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COUNTY DEPT: DCNR, Parks and Recreation
DEPT. CONTACT PERSON: Thomas Hartzell, Senior Park Planner
TELEPHONE/EMAIL: (425) 407-2501/thomas.hartzell@snoco.org
PROJECT: O'Reilly Acres Access Bridge & Abutment
Replacement Phase 1
AMOUNT: Not to Exceed \$543,404.97
FUND SOURCE: 309-51094640536599, 309-
51094640526599
CONTRACT DURATION: Date of Execution for 5 years unless
extended or renewed pursuant to Section 2
hereof

AGREEMENT PRK02-26 FOR PROFESSIONAL SERVICES

THIS AGREEMENT (the "Agreement") is made by and between SNOHOMISH COUNTY, a political subdivision of the State of Washington (the "County") and KPFF Inc., a Washington Corporation (the "Contractor" or "Consultant"). In consideration of the mutual benefits and covenants contained herein, the parties agree as follows:

1. Purpose of Agreement; Scope of Services. The purpose of this Agreement is Phase 1 of the O'Reilly Acres Bridge Replacement Project; Engineering Design and Environmental Permitting. The Scope of Services is as defined in Schedule A attached hereto and by this reference made a part hereof. This Agreement is the product of County RFQ No. 25-0518BC, Design and Engineering Services, O'Reilly Acres Access Bridge & Abutment Replacement. Phase 2 of this project will include design, bid support and construction support.

The services shall be performed in accordance with the requirements of this Agreement and with generally accepted practices prevailing in the western Washington region in the occupation or industry in which the Contractor practices or operates at the time the services are performed. The Contractor shall perform the work in a timely manner and in accordance with the terms of this Agreement. Any materials or equipment used by the Contractor in connection with performing the services shall be of good quality. The Contractor represents that it is fully qualified to perform the services to be performed under this Agreement in a competent and professional manner.

The Contractor will prepare and present status reports and other information regarding performance of the Agreement as the County may request.

2. Term of Agreement; Time of Performance. This Agreement shall be effective upon execution (the “Effective Date”) and shall terminate 5 years from Effective Date, PROVIDED, HOWEVER, that the term of this Agreement may be extended or renewed for up to one (1) additional two (2) year term, at the sole discretion of the County, by written notice from the County to the Contractor. PROVIDED, HOWEVER, that the County’s obligations after December 31, 2026 are contingent upon local legislative appropriation of necessary funds for this specific purpose in accordance with the County Charter and applicable law.

3. Compensation.

A. Services. The County will pay the Contractor for services as and when set forth in Schedule B, which is attached hereto and by this reference made a part of this Agreement.

B. Overhead and Expenses. The Contractor’s compensation for services set forth in Section 3A above includes overhead and expenses and no separate claims for reimbursement of overhead or expenses will be allow under this Agreement.

C. Invoices. The Contractor shall submit properly executed invoices to the County no more frequently than monthly. Each invoice shall include an itemization of the dates on which services were provided, including the number of hours and a brief description of the work performed on each such date. Each invoice shall also include an itemization of any reimbursable expenses incurred by the Contractor during the time period covered by the invoice, together with reasonable documentation substantiating such expenses, all in accordance with this Section 3 and Schedule B. Subject to Section 8 of this Agreement, the County will pay such invoices within thirty (30) calendar days of receipt.

Invoices should be sent by email to:

thomas.hartzell@snoco.org & carol.peterson@snoco.org

OR mailed to:

Snohomish County Parks and Recreation
6705 Puget Park Drive
Snohomish, Washington 98296

D. Payment. The County’s preferred method of payment under this contract is electronic using the County’s “e-Payable” system with Bank of America. The Contractor is highly encouraged to take advantage of the electronic payment method.

In order to utilize the electronic payment method, the Contractor shall email SFB-SnocoEpaybles@snoco.org and indicate it was awarded a contract with Snohomish County and will be receiving payment through the County’s e-Payable process. The Contractor needs to provide contact information (name, phone number and email address). The

Contractor will be contacted by a person in the Finance Accounts Payable group and assisted with the enrollment process. This should be done as soon as feasible after County award of a contract or purchase order, but not exceeding ten (10) business days.

Department approved invoices received in Finance will be processed for payment within seven calendar days for e-Payable contractors. Invoices are processed for payment by Finance two times a week for contractors who have selected the e-Payable payment option.

In the alternative, if the Contractor does not enroll in the electronic (“e-Payable”) payment method described above, contract payments will be processed by Finance with the issuance of paper checks or, if available, an alternative electronic method. Alternative payment methods, other than e-Payables, will be processed not more than 30 days from receipt of department approved invoices to Finance.

Upon acceptance of payment, the Contractor waives any claims for the goods or services covered by the Invoice. No advance payment shall be made for the goods or services furnished by Contractor pursuant to this Contract.

E. Contract Maximum. Total charges under this Agreement, all fees and expenses included, shall not exceed \$543,404.97 for the initial term of this Agreement.

4. Independent Contractor. The Contractor agrees that Contractor will perform the services under this Agreement as an independent contractor and not as an agent, employee, or servant of the County. This Agreement neither constitutes nor creates an employer-employee relationship. The parties agree that the Contractor is not entitled to any benefits or rights enjoyed by employees of the County. The Contractor specifically has the right to direct and control Contractor’s own activities in providing the agreed services in accordance with the specifications set out in this Agreement. The County shall only have the right to ensure performance. Nothing in this Agreement shall be construed to render the parties partners or joint venturers.

The Contractor shall furnish, employ, and have exclusive control of all persons to be engaged in performing the Contractor’s obligations under this Agreement (the “Contractor personnel”), and shall prescribe and control the means and methods of performing such obligations by providing adequate and proper supervision. Such Contractor personnel shall for all purposes be solely the employees or agents of the Contractor and shall not be deemed to be employees or agents of the County for any purposes whatsoever. With respect to Contractor personnel, the Contractor shall be solely responsible for compliance with all rules, laws and regulations relating to employment of labor, hours of labor, working conditions, payment of wages and payment of taxes, including applicable contributions from Contractor personnel when required by law.

Because it is an independent contractor, the Contractor shall be responsible for all obligations relating to federal income tax, self-employment or FICA taxes and contributions, and all other so-called employer taxes and contributions including, but not limited to, industrial insurance (workers’ compensation). The Contractor agrees to indemnify, defend, and hold the County harmless from any and all claims, valid or otherwise, made to the County because of these obligations.

The Contractor assumes full responsibility for the payment of all payroll taxes, use, sales, income, or other form of taxes, fees, licenses, excises, or payments required by any city, county, federal or state legislation which are now or may during the term of the Agreement be enacted as to all persons employed by the Contractor and as to all duties, activities, and requirements by the Contractor in performance of the work under this Agreement. The Contractor shall assume exclusive liability therefor, and shall meet all requirements thereunder pursuant to any rules or regulations that are now or may be promulgated in connection therewith.

5. Ownership. Any and all data, reports, analyses, documents, photographs, pamphlets, plans, specifications, surveys, films, or any other materials created, prepared, produced, constructed, assembled, made, performed, or otherwise produced by the Contractor or the Contractor's subcontractors or consultants for delivery to the County under this Agreement shall be the sole and absolute property of the County. Such property shall constitute "work made for hire" as defined by the U.S. Copyright Act of 1976, 17 U.S.C. § 101, and the ownership of the copyright and any other intellectual property rights in such property shall vest in the County at the time of its creation. Ownership of the intellectual property includes the right to copyright, patent, and register, and the ability to transfer these rights. Material which the Contractor uses to perform this Agreement but is not created, prepared, constructed, assembled, made, performed, or otherwise produced for or paid for by the County is owned by the Contractor and is not "work made for hire" within the terms of this Agreement.

6. Changes. No changes or additions shall be made in this Agreement except as agreed to by both parties, reduced to writing and executed with the same formalities as are required for the execution of this Agreement.

