



DAN JOHNSON
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

July 25, 2024

BCC Agenda Date/Item: _____

Board of County Commissioners
Clackamas County

Approval of Personal Services Contract #9792 with RS&H, Inc. for the Bear Creek Bridge and Molalla Ave Shoulders Project. Total contract value is \$539,887.46 through June 30, 2026. Funding through the Strategic Investment Fund (Community Road Fund) and Countywide Transportation System Development Charges. No County General Funds are involved.

Previous Board Action/Review	07/23/24: Request for consent		
Performance Clackamas	The project will build a strong infrastructure.		
Counsel Review	07/01/2024, AN	Procurement Review	Yes
Contact Person	Jordan Cools	Contact Phone	503-742-4654

EXECUTIVE SUMMARY: Located in a rural setting just south of the City of Molalla, S Molalla Avenue experiences flooding at Bear Creek where the existing culvert is undersized. This project will replace the existing culvert to improve the creek flows and construct a road section meeting current design standards to allow for future growth and development. Also, the project will make needed improvements to the roadside shoulder along S Molalla Avenue from the southerly extents of Molalla City Limits to S Sawtell Road to the south. Upon project completion, the road jurisdiction of S Molalla Avenue will be transferred to the City of Molalla through the intersection of S Molalla Forest Road. The total length of the project is just over half of a mile.

This engineering and related services contract will provide project management, survey, environmental studies and permitting services, stormwater and hydraulic services, geotechnical services, utility coordination, public outreach, and the development of both preliminary design and final PS&E (Plans, Specifications and Estimates) design for the culvert replacement and shoulder widening for the Bear Creek Bridge & Molalla Ave Shoulders Project.

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This project was requested by the City of Molalla and is funded through the Strategic Investment Fund part of the Community Road Fund (\$908,048) along with Countywide Transportation System Development Charges match at 44.9 percent (\$739,952). The project's total estimated cost is \$1,648,000. The design of the project is anticipated to be completed by the spring of 2026 with construction in the summer of 2026 through the spring of 2027.

PROCUREMENT PROCESS: This project was advertised in accordance with ORS and LCRB Rules on January 3, 2024 as RFP 2023-105 seeking written statements of qualifications from consulting firms with expertise in professional engineering services. Five consultant proposals were submitted from David Evans and Associates, Inc., Exeltech Consulting, Kittelson & Associates, Inc., PBS Engineering and Environmental Inc., and RS&H, Inc. A selection committee of three DTD personnel scored RS&H, Inc.'s proposal the highest. After Notice of Intent to Award was issued, the statement of work and project fees were negotiated and finalized .

RECOMMENDATION: Staff respectfully recommends that the Board of County Commissioners approve and sign Personal Services Contract #9792 with RS&H, Inc. for the Bear Creek Bridge and Molalla Ave Shoulders Project.

Respectfully submitted,

Dan Johnson

Dan Johnson – Director
Transportation & Development



**CLACKAMAS COUNTY
PERSONAL SERVICES CONTRACT
Contract #9792**

This Personal Services Contract (this “Contract”) is entered into between **RS&H, Inc.**, (“Contractor” or “Consultant”), and Clackamas County, a political subdivision of the State of Oregon (“County”) on behalf of the Department of Transportation and Development.

ARTICLE I.

1. **Effective Date and Duration.** This Contract shall become effective upon signature of both parties. Unless earlier terminated or extended, this Contract shall expire on **June 30, 2026**.
2. **Scope of Work.** Contractor shall provide the following engineering necessary to design Bear Creek Bridge & Molalla Ave Shoulders Project (“Work”), further described in **Exhibit A**.
3. **Consideration.** The County agrees to pay Contractor, from available and authorized funds, a sum not to exceed **Five Hundred Thirty-Nine Thousand Eight Hundred Eighty-Seven dollars and Forty-Six Cents (\$539,887.46)**, for accomplishing the Work required by this Contract. Consideration rates are on a fixed fee basis in accordance with the rates and costs specified in Exhibit B. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit B.
4. **Invoices and Payments.** Unless otherwise specified, Contractor shall submit monthly invoices for Work performed. Invoices shall describe all Work performed with particularity, by whom it was performed, and shall itemize and explain all expenses for which reimbursement is claimed. The invoices shall include the total amount billed to date by Contractor prior to the current invoice. If Contractor fails to present invoices in proper form within sixty (60) calendar days after the end of the month in which the services were rendered, Contractor waives any rights to present such invoice thereafter and to receive payment therefor. Payments shall be made in accordance with ORS 293.462 to Contractor following the County’s review and approval of invoices submitted by Contractor. Contractor shall not submit invoices for, and the County will not be obligated to pay, any amount in excess of the maximum compensation amount set forth above. If this maximum compensation amount is increased by amendment of this Contract, the amendment must be fully effective before Contractor performs Work subject to the amendment.

Invoices shall reference the above Contract Number and be submitted to: Jordan Cools jcools@clackamas.us and Laura Kitts lkitts@clackamas.us

5. **Travel and Other Expense.** Authorized: Yes No
If travel expense reimbursement is authorized in this Contract, such expense shall only be reimbursed at the rates in the County Contractor Travel Reimbursement Policy, hereby incorporated by reference and found at: <https://www.clackamas.us/finance/terms.html>. Travel expense reimbursement is not in excess of the not to exceed consideration.
6. **Contract Documents.** This Contract consists of the following documents, which are listed in descending order of precedence and are attached and incorporated by reference, this Contract, Exhibit A, and Exhibit B.

7. Contractor and County Contacts.

Contractor Administrator: Allen Hendy Phone: 971-347-1902	County Administrator: Jordan Cools Phone: 503-742-4654
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Email: Allen.Hendy@rsandh.com

Email: jcools@clackamas.us

Payment information will be reported to the Internal Revenue Service (“IRS”) under the name and taxpayer ID number submitted. (See I.R.S. 1099 for additional instructions regarding taxpayer ID numbers.) Information not matching IRS records will subject Contractor payments to backup withholding.

ARTICLE II.

1. **ACCESS TO RECORDS.** Contractor shall maintain books, records, documents, and other evidence, in accordance with generally accepted accounting procedures and practices, sufficient to reflect properly all costs of whatever nature claimed to have been incurred and anticipated to be incurred in the performance of this Contract. County and their duly authorized representatives shall have access to the books, documents, papers, and records of Contractor, which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Contractor shall maintain such books and records for a minimum of six (6) years, or such longer period as may be required by applicable law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.
2. **AVAILABILITY OF FUTURE FUNDS.** Any continuation or extension of this Contract after the end of the fiscal period in which it is written is contingent on a new appropriation for each succeeding fiscal period sufficient to continue to make payments under this Contract, as determined by the County in its sole administrative discretion.
3. **CAPTIONS.** The captions or headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this Contract.
4. **COMPLIANCE WITH APPLICABLE LAW.** Contractor shall comply with all applicable federal, state and local laws, regulations, executive orders, and ordinances, as such may be amended from time to time.
5. **COUNTERPARTS.** This Contract may be executed in several counterparts (electronic or otherwise), each of which shall be an original, all of which shall constitute the same instrument.
6. **GOVERNING LAW.** This Contract, and all rights, obligations, and disputes arising out of it, shall be governed and construed in accordance with the laws of the State of Oregon and the ordinances of Clackamas County without regard to principles of conflicts of law. Any claim, action, or suit between County and Contractor that arises out of or relates to the performance of this Contract shall be brought and conducted solely and exclusively within the Circuit Court for Clackamas County, for the State of Oregon. Provided, however, that if any such claim, action, or suit may be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the County of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. Contractor, by execution of this Contract, hereby consents to the personal jurisdiction of the courts referenced in this section.
7. **INDEMNITY, RESPONSIBILITY FOR DAMAGES.** Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay to the extent caused by, any negligent act, omission, or neglect of Contractor, its subcontractors, agents, or

employees. The Contractor agrees to indemnify and defend the County, and its officers, elected officials, agents, and employees, from and against all claims, actions, losses, liabilities, including reasonable attorney and accounting fees, and all expenses incidental to the investigation and defense thereof, arising out of or based upon Contractor's negligent acts or omissions in performing under this Contract.

However, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of County, purport to act as legal representative of County, or settle any claim on behalf of County, without the approval of the Clackamas County Counsel's Office. County may assume its own defense and settlement at its election and expense.

- 8. INDEPENDENT CONTRACTOR STATUS.** The service(s) to be rendered under this Contract are those of an independent contractor. Although the County reserves the right to determine (and modify) the delivery schedule for the Work to be performed and to evaluate the quality of the completed performance, County cannot and will not control the means or manner of Contractor's performance. Contractor is responsible for determining the appropriate means and manner of performing the Work. Contractor is not to be considered an agent or employee of County for any purpose, including, but not limited to: (A) The Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Contract; and (B) This Contract is not intended to entitle the Contractor to any benefits generally granted to County employees, including, but not limited to, vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits.
- 9. INSURANCE.** Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. The insurance requirement outlined below do not in any way limit the amount of scope of liability of Contractor under this Contract. Contractor shall provide proof of said insurance and name the County as an additional insured on all required liability policies. Proof of insurance and notice of any material change should be submitted to the following address: Clackamas County Procurement Division, 2051 Kaen Road, Oregon City, OR 97045 or emailed to the County Contract Analyst.

Required - Workers Compensation: Contractor shall comply with the statutory workers' compensation requirements in ORS 656.017, unless exempt under ORS 656.027 or 656.126.
<input checked="" type="checkbox"/> Required – Commercial General Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for Bodily Injury and Property Damage.
<input checked="" type="checkbox"/> Required – Professional Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per claim, with an annual aggregate limit of \$2,000,000 for damages caused by error, omission or negligent acts.
<input checked="" type="checkbox"/> Required – Automobile Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per accident for Bodily Injury and Property Damage.

The policy(s) shall be primary insurance as respects to the County. Any insurance or self-insurance maintained by the County shall be excess and shall not contribute to it. Any obligation that County agree to a waiver of subrogation is hereby stricken.

- 10. LIMITATION OF LIABILITIES.** This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 13 or Section 20 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this

Contact in accordance with its terms.

