Local Agency A&E Professional Services
Cost Plus Fixed Fee Consultant Agreement

Agreement Number:

Firm/Organization Legal Name (do not use dba's): WSP - USA	
Address 33301 Ninth Avenue South, Federal Way, WA 98003	Federal Aid Number
UBI Number	Federal TIN or SSN Number
Execution Date	Completion Date 05/31/2024
1099 Form Required ☐ Yes ☑ No	Federal Participation ☐ Yes ☑ No
Project Title REYNOLDS AVENUE / HARRISON AVENUE CORRIDOR IMPROVEMENTS	
Description of Work This work consists of widening the Reynolds Avenue corridor between the Reynolds Ave / Harrison Ave intersection and the Reynolds Ave / Pearl St (SR 507) intersection and the Harrison Avenue corridor between the Reynolds Ave / Harrison Ave intersection and the Kuper Rd / Harrison Avenue intersection. This work includes design, PS&E (preliminary and final), Construction Cost Estmates, Surveying, Right-of-Way and Real Estate Acquisition services, and Stormwater, Sanitary Sewer, and Water Utility installations, and utility coordination, locating relocation / undergrounding services. This work also includes Geotechnical Investigations, Environmental Permitting, Cultural Resources, and Public Outreach services. All work completed shall comply with WSDOT, AASHTO, Lewis County, and City of Centralia requirements and regulations.	
☐ Yes ☑ No DBE Participation ☐ Yes ☑ No MBE Participation ☐ Yes ☐ No WBE Participation ☐ Yes ☐ No SBE Participation	Total Amount Authorized: $3,717,149 Management Reserve Fund: N/A Maximum Amount Payable: $3,717,149

Index of Exhibits

Exhibit A Scope of Work
Exhibit B DBE Participation
Exhibit C Preparation and Delivery of Electronic Engineering and Other Data
Exhibit D Prime Consultant Cost Computations
Exhibit E Sub-consultant Cost Computations
Exhibit F Title VI Assurances
Exhibit G Certification Documents
Exhibit H Liability Insurance Increase
Exhibit I Alleged Consultant Design Error Procedures
Exhibit J Consultant Claim Procedures

Agreement Number:

THIS AGREEMENT, made and entered into as shown in the "Execution Date" box on page one (1) of this AGREEMENT, between the LEWIS COUNTY AND WSP USA
hereinafter called the "AGENCY," and the "Firm / Organization Name" referenced on page one (1) of this AGREEMENT, hereinafter called the "CONSULTANT."

WHEREAS, the AGENCY desires to accomplish the work referenced in "Description of Work" on page one (1) of this AGREEMENT and hereafter called the "SERVICES;" and does not have sufficient staff to meet the required commitment and therefore deems it advisable and desirable to engage the assistance of a CONSULTANT to provide the necessary SERVICES; and

WHEREAS, the CONSULTANT represents that they comply with the Washington State Statutes relating to professional registration, if applicable, and has signified a willingness to furnish consulting services to the AGENCY.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

I. General Description of Work

The work under this AGREEMENT shall consist of the above-described SERVICES as herein defined, and necessary to accomplish the completed work for this project. The CONSULTANT shall furnish all services, labor, and related equipment and, if applicable, sub-consultants and subcontractors necessary to conduct and complete the SERVICES as designated elsewhere in this AGREEMENT.

II. General Scope of Work

The Scope of Work and projected level of effort required for these SERVICES is described in Exhibit "A" attached hereto and by this reference made a part of this AGREEMENT. The General Scope of Work was developed utilizing performance based contracting methodologies.

III. General Requirements

All aspects of coordination of the work of this AGREEMENT with outside agencies, groups, or individuals shall receive advance approval by the AGENCY. Necessary contacts and meetings with agencies, groups, and/or individuals shall be coordinated through the AGENCY. The CONSULTANT shall attend coordination, progress, and presentation meetings with the AGENCY and/or such State, Federal, Community, City, or County officials, groups or individuals as may be requested by the AGENCY. The AGENCY will provide the CONSULTANT sufficient notice prior to meetings requiring CONSULTANT participation. The minimum required hours or days' notice shall be agreed to between the AGENCY and the CONSULTANT and shown in Exhibit "A."

The CONSULTANT shall prepare a monthly progress report, in a form approved by the AGENCY, which will outline in written and graphical form the various phases and the order of performance of the SERVICES in sufficient detail so that the progress of the SERVICES can easily be evaluated.

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations, and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

Participation for Disadvantaged Business Enterprises (DBE) or Small Business Enterprises (SBE), if required, per 49 CFR Part 26, shall be shown on the heading of this AGREEMENT. If DBE firms are utilized at the commencement of this AGREEMENT, the amounts authorized to each firm and their certification number will be shown on Exhibit "B" attached hereto and by this reference made part of this AGREEMENT. If the Prime CONSULTANT is a DBE certified firm they must comply with the Commercial Useful Function (CUF) regulation outlined in the AGENCY's "DBE Program Participation Plan" and perform a minimum of 30% of the total amount of this AGREEMENT. It is recommended, but not required, that non-DBE Prime CONSULTANTS perform a minimum of 30% of the total amount of this AGREEMENT.

In the absents of a mandatory DBE goal, a voluntary SBE goal amount of ten percent of the Consultant Agreement is established. The Consultant shall develop a SBE Participation Plan prior to commencing work. Although the goal is voluntary, the outreach efforts to provide SBE maximum practicable opportunities are not.

The CONSULTANT, on a monthly basis, shall enter the amounts paid to all firms (including Prime) involved with this AGREEMENT into the wsdot.diversitycompliance.com program. Payment information shall identify any DBE Participation.

All Reports, PS&E materials, and other data furnished to the CONSULTANT by the AGENCY shall be returned. All electronic files, prepared by the CONSULTANT, must meet the requirements as outlined in Exhibit "C – Preparation and Delivery of Electronic Engineering and other Data."

All designs, drawings, specifications, documents, and other work products, including all electronic files, prepared by the CONSULTANT prior to completion or termination of this AGREEMENT are instruments of service for these SERVICES, and are the property of the AGENCY. Reuse by the AGENCY or by others, acting through or on behalf of the AGENCY of any such instruments of service, not occurring as a part of this SERVICE, shall be without liability or legal exposure to the CONSULTANT.

Any and all notices or requests required under this AGREEMENT shall be made in writing and sent to the other party by (i) certified mail, return receipt requested, or (ii) by email or facsimile, to the address set forth below:

If to AGENCY:
Name: Josh Metcalf
Agency: Lewis County - Dept. of Public Works
Address: 2025 NE Kresky Avenue
City: Chehalis State: WA Zip: 98532
Email: josh.metcalf@lewiscountywa.gov
Phone: 360-740-2762
Facsimile:

If to CONSULTANT:
Name: Alex Shannon
Agency: WSP USA
Address: 33301 Ninth Avenue South
City: Federal Way State: WA Zip: 98003
Email: Alex.Shannon@wsp.com
Phone: 425-241-3232
Facsimile:

IV. Time for Beginning and Completion

The CONSULTANT shall not begin any work under the terms of this AGREEMENT until authorized in writing by the AGENCY. All work under this AGREEMENT shall be completed by the date shown in the heading of this AGREEMENT titled "Completion Date."

The established completion time shall not be extended because of any delays attributable to the CONSULTANT, but may be extended by the AGENCY in the event of a delay attributable to the AGENCY, or because of unavoidable delays caused by an act of GOD, governmental actions, or other conditions beyond the control of the CONSULTANT. A prior supplemental AGREEMENT issued by the AGENCY is required to extend the established completion time.

V. Payment Provisions

The CONSULTANT shall be paid by the AGENCY for completed SERVICES rendered under this AGREEMENT as provided hereinafter. Such payment shall be full compensation for SERVICES performed or SERVICES rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete SERVICES, specified in Section II, "Scope of Work". The CONSULTANT shall conform to all applicable portions of 48 CFR Part 31 (www.ecfr.gov). The estimate in support of the Cost Plus Fixed Fee amount is attached hereto as Exhibits "D" and "E" and by this reference made part of this AGREEMENT.

A. Actual Costs: Payment for all consulting services for this PROJECT shall be on the basis of the CONSULTANT'S actual cost plus a fixed fee. The actual cost shall include direct salary cost, indirect cost rate, and direct non-salary costs.

1. Direct (RAW) Labor Costs: The Direct (RAW) Labor Cost is the direct salary paid to principals, professional, technical, and clerical personnel for the time they are productively engaged in work necessary to fulfill the terms of this AGREEMENT. The CONSULTANT shall maintain support data to verify the direct salary costs billed to the AGENCY.

2. Indirect Cost Rate (ICR) Costs: ICR Costs are those costs, other than direct costs, which are included as such on the books of the CONSULTANT in the normal everyday keeping of its books. Progress payments shall be made at the ICR rates shown in attached Exhibits "D" and "E" of this AGREEMENT. Total ICR payment shall be based on Actual Costs. The AGENCY agrees to reimburse the CONSULTANT the actual ICR costs verified by audit, up to the Maximum Total Amount Payable, authorized under this AGREEMENT, when accumulated with all other Actual Costs.
   A summary of the CONSULTANT'S cost estimate and the ICR percentage is shown in Exhibits "D" and "E", attached hereto and by this reference made part of this AGREEMENT. The CONSULTANT (prime and all A&E sub-consultants) will submit to the AGENCY within six (6) months after the end of each firm's fiscal year, an ICR schedule in the format required by the AGENCY (cost category, dollar expenditures, etc.) for the purpose of adjusting the ICR rate for billings received and paid during the fiscal year represented by the ICR schedule. It shall also be used for the computation of progress payments during the following year and for retroactively adjusting the previous year's ICR cost to reflect the actual rate. The ICR schedule will be sent to Email: ConsultantRates@wsdot.wa.gov.
   Failure to supply this information by either the prime CONSULTANT or any of their A&E sub-consultants shall cause the AGENCY to withhold payment of the billed ICR costs until such time as the required information is received and an overhead rate for billing purposes is approved.
   The AGENCY's Project Manager and/or the Federal Government may perform an audit of the CONSULTANT'S books and records at any time during regular business hours to determine the actual ICR rate, if they so desire.

3. Direct Non-Salary Costs: Direct Non-Salary Costs will be reimbursed at the Actual Cost to the CONSULTANT. (excluding Meals, which are reimbursed at the per diem rates identified in this section) These charges may include, but are not limited to, the following items: travel, printing, long distance telephone, supplies, computer charges and fees of sub-consultants. Air or train travel will be reimbursed only to economy class levels unless otherwise approved by the AGENCY. The CONSULTANT shall comply with the rules and regulations regarding travel costs (excluding air, train, and rental car costs) in accordance with WSDOT's Accounting Manual M 13-82, Chapter 10 – Travel Rules and Procedures, and revisions thereto. Air, train, and rental car costs shall be reimbursed in accordance with 48 Code of Federal Regulations (CFR) Part 31.205-46 "Travel Costs." The billing for Direct Non-Salary Costs shall include an itemized listing of the charges directly identifiable with the PROJECT. The CONSULTANT shall maintain the original supporting documents in their office. Copies of the original supporting documents shall be supplied to the AGENCY upon request. All above charges must be necessary for the services provided under this AGREEMENT.

4. Fixed Fee: The Fixed Fee, which represents the CONSULTANT'S profit, is shown in attached Exhibits "D" and "E" of this AGREEMENT. This fee is based on the Scope of Work defined in this AGREEMENT and the estimated person-hours required to perform the stated Scope of Work. In the event the CONSULTANT enters into a supplemental AGREEMENT for additional work, the supplemental AGREEMENT may include provisions for the added costs and an appropriate additional fee. The Fixed Fee will be prorated and paid monthly in proportion to the percentage of work completed by the CONSULTANT and reported in the Monthly Progress Reports accompanying the billings. Any portion of the Fixed Fee earned but not previously paid in the progress payments will be covered in the final payment, subject to the provisions of Section IX entitled "Termination of Agreement."

5. Management Reserve Fund (MRF): The AGENCY may desire to establish MRF to provide the Agreement Administrator with the flexibility to authorize additional funds to the AGREEMENT for allowable unforeseen costs, or reimbursing the CONSULTANT for additional work beyond that already defined in this AGREEMENT. Such authorization(s) shall be in writing and shall not exceed the lesser of $100,000 or 10% of the Total Amount Authorized as shown in the heading of this AGREEMENT. The amount included for the MRF is shown in the heading of this AGREEMENT. This fund may not be replenished. Any changes requiring additional costs in excess of the MRF shall be made in accordance with Section XIII, "Extra Work."

6. Maximum Total Amount Payable: The Maximum Total Amount Payable by the AGENCY to the CONSULTANT under this AGREEMENT shall not exceed the amount shown in the heading of this AGREEMENT. The Maximum Total Amount Payable is comprised of the Total Amount Authorized, and the MRF. The Maximum Total Amount Payable does not include payment for Extra Work as stipulated in Section XIII, "Extra Work." No minimum amount payable is guaranteed under this AGREEMENT.

B. Monthly Progress Payments: The CONSULTANT may submit billings to the AGENCY for reimbursement of Actual Costs plus the ICR and calculated fee on a monthly basis during the progress of the work. Such billings shall be in a format approved by the AGENCY and accompanied by the monthly progress reports required under Section III, "General Requirements" of this AGREEMENT. The billings will be supported by an itemized listing for each item including Direct (RAW) Labor, Direct Non-Salary, and allowable ICR Costs to which will be added the prorated Fixed Fee. To provide a means of verifying the billed Direct (RAW) Labor costs for CONSULTANT employees, the AGENCY may conduct employee interviews. These interviews may consist of recording the names, titles, Direct (RAW) Labor rates, and present duties of those employees performing work on the PROJECT at the time of the interview.

C. Final Payment: Final Payment of any balance due the CONSULTANT of the gross amount earned will be made promptly upon its verification by the AGENCY after the completion of the work under this AGREEMENT, contingent, if applicable, upon receipt of all PS&E, plans, maps, notes, reports, electronic data and other related documents which are required to be furnished under this AGREEMENT. Acceptance of such Final Payment by the CONSULTANT shall constitute a release of all claims for payment, which the CONSULTANT may have against the AGENCY unless such claims are specifically reserved in writing and transmitted to the AGENCY by the CONSULTANT prior to its acceptance. Said Final Payment shall not, however, be a bar to any claims that the AGENCY may have against the CONSULTANT or to any remedies the AGENCY may pursue with respect to such claims.

The payment of any billing will not constitute agreement as to the appropriateness of any item and at the time of final audit; all required adjustments will be made and reflected in a final payment. In the event that such final audit reveals an overpayment to the CONSULTANT, the CONSULTANT will refund such overpayment to the AGENCY within thirty (30) calendar days of notice of the overpayment. Such refund shall not constitute a waiver by the CONSULTANT for any claims relating to the validity of a finding by the AGENCY of overpayment. The CONSULTANT has twenty (20) working days after receipt of the final POST AUDIT to begin the appeal process to the AGENCY for audit findings.

D. Inspection of Cost Records: The CONSULTANT and their sub-consultants shall keep available for inspection by representatives of the AGENCY and the United States, for a period of six (6) years after receipt of final payment, the cost records and accounts pertaining to this AGREEMENT and all items related to or bearing upon these records with the following exception: if any litigation, claim or audit arising out of, in connection with, or related to this AGREEMENT is initiated before the expiration of the six (6) year period, the cost records and accounts shall be retained until such litigation, claim, or audit involving the records is completed.

An interim or post audit may be performed on this AGREEMENT. The audit, if any, will be performed by the State Auditor, WSDOT's Internal Audit Office and/or at the request of the AGENCY's Project Manager.

VI. Sub-Contracting

The AGENCY permits subcontracts for those items of SERVICES as shown in Exhibit "A" attached hereto and by this reference made part of this AGREEMENT.

The CONSULTANT shall not subcontract for the performance of any SERVICE under this AGREEMENT without prior written permission of the AGENCY. No permission for subcontracting shall create, between the AGENCY and sub-consultant, any contract or any other relationship.

Compensation for this sub-consultant SERVICES shall be based on the cost factors shown on Exhibit "E" attached hereto and by this reference made part of this AGREEMENT.

The SERVICES of the sub-consultant shall not exceed its maximum amount payable identified in each sub-consultant cost estimate unless a prior written approval has been issued by the AGENCY.

All reimbursable direct labor, indirect cost rate, direct non-salary costs and fixed fee costs for the sub-consultant shall be negotiated and substantiated in accordance with section V "Payment Provisions" herein and shall be memorialized in a final written acknowledgement between the parties.

All subcontracts shall contain all applicable provisions of this AGREEMENT, and the CONSULTANT shall require each sub-consultant or subcontractor, of any tier, to abide by the terms and conditions of this AGREEMENT. With respect to sub-consultant payment, the CONSULTANT shall comply with all applicable sections of the STATE's Prompt Payment laws as set forth in RCW 39.04.250 and RCW 39.76.011.

The CONSULTANT, sub-recipient, or sub-consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this AGREEMENT. The CONSULTANT shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the CONSULTANT to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the recipient deems appropriate.

VII. Employment and Organizational Conflict of Interest

The CONSULTANT warrants that they have not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the AGENCY shall have the right to annul this AGREEMENT without liability or, in its discretion, to deduct from this AGREEMENT price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

Any and all employees of the CONSULTANT or other persons while engaged in the performance of any work or services required of the CONSULTANT under this AGREEMENT, shall be considered employees of the CONSULTANT only and not of the AGENCY, and any and all claims that may arise under any Workmen's

Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the CONSULTANT's employees or other persons while so engaged on any of the work or services provided to be rendered herein, shall be the sole obligation and responsibility of the CONSULTANT.

The CONSULTANT shall not engage, on a full- or part-time basis, or other basis, during the period of this AGREEMENT, any professional or technical personnel who are, or have been, at any time during the period of this AGREEMENT, in the employ of the United States Department of Transportation or the AGENCY, except regularly retired employees, without written consent of the public employer of such person if he/she will be working on this AGREEMENT for the CONSULTANT.

VIII. Nondiscrimination

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, sub-consultants, subcontractors and successors in interest, agrees to comply with the following laws and regulations:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. Chapter 21 Subchapter V § 2000d through 2000d-4a)
- Federal-aid Highway Act of 1973 (23 U.S.C. Chapter 3 § 324)
- Rehabilitation Act of 1973 (29 U.S.C. Chapter 16 Subchapter V § 794)
- Age Discrimination Act of 1975 (42 U.S.C. Chapter 76 § 6101 *et. seq.*)
- Civil Rights Restoration Act of 1987 (Public Law 100-259)
- American with Disabilities Act of 1990 (42 U.S.C. Chapter 126 § 12101 *et. seq.*)
- 23 CFR Part 200
- 49 CFR Part 21
- 49 CFR Part 26
- RCW 49.60.180

In relation to Title VI of the Civil Rights Act of 1964, the CONSULTANT is bound by the provisions of Exhibit "F" attached hereto and by this reference made part of this AGREEMENT, and shall include the attached Exhibit "F" in every sub-contract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto.

IX. Termination of Agreement

The right is reserved by the AGENCY to terminate this AGREEMENT at any time with or without cause upon ten (10) days written notice to the CONSULTANT.

In the event this AGREEMENT is terminated by the AGENCY, other than for default on the part of the CONSULTANT, a final payment shall be made to the CONSULTANT for actual hours charged and any appropriate fixed fee percentage at the time of termination of this AGREEMENT, plus any direct non-salary costs incurred up to the time of termination of this AGREEMENT.

No payment shall be made for any SERVICES completed after ten (10) days following receipt by the CONSULTANT of the notice to terminate. If the accumulated payment made to the CONSULTANT prior to Notice of Termination exceeds the total amount that would be due when computed as set forth in paragraph two (2) of this section, then no final payment shall be due and the CONSULTANT shall immediately reimburse the AGENCY for any excess paid.

If the services of the CONSULTANT are terminated by the AGENCY for default on the part of the CONSULTANT, the above formula for payment shall not apply.

In the event of a termination for default, the amount to be paid to the CONSULTANT shall be determined by the AGENCY with consideration given to the actual costs incurred by the CONSULTANT in performing SERVICES to the date of termination, the amount of SERVICES originally required which was satisfactorily completed to

date of termination, whether that SERVICE is in a form or a type which is usable to the AGENCY at the time of termination, the cost to the AGENCY of employing another firm to complete the SERVICES required and the time which may be required to do so, and other factors which affect the value to the AGENCY of the SERVICES performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount, which would have been made using the formula set forth in paragraph two (2) of this section.

If it is determined for any reason that the CONSULTANT was not in default or that the CONSULTANT's failure to perform is without the CONSULTANT's or its employee's fault or negligence, the termination shall be deemed to be a termination for the convenience of the AGENCY. In such an event, the CONSULTANT would be reimbursed for actual costs and appropriate fixed fee percentage in accordance with the termination for other than default clauses listed previously.

The CONSULTANT shall, within 15 days, notify the AGENCY in writing, in the event of the death of any member, partner, or officer of the CONSULTANT or the death or change of any of the CONSULTANT's supervisory and/or other key personnel assigned to the project or disaffiliation of any principally involved CONSULTANT employee. The CONSULTANT shall also notify the AGENCY, in writing, in the event of the sale or transfer of 50% or more of the beneficial ownership of the CONSULTANT within 15 days of such sale or transfer occurring. The CONSULTANT shall continue to be obligated to complete the SERVICES under the terms of this AGREEMENT unless the AGENCY chooses to terminate this AGREEMENT for convenience or chooses to renegotiate any term(s) of this AGREEMENT. If termination for convenience occurs, final payment will be made to the CONSULTANT as set forth in the second and third paragraphs of this section.

Payment for any part of the SERVICES by the AGENCY shall not constitute a waiver by the AGENCY of any remedies of any type it may have against the CONSULTANT for any breach of this AGREEMENT by the CONSULTANT, or for failure of the CONSULTANT to perform SERVICES required of it by the AGENCY. Forbearance of any rights under the AGREEMENT will not constitute waiver of entitlement to exercise those rights with respect to any future act or omission by the CONSULTANT.

X. Changes of Work

The CONSULTANT shall make such changes and revisions in the completed work of this AGREEMENT as necessary to correct errors appearing therein, without additional compensation thereof. Should the AGENCY find it desirable for its own purposes to have previously satisfactorily completed SERVICES or parts thereof changed or revised, the CONSULTANT shall make such revisions as directed by the AGENCY. This work shall be considered as Extra Work and will be paid for as herein provided under section XIII "Extra Work."

XI. Disputes

Any disputed issue not resolved pursuant to the terms of this AGREEMENT shall be submitted in writing within 10 days to the Director of Public Works or AGENCY Engineer, whose decision in the matter shall be final and binding on the parties of this AGREEMENT; provided however, that if an action is brought challenging the Director of Public Works or AGENCY Engineer's decision, that decision shall be subject to judicial review. If the parties to this AGREEMENT mutually agree, disputes concerning alleged design errors will be conducted under the procedures found in Exhibit "J". In the event that either party deem it necessary to institute legal action or proceeding to enforce any right or obligation under this AGREEMENT, this action shall be initiated in the Superior Court of the State of Washington, situated in the county in which the AGENCY is located. The parties hereto agree that all questions shall be resolved by application of Washington law and that the parties have the right of appeal from such decisions of the Superior Court in accordance with the laws of the State of Washington. The CONSULTANT hereby consents to the personal jurisdiction of the Superior Court of the State of Washington, situated in the county in which the AGENCY is located.

XII. Legal Relations

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

The CONSULTANT shall defend, indemnify, and hold The State of Washington (STATE) and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the negligence of, or the breach of any obligation under this AGREEMENT by, the CONSULTANT or the CONSULTANT's agents, employees, sub consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable; provided that nothing herein shall require a CONSULTANT to defend or indemnify the STATE and the AGENCY and their officers and employees against and hold harmless the STATE and the AGENCY and their officers and employees from claims, demands or suits based solely upon the negligence of, or breach of any obligation under this AGREEMENT by the STATE and the AGENCY, their agents, officers, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the STATE and/or the AGENCY may be legally liable; and provided further that if the claims or suits are caused by or result from the concurrent negligence of (a) the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT is legally liable, and (b) the STATE and/or AGENCY, their agents, officers, employees, sub-consultants, subcontractors and or vendors, of any tier, or any other persons for whom the STATE and or AGENCY may be legally liable, the defense and indemnity obligation shall be valid and enforceable only to the extent of the CONSULTANT's negligence or the negligence of the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable. This provision shall be included in any AGREEMENT between CONSULTANT and any sub-consultant, subcontractor and vendor, of any tier.

The CONSULTANT shall also defend, indemnify, and hold the STATE and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions by the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable, in performance of the Work under this AGREEMENT or arising out of any use in connection with the AGREEMENT of methods, processes, designs, information or other items furnished or communicated to STATE and/or the AGENCY, their agents, officers and employees pursuant to the AGREEMENT; provided that this indemnity shall not apply to any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions resulting from STATE and/or AGENCY's, their agents', officers' and employees' failure to comply with specific written instructions regarding use provided to STATE and/or AGENCY, their agents, officers and employees by the CONSULTANT, its agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable.

The CONSULTANT's relation to the AGENCY shall be at all times as an independent contractor.

Notwithstanding any determination by the Executive Ethics Board or other tribunal, the AGENCY may, in its sole discretion, by written notice to the CONSULTANT terminate this AGREEMENT if it is found after due notice and examination by the AGENCY that there is a violation of the Ethics in Public Service Act, Chapter 42.52 RCW; or any similar statute involving the CONSULTANT in the procurement of, or performance under, this AGREEMENT.

The CONSULTANT specifically assumes potential liability for actions brought by the CONSULTANT's own employees or its agents against the STATE and /or the AGENCY and, solely for the purpose of this indemnification and defense, the CONSULTANT specifically waives any immunity under the state industrial insurance law, Title 51 RCW. This waiver has been mutually negotiated between the Parties.

Unless otherwise specified in this AGREEMENT, the AGENCY shall be responsible for administration of construction contracts, if any, on the project. Subject to the processing of a new sole source, or an acceptable supplemental AGREEMENT, the CONSULTANT shall provide On-Call assistance to the AGENCY during contract administration. By providing such assistance, the CONSULTANT shall assume no responsibility for: proper construction techniques, job site safety, or any construction contractor's failure to perform its work in accordance with the contract documents.

The CONSULTANT shall obtain and keep in force during the terms of this AGREEMENT, or as otherwise required, the following insurance with companies or through sources approved by the State Insurance Commissioner pursuant to Title 48 RCW.

Insurance Coverage

A. Worker's compensation and employer's liability insurance as required by the STATE.

B. Commercial general liability insurance written under ISO Form CG 00 01 12 04 or its equivalent with minimum limits of one million dollars ($1,000,000.00) per occurrence and two million dollars ($2,000,000.00) in the aggregate for each policy period.

C. Business auto liability insurance written under ISO Form CG 00 01 10 01 or equivalent providing coverage for any "Auto" (Symbol 1) used in an amount not less than a one million dollar ($1,000,000.00) combined single limit for each occurrence.

Excepting the Worker's Compensation Insurance and any Professional Liability Insurance, the STATE and AGENCY, their officers, employees, and agents will be named on all policies of CONSULTANT and any sub-consultant and/or subcontractor as an additional insured (the "AIs"), with no restrictions or limitations concerning products and completed operations coverage. This coverage shall be primary coverage and non-contributory and any coverage maintained by the AIs shall be excess over, and shall not contribute with, the additional insured coverage required hereunder. The CONSULTANT's and the sub-consultant's and/or subcontractor's insurer shall waive any and all rights of subrogation against the AIs. The CONSULTANT shall furnish the AGENCY with verification of insurance and endorsements required by this AGREEMENT. The AGENCY reserves the right to require complete, certified copies of all required insurance policies at any time.

All insurance shall be obtained from an insurance company authorized to do business in the State of Washington. The CONSULTANT shall submit a verification of insurance as outlined above within fourteen (14) days of the execution of this AGREEMENT to:

Name: Josh Metcalf, Director of Public Works
Agency: Lewis County
Address: 2025 NE Kresky Avenue
City: Chehalis State: WA Zip: 98532
Email: josh.metcalf@lewiscountywa.gov
Phone: 360-740-2762
Facsimile:

No cancellation of the foregoing policies shall be effective without thirty (30) days prior notice to the AGENCY.

