

# **Exhibit A**

August 31, 2022

Michael Chambless, Public Works Director City of Snoqualmie PO Box 987 Snoqualmie, WA 98065

Re: Kimball Creek Bridges Restoration Project Otak Project No. 20964

Dear Mr. Chambless:

The City is requesting services to prepare bridge restoration documents for two bridges carrying Meadowbrook Way SE: South Fork Kimball Creek Bridge No. 1413B and East Fork Kimball Creek Bridge No. 1413C. Repairs will be based on previously prepared concept-level recommendations prepared by Otak under a separate contract and will include utility coordination; cultural and historical analysis; permitting and environmental documentation; hydraulic design; civil roadway design, bridge repair design; and development of plans, specifications, and construction cost estimate. The following scope of work details these efforts.

### **SCOPE OF WORK**

### Task 1 - Project Management

Otak's project manager will provide direction and coordinate preparation of deliverables. The project manager will monitor the project planned budget and schedule versus actual progress and take corrective actions if necessary. Otak will prepare and submit monthly invoices and a brief progress report to reflect progress over the last billing period. Otak's project manager will maintain regular communication with the City's project manager.

### Assumptions:

Level of effort assumes 26 months of work.

#### Deliverables:

Monthly invoices and progress reports will be prepared and submitted to the City.

#### Task 2 — Utility Coordination

This Task is added and includes work to coordinate project impacts to utilities along Meadowbrook Way SE.

## 2.1 Utility Coordination

This subtask involves the following:

- Preliminary Utility Coordination Meeting Meet with utility company and City staff at 30% design stage to review plans, identify conflicts, and develop action plans. Prepare and distribute meeting notes.
- Individual Coordination Resolve conflicts individually with the utility company and City staff that cannot be resolved at the meeting. Provide potential conflict information to utility and coordinate for utility removal, relocation, or reconnection.

■ Final Coordination Meeting – Meet with utility company and the City at 90% Design stage to review plans, confirm resolution of conflicts, and verify relocation schedule. Prepare and distribute meeting notes.

### Assumptions:

- Telephone is the only utility present at the site and is located on both bridges.
- Utility locations will be as shown in the survey base map provided by the City or supplemental information provided by the utility.
- The City will provide utility name and contact information
- Utility coordination items will be included in plans and specifications in other tasks.
- Utility coordination meetings will be remote using MS Teams or similar remote meeting application.

### Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Preliminary Meeting Notes (PDF)
- Final Meeting Notes (PDF)

## Task 3 – Cultural and Historical Analysis (CRC)

This task is to provide a cultural resource survey to meet federal, state, and local compliance. The study will be designed to meet the requirements of Section 106 of the National Historic Preservation. The survey will also be done to meet the standards and guidelines of the Washington Department of Archaeology and Historic Preservation (DAHP).

If the Area of Potential Effects (APE) includes areas not covered by the 2014 cultural resources assessment, archaeological field work will be conducted. The archaeological field work will include a pedestrian survey of the APE walking transects spaced 10 to 20 meters apart. Shovel testing will be done where the surface visibility is inadequate to determine if an archaeological site is present. Historic resources (i.e., buildings, structures, sites, objects, and districts constructed at least 45 years before the date of survey) within the APE have not been recorded by prior studies; these will be documented.

#### The tasks will include the following.

- Background review of the previous studies conducted in the vicinity.
- A systematic pedestrian archaeological survey of the APE walking transects spaced no more than 20 meters apart.
- Excavation of up to 5 shovel tests that will be 20 inches (in) (50 centimeters [cm]) in diameter and excavated to a minimum depth of 20 in (50 cm). Sediments will be screened using 1/2-in hardware cloth. All shovel tests will be backfilled upon completion. No artifacts will be collected. Archaeological resources, if found, will need to be recorded.
- Documentation of historic resources that are within the APE. Inventory forms will be prepared for each documented historic resource using the DAHP WISAARD database; the forms will be included in the report appendix.
- Evaluate documented historic resources to determine their eligibility to be listed on the National Register of Historic Places (NRHP). An assessment of project effects under Section 106 will be done for those historic resources that are recommended as eligible for listing in the NRHP.
- Prepare a draft cultural resource survey report and submit to the City. It is assumed the City will submit to the U.S. Army Corps of Engineers (Corps). This report will be an update to the 2014 cultural resources assessment to satisfy Section 106 of NHPA for the project as it is now proposed. It will include a recommendation of whether the proposed project will have an adverse effect on historic properties, including archaeological sites. Archaeological and historic resource forms will be appended to the report.