7. County Contact Person. The assigned contact person (or project manager) for the County for this Agreement shall be:

Name: Thomas Hartzell
Title: Senior Planner
Department: Department of Natural Resources, Parks & Recreation
Telephone: (425) 388-6695
Email: Thomas.hartzell@snoco.org

8. County Review and Approval. When the Contractor has completed any discrete portion of the services, the Contractor shall verify that the work is free from errors and defects and otherwise conforms to the requirements of this Agreement. The Contractor shall then notify the County that said work is complete. The County shall promptly review and inspect the work to determine whether the work is acceptable. If the County determines the work conforms to the requirements of this Agreement, the County shall notify the Contractor that the County accepts the work. If the County determines the work contains errors, omissions, or otherwise fails to conform to the requirements of this Agreement, the County shall reject the work by providing the Contractor with written notice describing the problems with the work and describing the necessary corrections or modifications to same. In such event, the Contractor shall promptly remedy the problem or problems and re-submit the work to the County. The Contractor shall receive no additional

compensation for time spent correcting errors. Payment for the work will not be made until the work is accepted by the County. The Contractor shall be responsible for the accuracy of work even after the County accepts the work.

If the Contractor fails or refuses to correct the Contractor's work when so directed by the County, the County may withhold from any payment otherwise due to the Contractor an amount that the County in good faith believes is equal to the cost the County would incur in correcting the errors, in re-procuring the work from an alternate source, and in remedying any damage caused by the Contractor's conduct.

9. Subcontracting and Assignment. The Contractor shall not subcontract, assign, or delegate any of the rights, duties or obligations covered by this Agreement without prior express written consent of the County. Any attempt by the Contractor to subcontract, assign, or delegate any portion of the Contractor's obligations under this Agreement to another party in violation of the preceding sentence shall be null and void and shall constitute a material breach of this Agreement.

10. Records and Access; Audit; Ineligible Expenditures. The Contractor shall maintain adequate records to support billings. Said records shall be maintained for a period of seven (7) years after completion of this Agreement by the Contractor. The County or any of its duly authorized representatives shall have access at reasonable times to any books, documents, papers, and records of the Contractor which are directly related to this Agreement for the purposes of making audit examinations, obtaining excerpts, transcripts or copies, and ensuring compliance by the County with applicable laws. Expenditures under this Agreement, which are determined by audit to be ineligible for reimbursement and for which payment has been made to the Contractor, shall be refunded to the County by the Contractor.

11. Indemnification.

A. Professional Liability.

The Contractor agrees to indemnify the County and, if any funds for this Agreement are provided by the State, the State and their officers, officials, agents and employees from damages and liability for damages, including reasonable attorneys' fees, court costs, expert witness fees, and other claims-related expenses, arising out of the performance of the Contractor's professional services under this Agreement, to the extent that such liability is caused by the negligent acts, errors or omissions of the Contractor, its principals, employees or subcontractors. The Contractor has no obligation to pay for any of the indemnitees' defense-related cost prior to a final determination of liability or to pay any amount that exceeds Contractor's finally determined percentage of liability based upon the comparative fault of the Contractor, its principals, employees, and subcontractors. For the purpose of this section, the County and the Contractor agree that the County's and, if applicable, the State's costs of defense shall be included in the definition of damages above.

B. All Other Liabilities Except Professional Liability.

To the maximum extent permitted by law and except to the extent caused by the sole negligence of the County and, if any funds for this Agreement are provided by the State, the

State, the Contractor shall indemnify and hold harmless the County and the State, their officers, officials, agents and employees, from and against any and all suits, claims, actions, losses, costs, penalties and damages of whatsoever kind or nature arising out of, in connection with, or incidental to the services and/or deliverables provided by or on behalf of the Contractor. In addition, the Contractor shall assume the defense of the County and, if applicable, the State and their officers and employees in all legal or claim proceedings arising out of, in connection with, or incidental to such services and/or deliverables and shall pay all defense expenses, including reasonable attorneys' fees, expert fees and costs incurred by the County and, if applicable, the State, on account of such litigation or claims.

The above indemnification obligations shall include, but are not limited to, all claims against the County and, if applicable, the State by an employee or former employee of the Contractor or its subcontractors, and the Contractor, by mutual negotiation, expressly waives all immunity and limitation on liability, as respects only the County and, if applicable, the State, under any industrial insurance act, including Title 51 RCW, other worker's compensation act, disability benefit act, or other employee benefit act of any jurisdiction which would otherwise be applicable in the case of such claim.

In the event that the County or, if applicable, the State incurs any judgment, award and/or cost including attorneys' fees arising from the provisions of this section, or to enforce the provisions of this section, any such judgment, award, fees, expenses, and costs shall be recoverable from the Contractor.

In addition to injuries to persons and damage to property, the term "claims", for purposes of this provision, shall include, but not be limited to, assertions that the use or transfer of any software, book, document, report, film, tape, or sound reproduction or material of any kind, delivered hereunder, constitutes an infringement of any copyright, patent, trademark, trade name, and/or otherwise results in an unfair trade practice.

The indemnification, protection, defense and save harmless obligations contained herein shall survive the expiration, abandonment, or termination of this Agreement.

Nothing contained within this provision shall affect or alter the application of any other provision contained within this Agreement.

12. Insurance Requirements. The Contractor shall procure by the time of execution of this Agreement, and maintain for the duration of this Agreement, (i) insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the services hereunder by the Contractor, its agents, representatives, or employees, and (ii) a current certificate of insurance and additional insured endorsement when applicable.

A. General. Each insurance policy shall be written on an "occurrence" form, except that Professional Liability, Errors, and Omissions coverage, if applicable, may be written on a "claims made" basis. If coverage is approved and purchased on a "claims made" basis, the Contractor warrants continuation of coverage, either through policy renewals or the purchase of an extended discovery period, if such extended coverage is available, for not less than three (3) years from the date of completion of the work which is the subject of this Agreement.

By requiring the minimum insurance coverage set forth in this Section 12, the County shall not be deemed or construed to have assessed the risks that may be applicable to the Contractor under this Agreement. The Contractor shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

B. No Limitation on Liability. The Contractor's maintenance of insurance as required by this Agreement shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the County's recourse to any remedy available at law or in equity.

C. Minimum Scope and Limits of Insurance. The Contractor shall maintain coverage at least as broad as, and with limits no less than:

i. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage, and for those policies with aggregate limits, a \$2,000,000 aggregate limit. CG 00 01 current edition, including Products and Completed Operations;

ii. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage. CA 0001 current edition, Symbol 1;

iii. Workers' Compensation: To meet applicable statutory requirements for workers' compensation coverage of the state or states of residency of the workers providing services under this Agreement;

iv. Employers' Liability or "Stop Gap" coverage: \$1,000,000

v. Professional Liability: \$3,000,000.

D. Other Insurance Provisions and Requirements. The insurance coverages required in this Agreement for all liability policies except workers' compensation and Professional Liability, if applicable, must contain, or must be endorsed to contain, the following provisions:

i. The County, its officers, officials, employees, and agents are to be covered as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor in connection with this Agreement. Such coverage shall be primary and non-contributory insurance as respects the County, its officers, officials, employees, and agents. Additional Insured Endorsement shall be included with the certificate of insurance, "CG 2026 07/04" or its equivalent is required.

ii. The Contractor's insurance coverage shall apply separately to each insured against whom a claim is made and/or lawsuit is brought, except with respect to the limits of the insurer's liability.

iii. Any deductibles or self-insured retentions must be declared to, and approved by, the County. The deductible and/or self-insured retention of the policies shall not limit or apply to the Contractor's liability to the County and shall be the sole responsibility of the Contractor.

iv. Insurance coverage must be placed with insurers with a Best's Underwriting Guide rating of no less than A:VIII, or, if not rated in the Best's Underwriting Guide, with minimum surpluses the equivalent of Best's surplus size VIII. Professional Liability, Errors and Omissions insurance coverage, if applicable, may be placed with insurers with a Best's rating of B+:VII. Any exception must be approved by the County.

Coverage shall not be suspended, voided, canceled, reduced in coverage or in limits until after forty-five (45) calendar days' prior written notice has been given to the County.

If at any time any of the foregoing policies fail to meet minimum requirements, the Contractor shall, upon notice to that effect from the County, promptly obtain a new policy, and shall submit the same to the County, with the appropriate certificates and endorsements, for approval.

E. Subcontractors. The Contractor shall include all subcontractors as insureds under its policies, or shall furnish separate certificates of insurance and policy endorsements for each subcontractor. **Insurance coverages provided by subcontractors instead of the Contractor as evidence of compliance with the insurance requirements of this Agreement shall be subject to all of the requirements stated herein.**

13. County Non-discrimination. It is the policy of the County to reject discrimination which denies equal treatment to any individual because of his or her race, creed, color, national origin, families with children, sex, marital status, sexual orientation, age, honorably discharged veteran or military status, or the presence of any sensory, mental, or physical disability or the use of a trained dog guide or service animal by a person with a disability as provided in Washington's Law against Discrimination, Chapter 49.60 RCW, and the Snohomish County Human Rights Ordinance, Chapter 2.460 SCC. These laws protect against specific forms of discrimination in employment, credit transactions, public accommodation, housing, county facilities and services, and county contracts.