- 11. NOTICES.** Except as otherwise provided in this Contract, any required notices between the parties shall be given in writing by personal delivery, email, or mailing the same, to the Contract Administrators identified in Article 1, Section 6. If notice is sent to County, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045. Any communication or notice so addressed and mailed shall be deemed to be given five (5) days after mailing, and immediately upon personal delivery, or within 2 hours after the email is sent during County's normal business hours (Monday – Thursday, 7:00 a.m. to 6:00 p.m.) (as recorded on the device from which the sender sent the email), unless the sender receives an automated message or other indication that the email has not been delivered.
- 12. OWNERSHIP OF WORK PRODUCT.** All work product of Contractor that results from this Contract (the "Work Product") is the exclusive property of County. County and Contractor intend that such Work Product be deemed "work made for hire" of which County shall be deemed the author. If for any reason the Work Product is not deemed "work made for hire," Contractor hereby irrevocably assigns to County all of its right, title, and interest in and to any and all of the Work Product, whether arising from copyright, patent, trademark or trade secret, or any other state or federal intellectual property law or doctrine. Contractor shall execute such further documents and instruments as County may reasonably request in order to fully vest such rights in County. Contractor forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications. Notwithstanding the above, County shall have no rights in any pre-existing Contractor intellectual property provided to County by Contractor in the performance of this Contract except to copy, use and re-use any such Contractor intellectual property for County use only.
- 13. REPRESENTATIONS AND WARRANTIES.** Contractor represents to County that (A) Contractor has the power and authority to enter into and perform this Contract; (B) this Contract, when executed and delivered, shall be a valid and binding obligation of Contractor enforceable in accordance with its terms; (C) Contractor shall at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work; (D) Contractor is an independent contractor as defined in ORS 670.600; and (E) the Work under this Contract shall be performed in accordance with the standard of professional skill and care required for a project of similar size, location, scope, and complexity, during the time in which the Work is being performed. The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided. The Contractor shall be responsible for the technical accuracy of its services and documents resulting therefrom, and County shall not be responsible for discovering deficiencies therein. The Contractor shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in information furnished by the County.
- 14. SURVIVAL.** All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Article II, Sections 1, 6, 7, 10, 12, 13, 14, 15, 17, 20, 21, 25, 27, and 34, and all other rights and obligations which by their context are intended to survive. However, such expiration shall not extinguish or prejudice the County's right to enforce this Contract with respect to: (a) any breach of a Contractor warranty; or (b) any default or defect in Contractor performance that has not been cured.
- 15. SEVERABILITY.** If any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.

16. SUBCONTRACTS AND ASSIGNMENTS. Contractor shall not enter into any subcontracts for any of the Work required by this Contract, or assign or transfer any of its interest in this Contract by operation of law or otherwise, without obtaining prior written approval from the County, which shall be granted or denied in the County's sole discretion. In addition to any provisions the County may require, Contractor shall include in any permitted subcontract under this Contract a requirement that the subcontractor be bound by this Article II, Sections 1, 7, 8, 13, 16 and 27 as if the subcontractor were the Contractor. County's consent to any subcontract shall not relieve Contractor of any of its duties or obligations under this Contract.

17. SUCCESSORS IN INTEREST. The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective authorized successors and assigns.

18. TAX COMPLIANCE CERTIFICATION. The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle County to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.

19. TERMINATIONS. This Contract may be terminated for the following reasons: (A) by mutual agreement of the parties or by the County (i) for convenience upon thirty (30) days written notice to Contractor, or (ii) at any time the County fails to receive funding, appropriations, or other expenditure authority as solely determined by the County; or (B) if contractor breaches any Contract provision or is declared insolvent, County may terminate after thirty (30) days written notice with an opportunity to cure.

Upon receipt of written notice of termination from the County, Contractor shall immediately stop performance of the Work. Upon termination of this Contract, Contractor shall deliver to County all documents, Work Product, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon County's request, Contractor shall surrender to anyone County designates, all documents, research, objects or other tangible things needed to complete the Work.

20. REMEDIES. If terminated by the County due to a breach by the Contractor, then the County shall have any remedy available to it in law or equity. If this Contract is terminated for any other reason, Contractor's sole remedy is payment for the goods and services delivered and accepted by the County, less any setoff to which the County is entitled.

21. NO THIRD PARTY BENEFICIARIES. County and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

22. TIME IS OF THE ESSENCE. Contractor agrees that time is of the essence in the performance of this Contract.

23. FOREIGN CONTRACTOR. If the Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State, Corporate Division, all information required by those agencies relative to this

Contract. The Contractor shall demonstrate its legal capacity to perform these services in the State of Oregon prior to entering into this Contract.

24. FORCE MAJEURE. Neither County nor Contractor shall be held responsible for delay or default caused by events outside the County or Contractor’s reasonable control including, but not limited to, fire, terrorism, riot, acts of God, or war. However, Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.

25. WAIVER. The failure of County to enforce any provision of this Contract shall not constitute a waiver by County of that or any other provision.

26. PUBLIC CONTRACTING REQUIREMENTS. Pursuant to the public contracting requirements contained in Oregon Revised Statutes (“ORS”) Chapter 279B.220 through 279B.235, Contractor shall:

- a. Make payments promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the work provided for in the Contract.
- b. Pay all contributions or amounts due the Industrial Accident Fund from such Contractor or subcontractor incurred in the performance of the Contract.
- c. Not permit any lien or claim to be filed or prosecuted against County on account of any labor or material furnished.
- d. Pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
- e. As applicable, the Contractor shall pay employees for work in accordance with ORS 279B.235, which is incorporated herein by this reference. The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract, and failure to comply is a breach entitling County to terminate this Contract for cause.
- f. If the Work involves lawn and landscape maintenance, Contractor shall salvage, recycle, compost, or mulch yard waste material at an approved site, if feasible and cost effective.

27. NO ATTORNEY FEES. In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys’ fees and expenses.

28. Reserved

29. Reserved

30. Reserved

31. Reserved

32. Reserved

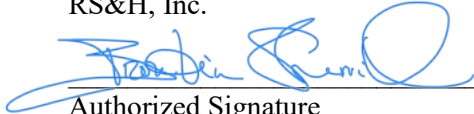
33. Reserved

34. MERGER. THIS CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE SUBJECT MATTER REFERENCED THEREIN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT,

CONSENT, OR WAIVER SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. CONTRACTOR, BY THE SIGNATURE HERETO OF ITS AUTHORIZED REPRESENTATIVE, IS AN INDEPENDENT CONTRACTOR, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THIS CONTRACT, AND CONTRACTOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

RS&H, Inc.


Authorized Signature

6/23/24
Date

Clackamas County

Chair Date


BROUEN SHERRILL, VICE PRESIDENT
Name / Title (Printed)

Recording Secretary

1672339-99
Oregon Business Registry #

Approved as to Form:

FBC/Florida
Entity Type / State of Formation



County Counsel Date

07/01/2024

**EXHIBIT A
PERSONAL SERVICES CONTRACT
SCOPE OF WORK**



**Bear Creek Culvert & Molalla Ave Shoulders Project
DTD Project No. 24329**

**SECTION 3
STATEMENT OF WORK**

INTRODUCTION

Clackamas County Department of Transportation and Development (“DTD”), hereafter referenced as “County”, is seeking a qualified consulting firm with expertise in professional engineering services to provide project management, survey, environmental studies and permitting services, stormwater and hydraulic services, geotechnical services, utility coordination, public outreach, and the development of both preliminary design and final Plans, Specifications and Estimates (PS&E) design for culvert replacement, shoulder widening, asphalt pavement, temporary traffic control, striping, stormwater facilities, limited right-of-way services and bid assistance for the “Bear Creek Culvert & Molalla Ave Shoulders Project”.

BACKGROUND

S Molalla Avenue is identified as a Rural Minor Arterial with an average daily traffic of 2,660 (2018). The existing shoulders are narrow and should be widened and improved for rural use and improved safety between the southerly extents of Molalla city limits and Sawtell Rd. Also, the existing elliptical corrugated metal pipe culvert conveying Bear Creek is undersized and likely nearing the end of its service life. Stormwater quality and detention upgrades will be required.

PROJECT UNDERSTANDING

This project will survey the area and identify public right-of-way through and around the culvert and along S Molalla Avenue between W 7th Street and S Sawtell Road. The limits of survey will exclude the Y Intersection at Sawtell Rd. It is the intent of the County to utilize existing right of way for this project, but slope and temporary easements may be required.

This project will design a replacement structure for an existing culvert and the associated striping, storm facilities and asphalt pavement restoration. The project will also design aggregate shoulder widening along both sides of Molalla Ave. (excluding the west shoulder from Bear Creek to Molalla Forrest Rd.) for approximately 0.60 miles as necessary to accomplish the project goals. This work will include vegetation management and new shoulder rock and the assumption is that the existing shoulders will be left in place and the shoulder widening will minimize impact to roadside ditches or wetlands. Driveway culverts will be cleaned and replaced only if needed.

The County has secured Community Road Funds (CRF) and System Development Charge funds for these improvements. The Community Road Funds are from the Strategic Investment Fund part of the CRF program, and the project was originally requested by the City of Molalla.

Project Limits

S Molalla Ave: Approximately M.P. 3.30 near Molalla city limits to S Sawtell Rd.

Lane Configuration and Geometry:

S Molalla Avenue lane configuration should remain unchanged except for increased shoulder widths through the length of the project (excluding the west shoulder between Bear Creek and S. Mollalla Forest Rd.) as well as accommodation for future roadway section improvements at Bear Creek. At the location of the existing culvert, the existing roadway consists of (2) lanes of approx. 10' width with approx. 1' paved shoulders within 60' public right-of-way width. The replacement section will use a 60' length culvert and the 4'-6' shoulders will be maintained through this section. The area for future widening will be vegetated and not count as impervious.

Stormwater Management:

Best Management Practices (BMP's) utilized per Water Environment Services (WES) design standards as adopted by Clackamas County Department of Transportation and Development. This project is outside of Water Environment Services Areas, but DTD follows WES stormwater management requirements. Conduct analysis of roadside ditches for shoulder widening and hydraulics of Bear Creek for bridge or culvert replacement. It is assumed that the stormwater design and approach will look at utilizing an equivalent area approach with a facility located near Bear Creek that intercepts the existing outfall at the creek. Stormwater design and improvements are assumed to not be included south of Bear Creek Culvert.

Signals and Lighting:

No new street lighting or signals are planned for this project.

Franchise Utilities:

Relocate franchise utilities. There are 5 utilities identified. Utility relocation and conflict resolution is assumed to only be needed within the culvert replacement area and the new stormwater facility. Utility conflicts and relocation south of Bear Creek will be excluded from the work.

Natural & Environmental Resources:

Identify and delineate wetlands and Ordinary High Water Mark (OHWM) elevation and obtain U.S. Army Corps of Engineers (USACE) and Oregon Department of State Lands (DSL) environmental permits, develop an Oregon Department of Fish & Wildlife (ODFW) Fish Passage Plan, perform Stream and Wetland Functional Assessment, complete SLOPES V documentation, obtain Oregon Department of Environmental Quality (DEQ) Water Quality Certification for Bear Creek culvert replacement, and research and develop archaeological baseline report. Additional County Land Use permit requirements are expected to be a Stream Conservation Area Review and will be determined during design.