- Address comments on the draft cultural resource survey report and finalize. A DAHP cover sheet will be included with the finalized version of the cultural resources report for agency submittal and distribution.
- Contact the cultural resources staff of tribes that may have an interest in or information regarding the project location. This communication is intended to inform the cultural resources assessment and does not constitute government-to-government consultation. Copies of this correspondence and received responses will be included as an attachment in the cultural resources assessment.

### Assumptions:

- Up to 5 shovel tests will be excavated.
- Documentation of up to one archaeological resource using the DAHP WISAARD database; the form will be included in the report appendix.
- Two historic resources, South Fork Kimball Creek Bridge No. 1413B and East Fork Kimball Creek Bridge No. 1413C, both constructed in 1954, will be identified and documented for the project. It is unlikely that the bridges will meet minimum eligibility requirements for listing in the NRHP.
- The Corps, as lead agency for Section 106, will consult with DAHP and Tribes regarding the cultural resources assessment and potential effects to historic properties.

### Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

A cultural resource survey report will be submitted for the review of the Corps. This report will satisfy Section 106 of NHPA. It will include a recommendation of whether the proposed project will have an adverse effect on historic properties, including archaeological sites. Archaeological and historic resource forms will be appended to the report. A DAHP cover sheet will be included with the finalized version of the cultural resources report for agency submittal and distribution. The draft and final report and resources forms will be provided electronically.

### Task 4 — Environmental Documentation and Permitting

Permit applications and supporting environmental and regulatory compliance documentation will be prepared under this Task. Federal, state and local regulatory compliance requirements are included, as well as underlying deliverables and assumptions for the work.

**4.1 Environmental Data Collection and Wetland/Habitat Delineation and Stream Characterization Report**Otak will conduct field work necessary to collect the environmental data for the preparation of the technical documents and permit applications for the project. Wetland boundary and stream ordinary high water (OHW) delineations will be conducted at both bridge locations to meet the requirements of Snoqualmie's Critical Areas Code (Snoqualmie Municipal Code [SMC] 19.12), the Corps of Engineers (the Corps), and Washington State Department of Ecology (Ecology). Wetland and stream boundaries will be flagged in the field, sketched and subsequently added to the project base map. Riparian and priority wildlife habitats will also be assessed.

The Consultant will prepare a Wetland/Habitat Delineation and Stream Characterization Report for each crossing to support the required federal, state, and county approvals required to construct the projects. Stream and riparian habitats will be qualitatively assessed within and adjacent to the project area to sufficiently establish baseline conditions for instream and riparian habitat. Data forms documenting the wetland boundaries and instream habitat will be completed. Wetlands will be rated according to the 2014 Ecology Washington State Wetland Rating System for Western Washington methodology and classified per SMC 19.12.170. Streams will be rated per Washington Department of Natural Resources criteria for compliance with SMC 19.12.160. Buffer widths for wetlands and streams will be identified.

## 4.2 ESA Compliance Documentation

Documentation necessary for compliance with the provisions of the Endangered Species Act (ESA) will be prepared for the project. A No Effects Letter (NEL) will be prepared for each project for wildlife species regulated by the ESA and administered by the US Fish and Wildlife Service (USFWS) and NOAA Fisheries. A Biological Assessment/Evaluation report is not expected to be required due to the absence of ESA-listed species in the project vicinity. ESA compliance documentation will be submitted to the Corps of Engineers with the JARPA (Task 4.3) as supporting environmental compliance documentation for issuance of the Section 404 permit under the Clean Water Act.