The CONSULTANT's professional liability to the AGENCY, including that which may arise in reference to section IX "Termination of Agreement" of this AGREEMENT, shall be limited to the accumulative amount of the authorized AGREEMENT amount or one million dollars ($1,000,000.00), whichever is greater, unless the limit of liability is increased by the AGENCY pursuant to Exhibit H. In no case shall the CONSULTANT's professional liability to third parties be limited in any way.

The parties enter into this AGREEMENT for the sole benefit of the parties, and to the exclusion of any third party, and no third party beneficiary is intended or created by the execution of this AGREEMENT.

The AGENCY will pay no progress payments under section V "Payment Provisions" until the CONSULTANT has fully complied with this section. This remedy is not exclusive; and the AGENCY may take such other action as is available to it under other provisions of this AGREEMENT, or otherwise in law.

XIII. Extra Work

A. The AGENCY may at any time, by written order, make changes within the general scope of this AGREEMENT in the SERVICES to be performed.

B. If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the SERVICES under this AGREEMENT, whether or not changed by the order, or otherwise affects any other terms and conditions of this AGREEMENT, the AGENCY shall make an equitable adjustment in the: (1) maximum amount payable; (2) delivery or completion schedule, or both; and (3) other affected terms and shall modify this AGREEMENT accordingly.

C. The CONSULTANT must submit any "request for equitable adjustment," hereafter referred to as "CLAIM," under this clause within thirty (30) days from the date of receipt of the written order. However, if the AGENCY decides that the facts justify it, the AGENCY may receive and act upon a CLAIM submitted before final payment of this AGREEMENT.

D. Failure to agree to any adjustment shall be a dispute under the section XI "Disputes" clause. However, nothing in this clause shall excuse the CONSULTANT from proceeding with the AGREEMENT as changed.

E. Notwithstanding the terms and conditions of paragraphs (A.) and (B.) above, the maximum amount payable for this AGREEMENT, shall not be increased or considered to be increased except by specific written supplement to this AGREEMENT.

XIV. Endorsement of Plans

If applicable, the CONSULTANT shall place their endorsement on all plans, estimates, or any other engineering data furnished by them.

XV. Federal Review

The Federal Highway Administration shall have the right to participate in the review or examination of the SERVICES in progress.

XVI. Certification of the Consultant and the Agency

Attached hereto as Exhibit "G-1(a and b)" are the Certifications of the CONSULTANT and the AGENCY, Exhibit "G-2" Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions, Exhibit "G-3" Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying and Exhibit "G-4" Certificate of Current Cost or Pricing Data. Exhibit "G-3" is required only in AGREEMENT's over one hundred thousand dollars ($100,000.00) and Exhibit "G-4" is required only in AGREEMENT's over five hundred thousand dollars ($500,000.00.) These Exhibits must be executed by the CONSULTANT, and submitted with the master AGREEMENT, and returned to the AGENCY at the address listed in section III "General Requirements" prior to its performance of any SERVICES under this AGREEMENT.

XVII. Complete Agreement

This document and referenced attachments contain all covenants, stipulations, and provisions agreed upon by the parties. No agent, or representative of either party has authority to make, and the parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein. No changes, amendments, or modifications of the terms hereof shall be valid unless reduced to writing and signed by the parties as a supplement to this AGREEMENT.

XVIII. Execution and Acceptance

This AGREEMENT may be simultaneously executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The CONSULTANT does hereby ratify and adopt all statements, representations, warranties, covenants, and AGREEMENT's contained in the proposal, and the supporting material submitted by the CONSULTANT, and does hereby accept this AGREEMENT and agrees to all of the terms and conditions thereof.

XIX. Protection of Confidential Information

The CONSULTANT acknowledges that some of the material and information that may come into its possession or knowledge in connection with this AGREEMENT or its performance may consist of information that is exempt from disclosure to the public or other unauthorized persons under either chapter 42.56 RCW or other local, state or federal statutes ("State's Confidential Information"). The "State's Confidential Information" includes, but is not limited to, names, addresses, Social Security numbers, e-mail addresses, telephone numbers, financial profiles, credit card information, driver's license numbers, medical data, law enforcement records (or any other information identifiable to an individual), STATE and AGENCY source code or object code, STATE and AGENCY security data, non-public Specifications, STATE and AGENCY non-publicly available data, proprietary software, State security data, or information which may jeopardize any part of the project that relates to any of these types of information. The CONSULTANT agrees to hold the State's Confidential Information in strictest confidence and not to make use of the State's Confidential Information for any purpose other than the performance of this AGREEMENT, to release it only to authorized employees, sub-consultants or subcontractors requiring such information for the purposes of carrying out this AGREEMENT, and not to release, divulge, publish, transfer, sell, disclose, or otherwise make it known to any other party without the AGENCY's express written consent or as provided by law. The CONSULTANT agrees to release such information or material only to employees, sub-consultants or subcontractors who have signed a nondisclosure AGREEMENT, the terms of which have been previously approved by the AGENCY. The CONSULTANT agrees to implement physical, electronic, and managerial safeguards to prevent unauthorized access to the State's Confidential Information.

Immediately upon expiration or termination of this AGREEMENT, the CONSULTANT shall, at the AGENCY's option: (i) certify to the AGENCY that the CONSULTANT has destroyed all of the State's Confidential Information; or (ii) returned all of the State's Confidential Information to the AGENCY; or (iii) take whatever other steps the AGENCY requires of the CONSULTANT to protect the State's Confidential Information.

As required under Executive Order 00-03, the CONSULTANT shall maintain a log documenting the following: the State's Confidential Information received in the performance of this AGREEMENT; the purpose(s) for which the State's Confidential Information was received; who received, maintained and used the State's Confidential Information; and the final disposition of the State's Confidential Information. The CONSULTANT's records shall be subject to inspection, review, or audit upon reasonable notice from the AGENCY.

The AGENCY reserves the right to monitor, audit, or investigate the use of the State's Confidential Information collected, used, or acquired by the CONSULTANT through this AGREEMENT. The monitoring, auditing, or investigating may include, but is not limited to, salting databases.

Violation of this section by the CONSULTANT or its sub-consultants or subcontractors may result in termination of this AGREEMENT and demand for return of all State's Confidential Information, monetary damages, or penalties.

It is understood and acknowledged that the CONSULTANT may provide the AGENCY with information which is proprietary and/or confidential during the term of this AGREEMENT. The parties agree to maintain the confidentiality of such information during the term of this AGREEMENT and afterwards. All materials containing such proprietary and/or confidential information shall be clearly identified and marked as "Confidential" and shall be returned to the disclosing party at the conclusion of the SERVICES under this AGREEMENT.

The CONSULTANT shall provide the AGENCY with a list of all information and materials it considers confidential and/or proprietary in nature: (a) at the commencement of the term of this AGREEMENT; or (b) as soon as such confidential or proprietary material is developed. "Proprietary and/or confidential information" is not meant to include any information which, at the time of its disclosure: (i) is already known to the other party; (ii) is rightfully disclosed to one of the parties by a third party that is not acting as an agent or representative for the other party; (iii) is independently developed by or for the other party; (iv) is publicly known; or (v) is generally utilized by unaffiliated third parties engaged in the same business or businesses as the CONSULTANT.

The parties also acknowledge that the AGENCY is subject to Washington State and federal public disclosure laws. As such, the AGENCY shall maintain the confidentiality of all such information marked proprietary and/ or confidential or otherwise exempt, unless such disclosure is required under applicable state or federal law. If a public disclosure request is made to view materials identified as "Proprietary and/or confidential information" or otherwise exempt information, the AGENCY will notify the CONSULTANT of the request and of the date that such records will be released to the requester unless the CONSULTANT obtains a court order from a court of competent jurisdiction enjoining that disclosure. If the CONSULTANT fails to obtain the court order enjoining disclosure, the AGENCY will release the requested information on the date specified.

The CONSULTANT agrees to notify the sub-consultant of any AGENCY communication regarding disclosure that may include a sub-consultant's proprietary and/or confidential information. The CONSULTANT notification to the sub-consultant will include the date that such records will be released by the AGENCY to the requester and state that unless the sub-consultant obtains a court order from a court of competent jurisdiction enjoining that disclosure the AGENCY will release the requested information. If the CONSULTANT and/or sub-consultant fail to obtain a court order or other judicial relief enjoining the AGENCY by the release date, the CONSULTANT shall waive and release and shall hold harmless and indemnify the AGENCY from all claims of actual or alleged damages, liabilities, or costs associated with the AGENCY's said disclosure of sub-consultants' information.

XX. Records Maintenance

During the progress of the Work and SERVICES provided hereunder and for a period of not less than six (6) years from the date of final payment to the CONSULTANT, the CONSULTANT shall keep, retain and maintain all "documents" pertaining to the SERVICES provided pursuant to this AGREEMENT. Copies of all "documents" pertaining to the SERVICES provided hereunder shall be made available for review at the CONSULTANT's place of business during normal working hours. If any litigation, claim or audit is commenced, the CONSULTANT shall cooperate with AGENCY and assist in the production of all such documents. "Documents" shall be retained until all litigation, claims or audit findings have been resolved even though such litigation, claim or audit continues past the six (6) year retention period.

For purposes of this AGREEMENT, "documents" means every writing or record of every type and description, including electronically stored information ("ESI"), that is in the possession, control, or custody of the CONSULTANT, including, without limitation, any and all correspondences, contracts, AGREEMENT 's, appraisals, plans, designs, data, surveys, maps, spreadsheets, memoranda, stenographic or handwritten notes, reports, records, telegrams, schedules, diaries, notebooks, logbooks, invoices, accounting records, work sheets, charts, notes, drafts, scribblings, recordings, visual displays, photographs, minutes of meetings,

tabulations, computations, summaries, inventories, and writings regarding conferences, conversations or telephone conversations, and any and all other taped, recorded, written, printed or typed matters of any kind or description; every copy of the foregoing whether or not the original is in the possession, custody, or control of the CONSULTANT, and every copy of any of the foregoing, whether or not such copy is a copy identical to an original, or whether or not such copy contains any commentary or notation whatsoever that does not appear on the original.

For purposes of this AGREEMENT, "ESI" means any and all computer data or electronic recorded media of any kind, including "Native Files", that are stored in any medium from which it can be retrieved and examined, either directly or after translation into a reasonably useable form. ESI may include information and/or documentation stored in various software programs such as: Email, Outlook, Word, Excel, Access, Publisher, PowerPoint, Adobe Acrobat, SQL databases, or any other software or electronic communication programs or databases that the CONSULTANT may use in the performance of its operations. ESI may be located on network servers, backup tapes, smart phones, thumb drives, CDs, DVDs, floppy disks, work computers, cell phones, laptops or any other electronic device that CONSULTANT uses in the performance of its Work or SERVICES hereunder, including any personal devices used by the CONSULTANT or any sub-consultant at home.

"Native files" are a subset of ESI and refer to the electronic format of the application in which such ESI is normally created, viewed, and /or modified.

The CONSULTANT shall include this section XX "Records Maintenance" in every subcontract it enters into in relation to this AGREEMENT and bind the sub-consultant to its terms, unless expressly agreed to otherwise in writing by the AGENCY prior to the execution of such subcontract.

In witness whereof, the parties hereto have executed this AGREEMENT as of the day and year shown in the "Execution Date" box on page one (1) of this AGREEMENT.

Shannon, Alex (USAS695484)

Digitally signed by Shannon, Alex (USAS695484)
DN: cn=Shannon, Alex (USAS695484), ou=Active, email=Alex.Shannon@wsp.com
Date: 2022.10.10 15:19:25 -07'00'

Signature	Date: 10/10/2022
Signature	Date

Any modification, change, or reformation of this AGREEMENT shall require approval as to form by the Office of the Attorney General.

Agreement Number:

Exhibit A
Scope of Work

Project No.

SEE ATTACHED EXHIBIT A

Agreement Number:

Contents

INTRODUCTION 1
Project Description 1
Work Breakdown Structure 1
Design Standards and References 2
Software Requirements 2
Acronyms/Abbreviations 2
General Project Assumptions 3
PROJECT TASKS 3
1. Project Management and Administration 3
1.1. General Project Administration 3
1.2. Progress Schedule and Updates 5
1.3. Progress Reporting and Invoicing 5
1.4. Project Management Plan 5
1.5. Project Kickoff Meeting 6
1.6. Project Closeout 7
2. Public Involvement 7
2.1. Public Involvement Strategy Meetings 7
2.2. Community Engagement Plan 7
2.3. Stakeholder Database and Property Owner Mailing List 9
2.4. Stakeholder Agencies and Tribes Meetings 9
2.5. Open Houses 10
2.6. Communication Materials/Website 11
2.7. Translation of Communications Materials 12
3. Data Collection 12
3.1. Review/Collect Existing Data 12
4. Professional Land Surveying and Mapping Services 13
General Assumptions for Land Surveying and Mapping Services 13
4.1. Survey Project Management, Administration, QA/QC 13
4.2. Survey Control 14
4.3. Field Surveying and Mapping 14
4.4. Office processing 14

4.5. Right-of-Way and Parcel Resolutions (To be performed by County forces) 14
4.6. Legal Descriptions and Exhibits (Future) 14
4.7. Task Deliverables 15
5. Environmental Services 15
5.1. Cultural Resources/Archaeology 15
5.2. Wetlands and Streams 18
5.3. Environmental Site Assessment (ESA) 19
5.4. Flood Plain Impacts/FEMA 21
5.5. ESA Compliance 21
5.6. SEPA Coordination 22
5.7. Agency Coordination and Permitting 22
6. Geotechnical 24
6.1. Geotechnical Exploration and Analysis 24
6.2. Geotechnical Recommendations 27
7. Traffic 28
7.1. Review/Collect Existing Data 28
7.2. Traffic Analysis 29
7.3. Intersection Control Evaluation 30
7.4. Safety Analysis 31
7.5. Traffic Design 31
8. Roadway 32
8.1. Design Documentation 32
8.2. Roadway Design and Modeling 33
8.3. Roadway Plan Production 35
8.4. Construction Staging and Maintenance of Traffic 35
8.5. Constructability 36
8.6. Right-of-Way Plan Development 37
9. Storm Drainage 38
9.1. Storm Drainage Design 38
10. Utilities 40
General Assumptions for Utilities 40
10.1. Utility Coordination 40
10.2. Conflict Assessment/Resolution 41

10.3. Utility Design 42
11. Structures 45
12. Fish Passage & Stream Restoration 46
12.1. Field Work and Research 46
12.2. Hydrology and Hydraulic Modeling 46
12.3. Fish Passage Design 47
12.4. Hydraulic Report 48
13. Plans, Specifications and Estimates 49
13.1. Task Description 49
13.2. Task Assumptions 49
13.3. 30% PS&E Deliverables 50
13.4. 60% PS&E Deliverables 50
13.5. 90% PS&E Deliverables 51
13.6. Ad-Ready PS&E 52
13.7. Advertisement, Addenda and Bidding 52
14. Right-of-Way (Future) 53
15. Construction Management Support (Future) 53
16. Grant Funding Application Preparation (Future) 53

EXHIBIT A

REYNOLDS AVENUE/HARRISON AVENUE CORRIDOR IMPROVEMENTS

SCOPE OF SERVICES

INTRODUCTION

Project Description

Lewis County and its project partners have crafted and refined a "Dig Once" approach to package multiple individual Lewis County and City of Centralia projects within the Harrison Avenue and Reynolds Avenue widening limits. The benefits brought by leveraging existing funding, realizing economies of scale, limiting construction-related traffic impacts to the public, and reducing construction duration and resultant cost escalation are indisputable.

The multiple project elements were originally described in a Lewis County provided project map which was subsequently revised. The individual elements are described below and are collectively and hereafter referred to as the "PROJECT," with their origin, are described as follows:

1. Ford's Prairie Interceptor – Planned City of Centralia Project
2. Harrison Water Main – Planned City of Centralia Project
3. Reynolds Avenue Corridor Improvements – Proposed City of Centralia & Lewis County Project
4. Coffee Creek Fish Barrier Replacement – Planned Lewis County Project
5. Utilities – Proposed Lewis County PUD Project
6. Harrison Avenue Corridor Improvements – Reynolds Avenue to Kuper Road
7. West Connector/Harrison Avenue Intersection Analysis – Proposed City of Centralia and Lewis County Project

WSP USA, Inc., hereafter referred to as "CONSULTANT," will provide engineering design services to Lewis County, hereafter referred to as "COUNTY," to complete the work, together with its subconsultants, will provide other design services as described in this scope of work under the direction of the CONSULTANT. The PROJECT lies fully within the City of Centralia, hereafter referred to as "CITY," Urban Growth Area and thus subject to the terms of Centralia Municipal Code 20.02, Urban Growth Area Regulation and Enforcement.

Work Breakdown Structure

To facilitate efficient project management, the following work breakdown structure (WBS) is created.

Task 1.0	Project Management and Administration
Task 2.0	Public Involvement
Task 3.0	Data Collection
Task 4.0	Survey
Task 5.0	Environmental Services
Task 6.0	Geotechnical
Task 7.0	Traffic
Task 8.0	Roadway
Task 9.0	Storm Drainage
Task 10.0	Utilities
Task 11.0	Structures
Task 12.0	Fish Passage and Stream Restoration

Task 13.0	Plans, Specifications & Estimates
Task 14.0	Right-of-Way
Task 15.0	Construction Management Support
Task 16.0	Grant Funding Application Preparation

The estimated level of effort is based upon the assumptions and task descriptions provided below. Efforts to complete these tasks can vary from the effort assumed for the preparation of the level of effort shown in the cost exhibits. The CONSULTANT will monitor requests total costs expended under this agreement and will notify the COUNTY if funds need to be reallocated between tasks.

Design Standards and References

Lewis County Road Development Standards (LCC 12.60)
City of Centralia General Development Standards and Guidelines
Washington State Department of Transportation (WSDOT) including *Local Agency Guidelines* and *Design Manual*
American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*
Washington Department of Fish and Wildlife (WDFW) *Water Crossing Design Guidelines*

Software Requirements

The design shall be performed in AutoCAD Civil 3D 2020.
The scheduling software to be used for the project will be Microsoft Project.

Acronyms/Abbreviations

AAI – All Appropriate Inquiry [rule]
AASHTO – American Association of State Highway and Transportation Officials
ADA – Americans with Disabilities Act
APE – Area of Potential Effect
ASTM – American Society for Testing and Materials
CEP – Community Engagement Plan
CPM – Critical Path Method
DAHP – Department of Archaeology and Historic Preservation
DOE – Department of Ecology
FEMA – Federal Emergency Management Agency
GIS – Geographic Information System
GPS – Global Positioning System
EPA – Environmental Protection Agency
ESA – Environmental Site Assessment
HMA – Hazardous Materials Analysis
HPA – Hydraulic Permit Approval
JARPA - Joint Aquatic Resources Permit Application
JUT – Joint Utility Trench
LAG – Local Agency Guidelines
LPA – Local Programs Agency
MUTCD – Manual of Uniform Traffic Control Devices
NEPA – National Environmental Policy Act
NMFS – National Marine Fisheries Service
NPDES – National Pollution Discharge Elimination System
NTP – Notice to Proceed
OHWM – Ordinary High-Water Mark
OPCC – Opinion of Probable Construction Cost
OTS – Over-the-Shoulder
PFA – Plan for Approval
PMP – Project Management Plan
PS&E – Plans, Specifications and Estimate
QA – Quality Assurance
QC – Quality Control
RCW – Revised Code of Washington
ROE – Right of Entry
ROW – Right-of-Way

SEPA – State Environmental Policy Act
SWMMWW – Stormwater Management Manual for Western Washington
SWPPP – Stormwater Pollution Prevention Plan
USACE – U.S. Army Corps of Engineers
USFWS – U.S. Fish and Wildlife Service
WBS – Work Breakdown Structure
WDFW – Washington Department of Fish and Wildlife
WSDOT – Washington State Department of Transportation

General Project Assumptions

The following list of project assumptions is included to confirm the understanding between the COUNTY and the CONSULTANT and will be used to guide the work. Additional assumptions related to individual technical disciplines are provided with each specific project task.

- The COUNTY and the CONSULTANT are the parties to this contract. While multiple agencies have interests in project elements, lines of communication and accountability flow through COUNTY representatives.
- The COUNTY will manage the coalition of project partners including the distribution of deliverables and the collection of comments.
- Additional work requests made by project partners, project stakeholders, or third parties during the course of project development will be raised with COUNTY representatives, and approval received, in advance of performing any additional work.
- The COUNTY will provide the CONSULTANT with one set of consolidated review comments for each draft deliverable. The CONSULTANT will provide comments responses and incorporate the agreed-upon resolution into final deliverables.
- The estimated level of effort is based upon the assumptions and task descriptions provided below. The level of effort is shown in Exhibits X and Y.
- WSDOT jurisdiction is limited to the SR 507/Reynolds Avenue intersection and the I-5 overcrossing of Reynolds Avenue.

PROJECT TASKS

1. Project Management and Administration

This task includes all administrative efforts to complete the project on time and within budget. To facilitate efficient project management, the following work breakdown structure is created.

1.1. General Project Administration

1.1.1. Project Administration

1.1.1.1. Task Description

The CONSULTANT will coordinate, direct, and manage staff and SUBCONSULTANTS throughout the duration of the project.

1.1.1.2. Task Assumptions

- The CONSULTANT will provide a single point of contact (project manager) for project-related communication with the COUNTY.
- The CONSULTANT will prepare, approve, and administer SUBCONSULTANT agreements and perform ongoing SUBCONSULTANT coordination.
- The CONSULTANT will monitor and direct staff and SUBCONSULTANTS to adhere to project scope, schedule, and budget.
- The CONSULTANT will provide staff and SUBCONSULTANTS to adhere to project scope, schedule, and budget.

- The CONSULTANT will provide filing, retention of documents, and retention of electronic files consistent with COUNTY and CONSULTANT requirements.
- The CONSULTANT will provide quality assurance (QA) of quality control (QC) work done on the design in accordance with the CONSULTANT's QA/QC standards.

1.1.1.3. Task Deliverables

- None.

1.1.2. Meetings with Lewis County and Project Partners

1.1.2.1. Task Description

The CONSULTANT will facilitate two meetings per month with the COUNTY and project partners (as the COUNTY chooses). Meetings will be one hour in duration and will be attended by attended by up to two CONSULTANT team members. At least half of these meetings will be remote through Microsoft Teams.

The CONSULTANT and COUNTY/CITY will participate in Over-the-Shoulder (OTS) Meetings as needed. The intent of OTS meetings is to address emergent issues which could be specific to a single technical discipline or interdisciplinary in nature.

1.1.2.2. Task Assumptions

- Two meetings per month, 1-hour in duration for 18 months, to include up to two CONSULTANT team members with COUNTY and CITY staff.
- Every fourth (4^{th}) meeting will be conducted in-person at the HDR Olympia office. All other meetings will be conducted virtually using Microsoft Teams. The venue for conducting meetings with COUNTY will be the COUNTY offices in Chehalis, WA or the HDR office in Olympia, WA.
- The CONSULTANT will prepare and distribute the meeting agendas in advance of meetings and a meeting summary following the meetings.

1.1.2.3. Task Deliverables

- Twice-monthly meeting agendas and meeting summaries.

1.1.3. Consultant Team Meeting and Coordination

1.1.3.1. Task Description

The CONSULTANT will facilitate weekly internal project team coordination meetings for the purposes of information sharing, interdisciplinary coordination, and reporting progress.

1.1.3.2. Task Assumptions

- Meetings will be approximately 1 hour in duration and will be attended by an average of ten (10) CONSULTANT team members. Meeting participants will include Project Manager, Deputy Project Manager, Roadway Lead, Stormwater Lead, Utilities Leads (Water, Sewer, Power/Comms), Environmental Lead as a standing group and Fish Passage Lead, Structures Lead, Right-of-Way Lead, Geotechnical Lead, Survey Lead, Public Involvement Lead, and Traffic Lead on an as-needed basis.
- It is anticipated CONSULTANT team meetings will be conducted remotely through Microsoft Teams.

1.1.3.3. Task Deliverables

- None. The CONSULTANT will prepare meeting notes and meeting summaries which are available to the COUNTY upon request.

1.2. Progress Schedule and Updates

1.2.1. Task Description

The CONSULTANT will prepare an initial critical path method (CPM) schedule. The CONSULTANT will develop, maintain, monitor, update monthly, and if necessary, revise the schedule to reflect changes in project scope, schedule, budget, or contract duration as approved by the COUNTY. The schedule will include milestone dates for key activities and include review periods for both CONSULTANT quality assurance/quality control (QA/QC) processes and review periods conducted by the COUNTY and other external reviewers.

1.2.2. Task Assumptions

- The CONSULTANT will prepare an initial CPM schedule using Microsoft Project software.
- The schedule for the Project will follow the WBS upon which this Scope of Work is created.
- The schedule will be updated monthly for a period of 18 months.
- Baseline schedule and monthly deliverables will be in pdf format. Native Microsoft Project files will be available upon request.

1.2.3. Task Deliverables

- Baseline CPM schedule
- Monthly schedule updates

1.3. Progress Reporting and Invoicing

1.3.1. Task Description

The CONSULTANT will prepare and submit monthly invoices, including a tabulation of hours expended, and monthly progress reports. Monthly progress reports will include a summary of current period activities, a look ahead to the next period's activities, and a summary of project issues, including any necessary corrective actions.

1.3.2. Task Assumptions

- Monthly invoices and progress reports are anticipated to for a period of 18 months with a 19th invoice/progress report for final billing to close out the project.
- Monthly invoices and progress reports will be submitted in pdf format.

1.3.3. Task Deliverables

- Monthly invoices
- Monthly progress reports

1.4. Project Management Plan

1.4.1. Task Description

The CONSULTANT will prepare a Project Management Plan (PMP), appropriate in scale for the project, for use by the project team. The PMP documents and tracks critical project information. The PMP will generally consist of the following:

- Project description
- Team identification, roles and responsibilities

- Work Breakdown Structure
- Scope of Work
- Master Deliverables Log
- Project communications
- Quality Management Plan
- Document management

1.4.2. Task Assumptions

- The PMP compiles an array of project information for project team members to have readily at hand, providing direction and expectations and establishing organizational and communication protocols for team member's ready use.
- The PMP will contain a quality management plan for all design work in accordance with the CONSULTANT's Quality Assurance/Quality Control (QA/QC) standards. The CONSULTANT will provide QA documentation to accompany all formal deliverables demonstrating that all quality control processes have been followed.
- The draft PMP will be submitted to the COUNTY within 30 days of notice-to-proceed (NTP); final PMP within 14 calendar days following receipt of COUNTY comments on the draft.
- It is assumed the final PMP will be in place by the end of Month 2. The PMP will be reviewed and updated on 6-month intervals (twice during the 18-month project duration).

1.4.3. Task Deliverables

- Draft PMP
- Final PMP
- PMP updates (2)

1.5. Project Kickoff Meeting

1.5.1. Task Description

The CONSULTANT will plan, facilitate, and participate in a project kickoff meeting with the full design team and key COUNTY staff and project partners. The purpose of the kickoff meeting will be to establish a common understanding of the project objectives, reporting, and lines of communication.

1.5.2. Task Assumptions

- The CONSULTANT will facilitate a project kickoff meeting with the COUNTY's project team within 15 working days of the COUNTY-issued NTP.
- The project kickoff meeting will last up to 2 hours.
- The project kickoff meeting will be held at the COUNTY's Chehalis office or at another mutually agreed to location.
- It is anticipated the project kickoff meeting will be attended by up to 16 CONSULTANT team members.
- The CONSULTANT will provide a kickoff meeting agenda two working days in advance of the kickoff meeting.
- The CONSULTANT will provide a meeting summary, including action items, within 5 working days of the kickoff meeting. The project kickoff meeting summary will include the PPT presentation in pdf format.

1.5.3. Task Deliverables

- Project kickoff meeting agenda in pdf format

- Project kickoff meeting summary in pdf format

1.6. Project Closeout

1.6.1. Task Description

Upon completion of the project, the CONSULTANT will archive project work products in accordance with its retention policy in effect at that time and prepare a package for submittal and transfer to the COUNTY pdf files of previously submitted deliverables and native engineering files.