The Contractor shall comply with the substantive requirements of Chapter 2.460 SCC, which are incorporated herein by this reference. Execution of this Agreement constitutes a certification by the Contractor of the Contractor's compliance with the requirements of Chapter 2.460 SCC. If the Contractor is found to have violated this provision, or to have furnished false or misleading information in an investigation or proceeding conducted pursuant to this Agreement or Chapter 2.460 SCC, this Agreement may be subject to a declaration of default and termination at the County's discretion. This provision shall not affect the Contractor's obligations under other federal, state, or local laws against discrimination.

14. Federal Non-discrimination. Snohomish County assures that no persons shall on the grounds of race, color, national origin, or sex as provided by Title VI of the Civil Rights Act of 1964 (Pub. L. No. 88-352), as amended, and the Civil Rights Restoration Act of 1987 (Pub. L. No. 100-259) be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any County sponsored program or activity. Snohomish County further assures that every effort will be made to ensure nondiscrimination in all of its programs and activities, whether those programs and activities are federally funded or not.

15. Employment of County Employees. SCC 2.50.075, “Restrictions on future employment of County employees,” imposes certain restrictions on the subsequent employment and compensation of County employees. The Contractor represents and warrants to the County that it does not at the time of execution of this Agreement, and that it shall not during the term of this Agreement, employ a former or current County employee in violation of SCC 2.50.075. For breach or violation of these representations and warranties, the County shall have the right to terminate this Agreement without liability.

16. Compliance with Other Laws. The Contractor shall comply with all other applicable federal, state, and local laws, rules, and regulations in performing this Agreement.

17. Compliance with Grant Terms and Conditions. The Contractor shall comply with any and all conditions, terms, and requirements of any federal, state, or other grant, if any, that wholly or partially funds the Contractor’s work hereunder.

18. Prohibition of Contingency Fee Arrangements. The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor, to solicit or secure this Agreement and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the County shall have the right to terminate this Agreement without liability or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

19. Force Majeure. If either party is unable to perform any of its obligations under this Agreement as a direct result of an unforeseeable event beyond that party’s reasonable control, including but not limited to an act of war, act of nature (including but not limited to earthquake and flood), embargo, riot, sabotage, labor shortage or dispute (despite due diligence in obtaining the same), or governmental restriction imposed subsequent to execution of the Agreement (collectively, a “force majeure event”), the time for performance shall be extended by the number of days directly attributable to the force majeure event. Both parties agree to use their best efforts to minimize the effects of such failures or delays.

20. Suspension of Work. The County may, at any time, instruct the Contractor in writing to stop work effective immediately, or as directed, pending either further instructions from the County to resume the work or a notice from the County of breach or termination under Section 21 of this Agreement.

21. Non-Waiver of Breach; Termination.

A. The failure of the County to insist upon strict performance of any of the covenants or agreements contained in this Agreement, or to exercise any option conferred by this Agreement, in one or more instances shall not be construed to be a waiver or relinquishment of those covenants, agreements or options, and the same shall be and remain in full force and effect.

shall promptly give written notice to the County of any judicial proceeding seeking disclosure of such information.

24. Public Records Act. This Agreement and all public records associated with this Agreement shall be available from the County for inspection and copying by the public where required by the Public Records Act, Chapter 42.56 RCW (the "Act"). To the extent that public records then in the custody of the Contractor are needed for the County to respond to a request under the Act, as determined by the County, the Contractor agrees to make them promptly available to the County. If the Contractor considers any portion of any record provided to the County under this Agreement, whether in electronic or hard copy form, to be protected from disclosure under law, the Contractor shall clearly identify any specific information that it claims to be confidential or proprietary. If the County receives a request under the Act to inspect or copy the information so identified by the Contractor and the County determines that release of the information is required by the Act or otherwise appropriate, the County's sole obligations shall be to notify the Contractor (a) of the request and (b) of the date that such information will be released to the requester unless the Contractor obtains a court order to enjoin that disclosure pursuant to RCW 42.56.540. If the Contractor fails to timely obtain a court order enjoining disclosure, the County will release the requested information on the date specified.

The County has, and by this section assumes, no obligation on behalf of the Contractor to claim any exemption from disclosure under the Act. The County shall not be liable to the Contractor for releasing records not clearly identified by the Contractor as confidential or proprietary. The County shall not be liable to the Contractor for any records that the County releases in compliance with this section or in compliance with an order of a court of competent jurisdiction.

25. Interpretation. This Agreement and each of the terms and provisions of it are deemed to have been explicitly negotiated by the parties. The language in all parts of this Agreement shall, in all cases, be construed according to its fair meaning and not strictly for or against either of the parties hereto. The captions and headings of this Agreement are used only for convenience and are not intended to affect the interpretation of the provisions of this Agreement. This Agreement shall be construed so that wherever applicable the use of the singular number shall include the plural number, and vice versa, and the use of any gender shall be applicable to all genders.

26. Complete Agreement. The Contractor was selected through the County's RFP or RFQ identified in Section 1. The RFP or RFQ and the Contractor's response are incorporated herein by this reference. To the extent of any inconsistency among this Agreement, the RFP or RFQ, and the Contractor's response, this Agreement shall govern. To the extent of any inconsistency between the RFP or RFQ and the Contractor's response, the RFP or RFQ shall govern.

27. Conflicts between Attachments and Text. Should any conflicts exist between any attached exhibit or schedule and the text or main body of this Agreement, the text or main body of this Agreement shall prevail.

28. No Third-Party Beneficiaries. The provisions of this Agreement are for the exclusive benefit of the County and the Contractor. This Agreement shall not be deemed to have conferred any rights, express or implied, upon any third parties.

Schedule A
Scope of Services

Project: O’Reilly Acres Bridge Replacement

PROJECT DESCRIPTION

Engineering design and environmental permitting support for the replacement of the O’Reilly Acres Bridge. The existing bridge is located approximately 1.5 miles west of Granite Falls, WA, and carries Pilchuck Tree Farm Road over the Pilchuck River. The existing bridge is load posted and will be replaced with a new bridge.

PROJECT OBJECTIVES

The goal of this project is to prepare the plans, specifications, and cost estimate (PS&E) to a 60% design level and prepare and submit the Section 404 USACE permit. Future design phases, bid support and construction support services are not included but may be scoped at a later date and added by amendment to this Agreement.

ANTICIPATED SCHEDULE

The design phase of the project is expected to last approximately 9 months. A detailed project schedule will be developed upon notice to proceed.

- Notice to Proceed: January 2026
- 30% Design PS&E: May 2026
- 60% Design PS&E: September 2026

DESIGN TEAM

The project team includes

Owner	Snohomish County (County)
Prime Consultant	KPFF Consulting Engineers (KPFF)
Structural Engineering	KPFF
Civil Engineering	KPFF
Stream Design	KPFF
Hydraulics Engineering	Watershed Science & Engineering (WSE)
Geotechnical Engineering	Haley & Aldrich (HA)
Environmental Permitting	Confluence Environmental Company (CEC)

GLOBAL PROJECT ASSUMPTIONS

- County to perform the following tasks:
 - Legal descriptions/figures for permanent acquisitions and depictions for all necessary real property acquisitions, if required.
 - Provide information regarding existing right-of-way.
 - Provide current traffic information. Information includes but is not limited to traffic counts, vehicle classification studies, speed studies, and providing accident reports.
 - County’s project manager will assist in contract management to ensure State requirements are met and will act as the liaison with local jurisdictions, WSDOT, and permitting agencies.

Schedule A
Scope of Services

- Coordinate construction access with property owners. Obtain permission (if required) for design team to access private property adjacent to the site.
 - Coordinate the design of improvements with utility owners, property owners, and other stakeholders, unless specifically outlined in this scope of work.
 - Coordinate all comments and input from other departments within the County and with permitting agencies.
 - Advertise the project for selection of a contractor.
 - Landscape and mitigation planting design
 - Cultural resources permitting
 - Provide title reports for adjacent properties for boundary basemapping
- No hazardous, dangerous, or contaminated soil/groundwater will be encountered on or within the project limits. Should any of these materials be encountered, addressing the situation will be extra work.
 - This design scope/fee does not include the bid support and construction phase.
 - No work shall be performed until notice-to-proceed is issued by the County.

