *Default.* If the Agreement is terminated for default, the Consultant shall not be entitled to receive any further payments under the Agreement until all work called for has been fully performed. Any extra cost or damage to the City resulting from such default(s) shall be deducted from any money due or coming due to the Consultant. The Consultant shall bear any extra expenses incurred by the City in completing the work, including all increased costs for

completing the work, and all damage sustained, or which may be sustained by the City by reason of such default.

D. Suspension. The City may suspend this Agreement, at its sole discretion. Any reimbursement for expenses incurred due to the suspension shall be limited to the Consultant's reasonable expenses, and shall be subject to verification. The Consultant shall resume performance of services under this Agreement without delay when the suspension period ends.

E. Notice of Termination or Suspension. If delivered to the Consultant in person, termination shall be effective immediately upon the Consultant's receipt of the City's written notice or such date as stated in the City's notice of termination, whichever is later. Notice of suspension shall be given to the Consultant in writing upon one week's advance notice to Consultant. Such notice shall indicate the anticipated period of suspension. Notice may also be delivered to the Consultant at the address set forth in Section 15 herein.

**9. Standard of Care.** Consultant represents and warrants that it has the requisite training, skill and experience necessary to provide the services under this agreement and is appropriately accredited and licensed by all applicable agencies and governmental entities. Services provided by Consultant under this agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing in similar circumstances.

**10. Ownership of Work Product.**

A. All data materials, reports, memoranda, and other documents developed under this Agreement whether finished or not shall become the property of City, shall be forwarded to City at its request and may be used by City as it sees fit. Upon termination of this agreement pursuant to paragraph 8 above, all finished or unfinished documents, reports, or other material or work of Consultant pursuant to this Agreement shall be submitted to City.

B. All written information submitted by the City to the Consultant in connection with the services performed by the Consultant under this Agreement will be safeguarded by the Consultant to at least the same extent as the Consultant safeguards like information relating to its own business. If such information is publicly available or is already in Consultant's possession or known to it, or is rightfully obtained by the Consultant from third parties, the Consultant shall bear no responsibility for its disclosure, inadvertent or otherwise.

**11. Work Performed at the Consultant's Risk.** The Consultant shall take all precautions necessary and shall be responsible for the safety of its employees, agents and sub-consultants in the performance of the work hereunder, and shall utilize all protection necessary for that purpose. All work shall be done at the Consultant's own risk, and the Consultant shall be responsible for any loss or damage to materials, tools, or other articles used or held by the Consultant for use in connection with the work.

**12. Indemnification.** The Consultant shall defend, indemnify and hold the City, its officers, officials, employees, agents and volunteers harmless from any and all claims, injuries, damages, losses or suits, including all legal costs and attorneys' fees, arising out of or in connection with the performance of this Agreement, except for injuries and damages caused by the sole negligence of the City. The City's inspection or acceptance of any of the Consultant's work when completed shall not be grounds to avoid any of these covenants of indemnification.

Should a court of competent jurisdiction determine that this Agreement is Subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, agents and Volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence.

IT IS FURTHER SPECIFICALLY AND EXPRESSLY UNDERSTOOD THAT THE INDEMNIFICATION PROVIDED HEREIN CONSTITUTES THE CONSULTANT'S WAIVER OF IMMUNITY UNDER INDUSTRIAL INSURANCE, TITLE 51 RCW, SOLELY FOR THE PURPOSES OF THIS INDEMNIFICATION. THE PARTIES FURTHER ACKNOWLEDGE THAT THEY HAVE MUTUALLY NEGOTIATED THIS WAIVER. THE CONSULTANT'S WAIVER OF IMMUNITY UNDER THE PROVISIONS OF THIS SECTION DOES NOT INCLUDE, OR EXTEND TO, ANY CLAIMS BY THE CONSULTANT'S EMPLOYEES DIRECTLY AGAINST THE CONSULTANT.

**13. Insurance.** The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

A. Minimum Scope of Insurance

Consultant shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 or a substitute form providing equivalent liability coverage and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named by endorsement as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington and Employer's Liability Insurance.
4. Professional Liability insurance appropriate to the Consultant's profession.

B. Minimum Amounts of Insurance

Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.
4. Employer's Liability insurance each accident \$1,000,000; Employer's Liability Disease each employee \$1,000,000; and Employer's Liability Disease – Policy Limit \$1,000,000.

C. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability, Professional Liability and Commercial General Liability insurance:

1. The Consultant's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.
2. The Consultant's insurance shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.
3. The City will not waive its right to subrogation against the Consultant. The Consultant's insurance shall be endorsed acknowledging that the City will not waive their right to subrogation. The Consultant's insurance shall be endorsed to waive the right of subrogation against the City, or any self-insurance, or insurance pool coverage maintained by the City.
4. If any coverage is written on a "claims made" basis, then a minimum of a three (3) year extended reporting period shall be included with the claims made policy, and proof of this extended reporting period provided to the City.

D. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

E. Verification of Coverage

Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

14. **Assigning or Subcontracting.** Consultant shall not assign, transfer, subcontract or encumber any rights, duties, or interests accruing from this Agreement without the express prior written consent of the City, which consent may be withheld in the sole discretion of the City.

15. **Notice.** Any notices required to be given by the City to Consultant or by Consultant to the City shall be in writing and delivered to the parties at the following addresses:

Carol Benson  
Mayor  
24301 Roberts Drive  
Black Diamond, WA 98010

Phone: 360-886-5700  
Fax: \_\_\_\_\_

PARAMETRIX, INC.  
Attn: David Roberts, P.E.  
Senior Consultant  
1019 39th Avenue SE, Suite 100  
Puyallup, WA 98374

Phone: 253-604-6600  
Fax: 855-542-6353

16. **Resolution of Disputes and Governing Law.**

A. Should any dispute, misunderstanding or conflict arise as to the terms and conditions contained in this Agreement, the matter shall first be referred to the Mayor, who shall determine the term or provision's true intent or meaning. The Mayor shall also decide all questions which may arise between the parties relative to the actual services provided or to the sufficiency of the performance hereunder.

B. If any dispute arises between the City and the Consultant under any of the provisions of this Agreement which cannot be resolved by the Mayor's determination in a reasonable time, or if the Consultant does not agree with the Mayor's decision on a disputed matter, jurisdiction of any resulting litigation shall be filed in King County Superior Court, King County, Washington.

C. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. In any suit or action instituted to enforce any right granted in this Agreement, the substantially prevailing party shall be entitled to recover its costs, disbursements, and reasonable attorney's fees from the other party.

17. **General Provisions.**

A. Non-waiver of Breach. The failure of either party to insist upon strict performance of any of the covenants and agreements contained herein, or to exercise any option herein contained in one or more instances, shall not be construed to be a waiver or relinquishment of said covenants, agreements, or options, and the same shall be in full force and effect.

B. Modification. No waiver, alteration, modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of the City and the Consultant.

C. Severability. The provisions of this Agreement are declared to be severable. If any provision of this Agreement is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other provision.



D. Entire Agreement. The written provisions of this Agreement, together with any Exhibits attached hereto, shall supersede all prior verbal statements of any officer or other representative of the City, and such statements shall not be effective or be construed as entering into or forming a part of or altering in any manner whatsoever, the Agreement or the Agreement documents. The entire agreement between the parties with respect to the subject matter hereunder is contained in this Agreement and the Exhibits attached hereto, which may or may not have been dated prior to the execution of this Agreement. All of the above documents are hereby made a part of this Agreement and form the Agreement document as fully as if the same were set forth herein. Should any language in any of the Exhibits to this Agreement conflict with any language contained in this Agreement, then this Agreement shall prevail.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year set forth above.

CITY OF BLACK DIAMOND,  
WASHINGTON

CONSULTANT

By: Carol Benson  
Carol Benson  
Mayor

By: Brian E. Bunker

Name: ~~David Roberts, P.E.~~ Brian E. Bunker, P.E.

Title: Senior Consultant

Date: 6/17/16

Date: 7/18/16

Attest:

By: Brenda L. Martinez  
Brenda Martinez  
City Clerk

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Carol A. Morris  
City Attorney

## EXHIBIT A SCOPE OF WORK

### City of Black Diamond Covington Creek Culvert Replacement

#### OBJECTIVE

The City of Black Diamond (City) requested that Parametrix prepare contract plans and specifications for replacement of the Covington Creek culverts at Lake Sawyer Road and 224th Avenue SE. The project will also include topographic mapping, Hydraulic Project Approval (HPA) permitting through the Washington Department of Fish and Wildlife (WDFW), hydraulic sizing and analysis of Covington Creek for the culvert replacement, and assistance during bidding and award.