1.6.2. Task Assumptions

- A Project Deliverables Log will be maintained and transmitted as part of the project closeout package. The Project Deliverables Log will be the basis for the development of the project closeout package.

1.6.3. Task Deliverables

- Project Deliverables Log and project closeout package.

2. Public Involvement

2.1. Public Involvement Strategy Meetings

2.1.1. Task Description

The CONSULTANT will prepare for and attend 4 public involvement strategy meetings with COUNTY staff. Meeting dates and times will be collaboratively scheduled between CONSULTANT and COUNTY staff and will be held virtually to align with Kickoff, 30% concept plans, 60% PS&E, and Ad Ready milestones. CONSULTANT will have capability to host meetings with screen and voice sharing software capable of running concurrently for use by the COUNTY and CONSULTANT staff. The purpose for these meetings is to discuss the Project goals and objectives, and desired communication methods and planned outcomes. Project messaging and schedule will also be reviewed.

2.1.2. Task Assumptions

- Meetings will be held virtually on a platform provided by the CONSULTANT and accessible by COUNTY staff.
- Up to 2 CONSULTANT (1 public involvement and 1 project management) staff will attend each meeting.
- Each public involvement meeting will be 90 minutes.

2.1.3. Task Deliverables

- Check-in meetings, agendas and summary notes (up to 4).

2.2. Community Engagement Plan

2.2.1. Task Description

The CONSULTANT will develop and implement a Community Engagement Plan (CEP) that will be informed and developed based on input from the initial public involvement check in meeting in Task 2.1.1 above and be updated 3 times (30% concept plans, 60% PS&E, and Ad Ready). The plan will describe the proposed methodology for maintaining a consistent and timely level of communication with the public, elected officials, agencies, and the news media; will outline a strategy for documenting stakeholder and community engagement and input; and will

encourage public awareness and understanding of the project. The plan will also include a general timeline and proposed coordination points between COUNTY and the CONSULTANT for the open houses, communication materials, and other tasks outlined in this scope of work. The CEP shall incorporate environmental justice principles into the decision processes to be consistent with Washington Senate Bill 4141 Environmental Justice/HEAL Act.[1] Outreach will need to consider Title VI populations within the project area.

The CEP shall include strategies for outreach to targeted stakeholder groups to spread awareness of the project and build support. Stakeholders will be summarized in the stakeholder database, described in Task 2.3, and may include, but are not limited to the following:

- Lewis County
- City of Centralia
- Riverside Fire Department
  - Riverside Fire Authority Station #2
- Twin Transit
- Lewis County PUD
- Lewis County Economic Development Alliance
- Centralia School District
  - Fords Prairie Elementary School
- Port of Centralia
  - Port of Centralia Business Park
- Confederated Tribes of Chehalis (all Tribal coordination to be conducted by COUNTY)
  - Quinault Tribe
  - Chehalis Tribe
  - Nisqually Tribe
  - Squaxin Island Tribe
  - Cowlitz Indian Tribe
  - Yakima Indian Tribe
  - Warm Springs Tribe
- Southwest Washington Regional Transportation Planning Organization (SWRTPO)
- United State Army Corps of Engineers (USACE)
- Washington Department of Ecology
- Washington State Department of Transportation
- Washington State Department of Fish and Wildlife
- Washington Trucking Association
- Centralia-Chehalis Chamber of Commerce
- Fords Prairie Grange Hall
- Union Pacific Railroad
- Bonneville Power Administration (electrical substations)
- Other appropriate Community, Business or Freight Stakeholder groups adjacent to the corridor.

2.2.2. Task Assumptions

- The CEP and each update will require one round of COUNTY review.

[1] E2SSB 5141 is an act relating to reducing environmental and health disparities and improving the health of all Washington state community members.

- The CEP will be created after kickoff, then updated twice (3 total).
- COUNTY will provide a Public Information Officer (PIO) or contact for all media inquiries.
- COUNTY will coordinate with all tribal governments.

2.2.3. Task Deliverables

- Initial Draft and Final Community Engagement Plan, and two updates (3 total).

2.3. Stakeholder Database and Property Owner Mailing List

2.3.1. Task Description

CONSULTANT will develop and maintain a stakeholder database of businesses, residents, agencies, and organizations potentially affected by the project. The stakeholder database will also include a comment log and mailing list of property owners within 0.50-mile of the corridor. CONSULTANT will update the stakeholder database periodically and include it with the quarterly CEP updates (Task 2.2 above). The stakeholder database will:

- Include contact names, phone numbers, physical addresses and email addresses for property owners located in and adjacent to the project area and other identified stakeholders, or information as agreed to by the COUNTY.
- List property owners within 0.50-mile of the corridor.
- Summarize stakeholder comments and COUNTY-approved responses.

2.3.2. Task Assumptions

- The stakeholder database will be created and maintained in Microsoft Excel format. Separate tabs within the Excel spreadsheet will show a list of stakeholders, mailing list, and comment log.

2.3.3. Task Deliverables

- Electronic version of stakeholder database included with each CEP (original + updates).

2.4. Stakeholder Agencies and Tribes Meetings

2.4.1. Task Description

CONSULTANT will hold meetings to coordinate local, state and federal or Native American Tribe's comments and concerns about the project at key project milestones. The meetings will be held on the phone or using an online platform such as Microsoft Teams or Zoom. The meetings will be one-hour long and held with key stakeholder agencies/entities and tribal governments identified in the stakeholder database. These meetings will include agendas and summaries and will utilize materials created from other tasks to convey project alternatives and to gather information or concerns and critical path permitting needs.

2.4.2. Task Assumptions

- COUNTY will provide all government-to-government contact and support for meetings with Native American Tribes.
- Agencies/Tribes will be comprised of key stakeholders shown in the stakeholder database.
- Graphics and maps will be used from other tasks.
- Meetings will be up to 1 hour long and held on the phone or using an online platform (Microsoft Teams/Zoom)

- Meetings will be held at times agreed to by the COUNTY. For the purposes of estimating it is assumed there will be four (4) meetings, attended by an average of two CONSULTANT team members.

2.4.3. Task Deliverables

- Agendas and summaries for four (4) Agency/Tribes meetings

2.5. Open Houses

2.5.1. Task Description

Two public open houses are proposed to be held in person in Centralia at key project milestones to inform and gather feedback from the public and project stakeholders. These sessions will include advanced notice via factsheet/mailers and social media (website) posts. Stations will be arranged according to an agreed meeting plan, and generally to include welcome, existing conditions, design development, and comment box/refreshments.

Open House No. 1
30% Design Concepts

Open House No. 2
60% PS&E Completion Meeting

The first open house will allow the team to collect comments about the 30% design concepts. At the second open house, 60% PS&E, the public can provide comments on the preferred improvements. A project Fact Sheet mailer will be developed and issued at the AD Ready phase of the project to inform the public of pending construction timeframe. Each open house will include graphics and written exhibits (Task 2.6). Formal presentations are not anticipated. Rather a series of one-on-one stations with several large presentation boards or roll maps (3 per station) will provide the basis for free movement of participants over a 3-hour open house period. They will be encouraged to sign in, and after providing comments to note takers at large chart packs, participants can stop for refreshments and fill out a comment card before exiting each open house. CONSULTANT will provide the advanced factsheet/mailer invite, online content for the COUNTY's website, meeting plans, materials list, exhibits, comment chart packs and comment forms/box, as well as a summary for each open house.

2.5.2. Task Assumptions

COUNTY will provide per open house:

- One consolidated set of comments on each deliverable
- Direct payment for venue, print and mailing of factsheets
- Posting of content on COUNTY website.
- Up to 2 COUNTY and 1 CITY staff to help staff stations (3 total staff)
- Boards and communication materials will be created in other tasks

CONSULTANT will provide up to five (5) staff members to attend two (2) open houses.

2.5.3. Task Deliverables

- A fact sheet/mailer invitation (4)
- Content for website updates (3)

- Up to 12 large graphics (2x3 boards or long roll maps) per open house (2)
- Meeting and materials plan (2)
- Draft and Final meeting summaries (2)

2.6. Communication Materials/Website

2.6.1. Task Description

The CONSULTANT will prepare text and provide the graphic layout for the Project factsheets and communications materials to use at public events, mailings and to post online. The COUNTY will provide and maintain the project website, with the CONSULTANT providing content. The initial factsheet will be used to announce the project and orient stakeholders to its goals, and ways to provide input. Three additional factsheets will be distributed at project milestones, and will generally provide a Project overview, map of Project limits, schedule, and contact information. The CONSULTANT will draft, design, and distribute COUNTY-approved factsheets to stakeholders via mail and material will be made available for the COUNTY to post its project website.

Project content updates will be provided for the COUNTY to upload to its web platform, including the project factsheets. Content developed by the CONSULTANT shall include, but is not limited to, a Project overview and communications materials created in this task. The CONSULTANT will provide all content to the COUNTY for review prior to posting to the web site.

The CONSULTANT will provide a comment card and comment box to obtain public comments and information at the public events described in Task 2.5. Each public comment will be transcribed into the stakeholder database/comments log.

Communication materials will include:

- Fact sheets/mailers (up to 4)
  - One at project initiation
  - One associated with 30% Design Concepts Open House
  - One associated with 60% PS&E Completion Open House
  - One associated with Ad Ready
- Website content (4) updates to roughly match the fact sheet mailer schedule
- Graphic Boards and maps (26):
  - Open Houses (12 boards x 2 = 24)
  - Agency/Tribes meetings (2)
- Comment Box:
  - Open House comment card and box
  - Content for website comment form

2.6.2. Task Assumptions

- COUNTY will maintain and post content on its website, and process comments as online comment box summaries
- COUNTY will provide consolidated comments on all draft products.
- COUNTY will pay print and mailing vendor directly.

2.6.3. Task Deliverables

- Up to 4 fact sheet/mailers
- Up to 36 open house board or roll maps

- Up to 2 Agency/Tribe specific boards or roll maps
- Two open house comment forms and comment box summaries

2.7. Translation of Communications Materials

2.7.1. Task Description

The CONSULTANT will translate the project factsheets, produced in Task 2.6, plus up to 4 factsheet updates, into Spanish.

2.7.2. Task Assumptions

- CONSULTANT will translate materials and:
  - deliver them to the COUNTY for posting,
  - provide them to Spanish-speaking stakeholders and groups
  - make them available at open houses

2.7.3. Task Deliverables

- Draft of translated fact sheets due as determined by the CEP and will align with upcoming Kickoff Initiation, open houses at 30% design concepts and 60% PS&E; final no later than 10 business days from receipt of COUNTY comments.

3. Data Collection

3.1. Review/Collect Existing Data

3.1.1. Task Description

- Data Requests
  - Items to be requested:
    - WSDOT Southwest Region Plan for Approval checklist
    - Lewis County Capital Improvement Plan, including all project plan/prospectus for this set of bundled projects
    - City of Centralia Capital Improvement Plan, including all project plan/prospectus for this set of bundled projects
    - City Water Report
    - Sewer Plans
    - List of Utilities and other agencies have jurisdiction in the project area
    - Record drawings from previous projects
    - Right-of-Way Plans
    - Adjacent project (Harrison Ave. Developer Project, City of Centralia Harrison Road Corridor Improvements) updates as appropriate
    - Effective Federal Emergency Management Agency (FEMA) hydrologic and hydraulic modeling for Chehalis River and Skookumchuck River

3.1.2. Task Assumptions

- The COUNTY will furnish the CONSULTANT with standard drawings, example plans and specs, and sign/illumination standard special provisions.
- The COUNTY will provide the CONSULTANT the above requested documents for review and incorporation into the roadway design within 30 days of project kickoff.
- Draft reports plans will be submitted to the COUNTY for a ten-day review period. All COUNTY comments will be addressed in one round.
- Documents requiring WSDOT review will be given a 15-day review.
- The CONSULTANT will perform Quality review prior to submittal of Reports and deliverables.

3.1.3. Task Deliverables

- None

4. Professional Land Surveying and Mapping Services

The CONSULTANT will commission an aerial photogrammetrist to prepare a topographic map at 1"=20' with 1-foot contours and 0.1' pixel color digital orthophotography within the aerial mapping limits. The aerial mapping limits are defined as being 100 feet left and right of road the centerline (200 feet wide total) commencing at Goodrich Road/Kuper Road intersection, running southeasterly along Harrison Avenue approximately 1.55 miles to the intersection of W. Reynolds Avenue, then easterly along W. Reynolds Avenue approximately 1.75 miles to the intersection of SR 507. The aerial mapping limits will also extend 400 feet northwesterly along Ives Road from Harrison Avenue. Intersections will extend 200 feet in each direction.

The CONSULTANT will provide ground-based mapping within the survey limits to supplement the aerial mapping. Survey limits are described as areas identified by the photogrammetrist as obscure but within the public right of way (ROW). Three (3) storm water parcels at 2 acres each, which may fall outside the survey limits, are included under this task. A fourth storm water parcel at 41.5 acres is also included. Other critical areas within the survey limits include railroad crossings, public roadway intersections, bridges, creeks extending from existing culvert pipes 100 feet upstream and downstream.

General Assumptions for Land Surveying and Mapping Services

- Health, Safety, and Security are priority. CONSULTANT personnel will not proceed if the conditions are deemed unhealthy, unsafe, or not secure from harm of any type.
- CONSULTANT is not responsible for any delays due to conditions outside of CONSULTANT'S control, such as weather.
- CONSULTANT is not responsible for any delays or errors caused by others.
- COUNTY will obtain title reports for up to seventy (70) parcels.
- COUNTY will submit letters to the appropriate utility companies prior to conducting field surveying. Surveying utility location paint marks will not commence until utility paint marking has concluded. Utility as-built records will be obtained by COUNTY and provided to the CONSULTANT.
- The CONSULTANT will use appropriate signage, high-visibility clothing and traffic control devices while performing field surveying.
- Only the property boundaries described in the COUNTY-provided title reports will be calculated.
- Right-of-way plan development will be prepared as described in Task 9.6.
- Up to eighteen (18) proposed acquisitions will be staked in the field.
- This proposal does not include setting property corners or filing a record of survey with the COUNTY Auditor.
- Should ROEs be required, they will be obtained as part of Task 14.2. Surveying outside the right of way (ROW) will require right of entry (ROE) from property owners.

4.1. Survey Project Management, Administration, QA/QC

- This task includes the survey project management, administrative duties, and quality control required for a project of this complexity and magnitude.

4.2. Survey Control

- This task includes the recovery of existing WSDOT survey control and establishing supplemental control, for aerial photogrammetry and ground-based surveying, as required for the project. Typically, survey control will be set, found, or referenced utilizing Real Time Kinematic (RTK) GPS (GNSS) and the Washington State Reference Network (WSRN) in conformance with industry standards. This survey control is then typically propagated, as required, utilizing standard traditional total station measurements.
- This survey will be referenced to WSDOT horizontal and vertical datums:
  - Horizontal Datum NAD83/2011.
  - Vertical Datum NAVD88.
  - Units shall be in US Survey Feet.
- The CONSULTANT will set up to eighteen (18) control points suitable for aerial photogrammetry and construction.

4.3. Field Surveying and Mapping

- This task includes the field surveying and mapping required for this specific effort. The CONSULTANT may use a combination of 3D Laser Scanner technology and traditional survey methods to collect the data for use in the creation of a basemap.
- These efforts will be performed by or under the direct supervision of a Washington State professional land surveyor.
- Mapping features within the survey limits include the edge of pavement, pavement markings, railroad crossings, bridges, creeks, culvert pipes, signs, driveways, fences, utility and light poles, traffic control devices, curbs, sidewalks, ADA ramps, fire hydrants, valves, and buildings. Trees 6" in diameter and larger at breast height (DBH) will be surveyed.
- Sanitary sewer and storm drain manholes will be measured internally for pipe and manhole diameter, material, and direction.

4.4. Office processing

- This task includes the office processing of the collected survey data, data extraction, field book note reductions, CADD drafting, and other duties required for the generation of the deliverable(s).
- The 3D laser scanning effort sub-tasks include the registering of point clouds; evaluating the registrations; exporting the point cloud data to Civil3D; creating or picking of appropriate points in Civil3D; Linework and Layering, and standard CADD drafting of the deliverables, as required.
- The CONSULTANT will supplement the 1"=20', 1-foot contour aerial mapping ,with georeferenced aerial image underlay, with comprehensive basemap adequate to support engineering design. The completed base map will be reviewed for accuracy by the Survey Quality Control Lead and any comments made during this review will be rectified and verified prior to release of the basemap.

4.5. Right-of-Way and Parcel Resolutions (To be performed by County forces)

The Lewis County surveyor will be resolving the Right-of-Way and property boundaries along the project corridor.

4.6. Legal Descriptions and Exhibits (Future)

The work of developing legal descriptions and exhibits in support of right-of-way acquisition is deferred to after the completion of the 30% design milestone.

4.7. Task Deliverables

- AutoCAD Civil 3D 2020 (or newer) survey base map at 1"=20' with 1-foot contours, with georeferenced aerial image underlay and digital terrain model.
- Survey base map updates, as required (up to six (6)).
- .XML file containing the terrain model and all survey points.

5. Environmental Services

5.1. Cultural Resources/Archaeology

Background research indicates two archaeological sites, two cemeteries or burial sites, one eligible historic structure, and eleven previous cultural resource surveys within one tax parcel of the project corridor. In addition, there are an additional 29 archaeological sites, three eligible structures, and 31 cultural resource surveys within a half-mile of the project area.

The project location is within a very high-risk probability area for precontact archaeological deposits as defined by the Department of Archaeology and Historic Preservation (DAHP). In addition, it is within a historically developed area with a very high probability of historic archaeological deposits. A search of the COUNTY Assessor's records for the property indicates 64 structures within one parcel of the project corridor older than 50 years of age (1972).

The project must be conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) as it will be receiving a permit from the USACE.

Relevant Washington State laws address archaeological sites and Native American burials. The Archaeological Sites and Resources Act [RCW 27.53] prohibits the disturbance of known prehistoric and historic archaeological sites on public or private lands. The Indian Graves and Records Act [RCW 27.44] prohibits the disturbance of American Indian graves. It provides that inadvertent disturbance through construction or other activity requires re-interment under the supervision of the appropriate Indian tribe.

CONSULTANT staff will initiate project work when notice-to-proceed confirmation and a signed agreement are received via email from the client.

CONSULTANT will assist the COUNTY with complying with these various state and federal legal requirements by identifying the presence of historic resources within the Area of Potential Effect (APE) through the completion of the following tasks.

5.1.1. Background Research

5.1.1.1. Task Description

CONSULTANT will conduct background research at appropriate repositories, such as DAHP, affected tribal cultural resource departments, university libraries, local history museums, and informants and use sources appropriate to the task, such as public records, private manuscript collections, online General Land Office records, published (secondary) sources, Sanborn fire insurance maps, and other relevant repositories. The research objective should be to fully understand the historical context, land use patterns, and previously identified

sites within the APE. The COUNTY will provide CONSULTANT with a detailed description of the project area, including relevant documentation (maps, plan sheets, photos, etc.). CONSULTANT will provide the client with justification for revising/amending the APE, if warranted (based on field survey and/or background research).

An APE memorandum will be developed, describing an area that encompasses all of the proposed horizontal and vertical project impacts for the proposed project. This memorandum will be provided to the COUNTY and CITY, for approval and dissemination to the consulting parties, pursuant to the requirements of Governor's Executive Order (GEO) 21-02 and Section 106 of the NHPA.

CONSULTANT will coordinate with the client to receive project materials, prepare to invoice and transmit correspondence. CONSULTANT will maintain project files to include necessary supporting materials as required. The Cultural Resources Task Manager will monitor project task performance, schedule, budget, and approve project expenses. The Task Manager will ensure that systems are in place to conduct quality assurance and quality control on deliverables and correspondence.

5.1.1.2. Task Assumptions

- The APE will consist of the project corridor alignment plus the adjacent tax parcel.
- The project will not be exempted from Section 106.
- Up to one APE modification/review round of the memorandum will occur between CONSULTANT and the COUNTY and CITY.
- The Cultural Resources Task Manager will be available for regular phone calls and emails with the client to facilitate the completion of the assignment, as necessary.

Project Materials:

The COUNTY will supply or facilitate CONSULTANT acquisition of the following items needed for this project:

- Preliminary and revised plan maps showing the location and extent of the project.
- Any additional descriptive information and design drawings that show the extent/depth of trenching, grading, excavation, or other ground disturbance including planting, staging/stockpile areas and traffic control associated with the project.
- The results of any geotechnical boring or subsurface testing that may assist in the development of a land use/land formation history.
- The CONSULTANT will obtain rights-of-entry as needed as part of Task 14.2 to access the survey area.

5.1.1.3. Task Deliverables

- APE exhibit and memorandum

5.1.2. Cultural Resources Survey

5.1.2.1. Task Description

The cultural resources survey will be completed by CONSULTANT archaeologists using standard, industry-accepted methods appropriate to the project area and landform. All survey activities will comply with the DAHP Survey and Inventory Standards

(www.dahp.wa.gov). Any recovered artifacts will be documented and photographed in the field and returned to the survey location unless negotiated under another agreement.

5.1.2.2. Task Assumptions

- Up to 200 shovel probes will be completed where the proposed ground disturbance is planned.
- CONSULTANT will backfill all shovel probes with soil excavated from the site.
- CONSULTANT will not excavate within the known boundaries of sites 45LE622, 45LE694, or 45LE759.
- CONSULTANT will not re-survey locations previously surveyed within the past ten years.
- No new archaeological or historic property sites will be identified.
- Up to 64 potentially historic properties within the APE will be recorded on historic property inventory forms.
- A separate cost estimate will be prepared for the client in the case that additional work (e.g., archaeological site or isolate file preparation, historic property identification requiring preparation of additional forms exceeding the current scope, construction monitoring, recording of site boundaries that lie outside the approved APE, archaeological excavation permit preparation) is required due to the discovery of historic/archaeological resource materials.
- The client will have all utilities on-site clearly marked prior to initiation of any fieldwork activity.
- If the project's horizontal/vertical limits are changed during periods of work performance, the APE will be revised, and modifications to the memorandum and hours associated with revisions will necessitate a contract amendment.
- The COUNTY will provide rights-of-entry as needed as described in Task 14.2 to access the required area(s).

5.1.2.3. Task Deliverables

- Historic property inventory forms.

5.1.3. Draft/Final Cultural Resource Assessment

5.1.3.1. Task Description

CONSULTANT will prepare a draft report of their findings that includes relevant supporting evidence for the findings and adheres to the DAHP Survey and Inventory Standards. The report will provide context on pertinent land use customs and beliefs, identify sites within the project area, discuss methods used to survey the project area, and include recommendations on the eligibility of the site(s) and the likelihood of construction impacts.

Upon receipt of comment from the client, CONSULTANT will revise and finalize the report to address specific concerns or suggested modifications. The final summary report will be suitable for submission to the federal lead agencies, DAHP, affected tribes, agencies, and other concerned parties. Due to confidentiality requirements for archaeological site locations, distribution of the report will be restricted beyond any of the aforementioned parties.

Newly identified cultural resources within the project area are required to be fully documented on a DAHP Archaeological Site Form and include a written description of the

site and its setting, sketch maps, USGS quadrant maps, and photographs. Any built environment resources that meet the Washington State standards of 45 years in age or older will have a historic context statement completed.

5.1.3.2. Task Assumptions

- A draft cultural resource assessment deliverable PDF will be provided to the client, with receipt and incorporation of combined comments for one (1) review round by the COUNTY and CITY, lead federal agencies and DAHP.
  - Up to 64 historic property inventory forms will be prepared and submitted to the DAHP.
  - Each evaluation and assessment will be submitted for official determination of eligibility.
  - Agency review and comment is not anticipated. If agency comments or modifications to the draft HPI forms are required, they will be covered under contract amendment.
- CONSULTANT will provide a final report deliverable PDF to the client for transmittal to the lead federal agency, the DAHP, and concerned parties.
- A draft version of the cultural resources assessment report will be provided to the COUNTY for review six weeks after completion of the field survey. The final report will be delivered to the client within ten business days after receipt of comment to the draft.

5.1.3.3. Task Deliverables

- Draft cultural resource assessment
- Final cultural resource assessment

5.2. Wetlands and Streams

5.2.1. Task Description

Field Work and Delineation

- Wetlands associated with Coffee Creek, and 5 other stream crossings within 200-feet upstream and downstream of Reynolds Avenue or Harrison Avenue must be delineated in accordance with the USACE 2010 Regional Supplement to the USACE Wetland Delineation Manual: Western Mountain, Valleys, and Cost Region. Wetland boundaries will be flagged or identified with GPS at approximately 30-foot intervals.
- Conduct visual reconnaissance along the entire project corridor to determine whether additional wetlands or streams are present. Delineate wetland and stream channels found with the limits of the study area. Assume a combination of not more than four (4) previous unknow wetlands and/or stream channels in the study area.
- Characterize the wetland conditions using the Washington State Wetland Rating System for Western Washington 2014 Update and associated wetland rating forms. Complete delineation and rating forms for all wetlands delineated.
- Identify the ordinary high-water mark (OHWM) for both banks of Coffee Creek pursuant to the Washington State Department of Ecology (Ecology) requirements for 200-feet upstream and downstream of the Reynolds Road crossing and the 5 other crossings in the study area.
- Identify the OHWM for both banks of Coffee Creek 200-feet upstream and downstream of Reynolds Road crossing pursuant to Washington Department of Fish and Wildlife (WDFW) requirements if different than Ecology.

- Identify (with flags or GPS) the top of bank of Coffee Creek at the Reynolds Road crossing, as well as any other fishbearing stream crossing to be impacted by the project, to assist in the determination of bankfull channel conditions to satisfy fish passage design criteria.
- Determine the appropriate buffers of each wetland and Coffee Creek pursuant to applicable sections of the Lewis County Code Chapter 17.37.
-

Wetland and Stream Delineation Report

- Prepare a project Wetland and Stream Delineation Report based on the WSDOT Wetland Discipline Report Checklist (omitting sections discussing impacts, mitigation, and project alternatives). The report will summarize the wetland delineation and OHWM determination. Graphics depicting the findings will be prepared and included. This report does not include an impact assessment or compensatory mitigation discussion.
- Include discussion of COUNTY/CITY wetland and stream buffer requirements per code.
- Respond to COUNTY comments on the draft Wetland & Stream Delineation Report and prepare the final version.

Bank Use Plan (if required)

- Prepare a Bank Use Plan using the DOE template or most current guidance. The plan will cover requirements from Lewis County code.
- Conduct an impact assessment for wetlands, streams, and habitat.
- Respond to COUNTY comments on the draft Bank Use Plan and prepare final version.
- Submit the final Bank Use Plan to the permitting agencies and respond to one round of comments.

5.2.2. Task Assumptions

- The CONSULTANT will delineate up to 12 wetlands in the project study area. Stream bank delineations will be identified and recorded via GPS at the six (6) crossing locations.
- A crew of two (2) environmental scientists will conduct the wetland and stream field work over the course of four (4) days.
- Survey of wetland and stream flags to be conducted via GPS during the delineation.
- The CONSULTANT will obtain rights-of-entry as needed as a part of Task 14.2 to access the required area(s).
- CONSULTANT effort to respond to agency comments on any documentation prepared above and submitted for review is not included in this scope and will require an amendment.

5.2.3. Task Deliverables

- Wetland data sheets and rating forms
- Draft Wetland and Stream Delineation Report
- Final Wetland and Stream Delineation Report
- Draft Bank Use Plan (if required)
- Final Bank Use Plan (if required)
- Updated Bank Use Plan w/ Agency Comments (if required)

5.3. Environmental Site Assessment (ESA)

5.3.1. Task Description

Data Compilation

- Work with the design team to define the action area to be used to request the Environmental Data Report (EDR) to support the historical characterization of the corridor.
- Research known online websites and databases to obtain relevant site records from federal, state, and local agencies such as EPA and DOE.
- Conduct a site visit to confirm information obtained through the EDR and through publicly available resources using the minimum search distances required by ASTM E 1527-13 and the All Appropriate Inquiry (AAI) rule to identify potential issues. Identify any obvious visual signs of potential environmental concerns. Photographs and field notes will be taken to document observations and conversations.
- Acquire and review historical information, maps, aerial photos, Sanborn fire insurance maps and similar documents according to industry best practices.
- Conduct interviews with current owners and operators/occupants, and past owners and operators/occupants of properties of concern to the extent possible and available.
- Prepare the WSP site assessment questionnaire for each interview and include it as part of the Phase I documentation.