Culvert:

Determine type, size, and location of replacement culvert structure. The replacement structure shall be sized to convey future roadway upgrade to County and City of Molalla standards.

Landscaping:

Grass seed shall be shown to match existing landscaping beyond improvements.

Public Involvement and Outreach:

Public involvement will consist of providing information for the County’s website, in-person meetings with adjacent property owners, and facilitating a virtual open house.

Right-of-Way (ROW):

It is assumed that most work will be completed within the existing right of way. Consultant will confirm with survey and preliminary design. Assume up to three (3) files for ROW and temporary easement acquisition for development of descriptions, exhibit maps, and impact maps. Valuations will be sourced by the County. County ROW staff will negotiate the files.

SCOPE OF WORK

Scope: SUMMARY OF WORK

Project management, survey, environmental studies and permitting services, stormwater and hydraulic services, utility coordination, geotechnical services, public outreach, the development of both preliminary design and final PS&E design, limited ROW services, and bid assistance up through bid award for this project based on the scope of services described herein.

- Task 1.0 Project Management and Project Coordination
- Task 2.0 Survey, Field Investigations and Mapping
- Task 3.0 Environmental Reconnaissance and Permitting
- Task 4.0 Stormwater / Hydraulics Related Services
- Task 5.0 Utility Coordination
- Task 6.0 Geotechnical and Geologic Services
- Task 7.0 (RESERVED)
- Task 8.0 Preliminary Design (30%)
- Task 9.0 Public Involvement/Outreach
- Task 10.0 Final Design (60%, 90%, and 100% Bid Ready)
- Task 11.0 (RESERVED)
- Task 12.0 Bid and Award Assistance

The duration of the design of this project is assumed to be from May 2024 through February 2026 for the completion of design. Bidding will occur in March or April of 2026. This scope of services does not include construction engineering or construction support but may be added at the discretion of the County towards the end of the design phase through a contract amendment.

Task 1.0 Project Management and Project Coordination

1.1 Project Management

Consultant shall:

- Prepare and maintain a master comment/response log to document action items from meetings, to track contract and task comments, responses, and decisions, and to log all proposed changes to the project (i.e., change orders and notices to proceed) as well as the proposed schedules and deliverables.

- Document risks, opportunities, and task decisions in individual deliverables such as meeting minutes and memoranda included within each task.
- Prepare monthly invoices and progress reports. Assume a 16-month timeframe for the project to be designed and bid for construction.

1.2 Project Coordination

The proposed approach to project coordination during design is to hold project meetings with key project team members and representatives from the County. The Consultant Project Manager (PM) shall direct all meetings and provide direction to the rest of the team as the project progresses. These meetings shall have a specific agenda with a predefined objective and outcome to address and resolve project issues as they are encountered. Agendas shall be distributed a minimum of three (3) days in advance of the meeting.

- Schedule and attend one (1) 1.5-hour Project Kickoff Meeting with the County, task leaders, and sub-consultants. Prepare and distribute a team member list, copies of the contract, and draft project schedule. Prepare meeting agenda and summary notes.
- Schedule and Attend Project Management Team Meetings. It is assumed one (1) in-person or virtual coordination meetings (1 hour each) shall be held during the design phase of the project (16-month time frame for up to a total of 12 meetings). Meetings to be held at the County office or virtually. Up to two (2) consultant personnel are expected to attend each meeting. Consultant shall prepare agenda in advance of deliverable review and other meetings as needed and provide minutes after each meeting including action items.
- Up to 12 monthly telephone check-in meetings with the Consultant PM (0.5 hour each).
- Consultant shall prepare a project schedule at the onset of design. Consultant shall provide an updated project schedule, as needed, with all major deliverables (30%, 60%, 90%, and 100%) and the ROW phase.

Task 1.0 Deliverables:

- Contract/Task Decision Log
- Monthly Invoices and Progress Reports
- Project Schedule with Periodic Updates
- Meeting Agendas and Minutes for Coordination Meetings

Task 2.0 Survey, Field Investigations and Mapping

2.1 Topographic Survey

Consultant shall complete a topographic survey in English units (International feet) for the project area.

- Features to be shown include trees six inches or more in diameter (DBH), ornamental trees, utilities, utility poles, overhead wires, fences, area lights, culverts, driveways (including width and length), walks, crown line of streets, edge of pavement and shoulders, ditches, traffic and other permanent signs, and structures as accessible.
- Underground features such as utility line sizes, rim elevations, invert elevations, fuel tanks, wells, septic tanks and lift stations, and drain fields shall be shown as indicated by surface features and other information including as-built drawings and utility company data.
- Existing striping shall be located where needed to design the project striping.
- All significant features beyond 100 feet of the existing ROW (or up to the face of building, whichever is closer) and within 100 feet of Bear Creek shall be surveyed. Beyond 100 feet of Bear

Creek and within the project limits all significant features within the existing ROW shall be surveyed.

- .
- The Horizontal Datum to be NAD 83(2011) epoch 2010.00 PDX Zone, utilizing the Oregon Real Time Network. The Horizontal Network shall be resolved using differential Real Time Kinematic (RTK) GPS observations from 100' South of Bear Creek to the southerly extents of the project limits. Terrestrial ground measurements will be taken within 100' of Bear Creek. The Vertical Datum shall be NAVD 88.
- Collect stream cross sections and thalweg profile as required to perform HEC-RAS modeling of Bear Creek at Molalla Ave. crossing.
- Send out survey notices a minimum of 7 days prior to survey work to the property owners along the corridor.
- The field topographic data shall be incorporated into a topographic survey base map and digital terrain model utilizing AutoCAD Civil 3D 2019 or newer.

The project limits shall include:

- Along S Molalla Avenue from W 7th Street to Molalla Avenue/Wilhoit Road/Sawtell Road intersection, 25 feet south along S Wilhoit Road, and 25 feet east along S Sawtell Road.
- All features within ROW should be considered within project limits.

2.2 Horizontal Control, Monument Recovery

Consultant shall:

- Retrace all existing ROW within the project corridor. Consultant shall search survey records on file with Clackamas County, to reestablish existing centerlines of each ROW.
- Research deeds and Record Surveys, including but not limited to property surveys, county road surveys, original county road resolutions, public land corner surveys, and Donation Land Claim (DLC) surveys.
- Keep copies of the research data collected, including but not limited to surveys, deeds, assessors' maps, county road maps, government corner surveys, and horizontal and vertical control data sheets Consultant's Project file. Consultant shall provide project-related data and records to the County at the end of the project.
- Survey found property corners, property line fences and the existing edges of pavement to establish existing road centerlines and rights-of-way. Consultant shall tie at least one (1) Public Land Survey System (PLSS) corner as necessary to show a relationship to the road centerlines. Consultant shall provide at least one (1) PLSS corner tie for ROW descriptions and the filing of a Record Survey.
- Show adjacent property lines and existing ROW on the Project Base Map using Consultant's ROW retracement.
- Obtain preliminary title reports along all fronting properties along the entire project limit including side streets. Research existing easements and show on the overall project base map.

2.3 (RESERVED)

2.4 Right-of-Way Descriptions, Exhibit Maps, and Impact Maps

Consultant shall:

- Prepare and assemble all title documents, including vesting deeds and preliminary title reports for each impacted property.
- Consultant shall develop and provide a centerline description from one end of the project limits to the other on Molalla Ave. within the project limits. Centerline description shall describe a corridor with maximum offsets for each type of easement with corresponding station ranges. County will provide an example if needed. County will review and provide feedback to Consultant if needed. Consultant will make any necessary changes requested by County.
- Prepare ROW Maps and Descriptions (Exhibits A and B) according to the guidelines and example provided by the County. County will review and provide feedback to Consultant if needed. Consultant will make any necessary changes requested by County. Maps and descriptions will be made on 8 1/2" x 11" paper. Written legal description should be referenced as "Exhibit A" and the map as "Exhibit B". Each description will include the following:
 - Exhibits shall be dated and stamped by a professional land surveyor licensed in the State of Oregon.
 - Descriptions for the properties shall reference the last recorded deed by type of deed, owner's name, book and page, and date recorded. This information is to be taken from the last vesting deed.
 - Descriptions shall reference easements as "Permanent" i.e. (Permanent Right-of-Way Easement for Road Purposes, Permanent Slope Easement, Permanent Public Utilities Easement, Permanent Slope and Public Utility Easement, Etc.) or as "Temporary" (i.e., Temporary Construction Easement, Temporary Mitigation Easement, etc.).
 - Descriptions shall reference ROW easements as "Parcel 1" and other easements as subsequently numbered parcels. Multiple easements per Parcel are acceptable (e.g., Parcel 2-Permanent Slope and Public Utilities Easement, Parcel 3-Temporary Construction Easement).
 - Descriptions shall reference centerline stations on the map. Show the distance from the centerline to existing ROW line and from centerline to proposed ROW and/or easement line(s) on the parcel map.
 - Each parcel map shall include a legend showing with a hatch, the areas being acquired. Give the areas for each parcel in square feet rounded up to the nearest foot. Note: Legend should be consistent from file to file. For example, a hatch used for a permanent slope easement would be the same for all files on the project.
 - Each parcel map shall provide tax lot numbers, last vesting deed number, owners' name, and address if other than situs, and file number.
 - Show north arrow, appropriate scale, project name, County project number and date exhibit was prepared.
 - Feet are to be shown on all distances in "Exhibit B" (excluding centerline).
- Prepare ROW Impact Maps according to the guidelines and example provided by the County. An 8.5" x 11" or 11"x17" color Impact Map shall be prepared for each file showing the proposed ROW acquisitions overlaid upon an aerial photo, with the larger improvements (fences, hedges, trees, etc.) being noted as either protect or remove. These are to be used in conjunction with the appraisal/ADJC preparation along with the Exhibits A and B.

2.5 Right-of-Way Staking

Consultant shall stake proposed and existing ROW and easements for appraisals and acquisition process as requested by the County and ROW Agent. This will be limited to one day of field staking.