## 4.3 Prepare 404/401, HPA, and Local Environmental Permit Applications

A Joint Aquatic Resources Permit Application (JARPA) will be completed when each project reaches a 60 percent design stage. The JARPA will be used to apply for the Ecology Section 401 Water Quality Certification (WQC); Washington State Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA); and a Section 404 permit from the Corps of Engineers. The projects are expected to qualify for a Nationwide Permit (NWP) #14 for Linear Transportation projects or an NWP #3 for Maintenance from the Corps of Engineers. A JARPA application will be prepared for each bridge project. JARPA submittals will consist of the application form, public notice formatted drawing set (sized 11"x17"), and construction plans for submittal to relevant regulatory agencies.

A 401 WQC Pre-Filing request will be submitted to Ecology after the 404 application package is submitted to the USACE. A Water Quality Monitoring Plan is not anticipated to be required by Ecology for the 401 WQC. If it is required, then it will be prepared under a separate contract amendment or similar.

The project will require compliance with SMC 19.12.150 (Frequently Flooded Areas) and SMC 15.12 (Flood Hazard Regulations) for activities within a regulated floodplain. The project will also require compliance with SMC 19.12.160 (Streams), 19.12.170 (Wetlands), and 19.12.190 (Fish and wildlife habitat conservation areas). A floodplain permit and clearing and grading permit application(s) will be prepared under this task and submitted online. It is assumed that Public Works will coordinate with the Community Development Department regarding the pre-application meeting requirement listed at SMC 19.12.070 prior to the permit application submittals.

### 4.4 Prepare Critical Areas Report and Buffer Mitigation Plan

The project will require a mitigation and monitoring plan that addresses no net loss of ecological functions in critical areas as required by the City, Ecology, and WDFW. The project is anticipated to temporarily impact wetland and stream buffers adjacent to the bridges to access the abutments. The plan will include performance standards and monitoring methods to meet City code requirements.

If the no net loss standard cannot be achieved on site within the City right of way and the project is determined to require compensatory mitigation for unavoidable adverse impacts to wetlands or streams, then off-site compensatory mitigation will be assessed in the immediate vicinity of the crossings within the limits of the baseline documentation. The baseline Wetland/Habitat and Stream Characterization Report will be amended to include the project impacts to critical areas, restoration of temporary impacts on site, and a monitoring and maintenance plan.

If onsite mitigation cannot be identified, then a Bank Use Plan will be prepared for purchase of mitigation credits. The Bank Use Plan would be prepared under a separate scope of work.

## 4.5 Agency Meetings, Permit Facilitation, and City Coordination

Prior to permit submittals, Otak will support City staff to arrange up to one (1) meeting, preferably on-site, with all applicable City and WDFW staff to assure that they have a solid understanding of the existing and proposed conditions for the project prior to receiving the JARPA package. After permits are submitted, Otak will coordinate with City staff to respond to comments, provide additional clarification, and assist with shepherding the permits through the process efficiently.

## 4.6 SEPA Compliance

The project will require compliance with the State Environmental Policy Act (SEPA). Otak will prepare a SEPA checklist for each project, with vicinity map and simple plan view appropriate for the general public, and will submit the checklists to the City for environmental review as the lead agency in the SEPA process. The SEPA Checklists will be submitted along with the local permit applications prepared under Task 4.3

### Assumptions:

- Wetland and stream boundaries will be verified within the City-owned right of way and adjacent private parcels immediately adjacent to the right of way as needed for site access. The study area will be confirmed with the City prior to completing field work (e.g., staging areas).
- City will acquire rights of entry to areas from adjacent property owners prior to field work.
- Otak will survey the flagged wetland and stream boundaries.
- The project will result in a Determination of Non-Significance for SEPA compliance. Preparation of an EIS is not included in this scope.
- The project will meet the definition of maintenance under the 4(d) Program.
- The project will result in a No Effects determination for ESA-listed species regulated by the USFWS and NOAA Fisheries. A Biological Assessment (BA) or Biological Evaluation (BE), if required, would be completed under a separate scope of work
- Application fees will be paid by the City.
- The project will adhere to appropriate mitigation sequencing and will avoid and minimize adverse impacts to the extent possible prior to proposing compensatory mitigation within or outside of the City-owned right of way.
- If complete mitigation cannot be provided on-site within the vicinity of each crossing, then offsite compensatory mitigation (e.g., Bank Use Plan) that meets the federal, state, and local requirements would be completed under a separate scope of work.
- Two (2) Otak staff members will attend one (1) onsite meeting not to exceed four (4) hours.
- Two (2) Otak members will attend a total of two (2) internal coordination meetings not to exceed three (3) hours each.

### Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Draft Wetland/Habitat Delineation and Stream Characterization Report (2) (MS Word and PDF)
- Final Wetland/Habitat Delineation and Stream Characterization Report (2) (PDF)
- Draft NEL (2) (PDF)
- Final NEL (2) (PDF)
- Draft JARPA (2) (PDF)
- Final JARPA (2) (PDF)
- 401 Pre-Filing Request (2)
- Floodplain and Grading/Clearing Permit Application contents (2) (PDF)
- Draft Critical Areas Report and Buffer Mitigation Plan (2) (PDF)
- Final Critical Areas Report and Buffer Mitigation Plan (2) (PDF)
- Project plans or exhibits appropriate for the field visit (PDF).
- Draft SEPA checklist with vicinity map and site plan (2) (PDF)
- Final SEPA checklist with vicinity map and site plan (2) (PDF)

### Task 5 - Hydraulic Design

#### 5.1 Data Collection

Collect and review available information on Kimball Creek and East Fork Kimball Creek; and the existing bridge crossing, including previous study reports, as-built plans, bridge inspection reports, available survey data, historic air photos, and available geotechnical information, and bridge replacement plans and design reports prepared previously by others. Some of this information has already been provided by the City.

### 5.2 Site Investigation and Channel Stability Assessment

- Conduct a site investigation to record observations, gather field measurements, and take digital photographs.
- Record observations of the following:
  - Stream characteristics and the adjacent floodplain in the vicinity of the bridges
  - Lateral and vertical stability of the stream channel
  - General and local scour at the bridges
  - Lateral and vertical controls
  - Stream channel and floodplain roughness
  - Stream bed material characteristics
- Field-analyze stream bed material using the Wolman pebble count method.
- Identify and stake or flag in the field any additional survey work needed to support the hydraulic modeling.
- Review available historic air photos to evaluate instances of past channel migration.
- Evaluate the vertical and lateral stability of the channel, based on the field investigation.

## 5.3 Hydrologic Analysis

- Otak will review the hydrologic models, documentation, and critical design flows developed by others that will be provided by the City for each crossing. It is assumed that the land cover parameters used in the previous models are suitable to represent current conditions. Otak will update the precipitation input for the models, if necessary.
- After updating the precipitation in the hydrologic model, the results will be summarized in the Hydraulics Report under Task 5.8.

## **5.4 Hydraulic Analysis**

- Otak will review the hydraulic model (HEC-RAS) for existing conditions developed by others that will be provided by the City. Otak will add up to two cross-sections to the model for scour analysis.
- The hydraulic models will be updated with additional cross sections in the vicinity of each bridge using survey data provided by the City and supplemented with available LiDAR data in the overbank areas.
- Perform a hydraulic analysis of Kimball Creek and East Fork Kimball Creek in the vicinity of the bridges using the U.S. Army Corps of Engineers HEC-RAS computer software to evaluate existing conditions and up to three (3) project conditions for a range of flows up through the 500-year event.

### 5.5 Scour Analysis

- Conduct a scour analysis at each bridge following the guidelines as outlined in HEC-18, Evaluating Scour at Bridges (Fifth Edition) to support the design of scour countermeasures.
- Evaluate the long-term degradation potential based on field evaluation, bridge inspection reports, and any other historical information on the channel in the vicinity of the bridge.
- Calculate general (contraction) scour and bend scour as necessary. It is assumed that the proposed scour countermeasures will protect against local scour at the abutments so that local abutment scour calculations will not be necessary.

### 5.6 Design of Scour Countermeasures

- Coordinate with other design disciplines to develop one or more design alternatives for the scour countermeasures.
- As needed, perform riprap design calculations to determine the gradation and thickness of any riprap revetment.
- Based on the scour analysis and any riprap design calculations, develop the basic layout for each design alternative.

### 5.7 Temporary Water Management

- Determine limits of work area isolation.
- Develop temporary water management approach to isolate in-stream work areas.