Phase I ESA/Level I HMA

- Prepare a draft report that provides a description of the corridor and discusses the findings of the environmental assessment.
- In the event the project decides to pursue federal funding, this document will be prepared in accordance with WSDOT Level I Hazardous Materials Analysis (HMA) to assess and identify any know or potential environmental conditions within or adjacent to the project alignment. The Level I HMA and the Phase I ESA will confirm with the AAI Final Rule per 40 CFR 312, ASTM Standard Practice for Environmental Site Assessments (ASTM E 1527-13) and the WSDOT Environmental Manual (M 31-11).
- Summarize recognized environmental conditions (RECs), historical RECs, and de minimis conditions.
- Provide recommendations for conducting a Phase II investigation.
- Prepare graphics showing the project alignment and environmental features of nearby properties of concern, color photograph montage and other relevant information.
- Respond to comments and issue a final Phase I ESA.

5.3.2. Task Assumptions

- For budgeting purposes, it is assumed that files for up to 12 sites in the corridor will need to be reviewed in detail.
- Site reconnaissance can be completed within a 10-hour day (including travel) for a team of two scientists.
- The COUNTY will assist in identifying individuals/property owners, coordinating virtual interview times and participating in the interview. Up to 4 interviews are assumed in this scope.
- Destructive or non-destructive sampling or testing of soil, water, building materials, etc. is excluded. If such work is deemed necessary, then further investigation can be completed through an amendment.
- The site visit will be conducted by the CONSULTANT meeting the definition of an Environmental Professional as described in ASTM E 1527-13.
- The cost of the EDR will be included as a direct expense.

- A Phase II ESA may be recommended for specific properties of concern. An amendment to prepare the Phase II ESA would be required.
- The CONSULTANT will obtain rights-of-entry as needed as a part of Task 14.2 to access the required area(s).

5.3.3. Task Deliverables

- EDR report
- Draft Phase I ESA/Level I HMA
- Final Phase I ESA/Level I HMA

5.4. Flood Plain Impacts/FEMA

5.4.1. Task Description

- Work with the design team to evaluate and generate any floodplain related water surface elevations or inundation boundaries. The digitized preliminary and effective FEMA special flood hazard areas including the 100-year floodplain and floodways, as shown on the COUNTY interactive mapper, will be requested from the COUNTY GIS department.
- Generate flood hazard zone permit for COUNTY and CITY. Assumed permit requirement include site plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:
  - Description of the extent to which any watercourse will be altered or relocated as a result of proposed project; and
  - The exact location of the proposed project upon a copy of the flood hazard map with certification in writing that the location shown is correct.

5.4.2. Task Assumptions

- Hydraulic modeling to be complete as part of Task 12.2.1
- Obtain hydrologic and hydraulic modeling from FEMA.
- Task includes up to four (4) virtual meetings of 1-hour duration with the COUNTY to discuss requirements. Meetings will include up to two (2) CONSULTANT staff members.
- A no-rise certification will not be required as part of a memorandum to support the permit application.
- A no-rise is anticipated, thus a CLOMR and associated data package is not anticipated.

5.4.3. Task Deliverables

- Flood development permit for COUNTY and CITY.

5.5. ESA Compliance

5.5.1. Task Description

<u>ESA Compliance Documentation</u>

- Gather background information concerning USFWS listed species and critical habitat within the project action area.
- Identify construction and operational activities that may affect listed species and critical habitat.

- Conduct an analysis of effects to listed species and critical habitat from construction and operation of the road improvements.
- Prepare a No Effect Letter
- Prepare an Essential Fish Habitat Assessment pursuant to the requirements of the Magnussen Stevenson Act.

5.5.2. Task Assumptions

- A No Effect determination is anticipated due to the absence of NMFS ESA listed salmonid species presence in the Chehalis Basin system and the developed nature of the project area. Presence/absence surveys or formal species-specific surveys will not be conducted as part of this task.

5.5.3. Task Deliverables

- Draft No Effect Letter and EFH Analysis (pdf format)
- Final No Effect Letter and EFH Analysis (pdf format)

5.6. SEPA Coordination

5.6.1. Task Description

SEPA Checklist Preparation

- Prepare a draft project SEPA checklist for COUNTY and CITY review and comment.
- Incorporate review comments and prepare a final SEPA checklist for COUNTY issuance.

5.6.2. Task Assumptions

- The COUNTY will arrange to be the SEPA Lead Agency for determination issuance, public notice and distribution as required.
- A SEPA Determination of Non-significance or Mitigated Determination of Non-significance will be issued by the COUNTY.
- Site posting will be done by COUNTY staff.
- Public notice fees and SEPA fees will be paid for by the COUNTY.
- No SEPA related public hearings are anticipated.
- No SEPA appeals are anticipated.
- One round of review of each draft document by the COUNTY/CITY.
- All SEPA related meetings are assumed to be held virtually.
- Up to 24 hours of coordination and response to comment resolution is anticipated.
- NEPA determination will be made by the COUNTY at 30% Design Milestone. A determination in favor of advancing NEPA will result in a contract amendment.

5.6.3. Task Deliverables

- Draft SEPA checklist
- Final SEPA checklist

5.7. Agency Coordination and Permitting

5.7.1. Task Description

Agency Site Visit

- Organize, facilitate, and document a site visit to be attended either in person or via electronically/phone by permitting representatives of the USACE, WDFW, affected Tribes, and COUNTY/CITY staff. The 1-hour long meeting will be conducted at the COUNTY Public

Works Office and attended by up to five (5) CONSULTANT staff. An optional site visit to the Coffee Creek crossing at Reynolds will follow.

- The CONSULTANT will prepare a high-level meeting summary to document participants, key discussions, findings and action items.

Agency Meetings and Team Coordination

- The CONSULTANT will organize and facilitate up to three (3) agency meetings such as pre-application meetings with COUNTY/CITY staff and permit facilitation meetings with the USACE and WDFW as necessary. Meetings will be held virtually approximately 1 hour each.
- Maintain a 1-hour long internal environmental team check-in meeting, held monthly.

WSDOT Right-of-Entry and General Permit Coordination

- Work with the design team to prepare the description of activities and location within the WSDOT ROW needed for the right-of-entry or General Permit application package.
- Prepare up to three (3) WSDOT application packages for investigative efforts such as survey, geotechnical, wetland delineation.
- Coordinate with WSDOT reviewers and the design team to facilitate application processing and respond to one (1) round of comments per application.

JARPA Preparation and Graphics

- The CONSULTANT will prepare the Joint Aquatic Resources Permit Application (JARPA) and supporting graphics for submittal of applications for a USACE Clean Water Act Section 404 Permit for wetland/stream impacts, and Ecology Section 401 Water Quality Certification. The Wetland Stream Delineation Report, Hydraulic Report, Geotechnical Recommendations Report, Cultural Resources Survey, No Effect Letter and Mitigation Bank Use Plan will be submitted as supporting documentation.
- The USACE requires special permit exhibits be generated and included as part of the JARPA application package. Up to 12 graphics are anticipated for this effort.
- Coordinate closely with the design team to facilitate avoidance and minimization measures to limit impacts to wetland and waters of the US to the extent practical.
- Collect quantity calculations, fish passage design details, construction means and methods and equipment for inclusion in the JARPA.
- Respond to one round of review comments from COUNTY/CITY on Draft JARPA and prepare final package for submittal
- Update final JARPA to respond to one round of review comments from the USACE and Ecology.
- Submit the JARPA to Lewis County Community Development for critical areas review, floodplain development permit, and shoreline development permit. The Wetland Stream Delineation Report , Hydraulic Report, No-Rise Analysis, and Cultural Resources Report will be submitted as supporting documentation as well as a Bank Use Plan if one is needed.

WDFW On-Line Application

- Prepare the APPS (on-line JARPA) required for the Washington Department of Fish and Wildlife Hydraulic Permit Approval (HPA). It is a similar but different JARPA and must be completed and submitted electronically through the WDFW system.

DOE NPDES Construction Stormwater General Permit

- The CONSULTANT will prepare the Notice of Intent for the NPDES as well as a Stormwater Control and Countermeasures Plan as per the SWPPP Template or most current guidance.

Local Permitting/Review – Grading, Critical Area, Flood Zone, Shoreline

- The project will trigger a critical area review from COUNTY for potential impacts to wetlands and wetland buffers.
- Coffee Creek is within a FEMA designated 100-year flood plain and floodway. A COUNTY flood permit application will be prepared.
- Shoreline permit review will utilize materials provided with the project JARPA.
- A grading application for the project will be prepared for COUNTY/CITY review.
- Minimal roadside restoration or site restoration planting at the three (3) stormwater ponds are anticipated. Coordinate with the COUNTY and CITY to develop the restoration performance specifications and material selection (if required). Restoration landscape plan sheet development is not anticipated.

5.7.2. Task Assumptions

- Agency coordination meetings will be attended by the COUNTY PM.
- Any permit fees and public notice fees will be paid for by the COUNTY.
- All applications will be signed by the COUNTY.
- The project impacts to wetlands are within the thresholds allowed to meet a USACE Nationwide Permit 14 Linear Transportation and analysis under 404(b)(1) will not be required. Exceeding 0.50 acres of wetland/waters impacts per drainage area triggers an individual permit and is not covered by this scope of work.
- A preliminary stormwater report will be available for submittal with the JARPA package at the 30-60% design stage.
- A mitigation bank is available through COUNTY or the CITY. The COUNTY agrees use of a mitigation bank for the project is acceptable. The COUNTY will be responsible for purchasing mitigation credits after the USACE permit is issued.
- Mitigation planning and design for in-kind, onsite mitigation is not included in this scope and an amendment will be required.
- Development of restoration plan sheets are not anticipated. Restoration will be handled as a specification.

5.7.3. Task Deliverables

- Agency site visit summary notes
- Draft and Final JARPA and graphics
- Updated Final JARPA with agency comment/response
- WDFW on-line HPA application
- Draft and Final Notice of Intent for NPDES and SWPPP
- Local Agency Flood Permit package
- Local Agency Grading Permit Application package

6. Geotechnical

6.1. Geotechnical Exploration and Analysis

6.1.1. Task Description

Field and subsurface exploration for the project will include soil borings, pavement coring, geophysics, test pits, and infiltration testing. The geotechnical exploration will be completed in

two phases. The first phase (Phase 1) will cover known locations requiring subsurface information. The second phase (Phase 2) will cover locations identified during design advancement requiring subsurface information. For example, infiltration testing for stormwater facilities will be completed in Phase 2 after specific locations for the facilities are identified. The following subsections describe our current understanding of the subsurface data requirements and phasing for each project element.

6.1.1.1. Harrison Avenue (Phase 1)

Four pavement cores are proposed along Harrison Avenue to support pavement design. The cores are proposed at the following locations:

- One in northbound lane north of the Goodrich Rd/Kuper Rd Intersection
- One in southbound lane south of Goodrich Rd/Kuper Rd Intersection
- One in northbound lane in the vicinity of the Fire Station
- One in southbound lane approximately 150 feet south of the Fire Station

CONSULTANT understands concrete panels are present in both the northbound and southbound lanes of Harrison Avenue. Concrete panels encountered during sewer improvements or other construction activities will require complete panel removal. Additional pavement cores supplemented by ground penetrating radar (GPR) methods are proposed to delineate the extents of the panels within the project limits.

6.1.1.2. Reynolds Avenue (Phase 1)

Four pavement cores are proposed along Reynolds Avenue to support pavement design. The cores are proposed at the following locations:

- One in eastbound lane between Harrison Avenue and Blakeslee Junction
- One in westbound lane between Harrison Avenue and Blakeslee Junction
- One in eastbound lane between Blakeslee Junction and Pearl Street (SR 507 Intersection)
- One in westbound lane between Blakeslee Junction and Pearl St (SR 507 Intersection)

6.1.1.3. Coffee Creek (Phase 1)

Depending on the presence of utilities or other conflicts, a maximum of two soil boring will be completed to support the design of the Coffee Creek fish passage structure. Borehole locations are proposed at the following locations

- One borehole in eastbound lane west of the creek to a maximum depth of 35 feet below existing ground surface.
- One borehole in westbound lane east of the creek to a maximum depth of 35 feet below existing ground surface.

6.1.1.4. Utilities (Phase 1)

A series of soil borings will be completed along the length of the proposed utilities. Depending on the presence of utilities or other conflicts (e.g., intersection, driveways), the boreholes will be spaced approximately 500 feet apart. Both the interceptor and the water main are proposed along Harrison Avenue. There will be an opportunity to combine borehole locations with the additional pavement core locations to reduce the number of lane closures and traffic control days.

- Eight boreholes to maximum depths of 30 feet below existing ground surface to evaluate soil and groundwater conditions along the length of Harrison Avenue.
- Open standpipe piezometers will be installed in four of the eight sewer alignment borings. Piezometer locations will be capped with 12-inch-diameter, flush-mount monument.
- Slug testing will be completed in each of the piezometers. The results of the slug tests will be used to estimate a range of hydraulic conductivity along the length of the trench
- As dewatering volumes and drawdown are dependent on the construction contractor's means and methods and are, therefore, not a part of this scope of work.

6.1.1.5. Stormwater Facilities (Phase 1)

Four potential stormwater facility sites will be evaluated. The four sites are Parcel 023619001004 (1303 W. Reynolds Avenue), Parcel 003475001034 (2600 W. Reynolds Avenue) and Parcel 024006001005 and Parcel 023745003007 (to the west of 2723 Harrison Avenue). During Phase 1 of the subsurface exploration, a soil boring will be advanced at each location and monitoring well installed. A data logger will be installed in each monitoring to collect water level readings through the wet season. During Phase 2, infiltration testing will be completed. A Pilot Infiltration Test (PIT) will be completed at each location and soil samples will be collected for grain size analyses in the lab.

6.1.1.6. Culvert Headwalls and Retaining Walls (Phase 1)

The terrain in the project area is generally level, but potential retaining walls will be evaluated during design progression to limit right-of-way (ROW) acquisition. Specifically, retaining walls will be evaluated at the Coffee Creek crossing and the three large non-fish bearing culvert crossings. Subsurface investigation will be completed as part of the Phase 2 field effort. A minimum of one borehole at each retaining wall location.

6.1.2. Task Assumptions

The geotechnical exploration scope, budget, and schedule are based on the following assumptions:

- A project specific health and safety plan will be developed for the geotechnical exploration program.
- It is anticipated to advance up to four (4) borings in WSDOT right-of-way. A WSDOT General Permit will be required for borings in WSDOT right-of-way. The General Permit will be obtained as part of Task 5.7.
- Prior to any subsurface exploration, 811 utility locates will be completed.
- No fish windows affect when boreholes can be advanced adjacent to Coffee Creek.
- No time of day or day of week restrictions on lane closures or traffic control.
- Traffic control will be required for all geotechnical exploration activities, except for work at the stormwater facilities.
- Laboratory testing of soil samples will be limited to index tests (e.g., grain size analyses, moisture content, Atterberg Limits). No environment testing or sampling is included as part of this task.
- Boreholes and pavement cores will be located in the field using handheld GPS and or relative to existing site features. Surveying of locations by a licensed surveyor is not included as part of this task.

- The interceptor and water main utilities will be installed using open trench construction methods. Soil borings have not been included to support development of recommendations for trenchless installation methods.
- Utility potholing is not included in this task.
- Traffic Control associated with geotechnical field work will be arranged through a third-party vendor and included as a direct expense.
- The COUNTY will obtain rights-of-entry as described in Task 14.2 to access the required area(s).

6.1.3. Task Deliverables

The deliverables for the geotechnical exploration will include borehole records and laboratory testing result that will be included as appendices in the geotechnical recommendations report.

6.2. Geotechnical Recommendations

6.2.1. Task Description

Based on the results of the geotechnical subsurface exploration, geotechnical analyses will be completed, and recommendations will be developed. The geotechnical analyses and recommendation development will generally follow guidelines in AASHTO LRFD Bridge Design Specifications and WSDOT Geotechnical Design Manual. Recommendations will be consistent with the CITY Design and Development Guidelines. The following subsections describe the anticipated analyses to be completed and recommendations that will be provided for each project element.

6.2.1.1. Foundation Considerations/Design

The Coffee Creek fish passage structure, retaining walls, culvert headwalls, and other structures associated with the project can likely be supported on spread footings. Recommendations for bearing capacity, embedment depth, and soil subgrade preparation will be provided. If the soil conditions encountered during the geotechnical exploration are not suitable for spread footing support, recommendations will be developed for deep foundations. For example, a micropile foundation system consisting of small diameter driven pipe piles may be a feasible alternative to spread footings for the Coffee Creek structure.

6.2.1.2. Utilities

The sanitary sewer interceptor, water main, and other utilities will be installed using open trench methods. A summary of soil and groundwater conditions encountered in the boreholes along the utility alignments will be included, along with excavation and backfill considerations. Recommendations for lateral earth pressures for temporary trench shoring will also be included.

6.2.1.3. Retaining Walls and Culvert Headwalls

As required, geotechnical recommendations for the design of retaining walls and culvert headwalls will be provided. Geotechnical recommendations for design of cast-in-place cantilever concrete, Mechanically Stabilized Earth (MSE), gravity, and cantilever soldier pile walls will be provided as appropriate for the wall types identified during the design development. Geotechnical construction considerations will also be included.

6.2.1.4. Pavement Design

Flexible pavement sections will be developed for Harrison Avenue and Reynolds Avenue consistent with the COUNTY requirements and CITY Design and Development Guidelines. Where there is conflict between requirements, the more stringent will control the design. A rigid pavement section, should it be required, will be developed for the intersection of Harrison and Reynolds Avenues.

6.2.1.5. Stormwater Facility Design

Geotechnical evaluation will be conducted on three parcels as noted in 6.1.1.5. A Pilot Infiltration Test will be completed at each location as part of the geotechnical exploration. Analyses of the data obtained from each location will be completed and appropriate correction factors applied consistent with the Department of Ecology 2014 Stormwater Management Manual for Western Washington. Geotechnical recommendations and construction considerations will also be developed based on the type of facility (e.g., pond or vault).

6.2.2. Task Assumptions

The geotechnical recommendations are based on the following assumptions:

- Any required scour analyses for the Coffee Creek fish passage structure, other culverts, or structures will be completed as part of another task.
- No analyses or recommendations are included for trenchless utility installation methods.
- A geotechnical recommendations report documenting the geotechnical exploration and recommendations will be provided. The report will include borehole records and geotechnical laboratory results as appendices.

6.2.3. Task Deliverables

- Geotechnical recommendations report

7. Traffic

7.1. Review/Collect Existing Data

7.1.1. Task Description

The CONSULTANT will review current planning documents and historic count data provided by the COUNTY. The CONSULTANT will determine gaps in data needs and conduct new traffic volume collections as determined.

The CONSULTANT will use data collected as part of the NLCIA project. No new data is included with this scope of work.

Field Observations

Field investigations of traffic movements and operations will be conducted during a typical afternoon peak hour, with attention to typical queue extents, any cycle failures, and yielding interactions between vehicles and non-motorized traffic. All data will be summarized in spreadsheet form with a short summary.

Other Data

Signal timing data for the signalized intersections listed above will be provided by the COUNTY and WSDOT. Basic intersection and roadway geometric data will be gathered in direct

partnership with the roadway design team, and, if gaps remain afterward, measured either in the field or using publicly available online resources.

7.1.2. Task Assumptions

- No new data will be collected.
- The peak periods for this project are defined as 6-9 a.m. and 3-6 p.m. The peak hours at each intersection will be defined by the four consecutive 15-minute periods with the highest total volume entering the intersection.
- Intersection turning movement counts will be collected simultaneously and during the 48 hours in which tube counts are collected.
- Field observations will be conducted during the same time PM peak period counts are collected, if possible.

7.1.3. Task Deliverables

- Volume count sheets (PDF)
- Field observation summary spreadsheet

7.2. Traffic Analysis

The purpose of this task is to evaluate recent and relevant traffic operational analysis to set the baseline of the corridor and to help guide the development and refinement of the corridor design

7.2.1. Task Description

Demand Forecasting

Regional growth and future travel demand as developed in the COUNTY's regional planning efforts will be utilized to provide context to the corridor within the project limits. The 2040 forecasts from the Comprehensive Plan will be utilized for the horizon year analysis.

Traffic Modeling and Analysis

Project will use Synchro modeling developed as part of the NLCIA effort. CONSULTANT to refine the Synchro model for the project corridor including the signalized intersections within the study area as well as the length of Harrison Ave to the I-5 ramps. Analysis will look at queuing along Harrison and potential for back up through the study intersections. The CONSULTANT will use Synchro to evaluate existing lane configuration and determine whether lane assignments are reasonable at each study intersection.

Scenarios

The CONSULTANT will develop up to 4 design scenarios. The scenarios are as follows:

- Existing Conditions AM Peak Hour
- Existing Conditions PM Peak Hour
- 2040 Horizon Year AM Peak Hour
- 2040 Horizon Year PM Peak Hour

The horizon year analysis will take into consideration planned projects and developments recorded in the COUNTY's Adopted Long-Range plans. Additional analysis scenarios, such as near-term and construction year, are not included in the proposed modeling effort.

Measure of Effectiveness

Following the analysis scenarios listed above the CONSULTANT will perform peak hour traffic measures of effectiveness (MOEs) analysis for each of the two signalized intersections in the corridor, which will include (1) LOS and average delay at signalized intersections, (2) average queue lengths for each intersection approach, and (3) the estimated left turn pocket lengths required to prevent average peak hour queues from spilling back into the adjacent through lanes at locations where lengths are (or are projected to be) inadequate. These measures will be indicated in detailed software output reports for each intersection under each scenario and peak hour.

Traffic Technical Memorandum
The CONSULTANT will produce a draft and final traffic technical memo (maximum of up to 10 pages long) documenting basic assumptions, methods, and summary results from the traffic analysis.

7.2.2. Task Assumptions

- No travel demand modeling or forecasting is included in this scope of work.
- Only conceptual modeling of roundabouts will not be considered as part of this scope of work

7.2.3. Task Deliverables

- Draft Traffic Technical Memorandum
- Final Traffic Technical Memorandum

7.3. Intersection Control Evaluation

The CONSULTANT will evaluate intersection control at two locations on the project: the SR 507 (Pearl Avenue)/Reynolds Avenue intersection and a future West Connector intersection with Harrison in the vicinity of Ives Road.

7.3.1. Task Description

SR 507/Reynolds Avenue Intersection
The CONSULTANT will perform an intersection control evaluation (ICE) modified to reflect the size and complexity of this existing WSDOT/COUNTY intersection. The ICE will follow the guidance of WSDOT Design Manual Chapter 1300.05(2) for existing intersections.

West Connector (Harrison Avenue/Ives Road/Foron Road) Intersection
The CONSULTANT will perform an ICE for this combined COUNTY road intersection following a scaled version of the process detailed in WSDOT Design Manual Chapter 1300.05(3) for new intersections.

7.3.2. Task Assumptions

- The PROJECT will use a modified version of the WSDOT ICE process at up to two locations: one existing intersection and one location where two intersections would be combined to form a new intersection.

7.3.3. Task Deliverables

- Draft SR 507/Reynolds Avenue ICE Memo report for WSDOT review
- Final SR 507/Reynolds Avenue ICE Memo report for WSDOT approval

- Draft West Connector/Harrison Avenue ICE Memo report for COUNTY/CITY review
- Final West Connector/Harrison Avenue ICE Memo report for COUNTY/CITY approval

7.4. Safety Analysis

7.4.1. Task Description

The CONSULTANT will conduct a safety assessment of up to 3 intersections in COUNTY and the CITY: Harrison/Reynolds, Reynolds/Johnson, and Reynolds/Lum/Industrial. This assessment will use recent crash history and the proposed condition with the project. The CONSULTANT will obtain the latest 5-year crash history from WSDOT, indicate crash trends, and describe potential contributing factors. The CONSULTANT will perform a qualitative analysis of the potential safety performance implications of the proposed design and discuss trade-offs. The CONSULTANT will review and document relevant crash modification factors and research literature for the proposed project features with respect to safety such as crosswalk location and orientation, curb extensions, and bicyclist use. The CONSULTANT will document the findings of these conceptual investigations in an intersection safety technical memorandum.

7.4.2. Task Assumptions

- A full corridor safety review will not be included. A Highway Safety Manual predictive analysis will not be performed.

7.4.3. Task Deliverables

- Draft Intersection Safety Technical Memorandum
- Final Intersection Safety Technical Memorandum

7.5. Traffic Design

7.5.1. Task Description

Pavement Marking/Channelization

The CONSULTANT will prepare pavement marking plans for the project as detailed in the PS&E plan sheet tables in Task 13. The plans will show dimensions for lanes, crosswalks, stop bars, pavement marking symbols and tapers and meet the requirements of the Manual on Uniform Traffic Control Devices (MUTCD) and COUNTY and CITY standards.

Signing

The CONSULTANT will prepare signing plans that show the location of new signs and associated sign design details as detailed in the PS&E plan sheet tables in Task 13. Signing will conform to the current edition of the MUTCD and the COUNTY's signing guidelines.

Signal Design

The CONSULTANT will design, calculate, and document signal system modifications at the two (2) signalized intersections. Traffic signal design as part of the30% design package will include:

- Pedestrian Pole location as needed to meet ADA requirements
- Vehicle detection

Design impacts on existing signal system (moving of signal heads on existing mast arms)

The CONSULTANT will advance the signal design to prepare 60/90/Ad Ready plans showing proposed locations for the signal equipment, electrical hardware, and wiring diagrams for the two (2) signalized intersections located within the project limits.

- Harrison Ave / Reynolds Ave
- Reynolds Ave / N Pearl St

Illumination

The CONSULTANT will prepare preliminary illumination design plans as part of the 30% design package. Subsequent PS&E packages will include illumination design plans and illumination details as shown in the plan sheet tables in Task 13. The street lighting design will meet the Illuminating Engineers Society (IES) standards for a principal arterial roadway and applicable local standards.

Illumination design will be based on the width of the roadway and the potential for placing luminaires on the outside of the roadway along the corridor segment. CONSULTANT will work with the CITY to determine the general layout, configuration, and type of light fixture(s) for the roadway and pedestrian lighting to be used on this project. CONSULTANT will model photometrics that match the chosen fixture using AGi32 software. The use of LED lighting will be considered.

CONSULTANT will provide a preliminary lighting design that shows the preliminary design layout, lane configuration, type of luminaire configuration, spacing between luminaires, and the light level results. Plan sheets will indicate luminaire locations. CONSULTANT will summarize the analysis for the CITY, in an Illumination Design Memorandum.

ITS (none assumed)

7.5.2. Task Assumptions

- SOW assumes minor signal modifications to upgrade to latest ADA standards and potential repositioning of signal heads to match lane channelization.
- Improvements causing signal rewiring or more significant modifications are considered out of scope.
- Owning/Maintain agency to provide type of illumination fixture to include in design
- No ITS or signal interconnect is assumed with this project
- No proposed change to signal phasing

7.5.3. Task Deliverables

- Draft and final Illumination memo with light level exhibits

8. Roadway

8.1. Design Documentation

Design documentation for the project will conform to the requirements of Local Agency Guidelines (LAG) Manual Chapter 42 and as revised by this scope of work.

8.1.1. Task Description

Design Criteria/Parameters

The CONSULTANT will prepare project design criteria to address COUNTY, CITY, AASHTO, Proposed Right-of-Way Accessibility Guidelines (PROWAG) and WSDOT design and code requirements. The CONSULTANT will prepare a basis of design summary identifying design

criteria and any variances to the Centralia Design Standards that may be necessary or appropriate. The following elements are included in this task.