Task 2.0 Deliverables:

- Base maps drawings in AutoCAD
- Preliminary Title Reports and supporting documents
- Right-of-Way Descriptions and Maps (3 files)

- Right-of-way Staking (3 files)

Task 3.0 Environmental Reconnaissance and Permitting

County will obtain Rights of Entry (ROE) for environmental-related field work. The Consultant will provide a list of properties requiring ROE's for research disciplines no less than six (6) weeks before such ROEs are required to perform work on private parcels. Consultant shall provide County with an exhibit map for each property showing the approximate location of any invasive test sites on the property (e.g., anything more than minor shovel sampling, test pits, etc.) prior to initiating ROEs.

The following tasks will be completed by the Consultant to identify issues and ensure compliance with the regulating agencies:

- Develop a memorandum documenting existing conditions of biological and wetland resources and draft applicable permit applications.
- Perform a Level One Hazardous Materials Corridor Assessment and provide draft and final memorandums.
- Depending on the findings of the Level One Assessment, a Level Two Assessment may be required. This activity may be added by amendment at a later date.

3.1 Wetland and Waters Delineation

Consultant shall conduct a site visit of the project's Area of Potential Impact (API). It is anticipated that reconnaissance will determine wetlands exist within the project area. Consultant shall delineate wetlands, streams, and ditches within the API as well as delineate OHWM. The wetland and waters of the United States (WOTUS) delineation will be conducted in accordance with the routine on-site wetland determination methodology described in the 1987 USACE Wetland Delineation Manual: Wetlands Research Program Technical Report Y-87-1, supplemented by the Western Mountain, Valleys, and Coast Regional Supplement, the Code of Federal Register (CFR) Title 33, Part 329.11, and Oregon Administrative Rules (OAR) Chapter 141, Division 85, Section 0515. In accordance with the USACE Wetland Delineation Manual, Consultant shall:

- Evaluate representative soil characteristics to assess hydric soil conditions and wetland hydrology.
- Identify dominant vegetation within each vegetation cover class at soil assessment locations.
- Classify identified wetlands according to the Cowardin system used by the U.S. Fish and Wildlife Service (USFWS) for the National Wetlands Inventory (NWI) and hydrogeomorphic (HGM) system.
- Provide flags on site demonstrating wetland and waters feature boundaries to assist surveyors in mapping wetlands.

Consultant shall prepare a draft and final wetland delineation report in accordance with DSL standards. Consultant shall submit the draft wetland delineation report to the County for review. Consultant shall submit the final, County-reviewed report to the DSL electronically for concurrence. Consultant shall address questions from DSL during concurrence review regarding the wetland delineation report to facilitate DSL concurrence of the wetland delineation.

Assumptions

- The biologist will complete the wetland field work for this task during a single day, including travel. No other sites visits are included in this task.

- The County and Consultant will agree to the final project API prior to completion of the field work. Consultant will provide draft and final API maps.
- The County will coordinate property access and entry approval for completion of the field work.
- Wetland/WOTUS delineation boundary flag locations will be surveyed using a hand held unit.
- CADD, Microstation, or GIS data provided to Consultant engineer for surveyed boundaries and sample plot locations will include projection, units (inches, feet, meters, etc.), and the coordinate system.
- The OHWM of waters/ditches within the API will be delineated based on field indicators; a hydrologic analysis of stream gage data is not included in this task. No groundwater monitoring or analysis is included in this task.
- An agency site visit to verify the wetland and WOTUS delineation will not be required and is not included in this task.
- The County will pay the DSL review fee with submittal of the delineation report (currently \$350).

3.2 (RESERVED)

3.3 Stream and Wetland Function Assessments

Consultant shall complete a wetland and stream assessment using best professional judgement within the API to assess lost stream functions and values. It is assumed that the project will meet the DSL's criteria for a Transportation-Related Structures General Permit (GP) and impacts will be less than 0.2 acre.

Assumptions

- Permanent wetland and stream impacts will be less than 0.2 acre and the project will qualify for DSL's Transportation GP and the USACE's Nationwide Permit (NWP) 14 – Linear Transportation Projects
- A BPJ wetland assessment will be sufficient and conducted by Consultant biologists.

Consultant will work with DSL and USACE to verify the requirements for these assessments based on the design and impacts of the project. If impacts are determined to fall above the maximum threshold to qualify for the GP and NWPs, formal assessment methodologies will be required and an amendment to this SOW and budget will be negotiated with the County.

3.4 Joint Permit Application (JPA)

Consultant shall prepare a draft and final JPA to apply for a USACE Clean Water Act Section 404 NWP and for a DSL GP in accordance with requirements set forth in OAR 141-085-0025. If project impacts to wetlands and waters of the U.S. and State exceed NWP and/or GP thresholds, the JPA will be used to obtain an Individual Permit (IP) from the respective agency requiring an IP.

Preparation of the JPA may include correspondence with regulatory agencies in the form of telephone calls, letters, and memorandums to document permit needs. Consultant shall:

- Prepare brief narratives and descriptions on project purpose and need, potential impacts, and project alternatives using information provided by Consultant and County, as necessary to complete the JPA.
- Provide pre-submittal coordination with representatives of the USACE and DSL to confirm permitting requirements and application procedures. This coordination will include pre-application meeting and correspondence.
- Coordinate with DEQ and if necessary, prepare a 401 Dredge-Fill Certification Application request
- Prepare all necessary non-engineering drawings, maps, and photographs for inclusion in the JPA.

- Evaluate potential wetland/waters impacts and methods for avoidance or minimization measures.
- Respond to questions or comments raised by the agencies during their review of the JPA. This task may include correspondence and clarification of the JPA and related tasks as necessary to clarify regulatory agency concerns and to facilitate the issuance of USACE's and DSL's permits for the proposed project.
- Provide the draft JPA to County for review and comment, revise the draft JPA once each per comment review, and prepare the final JPA for submittal to the USACE and DSL.

Assumptions

- Clean Water Act Section 401 certification from the DEQ will be obtained through the JPA process. If a NWP does not apply to the project, a pre-filing meeting will be scheduled at least 30 days prior to submitting the 401 Dredge-Fill Certification Application request.
- If project impacts exceed 0.2 acre of permanent wetland impact and/or the project cannot meet the DSL's criteria for a Transportation-Related Structures General Permit, Task 3.2 will be revised to address the increased functional assessment requirements.
- Additional fieldwork beyond the wetland/water delineation effort (Task 3.1) will not be required for this task.
- Permittee-responsible wetland mitigation or plans will not be required. If necessary, permanent wetland and/or WOTUS impact mitigation will be satisfied through County purchase of environmental mitigation bank credits, in-lieu-fee, or payment in-lieu.
- USACE/DSL permit conditions will not change during the application phase.
- Engineering drawings, cross sections, details, impact calculations and project description support for inclusion in the JPA will be provided by Consultant.
- DSL may require a permit fee, depending on the type of authorization required, and the amount of fill or excavation to be performed in wetlands and/or WOTUS. Payment of the DSL permit fees will be the responsibility of the County.
- If compensatory wetland/waters mitigation is addressed by use of a mitigation bank, in-lieu-fee, or payment in-lieu, the County is responsible for any payment required.
- The County will acquire signatures from all appropriate parties as required for completion of the JPA, including applicants, landowners, and local planning officials.
- Permit close-out inspection and reporting services will be provided under a separate contract or an amendment to this contract, if requested in the future.
- The JPA will include all impacts along the entire project corridor.
- An Agency site visit will not be required

3.5 SLOPES V Endangered Species Act Compliance Documentation

Bear Creek is a seasonal stream but may be fish-bearing. This task is defined in the event that Chinook salmon and Coho salmon of the Lower Columbia River (LCR) Evolutionarily Significant Unit (ESU), and steelhead of the LCR Distinct Population Segment (DPS) occur in Bear Creek downstream of the project corridor. These ESUs and DPS are listed as Threatened under the federal Endangered Species Act (ESA). The project could affect the water quality in Bear Creek as a result of project-related in-water work activities and alterations to existing local drainage patterns. The receipt of a permit from the USACE provides a federal nexus with the ESA and the regulatory need for the project to demonstrate compliance with ESA standards for avoiding or minimizing downstream effects on listed salmon and steelhead populations.

Consultant shall determine if programmatic ESA compliance processes such as the Standard Local Operating Procedures for Endangered Species (SLOPES V) programmatic Biological Opinion can be used for project ESA compliance.

Assumptions

- The project will not result in impacts on federally listed wildlife or plant species.
- Use of the SLOPES V programmatic ESA compliance process will be determined shortly after the 30% design milestone and will apply.
- SLOPES V transportation project compliance standards will not change during project design and construction.
- Coordination/consultation with NMFS will be conducted by USACE. A site visit or meeting with NMFS will not be required.
- SLOPES V documentation will be submitted to the USACE with the project JPA. USACE will deliver the SLOPES V documentation to NMFS for review and coordination/consultation.

If the project does not qualify for SLOPES V programmatic ESA compliance, preparation of a BA and individual ESA consultation with NMFS will be required. If a BA is required, an amendment to the Consultant contract would be required to authorize preparation of the BA and consultation with NMFS.

3.6 Oregon Fish Passage Plan – Bear Creek

Bear Creek is a seasonal stream but is anticipated to be fish-bearing. This task is defined in the event that Bear Creek supports Native Migratory Fish (NMF) per Oregon’s Fish Passage Law (OARs 635-412-0005 to 625-412-0040). The replacement of the existing culvert that conveys Bear Creek under Molalla Ave. may trigger application of the Fish Passage Law. Crossing designs must therefore meet Oregon Department of Fish and Wildlife (ODFW) hydraulic or streambed simulation fish passage design criteria. Consultant shall design the stream crossing structure such that it complies with OAR 635-412-0035. Consultant will submit to ODFW a fish passage plan application including all required supporting information (e.g., design drawings compliant with OAR 635-412-0035, stream measurements, designed slope).

Assumptions

- Delineation of the Bear Creek Active Channel Width (ACW) and streambed sediment grain size analysis will be required for this task in conjunction with Task 3.1.
- Three Cross sections of the stream twice the bed width above and 3 below the crossing will be surveyed in conjunction with Task 1.
- Culvert replacement will be designed and constructed in compliance with applicable Oregon’s Fish Passage Laws.
- The replacement crossings at Molalla Ave. will not require a fish passage exemption, waiver, or mitigation. If a fish passage waiver and mitigation is required, an amendment to the Consultant contract would be required to authorize preparation of and coordination for fish passage waiver/mitigation documentation.

3.7 DEQ Erosion & Sediment Control Approval

The County’s 1200-CA permit requires review and approval of erosion and sediment control plans for projects greater than one (1) acre. Projects greater than five (5) acres require public notice. Consultant shall submit an Environmental Management Plan to “Your DEQ Online” portal for DEQ’s review, public notice, and approval.