## 5.8 Hydraulics Report

- Prepare a Draft Hydraulics Report that documents the hydraulics analysis, scour analysis, design of scour countermeasures, and in-stream isolation plan and submit for review. The report will address any impacts to Base (100-year) Flood Elevations to support a No-Rise Certification.
- Prepare a response to review comments and incorporate changes into a Final Hydraulics Report.

#### Assumptions:

- Peak flow design discharges will be based on hydrologic models provided by the City, with only precipitation to be updated by Otak.
- All survey data to be provided by the City
- The scour repair can be designed to meet a "no-rise" condition and therefore a CLOMR/LOMR will not be required.
- The roadway restoration related to the bridge repair will not require the project to include any stormwater flow control, runoff treatment, or any permanent on-site stormwater management BMPs.
- If cover under the Ecology Construction Stormwater General Permit is required, the Stormwater Pollution Prevention Plan (SWPP) will be prepared by the Contractor that is awarded to construct the project.

#### Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Draft Hydraulics Report (Hard copy and PDF)
- Final Hydraulics Report (Hard copy and PDF)
- Electronic copy of the HEC-RAS model used for the hydraulic analysis

## Task 6 - Civil Design

This task includes the following civil engineering design services. Incorporation of these designs into the project documents is included in a separate task.

### 6.1 Site Investigation

Visit each bridge to:

- Verify guardrail type and layout
- Take site photos to document guardrail layout and condition

### 6.2 Guardrail Design

Review and implement WSDOT design standards and standard plans for replacing guardrail approaches to the bridge.

## 6.3 Pavement Design

Design asphalt pavement section to replace pavement removed during repairs.

## 6.4 Detour Design

Determine signing requirements and coordinate with the City and other agencies affected by the detour.

### Assumptions:

- Guardrail replacement will be similar to the existing layout and shoulder improvements will not be needed.
- Future ADT and percent truck traffic listed in the WSBIS Local Agency Inventory Report provided for each bridge by the City will be adequate for pavement design.
- Detour route will be similar to that used in the previous bridge replacement design by others and will require coordination with and approval by the City of North Bend, King County and WSDOT.

#### Deliverables:

None. Efforts in this task will be incorporated into the construction documents covered in a separate task.

### Task 7 - Structural Design

This task includes the structural analysis and design services.

### 7.1 Site Investigation

Visit each bridge to:

- Verify bridge member conditions noted in the bridge inspection reports dated 8/3/2021.
- Take site photos to document site and member conditions.
- Field measure members to determine member size and limits to supplement bridge plans.

#### 7.2 Bridge Load Rating

Perform bridge load rating calculations in accordance with the AASHTO Manual for Bridge Evaluation (MBE) and the Washington State Department of Transportation (WSDOT) Bridge Design Manual (BDM). Two draft and final bridge load ratings will be performed for each bridge and submitted to the City:

- Existing bridges to determine member live load carrying capacity and repairs needed.
- As-repaired bridge condition after completion of construction to capture as-built conditions and verify desired live load capacity.

Final bridge load ratings will be stamped and signed by a professional engineer licensed in the State of Washington.

### 7.3 Bridge Repair Design

Bridge repairs will be based on recommendations provided in our draft Kimball Creek Bridges Assessment Memorandum, dated 5/26/2022 which are based on bridge inspection reports dated 8/3/2021 prepared by the King County bridge group and provided by the City. The Consultant will review the results of the bridge load rating efforts above to identify extent of repairs and determine additional repairs if needed.

- Perform calculations for repairs and new members.
- Coordinate with hydraulic discipline to incorporate scour countermeasures with bridge repairs.

Bridge repair calculations will be stamped and signed by a professional engineer licensed in the State of Washington.

### Assumptions:

Full bridge inspection, material testing, ground penetrating radar (GPR) will not be needed to assess the existing condition of the bridge.

- Bridge repairs will be limited to those identified in the identified in the draft Kimball Creek Bridges Assessment Memorandum, dated 5/26/2022, prepared by Otak.
- Roadway excavation will be needed to repair bridge timber abutment walls requiring the need for bridge approach pavement and guardrail restoration.
- Roadway will be closed with a detour during bridge repairs.

#### Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Draft Bridge Load Rating of existing bridge condition for Bridge 1413B (PDF)
- Draft Bridge Load Rating of existing bridge condition for Bridge 1413C (PDF)
- Final Bridge Load Rating of existing bridge condition for Bridge 1413B (PDF)
- Final Bridge Load Rating of existing bridge condition for Bridge 1413C (PDF)
- Draft Bridge Load Rating of as-repaired bridge condition for Bridge 1413B (PDF)
- Draft Bridge Load Rating of as-repaired bridge condition for Bridge 1413C (PDF)
- Final Bridge Load Rating of as-repaired bridge condition for Bridge 1413B (PDF)
- Final Bridge Load Rating of as-repaired bridge condition for Bridge 1413C (PDF)
- Final Bridge Repair Structural Calculations (PDF)

## Task 8 - Construction Documents

#### 8.1 30% Design Documents

This task will develop the design to an approximate 30% level. The primary use of this submittal is for project team review, intra- and inter-disciplinary coordination, confirming the location of environmental boundaries, determining preliminary environmental impacts, evaluating scour repair features, providing information to utility providers for conflict review, and to communicate project assumptions and challenges.

This work will include the following:

- Project kickoff meeting schedule and attend meeting with City staff to initiate design tasks
- Plans plan sheets as assumed below
- Construction Cost Estimate

### 8.2 60% Design Documents

30% level documents will be updated to address comments from the City and will be developed to the 60% design level of completion, appropriate for Environmental Permitting. This work will include the following:

- 30% design review meeting with the City.
- Plans plan sheets as assumed below
- Project Technical Special Provisions Outline. The outline will identify work and specification sections to be developed during 90% design.
- Construction Cost Estimate

## 8.3 90% Design Documents

60% level documents will be updated to address comments from the City, coordination with utilities, and permitting agencies; and will be developed to the 90% design level of completion, appropriate for establishing final decisions. This work will include the following:

- 60% design review meeting with the City
- Plans plan sheets as assumed below
- Project Technical Special Provisions

Construction Cost Estimate

### 8.4 Final Design Documents

90% level documents will be updated to address comments from the City and coordination with utilities and will be finalized. This work will include the following:

- 90% design review meeting with the City.
- Final Plans, stamped and signed by a professional engineer licensed in the State of Washington
- Final Project Technical Special Provisions
- Final Construction Cost Estimate

## Assumptions:

- Meetings will be held remotely via MS Teams or similar remote meeting application
- The design will not change substantially after the completion of the 60% design
- The City will compile consultant provided special provisions into the final bid documents
- The following sheets are assumed at each design stage:

Sheet Name	30%	60%	90% and Final			
	Design	Design	Design			
Cover Sheet	1	1	1			
General Notes, Index, and Legend	-	1	1			
Roadway Typical Section	1	1	1			
Guardrail and Striping Plan	1	1	1			
Bridge No. 1413B						
Existing Conditions Plans	1	1	1			
Erosion Control and Work Area	-	1	1			
Isolation Plans						
Bridge Repair Layout	1	1	1			
Bridge Repair Notes	-	1	1			
Bridge Repair Details	-	1	2			
Scour Repair Details	-	1	2			
Restoration/Landscaping/Mitigation	1	1	1			
Plans						
Bridge No. 1413C						
Existing Conditions Plans	1	1	1			
Erosion Control and Work Area	-	1	1			
Isolation Plans						
Bridge Repair Layout	1	1	1			
Bridge Repair Notes	-	1	1			
Bridge Repair Details	-	1	2			
Scour Repair Details	-	1	2			
Restoration/Landscaping/Mitigation	1	1	1			
Plans						
Detour Plan	1	1	1			
Total Sheets	10	19	23			

## Deliverables:

- 30% Plans (PDF)
- 30% Construction Cost Estimate (PDF)
- 60% Plans (PDF)

- 60% Construction Cost Estimate (PDF)
- 60% Special Provisions Outline (MS Word)
- 90% Plans (PDF)
- 90% Construction Cost Estimate (PDF)
- 90% Special Provisions (MS Word)
- Final Plans (PDF)
- Final Construction Cost Estimate (PDF)
- Final Special Provisions (MS Word)

## Task 9 - Construction Phase Services

The City will lead the Construction Phase of the project. The Consultant will provide the following support services:

### 9.1 Bid Assistance

Consultant will provide responses to bidders' questions and assistance to the City, including:

- Assist City in responding to engineering questions from Bidders.
- Assist City preparing addenda.