SCOPE OF WORK

TASK NO. 1.0 – PROJECT MANAGEMENT
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1.1 Preparation of Contract Documents, Invoices, and Progress Reports

KPFF will submit monthly invoices pursuant to Section 3 of the Agreement and progress reports outlining completed work, upcoming work and the percent completed versus budget remaining to the County. KPFF will compile the invoices and progress reports for the entire team into a single document to be submitted to the County. KPFF will prepare and administer all subcontracts for subconsultants.

1.2 Coordination and Meetings with County

KPFF will coordinate with the County to discuss project issues, schedule, progress, risks, review comments as well as general coordination of effort. The following project meetings are anticipated:

- Kick-off Meeting (1 meeting)
- County Check-in Meetings (9 meetings)
 - Every two weeks for the first two months
 - Monthly thereafter
 - Meeting Attendees:
 - KPFF PM: All meetings
 - KPFF Civil Lead: 3 meetings
 - KPFF Structural Lead: 3 meetings
 - WSE Hydraulics Lead: 3 meetings
 - KPFF Stream Lead: 3 meetings
 - HA Geotech Lead: 6 meetings
 - CEC Permitting Lead: 3 meetings
- Submittal Review Meetings (30%, 60%)

KPFF will provide agenda and meeting minutes for all meetings.

Schedule A
Scope of Services

1.3 Project Coordination and Meetings with Design Team

KPFF will perform general coordination and be the main point of contact for the team. KPFF will hold regular monthly design team meetings as needed throughout design. Each meeting will last one (1) hour.

1.4 Estimated Project Schedule

KPFF will create a project schedule using Microsoft Project identifying submittal dates, County review periods, and critical path items for the design and construction phases of the project. The initial schedule will be prepared and submitted after Notice to Proceed (NTP) and prior to the kick-off meeting. Updates will be submitted as necessary throughout the design phase.

1.5 Project Quality Control and Quality Assurance (QC/QA)

KPFF will provide a project-wide multi-disciplinary QA review of the project design deliverables. KPFF will develop a QA/QC plan for all KPFF disciplines. Subconsultants will develop and implement their own QA/QC process. KPFF will perform quality assurance of all subconsultant documents and confirm that subconsultants internal QC was performed.

Assumptions

- All meetings will be virtual.
- 9-month design phase (NTP to 60% Design Submittal)

Deliverables

- Monthly Invoices (9), including a progress report outlining completed work, upcoming work, and percent completed versus budget remaining.
- KPFF to compile invoices from subconsultants into a single document
- Project Schedule (PDF)
- Meeting agendas and minutes (PDF)

TASK NO. 2.0 – HYDRAULIC ENGINEERING (WSE)

2.1 Data Collection and Review

Consultant will collect and review existing data and information needed to complete the hydraulic investigation. Data will include but not be limited to topographic maps including LiDAR data, historical aerial photos, flood data, existing bridge drawings and maintenance records, and anecdotal information on past flood events from County maintenance staff.

Assumptions:

- County will supply relevant data they possess including topographic survey in AutoCAD format.

2.2 Site Inspection

Consultant will conduct a one-day field inspection with County and consultant team personnel to examine the crossing and the Pilchuck River. Consultant will examine hydraulic and geomorphic characteristics, sediment transport, debris flow potential, lateral erosion, and scour.

Schedule A
Scope of Services

Assumptions

- County will notify adjacent landowners and right of entry will be provided up and downstream of existing crossing.
- Task includes 2 staff for a 10-hour day.

2.3 Channel Survey

Consultant will review a complete project topographic base map which includes full channel geometry, including streambed, along with overbank.

Assumptions

- The topographic base map will be of sufficient longitudinal and lateral extent, and resolution, to complete the hydraulic analyses without any additional survey. The survey will include the OHWM line, delineated by others.
- A LandXML terrain surface along with the survey data points in XYZ format will be provided to WSE by KPFF.

2.4 Hydrology

Consultant will review effective FEMA 10-, 50-, 100-, and 500-year peak flows (circa 1980s) for the Pilchuck River and determine whether they need to be updated for the current design analysis. Peak flow analysis will use the best available flow records for the Pilchuck River; if flow records are not available, flows may need to be determined and cross-checked using different methods, such as USGS regional regression equations, and discharge records from neighboring streams that have similar basin characteristics -- assuming suitable records are available. If the two methods produce significantly different results, WSE will recommend / select the final design values. The design event for flow and scour will be the 100-year flood and the check flood for potential damage will be the 500-year event. The 500-year event is not the design event, it is solely used to assess risk to identify any remaining significant erosion or scour issues that might need to be addressed in the design.

Assumptions

- None

2.5 Hydraulic Analysis

The project reach has an effective FEMA flood insurance study including detailed (Zone AE) mapping and a defined floodway. Consultant will update and apply the FEMA model to analyze flow characteristics within the project reach, to support bridge alternative analysis and design, and to evaluate project impacts to FEMA floodway and base flood elevations.

Consultant will request the effective hydraulic model and engineering data (ca 1980s) from FEMA, convert the model to HEC RAS, and run the model to recreate the effective FEMA 100-year profile and floodway*. Consultant will then update the model through the project reach to reflect existing site conditions based on new survey and LiDAR. WSE will use engineering judgment to refine model parameters and then apply the model to simulate design flows to establish existing conditions. The model will be used to help size the bridge waterway, to provide data required to evaluate lateral erosion and scour potential,

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Scope of Services

evaluate longitudinal profile stability, develop countermeasures, and provide streambed sediment stability analysis.

*If the FEMA model is not available or is determined to be unusable, Consultant will develop a new hydraulic model of the existing channel and adjacent floodplain through the project reach based on new survey and LiDAR, and tie that model into effective FEMA cross sections based on information from the flood insurance rate maps and flood insurance study.

Assumptions

- None

Deliverables

- Hydraulic model (HEC RAS format)

2.6 Channel Stability, Scour Assessment, and Countermeasure Design

Consultant will determine if lateral erosion, local scour, longitudinal stability, ice, or debris flows pose a threat to the proposed crossing. The goal will be to address these hazards through modifications to the structure itself (e.g. deeper foundations, longer bridge, etc.) and preferably not through design and installation of external countermeasures (e.g. riprap). If additional scour and erosion protection countermeasures are required to protect the bridge, Consultant will provide scour countermeasure concept sketches. Consultant will also examine and evaluate the longitudinal profile and provide design input and recommendations with regard to abutment foundation depths and wing/guide wall design.

Assumptions

- None

Deliverables

- Scour Countermeasure sketches for incorporation into design plans.

2.6.1 Scour Countermeasure Design (KPFF)

Consultant will design scour countermeasure material, size, and dimensions using the Federal Highway Administration's Bridge Scour and Stream Instability Countermeasures Design Guidance (HEC-23). KPFF will provide a scour countermeasure detail. Scour countermeasures will be coordinated with the 60% structural engineering design of the crossing.

2.7 No-Rise Analysis

This site is located within a FEMA Special Flood Hazard Area and Floodway. No-rise analysis demonstrating the proposed project does not result in a rise in 100-year Base Flood Elevation (BFE) or Floodway water surface elevation will be required. Consultant will conduct a no-rise analysis of the site and hydraulic design comparing existing to proposed conditions and revise the design to attempt to achieve no-rise.

Assumptions

- A FEMA No-Rise Certificate is required.
- The design will meet No-Rise, and a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) will not be required.

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Deliverables

- No-Rise Analysis and Certification will be documented in Hydraulic Design Report.

2.8 Permit Assistance

KPFF will provide information to the project permit specialist to support the preparation of the USACE and WDFW permit applications. KPFF will prepare JARPA drawings, coordinating with other disciplines as necessary. The JARPA drawings will include relevant stream design elements on approximately 20 sheets. JARPA drawings will be prepared following the USACE drawing standards after the 60% design submittal. The Ordinary High Water Mark (OHWM) location, provided by others, will be displayed on the plans. The following sheets are anticipated:

- Cover Page (1 sheet)
- Summary of Quantities (1 sheet)
- TESC & Demo Plan (1 sheet).
- Stream Restoration Plan View depicting the proposed structure, limits of stream reconstruction, and associated retaining walls/headwalls (1 sheet).
- Stream Restoration Profile depicting the structure and limits of stream reconstruction in profile view (1 sheet).
- Stream Details to include a cross section of the proposed streambed beneath the structure and a typical stream cross section, and Streambed Material Installation Detail (2 sheet).
- Scour Countermeasure details depicting the location, dimensions, and material requirements for scour countermeasures (1 sheet).
- Site Restoration / Planting Plan depicting restoration areas and concepts such as upland planting areas and riparian planting areas (1 sheet). CAD information for the planting plan will be provided by the County.
- Planting Details depicting tree, shrub, and groundcover planting installation details (1 sheet). Cad information for the planting details will be provided by County.