Assumptions

- The existing Clackamas County DTD 1200-CA permit is applicable to address erosion control requirements and no other 1200 DEQ permit is required.

- Environmental Management Plan shall include Erosion & Sediment Control Plans and special provisions, including the following:
 - Location and type of Best Management Practices (BMPs) for erosion prevention, sediment control and runoff control for each phase of construction,
 - Perimeter controls, track out controls, stabilization measures,
 - Maintenance procedures for each BMP type,
 - Schedule for installation and duration of BMPs,
 - Seed mix, final stabilization – include 01030 special provision with Erosion and Sediment Control Plan (ESCP), and
 - Sediment basin designs shall be stamped by a qualified professional and have calculations available.
 - ESCP included in Task 10.

3.8 Permits

The project will require additional local permits to comply with Clackamas County Code (Code) Section 4.3 of the County’s code discussed in this SOW and City of Molalla Water Resources Overlay 17-2.4.030. Consultant shall research local permit jurisdictional requirements and clarify the development review process with County and City Planning staff to confirm code compliance approval requirements and timelines. Consultant shall document local permit requirements in the design memorandum at the 30% design milestone under Task 8.2 that identifies:

- Local jurisdictional requirements
- County development codes or rules triggered by the project,
- The County agency that is responsible for administration of the code or rules,
- City development codes or rules triggered by the project,
- Specific permitting pathways for each development review requirement triggered, and
- Code compliance/permit issuance timeline for each triggered code compliance requirement.

The memorandum will be used to confirm specific local land use compliance requirements and other potential permits once preliminary design is completed

Assumptions

- A Stream Conservation Area (SCA) Application shall be required as part of this work.
- A site plan and stream buffer restoration plan per Clackamas County Code 704.08 will be adequate to comply with Clackamas County SCA and buffer requirements
- A City of Molalla Site Plan shall be required and is adequate to comply with City of Molalla Water Resources Overlay requirements.
- The project qualifies as a permitted use in the City of Molalla Water Resources overlay (i.e., Construction of transportation facilities identified in the adopted Transportation System Plan.)
- Floodplain Development Permit will be required along with other permit from City of Molalla or Clackamas County as part of this work, and a “no rise” certification shall be required.
- The project is outside both the Metropolitan Service District Boundary and the Portland Metropolitan Urban Growth Boundary and therefore, not subject to Section 706 (Habitat Conservation Areas) of the Clackamas County Code.
- Payment of any local land use permit review fees will be the responsibility of the County.
- Consultant shall submit final local land use compliance applications to County Project Manager for submittal to County planning staff.

3.9 Hazardous Materials Corridor Study (HMCS)

Consultant shall conduct a Hazardous Materials Corridor Study (Level 1) to identify potential hazardous material in the project area of project impact (API) and according to accepted environmental procedures as outlined in the Hazardous Waste Guide for Project Development (1990), by the American Association of State Highway and Transportation Officials (AASHTO) Special Committee on Environment, Archaeology and Historic Preservation, and the 2020 ODOT Hazardous Materials Program Procedures Guide available on the Agency website at:

https://www.oregon.gov/odot/GeoEnvironmental/Docs_GeologyGeotech/HazMat_Program_Manual.pdf

Consultant shall prepare the HMCS Report per the most recent version of the Level 1 Hazardous Materials Corridor Study report template.

Consultant shall:

- Review available federal and state environmental records for hazardous waste generators, documented leaking or permitted underground storage tanks (USTs), sites with known or suspected releases, landfill sites, and Superfund sites using government web-based databases or using a commercial database search report. Consultant shall use the search radii set forth in American Society for Testing and Materials (ASTM) Standard E1527-21 for these database searches. Consultant shall review DEQ file information for all sites that could impact the Project corridor to determine the nature and extent of contamination.
- Conduct a site reconnaissance of the Project API that consists of systematically traversing the Project API and viewing adjacent properties from roadways and public access areas. Consultant shall include photographs documenting Project API observations in the HMCS Report. Consultant shall use the reconnaissance to identify potential sources of contamination that could impact the proposed Project during construction or that could result in Clackamas County acquiring contaminated property.
- Conduct historical research to assess past uses of the Project API and adjacent properties starting in 1920, or the earliest readily available date, and at 10-year intervals to present time. Consultant shall note data gaps in the HMCS Report. Consultant shall make recommendations for additional research if the historical resources are insufficient in describing the Project API land use history for the last 50 years. The historical research must include a review of historic aerial photographs and at least one (1) or more of the following:
 - Topographic maps
 - Sanborn Fire Insurance maps
 - Historic property ownership/occupancy records
- Contact local Agency Maintenance and Engineering staff to get an accounting and records relating to prior maintenance activities that have occurred in the Project Area that may relate to hazardous materials.
- Prepare an AASHTO Initial Site Assessment Checklist according to AASHTO guidelines. Consultant shall incorporate the checklist into the HMCS Report.
- Prepare a draft and final HMCS Report to include a description of field observations, information from state and federal environmental databases, DEQ file review information, historic land use, a scaled map showing the location of all identified potential sources of contamination and sample locations and depths (as applicable), photographs, copies of historic data, copies of state and federal databases, results of any testing, and any other relevant documentation. The HMCS Report must include conclusions that identify specific sources of contamination that could impact the Project or the proposed construction work, and recommendations for further investigation or remediation.

Consultant shall prepare a draft HMCS Report for client review and comment. Consultant shall prepare a final HMCS Report based on client review comments and acceptance of the draft document.

Assumptions

- The Consultant will not need property access and entry approval for completion of the study.
- A full Phase 1 Environmental Assessment complying with ASTM Method 1527-21 will not be required. Level 1 assessment and reporting activities will be limited to those listed above.

3.10 Archaeological Resources

All archaeological sub tasks must be completed by a qualified archeologist as approved by the Oregon State Historic Preservation Officer (SHPO).

3.10.1 Literature Review/Field Reconnaissance/Baseline Report

The purpose of this task is for Consultant to conduct archival and background research in combination with field reconnaissance to determine the presence or absence of high probability landforms or archaeological sites within the Area of Potential Effect (APE) and to make recommendations regarding the need for further archaeological review.

Consultant shall conduct a Literature Review for the APE, and include a description of the APE, detailed historic context and ethno-historic information, methodology, recommendations for future work, detailed bibliography, maps, and photos.

Consultant shall examine the following:

- The SHPO database in Salem, OR; appropriate Tribal Historic Preservation Office (THPO) database if APE is within a recognized reservation boundary;
- General Land Office (GLO) maps;
- Sanborn Fire Insurance Maps;
Other records archives (i.e., historical societies; tribal archives) for known/potential prehistoric and historic archaeological resources within a one (1) mile radius of the APE;
- Field Reconnaissance must include a pedestrian survey. Consultant shall conduct pedestrian surveys within the APE and must include areas where ground will be disturbed by Project construction including temporary access roads, as well as staging areas, material sources, disposal sites, detours, etc.

Pedestrian survey methods must be consistent with the latest updated [SHPO guidelines](#). The recommended maximum spacing of transects is 20 meters apart and may vary depending on terrain features or ground visibility. Consultant shall determine transect spacing based on professional judgment to ensure that all probable site locations are discovered. All cultural resources observable on the surface and in exposed subsurface profiles must be identified and recorded. Field Reconnaissance must enable Consultant to identify areas of high and low probability for archaeological resources and to determine the appropriate level of survey or subsurface exploratory probing.

Consultant shall prepare a Baseline Report that must contain the following:

- A completed Oregon SHPO Archaeological Report Cover Page.
- A purpose statement and full Project description including:
 - 1. ODOT Key Number and Federal Aid Number
 - 2. Location and legal description
 - 3. General environmental description
 - 4. Historic context
 - 5. Proposed construction activities

- 6. Defined APE and APE map
- 7. Total acreage of impact
- Results of SHPO/THPO database search including:
 - Brief summary of previous archaeological research completed within one (1) mile of APE
 - Brief summary of recorded archaeological features within one (1) mile of APE; include eligibility discussion if available.
- Results of GLO and Sanborn map review including:
 - Brief summary of features (trails, buildings, etc.) depicted on maps and within APE; include eligibility discussion if available.
- Description of pedestrian survey methods including date of survey, types of transects used, and names and duties of personnel conducting the survey.
- Findings of pedestrian survey including ground conditions (percent visibility) and difficulties encountered, if any.
- Identification of areas of high and low probability for archaeological resources within APE.
- Recommendations regarding the need for appropriate level of additional survey and subsurface exploratory probing, if any.
- Site and isolate forms for newly discovered archaeological sites and isolates. Consultant shall complete the SHPO online site form.
- List of references cited.
- Location map at 1:24,000 scale; aerial image (Google map acceptable) showing APE; and representative digital images of current conditions within APE.

Task 3.0 Deliverables:

- Meeting summaries;
- Draft and Final Wetland Delineation Report;
- Stream Conservation Area Application
- Clackamas County Type II Floodplain Development Permit or City of Molalla permit application documentation
- Draft and Final JPA for County review and submittal to USACE and DSL;
- USACE 404 permit authorization/DSL Removal/Fill Authorization;
- Draft and Final SLOPES V documentation for County review and inclusion in the JPA;
- Draft and Final Fish Passage Plan in ODFW format for County review and submittal to ODFW;
- Submittal of Draft and Final Erosion and Sediment Control Management Plan;
- Draft and Final HMCS Report;

Task 4.0 Stormwater / Hydraulics Related Services

4.1 Hydraulic Site Investigation

The purpose of this task is to identify existing information and field conditions. Consultant shall:

- Obtain the Flood Insurance Study (FIS) report and if applicable to Bear Creek the Flood Insurance Rate Map using the Federal Emergency Management Agency (FEMA) web site or identify applicable regression equations for this section of creek.
- Review local floodplain ordinances to determine if there are any applicable to Bear Creek within the project limits.
- Obtain applicable stream gauge records, if available.
- Locate and obtain existing topographic maps of the tributary drainage basin.
- Visit the bridge/culvert Project site to observe site conditions, physical properties, and collect data needed to perform a thorough hydraulic study.

- Evaluate the site and determine survey data requirements for hydraulic analysis.
- Conduct a pebble count at two locations and collect two (2) streambed sediment samples in the vicinity of the culvert for grain size analysis.
- Determine channel and floodplain hydraulic roughness values (document with photographs).
- Record observations with respect to the following:
 - Lateral channel stability.
 - Stream channel hydraulic roughness.
 - Aggradation or degradation of bed material.
 - Existing evidence of scour and/or erosion.
- Coordinate with County PM and review geotechnical report regarding lateral stream stability and scour potential.