- Basis of Design
- Plan For Approval (PFA)
- The CONSULTANT will prepare an intersection PFA package for the SR 507 (Pearl Street)/Reynolds Avenue intersection. The package will consist of:
  - Roadway Section(s)
  - PFA Sheets
  - Turning Movement Exhibits
  - Design Decisions/Design Analysis (if required)
  - Traffic Data Diagram
- Project File Elements
  - Design Approval
  - Project Development Approval
- Design Documentation Memorandum
  - Design Criteria
  - Turning Movement Exhibits
  - Sight Triangles

8.1.2. Task Assumptions

- Draft reports plans will be submitted to the COUNTY/CITY for a ten-day review period. All COUNTY/CITY comments will be addressed in one round.
- The CONSULTANT will perform internal quality assurance/quality control reviews prior to submittal of Reports and deliverables.

8.1.3. Task Deliverables

- Basis of Design summary
- PFA package
- Design Documentation Memorandum

8.2. Roadway Design and Modeling

8.2.1. Task Description

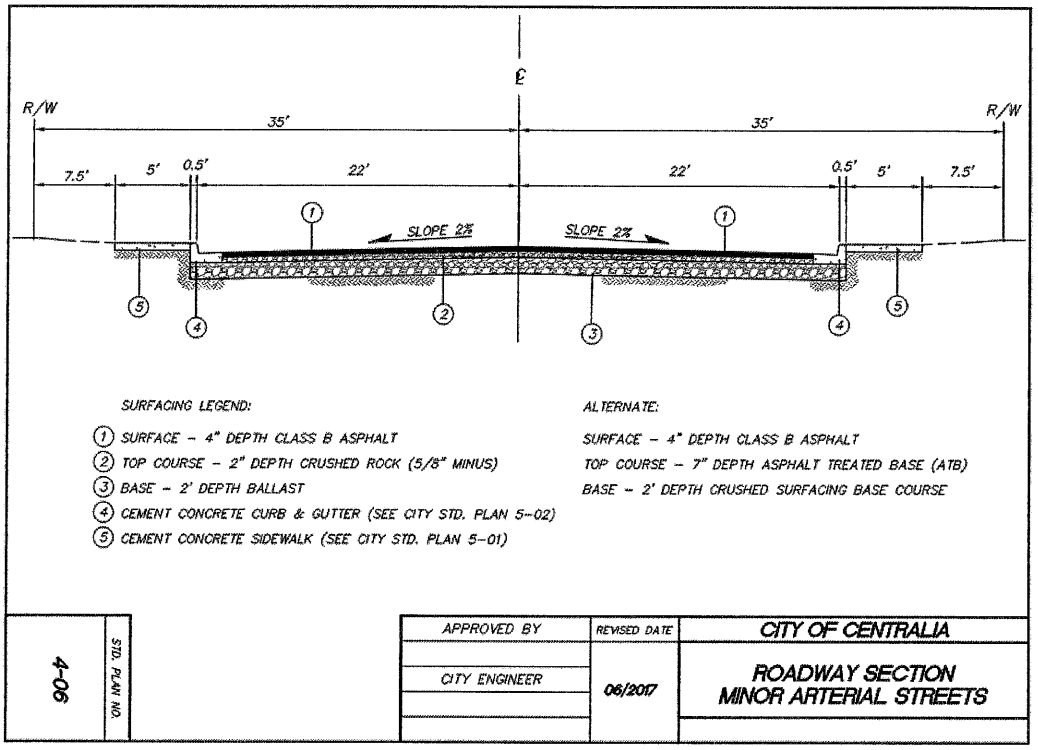
The CONSULTANT will prepare a single "best-fit" design for the corridors based on the following:

- Traffic model analysis and demand forecasting
- Existing physical constraints within project area (i.e., railroad crossing, structures near the roadway etc.)
- Available right of way
- Stakeholder input
- Stormwater requirements
- Geotechnical reports
- Pedestrian facilities requirements
- Location of proposed and existing utilities

8.2.2. Task Assumptions

- No additional signalized intersections are anticipated. Should a signal be the recommended intersection control for the West Connector/Harrison Avenue/Ives Road/Foron Road intersection, no signal will be designed or constructed as part of the PROJECT.

- CONSULTANT understands the COUNTY right-of-way is typically 60 feet. The general roadway section shown below identifies a 70-foot right-of-way. The right-of-way width will be managed using these guiding principles:
  - Minimize right-of-way acquisition needs.
  - The buffer behind the back of sidewalk is subject to revision to a smaller dimension
  - The minimum sidewalk width is 5 feet
  - The minimum bicycle lane width adjacent to vertical curb is 5 feet
  - The 44-foot curb-to-curb width typically provides for two 11-foot through lanes, a 12-foot two-way-left-turn lane (TWLTL) and two 5-foot bicycle lanes. Modifications to the typical roadway section will be coordinated with the COUNTY.
  - The accommodation of utilities, whether above ground or below ground, must be considered and coordinated during the establishment of the project footprint.



- The CONSULTANT will attend periodic design review meetings to discuss key design element features. These meetings may coincide with other project meetings to realize efficient use of time. For the purpose of estimating it is anticipated to have up to three (3) design review meetings, corresponding with the 60%, 90%, and Ad Ready milestones.
- This task will support the preparation of CONSULTANT-prepared permit applications. These permits may include, but are not limited to construction stormwater general permit, right of way permit, utility franchise agreement.
- The CONSULTANT will perform constructability analysis, as described in Task 8.5, of the design throughout the design of the project.
- The CONSULTANT will incorporate stakeholder comments into the designs as allowed by the design criteria documents. If a stakeholder's comments or request do not conform to the

design criteria documents listed above, the CONSULTANT will inform the COUNTY/CITY about the issue to determine if the comment or request should be granted a variance.

8.2.3. Task Deliverables

- No formal deliverables, Civil3D files may be made available upon request.

8.3. Roadway Plan Production

8.3.1. Task Description

The CONSULTANT will prepare conceptual plans for the project as described in Task 13 below. The objective of this work item is to develop project geometrics and sufficient engineering design to produce the project and pavement limits necessary to support the environmental effort and ROW engineering.

8.3.2. Task Assumptions

- The CONSULTANT will provide a schematic roll plot for the 30% deliverable. The schematic roll plot will contain the roadway alignment and geometry, proposed channelization, existing right-of-way, proposed right-of-way and/or temporary construction easements.
- The CONSULTANT will provide roadway packages at 60% PS&E, 90% PS&E and Ad-Ready PS&E submittal milestones.
- The CONSULTANT will review plans package comments and participate in comments resolution meeting with the COUNTY and CITY. Each meeting will last up to four hours and have the participation of up to eight CONSULTANT staff including the Project Manager.
- Sheet count for task deliverables will conform to the plan sheet tables in Task 13.

8.3.3. Task Deliverables

- Alignment, profile, and roadway section plans

8.4. Construction Staging and Maintenance of Traffic

This task involves engineering and design work for the construction staging and phasing portion of the PS&E documents.

8.4.1. Construction Staging

8.4.1.1. Task Description

The CONSULTANT will develop construction phasing concepts for the project. The concepts will include major construction activities and a proposed sequencing of activities that can be followed to construct the project. This task shall include meetings with the COUNTY to brainstorm and vet alternatives, including establishing parameters for maintenance of traffic and construction detours.

8.4.1.2. Task Assumptions

- An evaluation of construction staging will occur in the development of the 60% PS&E package.
- The task will include meetings with the COUNTY and CONSULTANT to establish maintenance of traffic guiding principles and design parameters, including considerations of road closures (partial and/or full), detours, hours of operation, fish windows, and anticipated permit and/or stakeholder constraints and restrictions.

- A construction staging memorandum will be prepared at the 60% PS&E milestone to capture staging and maintenance of traffic approaches, agreements and constraints.
- Construction staging plans will be prepared for the 60% PS&E milestone detailing major items of work in each construction stage and detailing required work zones.
- Construction staging plans prepared for the 90% PS&E milestone will incorporate resolutions to comments from 60% review and be updated to account for any project changes.

8.4.1.3. Task Deliverables

- 60% construction staging plans with memorandum
- 90% construction staging plans
- Ad-Ready construction staging plans

8.4.2. Maintenance of Traffic

8.4.2.1. Task Description

The CONSULTANT will prepare preliminary and final traffic control plans for each phase of construction. This task shall include detour plans as assumed below.

8.4.2.2. Task Assumptions

- It is assumed the construction staging memorandum will allow detours to be established under a set of prescribed conditions. For estimating purposes, it is assumed three (3) sets of detour plans (two (2) pages each) will be prepared for the project.
- The COUNTY will coordinate detour agreement approval with jurisdictions having authority. The CONSULTANT will support detour agreement preparation and negotiations.
- Preliminary traffic control plans will be included in the 60% PS&E submittal.
- Final traffic control plans will be included in the 90% PS&E submittal.
- The Ad-Ready PS&E submittal will address and incorporate resolution to all 90% traffic control plan comments.

8.4.2.3. Task Deliverables

- 60% traffic control plans
- 90% traffic control plans
- Ad-Ready traffic control plans

8.5. Constructability

8.5.1. Task Description

The CONSULTANT will perform constructability reviews as necessary throughout the course of design development in order to determine the viability of concepts and to validate cost estimates. A Conceptual Construction Schedule and Staging Plan will be prepared to support the constructability reviews.

8.5.2. Task Assumptions

- This work will focus on identifying construction complexity and risks, contractor access issues as well as obtaining input from staff with construction experience on identified construction staging concept developed under Task 8.4.

- The results of COUNTY/CITY comments from the constructability reviews will be consolidated by the COUNTY/CITY and submitted to the CONSULTANT and the CONSULTANT will incorporate these comments into the DRAFT roadway design and other deliverables as needed.

8.5.3. Task Deliverables

- Conceptual Construction Schedule
- Conceptual Construction Staging Concepts (3 max)
- Draft Exhibits of Construction Staging (12 max)
- Summary of Construction Staging (1 Word doc)

8.6. Right-of-Way Plan Development

This task involves coordination meetings, preparing ROW plans in compliance with the COUNTY/CITY requirements, and preparing right-of-way exhibits to support acquisition of temporary and permanent property rights required for the project. This task draws on information developed in Task 4, Survey and Task 14, Right-of-Way and will coordinate closely with each.

8.6.1. Right-of-Way Coordination

The CONSULTANT will conduct coordination meetings between the multiple project partners and team members to support the preparation of the ROW plans and ROW acquisition exhibits.

8.6.1.1. Task Description

The CONSULTANT will assist COUNTY as requested with the CITY, WSDOT, utility providers, and public and private property owners to determine ROW needs and procedures for obtaining the necessary property rights for the project. Meetings held under this task will include up to 12 meetings attended by up to two (2) CONSULTANT staff with the COUNTY and/or property owners.

8.6.1.2. Task Assumptions

- The COUNTY will be invited to attend all right-of-way meetings initiated by the CONSULTANT team. The CONSULTANT will be invited to attend all right-of-way meetings initiated by the COUNTY.
- The CONSULTANT will prepare meeting agendas and meeting summaries for the project record.
- The CONSULTANT will note property impacts and constraints and communicate such to the larger project team to shape design and for inclusion in the project specifications.

8.6.1.3. Task Deliverables

- Meeting agendas and meeting summaries (in pdf format)

8.6.2. Right-of-Way Plans

8.6.2.1. Task Description

The CONSULTANT will prepare the ROW plans for the project using the certified Right-of-Way map provided by the COUNTY.

8.6.2.2. Task Assumptions

- Existing right-of-way basemap information, to include right-of-way centerline and parcel linework, is being prepared in Task 4.
- The CONSULTANT will utilize the existing right-of-way basemap information to cut right-of-way plan sheets. The CONSULTANT will add to the existing right-of-way information proposed right-of-way acquisitions and proposed temporary construction easements.
- The CONSULTANT will establish a centerline ROW alignment as part of Task 4 for use in defining existing and proposed ROW acquisitions. This procedure will be used to define the limits of temporary and permanent easements. Calculations will be made to provide approximated square footage of all acquisitions.
- Existing ROW plans will be gathered from project partners by the COUNTY and supplied to the CONSULTANT.
- The ROW plans will be prepared in a WSDOT format, using centerline stationing with offsets to define the existing and proposed acquisition areas, including temporary and permanent easements.
- The CONSULTANT will prepare revisions to the ROW plans if needed after they are originally signed. For estimating purposes, it is assumed six (6) plan sheets will be revised.

8.6.2.3. Task Deliverables

- Draft ROW plans (32 sheets in pdf format)
- Final ROW plans (32 sheets hard copies and in pdf format), sealed and signed by a professional engineer and/or a professional land surveyor licensed in the state of Washington, per WSDOT standards showing the existing and proposed ROW and both permanent and temporary easements required for project.
- Final ROW plan files in AutoCAD format.
- Right of way plan revisions after they are originally signed and approved by COUNTY and/or the CITY.

8.6.3. Right-of-Way Exhibits

8.6.3.1. Task Description

The CONSULTANT will prepare exhibits that may aid in discussions between the property owner and the ROW acquisition agent. The CONSULTANT will also prepare ROE exhibits that will aid the ROW task lead in obtaining ROE from identified property owners. The ROE will be based on the need for additional surveying, geotechnical explorations, and environmental investigations and studies.

This task is deferred until after the 30% design milestone when right-of-way acquisition and easement needs are better defined.

8.6.3.2. Task Assumptions

- None.

8.6.3.3. Task Deliverables

- None.

9. Storm Drainage

9.1. Storm Drainage Design

9.1.1. Task Description

This task includes the completion of a conceptual technical memorandum, draft and final stormwater site plan and the design of the stormwater conveyance and treatments systems. The basis of design for the conveyance and treatment system will be the conceptual technical memorandum and stormwater site plan. The following elements are included in this task:

- The CONSULTANT will perform a field investigation site visit to evaluate stormwater infrastructure along the project corridor; and any existing conveyance systems both the upstream and downstream side of the project within a flow distance of 1/4-mile to support completion of the Off-Site Analysis required as part of the Stormwater Site Plan.
- Prepare the 60%, 90% and Ad Ready stormwater plans and profiles and storm drainage details to be included in the project plan set as described in the Task 13.
- Complete the quantity takeoffs to assist in the preparation of the 60%, 90% and final Engineer's Estimate of Probable Cost as described in the Task 13.
- Prepare the stormwater related specifications for the 60%, 90% and Ad Ready PS&E submittal.
- Perform conveyance analysis.
- Prepare a Conceptual technical memorandum on the planned stormwater design that includes:
  - Delineation of Threshold Discharge Areas (TDAs)
  - Estimate of additional runoff generated by the project and required treatment area and flow control necessary.
  - Planned treatment and flow control facilities that will be used in the 15 percent design.
  - Overview of how minimum requirements are planned to be met.
- Address stormwater comments received from the 60%, 90% and final PS&E reviews.
- Develop planning level OPCC with project 30% submittal

9.1.2. Task Assumptions

- Utilize Stormshed3G to perform a real time hydraulic analysis of the proposed conveyance system using the Santa Barbara Unit Hydrograph. CONSULTANT will evaluate the 25-year, 24-hour storm event for conveyance and the 100-year, 24-hour event for surcharge. The results will be documented in the Draft and Final Stormwater Site plan.
- The field site visit will be two full days in duration including travel time (sixteen hours). The field investigation site visit will include up to two CONSULTANT staff members.
- All stormwater is assumed to be treated within the project corridor on either COUNTY- or CITY-owned or acquired parcels. No flow control is required.
- No new stormwater pump station is required.
- New outfall design is not included in this scope of services.
- The Chehalis River is flow control exempt.
- Stormwater conceptual technical memorandum shall be 20 pages maximum in length.
- The draft Stormwater Site Plan will be submitted at the 60% submittal and will follow the outline of required elements listed in the Washington Department of Ecology (Ecology) Stormwater Management Manual for Western Washington (SWMMWW). For the 60% design, the Stormwater Site Plan will not include the following attachments:
  - Operations and Maintenance Manual
  - Construction Stormwater Pollution Prevention Plan (SWPPP)
  - Hydraulic/Hydrologic Modeling Results

- The final Stormwater Site Plan will be submitted at the 90% submittal. It is assumed that only minor roadways and stormwater design changes will be made after the 90% submittal and that no revisions to the Stormwater Site Plan will be made after the 90% design.
- The CITY is a Phase II permittee while COUNTY is not a Phase II permittee. Since the PROJECT falls within the Centralia UGA, the PROJECT will follow CITY guidelines/requirements and will follow the requirements of the SWMMWW for meeting the triggered Minimum Requirements. A single drainage report will be created (Stormwater Site Plan) meeting the Stormwater Site Plan requirements in the SWMMWW that will also serve as the Hydrological Engineering Report called for in the Lewis County Code.
- The latest edition of the WSDOT standard specifications will be used for specification development.
- The design will utilize CITY standard details.

9.1.3. Task Deliverables

- 60%, 90% and Ad Ready Stormwater Plan and Profile sheets (pdf format)
- 60%, 90%, and Ad Ready Storm Drainage Detail sheets (pdf format)
- 60%, 90%, and Ad Ready Stormwater specific specifications to be included in the overall project specifications. (pdf format)
- 30% Planning Level OPCC
- 60%, 90%, and Final OPCC
- Stormwater quantity takeoffs to be incorporated into the project estimate (pdf format)
- Stormwater Conceptual Design Technical Memorandum (pdf format)
- Draft Stormwater Site Plan (pdf format)
- Final Stormwater Site Plan (pdf format)

10. Utilities

General Assumptions for Utilities

- Overhead utilities will be evaluated for possible underground conversion with the applicable utility purveyor. The CONSULTANT will provide suggested joint utility trench (JUT) locations and details for use in discussion with the various utilities.
- Utility relocation and reconstruction plans for power, gas, and communication purveyors will be prepared by the respective utility. The CONSULTANT will coordinate directly with the utility companies and the COUNTY. The CONSULTANT will incorporate design information from the utility owners into the joint utility trench for layout, number and size of conduits, and vault sizes.
- Design plans from the utility owners will be included in the contract documents.

10.1. Utility Coordination

10.1.1. Task Description

This activity is to provide support to the COUNTY for the purpose of coordinating with the local utility companies and staff to identify potential conflicts with proposed project infrastructures and for resolving those conflicts. This task includes identifying conflict locations and relocation/mitigation needs. This activity also includes assisting the COUNTY in development/review of Schedule 74 Agreements should undergrounding of overhead utilities be formally agreed to by utility purveyors and other undergrounding agreements as necessary for converting existing overhead utilities to underground utilities along Reynolds Avenue and Harrison Avenue.

10.1.2. Task Assumptions

- The COUNTY will submit or mail plans, cross sections and other support information to the respective utility companies as part of the coordination process for use in identifying conflict locations and follow-up meetings.
- The COUNTY will compile and provide all utility As-Built information to the CONSULTANT for use in project development and for assessing conflicts with existing private and public utilities within the project limits.
- The COUNTY will schedule all coordination meetings with utility providers. Two CONSULTANT staff will attend two utility coordination meetings at each stage of design.

10.1.3. Task Deliverables

- None

10.2. Conflict Assessment/Resolution

10.2.1. Task Description

- The CONSULTANT will perform a Field Investigation Site Visit: This activity will include a site visit to validate existing survey and record drawings along the project corridor.
- The CONSULTANT will assess all information, including existing "As-Built" plans and/or drawings provided by private utility companies and COUNTY staff and identify possible conflicts with proposed roadway, storm drainage, sanitary sewer, and water infrastructure being installed in conjunction with the project.
- The CONSULTANT will meet with the COUNTY project manager, Staff, and applicable utility representatives to address potential conflict locations and recommend measures for resolving conflicts and/or identify locations for the relocation of utilities to avoid conflict with proposed infrastructures.
- The CONSULTANT will retain the services of a Utility Locating "Potholing" firm to verify critical public utility conflicts. Private utilities will pothole their respective facilities. The CONSULTANT will develop a list of locations in concert with the COUNTY project manager and coordinate with survey staff for survey services in support of verifying the depth and location of existing utilities.
- The CONSULTANT will work with COUNTY project manager and applicable utility representative to identify the number of working days required by each utility company for relocation of their respective utility should avoidance measures for the roadway infrastructure not be possible in advance of advertisement/award of a construction contract. The CONSULTANT will work with the COUNTY project manager to develop a "Utility Relocation Window" for incorporation into the project contract documents to assist the utility companies in the relocation/conversion of their respective utility should right-of-way not be available to the utility companies prior to advertisement/construction of the project.
- The CONSULTANT will maintain a Utility Conflict Matrix with utility conflict information and resolution. The matrix will be updated for each submittal up to and including the 90% Plans.
- The CONSULTANT will work with the COUNTY project manager to develop a "Letter of Concurrence" to be signed by each utility company representative acknowledging their role and responsibility for implementing work to relocate/convert/ and install their respective utility during construction of the project.

10.2.2. Task Assumptions

- For the purposes of estimating it is anticipated there will be up to 30 potholing locations for the purpose of verifying critical utility conflicts.

10.2.3. Task Deliverables

- Kickoff Letter with Project Base Map - Existing Utility Locations
- Letter and 30% schematic roll plot (pdf format) with Utility Conflict Matrix for COUNTY's submittal to utility companies.
- Letter and 60% Plans Completion (pdf format) with Utility Conflict Matrix for COUNTY's submittal to utility companies.
- Letter and 90% Plans Completion (pdf format) with Utility Conflict Matrix or COUNTY's submittal to utility companies
- Letter and Ad Ready Plans for COUNTY's submittal to utility companies, including Concurrence Letter for Signature.

10.3. Utility Design

10.3.1. Water Main

10.3.1.1. Task Description

This task includes the design of approximately 3,100 lineal feet (LF) of 12-inch watermain along Harrison Avenue between Sandra Avenue and Foron Road in Centralia, Washington. The following elements are included in this task:

- Field Investigation Site Visit: This activity will include a site visit to validate existing survey and record drawings along the project corridor.
- Perform hydraulic modeling to validate pipe size. Prepare a technical memorandum documenting the results of the watermain sizing.
- Develop planning level OPCC with project 30% submittal.
- Prepare the 60%, 90% and Ad Ready Waterline Plan and Profile plans and profiles and waterline details to be included in the project plan set as described in Task 13.
- Complete the quantity takeoffs for the waterline portion of the project, to assist in the preparation of the 60%, 90% and Ad Ready Engineer's Estimate of Probable Cost as described in the Task 13.
- Prepare meeting agendas and summaries and facilitate up to 2 design review workshops, each not to exceed 2 hours in length with COUNTY and CITY staff.
- Prepare the waterline related specifications for the 60%, 90% and Ad Ready PS&E submittal as described in the Task 13.
- Address waterline comments received from the 60%, 90% and Ad Ready PS&E reviews.

10.3.1.2. Task Assumptions

- The field site visit will be four hours in duration including travel time. The field investigation site visit will include up to two CONSULTANT staff members.
- The proposed waterline design will meet the latest edition of the CITY Design and Development Standards.
- The latest edition of the WSDOT standard specifications will be used for specification development.
- The proposed waterline will be 12-inches in diameter and will be ductile iron.
- Validate pipe size in using the CITY'S most recent hydraulic model. The hydraulic model technical memorandum will be up to 2 pages.

- The project will require the removal and replacement of all existing water meters. The CITY to provide and install the water meters.
- All water meters and service lines will be 1-inch in diameter.
- The waterline does not require cathodic protection.
- The facility workshops will be held in the HDR Olympia office or virtually. The workshop will be attended by two CONSULTANT staff members and will be two hours in duration. An additional hour per meeting will be required for meeting agenda and follow-up notes.

10.3.1.3. Task Deliverables

- Waterline Review Meeting Agendas and Summaries (pdf format)
- 60%, 90%, and Ad Ready Waterline Plan and Profile sheets (pdf format)
- 60%, 90%, and Ad Ready Waterline Detail sheets (pdf format)
- 60%, 90%, and Ad Ready Waterline specific specifications to be included in the overall project specifications (pdf format)
- 60%, 90%, and Final OPCC
- Waterline quantity takeoffs to be incorporated into the project estimate (pdf format)
- Water Main Sizing Validation Technical Memo (pdf format)

10.3.2. Sanitary Sewer

10.3.2.1. Task Description

This task includes the design of select elements as described in the City of Centralia *General Sewer/Facility Plan (2019 Update).* Chapter 5, Sewer Collection System Improvements, describes the plan elements to be included in this scope of services. The plan elements with the component sections that fall within the greater project limits include:

F-1, Ford's Prairie Interceptor

Line Designation	Pipe Length (feet)	Pipe Diameter (inches)
F-1.4	2,300	36
F-1.5	1,040	36
F-1.6	1,400	36
F-1.7	220	36
F-1.8	1,330	36
F-1.9	160	36

F-7, Reynolds Avenue Area

Line Designation	Pipe Length (feet)	Pipe Diameter (inches)
F-7.1	200	15
F-7.2	1,680	15
F-7.4	1,640	15

W-1, Waunch Prairie Interceptor

Line Designation	Pipe Length (feet)	Pipe Diameter (inches)
W-1.1	2,760	15

W-1.2	550	15
W-1.3	280	36
W-1.4	500	15
W-1.5	200	15
W-1.6	1,100	15

The following elements are included in this task:

- Field Investigation Site Visit: This activity will include a site visit to validate existing survey and record drawings along the project corridor.
- CONSULTANT will design sewer facilities according to the parameters of the City of Centralia *General Sewer/Facility Plan (2019 Update).* Should hydraulic modeling be requested, such services will be provided under a contract modification.
- Provide preliminary design report (30%) which will establish the basis of design and summarize the findings of the site-specific investigations and develop design criteria. Full plans, specification, and estimates will not be provided at 30%.
- Prepare the 60%, 90% and Ad Ready Sewer Plan and Profile and Sewer Details, to be included in the project plan set as described in the Task 13.
- Complete the quantity takeoffs for the sewer system portion of the project, to assist in the preparation of the 60%, 90% and Ad Ready Engineer's Estimate of Probable Cost as described in the Task 13.
- Prepare the sewer system related specifications for the 60%, 90% and Ad Ready PS&E submittal as described in the Task 13.
- Address sewer comments received from the 60%, 90% and Ad Ready PS&E reviews.
- Prepare meeting agendas and summaries and facilitate up to 5 design review workshops, each not to exceed 2 hours in length with COUNTY and CITY staff.

10.3.2.2. Task Assumptions

- CITY to provide as-builts, CCTV, and condition data if available.
- CITY to provide hydraulic modeling files used for interceptor sizing.
- The proposed sewer design will meet the latest edition of the CITY Design and Development Standards.
- The latest edition of the WSDOT standard specifications will be used for specification development.
- The design will utilize CITY standard details.
- The length and diameter of the proposed sewer lines are as described above in 10.3.2.1.
- No hydraulic analysis is required for the design of the sewer.

10.3.2.3. Task Deliverables

- Sewer Design Review Meeting Agendas and Summaries
- Sewer Plan and Profile sheets
- Sewer Detail sheets
- Sewer system specific specifications to be including in the overall project specifications.
- Sewer system quantity takeoffs to be incorporated into the project estimate.
- Preliminary sewer design report
- Sewer design report

10.3.3. Joint Utility Trench

10.3.3.1. Task Description

This task includes coordination with utility providers to determine the possibility of underground conversion. If agreed to by utility providers, this task will include design of the joint utility trench (JUT) to underground their respective utilities for underground conversion of overhead utilities along the project corridor. If utility providers do not agree to underground conversion the scope of this task will be re-evaluated through amendment. The following elements are included in this task:

- The CONSULTANT will develop conceptual design of the JUT (power, telecommunications, natural gas), consisting of a roll plot showing proposed joint utility trench and adjacent existing and proposed utilities.
- Prepare the 30%, 60%, 90% and Ad Ready JUT Plans and JUT Details, to be included in the project plan set as described in Task 13.
- Complete the quantity takeoffs for the JUT portion of the project, to assist in the preparation of the 30%, 60%, 90% and Ad Ready Engineer's Estimate of Probable Cost as described in Task 13.
- Prepare the JUT system related specifications for the 30%, 60%, 90% and Ad Ready PS&E submittal as described in Task 13.
- Address JUT comments received 30%, 60%, 90% and Ad Ready PS&E reviews.

10.3.3.2. Task Assumptions

- The proposed JUT design will meet the latest edition of the CITY Design and Development Standards.
- The latest edition of the WSDOT standard specifications will be used for specification development.
- The design will utilize CITY standard details.
- The project will require the installation of handholes and junction boxes for the various utilities though out the corridor. Utilities not owned by the COUNTY will be required to either provide the material for undergrounding or reimburse the COUNTY for such materials.
- Prepare meeting agendas and summaries and facilitate up to 2 design review workshops, each not to exceed 2 hours in length with COUNTY, CITY and Utility purveyor staff.