### 9.2 Construction Support

- Review construction submittals:
  - Stream isolation plan
  - Excavation dewatering plan
  - Traffic control / detour plan
  - Bridge repair plan
- Respond to field questions and requests for information (RFIs). The number of RFIs may vary within the maximum level of effort assumed in the fee estimate.
- Attend on-site project meetings:
  - Pre-construction meeting
  - One (1) project meeting
- Site observations during critical times, including site observation report within five (5) working days of observation date:
  - Stream isolation (2)
  - Scour repair installation (2)
  - Bridge member repairs (2)
- Punchlist walkthrough prior to project completion, including list of items to be completed or corrected within five (5) working days of walkthrough date.

#### Assumptions:

- The City will take the lead in fielding and responding to Bidder inquiries during the bid period.
- Addenda will be compiled by the City and issued to the Bidders.
- Consultant will respond directly to the City, unless requested otherwise by the City.
- The City will prepare the preconstruction meeting agenda and notes.
- Consultant will be on site as select times only. The City will perform regular project inspections as needed.

#### Deliverables:

- Submittal responses
- RFI responses
- Site observation reports
- Punchlist walkthrough list

#### **FEE ESTIMATE**

The following summarizes the fee breakdown for this scope of work:

Task	Total			
Task 1 – Project Management	\$	26,674		
Task 2 – Utility Coordination	\$	4,084		
Task 3 – Cultural and Historical Analysis (CRC)	\$	4,200		
Task 4 – Environmental Documentation and Permitting	\$	51,212		
Task 5 – Hydraulic Design	\$	45,408		
Task 6 – Civil Design	\$	4,978		
Task 7 – Structural Design	\$	22,302		
Task 8 – Construction Documents	\$	36,422		
Task 9 – Construction Phase Services		10,094		
Direct Expenses	\$	1,080		
Total	¢	206 454		

We estimate that we can complete the above scope of work on a time and materials basis for a budget not to exceed the total above. If unexpected situations arise for which additional work is required, Otak will notify the City immediately and discuss any impacts to the scope of work and budget.

### **SCHEDULE**

Otak will commence work after receiving signed notice to proceed (NTP) on this scope of work. The following project timeline is assumed:

- NTP issued: September 7, 2022
- Design and permitting phase completion: September 29, 2023
- Bidding completion: March 1, 2024
- Construction completion: September 30, 2024
- Contract end date of October 31, 2024

# Kimball Creek Bridges Restoration Project

Fee Estimate
Otak, Inc.