4.2 Hydrologic Analysis

The purpose of this task is to perform hydrologic analysis to determine appropriate flow rates for design of various Project elements. Consultant shall:

- Review Clackamas County specific hydrologic data sources to determine the most appropriate 2-, 10-, 25-, 50-, 100-, and 500-year design flows for the proposed Project.
- Analyze available stream gauge records to calculate flood frequency and flow duration values to support hydraulic analysis and design.
- In the absence of stream specific data, Consultant shall utilize the regional regression equations described in the U.S. Geological Survey (USGS) magnitude and frequency of floods in Western Oregon to predict design flows.
- Determine the temporary water management discharge estimates for the portion of the year when construction will take place to be used in temporary water management design recommendations and included in the technical specifications for the Project.
- Determine the fish passage high flow and fish passage low flow if required.

4.3 Bridge/Culvert Analysis

The purpose of this task is to perform a variety of hydraulic analyses in support of design and provide hydraulic design recommendations related to the culvert conveying Bear Creek and associated tributaries within the project limits and to summarize the findings of the hydraulic related services and document the design recommendations. Consultant shall:

- Analyze the downstream conveyance system in conformance with County and/or SLOPES Programmatic Biological Opinion guidelines.
- Simulate existing hydraulic conditions of the culvert site using a computer model to determine current water surface profiles, velocities, depths, and flow area for the various design flows.
- Create a model for up to two (2) alternatives to simulate proposed culvert crossing to determine water surface profiles, velocities, depths, and flow area for the various design flows.
- Provide minimum culvert size and material recommendation.
- Prepare Hydraulic data table.
- Review past culvert inspection reports that might include evidence of past scour problems.
- Conduct a scour analysis using results from the hydraulic analysis as described in the Federal Highway Administration (“FHWA”) publication HEC-18, Evaluating Scour at Bridges.
- Coordinate with the structural and geotechnical engineers on the design of the culvert foundation.
- Provide scour countermeasure design recommendations in accordance with HEC-23, Bridge Scour and Stream Instability Countermeasures..

- Conduct supporting design calculations (e.g., riprap size calculations).
- Prepare a draft version of the Hydraulics Report per County WES guidelines containing preliminary design recommendations for the hydraulic related services.
- Prepare a final Hydraulics Report to reflect County review comments and to include changes to hydraulic related design recommendations that need to be modified due to advancement of the overall Project design. Include with the final report a No-Rise Certificate as needed.

4.4 Temporary Water Management Design

The purpose of this task is to prepare temporary water management design recommendations, special provisions, and plan for inclusion in the construction documents.

Consultant shall:

- Identify the construction activities requiring temporary water management.
- Determine the timeframe for which each temporary water management effort will need to be in place (often the in-water work period).
- Summarize the requirements for temporary water management due to the chosen environmental permitting method.
- Prepare a plan and special provisions for flow and sediment control of surface water and groundwater seepage during construction activities based on site conditions and incorporate into Final Design Documents.

4.5 Existing Stormwater System Review and Downstream Analysis

Consultant shall:

- Review maps of the existing stormwater system for the project area as provided by the County.
- Review drainage basins for the existing project area.
- Review and evaluate the available capacity in the downstream systems.
- Analysis and summary to be included in the Stormwater Design Documentation described in task 4.7.

4.6 Stormwater Conveyance and Management Analysis and Design

Note: the latest WES guidelines state that stormwater quantity and quality upgrades are required for improvements or changes to impervious area that exceeds 5,000 square feet. It is anticipated that the project will exceed this threshold. It is also anticipated that the project will be required to meet the stormwater requirements of the SLOPES V programmatic.

Consultant assumes that one stormwater management facility, located on the north side of Bear Creek, will be sufficient to meet the project's stormwater management requirements. This facility would manage an equivalent area of stormwater runoff from the City of Molalla's existing 18-inch diameter storm sewer in lieu of the project's triggering impervious area. No further stormwater design or improvements will be required south of the Bear Creek Culvert.

Consultant shall:

- Determine stormwater management triggering areas
- Determine the specific stormwater quantity and quality requirements for the triggering areas
- Delineate drainage basins and sub-basins for conveyance and facility designs
- Analyze the proposed conveyance system.
- Design and analyze the proposed stormwater management (water quality and quantity control) facility

- Summary of analyses to be included in the Stormwater Design Documentation

4.7 Stormwater Design Documentation

Preliminary Stormwater Summary

Consultant shall prepare a preliminary stormwater concept and memorandum that shall be submitted with the Design Acceptance Package. The purpose of this memorandum is to develop the overall recommendations of the stormwater conveyance system layout, pipe outfall locations, treatment, and storage concepts. These recommendations do not contain full facility designs. Consultant shall prepare the Preliminary Stormwater Memorandum following the outline below:

- Introduction and Title – This section shall list Project name, road name, beginning and ending mile points, and date of the report. The introduction will include the names of the engineering staff who prepared the recommendations, the purpose of the report, a brief description of the Project, and a summary of treatment/storage concepts and recommendations on their use.
- Existing and Proposed Conditions Narrative – The introduction will be followed by a narrative that describes the proposed changes to the existing conditions. The stormwater management triggers and requirements will also be included in the narrative.
- Proposed Stormwater Management Plan – This section will include a discussion of the proposed stormwater management facility. The topics addressed will include location, removal efficiency, storage capacity, constructability, maintenance, and cost. Also included will be a discussion of the proposed stormwater management plan highlighting facility dependability, construction, maintenance, cost, and appearance.

Stormwater Design Report

Consultant shall prepare a Draft Stormwater Design Report at the 60% submittal and a Final Stormwater Report along with the 100% submittal. The purpose of this report is to develop design documentation for final stormwater designs. This scope assumes that the stormwater design will consist of a single combined water quality and detention facility and associated conveyance. The Draft and Final Stormwater Report will include the following:

- Statement of Purpose
- Existing Conditions
- Proposed Project Improvements
 - Summary of contributing impervious areas
- Summary of applicable requirements
- Proposed Stormwater Management Design (Water Quality/Quantity)
- Drainage basin maps
- Conveyance Calculations
- Stormwater Facility Design Calculations
 - Water Quality
 - Water Quantity

Consultant shall prepare the Final Stormwater Design Report in accordance with the Clackamas County WES Standards. Consultant shall complete the Final Stormwater Design Report with Final plans. The facility design(s) incorporated in the final plans should comply with the information in the final stormwater design report unless approval for any change has been obtained from the engineer of record for the Stormwater Design Report. Stormwater Design Report shall include standard Operations and Maintenance Procedures from Clackamas County WES for the proposed facility.

Task 4.0 Deliverables:

- Draft and Final Hydrology and Hydraulics Report
- Temporary Water Management Plan
- Preliminary Stormwater Summary as part of 30% Design Memo
- Draft Stormwater Report at 60%
- Final Stormwater Design Report
-

Task 5.0 Utility Coordination

It is anticipated that some utilities may require relocation due to shoulder widening and culvert replacement. Utility conflict identification and resolution south of the Bear Creek Culvert will be excluded from the work.

5.1 Utility Coordination

Consultant shall initiate coordination with utilities and incorporate utility provided relocation plans into the design documents. The locations and elevations of existing utilities and options for resolving conflicts shall be investigated. This work shall include working with the County and utility companies to “pothole” crossings and other areas to identify and eliminate conflicts. It is expected that “potholing” shall be provided by the utility companies. Once potholing data is obtained and mapped, the Consultant shall incorporate the data into any plan changes.

It is assumed up to five (5) utilities will require coordination. County shall send formal notice letters to any utilities who are unresponsive to utility coordination and relocation efforts.

Consultant shall:

- Prepare a Utility Conflict Spreadsheet and send utility conflict email correspondence with 30% plans to the affected utility companies describing the conflicts that exist, and the required adjustment to eliminate the conflict. A spreadsheet of centerline reference points and elevations shall be provided to utility companies for use in excavating existing utilities (potholing) at points of potential conflicts. Consultant shall also provide the conflict list to an independent potholing service who shall provide quotes to the utilities and coordinate with the Project team to aid in gathering pothole data. The schedule for making the necessary adjustment ahead of the beginning of road construction shall be identified.
- Review pothole data provided by the utilities and make recommendations to the project design to minimize utility relocation.
- Prepare and send a Utility Relocation email correspondence with 60% plans for each utility notifying them of unavoidable conflicts with a mandatory relocation date.
- Organize and lead one group utility coordination meeting (60% design milestones).
- Perform ongoing coordination with utilities to resolve utility conflicts and finalize utility relocation requirements as appropriate.
- Provide 90% plans to each utility, perform ongoing coordination with utilities to resolve utility conflicts and finalize utility relocation requirements as appropriate.
- Attach utility relocation plans to the Final Contract Documents.

Task 5.0 Deliverables:

- Utility contact list
- Utility Conflict Plot Map include on 30% Strip Map
- Utility Conflict Spreadsheet(s) and Letter(s)

- The final utility relocation plan(s) submitted to the County Project Manager (CPM) within 10 days after acceptance.
- Final Notice Letter(s) submitted to each utility and CPM 15 business days after submittal of 90% Plans to County.

Task 6.0 Geotechnical and Geologic Services

The County has directed preliminary geotechnical investigations near Bear Creek at S Molalla Ave. crossing. See attached for associated memorandum dated December 13, 2023.

The County will obtain ROE for field reconnaissance work, if needed. If needed, the Consultant will provide a list of properties requiring ROEs for research disciplines no less than six (6) weeks before such ROEs are required to perform work on private parcels. Consultant shall provide County with an exhibit map for each property showing the approximate location of any invasive test sites on the property (e.g., anything more than minor shovel sampling, test pits, etc.) prior to County initiating ROEs.

Consultant shall conduct geotechnical field investigations and review available subsurface information to support design and construction of a four-sided culvert replacement. Consultant shall provide a Geotechnical Report summarizing and presenting the results of the investigation, analyses, and recommendations. Assessment of Material Sources and Disposal Sites is not included in these Services.

Consultant shall complete the geotechnical and geological Services in accordance with County design standards, AASHTO, and FHWA. Consultant shall summarize the findings in a Geotechnical Report. Consultant shall perform the following subtasks for the foundation investigation.

6.1 Site Reconnaissance, Exploration and Testing Work Plan

Consultant shall perform site reconnaissance. The site reconnaissance must include the following. Consultant shall:

- Observe surface conditions indicative of subsurface conditions;
- Review available subsurface information for the area, including information disclosed by other boring or excavation work in the project area
- Identify site constraints and staging concerns (for exploration and construction);
- Identify potential exploration locations, if required;
- Attend meetings with County or other parties to discuss, review, and ascertain site conditions relevant to the geotechnical project work.