10.3.3.3. Task Deliverables

- JUT Design Review Meeting Agendas and Summaries
- Roll plot with conceptual JUT.
- JUT Plan and Profile sheets (35 each, 70 total)
- JUT Detail sheets (12)
- JUT system specific specifications to be included in the overall project specifications.
- JUT quantity takeoffs to be incorporated into the project estimate.

11. Structures

The work of Task 11, Structures cannot be described in the original scope of work for the project. It is dependent on the identification of stream crossing structural requirements, the identification and location of retaining walls and emergent needs yet to be identified. The structures lead will be available for consultation and coordination on the fish passage structure and retaining wall during the early

stages of project design, which is reflected in the level of effort/cost spreadsheet. A contract modification is anticipated to define the structure work.

12. Fish Passage & Stream Restoration

The existing crossing of Coffee Creek [WDFW Site ID 021(91011)(00487)] under Reynolds Avenue currently is two cell rectangular box culvert that constrains roadway widening. The creek crossing is located in COUNTY, outside the CITY limits but within the limits of the UGA boundary. The culvert will be replaced by this project according to fish passage requirements as specified by the WDFW Water Crossing Design Guidelines.

12.1. Field Work and Research

12.1.1. Task Description

The CONSULTANT will perform the following.

- Collect and review available paper and electronic record drawings and background information developed and provided by the COUNTY, including geographic information system (GIS) mapping, aerial photography, and any information relating to the existing culvert.
- Perform up to two days of field investigations, including a longitudinal survey of the stream, survey of stream cross sections, streambed sediment samples, measure bankfull width, and obtain photographs of the existing culvert and adjacent conditions. Field work shall be coordinated with the COUNTY, CITY, local Tribes, and WDFW to obtain concurrence on bankfull width determination.
- Additionally, summertime high flows will be included for use during construction to determine stream bypass pump/culvert size.

12.1.2. Task Assumptions

- Notification of property owners and resource co-managers will be accomplished as part of Task 2, Public Involvement prior to scheduling field work.
- The CONSULTANT will obtain rights-of-entry as needed as a part of Task 14.2 to access the required area(s).

12.1.3. Task Deliverables

- None.

12.2. Hydrology and Hydraulic Modeling

12.2.1. Task Description

- The CONSULTANT shall develop a hydrologic model of the Coffee Creek watershed upstream of Reynolds Avenue representing the current hydrologic condition. The model will use either the MGSFlood or HSPF platform.
- The hydrologic model will be based on the most recent LiDAR from the Washington LiDAR Portal to delineate the watershed and determine land cover parameters.
- All major tributaries to Coffee Creek shall be represented by subbasins in the hydrologic model. Significant hydrologic units such as ponds, wetlands, and detention basins will be modeled based on information provided by the COUNTY.
- Peak discharges from the hydrologic model will be adjusted for climate change using adjustment factors from the WDFW Culverts and Climate Change web app.

- The CONSULTANT will review boundary conditions and use the predicted peak discharges from the hydrologic model to develop an existing conditions HEC-RAS 1D model of Coffee Creek extending up to one mile upstream and downstream of the Reynolds Avenue crossing.
- The CONSULTANT will update the HEC-RAS model with the improvements for up to three alternatives to be used for alternatives analysis.
- If replacement of the existing culvert significantly affects the hydrologic conditions and flood storage within the Coffee Creek system, the hydrologic model will be updated as needed to reflect proposed changes.
- The CONSULTANT will use the hydraulic model to size streambed material to be stable within the crossing and open channel sections.
- The CONSULTANT shall provide data to support design of the selected fish passage structure such as velocities and water surface elevations at key fish passage design flows, flood elevations, and scour depth.
- The CONSULTANT shall provide a summary of modeling results for alternative analysis, such as flow rates and elevations to support the floodplain development permit.
- Coordinate modeling task with Task 5.4, Flood Plain Impacts/FEMA Coordination to analyze the effects of the creek crossing on the mapped floodplain.

12.2.2. Task Assumptions

- Any past hydrologic/hydraulic simulations for Coffee Creek and the contributing basin will be provided by the COUNTY. COUNTY will provide a brief document describing model development that CONSULTANT can integrate into design report.
- If a FEMA FIS model is available for Coffee Creek, the FEMA peak flow rates will be used for design in lieu of the hydrologic model developed by the CONSULTANT.
- If any additional non-fishbearing or fishbearing crossings are determined to exist within the project area and need replacement as part of this project additional hydraulic analysis and design will be covered under a contract amendment.

12.2.3. Task Deliverables

- Summary results for existing conditions (with COUNTY-provided hydrologic model) and alternative condition, such as peak flows, and water surface elevations (draft and final in electronic format)
- Elevation comparison for no-rise criteria.
- Draft section of the Hydraulic Design Report summarizing the hydrologic and hydraulic modeling efforts and results.
- Final section of the Hydraulic Design Report summarizing the hydrologic and hydraulic modeling effort, results, minimum hydraulic opening, and scour analysis.
- HEC-RAS 1D modeling files

12.3. Fish Passage Design

12.3.1. Task Description

The CONSULTANT shall provide design data for the structural design of a new fish passage crossing. Design will include the replacement crossing structure and associated stream work, including the stream plan, section, and profile, streambed/bank material, and habitat features. Structural design performed by the CONSULTANT under Task 11.0 shall deliver preliminary, 60 percent, 90 percent, and Ad Ready design plans per Task 13.0.

12.3.2. Task Assumptions

- Fish passage design will focus on the minimum hydraulic opening, structure free zone, and stream restoration elements. Structural, geotechnical, roadway, and utility design will be performed under their respective tasks.

12.3.3. Task Deliverables

- 30 percent design plans
- 60 percent design plans
- 90 percent design plans
- Ad Ready design plans

12.4. Hydraulic Report

12.4.1. Bankfull Width Memo

12.4.1.1. Task Description

The CONSULTANT will write a memo summarizing findings of the field work, stream characteristics, stream bankfull width, and selection of an appropriate reference reach. The memo shall contain a preliminary recommendation of culvert width sizing and stream channel widths.

12.4.1.2. Task Assumptions

- All available background data will be provided by the COUNTY.

12.4.1.3. Task Deliverables

- Bankfull Width Memo

12.4.2. Draft Hydraulic Design Report

12.4.2.1. Task Description

The CONSULTANT shall write a draft hydraulic report summarizing the existing and proposed conditions of the creek crossing, hydraulic and hydrologic modeling efforts, description of alternatives, fish passage criteria, culvert sizing documentation, etc. The Hydraulic Design will follow WDFW and WSDOT guidelines.

12.4.2.2. Task Assumptions

- None

12.4.2.3. Task Deliverables

- Draft Hydraulic Design Report

12.4.3. Final Hydraulic Design Report

12.4.3.1. Task Assumptions

The CONSULTANT shall incorporate comments on the draft hydraulic report and provide a final hydraulic report summarizing the existing and proposed conditions of the creek crossing, hydraulic and hydrologic modeling efforts, description of alternatives, fish passage criteria, culvert sizing documentation, etc. The Hydraulic Design will follow WDFW and WSDOT guidelines. The Hydraulic Design Report will include a summary of stakeholder feedback and explain how that feedback has or has not been incorporated in the design.

12.4.3.2. Task Assumptions

- The CONSULTANT will address and respond to one (1) combined set of COUNTY, Resource Co-manager and/or Stakeholder comments on the Draft Hydraulic Design Report.

12.4.3.3. Task Deliverables

- Final Hydraulic Design Report

13. Plans, Specifications and Estimates

13.1. Task Description

- The CONSULTANT will prepare a 30 percent schematic roll plot and 60 percent, 90 percent, and Ad Ready plans for COUNTY review. The design shall be based on the design standards and references listed in the at the beginning of this document. The Ad Ready contract drawings, indicated in the list of roadway drawings provided below, will be completed following an interdisciplinary quality review.
- The CONSULTANT will prepare the project-specific specifications and special provisions for the construction of the project to supplement the APWA/WSDOT Standard Specifications for Road, Bridge and Municipal Construction and the associated amendments and general special provisions. The 30 percent specification submittal will be an outline serving as the framework for further development as the design effort progresses.
- The CONSULTANT will prepare 30 percent, 60 percent, 90 percent, and Ad Ready estimates of probable cost for COUNTY review. The CONSULTANT will prepare a list of bid items, conforming to the WSDOT standard item table, for the project. Each non-standard bid item will have a description, measurement unit, and payment description in the specifications. Quantities and unit prices will be estimated for every bid item. Unit prices will be estimated from recent bid experience on similar COUNTY projects, WSDOT unit bid analysis, and/or the Means construction estimating manuals, as applicable.
- In addition, the CONSULTANT will prepare a quantity take-off binder of all bid items that shows how each bid item was estimated, complete with sketches and calculations as necessary to high the limits of the items.

13.2. Task Assumptions

- All plans will be prepared in accordance with standard practices of the COUNTY. Sample plans will be provided by the COUNTY as a guide. The COUNTY may, at its own choosing, elect to have the plans prepared according to the WSDOT Plans Preparation Manual.
- The CONSULTANT will coordinate with all CONSULTANTS and compile the PS&E for each of the PS&E tasks.
- The COUNTY and CONSULTANT will develop an estimate template prior to the 30% cost estimate
- Plans, Specifications, and Estimates will be submitted to the COUNTY for a ten-day review period. All COUNTY comments will be addressed in one round.
- The CONSULTANT will coordinate with the COUNTY to address Stakeholder comments. The CONSULTANT will attend up to a half-day comment resolution meeting with the COUNTY to go through the COUNTY's comments and to come to a tentative agreement on them.
- The CONSULTANT will provide written response to all of the COUNTY's review comments provided to the CONSULTANT following 30%, 60% and 90% design submittals.
- Plans shall be prepared as follows:

- The horizontal scale for the full-size plans will be 1" = 20'
- The plans will be completed in AutoCAD Version 2020
- Line types and layers will be consistent with CONSULTANT CAD standards
- Full-size plan sheets will be 22" by 34" on standard CONSULTANT title and border
- Plan sheets using topographic base mapping will use reference files so that the base map will remain as a single computer file. Each drawing will be a separate computer file with the base reference file as a separate CAD file
- Detail of plan sheets shall conform to WSDOT's Deliverables Expectation Matrix

13.3. 30% PS&E Deliverables

- 30% Schematic Roll Plot
- 30% Specifications
- 30% Engineer's Estimate of Probable Cost

13.4. 60% PS&E Deliverables

- 60% Plan List

Plan Sheets	No. of Sheets in Series
Cover Sheet	1
Sheet Index	1
Vicinity Map	1
General Notes	2
Roadway Typical Sections	3
Alignment and ROW	35
Site Preparation Plans	18
TESC Plans	18
TESC Details	5
Roadway Plans/Profiles	40
Storm Drainage Plans/Profiles	40
Storm Drainage Lateral Profiles	16
Drainage Details	10
Roadway Details	7
Sewer Plans/Profiles	32
Sewer Details	3
Waterline Plans/Profiles	20
Waterline Details	3
Curb Ramp Plans	18
Coffee Cr Temporary Stream Diversion Plan	2
Coffee Cr Fish Passage Culvert/Structure Plan	2
Coffee Cr Fish Passage Culvert/Structure Profiles	2
Coffee Cr Fish Passage Culvert/Structure Details	5
Coffee Cr Stream Restoration Details	2
Coffee Cr Planting Plan	2
Coffee Cr Planting Details	2
Retaining Wall Plan/Profile	5

Plan Sheets	No. of Sheets in Series
Retaining Wall Details	3
Illumination Plans	35
Illumination Details	5
Traffic Signal Plans	7
Traffic Signal Details	7
Pavement Marking and Signing Plans	35
Pavement Marking and Signing Details	5
Utility Plans	70
Utility Details	10
Construction Staging Plans	10
Traffic Control Plans	20
Detour Plans	6
Total	508

- 60% Specifications
- 60% Engineer's Estimate of Probable Cost
- Comment/Response Log for 30% review comments

13.5. 90% PS&E Deliverables

- 90% Plan List

Plan Sheets	No. of Sheets in Series
Cover Sheet	1
Sheet Index	1
Vicinity Map	1
General Notes	2
Roadway Typical Sections	3
Alignment and ROW	35
Site Preparation Plans	18
TESC Plans	18
TESC Details	5
Roadway Plans/Profiles	40
Storm Drainage Plans/Profiles	40
Storm Drainage Lateral Profiles	16
Drainage Details	10
Roadway Details	7
Sewer Plans/Profiles	32
Sewer Details	3
Waterline Plans/Profiles	20
Waterline Details	3
Curb Ramp Plans	18
Coffee Cr Fish Passage Culvert/Structure Plan	2
Coffee Cr Temporary Stream Diversion Plan	2

Plan Sheets	No. of Sheets in Series
Coffee Cr Fish Passage Culvert/Structure Profiles	2
Coffee Cr Fish Passage Culvert/Structure Details	5
Retaining Wall Plan/Profile	5
Coffee Cr Stream Restoration Details	2
Coffee Cr Planting Plan	2
Coffee Cr Planting Details	2
Retaining Wall Details	3
Illumination Plans	35
Illumination Details	5
Traffic Signal Plans	8
Traffic Signal Details	8
Pavement Marking and Signing Plans	35
Pavement Marking and Signing Details	5
Utility Plans	70
Utility Details	12
Construction Staging Plans	10
Traffic Control Plans	20
Detour Plans	6
Total	512

- 90% Specifications
- 90% Engineer's Estimate of Probable Construction Costs
- Comment/Response Log for 60% review comments

13.6. Ad-Ready PS&E

13.6.1. Task Description

Following resolution of the 90% PS&E comments, the CONSULTANT will compile the Ad Ready PS&E and construction schedule for Ad-ready contract documents.

13.6.2. Task Assumptions

- The CONSULTANT will provide project design calculations in PDF format with an accompanying index/table of contents to permit ease of reference.

13.6.3. Task Deliverables

- Ad-Ready Plans, conforming to the 90% Plan Set
- Ad-Ready Specifications
- Ad-Ready Engineer's Estimate of Probable Construction Costs
- Comment/Response Log for 90% review comments

13.7. Advertisement, Addenda and Bidding

13.7.1. Task Description

CONSULTANT will assist COUNTY to respond to bidder questions and reviewing the proposals as requested.

13.7.2. Task Assumptions

- It is assumed there will be a minimum of two (2) plan changes required during the contract advertisement period.
- It is assumed there will be a minimum of two (2) specification changes required during the contract advertisement period.
- The CONSULTANT will prepare the required plan and specification change(s) and provide to the COUNTY for posting

13.7.3. Task Deliverables

- Plan changes
- Specification changes

14. Right-of-Way (Future)

15. Construction Management Support (Future)

16. Grant Funding Application Preparation (Future)

Exhibit B
DBE Participation

SEE ATTACHED EXHIBIT B

Agreement Number:

Exhibit C
Preparation and Delivery of Electronic Engineering and Other Data

In this Exhibit the agency, as applicable, is to provide a description of the format and standards the consultant is to use in preparing electronic files for transmission to the agency. The format and standards to be provided may include, but are not limited to, the following:

I. Surveying, Roadway Design & Plans Preparation Section

PREPARATION AND DELIVERY OF ELECTRONIC ENGINEERING AND OTHER DATA SHALL BE AS DOCUMENTED IN THE SCOPE OF WORK - EXHIBIT A

A. Survey Data

B. Roadway Design Files

C. Computer Aided Drafting Files

Agreement Number:

D. Specify the Agency's Right to Review Product with the Consultant

E. Specify the Electronic Deliverables to Be Provided to the Agency

F. Specify What Agency Furnished Services and Information Is to Be Provided

II. Any Other Electronic Files to Be Provided

III. Methods to Electronically Exchange Data

A. Agency Software Suite

B. Electronic Messaging System

C. File Transfers Format

Exhibit D
Prime Consultant Cost Computations

SEE ATTACHED EXHIBIT D

Agreement Number:

Analysis of Costs - WSP USA Inc.

DIRECT SALARY COST (DSC)

Personnel	Hours	2023 Pay Rate	Cost
Director	1,220	$ 97.67	$ 119,161
Sr. Director	310	$ 117.88	$ 36,542
Sr. Lead Engineer	417	$ 82.10	$ 34,234
Lead Engineer	1,811	$ 69.20	$ 125,321
Sr. Engineer	776	$ 55.73	$ 43,250
Consultant Engineer	2,515	$ 50.01	$ 125,778
Associate Engineer	2,288	$ 43.45	$ 99,412
Assistant Engineer	637	$ 37.99	$ 24,203
Sr. Intern	-	$ 26.91	$ -
Planner/PI Specialist	287	$ 50.01	$ 14,353
Project Accountant	114	$ 50.01	$ 5,701
Project Coordinator	291	$ 34.84	$ 10,138
Sr CAD Technician	1,687	$ 57.63	$ 97,220
Direct Salary Cost Total	12,353		$ 735,313
Salary Escalation			
Overhead Cost	139%	of DSC	$ 1,022,086
Net Fee	30%	of DSC	$ 220,594
		SUBTOTAL	$ 1,977,993

DIRECT EXPENSES

Reimbursables	Units	Qty	Cost/Unit	Cost
Project Management Expenses				
Mileage	Miles	3,300	$ 0.625	$ 2,063
Postage	Each	10	$ 25.00	$ 250
Courier	Each	4	$ 50.00	$ 200
Miscellaneous	Est	1	$ 500.00	$ 500
Public Involvement Expenses				
Mileage	Miles	1,415	$ 0.625	$ 884
Translation	Words	5,000	$ 0.33	$ 1,650
Printing/folding/mailing	Paper	2,000	$ 1.80	$ 3,600
Printing/Mounting/Courier/Boards	Boards	26	$ 75.00	$ 1,950
Courier	Each	4	$ 50.00	$ 200
Geotech Expenses				
Phase 1 Driller Sub (21 x 30-ft HSA + 7 x 2-inch piezos + development)	LS	1	$ 58,210.00	$ 58,210
Phase 2 Driller Sub (5 x 30-ft HSA)	LS	1	$ 13,272.50	$ 13,273
Soil Index testing	LS	1	$ 2,500.00	$ 2,500
GPR Equipment Rental (1 week rental)	Week	1	$ 1,250.00	$ 1,250
Concrete Coring Sub	Day	14	$ 1,750.00	$ 24,500
PIT Sub (3 PITs)	Each	3	$ 14,250.00	$ 42,750
Slug Test Equipment	LS	1	$ 250.00	$ 250
Mileage/Rental/Fleet Vehicle	Day	45	$ 130.00	$ 5,850
Lodging	Day	41	$ 96.00	$ 3,936

Food	Day	41	$	59.00	$	2,419
Traffic Control	Day	32	$	1,000.00	$	32,000
Environmental Related						
Environmental Data Report	LS	1	$	500.00	$	500
Mileage/Rental/Fleet Vehicle	Day	15	$	130.00	$	1,950
Lodging	Day	8	$	96.00	$	768
Food	Day	10	$	59.00	$	590
				SUBTOTAL	$	199,030
WSP SUBTOTAL				**SUBTOTAL**	$	2,177,023

WSP USA Inc.

EXHIBIT D

	Classification	Director	Director	Sr. Director	Sr. Lead Engineer	Lead Engineer	Sr. Engineer	Consultant Engineer	Associate Engineer	Assistant Engineer	Sr. Intern	Project Accountant	Project Coordinator	Sr CAD Technician	Planner/PI Specialist	HOURS	COST
		G. Roycroft/PM	K. Kawamoto/Env D. Shafar/Sew TBD/Geo	A. Shannon/PIC & Sew S. Kellor/PI B. Banks/Struc	S. Lenn/Sched Y. Jiang/Rdwy	J. Ellis/Stream S. Stewart/Rdwy	D. Zang	K. Gray B. Stmac/Env	N. Arnold	C. Andrews	TBD	S. Woelfert	J. Merg	J. Hammond	S. Bucklin		
		$ 262.74	$ 262.74	$ 317.09	$ 220.84	$ 186.15	$ 149.93	$ 134.53	$ 116.88	$ 102.21	$ 72.39	$ 134.53	$ 93.71	$ 155.02	$ 134.53		
Scope Description																	
Task 1 - Project Management and Administration																	
1.1	Project Meetings																
1.1.1	General Project Administration (PM 4 hrs/wk, PC 2 hrs/wk)	165											165			330	
1.1.2	Meetings with Lewis County/Project Partners (mtg + 1 hr travel)	38														38	
1.1.3	Consultant Team Meeting and Coordination	108	216	72		144										540	
	Subtotal	*311*	*216*	*72*	*0*	*144*	*0*	*0*	*0*	*0*	*0*	*0*	*165*	*0*	*0*	*908*	*$ 203,563*
1.2	Progress Schedule and Updates																
	Initial Project Schedule	4			4				32							40	
	Monthly Schedule Updates (17)	17			17				17							51	
	Subtotal	*21*	*0*	*0*	*21*	*0*	*0*	*0*	*49*	*0*	*0*	*0*	*0*	*0*	*0*	*91*	*$ 15,882*
1.3	Progress Reporting and Invoicing																
	Monthly Progress Reports (19)	19											38			57	
	Monthly Invoices (19)	19										114	38			171	
	Subtotal	*38*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*114*	*76*	*0*	*0*	*228*	*$ 32,443*
1.4	Project Management Plan																
	Initial Project Management Plan	40											20			60	
	Project Management Plan Updates (2)	8											4			12	
	Subtotal	*48*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*24*	*0*	*0*	*72*	*$ 14,861*
1.5	Project Kickoff Meeting																
	Meeting Prep/Summary	2		2									2		4	10	
	Attendance (2 hr meeting + 1 hr travel)	3	9	6		6									3	27	
	Subtotal	*5*		*8*	*0*	*6*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*7*	*37*	*$ 6,096*
1.6	Project Closeout	4				16							8	16		44	
	Subtotal	*4*	*0*	*0*	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*16*	*0*	*44*	*$ 7,259*
	TASK HOURS	**427**	**216**	**80**	**21**	**166**	**0**	**0**	**49**	**0**	**0**	**114**	**275**	**16**	**7**	**1380**	**$ 280,104**
	TASK COST	**$ 112,190**	**$ 56,752**	**$ 25,367**	**$ 4,638**	**$ 30,901**	**$ -**	**$ -**	**$ 5,727**	**$ -**	**$ -**	**$ 15,336**	**$ 25,771**	**$ 2,480**	**$ 942**	**$ 280,104**	
Task 2 - Public Involvement																	
2.1	Public Involvement Strategy Meetings	8		8											8	24	
	Subtotal	*8*	*0*	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*24*	*$ 5,715*
2.2	Community Engagement Plan																
	Initial Plan Development (Draft and Final)	6		8											32	46	
	Plan Updates			8											24	32	
	Subtotal	*6*	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*56*	*78*	*$ 14,184*
2.3	Stakeholder Database & Property Owner Mailing List	1		4											12	17	
	Subtotal	*1*	*0*	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*17*	*$ 3,145*
2.4	Stakeholder Agenices and Tribal Meetings (4 @ 1hr)																
	Meeting Preparation and Follow-up (Agendas, Exhibits, Summaries)	4		8											16	28	
	Meeting Attendance	6		8											8	22	
	Subtotal	*10*	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*24*	*50*	*$ 10,930*
2.5	Open Houses (2 @ 3 hrs w 5 WSP, 1 county, 1 city)																
	Open House Preparation and Follow-up (Agendas, Exhibits, Summar	8		16											24	48	

		Classification	Director	Director	Sr. Director	Sr. Lead Engineer	Lead Engineer	Sr. Engineer	Consultant Engineer	Associate Engineer	Assistant Engineer	Sr. Intern	Project Accountant	Project Coordinator	Sr CAD Technician	Planner/PI Specialist	HOURS	COST
	Open House Attendance		12		12	12	12									12	60	
		Subtotal	*20*	*0*	*28*	*12*	*12*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*36*	*108*	*$ 23,860*
2.6	Communication Materials/Website		18		60											120	318	
		Subtotal	*18*	*0*	*60*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*120*	*318*	*$ 39,898*
2.7	Translation of Communications Materials		4		12											24	40	
		Subtotal	*4*	*0*	*12*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*24*	*40*	*$ 8,085*
		TASK HOURS	**67**	**0**	**144**	**12**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**280**	**635**	**$ 105,816**
		TASK COST	**$ 17,604**	**$ -**	**$ 45,661**	**$ 2,650**	**$ 2,234**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 37,668**	**$ 105,816**	
Task 3 - Data Collection																		
3.1	Collect/Review Existing Data																	
	Document Requests						4		8								12	
	Field Visits (4 staff x 2 visits x 4 hrs)					8	8	8	8								32	
	Document Review					4	4	4	4								16	
		Subtotal	0	0	0	12	16	12	20	0	0	0	0	0	0	0	60	*$ 10,118*
		TASK HOURS	**0**	**0**	**0**	**12**	**16**	**12**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	**$ 10,118**
		TASK COST	**$ -**	**$ -**	**$ -**	**$ 2,650**	**$ 2,978**	**$ 1,799**	**$ 2,691**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 10,118**	
Task 4 - Survey																		
4.4	Field Surveying and Base Mapping																	
	Coordination						20										20	
		Subtotal	*0*	*0*	*0*	*0*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*20*	*$ 3,723*
4.5	Right-of-Way Research and Delineation																	
	Coordination						20										20	
		Subtotal	*0*	*0*	*0*	*0*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*20*	*$ 3,723*
		TASK HOURS	**0**	**0**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**$ 7,446**
		TASK COST	**$ -**	**$ -**	**$ -**	**$ -**	**$ 7,446**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 7,446**	
Task 5 - Environmental Services																		
5.1	Cultural Resources/Archaeology																	
	Coordination			20													20	
		Subtotal	*0*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*20*	*$ 5,255*
5.2	Wetlands and Streams																	
	Field Work & Delineation			8					88								100	
	Delineation Report			6				4	56								78	
	Bank Use Plan			6				4	40								50	
		Subtotal	*0*	*20*	*0*	*0*	*0*	*8*	*184*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*228*	*$ 31,208*
5.3	Environmental Site Assessment																	
	Data Compilation			8					40								52	
	Phase I ESA/Level 1 HMA			8				4	64								92	
		Subtotal	*0*	*16*	*0*	*0*	*0*	*4*	*104*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	144	*$ 18,795*
5.4	Flood Plain Impacts/FEMA Coordination			16													16	
		Subtotal	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*16*	*$ 4,204*
5.5	Biological Assessment (BA)/ESA Compliance																	
	ESA Compliance Documentation			16				4	64								108	
		Subtotal	*0*	*16*	*0*	*0*	*0*	*4*	*64*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*108*	*$ 13,413*
5.6	SEPA Documentation/Coordination																	
	SEPA Checklist			8				4	32								44	
		Subtotal	*0*	*8*	*0*	*0*	*0*	*4*	*32*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*44*	*$ 7,007*
5.7	Agency Coordination and Permitting																	
	Agency Site Visit			24	6	6			12								48	
	Agency Coordination Meeting & Team Coordination			40													40	
	WSDOT ROE/General Permit Support			40													40	
	JARPA Prep & Graphics			16					40								96	