In addition to the JARPA drawings, KPFF will provide design information to support environmental permit applications by others. This information includes coordinating the approximate project extents, project description, and material quantities.

Assumptions

- KPFF will generate JARPA drawings using information from the 60% plan submittal formatted to USACE standards. Separate CAD files will not be produced for the JARPA drawings.

Deliverables

- JARPA drawings (PDF)

2.9 Stream PS&E Design and Document Preparation

KPFF will prepare drawings, specifications, and quantities for the Project that comply with Snohomish County, WDFW, WSDOT, AASHTO, and guidelines. Stream and PS&E document preparation will be in accordance with the WDFW Water Crossing Design Guidelines (2013 edition) and the 2025 WSDOT Hydraulic Manual, Standard Specification, Amendments, and General Special Provisions (latest addition).

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Anticipated Stream Plan Sheet List

- Stream Grading Plan View depicting the structure, limits of stream reconstruction, and associated retaining walls/headwalls (1 sheet).
- Stream Grading Profile depicting the structure and limits of stream reconstruction (1 sheet).
- Stream Details to include a cross section of the proposed streambed beneath the structure, typical stream cross section, and Streambed Installation Details (2 sheets).

Specifications:

Project specifications will be prepared to supplement WSDOT Standard Specifications for Road, Bridge, and Municipal Construction.

KPFF will provide the following:

- General Special Provisions (GSP), APWA Special Provisions, and Project-Specific Special Provisions for Divisions 2-9, as they relate to stream elements.
- All technical special provisions required for any non-standard bid items.

Engineer's Estimate Support

KPFF will compile a list of stream bid items and associated quantities/costs that correspond to the stream specifications and plan set.

PS&E Deliverables

- 30 Percent PS&E Submittal:
 - 30% Plan Set (11x17 PDF)
- 60 Percent PS&E Submittal:
 - 60% Plan Set (11x17 PDF)
 - 60% Engineer's Estimate (PDF)
 - Draft Specifications (PDF)
 - Response to County 30% comments (PDF and/or Excel)

2.10 Hydraulic Design Report

Consultant will prepare a hydraulic design report to summarize and document the results of the investigation, hydraulic analysis, and design. It will include the recommended NBIS Scour Code rating for the new structure, a code that the County will need for their records.

Assumptions

- None

Deliverables

- Hydraulic Design Report, Preliminary, Draft & Final (PDF)

TASK NO. 3.0 – GEOTECHNICAL ENGINEERING (HA)

3.1 Review of Existing Information and Site Reconnaissance

Prior to field exploration work, Consultant will review and compile readily available geotechnical information across the project area. This review will include online geotechnical databases, geologic maps, and Consultant's internal database.

Consultant will perform a geotechnical site reconnaissance of the project. This reconnaissance will be used to identify geotechnical challenges and assist in identifying the specific locations for the geotechnical exploration program. While on site, Consultant will mark the proposed boring locations for utility locates.

3.2 Field Investigation Program and Laboratory Testing

Consultant will prepare a Geotechnical Work Plan Memorandum for the proposed exploration program. The work plan will be submitted to the design team and the County for review and approval. The work plan will detail the type, location, and extent of proposed field explorations along with logistics necessary to perform the work such as traffic control plans and staging areas, as necessary. The work plans will also be used for utility locating clearances and for permitting that may be necessary to access the exploration locations. The County will provide right-of-entry permits as they become available.

Prior to performing the boring exploration work, a public utility locate will be called in to verify that the proposed drilling locations do not overlap with known buried utilities. Consultant will also perform an additional private utility locate with a hired subcontractor to confirm/expand upon the public utility locate. A project specific jog hazard analysis document will be developed to help ensure the health and safety of staff on-site for the drilling exploration work.

Following review and acceptance of the work plan, Consultant will plan and complete the geotechnical exploration program for the project. Consultant anticipates that this program will consist of drilling two boring explorations, each to a depth of about 120 feet: one boring in the vicinity of each proposed bridge abutment foundation. Depending on the findings of task 3.1, the depth and quantities may change. Each boring is assumed to be drilled off the road, along the road shoulder. All explorations performed will be repaired at the surface to approximately match adjacent surface conditions. All drilling spoils will be drummed and transported off site for disposal by the driller. Each of the above-described geotechnical explorations will be logged by Consultant's geologist or geotechnical engineer. We expect that these borings will take up to 6 days to complete.

One of these two borings will be completed with a grouted-in-place vibrating wire piezometer (VWP) to provide continuous groundwater monitoring data. Shear wave velocity casing will also be installed in one of the borings to provide shear wave velocity data that can be used to support identification of a seismic site class for the project. A geophysical subconsultant will perform downhole suspension logging testing within the boring with shear wave velocity casing. An Consultant staff member will return to the site quarterly to collect groundwater data from the VWP.

Consultant will prepare summary boring logs and perform laboratory testing to evaluate

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relevant physical properties of the site soils. Laboratory testing will include moisture content, Atterberg limit and grain-size distribution tests.

If significant thicknesses of soft fine-grained soils are encountered within either exploration, we recommend performing additional advanced laboratory testing (e.g. consolidation, direct simple shear, etc.) on undisturbed samples to support geotechnical design. At this time, we understand that the County would like us to exclude this advanced testing from our scope and fee. We will contact the County to produce a contract amendment should the need for these advanced tests be determined following completion of drilling.

Assumptions

- Consultant will be given ready access to the work locations and appropriate rights of entry during normal daytime work hours to both sides of the bridge, such that drilling equipment will not need to be across the bridge.
- Borings can be completed along the road shoulder, off the road, without the need for a right-of-way permit and a traffic control plan
- Concrete coring will not be required at boring locations.
- Consultant will be given maps showing the accurate locations of all underground utilities at the site, as available.
- A surface flush well monument will be installed at the boring location with the VWP and shear wave velocity casing, with remaining annular space patched using asphalt or concrete cold patches.
- The installed well will be decommissioned by others in the future.
- No site restoration will be required other than typical cleanup and patching.
- The boring locations will be surveyed by KPFF.
- The soil cuttings and groundwater are environmentally clean and can be disposed of as clean waste. Clean soil cuttings will be hauled off site and disposed of. Clean groundwater generated during well development will be disposed of on site.
- If suspected contaminated soil or groundwater is encountered, the consultant will place it in drums, label the drums, leave the drums on site, and contact you for discussion of drum disposal alternatives.
- Estimated boring depths assume that competent bearing soils will be encountered within the upper 120 feet. Borings may need to be extended in the field at additional cost if this is not true.

Deliverables

- Geotechnical Work Plan Memorandum (PDF)

3.3 Geotechnical Engineering Design Analysis

Based on the results of the field investigation, Consultant will characterize the subsurface soil conditions and develop suitable engineering properties relevant to the proposed site improvements. Specific analyses that we expect to perform include, but are not limited to:

- Develop seismic site class and AASHTO general procedure-based seismic design parameters.
- Liquefaction susceptibility, triggering, and consequence analyses.
- Limit-equilibrium slope stability analyses for walls, slopes, and embankments.

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- Lateral earth pressures to support retaining wall design.
- Bridge foundation type recommendations and appropriate soil resistances for design of selected foundation types.
- Assess expected settlement associated with planned site improvements.

Assumptions

- No site-specific seismic analyses (e.g. site response analysis, dynamic soil-structure interaction numerical modeling, etc.) will be required or performed.
- Design of ground improvement (if needed) will not be performed.

3.4 Geotechnical Reporting

Consultant will prepare a draft geotechnical report for the project. This report will contain the results of our subsurface exploration program (boring logs, soil laboratory test results, and a report from our geophysical subconsultant), including a site plan showing exploration locations and a subsurface cross section. The report will provide geotechnical recommendations for proposed site improvements. We expect that this draft report will be submitted with the 30% design package.

After design has progressed further and we have received review comments from the County, we will update our geotechnical report as needed to produce our final stamped geotechnical report. We expect this final report to be submitted with either the 60% or 90% design packages.

Deliverables

- Draft Geotechnical Report (PDF)
- Final Geotechnical Report (PDF)

3.5 Review of Plans and Specifications

Consultant will perform a review of the plans and specifications to confirm that they conform to the recommendations included within our geotechnical report.

TASK NO. 4.0 – RIGHT-OF-WAY BASE MAPPING & TOPOGRAPHIC SURVEYING (KPF)

4.1 – Records Research

Research of existing records (plats, legal descriptions, records of survey, right-of-way documents) shall be furnished by the Consultant. At the request of the Consultant, the County will provide title reports. The Consultant shall have sufficient research, in combination with the found monumentation to establish the control, right-of-way, and abutting parcels.

4.2 – Horizontal and Vertical Control

The datum for horizontal control shall be done using Washington State Plane Coordinates (North Zone expressed in US Survey feet) NAD 83/11. The datum for the vertical control shall be NAVD 88. Sufficient control points will be added throughout the project limits to ensure that all points within the right-of-way can be

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mapped. The Consultant shall tie into at least two (2) existing horizontal and vertical control points in order to establish the horizontal and vertical datums.

4.3 – Topographic Survey

The Consultant shall perform a field topographic survey to identify existing surface conditions within the limits of the project described above. This shall be done using electronic surveying equipment and a one-person crew and/or two-person crew.

It is the responsibility of the Consultant to ensure that the work performed is done so in a safe manner that does not endanger the workers or pedestrian and vehicular traffic. It is assumed that no traffic control will be necessary for this project. KPFF may request County personnel to assist with traffic control if it is deemed necessary to complete the work. All rights of entry agreements required to perform the work will be secured by the County prior to the survey.

At a minimum, the following surface features shall be mapped in the topographic survey:

- a. Curbs
- b. Sidewalks
- c. Pavement
- d. Driveways
- e. Retaining walls
- f. Storm drainage structures (including type of structure, invert elevation and direction, and rim elevation)
- g. Sanitary sewer structures (including type of structure, invert elevation and direction, and rim elevation)
- h. Water utilities (valves, hydrants, blowoffs, etc.)
- i. Visible irrigation boxes and heads
- j. Power structures, poles, guys, and lines (for aerial lines, show horizontal location for all lines on pole)
- k. Natural gas valves, lines, and blowoffs
- l. Telephone lines and structures
- m. Cable lines and structures
- n. Traffic signal and street lighting poles, conduit, and junction boxes
- o. Signage
- p. Channelization (striping including parking lot areas)
- q. Visible existing survey markers
- r. Vegetation (list trunk diameter and type for trees)
- s. Building structures
- t. Fences
- u. Mailboxes
- v. Bollards

4.4 – Base Map Preparation

The Consultant shall prepare a basemap in electronic format. It shall be completed using the vertical and horizontal control listed under Task 4.3. Units for the basemap shall be in feet. This basemap shall include all surface features listed above, catch basin rims and invert elevations, a TIN Surface depicting one-foot contours, right-of-way lines, parcel lines, and parcel information (property owner name, address, parcel number). Break lines shall be provided for all pertinent sections (at a minimum these shall include crown, flow line, curb, and any other

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vertical faces). The TIN shall include these break lines. All layers, blocks, text styles, point styles, and line types shall be derived from the County drawing standards. Point descriptions will follow Consultants point coding and a detailed list of codes will be provided to the County. At a minimum, a narrative explaining how the horizontal control was established will be included in the basemap. This shall include a description of the monuments and the basis for bearing. Consultant will prepare a right-of-way basemap depicting the existing right-of-way and adjacent properties. Consultant will analyze title reports and plot easements on adjacent properties.

Assumptions:

In addition to any assumptions previously made in this proposal, the following assumptions have been made in preparation of this scope of work:

- Any scope of work requested or required that is not specifically identified in one of the tasks above may be considered an additional service. Prior to completing any such work, KPFF will discuss with you the need and impact on the scope and fee.
- KPFF will be allowed unrestricted access to site during course of project.
- Where required, the County will secure rights of entry for adjacent properties.
- County will confirm and supply KPFF with any necessary rights of entry prior to performing work on private property.
- County will provide any record utility information within the project limits.
- Potholing utilities is not part of this scope. Should potholing be necessary to complete design, KPFF can provide a fee proposal for coordinating and locating utility potholes. Potholing for the shoring design will be coordinated by others.
- Underground utilities will be mapped based on locates painted on the ground, these locates are limited to conductible utilities only, ground penetrating radar will not be utilized for this project. Utilities may exist that are not conductible. In this case, KPFF will show surface features and supplement with record data provided by the County.
- Underground utilities will be shown based on best available information and utility locates. Pipe sizes and types will be shown only where record information is available, or where access for measurement is available, such as sanitary sewer and storm structures.
- Traffic control is not part of this scope. Should traffic control, including but not limited to, flaggers, and lane closures become necessary, KPFF will work with County crews to coordinate traffic control. At the request of the County, KPFF can hire a private consultant to perform the traffic control necessary to complete the scope of work.
- Title reports will be provided by others, the survey fee does not include cost associated with title reports.
- Fee given does not include meetings.

Deliverables

- An AutoCAD basemap depicting boundary and right of way, and topography of the site area, and a civil 3D surface file in AutoCAD 2018 format or later.

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TASK NO. 5.0 – CIVIL ENGINEERING (KPFF)

5.1 - Alternatives Analysis

KPFF will develop civil design criteria for inclusion in the Design Alternative memo. KPFF will document opportunities and constraints in an existing conditions map and narrative identifying the locations and character of site conditions that will influence alignment evaluation, selection and development.

The evaluation will be summarized in a Design Alternatives Memo and submitted to the County for review. The summary will include concept level sketches (alignment, profile, and cross-sections), quantities, and costs for each alternative.

Assumptions

- Road will be closed for construction and new bridge will be constructed near the existing alignment. There is a viable detour for adjacent property owners.

Deliverables

- Design Alternatives Memo, Draft & Final (PDF)
- Figures for three roadway/bridge plan and profile view layout. (PDF)

5.2 - Stormwater Report

Stormwater design will be based on the Stormwater Management Manual for Western Washington (SWMMWW) (2024).

KPFF will perform the following tasks:

- Review existing conditions, utility as-builts, drainage, sub-basin delineation, and to generally confirm accuracy of survey base mapping.
- Prepare draft Stormwater Report that addresses stormwater collection, conveyance, changes in impervious area, tributary areas and points of discharge, pollution generating impervious areas, detention requirements and measures, and water quality treatment as needed for the Project. KPFF will submit the report to the County for review and approval at the 60% design level.
- Prepare responses to comments from the County and revise the Stormwater Report and storm drainage plans. Prepare a final Stormwater Report and submit to County at the 100% design level.

Assumptions

- Stormwater design will be based on the Stormwater Management Manual for Western Washington (SWMMWW) (2024).

Deliverables

- Draft Stormwater Report at the 60% design level (PDF)

5.3 – Civil PS&E Design and Document Preparation

KPFF will prepare drawings, specifications, and quantities for the Project that comply with Grays Harbor County, WSDOT, AASHTO, and MUTCD guidelines. Civil design and

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PS&E document preparation will be in accordance with the WSDOT Design Manual (September 2021), AASHTO Geometric Design of Highways and Street (2018), and the WSDOT Standard Specification, Amendments, and General Special Provisions (latest addition)

Anticipated Civil Plan Sheet List

- Site Preparation (Demo) Plan
- Temporary Erosion and Sediment Control (TESC) Plan
- Roadway Typical Sections
- Traffic Control /Maintenance of Traffic Plan
- Roadway Plan and Profile
- Paving Plan, Pavement Marking and Details
- Drainage Plan, Profile and Details

Flow Control and Water Quality Details

Specifications:

Project specifications will be prepared to supplement WSDOT Standard Specifications for Road, Bridge, and Municipal Construction.

KPFF will provide the following:

- General Special Provisions (GSP), APWA Special Provisions, and Project-Specific Special Provisions for Divisions 2-9, as they relate to civil elements.
- All technical special provisions required for any non-standard bid items

Engineer's Estimate Support

KPFF will compile a list of civil bid items and associated quantities/costs that correspond to the civil specifications and plan set.

Deliverables:

- 30 Percent PS&E Submittal:
 - 30% Plan Set (11x17 PDF)
- 60 Percent PS&E Submittal:
 - 60% Plan Set (11x17 PDF)
 - 60% Engineer's Estimate (PDF)
 - Draft Specifications (PDF)
 - Response to County 30% comments (PDF and/or Excel)

QA/QC

KPFF will provide civil QA/QC for the project at each submittal for each document submitted to the County.