The site reconnaissance will facilitate understanding of the site constraints for field explorations, construction, and traffic staging. Proposed boring locations will be staked or painted on the ground.

Consultant shall prepare an Exploration and Testing Work Plan (ETWP) figure to show the proposed exploration locations. Traffic control is not anticipated based on our understanding of the planned exploration locations.. Consultant shall submit the EWTP to the County and/or City of Molalla for approval. Consultant shall obtain ROW permit from the County or City of Molalla, if required.

6.2 Field Exploration and Laboratory Testing

Consultant shall perform the geotechnical explorations and reconnaissance for culvert crossing to evaluate subsurface conditions and develop geotechnical recommendations for the designs as shown in the following table. The proposed investigation scope assumes a 4-sided culvert will be used. Additional explorations will be required if design of a 3-sided culvert is required and will require contract amendment.

STRUCTURE	ESTIMATED # OF BORINGS	ESTIMATED BORING DEPTH
Stormwater facilities (infiltration testing)	4 (Test Pits)	3 to 5 feet below ground surface for infiltration test.

Consultant shall perform geotechnical field explorations and review available geotechnical data to determine the subsurface conditions for the express purpose of characterizing subsurface conditions within the project limits and determining foundation and design recommendations for the items listed in the table above.

Four (4) infiltration tests will be performed at two (2) locations outside of the existing roadway prism. The infiltration tests will be performed using the Open Pit Falling Head method, in general accordance with Clackamas County Service District No. 1 Stormwater Standards, Appendix E. The test depth is between three (3) and five (5) feet below ground surface (BGS).

Consultant shall perform exploration work in accordance with Federal, State, and Local regulations. Consultant shall perform the subsurface exploration work in conformance with the ETWP as described in Task 6.1.

Exploration tasks include the following. Consultant shall:

- Obtain a right-of-way permit from Clackamas County for drilling operations;
- The permit fee will be waived;
- Locate utilities in the vicinity of the proposed borings and test pits by and through the One-Call system prior to the fieldwork;
- Complete infiltration testing in test pits;
- Spoils will be used to backfill the test pits if no obvious indications of contaminated soil or groundwater are observed.
- Notify the County immediately and place drill cuttings/fluids in separate drums, labeled with the boring #, depth, and date and transport drums to a location designated by the County, if contaminated soil/groundwater is encountered. The geotechnical investigation does not include any services related to environmental or hazardous materials;
- If needed, place polymer-modified pavement patch in pavement boring. Pavement replacement to be at least to the thickness of adjacent pavement.
- The field explorations will be performed during weekdays between 8 am and 6 pm;
- Provide temporary traffic control that will be consistent with requirements for shoulder and single lane closures if required;

Consultant shall provide an engineer or geologist to supervise the field operations and log the test pits. Subsurface explorations must be conducted in general accordance with American Association of State

Highway Transportation Officials (AASHTO). Soil samples must be obtained at 2.5-foot to 5-foot intervals using either a standard penetration sampler or a Shelby tube sampler.

Laboratory Testing: Consultant shall conduct water contents, sieve analyses, and Atterberg limits tests on soil samples obtained from the boring(s) to classify the soils and estimate their engineering properties. Two sieve analyses will be completed to characterize streambed sediment. We assume these samples can be collected from the infiltration test pits. If samples must be collected from a different location, we assume these samples will be provided to GRI by others.

6.3 Geotechnical Analysis

Consultant shall perform analyses of the field and laboratory test data previously collected to develop geotechnical recommendations for foundation design and construction of culvert replacement. This assumes a 4 sided box culvert can be supported with subsurface conditions observed from previous boring.

The Consultant shall provide the analysis and design for the foundation in accordance with County's design standard, FHWA, AASHTO, design guidelines. Geotechnical analysis must include:

- Embankment/slope stability recommendations;
- Culvert design recommendations;
- Foundation support recommendations for proposed 4-sided culvert, culvert headwall, and culvert wing walls;
- Seismic response characteristics of soil and rock in the area of the culvert; and
- Drainage considerations.

6.4 Geotechnical Report

Consultant shall prepare a Geotechnical Report summarizing the subsurface conditions, design, and construction recommendations. The Geotechnical Report must summarize the field observations, subsurface conditions, laboratory test data, analysis results, construction issues and geotechnical recommendations for the project. Consultant shall prepare the Geotechnical Report in accordance with the Geotechnical Report and Documentation requirements contained in the most current version of the ODOT Geotechnical Design Manual.

Consultant shall provide special provisions relating to embankment and construction. Special Provisions shall be per ODOT Standard Specifications format.

Consultant shall meet for up to two (2) post-report consultation meetings (1 hour each).

Task 6.0 Deliverables:

- Exploration and Testing Work Plan (ETWP)
- Design parameters for culvert design and construction with summary memo at 30%
- Recommended infiltration rates
- Draft and Final Geotechnical Report

Task 7.0 (RESERVED)

Task 8.0 30% Design

The objective of the 30% Design is to identify the size of the Project footprint, required design exceptions, ROW impacts, and any required environmental permits prior to preparing the Final Plans.

8.1 30% Design

Consultant shall complete preliminary design and prepare a 30% Strip Map to accompany a construction cost estimate (Task 8.2) and a design memorandum (Task 8.3).

8.2 Construction Estimate

Consultant shall develop estimated costs early in the 30% design process for use in decision making. Consultant shall provide quantities and construction cost estimates for design alternatives considered and the preferred alternative.

8.3 Design Memorandum

Consultant shall provide a 30% design memorandum summarizing the preferred alternative. The memorandum will reference the other applicable reports, memorandums, and documents supporting the preliminary design. The memo will identify areas of further study and refinement based upon alternatives provided.

It is assumed that the two alternatives will be a 4-sided and 3-sided precast culvert. The following items will be included in the design memorandum:

- Description of the purpose, need, and design solution for the Project;
- Summary of existing conditions, (i.e., Project location, roadway classification, lanes, average daily traffic (ADT), posted speed, and other design standards pertinent to the Project);
- Summary of design exceptions that will be necessary;
- Summary of culvert alternatives considered, including recommendations;
- Environmental impacts and mitigation measures;
- Environmental permitting requirements;
- Utility conflicts;
- Description of geotechnical subsurface conditions;
- Draft Geotechnical Summary;
- Preliminary Stormwater Summary;
- Draft Hydraulics and Hydrology Summary;
- ROW needs;
- Local permit needs
- Temporary Traffic Control concept summary

Task 8.0 Deliverables:

- 30% Strip Map of Preferred Alternative including horizontal and vertical alignment, signing, permanent pavement markings, shoulder widening, culvert replacement, guardrail, stream restoration limits, temporary traffic control, and other necessary design elements
- Cost Estimate (one (1) electronic copy in PDF form and one (1) copy in Excel form)
- Design Memorandum (one (1) electronic copy in PDF form)

Task 9.0 Public Involvement/Outreach

The Consultant will assist the County's community relations specialists with preparation of documents to be distributed or made available to the general public. Tasks related to public involvement include:

- Coordinating with the County's community relations specialists, County PM and other relevant staff.
- Preparing up to three (3) flyers to be mailed to area businesses and residents. The County will develop the mailing list and mail the flyers.
- Providing project design graphics and information for inclusion on the County's website.

Task 9.0 Deliverables:

- Up to three (3) flyers
- Project graphics and information for County project website

Task 10.0 Final Design (60% Progress Print, 90% and Final Bid Ready) - Plans, Specifications, and Estimate (PS&E)

The Consultant shall advance the recommended alternative from the Preliminary Design (30% design) stage to the 100% complete stage.

Consultant shall:

- Conduct work sessions (per Task 1) with County staff.
- Provide a Progress Print set in pdf at 60% for review prior to a Constructability Meeting with the County.
- Complete engineering drawings for submittal to the County 90%, and Final milestones and perform quality assurance and in-house independent design checks and plan review of all drawings and related quantities including constructability reviews. Plans will be drafted with the latest version of AutoCAD software and the final CAD drawings provided through a File Transfer Protocol (FTP) site.
- Provide relevant plan drawings per the anticipated sheet list below for submittal to County for review. Drawings shall include sufficient information for review and bidding including ROW lines, alignments, elevations, etc., with the assumption that more detailed staking and layout information necessary for construction will be provided electronically to the Contractor after notice of intent to award. Standard details and drawings will be attached at the end of the plan set without the need for a title block.

Additional specific plan sheet requirements include:

Sheet #	Description
1	Cover Sheet - Location Map
2	General Notes
3	Sheet Layout
4-5	Typical Sections
6-10	Roadway/Alignment Plan

11-12	Drainage/Utilities Plan
13-15	Culvert Replacement Plan
16-20	TESC Plans
21-23	Traffic Control/Detour
24-27	Roadway/Drainage Details
28-29	Stream Restoration Plan/Details

- Index of Drawings: Provide a list of the standard details and drawings utilized with a link to the location where they can be found.
- Roadway, Drainage, and Grading Plan and Profile: Consultant shall prepare roadway, drainage, and grading construction plans and details in accordance with County design standards, AASHTO, and Oregon Standard Specifications for Construction with ROW information shown as applicable.
- Roadway Cross Sections: Assumes cross sections prepared at intervals and/or at locations of interest for the proposed improvements. Sections will be prepared to display the existing ground, finish grade, subgrade, and right-of-way.
- Driveway Connection Details
- Erosion Control: Consultant shall prepare erosion control plans in accordance with the 1200-CA permit, which will require a cover sheet and grading plans for each stage of work.
- Traffic Control: Consultant shall prepare temporary traffic control detour plan in accordance with County design standards, the MUTCD, and Oregon Standard Specifications for Construction.
- Signing/Striping: Consultant shall prepare signing and striping plans per County and MUTCD standards. A sign inventory will be completed to evaluate existing sign conditions and verify compliance with current MUTCD standards. These will be included in Roadway Plans.
- Culvert: Consultant shall prepare culvert plans and details in accordance with County design standards and the most current AASHTO LRFD Bridge Design Specifications, if applicable. Plans shall include stream restoration and details.
- Temporary water management plans and details.
- Stormwater management plans and details.
- Standard details and other required drawings for submittal to County for review.
- Calculate quantities and develop an engineer's construction cost estimate for submittal at each plan development milestone (60%, 90%, Final).
- Develop an anticipated construction schedule (90%, Final)
- Prepare relevant sections of specifications based on the current Oregon Standard Specifications for Construction at 90%. Produce special provisions for the project using standard ODOT boilerplate special provisions and County boilerplate special provisions to the specifications.
- Revise and submit final Special Provisions based on comments received during County reviews.
- Make corrections as required by County and submit final plans to County (both documents and electronic copies).