Otak Project #20964 Date: 8/31/2022

		Structural Civil Hydraulics						Env	ronmental / Perm	itting	Drafting	Admin.	7				
		PM / Lead Bridge Engr.		Civil Lead/QC	Civil EIT	Hyd. QC	Hydrologist	Hyd. Lead	Hyd. Engr.	Civil EIT	Env. Lead	Env. Staff	L.A.	Drafter	Coordinator	_	
Task	Description	Civil Engineer X	Civil Engineer V	Civil Engineer X	Engineering Designer IV	Civil Engineer X	Scientist VI	Civil Engineer	Civil Engineer IV	Engineering	Scientist V	Scientist II	Landscape Architect VI	Engineering Tech		Total Hours	Total Budget by Task
	Project Management	108	GIVII Eligineer V	11	Designer IV	71	7.1	171	GIVII Eligineer I V	Besigner IV	·	11	THEIRCEL VI	1,	26	134	\$26,674
-	General Project Management	82													20	82	\$17,548
	Monthly Invoices and Progress Reports	26													26	52	\$9,126
	, , , , , ,																
2	Utility Coordination	12						6			2					20	\$4,084
2.1	Utility Coordination	12						6			2					20	\$4,084
3	Cultural and Historical Analysis						Subconsultant: 0	Cultural Resource	es Consultants (C	CRC) - See Below							
			_										_				
	Environmental Documentation and Permitting	2	8								136	248	8			402	\$51,212
4.1	Environmental Data Collection and Wetland/Habitat Delineation and Stream										36	96				132	\$15,984
4.2	Characterization Report										20	40				(0)	ØF 400
	ESA Compliance Documentation		0								20	40	0			60	\$7,480
4.3	Prepare 404/401, HPA, and Local Environmental Permit Applications		8			1					32	48	8			96	\$12,728
4.4	Prepare Critical Areas Report and Buffer Mitigation Plan					1					24	40				64	\$8,136
	Agency Meetings, Permit, Facilitation, and City Coordination	2				†				<u> </u>	12	10		<del> </del>		14	\$2,396
	SEPA Compliance	_				1					12	24				36	\$4,488
	r ·····					1					_				1		71,100
5	Hydraulic Design					17	12	42	102	152						325	\$45,408
	Data Collection							4	8	16						28	\$3,696
	Site Investigation and Channel Stability Assessment							8	10	12						30	\$4,286
5.3	Hydrologic Analysis					1	12	2	8	8						31	\$5,046
	Hydraulic Analysis					6		8	16	24						54	\$7,748
	Scour Analysis					6		4	12	24						46	\$6,432
	Design of Scour Counterneasures					4		2	12	12						30	\$4,216
	Temporary Water Management							6	12	24						42	\$5,544
5.8	Hydraulics Report							8	24	32						64	\$8,440
	Ci "D			2	20											25	21252
	Civil Design	4		3	30											37	\$4,978
	Site Investigation Guardrail Design			2	6											6	\$696 \$892
	Pavement Design			1	4											6 5	\$678
	Detour Design	4		1	16	+										20	\$2,712
0.4	Detour Design	7			10											20	φ2,712
7	Structural Design	12	138													150	\$22,302
	Site Investigation	6	6													12	\$2,142
	2 Bridge Load Rating	4	72													76	\$11,152
	B Bridge Repair Design	2	60			1										62	\$9,008
																1	. ,,
8	Construction Documents	24	100	4	25			14	10	8	8	5	12	38	3	251	\$36,422
	30% Design Documents	6	34	1	10			2	2	2	2		6	12		77	\$10,982
	2 60% Design Documents	8	40	1	8			4	2	2	2	2	2	16	1	88	\$12,555
	90% Design Documents	8	20	1	4	<u> </u>		6	4	2	2	2	2	8	1	60	\$9,041
8.4	Final Design Documents	2	6	1	3	1		2	2	2	2	1	2	2	1	26	\$3,844
	C M. C	40	24	2	2			2									610.00
9	Construction Phase Services	10	26	2	2			8	6	2	2	2	1		1	61	\$10,094
9.1	Bid Assistance	4	4	1	1	1		7	5	1	1	1	1		1	16 47	\$2,609
9.2	Construction Support	6	22	1	1	+		/	3	1	1	1	1		1	4/	\$7,485
-	Total Hours	172	272	9	57	17	12	70	118	162	148	255	21	38	31	1382	
<b> </b>	Billing Rate	\$214.00	\$143.00	-	\$116.00		\$205.00	\$198.00			\$164.00	\$105.00			\$137.00		
<b> </b>	Total Labor Cost	\$36,808		\$1,926	\$6,612		\$2,460	\$13,860			\$24,272	\$26,775					\$201,174
-	Direct Expenses	920,000	250,070	ψ1,720	φ0,012	Ψυ,000	Ψ2,π00	¥15,000	910,700	910,772	¥27,272	Ψ20,773	93,702	e1,020	97,247	+ +	\$1,080
<b>†</b>	Subconsultant Administration					1										+	¥2,000
	Otak Total					1										+ +	\$202,254
0 :		Б		ı						•				•			,
Subconst		Fee	1	1	ı	1	ı		ı		T		1		1		
1	Cultural Resources Consultants (CRC)	\$ 4,200.00				1								-		+	<del>                                     </del>
-	Subconsultants Total					+										+	\$4,200
	Subconsultants Total				<u> </u>		<u> </u>		<u> </u>					<u> </u>			<b>⊅4,∠</b> 00
	Total															$\overline{}$	\$206,454
	1 otal																φ400,434