		Classification	Director	Director	Sr. Director	Sr. Lead Engineer	Lead Engineer	Sr. Engineer	Consultant Engineer	Associate Engineer	Assistant Engineer	Sr. Intern	Project Accountant	Project Coordinator	Sr CAD Technician	Planner/PI Specialist	HOURS	COST
		WDFW, NPDES, Local Permit Support		24				20	40								92	
		Subtotal	*0*	*144*	*6*	*6*	*0*	*20*	*92*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*316*	*$ 56,437*
		TASK HOURS	**0**	**240**	**6**	**6**	**0**	**40**	**476**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**876**	**$ 136,319**
		TASK COST	**$ -**	**$ 63,058**	**$ 1,903**	**$ 1,325**	**$ -**	**$ 5,997**	**$ 64,036**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 136,319**	
Task 6 - Geotechnical																		
6.1		Geotechnical Exploration and Analysis																
		HSSE Plan		1						8				1			10	
		Subcontractor coordination (driller, PIT, coring, lab)				1	2			24				4			31	
		Phase 1 travel time (4 hours per person one-way)								48							48	
		Phase 1 borehole marking								4							4	
		Phase 1 borehole logging - 21 boreholes (30-ft) with 7 piezo		1			2			168							171	
		Phase 1 borehole records								42							42	
		Slug testing - 4 locations								16							16	
		Samples selection for lab and delivery to lab					1			8							9	
		Phase 2 travel time (4 hours per person one-way)								40							40	
		Phase 2 borehole marking								4							4	
		Phase 2 borehole logging - 5 boreholes (30-ft)								40							40	
		Phase 2 PIT - 3 tests (4 hours setup + 24 hours per test)					8			84							92	
		Phase 2 borehole records								8							8	
		Samples selection for lab and delivery to lab					1			8							9	
		GPR/Pavement Coring travel time (4 hours per person one-way)								24							24	
		Pavement coring								24							24	
		Geophysics - GPR field				24				24							48	
		Subtotal	*0*	*2*	*0*	*25*	*14*	*0*	*0*	*574*	*0*	*0*	*0*	*5*	*0*	*0*	*620*	*$ 76,209*
6.2		Geotechnical Recommendations																
		Geotechnical Analyses (including borehole database, interp and CADD drawings)		1			24			120					8		153	
		Draft Geotechnical Report		4			24			40				4	8		80	
		Draft Hydraulic conductivity analysis and memo - report appendix				40								2	4		46	
		Draft GPR analysis and memo - report appendix				40								2	4		46	
		QC (~10% of hours)		1		8	5			16					2		32	
		Final Geotechnical Report		1			8			16				1	1		27	
		Final Hydraulic conductivity analysis and memo - report appendix				8								1	1		10	
		Final GPR analysis and memo - report appendix				8								1	1		10	
		QC (~10% of hours)		1		2	1			2					1		7	
		Subtotal	*0*	*8*	*0*	*106*	*62*	*0*	*0*	*194*	*0*	*0*	*0*	*11*	*30*	*0*	*411*	*$ 65,408*
		TASK HOURS	**0**	**10**	**0**	**131**	**76**	**0**	**0**	**768**	**0**	**0**	**0**	**16**	**30**	**0**	**1031**	**$ 141,617**
		TASK COST	**$ -**	**$ 2,627**	**$ -**	**$ 28,930**	**$ 14,147**	**$ -**	**$ -**	**$ 89,763**	**$ -**	**$ -**	**$ -**	**$ 1,499**	**$ 4,651**	**$ -**	**$ 141,617**	
Task 7 - Traffic																		
Task 8 - Roadway																		
8.1		Design Documentation		4			16	64		40	40						164	
		Subtotal	*4*	*0*	*0*	*16*	*64*	*0*	*40*	*40*	*0*	*0*	*0*	*0*	*0*	*0*	*164*	*$ 26,554*
8.2		Roadway Design and Modeling					26	53		106	132				211		528	
		Subtotal	*0*	*0*	*0*	*26*	*53*	*0*	*106*	*132*	*0*	*0*	*0*	*0*	*211*	*0*	*528*	*$ 78,005*
8.3		Roadway Plan Production		8			139	279		557	697				1114		2794	
		Subtotal	*8*	*0*	*0*	*139*	*279*	*0*	*557*	*697*	*0*	*0*	*0*	*0*	*1114*	*0*	*2794*	*$ 413,825*
8.4/8.5		Construction Staging, MOT & Constructability		2			17	34		67	84				134		338	
		Subtotal	*2*	*0*	*0*	*17*	*34*	*0*	*67*	*84*	*0*	*0*	*0*	*0*	*134*	*0*	*338*	*$ 50,213*
8.6		Right-of-Way Plan Development																
	8.6.1	Right-of-Way Coordination Meetings					24	24	48								96	
		Subtotal	*0*	*0*	*0*	*24*	*24*	*48*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*96*	*$ 16,964*
	8.6.2	Right-of-Way Plans					13	26		51	64				102		256	
		Subtotal	*0*	*0*	*0*	*13*	*26*	*0*	*51*	*64*	*0*	*0*	*0*	*0*	*102*	*0*	*256*	*$ 37,864*

	Classification	Director	Director	Sr. Director	Sr. Lead Engineer	Lead Engineer	Sr. Engineer	Consultant Engineer	Associate Engineer	Assistant Engineer	Sr. Intern	Project Accountant	Project Coordinator	Sr CAD Technician	Planner/PI Specialist	HOURS	COST
8.6.3 Right-of-Way Exhibits *(deferred to after 30% milestone)*																0	
	Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*$ -*
	TASK HOURS	**14**	**0**	**0**	**235**	**480**	**48**	**821**	**1017**	**0**	**0**	**0**	**0**	**1561**	**0**	**4176**	**$ 623,426**
	TASK COST	**$ 3,678**	**$ -**	**$ -**	**$ 51,897**	**$ 89,351**	**$ 7,196**	**$ 110,449**	**$ 118,866**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 241,989**	**$ -**	**$ 623,426**	
Task 9 - Storm Drainage																	
Task 10 - Utilities																	
10.3 Utility Design																	
10.3.2 Sanitary Sewer			200	40			600	625		625						2090	
	Subtotal	*0*	*200*	*40*	*0*	*0*	*600*	*625*	*0*	*625*	*0*	*0*	*0*	*0*	*0*	*2090*	*$ 303,148*
	TASK HOURS	**0**	**200**	**40**	**0**	**0**	**600**	**625**	**0**	**625**	**0**	**0**	**0**	**0**	**0**	**2090**	**$ 303,148**
	TASK COST	**$ -**	**$ 52,548**	**$ 12,683**	**$ -**	**$ -**	**$ 89,956**	**$ 84,081**	**$ -**	**$ 63,879**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 303,148**	
Task 11 - Structures																	
11.1 Structures Coordination				40												40	
	Subtotal	*0*	*0*	*40*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*40*	*$ 12,683*
	TASK HOURS	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**$ 12,683**
	TASK COST	**$ -**	**$ -**	**$ 12,683**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 12,683**	
Task 12 - Fish Passage & Stream Restoration																	
12.0 Task Management			16			83		83								182	
	Subtotal	*0*	*16*	*0*	*0*	*83*	*0*	*83*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*182*	*$ 30,820*
12.1 Field Work and Research						20		20	20							60	
	Subtotal	*0*	*0*	*0*	*0*	*20*	*0*	*20*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*60*	*$ 8,751*
12.2 Hydrology and Hydraulic Modeling																	
Existing Hydrology			4			12		24	24							64	
Proposed Hydrology						8		16	16							40	
HEC-RAS Model - Existing			4			8		24	24							60	
HEC-RAS Model - Proposed						8		24	24							56	
Scour Analysis / Stream Migration						16		24	24							64	
Streambed Material Sizing						4		8	8							20	
Floodplain Permit Support						8		16	16							40	
	Subtotal	*0*	*8*	*0*	*0*	*64*	*0*	*136*	*136*	*0*	*0*	*0*	*0*	*0*	*0*	*344*	*$ 48,207*
12.3 Fish Passage Design																	
30% Design			4			88	12	30	30	12						192	
60% Design			4			120	16	120	100							368	
90% Design			4			70	8	90	90							270	
Ad Ready Design Plans						32		16	24							80	
	Subtotal	*0*	*12*	*0*	*0*	*310*	*36*	*256*	*244*	*12*	*0*	*0*	*0*	*0*	*0*	*910*	*$ 130,441*
12.4 Hydraulic Report																	
Bankfull Width Memo			2			8		24								34	
Draft Hydraulic Design Report			4			40		30	30							104	
Final Hydraulic Design Report			4			16		24	24							68	
	Subtotal	*0*	*10*	*0*	*0*	*64*	*0*	*78*	*54*	*0*	*0*	*0*	*0*	*0*	*0*	*206*	*$ 31,346*
	TASK HOURS	**0**	**46**	**0**	**0**	**541**	**36**	**573**	**454**	**12**	**0**	**0**	**0**	**0**	**0**	**1702**	**$ 249,565**
	TASK COST	**$ -**	**$ 12,086**	**$ -**	**$ -**	**$ 100,706**	**$ 5,397**	**$ 77,086**	**$ 53,063**	**$ 1,226**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 249,565**	
Task 13 - Plans, Specifications and Estimates																	
13.1 30% Design																	
Plan sheet compliation						20										20	
Specifications Compilation						20										20	
Estimate Compliation						40										40	
	Subtotal	*0*	*0*	*0*	*0*	*80*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*80*	*$ 14,892*
13.2 60% PS&E																	
Plan sheet compliation						40										40	
Specifications Compliation						40										40	
Estimate Compliation						40										40	
	Subtotal	*0*	*0*	*0*	*0*	*120*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*120*	*$ 22,338*

		Classification	Director	Director	Sr. Director	Sr. Lead Engineer	Lead Engineer	Sr. Engineer	Consultant Engineer	Associate Engineer	Assistant Engineer	Sr. Intern	Project Accountant	Project Coordinator	Sr CAD Technician	Planner/PI Specialist	HOURS	COST
13.3	90% PS&E																	
	Plan sheet compliation						40										40	
	Specifications Compliation						40										40	
	Estimate Compliation						40										40	
		Subtotal	*0*	*0*	*0*	*0*	*120*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*120*	*$ 22,338*
13.4	Ad-Ready PS&E																	
	Plan sheet compliation						20										20	
	Specifications Compliation						20										20	
	Estimate Compliation						20										20	
		Subtotal	*0*	*0*	*0*	*0*	*120*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*120*	*$ 22,338*
13.5	Advertisement and Bidding						40								80		120	
		Subtotal	*0*	*0*	*0*	*0*	*40*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*80*	*0*	*120*	*$ 19,848*
		TASK HOURS	**0**	**0**	**0**	**0**	**480**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**80**	**0**	**560**	**$ 101,753**
		TASK COST	**$ -**	**$ -**	**$ -**	**$ -**	**$ 89,351**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 12,402**	**$ -**	**$ 101,753**	
Task 14 - Right-of-Way																		
14.1	Task Management Coordination							40									40	
		Subtotal	*0*	*0*	*0*	*0*	*0*	*40*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*40*	*$ 5,997*
		TASK HOURS	**0**	**0**	**0**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**$ 5,997**
		TASK COST	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,997**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,997**	
Task 15 - Construction Management Support																		
Task 16 - Grant Funding Preparation																		
		TOTAL HOURS	**$ 508**	**$ 712**	**$ 310**	**$ 417**	**$ 1,811**	**$ 776**	**$ 2,515**	**$ 2,288**	**$ 637**	**$ -**	**$ 114**	**$ 291**	**$ 1,687**	**$ 287**	**$ 12,630**	***$ 1,977,993***
		TOTAL COST	**$ 133,472**	**$ 187,071**	**$ 98,297**	**$ 92,090**	**$ 337,115**	**$ 116,343**	**$ 338,343**	**$ 267,418**	**$ 65,105**	**$ -**	**$ 15,336**	**$ 27,271**	**$ 261,521**	**$ 38,610**	**$ 1,977,993**	

Exhibit E
Sub-consultant Cost Computations

If no sub-consultant participation at this time. The CONSULTANT shall not sub-contract for the performance of any work under this AGREEMENT without prior written permission of the AGENCY. Refer to section VI "Sub-Contracting" of this AGREEMENT.

SEE ATTACHED EXHIBIT E

Agreement Number:

EXHIBIT E

Analysis of Costs - 1 Alliance Geomatics

DIRECT SALARY COST (DSC)

Personnel	Hours	Pay Rate	Cost
Principal Surveyor	24	$ 91.00	$ 2,184
Project Manager	140	$ 60.00	$ 8,400
QA/QC	124	$ 48.00	$ 5,952
PLS/Project	152	$ 48.00	$ 7,296
CADD 5	416	$ 39.50	$ 16,432
Tech 5	484	$ 41.00	$ 19,844
Tech 3	484	$ 35.00	$ 16,940
Tech 1	242	$ 28.00	$ 6,776
Assist PM	12	$ 36.50	$ 438
Admin	31	$ 33.00	$ 1,023
Direct Salary Cost Total	2109		$ 85,285
Salary Escalation			
Overhead Cost	149.56%	of DSC	$ 127,552
Net Fee	30%	of DSC	$ 25,586
		SUBTOTAL	$ 238,423

DIRECT EXPENSES

Reimbursables	Units	Qty	Cost/Unit	Cost
Aerial Photography	LS	1	$ 20,885.00	$ 20,885
Mileage	Miles	3475	$ 0.625	$ 2,172
2022 GSA Lodging & Per Diem	LS	1	$ 22,570.13	$ 22,570
			SUBTOTAL	$ 45,627
1AG TOTAL			**TOTAL**	$ 284,050

1 Alliance Geomatics

EXHIBIT E

		Classification	Principal Surveyor	Project Manager	QA/QC	PLS/Project	CADD 5	CADD 4	Tech 5	Tech 3	Tech 1	Assist PM	Admin	HOURS	COST
			$ 254.40	$ 167.74	$ 134.19	$ 134.19	$ 110.43	$ 104.84	$ 114.62	$ 97.85	$ 78.28	$ 102.04	$ 92.25		
Scope Description															
Task 1 - Project Management and Administration															
1.1		Project Meetings		8		8								16	
		Subtotal	*0*	*8*	*0*	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*16*	*$ 2,415*
1.3		Progress Reporting and Invoicing													
		Monthly Progress Reports (19)		10										10	
		Monthly Invoices (19)		10									19	29	
		Subtotal	*0*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*19*	*39*	*$ 5,108*
		TASK HOURS	**0**	**28**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**55**	**$ 7,523**
		TASK COST	**$ -**	**$ 4,697**	**$ -**	**$ 1,074**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,753**	**$ 7,523**	
Task 4 - Survey															
4.1	4.1	Survey Project Management, Administration, QA/QC	24	24								12	12	72	
		Subtotal	*24*	*24*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*12*	*72*	*$ 12,463*
4.2	4.2	Survey Control													
		Post ID for Aerial		6	16	28	0	0	28	28	14	0	0	120	
		Ground Control		6	16	24	0	0	40	40	20	0	0	146	
		Subtotal	*0*	*12*	*32*	*52*	*0*	*0*	*68*	*68*	*34*	*0*	*0*	*266*	*$ 30,394*
4.3	4.3	Field Surveying and Base Mapping													
		Obscure Aerial Mapping	0	20				0	88	88	44	0	0	240	
		4 Parcels (47.5 Acres Total) & Access Rd	0	24				0	144	144	72	0	0	384	
		Utilities	0	8				0	72	72	36	0	0	188	
		Streams / Culverts	0	16				0	80	80	40	0	0	216	
		Scanning Intersections, Overpass, Railroad Intx	0	8				0	32	32	16	0	0	88	
		Subtotal	*0*	*76*	*0*	*0*	*0*	*0*	*416*	*416*	*208*	*0*	*0*	*1116*	*$ 117,415*
4.4	4.4	Office Processing													
		Obscure Aerial Mapping	0	0	20	20	80	0	0	0	0	0	0	120	
		4 Parcels (47.5 Acres Total)	0	0	32	32	128	0	0	0	0	0	0	192	
		Utility mapping / Structure Dips	0	0	10	10	72	0	0	0	0	0	0	92	
		Streams / Culverts	0	0	20	20	72	0	0	0	0	0	0	112	
		Scanning Intersections, Overpass, Railroad Intx	0	0	10	10	64	0	0	0	0	0	0	84	
		Subtotal	*0*	*0*	*92*	*92*	*416*	*0*	*0*	*0*	*0*	*0*	*0*	*600*	*$ 70,628*
4.5	4.5	Right-of-Way and Parcel Resolutions (Deleted)													
		Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*$ -*
4.6	4.6	Legal Descriptions													
		Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*$ -*
		TASK HOURS	**24**	**112**	**124**	**144**	**416**	**0**	**484**	**484**	**242**	**12**	**12**	**2054**	**$ 230,900**
		TASK COST	**$ 6,106**	**$ 18,786**	**$ 16,639**	**$ 19,323**	**$ 45,937**	**$ -**	**$ 55,476**	**$ 47,357**	**$ 18,943**	**$ 1,224**	**$ 1,107**	**$ 230,900**	
		TOTAL HOURS	**$ 24**	**$ 140**	**$ 124**	**$ 152**	**$ 416**	**$ -**	**$ 484**	**$ 484**	**$ 242**	**$ 12**	**$ 31**	**$ 2,109**	***$ 238,423***
		TOTAL COST	**$ 6,106**	**$ 23,483**	**$ 16,639**	**$ 20,397**	**$ 45,937**	**$ -**	**$ 55,476**	**$ 47,357**	**$ 18,943**	**$ 1,224**	**$ 2,860**	**$ 238,423**	

EXHIBIT E

2022 GSA Per Diem Rates Other Counties Without Specified Rates

Primary Destination Standard Rate (PP)	Lodging (**)	County Other	M&IE Total Per Day	Breakfast	Lunch	Dinner	Incidental	1st & Last I Travel (*)	Totals
				Breakdown					
Day 1 (Drive to Site)	96							44.25	
Day 2	96		59	13	15	26	5		
Day 3	96		59	13	15	26	5		
Day 4	96		59	13	15	26	5		
Day 5 (Drive Home)								44.25	
Per Person (PP)	384.00			39	45	78	15	88.50	265.50
Lodging Total Per Week PP									384.00
Per Diem Total Per Week PP									265.50
Total Lodging & Per Diem Per Week PP									649.50
Estimated Weeks of Field Work for 2 Staff			13.9						18,056.10
Estimated Weeks of Field Work for 3rd Person			6.95						4,514.03
Total Lodging & Per Diem									**22,570.13**

Notes:
(*) First & last day of travel (equals 75% of total M&IE)
(**) Lodging per person (PP) per day includes tax

EXHIBIT E

Analysis of Costs - Aqua Terra Cultural Resource Consultants

DIRECT SALARY COST (DSC)

Personnel	Hours	Pay Rate	Cost
Project Manager	68	$ 60.14	$ 4,090
Principal Investigator	270	$ 40.00	$ 10,800
Project Archaeologist	234	$ 29.00	$ 6,786
CR Specialist	300	$ 23.00	$ 6,900
Direct Salary Cost Total	872		$ 28,576
Salary Escalation			
Overhead Cost	110%	of DSC	$ 31,433
Net Fee	30%	of DSC	$ 8,573
		SUBTOTAL	$ 68,581

DIRECT EXPENSES

Reimbursables	Units	Qty	Cost/Unit	Cost
Mileage	Miles	1144	$ 0.625	$ 715
Item 2				$ -
Item 3				$ -
			SUBTOTAL	$ 715
ATCRC TOTAL			**TOTAL**	$ 69,296

EXHIBIT E
Aqua Terra Cultural Resource Consultants

		Classification	Project Manager	Principal Investigator	Project Archaeologist	CR Specialist	HOURS	COST
			$ 144.34	$ 96.00	$ 69.60	$ 55.20		
Scope Description								
Task 1 - Project Management and Administration								
1.3	Progress Reporting and Invoicing							
	Monthly Progress Reports (19)		19				19	
	Monthly Invoices (19)		19				19	
		Subtotal	*38*	*0*	*0*	*0*	*38*	*$ 5,485*
		TASK HOURS	**38**	**0**	**0**	**0**	**38**	**$ 5,485**
		TASK COST	**$ 5,485**	**$ -**	**$ -**	**$ -**	**$ 5,485**	
Task 3 - Data Collection								
3.1	Collect/Review Existing Data			10	4		14	
		Subtotal	*0*	*10*	*4*	*0*	*14*	*$ 1,238*
		TASK HOURS	**0**	**10**	**4**	**0**	**14**	**$ 1,238**
		TASK COST	**$ -**	**$ 960**	**$ 278**	**$ -**	**$ 1,238**	
Task 4 - Survey								
Task 5 - Environmental Services								
5.1	Cultural Resources/Archaeology						0	
	Background Research- APE exhibit and memorandum		10	40	10	0	60	
	Cultural Resource Survey		10	20	80	200	310	
	Draft/Final Cultural Resource Assessment		10	200	140	100	450	
		Subtotal	*30*	*260*	*230*	*300*	*820*	*$ 61,858*
		TASK HOURS	**30**	**260**	**230**	**300**	**820**	**$ 61,858**
		TASK COST	**$ 4,330**	**$ 24,960**	**$ 16,008**	**$ 16,560**	**$ 61,858**	
		TOTAL HOURS	**68**	**270**	**234**	**300**	**872**	**$ 68,581**

TOTAL COST	**$ 9,815**	**$ 25,920**	**$ 16,286**	**$ 16,560**	**$ 68,581**

EXHIBIT E

Analysis of Costs - Rae Hansen Consulting

DIRECT SALARY COST (DSC)

Personnel	Hours	Pay Rate	Cost
Project Manager	1184	$ 90.00	$ 106,560
Direct Salary Cost Total	1184		$ 106,560
Salary Escalation			
Overhead Cost	110.00%	of DSC	$ 117,216
Net Fee	30%	of DSC	$ 31,968
		SUBTOTAL	$ 255,744

DIRECT EXPENSES

Reimbursables	Units	Qty	Cost/Unit	Cost
Mileage	miles	2330	$ 0.63	$ 1,456
				$ -
				$ -
			SUBTOTAL	$ 1,456
RHC TOTAL			**TOTAL**	$ 257,200

EXHIBIT E
Rae Hansen Consulting

		Classification	Project Manager	HOURS	COST
Scope Description					
Task 1 - Project Management and Administration					
1.1	Project Meetings				
1.1.1	General Project Administration (1 hr/wk)		72	72	
1.1.2	Meetings with Lewis County/Project Partners (mtg + 1 hr travel)		38	38	
1.1.3	Consultant Team Meeting and Coordination		72	72	
		Subtotal	*182*	*182*	*39,312*
1.2	Progress Schedule and Updates				
	Initial Project Schedule		*4*	4	
	Monthly Schedule Updates (17)		*17*	17	
		Subtotal	*21*	*21*	*4,536*
1.3	Progress Reporting and Invoicing				
	Monthly Progress Reports (19)		19	19	
	Monthly Invoices (19)		*19*	19	
		Subtotal	*38*	38	*8,208*
1.4	Project Management Plan			0	
		Subtotal	*0*	*0*	*0*
1.5	Project Kickoff Meeting				
	Meeting Prep/Summary		2	2	
	Attendance (2 hr meeting + 1 hr travel)		3	3	
		Subtotal	*5*	*5*	*1,080*
1.6	Project Closeout		16	16	
		Subtotal	*16*	*16*	*3,456*
		TASK HOURS	**262**	**262**	**56,592**
		TASK COST	**$ 56,592**	**$ 56,592**	
Task 2 - Public Involvement					
2.1	Public Involvement Strategy Meetings		8	8	
		Subtotal	*8*	*8*	*1,728*
2.2	Community Engagement Plan		*8*	8	
		Subtotal	*8*	*8*	*1,728*
2.3	Stakeholder Database & Property Owner Mailing List		8	8	
		Subtotal	*8*	*8*	*1,728*
2.4	Stakeholder Agenices and Tribal Meetings		8	8	

		Classification	Project Manager	HOURS	COST
		Subtotal	*8*	*8*	*1,728*
2.5	Open Houses		8	8	
		Subtotal	*8*	*8*	*1,728*
2.6	Communication Materials/Website		12	12	
		Subtotal	*12*	*12*	*2,592*
		TASK HOURS	**52**	**52**	**11,232**
		TASK COST	**$ 11,232**	**$ 11,232**	
Task 3 - Data Collection					
3.1	Collect/Review Existing Data		8	8	
		Subtotal	*8*	*8*	*1,728*
		TASK HOURS	**8**	**8**	**1,728**
		TASK COST	**$ 1,728**	**$ 1,728**	
Task 4 - Survey					
4.1	Research/Compile Existing Data		24	24	
		Subtotal	*24*	*24*	*5,184*
4.3	Utility Locates		24	24	
		Subtotal	*24*	*24*	*5,184*
4.4	Field Surveying and Base Mapping		8	8	
		Subtotal	*8*	*8*	*1,728*
4.6	Office Processing and Deliverables		16	16	
		Subtotal	*16*	*16*	*3,456*
4.7	Right-of-Way Acquisition Support		16	16	
		Subtotal	*16*	*16*	*3,456*
		TASK HOURS	**88**	**88**	**19,008**
		TASK COST	**$ 19,008**	**$ 19,008**	
Task 5 - Environmental Services					
5.1	Cultural Resources/Archaeology		4	4	
		Subtotal	*4*	*4*	*864*
5.2	Wetlands and Streams		8	8	
		Subtotal	*8*	*8*	*1,728*
5.3	Environmental Site Assessment		8	8	
		Subtotal	*8*	*8*	*1,728*
5.4	Flood Plain Impacts/FEMA Coordination		8	8	
		Subtotal	*8*	*8*	*1,728*

		Classification	Project Manager	HOURS	COST
5.5	Biological Assessment (BA)/ESA Compliance		8	8	
		Subtotal	*8*	*8*	*1,728*
5.6	SEPA/NEPA Documentation/Coordination		16	16	
		Subtotal	*16*	*16*	*3,456*
5.7	Agency Coordination and Permitting		8	8	
		Subtotal	*8*	*8*	*1,728*
		TASK HOURS	**60**	**60**	**12,960**
		TASK COST	**$ 12,960**	**$ 12,960**	
Task 6 - Geotechnical					
6.1	Geotechnical Exploration and Analysis		4	4	
		Subtotal	*4*	*4*	*864*
6.2	Geotechnical Recommendations		4	4	
		Subtotal	*4*	*4*	*864*
		TASK HOURS	**8**	**8**	**1,728**
		TASK COST	**$ 1,728**	**$ 1,728**	
Task 7 - Traffic					
7.2	Traffic Analysis		4	4	
		Subtotal	*4*	*4*	*864*
7.3	SR 507/Reynolds Ave Intersection Control Evaluation		4	4	
		Subtotal	*4*	*4*	*864*
7.4	Safety Analysis		4	4	
		Subtotal	*4*	*4*	*864*
7.5	Traffic Design		16	16	
		Subtotal	*16*	*16*	*3,456*
		TASK HOURS	**28**	**28**	**6,048**
		TASK COST	**$ 6,048**	**$ 6,048**	
Task 8 - Roadway					
8.1	Design Documentation		90	90	
		Subtotal	*90*	*90*	*19,440*
8.2	Roadway Design and Modeling		40	40	
		Subtotal	*40*	*40*	*8,640*
8.3	Roadway Plan Production		58	58	
		Subtotal	*58*	*58*	*12,528*
8.4/8.5	Construction Staging, MOT & Constructability		30	30	
		Subtotal	*30*	*30*	*6,480*

			Classification	Project Manager	HOURS	COST
8.6		Right-of-Way Plan Development				
	8.6.1	Right-of-Way Coordination Meetings		24	24	
			Subtotal	*24*	*24*	*5,184*
	8.6.2	Right-of-Way Plans		16	16	
			Subtotal	*16*	*16*	*3,456*
	8.6.3	Right-of-Way Exhibits			0	
			Subtotal	*0*	*0*	*0*
			TASK HOURS	**258**	**258**	**55,728**
			TASK COST	**$ 55,728**	**$ 55,728**	
Task 9 - Storm Drainage						
9.1		Storm Drainage Design		20	20	
			Subtotal	*20*	*20*	*4,320*
			TASK HOURS	**20**	**20**	**4,320**
			TASK COST	**$ 4,320**	**$ 4,320**	
Task 10 - Utilities						
10.1		Utility Coordination		20	20	
			Subtotal	*20*	*20*	*4,320*
10.2		Conflict Assessment/Resolution		40	40	
			Subtotal	*40*	*40*	*8,640*
10.3		Utility Design				
	10.3.1	Water Main		16	16	
			Subtotal	*16*	*16*	*3,456*
	10.3.2	Sanitary Sewer		16	16	
			Subtotal	*16*	*16*	*3,456*
	10.3.3	Joint Utility Trench		16	16	
			Subtotal	*16*	*16*	*3,456*
			TASK HOURS	**108**	**108**	**23,328**
			TASK COST	**$ 23,328**	**$ 23,328**	
Task 11 - Structures						
11.1		Structures Coordination		16	16	
			Subtotal	*16*	*16*	*3,456*
			TASK HOURS	**16**	**16**	**3,456**
			TASK COST	**$ 3,456**	**$ 3,456**	
Task 12 - Fish Passage & Stream Restoration						
12.1		Preliminary Hydraulic Design		4	4	
			Subtotal	*4*	*4*	*864*