After the 30% drawings are completed in strip map format, the design team will prepare a proposed sheet layout, title block, and number scheme. The team will obtain County concurrence before producing sheets. Roadway plans will be prepared at 1"=50' full size drawings with appropriate sheets prepared at 1"=50'. Sheets will be able to be printed on 11"x17" sheets for construction.

Consultant shall provide services for each deliverable per the following subtasks:

10.1 60% Design

Provide a Progress Print pdf at 60% one week prior to a Constructability Meeting with the County. Provide updated quantities and unit prices.

10.2 90% Design

Provide 90% complete plans, specifications, estimate, and construction schedule as described above.

10.3 Final Design

Provide Final plans, specifications, estimate, and construction schedule as described above.

Task 10.0 Deliverables (all electronic):

- 60% (Progress Print set), 90%, and Final Engineering Drawings (Full Size – 11”X17”)
- 90% and Final Construction Schedule
- 90% and Final Specifications and Bid Schedule
- Documentation of 60% and 90% review comments
- 60%, 90%, and Final Engineer’s Estimate
- Updated Comment/Response Log at each milestone

Task 11.0 (RESERVED)

Task 12.0 Bid and Award Assistance

This task includes the preparation of up to two (2) addenda, as needed, and responding to questions during the bidding phase. Consultant shall respond to questions from County and Construction Contractors about the plans and specifications during the bidding process.

Consultant’s PM, or Consultant’s designee(s) approved by County, shall assist County with questions regarding the bid documents and bid process. Consultant shall respond to all questions in writing within three (3) days to the CPM.

During the bidding process, Consultant shall not separately communicate with Construction Contractors or suppliers during bidding. Any communication will go through County Procurement passed on to the CPM in a manner that assures that no Construction Contractor or supplier is provided with information not in the bidding documents and that could provide a bidding advantage or disadvantage. Consultant shall prepare a written log to document responses to CPM response requests as a result of construction contractors or supplier’s questions to Procurement. Consultant shall maintain a written log and provide upon request of the CPM.

Task 12.0 Deliverables:

- Written log of conversations, questions, and answers, provided to the CPM upon request.
- Up to two (2) addenda

REIMBURSABLE EXPENSES

The reimbursable budget estimate is based on our experience with this project type and the governing agencies. It is an estimate only. Additional budget may be necessary to complete the project.

Customary reimbursable expenses mean the actual expense incurred in direct connection with the project. Vehicle mileage is reimbursed at the current Internal Revenue Service (IRS) rate for project related travel.

The following project related expenses are reimbursed at cost:

- External Reproduction Services
- Travel Expenses,
- Mileage rates per Federal guidelines
- Express Postage
- Other Direct Expenses (survey filing fees; project specific supplies, etc.)

ASSUMPTIONS

1. All permits and application fees shall be paid by Clackamas County, or as a reimbursable expense at cost.

COUNTY'S RESPONSIBILITIES

The County will:

1. Provide a project manager who is responsible for overall project development and management and for coordination between the Consultant and the County including coordination of review and comment by County staff on design deliverables.
2. Maintain records and process Consultant invoices.
3. Coordinate the relationship with adjacent property owners and with the public.
4. Maintain and manage the public involvement mailing list and project press releases.
5. Provide County standard drawings and details when possible.
6. Provide as-built CAD files of recent construction projects.
7. Provide standard pavement sections for use in pavement design.
8. Assist in utilities coordination through attendance at coordination meetings and providing County templates for 60- and 30-day final notices.
9. Provide Consultant with digital copies of the County 00100 Special Provisions. County to prepare the front-end contract forms, prepare the bid-booklet, and provide legal review of the contracts and bid forms.
10. Advertise and manage the bidding process for construction.

**EXHIBIT B
FEE SCHEDULE**

Bear Creek Bridge & Molalla Ave Shoulders Project

Engineering Fee Estimate

May 23, 2024

Task and Description	RS&H SUBTOTAL	SUBCONSULTANTS			SUBCONSULTANT SUBTOTAL	TOTAL BUDGET AMOUNT
		Anchor QEA	3Point	GRI		
TASK 1: PROJECT MANAGEMENT & COORDINATION						\$ 49,999.66
Task 1.1: Project Management	\$ 27,052.57	0.00	0.00	0.00	0.00	\$ 27,052.57
Task 1.2: Project Coordination	\$ 22,947.09	0.00	0.00	0.00	0.00	\$ 22,947.09
TASK 2: SURVEY, FIELD INVESTIGATIONS AND MAPPING [County]						\$ 45,870.00
Task 2.1: Topographic Survey	\$ -	0.00	17,840.00	0.00	17,840.00	\$ 17,840.00
Task 2.2: Horizontal Control, Monument Recovery and Pre-Construction ROS	\$ -	0.00	18,540.00	0.00	18,540.00	\$ 18,540.00
Task 2.3: (RESERVED)	\$ -	0.00	0.00	0.00	0.00	\$ -
Task 2.4: Right-of-way Descriptions, Exhibits Maps and Impact Maps	\$ -	0.00	7,500.00	0.00	7,500.00	\$ 7,500.00
Task 2.5: Right-of-way Staking	\$ -	0.00	1,990.00	0.00	1,990.00	\$ 1,990.00
TASK 3: ENVIRONMENTAL RECONNAISSANCE AND PERMITTING						\$ 72,900.61
Task 3.1: Wetland and Waters Delineation	\$ 3,728.61	13,692.00	0.00	0.00	13,692.00	\$ 17,420.61
Task 3.2: (RESERVED)						
Task 3.3: Stream and Wetland Function Assessments	\$ -	5,942.00	0.00	0.00	5,942.00	\$ 5,942.00
Task 3.4: Joint Permit Application (JPA)	\$ -	12,950.00	0.00	0.00	12,950.00	\$ 12,950.00
Task 3.5: SLOPES V Endangered Species Act Compliance Documentation	\$ -	2,583.00	0.00	0.00	2,583.00	\$ 2,583.00
Task 3.6: Oregon Fish Passage Plan – Bear Creek	\$ -	4,814.00	0.00	0.00	4,814.00	\$ 4,814.00
Task 3.7: DEQ Erosion & Sediment Control Approval	\$ -	8,223.00	0.00	0.00	8,223.00	\$ 8,223.00
Task 3.8: Permits	\$ -	5,510.00	0.00	0.00	5,510.00	\$ 5,510.00
Task 3.9: Hazardous Materials Corridor Study (HMCS)	\$ -	4,075.00	0.00	0.00	4,075.00	\$ 4,075.00
Task 3.10: Archaeological Resources	\$ -	11,383.00	0.00	0.00	11,383.00	\$ 11,383.00
TASK 4: STORMWATER/HYDRAULICS						\$ 80,806.81
Task 4.1: Hydraulic Site Investigation	\$ 5,848.38	0.00	0.00	0.00	0.00	\$ 5,848.38
Task 4.2: Hydrologic Analysis	\$ 7,105.95	0.00	0.00	0.00	0.00	\$ 7,105.95
Task 4.3: Bridge/Culvert Analysis	\$ 19,918.86	0.00	0.00	0.00	0.00	\$ 19,918.86
Task 4.4: Temporary Water Management Design	\$ 7,105.95	0.00	0.00	0.00	0.00	\$ 7,105.95
Task 4.5: Existing Stormwater System Review and Downstream Analysis	\$ 4,737.30	0.00	0.00	0.00	0.00	\$ 4,737.30
Task 4.6: Stormwater Conveyance and Management Analysis and Design	\$ 19,787.58	0.00	0.00	0.00	0.00	\$ 19,787.58
Task 4.7: Stormwater Design Documentation	\$ 16,302.78	0.00	0.00	0.00	0.00	\$ 16,302.78
TASK 5: UTILITY COORDINATION						\$ 17,418.68
Task 5.1: Utility Coordination	\$ 17,418.68	0.00	0.00	0.00	0.00	\$ 17,418.68
TASK 6: GEOTECHNICAL AND GEOLOGICAL						\$ 21,905.60
Task 6.1: Site Reconnaissance, Exploration and Testing Work Plan	\$ -	0.00	0.00	1,655.00	1,655.00	\$ 1,655.00
Task 6.2: Field Exploration and Laboratory Testing	\$ -	0.00	0.00	7,605.60	7,605.60	\$ 7,605.60
Task 6.3: Geotechnical Analysis	\$ -	0.00	0.00	6,220.00	6,220.00	\$ 6,220.00
Task 6.4: Geotechnical Report	\$ -	0.00	0.00	6,425.00	6,425.00	\$ 6,425.00
TASK 7: (RESERVED)						\$ -
TASK 8: 30% DESIGN						\$ 54,110.10
Task 8.1: 30% Design	\$ 32,894.77	0.00	0.00	0.00	0.00	\$ 32,894.77
Task 8.2: Construction Estimate	\$ 12,491.80	0.00	0.00	0.00	0.00	\$ 12,491.80
Task 8.3: Design Memorandum	\$ 8,723.53	0.00	0.00	0.00	0.00	\$ 8,723.53
TASK 9: PUBLIC INVOLVEMENT/OUTREACH						\$ 4,371.43
Task 9.1: Public Involvement/Outreach	\$ 4,371.43	0.00	0.00	0.00	0.00	\$ 4,371.43
TASK 10: FINAL DESIGN - PLANS, SPECIFICATONS, AND ESTIMATE (PS&E)						\$ 184,274.53
Task 10.1: 60% Design	\$ 68,639.45	0.00	0.00	0.00	0.00	\$ 68,639.45
Task 10.2: 90% Design	\$ 62,584.60	0.00	0.00	0.00	0.00	\$ 62,584.60
Task 10.3: Final Design	\$ 53,050.47	0.00	0.00	0.00	0.00	\$ 53,050.47
TASK 11: (RESERVED)						\$ -
TASK 12: BID AND AWARD ASSISTANCE						\$ 5,750.05
Task 12.1 Questions During Bidding	\$ 5,750.05	0.00	0.00	0.00	0.00	\$ 5,750.05
DIRECT EXPENSES	\$ 500.00		1,980.00		1,980.00	2,480.00
TOTAL HOURS	1,908.00	322.00	352.00	281.00	955.00	2,863.00
HOURLY RATES						
TOTAL DOLLARS	\$ 400,959.86	\$ 69,172.00	\$ 47,850.00	\$ 21,905.60	\$ 136,947.60	\$ 539,887.46