Assumptions

- Roadway design will be based on design standards published by AASHTO, WSDOT, MUTCD, and Grays Harbor County.
- The design software will be AutoCAD 2020 with Civil 3d.
- The County will provide Division 1 specifications.

TASK NO. 6.0 – STRUCTURAL ENGINEERING (KPFF)

KPFF will perform the bridge engineering tasks for this project. Anticipated tasks include the following:

6.1 Alternatives Analysis

KPFF will develop project design criteria and summarize in a Design Criteria Memorandum. KPFF will study the location, span, and potential substructure and superstructure types for the bridge replacement. It is anticipated that the preferred alternative will consist of a single-span bridge supported on either a spread footing, driven steel piles, or GRS-IBS abutment. Three superstructure types will be evaluated.

The evaluation will be summarized in a Draft Design Report and submitted to the County for review. The summary will include concept level sketches (plan and cross-section), quantities, and costs for each alternative.

Assumptions

- Road will be closed for construction and new bridge will be constructed on or adjacent to the existing alignment. Construction phasing will not be considered.

Deliverables

- Design Criteria Memo (PDF)
- Draft and Final Design Report (PDF)

6.2 Bridge PS&E Design and Document Preparation

All work will comply with County, WSDOT and AASHTO guidelines. Structural design and PS&E document preparation will be in accordance with the WSDOT Bridge Design Manual, the AASHTO LRFD Bridge Design Specifications, and the 2022 Washington State Department of Transportation (WSDOT) Standard Specifications, Amendments and General Special Provisions, (latest edition).

Anticipated Structural Plan Sheet List (Sheet Count: 30+-)

- Cover Page/Sheet Index
- Structural General Notes
- Bridge Layout
- Typical Section
- Suggested Construction Sequence (up to 2 sheets)
- Foundation Layout
- Foundation Details
- Abutment Plan, Elevation and Details (up to 4 sheets)
- Bearing Details
- Framing Plan
- Girder Details (4 sheets)
- Deck Reinforcing Plan and Section
- Approach Slabs (2 sheets)
- Traffic Barrier/Railing Details (3 sheets)
- Retaining Walls (3 sheets)

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Specifications/Contract Bid Package:

Project specifications will be prepared to supplement the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction.

KPFF will provide the following:

- General Special Provisions (GSP), APWA Special Provisions, Bridge Special Provisions (BSP) and Project-Specific Special Provisions for Divisions 2-9, as they relate to structural components.
- All technical special provisions required for any non-standard bid items
- Bid List for structural elements

Engineer's Estimate:

KPFF will compile a list of bid items and associated quantities/costs that correspond to the bridge specifications and plan set.

PS&E Deliverables

- 30 Percent PS&E Submittal:
 - 30% Level Plan Set (11x17 PDF)
- 60 Percent PS&E Submittal:
 - 60% Level Plan Set (11x17 PDF)
 - 60% Engineer's Estimate (PDF)
 - Draft Specifications (PDF)
 - Response to County 30% comments (PDF and/or Excel)

QA/QC

KPFF will provide structural QA/QC for the project at each submittal for each document submitted to the County.

TASK NO. 7.0 – ENVIRONMENTAL DOCUMENTATION/PERMITTING (CEC)
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7.1 Environmental Review and Permitting (CEC)

Consultant will support the environmental review process and prepare the environmental permit applications. Environmental review and permitting will include the following environmental review documents and permit applications:

- Consultant will prepare the Joint Aquatic Resources Permit Application (JARPA) Form as application for the following permits:
 - Clean Water Act Section 404 permit issued by the U.S. Army Corps of Engineers (Corps).
 - Clean Water Act Section 401 Water Quality Certification issued by the Washington Department of Ecology (Ecology).
- Consultant will prepare a Biological Assessment that will cover Species under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) and will be submitted to the Corps to initiate ESA Section 7 consultation with the USFWS and NMFS (See Task 6.2, below) in support of the Corps permit application.

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- Consultant will prepare a Critical Areas Report that will cover Wetlands and Fish and Wildlife Habitat Conservation Areas (i.e., streams) (See Task 6.2, below). The Critical Areas Report will be included as attachment to the JARPA in support of the Corps permit application, covering jurisdictional waters of the U.S.

For the CWA 404 (Corps) and the 401 Water Quality Certification (Ecology) applications, Consultant will prepare a JARPA Form that will include a project description and will pull information from the Biological Assessment (See Task 6.2.1, below) and Wetland/Stream Assessment (See Task 6.2.2, below) for specific information related to wetlands and other aquatic habitats, species, and potential project impacts. Consultant will coordinate with Snohomish County regarding the timing for the submittal of the Corps permit application. Consultant will be prepared to submit the Corps permit application between 30% and 60% design and once Snohomish County has approved the Corps permit application and supporting documents and directed Consultant to submit.

Assumptions

- Consultant will be designated as the authorized agent as appropriate for permitting on behalf of Snohomish County
- Consultant will develop a project description, with support from the project team, which can be used across multiple documents for consistency. The project description will include area of temporary and permanent impacts, volume of material to be excavated and imported for use as fill (especially within the floodplain), existing and proposed new/replaced impervious surface area (pollution generating and non-pollution generating, location, sizing and efficiency of stormwater treatment and detention facilities (if required) and the appropriate hydrologic and hydraulic analysis prepared by others to demonstrate potential impacts of the project on floodplain function and appropriate mitigation to offset any potential impact, general construction equipment and methods, avoidance and minimization measures, timing and duration of construction activities, including in-water work.
- No federal structures are assumed to be present, therefore Section 408 of the Rivers and Harbors Act does not apply: the river is not defined as navigable and will not require a Section 10 permit from the Corps; and a Washington State Department of Natural Resources Aquatic Lands Lease Authorization is not required.
- Consultant will not be responsible for quantifying impacts to floodplain function or identifying, developing, or designing floodplain related mitigation if required to offset impacts to floodplain function that may result from the project. This information will be provided to Consultant to support the Corps permit application if needed.
- Wetlands and the Pilchuck River are assumed to be Waters of the U.S. and require coordination with the Corps. Impacts to the Waters of the U.S. will be less than 0.5 acres and the project will meet the requirements of Nationwide Permit (NWP) 14, Linear Transportation Project. If impacts to Waters of the U.S. are greater than 0.5 acres, an Individual Permit will be required, and a scope and budget amendment will be needed.
- Consultant will not be responsible for National Historic Preservation Act compliance or NHPA Section 106 consultation with Department of Archaeology and Historic Preservation (DAHP) and the affected Tribes. This information, or documentation of compliance with Section 106 of the NHPA will be provided to Consultant as supporting documentation for the Corps permit application.
- The project will not require a U.S. Coast Guard Bridge Permit.

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- Consultant will submit Draft Corps permit application and supporting documents and the Biological Assessment to Snohomish County for review. Consultant will respond to one round of comments from Snohomish County on the Draft Corps permit application and supporting documents and the Biological Assessment and prepare the Final Corps permit applications and supporting documents and Biological Assessment.
- Assumes one (1) round of County review.
- Assumes one (1) round of Corps review and one (1) virtual coordination meeting, if required, to coordinate updates based on Corps comments.

Deliverable

- Draft and Final Corps Permit Application and Supporting Documents (JARPACritical Areas (Wetlands/Streams) Report) [electronic copy].

7.2 Supporting Documentation (CEC)

Consultant will complete the following supporting documentation in support of the required Corps permit application.

7.2.1 Biological Resources/Endangered Species Act Compliance (CEC)

Consultant will prepare a Biological Assessment (BA) to assess potential impacts from the Proposed Action to species listed under the Endangered Species Act. The BA will assess the potential effects of the proposed project on species that are listed, proposed, or candidates for listing as Endangered or Threatened and their designated Critical Habitat under the federal Endangered Species Act. The BA will meet the requirements of Section 7 of the Endangered Species Act. The BA will include the following:

- Background;
- Delineation of the project Action Area;
- Status of Species and Critical Habitat;
- Environmental Baseline;
- Effects of the Action;
- Cumulative Effects (if formal consultation is required);
- Effect Determinations for each species and their designated critical habitat;
- References; and
- Essential Fish Habitat.

The BA will be based on the preliminary design and best available science to determine the potential impact to listed species and their designated critical habitat. Habitat conditions will be documented in the BA. Additional information required to prepare the BA includes, but is not limited to the following:

- Preliminary Design site plans;
- Limits of Construction, including permanent and temporary disturbance area;
- New and existing impervious surface and stormwater management;
- Pre- and post-construction contours; and
- Construction methods and timing.

A draft BA will be provided to the County for review and comment. Comments will be incorporated into the draft before being finalized and submitted to the Corps for review.

Schedule A Scope of Services

The BA will be revised and finalized based on comments received. The Corps will then submit the BA to the USFWS and NMFS for agency-to-agency consultation (formal or informal), as needed. Consultant will participate in consultation as needed to support the Corps and respond to any technical questions on the BA.

Assumptions

- A site visit (one 10-hour day) will be performed by a qualified biologist to assess habitat conditions and determine if suitable for listed species is present at the project site and within the anticipated action area (where access is allowed). Site visit will align with the wetland delineations covered in Task 6.2.2, below.
- Assumes one (1) review by County prior to submittal to the Corps.
- Assumes one (1) review by the Corps prior to submittal to USFWS and NMFS.
- Assumes one (1) review by USFWS and NMFS.

Deliverables

- Draft and Final Biological Assessment (PDF)

Task 7.2.2 Wetland/Stream Assessment (CEC)

Habitat Survey (CEC)

Consultant will conduct a pre-site visit desktop analysis of potential Critical Habitat Areas and sensitive species for the bridge site. The purpose of this research will be to help guide the fieldwork and the team's conceptual design development with respect to potential habitat constraints and project permit requirements. Prior to fieldwork, desktop analysis will include consulting the following resources:

- USFWS National Wetland Inventory online maps
- NRCS USDA Web Soil Survey online maps
- WDFW Priority Habitats and Species (PHS) online maps
- Snohomish County Critical Areas Ordinance SCC 30.62A
- Snohomish County GIS parcel viewer critical areas map layers
- Stream inventories and salmonid habitat databases (WDNR, WDFW, SWIFD, SSHIAP)
- FEMA Floodplain and Floodway Maps
- WA Department of Ecology Water Quality Atlas & Coastal Atlas
- WDNR Washington Natural Heritage Program (WNHP) Data Explorer
- NRCS National Water and Climate Center's Wetlands Tables (aka WETS tables)

Consultant will complete a habitat survey to examine sensitive habitats and/or species conditions that may influence Corps permitting and mitigation requirements. During the site visit, the Ordinary High Water Mark (OHWM) will be delineated to establish and flag the jurisdictional stream boundary. Stream characteristics will be noted within the project reach, such as bankfull width, gradient (percent slope), and fish presence.

Additionally, if any wetlands are found within 300 feet of areas anticipated to be

Schedule A Scope of Services

disturbed for the project, a wetland investigation will be conducted. The wetland investigation will cover a 300-ft radius area surrounding the proposed construction and staging areas, since 300-ft encompasses the largest possible wetland buffer per SCC 30.62A. Any sensitive or ESA listed species or important habitat features will also be noted while on site.

The OWHM delineation will be conducted according to the Washington Department of Ecology (Ecology) and the U.S. Army Corps of Engineers (Corps) standards. The federal definition of the OHWM outlined in 33 CFR 328.3(c) is as follows: "*The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*" The Shoreline Management Act defines OHWM as, "*that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971...*" (RCW 90.58).

The wetland survey will be conducted using methods described in the 2010 Regional Supplement (Western Mountains, Valleys, and Coast) to the Corps of Engineers 1987 Wetlands Delineation Manual. The wetland boundary will be marked in the field with flagging tape and wetland boundaries, and plot locations will be surveyed using handheld GPS units. Wetland and stream determination methods will be consistent with the definition(s) and requirements of local, state, and federal agencies.

Wetland Rating, Mapping, & Critical Areas (Wetlands/Streams) Report (CE)

After the on-site fieldwork is completed, a wetland rating will be necessary for any wetlands found, to establish wetland buffer size. The wetland rating work will use the Washington Department of Ecology's Wetland Rating System for Western Washington (2014 Update, version 2). Additionally, the SCC 30.62A will be referenced to determine wetland and stream buffer sizes. Stream and wetland buffers, along with any other sensitive habitat or species features, will be overlaid on a GIS map of the bridge site, to be used in the analysis of stream and/or wetland impacts as well as buffer impacts for each alternative. A final wetland delineation and rating report will be completed, which will include all relevant data forms, photos, and maps that were collected or referenced during the critical areas study. This report will describe all findings from the wetland survey, and if any wetlands were delineated they will include the rating and category assignment. Consultant will also describe the topography, hydrology, soils, weather trends, and plant species observed on site, along with a function and value assessment of delineated wetlands.

Assumptions

Schedule A
Scope of Services

- This scope assumes up to one wetland at the bridge site. If more wetlands are found, more rating and GIS mapping time may be required.
- This scope assumes one (1) 10-hour field day with two (2) biologists to conduct the wetland, OHWM, and habitat survey, in addition to drive time and mileage. The site visit will align with the biologist site visit in Task 6.2.1, above.
- GPS data will be collected by biologists during habitat surveys, and digital GIS shapefiles of field data will be shared with the County, along with metadata.
- Wetland determination datasheets, wetland rating worksheets, and GIS figures developed by Consultant will be included in the Wetland Delineation Report.
- Deliverables will be PDF files with the exception of the GIS shapefiles.
- One (1) draft and one (1) final report will be provided.
- Access permission for the study area will be obtained by the County.
- Field work will be conducted during low flow conditions.
- Field work will not occur during high water flows or during snow events.
- This scope does not include a mitigation plan for unavoidable wetland or stream impacts.

Deliverables

- PDF of GIS site map showing critical areas and their associated buffers.
- GIS shapefiles and metadata.
- Draft and final Critical Areas/Wetland Delineation Report with mitigation recommendations.

KPFF Consulting Engineers

Consultant Fee Summary

Cost Plus Fixed Fee Consultant Agreement
SnoCo O'Reilly Acres Bridge Replacement

Classification	Total Hours	X	Rate	=	Cost
Project Manager(Bridge)	181.00	X	\$ 86.50	=	\$ 15,656.50
Sr. Project Engineer (Bridge)	154.00	X	\$ 70.00	=	\$ 10,780.00
Design Engineer (Bridge)	264.00	X	\$ 49.00	=	\$ 12,936.00
CADD Technician (Bridge)	262.00	X	\$ 60.00	=	\$ 15,720.00
Project Coordinator (Bridge)	18.00	X	\$ 41.00	=	\$ 738.00
Principal (Survey)	14.00	X	\$ 86.54	=	\$ 1,211.56
Sr. Project Surveyor (Survey)	44.00	X	\$ 60.10	=	\$ 2,644.40
Project Surveyor (Survey)	8.00	X	\$ 53.07	=	\$ 424.56
Survey Crew Chief (Survey)	56.00	X	\$ 42.69	=	\$ 2,390.64
Instrument Person (Survey)	56.00	X	\$ 31.15	=	\$ 1,744.40
Utility Locator (Survey)	8.00	X	\$ 42.69	=	\$ 341.52
Cadd Technician (Survey)	32.00	X	\$ 46.15	=	\$ 1,476.80
Principal (Civil)	16.00	X	\$ 85.81	=	\$ 1,372.96
Associate (Civil)	68.00	X	\$ 75.00	=	\$ 5,100.00
Senior Engineer (Civil)	230.00	X	\$ 63.36	=	\$ 14,572.80
Project Engineer (Civil)	345.00	X	\$ 55.00	=	\$ 18,975.00
Design Engineer (Civil)	98.00	X	\$ 44.83	=	\$ 4,393.34
CADD Design Technician (Civil)	164.00	X	\$ 59.60	=	\$ 9,774.40
	0.00	X	\$ -	=	\$ -
			<i>Total Direct Labor</i>		\$ 120,252.88
Overhead (OH) Cost					
OH Rate x DSC of	157.97%	X	\$120,252.88	=	\$ 189,963.47
Fixed Fee (FF)					
FF Rate x DSC of	30.00%	X	\$120,252.88	=	\$ 36,075.86
			<i>Direct Labor Subtotal</i>		\$ 346,292.22
Reimbursable Items					
Mileage	(100 Miles x \$0.70/mile)			\$	70.00
Survey Consumables				\$	2,166.00
				\$	-
				\$	-
				\$	-
			<i>Subtotal</i>	\$	2,236.00
Subconsultant Total:					\$194,876.75
GRAND TOTAL:					\$543,404.97