#### SCHEDULE

This scope of services is anticipated to be completed by December 31, 2016.

#### PHASE 1 – COVINGTON CREEK CULVERT REPLACEMENT

Task 1 – Project Management and Quality Assurance/Quality Control

##### Approach

Parametrix will be responsible for continuous tracking and contract administration of this project including preparing monthly invoices, coordination of work efforts with the City's project manager, and coordination with our subconsultants. The Parametrix project manager will maintain routine telephone and email contact with the City's project manager on an as-needed basis with regard to scope, schedule, budget, and invoicing issues.

Independent qualified staff will conduct reviews of all deliverables prior to submittal to the City and/or other regulatory agencies.

##### Deliverables

- Miscellaneous correspondence to document project management issues.
- Monthly progress reports and invoices.

Task 2 – Mapping

##### Approach

Parametrix surveyors will establish horizontal and vertical control and map approximately 250 feet of roadway (125 feet in each direction) in the vicinity of the existing culverts.

Surveyors will map improvements such as edge-of-pavement, storm and sanitary structures, fences, and driveways. In addition to improvements, surveyors will map ground features including tops and toes,

edge-of-water, and significant trees (8-inch or larger). Ground shots will be gathered at sufficient intervals to generate 1-foot contours. Location of wetland flags and ordinary high water mark (OHWM), as defined by Parametrix wetland biologists, will be marked.

Once the field data is complete, a survey technician will process the data and incorporate it into the base map. A licensed surveyor will research public records and construct line work to represent parcel lines and right-of-way limits.

### Assumptions

- The City will send right-of-entry or notice to property owners, if necessary.
- All property lines will be represented as record lines. A boundary survey will not be performed by Parametrix.
- Parametrix will contract with a utility locating firm for underground utility locates.
- Mapping will be limited to a point 25 feet upstream and downstream of the existing culvert location(s).

### Deliverables

- A topographic base map in AutoCAD Civil 3D 2014 format.

### Task 3 – Geotechnical Investigation and Report

#### Approach

Associated Earth Sciences (AES), Inc. will perform a geotechnical assessment in the vicinity of the culvert crossing. The investigation will include the following:

- Advance two borings (one on either side of the existing culvert crossing).
- Perform laboratory testing of on-site soils collected during the site investigation.
- Prepare a draft and final geotechnical report that includes an analysis of AES findings along with recommended design infiltration rates and construction methods and materials.

### Deliverables

The deliverables for this task consist of the following:

- Draft Geotechnical Report in electronic (PDF) format.
- Final Geotechnical Report in electronic (PDF) format.

### Assumptions

- For a list of project assumptions regarding this task, see the attached proposal from AES, Inc.

### Task 4 – Permitting

Parametrix will prepare environmental documentation necessary to obtain permits for the culvert replacement. It is anticipated that environmental permits for this project will be required by the City of Black Diamond, Washington Department of Fish and Wildlife (WDFW), the Corps of Engineers (Corps) and Washington Department of Ecology (Ecology). Parametrix will also prepare documentation to satisfy SEPA (State Environmental Policy Act) with the City of Black Diamond acting as the SEPA lead agency.

*Subtask 4.1 City of Black Diamond Critical Areas Ordinance Permitting*

**Approach**

Parametrix will prepare the information necessary to satisfy the City of Black Diamond's Critical Areas Ordinance (CAO) permitting requirements. The CAO requires the submittal of a Critical Area Report (CAR) that documents potential to critical areas regulated by the City. For this project, these critical areas consist primarily of Covington Creek and associated riparian areas. Parametrix will identify and flag wetland boundaries and riparian/stream OHWMs so that potential impacts to critical areas can be assessed and documented in a CAR. Parametrix will complete the following:

- Identify, delineate, and generally describe wetlands, streams, and buffers in the project area. Any wetlands within the study area will be delineated according to the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the regional supplement.
- Research available background information on wetlands at the site including the *King County Area Soil Survey* and *National Wetland Inventory* data prior to conducting the field work.
- Locate wetland boundaries and stream OHWM in the field and mark with numbered flagging. All delineated wetlands and streams will be documented on a general hand-drawn sketch map for the use of the project survey team.
- Document soil, vegetation, and hydrology conditions as necessary at representative locations throughout the study area to identify wetlands (data plots). The data plots will be identified in the field with labeled flagging. Both wetland and upland data plots will be sampled and the data will be included in a CAR. Data forms for the regional supplement to the *Corps of Engineers Wetland Delineation Manual* will be prepared.
- Wetlands will be rated in accordance with the Department of Ecology's *2014 Washington State Wetland Rating System for Western Washington*.
- A CAR will be written that includes streams and wetlands delineated as part of this task. The CAR will include a mitigation plan for impacts to streams and wetlands along the trail alignment.
- Photograph wetlands, streams, and buffers in the study area, as necessary, to document existing environmental conditions.

**Assumptions**

- Two Parametrix wetland biologists will need 1 day to conduct stream delineation at the project site.
- No wetlands are present at the project site. If wetlands are found to be at the project site, additional scope and budget will be necessary for delineation and documentation.
- The City will procure right-of-entry documentation for all non-City-owned land or right-of-way areas prior to field activities.
- It is assumed that the culvert replacement structure will occupy the same or smaller footprint as the existing culverts so only minimal mitigation may be necessary for impacts. Area for mitigation for impacts to Covington Creek and its buffers will be readily available at the site. If mitigation is determined to not be practicable at the site, additional scope and budget will be necessary for determining an adequate mitigation site.
- The CAR and mitigation plan will be used to satisfy City critical area code requirements.

- The scope assumes one review of the draft CAR by the City.

#### Deliverables

- A sketch map to be provided to the project survey team that locates the wetland boundary flags, OHWM flags, and data plots.
- A draft CAR including a mitigation plan.
- A final CAR including a mitigation plan.

#### *Subtask 4.2 City of Black Diamond Shoreline Master Program Permitting*

#### Approach

The project area is within the Shoreline jurisdiction of Lake Sawyer, which requires a permit for certain activities in accordance with the City's Shoreline Master Program (SMP). The City's SMP allows for exemptions for projects that are considered normal maintenance or repair. Parametrix will prepare documentation to qualify the project as exempt under the SMP as a normal repair activity.

#### Assumptions

- The City will exempt the project under its SMP as a normal repair activity. If a Shoreline Permit is required, additional scope and budget will be required.

#### Deliverables

The deliverables for this task consist of the following:

- Draft and final SMP exemption letter.

#### *Subtask 4.3 WDFW Permitting – Hydraulic Project Approval*

#### Approach

Parametrix will complete a Joint Aquatic Resources Permit Application (JARPA) to apply for a HPA permit. Parametrix will provide draft HPA permit documents to the City for review. Parametrix will make any needed revisions to the draft HPA permit documents prior to submission to WDFW.

#### Assumptions

- The culvert design will be performed in accordance with WDFW's *Design of Road Culverts for Fish Passage* manual.
- Parametrix staff (up to one biologist and one engineer) will meet with WDFW staff in the field prior to submission of the HPA application to discuss the anticipated culvert replacement structure size and to receive WDFW input.
- Existing information will be used to document fish presence and habitat use in the project area. No field surveys for fish will be required.

## Deliverables

The deliverables for this task consist of the following:

- Draft and final JARPA.

### *Subtask 4.4 Federal Permitting – Nationwide Permit*

## Approach

Parametrix will prepare permit application documentation to obtain a Nationwide Permit for work occurring below the OHWM to satisfy requirements of Sections 404 and 401 of the Clean Water Act, as administered by the Corps and Ecology, respectively. Due to the type and magnitude of work anticipated, the project will be covered by a Nationwide Permit 3, Maintenance. Parametrix will submit a JARPA to fulfill the Pre-Construction Notification requirement and will request a jurisdictional determination. Parametrix staff (up to one biologist and one engineer) will meet with the Corps on-site to discuss the project and the Corps' potential jurisdiction.

## Assumptions

- The Corps will not assert jurisdiction over the project. Therefore, Corps-related ancillary studies/documentation, such as a Biological Assessment or a Cultural Resources Survey, will not be required.
- If the Corps asserts jurisdiction and requires supporting studies and/or documentation, additional scope and budget will be required.

## Deliverables

The deliverables for this task consist of the following:

- Draft and final JARPA.

### Task 5 – Preliminary Design

Parametrix will prepare Preliminary Plans and Opinion of Cost for review by the City. The plans will be completed to a level of detail necessary to obtain an HPA permit (and a Corps permit, if necessary) and the design will include a hydraulic analysis for sizing of the new culvert.

## Approach

The Preliminary Plans are anticipated to include the following sheets:

Cover and Legend	2 sheets
Demo and TESC Plans	1 sheet
Plan and Profile	1 sheet
<u>Culvert Plan/Elevation</u>	<u>2 sheets</u>
<b>Total:</b>	<b>6 sheets</b>

Parametrix will prepare an Opinion of Cost for review by the City.

## SCOPE OF WORK (continued)

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The City will work with Parametrix to obtain historical flow data for the outlet from Lake Sawyer to Covington Creek to support the design of a large fish-passable culvert (or land use information for use in estimating flows). Parametrix will use this data to design the culvert using the WDFW Stream Simulation design method. A hydraulic analysis will be performed to size the proposed culvert for high-flow events. Parametrix work activities shall consist of the following:

- One site visit that will include stream survey of long profile, cross sections, and pebble count.
- Survey longitudinal stream channel (thalweg) to a point no further than 25 feet upstream (or to headwaters) and 25 feet downstream of the 224th Avenue stream crossing.
- Maximum of one stream cross section upstream and one cross section downstream of the culvert outside the influence of the culvert or other artificial or unique channel conditions.
- Maximum of three pebble counts (Wolman 1954) in an unmodified reach representative of prevailing stream conditions.
- Hydraulic analysis using Hydrologic Engineering Centers River Analysis System (HEC-RAS) to evaluate the proposed culvert. Geometric data for the model will be based on the topographic survey and the proposed culvert design. Flow data will be based on U.S. Geological Survey (USGS) regression analysis (USGS 2001).
- A scour analysis will be performed for the proposed culvert.

Parametrix will prepare a cover letter summarizing the stream survey and hydrologic, hydraulic, and scour analyses. The letter will state the results of the analysis and recommended dimensions of the culvert or bridge. It will also document the assumptions for the stream design.

### Assumptions

- Comments received from the City following review of the preliminary design will be incorporated into the final design.
- Technical memorandum (hydraulic analysis) will be a maximum of five pages of text and will include appendices for figures and support calculations, as necessary.
- The work included in the final design task assumes that the work required by WDFW will be limited to the area currently occupied by the existing culverts that are being replaced. Additional restoration requirements beyond the limits of the existing culverts may require additional funds to complete.
- No structural calculations are included in this scope of services. It is assumed the project will use a precast three-sided box culvert or similar culvert that is typically designed by the manufacturer.

### Deliverables

- Cover letter and hydraulic culvert sizing calculations in PDF format.
- Preliminary plans in PDF format.
- Preliminary opinion of cost in MS Excel format.

### Task 6 – Final Design

Parametrix will complete the design and prepare plans, contract specifications, and Opinion of Cost for the project. The plans and contract specifications will be prepared in accordance with the City's legal boilerplate and 2016 WSDOT *Standard Specifications for Road, Bridge, and Municipal Construction*.

## Approach

90% Plans are anticipated to include the following sheets:

Cover and Legend	2 sheets
Demo and TESC Plans	2 sheet
Plan and Profile	1 sheet
Culvert Plan/Elevation	2 sheets
Stream Restoration (beneath new culvert)	2 sheets
<u>Details</u>	<u>1 sheets</u>
<b>Total:</b>	<b>10 sheets</b>

Parametrix will refine the Opinion of Cost for consistency with the final plans.

Parametrix will incorporate the City's legal boilerplate and Public Works contract into the Contract Provisions, including a Schedule of Prices based on the Bid Item List and special technical provisions as appropriate for the project.

## Assumptions

- The City will deliver the most recent legal boilerplate and Public Works contract to Parametrix for incorporation into the contract specifications.
- Contract specifications including technical special provisions shall be based on the WSDOT Standard Specifications.
- The work included in the final design task assumes that the work required by WDFW will be limited to the area currently occupied by the existing culverts that are being replaced. Additional restoration requirements beyond the limits of the existing culverts may require additional funds to complete.
- No structural calculations are included in this scope of services. It is assumed that the project will use a precast three-sided box culvert or similar culvert that is typically designed by the manufacturer.
- No landscape or wetland mitigation plans are included in this scope of services.

## Deliverables

- Final plans in PDF format.
- Final contract documents in PDF format.
- Final Opinion of Cost in MS Excel format.

END SCOPE OF SERVICES