		Classification	Project Manager	HOURS	COST
12.2	Final Hydraulic Design		4	4	
		Subtotal	*4*	*4*	*864*
12.3	Stream Restoration Plan Production		8	8	
		Subtotal	*8*	*8*	*1,728*
		TASK HOURS	**16**	**16**	**3,456**
		TASK COST $	**3,456**	**$ 3,456**	
Task 13 - Plans, Specifications and Estimates					
13.1	30% Design		40	40	
		Subtotal	*40*	*40*	*8,640*
13.2	60% PS&E		60	60	
		Subtotal	*60*	*60*	*12,960*
13.3	90% PS&E		60	60	
		Subtotal	*60*	*60*	*12,960*
13.4	Ad-Ready PS&E		60	60	
		Subtotal	*60*	*60*	*12,960*
13.5	Advertisement and Bidding		40	40	
		Subtotal	*40*	*40*	*8,640*
		TASK HOURS	**260**	**260**	**56,160**
		TASK COST $	**56,160**	**$ 56,160**	
Task 14 - Right-of-Way					
14.2	Pre-Acquisition and Data Management			0	
		Subtotal	*0*	*0*	*0*
		TASK HOURS	**0**	**0**	**0**
		TASK COST $	**-**	**$ -**	
Task 15 - Construction Management Support					
Task 16 - Grant Funding Preparation					
		TOTAL HOURS	**1184**	**1184**	**255,744**
		TOTAL COST $	**255,744**	**$ 255,744**	

EXHIBIT E
Analysis of Costs - HDR

DIRECT SALARY COST (DSC)

Staff Name	Title	Hours	Blended Escalated Billing Rate	Cost
Johnson, Ty M	Project Manager	264	$ 265.88	$ 70,193
Kuhns, David W Jr.	Project Engineer	669	$ 190.19	$ 127,238
Starling, Jonathan M (Michael)	Utilities	327	$ 247.67	$ 80,990
Prossick, James F	Real Estate	110	$ 304.66	$ 33,512
Acevedo, Robert C	Sr. Traffic Engineer	150	$ 256.73	$ 38,509
Larson, Nathan M (Nate)	Sr. Traffic Engineer	42	$ 209.70	$ 8,807
Wang, Zhuojin	Sr. Traffic Engineer	244	$ 208.03	$ 50,760
Liu, Yiwen (Jenny)	Traffic EIT	500	$ 104.02	$ 52,008
Draheim, Daniel P (Dan)	Tech Editor	39	$ 144.09	$ 5,620
Raclawski, Matthew R	Project Controller	46	$ 169.75	$ 7,809
Johnson, Michelle Kathy	Project Assistant	38	$ 107.24	$ 4,075
Sannon, Jenson Sterling	Utilities Engineer	782	$ 153.98	$ 120,410
Rana, Bivek	Utilities EIT	862	$ 115.23	$ 99,331
Carpenter, John	CADD	573	$ 170.32	$ 97,593
Bush, Jaelen Alexander	EIT	629	$ 121.49	$ 76,418
Gibbs, Troy M	Sr. Project Engineer QC	149	$ 213.96	$ 31,880
Hansen, Jeffrey M	Hydraulic QC	2	$ 279.73	$ 559
Bartle, Brian D	WBG Manager	2	$ 382.81	$ 766
Dolquist, Risa Chuman (Risa)	Records Coordinator	3	$ 152.05	$ 456
Zgonina, Eric Timothy	Loo, Nicole Yieling	40	$ 201.37	$ 8,055
Loo, Nicole Yieling	Water Resource EIT	100	$ 141.93	$ 14,193
Labor Cost Total		5571		$ 929,181
			SUBTOTAL	$ 929,181

DIRECT EXPENSES

Reimbursables	Units	Cost/Unit	Cost
Mileage	480	$ 0.63	$ 300
Copies, Mailings & conference calls	1000	$ 0.08	$ 80
5% Markup			$ 19
		SUBTOTAL	$ 399
HDR TOTAL		**TOTAL**	$ 929,580

HDR EXHIBIT E		Johnson, Ty M	Kuhns, David W Jr.	Starling, Jonathan M (Michael)	Prosnick, James F	Wu, Tong	Gunderson, Rita M	LeCavalier, Susan E	Gould, Paul F	Acevedo, Robert C	Larson, Nathan M (Nate)	Wang, Zhuojin	Liu, Yiwen (Jenny)	Draheim, Daniel P (Dan)	Raciawski, Matthew R	Johnson, Michelle Kathy	Sannon, Jareon Sterling	Rana, Bivek	Carpenter, John	Bush, Josiah Alexander	Gibbs, Troy M	Hansen, Jeffrey M	Bartle, Brian D	Dolquist, Rita Chuman (Rita)	Zgonina, Eric Timothy	Lee, Nicole Yisling	
	Classification	Project Manager	Project Engineer	Utilities	Real Estate	Real Estate	Real Estate	Real Estate	Real Estate	Sr. Traffic Engineer	Sr. Traffic Engineer	Sr. Traffic Engineer	Traffic EIT	Tech Editor	Project Controller	Project Assistant	Utilities Engineer	Utilities EIT	CADD	EIT	Sr. Project Engineer QC	Hydraulic QC	WBG Manager	Records Coordinator	Water Resource Engineer	Water Resource EIT	TOTAL
	Billing Rate	$265.88	$190.19	$247.67	$304.66	$113.87	$152.71	$206.50	$195.25	$256.73	$209.70	$208.03	$104.02	$144.09	$169.75	$107.24	$153.98	$115.23	$170.32	$121.49	$213.96	$279.73	$382.81	$152.05	$201.37	$141.93	
Scope Description																											
Task 1 - Project Management and Administration																											
1.1	Consultant Team Meetings (1 per week, 18 months, 1.5 hours each)	108		108	108					108						2							2	3			439
	Subtotal	*108*	*0*	*108*	*108*	*0*	*0*	*0*	*0*	*108*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*3*	*0*	*0*	*439*
	Progress Schedule and Updates (Reivew monthly)	18																									18
	Subtotal	*18*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*18*
1.3	Progress Reporting and Invoicing																										
	Monthly Progress Reports (19)	17																									17
	Monthly Invoices (19)	17													38												55
	Subtotal	*34*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*38*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*72*
1.4	Project Management Plan	2														2											4
	Subtotal	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*
1.5	Project Kickoff Meeting (Assume 2 hours with 4 HDR discipline leads)	2		2	2					2																	8
	Subtotal	*2*	*0*	*2*	*2*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*
1.6	Project Closeout	8													8												16
	Subtotal	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*16*
	TASK HOURS	**172**	**0**	**110**	**110**	**0**	**0**	**0**	**0**	**110**	**0**	**0**	**0**	**0**	**46**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**557**
	Total Fee	**$45,731.62**	**$0.00**	**$27,244**	**$33,512**	**$0**	**$0**	**$0**	**$0**	**$28,240**	**$0**	**$0**	**$0**	**$0**	**$7,809**	**$429**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$766**	**$456**	**$0**	**$0**	**$144,188**
Task 5 - Environmental Services																											
5.4	Flood Plain Impacts/FEMA Coordination	4													6										40	100	150
	Subtotal	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*40*	*100*	*150*
	TASK HOURS	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**100**	**150**
	Total Fee	**$1,063.53**	**$0.00**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$865**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$8,055**	**$14,193**	**$24,176**
Task 7 - Traffic																											
7.1	Review/Collect Existing Data									1	2	8	8														19
	Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*2*	*8*	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*19*
7.2	Traffic Analysis									1	16	40	80														137
	Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*16*	*40*	*80*	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*141*
7.3	SR 507/Reynolds Ave Intersection Control Evaluation									2	20	20	40														82
	Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*20*	*20*	*40*	*6*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*88*
7.4	Safety Analysis									4	4	12	40														60
	Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*4*	*12*	*40*	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*64*
7.5	Street Lighting Analysis and Memo									12		40	80														132
	Street Lighting Design									8		20	60														88
	Traffic Signal Design									12		60	120	4													196
	Subtotal	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*32*	*0*	*120*	*260*	*4*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*416*
	TASK HOURS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**42**	**200**	**428**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**728**
	Total Fee	**$0.00**	**$0.00**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$10,269**	**$8,807**	**$41,606**	**$44,519**	**$2,594**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$107,795**
Task 9 - Storm Drainage																											
9.1	Storm Drainage Design																										0
	Field Investigation Site Visit (Up to 32 hours)		16																	16							32
	Conceptual TM	2	40											2						20	8						72
	Stormshed Conveyance Model	8	40																	80	12						140
	Planning level OPCC	1	12																		2						15
	60% Plans	5	180																300	220	40						745
	60% Specifications	4	32													12				2	9						59
	60% OPCC	1	8																	30	4						43
	Response to 60% Comments	2	20																		2						24
	90% Plans	1	45																65	45	8						164
	90% Specifications	2	16													6					8						32
	90% OPCC	1	6																	12	4						23
	Response to 90% Comments	1	8																		1						10
	Ad Ready PS&E	2	24																26	18	4						74
	DRAFT Stormwater Site Plan	4	100											8						120	16						248
	Final Stormwater Site Plan	4	40											4						32	8						88
	Subtotal	*38*	*587*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*14*	*0*	*18*	*0*	*0*	*391*	*595*	*126*	*0*	*0*	*0*	*0*	*0*	*1769*
	TASK HOURS	**38**	**587**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**18**	**0**	**0**	**391**	**595**	**126**	**0**	**0**	**0**	**0**	**0**	**1769**
	Total Fee	**$ 10,103**	**$ 111,642**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,017**	**$ -**	**$ 1,930**	**$ -**	**$ -**	**$ 66,595**	**$ 72,287**	**$ 26,959**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 291,534**
Task 10 - Utilities																											
10.1	Utility Coordination	2		24													42		8								76
	Schedule 74 Conversion			24													42										66
	Subtotal	*2*	*0*	*48*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*84*	*0*	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*142*
10.2	Conflict Assessment/Conflict Matrix	2		20													20	40									82
	Field Visit (up to 36 hours)			12													12	12									36
	Pothole Plan			2													2	4									8
	Kickoff Letter			2													8										10
	Design stage letters (30%, 60%, 90%) and conflict matrix			2													4										6
	Ad Ready letter and Concurrence Letter for Signature			2													6										8
	Subtotal	*2*	*0*	*40*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*52*	*56*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*150*
10.3	Utility Design																										
10.3.1	Water Main																										
	Field Site Visit (up to 4 hours)		4																								4
	Hydraulic Modeling and TM	1	12											1								2					16
	Planning level OPCC	2	4																								6
	Response to 30% Comments	1	2																		1						4
	60% Plans	4	24																60	16	6						110
	60% Specifications	2	8													2				2	2						16
	60% OPCC	1	2																	2	2						7
	Response to 60% Comments	1	2																								3
	90% Plans	1	8																12	8	4						33
	90% Specifications	2	4													2					2						10
	90% OPCC	1	2																	2	2						7
	Response to 90% Comments	1	2																								3
12	Ad Ready PS&E	1	4																12	4	4						25
	Workshops (2 total)	6	4																								10

		Classification	Project Manager	Project Engineer	Utilities	Real Estate	Real Estate	Real Estate	Real Estate	Real Estate	Sr. Traffic Engineer	Sr. Traffic Engineer	Sr. Traffic Engineer	Traffic EIT	Tech Editor	Project Controller	Project Assistant	Utilities Engineer	Utilities EIT	CADD	EIT	Sr. Project Engineer QC	Hydraulic QC	WBG Manager	Records Coordinator	Water Resource Engineer	Water Resource EIT	TOTAL
	Subtotal		*24*	*82*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*4*	*0*	*0*	*84*	*34*	*23*	*2*	*0*	*0*	*0*	*0*	*254*
10.3.2	Sanitary Sewer (WSP Task)																											
	Subtotal		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
10.3.3	Overhead Utilities & Conversion																											
	Design Review Workshop (2)		2		4																							0
	30% Plans		2		24													8	4									18
	30% Specifications		2		4													108	132	26								292
	30% OPCC		1		4												2	8										16
	Response to 30% Comments		1		1													16	26									47
	60% Plans		2		28													6										8
	60% Specifications		2		4													172	220	26								448
	60% OPCC		1		4												4	24										34
	Response to 60% Comments		1		1													16	38									59
	90% Plans		1		28													12										14
	90% Specifications		2		4													172	264	26								491
	90% OPCC		1		4												4	24										34
	Response to 90% Comments		1		1													16	26									47
	Ad Ready PS&E		2		10													12										14
	Coordination meetings		1		8												2	44	88	12								158
	Subtotal		*22*	*0*	*129*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*8*	*8*									25
																		646	*806*	*90*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1705*
	TASK HOURS		**50**	**82**	**217**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**16**	**782**	**862**	**182**	**34**	**23**	**2**	**0**	**0**	**0**	**0**	**2251**
	Total Fee		**$13,294**	**$15,596**	**$53,745**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$144**	**$0**	**$1,716**	**$120,410**	**$99,331**	**$30,998**	**$4,131**	**$4,921**	**$559**	**$0**	**$0**	**$0**	**$0**	**$344,845**
Task 13 - Plans, Specifications and Estimates (WSP Task)																												
14.1	30% Design												8	16														24
	Subtotal		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*24*
14.2	60% PS&E												16	20														36
	Subtotal		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*16*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*36*
14.3	90% PS&E												8	16														24
	Subtotal		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*24*
14.4	Ad-Ready PS&E												8	12														20
	Subtotal		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*12*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*20*
14.5	Advertisement and Bidding												4	8														12
	Subtotal		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*8*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12*
	TASK HOURS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**72**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**116**
	Total Fee		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$9,153**	**$7,489**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$16,643**
Task 14 - Right-of-Way																												
14.1	Task Management																											
vices PM & QA QC, Monthly status reports, 17 ROW meetings agenda & notes	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.2	Pre-Acquisition and Data Management																											
rvices ROW Plan review, Public meeting handouts & meetings 50 ROE, file prep	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.3	Relocation Plan (Optional)																											
Services displacee interviews and prepare draft relocation plan	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.4	Preliminary and Final Project Funding Estimates and Administrative Offer Summaries																											
Services Preliminary & Final PFE and 50 worksheets, 40 AOS reports	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.5	Appraisal, Appraisal Review and Appraisal Management																											
Services Landowner site visit notices, appraisal schedule & 10 appraisals	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.6	ROW Acquisitions and Negotiations																											
le, 50 encumb. Reports, 50 offer packages, legal QC Negotiations file tranmittal	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.7	Relocation Services (Optional)																											
ervices 3 bus & 2 Res, process all payments and approvals, final file transmittals	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.8	Property Management (Optional)																											
Services rent calculation, draft leases and lease management for 5 leases	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
14.9	Prepare ROW Certification Package																											
Services 55 ROW cert files, 4 cert meetings @2 hrs each 2 cert memos	*Subtotal*		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	TASK HOURS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Total Fee		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	TOTAL HOURS		**264**	**669**	**327**	**110**	**0**	**0**	**0**	**0**	**150**	**42**	**244**	**500**	**39**	**46**	**38**	**782**	**862**	**573**	**629**	**149**	**2**	**2**	**3**	**40**	**100**	**5571**
	Total Fee		**$70,193**	**$127,236**	**$80,990**	**$33,512**	**$0**	**$0**	**$0**	**$0**	**$38,509**	**$8,807**	**$50,760**	**$52,008**	**$5,620**	**$7,809**	**$4,075**	**$120,410**	**$99,331**	**$97,593**	**$76,418**	**$31,880**	**$559**	**$766**	**$456**	**$8,055**	**$14,193**	**$929,181**

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, ***(Title of Modal Operating Administration)***, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21. ***[Include Modal Operating Administration specific program requirements.]***

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin. ***[Include Modal Operating Administration specific program requirements.]***

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the ***(Title of Modal Operating Administration)*** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the ***(Title of Modal Operating Administration)***, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non- discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the ***(Title of Modal Operating Administration)*** may determine to be appropriate, including, but not limited to:

    a. withholding payments to the contractor under the contract until the contractor complies; and/or
    b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the ***(Title of Modal Operating Administration)*** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Exhibit G
Certification Documents

Exhibit G-1(a)	Certification of Consultant
Exhibit G-1(b)	Certification of _____
Exhibit G-2	Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions
Exhibit G-3	Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying
Exhibit G-4	Certificate of Current Cost or Pricing Data

Agreement Number:

Exhibit G-1(a) Certification of Consultant

I hereby certify that I am the and duly authorized representative of the firm of
WSP - USA
whose address is
33301 Ninth Avenue South, Federal Way, WA 98003
and that neither the above firm nor I have:

a) Employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above CONSULTANT) to solicit or secure this AGREEMENT;

b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out this AGREEMENT; or

c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above CONSULTANT) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this AGREEMENT; except as hereby expressly stated (if any);

I acknowledge that this certificate is to be furnished to the
and the Federal Highway Administration, U.S. Department of Transportation in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

WSP - USA

Consultant (Firm Name)

Shannon, Alex (USAS695484)

Digitally signed by Shannon, Alex (USAS695484)
DN: cn=Shannon, Alex (USAS695484), ou=Active, email=Alex.Shannon@wsp.com
Date: 2022.10.10 15:20:11 -07'00'

Signature (Authorized Official of Consultant)

10/10/2022

Date

Agreement Number:

Exhibit G-1(b) Certification of

I hereby certify that I am the:

☐

☐ Other

of the , and
or its representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this AGREEMENT to:

a) Employ or retain, or agree to employ to retain, any firm or person; or

b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as hereby expressly stated (if any):

I acknowledge that this certificate is to be furnished to the
and the Federal Highway Administration, U.S. Department of Transportation, in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

Signature

Date

Agreement Number:

Exhibit G-2 Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions

I. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

B. Have not within a three (3) year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

C. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

D. Have not within a three (3) year period preceding this application / proposal had one or more public transactions (Federal, State and local) terminated for cause or default.

II. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

WSP - USA

Consultant (Firm Name)

Shannon, Alex (USAS695484)

Digitally signed by Shannon, Alex (USAS695484)
DN: cn=Shannon, Alex (USAS695484), ou=Active, email=Alex.Shannon@wsp.com
Date: 2022.10.10 15:21:25 -07'00'

Signature (Authorized Official of Consultant)

10/10/2022

Date

Agreement Number:

Exhibit G-3 Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative AGREEMENT, and the extension, continuation, renewal, amendment, or modification of Federal contract, grant, loan or cooperative AGREEMENT.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative AGREEMENT, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

   This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000.00, and not more than $100,000.00, for each such failure.

   The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier sub-contracts, which exceed $100,000, and that all such sub-recipients shall certify and disclose accordingly.

WSP - USA

Consultant (Firm Name)

Shannon, Alex (USAS695484) Digitally signed by Shannon, Alex (USAS695484) DN: cn=Shannon, Alex (USAS695484), ou=Active, email=Alex.Shannon@wsp.com Date: 2022.10.10 15:21:38 -07'00'

Signature (Authorized Official of Consultant)

10/10/2022

Date

Agreement Number:

Exhibit G-4 Certificate of Current Cost or Pricing Data

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 2.101 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.403-4) submitted, either actually or by specific identification in writing, to the Contracting Officer or to the Contracting Officer's representative in support of Reynolds/Harrison Corridor Improvements * are accurate, complete, and current as of October 10, 2022 **.

This certification includes the cost or pricing data supporting any advance AGREEMENT's and forward pricing rate AGREEMENT's between the offer or and the Government that are part of the proposal.

Firm: WSP - USA

Shannon, Alex (USAS695484)
Digitally signed by Shannon, Alex (USAS695484)
DN: cn=Shannon, Alex (USAS695484), ou=Active, email=Alex.Shannon@wsp.com
Date: 2022.10.10 15:22:13 -07'00'

Signature

Vice President, District Business Line Leader

Title

Date of Execution***: 10/10/2022

*Identify the proposal, quotation, request for pricing adjustment, or other submission involved, giving the appropriate identifying number (e.g. project title.)
**Insert the day, month, and year, when price negotiations were concluded and price AGREEMENT was reached.
***Insert the day, month, and year, of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

Agreement Number:

Exhibit H
Liability Insurance Increase

To Be Used Only If Insurance Requirements Are Increased

The professional liability limit of the CONSULTANT to the AGENCY identified in Section XII, Legal Relations and Insurance of this Agreement is amended to $.

The CONSULTANT shall provide Professional Liability insurance with minimum per occurrence limits in the amount of $.

Such insurance coverage shall be evidenced by one of the following methods:

- Certificate of Insurance.
- Self-insurance through an irrevocable Letter of Credit from a qualified financial institution.

Self-insurance through documentation of a separate fund established exclusively for the payment of professional liability claims, including claim amounts already reserved against the fund, safeguards established for payment from the fund, a copy of the latest annual financial statements, and disclosure of the investment portfolio for those funds.

Should the minimum Professional Liability insurance limit required by the AGENCY as specified above exceed $1 million per occurrence or the value of the contract, whichever is greater, then justification shall be submitted to the Federal Highway Administration (FHWA) for approval to increase the minimum insurance limit.

If FHWA approval is obtained, the AGENCY may, at its own cost, reimburse the CONSULTANT for the additional professional liability insurance required.

Notes: Cost of added insurance requirements: $.

- Include all costs, fee increase, premiums.
- This cost shall not be billed against an FHWA funded project.
- For final contracts, include this exhibit.

Agreement Number:

Exhibit I
Alleged Consultant Design Error Procedures

The purpose of this exhibit is to establish a procedure to determine if a consultant's alleged design error is of a nature that exceeds the accepted standard of care. In addition, it will establish a uniform method for the resolution and/or cost recovery procedures in those instances where the agency believes it has suffered some material damage due to the alleged error by the consultant.

Step 1 Potential Consultant Design Error(s) is Identified by Agency's Project Manager

At the first indication of potential consultant design error(s), the first step in the process is for the Agency's project manager to notify the Director of Public Works or Agency Engineer regarding the potential design error(s). For federally funded projects, the Region Local Programs Engineer should be informed and involved in these procedures. (Note: The Director of Public Works or Agency Engineer may appoint an agency staff person other than the project manager, who has not been as directly involved in the project, to be responsible for the remaining steps in these procedures.)

Step 2 Project Manager Documents the Alleged Consultant Design Error(s)

After discussion of the alleged design error(s) and the magnitude of the alleged error(s), and with the Director of Public Works or Agency Engineer's concurrence, the project manager obtains more detailed documentation than is normally required on the project. Examples include: all decisions and descriptions of work; photographs, records of labor, materials and equipment.

Step 3 Contact the Consultant Regarding the Alleged Design Error(s)

If it is determined that there is a need to proceed further, the next step in the process is for the project manager to contact the consultant regarding the alleged design error(s) and the magnitude of the alleged error(s). The project manager and other appropriate agency staff should represent the agency and the consultant should be represented by their project manager and any personnel (including sub-consultants) deemed appropriate for the alleged design error(s) issue.

Step 4 Attempt to Resolve Alleged Design Error with Consultant

After the meeting(s) with the consultant have been completed regarding the consultant's alleged design error(s), there are three possible scenarios:

- It is determined via mutual agreement that there is not a consultant design error(s). If this is the case, then the process will not proceed beyond this point.
- It is determined via mutual agreement that a consultant design error(s) occurred. If this is the case, then the Director of Public Works or Agency Engineer, or their representatives, negotiate a settlement with the consultant. The settlement would be paid to the agency or the amount would be reduced from the consultant's agreement with the agency for the services on the project in which the design error took place. The agency is to provide LP, through the Region Local Programs Engineer, a summary of the settlement for review and to make adjustments, if any, as to how the settlement affects federal reimbursements. No further action is required.
- There is not a mutual agreement regarding the alleged consultant design error(s). The consultant may request that the alleged design error(s) issue be forwarded to the Director of Public Works or Agency Engineer for review. If the Director of Public Works or Agency Engineer, after review with their legal counsel, is not able to reach mutual agreement with the consultant, proceed to Step 5.

Agreement Number:

Step 5 Forward Documents to Local Programs

For federally funded projects all available information, including costs, should be forwarded through the Region Local Programs Engineer to LP for their review and consultation with the FHWA. LP will meet with representatives of the agency and the consultant to review the alleged design error(s), and attempt to find a resolution to the issue. If necessary, LP will request assistance from the Attorney General's Office for legal interpretation. LP will also identify how the alleged error(s) affects eligibility of project costs for federal reimbursement.

- If mutual agreement is reached, the agency and consultant adjust the scope of work and costs to reflect the agreed upon resolution. LP, in consultation with FHWA, will identify the amount of federal participation in the agreed upon resolution of the issue.
- If mutual agreement is not reached, the agency and consultant may seek settlement by arbitration or by litigation.

Exhibit J
Consultant Claim Procedures

The purpose of this exhibit is to describe a procedure regarding claim(s) on a consultant agreement. The following procedures should only be utilized on consultant claims greater than $1,000. If the consultant's claim(s) are a total of $1,000 or less, it would not be cost effective to proceed through the outlined steps. It is suggested that the Director of Public Works or Agency Engineer negotiate a fair and reasonable price for the consultant's claim(s) that total $1,000 or less.

This exhibit will outline the procedures to be followed by the consultant and the agency to consider a potential claim by the consultant.

Step 1 Consultant Files a Claim with the Agency Project Manager

If the consultant determines that they were requested to perform additional services that were outside of the agreement's scope of work, they may be entitled to a claim. The first step that must be completed is the request for consideration of the claim to the Agency's project manager.

The consultant's claim must outline the following:

- Summation of hours by classification for each firm that is included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Timeframe of the additional work that was outside of the project scope;
- Summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work; and
- Explanation as to why the consultant believes the additional work was outside of the agreement scope of work.

Step 2 Review by Agency Personnel Regarding the Consultant's Claim for Additional Compensation

After the consultant has completed step 1, the next step in the process is to forward the request to the Agency's project manager. The project manager will review the consultant's claim and will met with the Director of Public Works or Agency Engineer to determine if the Agency agrees with the claim. If the FHWA is participating in the project's funding, forward a copy of the consultant's claim and the Agency's recommendation for federal participation in the claim to the WSDOT Local Programs through the Region Local Programs Engineer. If the claim is not eligible for federal participation, payment will need to be from agency funds.

If the Agency project manager, Director of Public Works or Agency Engineer, WSDOT Local Programs (if applicable), and FHWA (if applicable) agree with the consultant's claim, send a request memo, including backup documentation to the consultant to either supplement the agreement, or create a new agreement for the claim. After the request has been approved, the Agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit. No further action in needed regarding the claim procedures.

If the Agency does not agree with the consultant's claim, proceed to step 3 of the procedures.

Agreement Number:

Step 3 Preparation of Support Documentation Regarding Consultant's Claim(s)

If the Agency does not agree with the consultant's claim, the project manager shall prepare a summary for the Director of Public Works or Agency Engineer that included the following:

- Copy of information supplied by the consultant regarding the claim;
- Agency's summation of hours by classification for each firm that should be included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Agency's summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work;
- Explanation regarding those areas in which the Agency does/does not agree with the consultant's claim(s);
- Explanation to describe what has been instituted to preclude future consultant claim(s); and
- Recommendations to resolve the claim.

Step 4 Director of Public Works or Agency Engineer Reviews Consultant Claim and Agency Documentation

The Director of Public Works or Agency Engineer shall review and administratively approve or disapprove the claim, or portions thereof, which may include getting Agency Council or Commission approval (as appropriate to agency dispute resolution procedures). If the project involves federal participation, obtain concurrence from WSDOT Local Programs and FHWA regarding final settlement of the claim. If the claim is not eligible for federal participation, payment will need to be from agency funds.

Step 5 Informing Consultant of Decision Regarding the Claim

The Director of Public Works or Agency Engineer shall notify (in writing) the consultant of their final decision regarding the consultant's claim(s). Include the final dollar amount of the accepted claim(s) and rationale utilized for the decision.

Step 6 Preparation of Supplement or New Agreement for the Consultant's Claim(s)

The agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit.