## **Request for Proposals**

A&E and Related Services

Issued by: Linn County Road Department (herein after referred to as "Agency")

### **RFP Number: BS148B**

**RFP Title/Project Name:** 

Architecture and Engineering Services (Full Service Contract)

for

Cox Creek (Waverly Drive) Bridge (City of Millersburg)

Issue Date: November 1, 2024

PROPOSAL DUE DATE and TIME: December 2, 2024 by 5:00 PM PST

Proposer Questions, RFP Protests, and Requests for Change: due via email no later than 7 calendar days prior to Proposal due date.

A pre-Proposal conference will not be held.

Issuing Office; Purchaser/Single Point of Contact		
Purchaser/Single Point	Daineal Malone, PE	
of Contact for this RFP:	County Engineer	
Address:	Linn County Road Department	
	3010 Ferry St SW	
	Albany, OR 97322	
E-mail:	roads.bidding@co.linn.or.us	

Notes:

- This RFP is a Qualifications Based Selection (QBS) with Federal Highway Administration (FHWA) Funding.
- This RFP is advertised as a "Bid Solicitation" in the OregonBuys web-based eProcurement system. See RFP section 0.1 - OregonBuys for information regarding vendor registration and terminology used in OregonBuys platform.

Proposals and all other submittal requirements specified in RFP section 2.4 must be submitted before the Proposal due date and time to the above physical or email address.

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#### Definition of Terms:

The following terms have the meaning provided in <u>OAR 137-046-0110</u>: "Addendum" or "Addenda", "Business Day", "Closing", "Contract", "OAR", "ORS", "Proposal", "Request for Proposal" or "RFP", "Responsive", "Writing". "Business Day" means Monday through Friday, excluding State of Oregon holidays.

### Section 0.0 PROCUREMENT SYSTEMS

Agency will advertise solicitation documents on the County's website and on OregonBuys.

#### 0.1 LINN COUNTY PROCUREMENT

Solicitation documents can be found at the following website: https://www.linncountyor.gov/roads/page/proposals-and-quotes

#### 0.2 OREGONBUYS REGISTRATION REQUIREMENT and VENDOR GUIDANCE

All vendors wanting to obtain solicitation documents through OregonBuys must be registered in OregonBuys. Registration is free. To create a Vendor account, click the blue "Register" button in the top right corner of the OregonBuys website: <u>https://oregonbuys.gov/bso</u>. For registration assistance see <u>online guidance</u>.

Vendors are responsible for ensuring that their Vendor registration and information is current and correct in OregonBuys. Agency shall not be responsible for defective registration or incorrect Vendor information.

#### 0.3 CROSSWALK of TERMS used in OREGONBUYS

Terms used in OregonBuys	Definition	
Amendment	"Addendum" or "Addenda", as defined in OAR 137-046-0110(1); or any form of notice associated with the solicitation, such as intent to award, cancellation, etc., as set forth in the Amendment.	
Bid Opening Date	"Closing" as defined in OAR 137-046-0110(5). In OregonBuys it is the deadline for submitting Quotes (Bids, Proposals or other required responses) required by a Bid Solicitation.	
Bid Solicitation	Any form of solicitation: Request for Proposal, Invitation to Bid, Request for Quote, Request for Information, etc., including notices (sole source notice, intent to participate, etc.). Each Bid Solicitation has a separate page and ID number in OregonBuys.	
Change Order	A formal change to any form of existing contract.	
Master Blanket Purchase Order ("MBPO")	Any form of contract or agreement.	
Quote	Any form of offer submission by Vendors; i.e., Bids, Technical Proposals, Price Proposals, or any other type of offer required by a Bid Solicitation.	
Vendor	Any form of business entity registered in OregonBuys. Only registered Vendors may submit a Quote or enter a contract pursuant to a solicitation advertised in OregonBuys.	

### **1.0 SOLICITATION PURPOSE & CONTRACT OVERVIEW**

#### 1.1 SUMMARY OVERVIEW & PROCUREMENT SCHEDULE

Agency is issuing this Request for Proposals and any Addenda thereto (collectively, the "RFP") to obtain Proposals from qualified consultant(s) for preliminary engineering, design and related services ("Services") for the project described in section 1.2.

For further information regarding the project and Services needed, see sections 1.2 through 1.10 and RFP Attachment B.

Proposers responding to this RFP do so solely at their expense, and Agency is not responsible for any Proposer expenses associated with the RFP.

Procurement Schedule	Date
RFP issue date, deadline for Proposer questions/protests, and	Stated on front page
Closing/Proposal submittal deadline	
Proposal evaluation (and interviews if conducted)	Estimated 12/3/24 to 12/9/24
Notice of Intent to Award	Estimated 12/10/24
*Negotiations	Estimated 1/3/25
Contract start	Estimated 1/31/25

\*Proposer, by submitting a Proposal, commits to and will be expected to make best efforts to accommodate the negotiation schedule above if selected for intent to award. See section 4.7 - Negotiations.

#### 1.2 PROJECT BACKGROUND/SCOPE INFORMATION & LOCATION

The City of Millersburg has jurisdiction of the Waverly Drive, Cox Creek Bridge. This bridge is on an urban local road that provides sole access to city park areas, city bike trail system, a railroad maintenance center, and a portion of the City domestic sewage treatment system.

The 6 span, 116 foot long bridge, was constructed in 1957 with concrete slabs supported on timber caps and pilings. One half of the bridge is currently barricaded to support only one lane of traffic due to the poor condition of one side of the bridge. The bridge is narrow and does not support pedestrian and bicycle traffic.

It is recommended that the proposed, single span bridge, 120 ft. long, accommodate a single, raisedpedestrian way (sidewalk) on the east side of the bridge with two travel lanes to the west. Bikes would use the travel lanes and, if necessary, applicable signage (Bikes on Bridge) could be added. The bridge would accommodate a minimum six-foot-wide sidewalk, with eight feet being preferable. The two travel lanes approaching the bridge will be 12 feet in width, and in addition to, some shy distance from railings and curbs.

The final scope of work will be determined during negotiations with the selected A&E Service Provider, but is expected to include the following tasks listed generally below, and supplemented by RFP **Attachment B** (Consultant Scope of Work), which is attached and incorporated by reference:

- Project Management
- Survey and Mapping
- Environmental Services
- Public Involvement Support
- Utility Coordination
- Geotechnical and Pavement Services
- Hydraulics Related Services
- Bridge Design
- Design Acceptance Package (DAP)
- Right of Way
- Plan, Specification and Estimate (PS&E)
- Bid Assist

The statement of work (SOW) will be developed and negotiated, within the scope advertised in this RFP, with the selected Proposer for inclusion in the Contract. A draft SOW is provided in RFP **Attachment B**, which will be negotiated with the selected Proposer for inclusion in the Contract.

#### Project: Cox Creek (Waverly) Drive Bridge (City of Millersburg)

- Project location: Located on Waverly Drive, 0.27 miles east/northeast of Davidson Street, crossing Cox Creek.
- Estimated cost of the associated project construction: \$3,923,500

- The scheduled bid-let date for the associated construction contract: 1/9/2026
- Estimated date for completion of the A&E and Related Services required under this RFP: 2/10/2026
- Estimated range of costs for the A&E and Related Services required under this RFP: \$0 to \$750,000

#### 1.3 PROJECT PHASES

Agency anticipates the contracted Services will be a phased development as follows:

- Phase I Preliminary Engineering, Design Acceptance and Final Design.
- Phase II Construction contract administration, construction engineering and inspection ("CA/CEI"). Following Final Design, Agency may, at its discretion:
  (a) negotiate and amend the Contract to include all CA/CEI Services (or various elements), or
  (b) assign various elements of CA/CEI Phase to another consulting firm.

#### 1.4 PERIOD OF PERFORMANCE

The schedule for performance of Services needed under the prospective Contract is approximately: February 4, 2025 to July 28, 2026 for Phases I. Completion of Phase II, if applicable, is approximately June 2027.

#### 1.5 QUANTITY OF CONTRACTS AWARDED & OFFER PERIOD

If award is made, it is anticipated that 1 Proposer will be selected for Contract award from this RFP.

A Proposer's Proposal is a firm offer, irrevocable, valid and binding on the Proposer for not less than 180 days following the Closing date for this RFP. Agency may request, either orally or in Writing, that Proposer extend the offer period in Writing.

#### 1.6 FUNDING SOURCE(S):

Federal Highway Administration (FHWA) funding provided by the Infrastructure Investment and Jobs Act (IIJA), state funding provided through the Local Bridge Section, and City of Millersburg funds.

#### 1.7 CONTRACT NOT TO EXCEED AMOUNT & METHOD OF COMPENSATION

Proposers are advised that the award and potential dollar amount of the Contract, including as may be amended within the Scope of Work identified in this RFP, are contingent upon Agency receiving approval of funding for use under this RFP as determined by Agency in its sole discretion.

The anticipated value of the Contract awarded from this RFP is estimated to be in the range of \$0 to \$750,000.

Contingent upon Agency's need, Consultant's performance, and the availability of approved funding, Agency reserves the right to amend the Contract (within the scope of the project described in this RFP) for additional tasks, project phases and compensation as necessary to complete the project.

The method of compensation will be determined by Agency and may be any of the following methods (may include more than one method - "Mixed"):

- Cost Plus Fixed-fee, up to a maximum NTE amount;
- Time and Materials, up to a maximum NTE amount;
- Fixed Price for all Services; Fixed Price per Deliverable; Fixed Price per Milestone;

**ODOT's DBE Policy Statement** is posted at the following Internet address: https://www.oregon.gov/ODOT/Business/OCR/Pages/Disadvantaged-Business-Enterprise.aspx

The DBE Policy Statement applies and is incorporated with the same force and effect as though fully set forth in this RFP.

See RFP Attachment C - Sample Contract, Exhibit E for:

- information on reporting requirements and how credit for DBE participation is determined (for goal and no-goal Contracts), and
- further explanation and description of the DBE program.

A DBE participation goal of **8.5%** has been assigned for the Contract.

#### 1.9 INSURANCE REQUIREMENTS

See RFP Attachment C - Sample Contract for the insurance requirements (Contract Exhibit C) and terms and conditions that will apply to the prospective Contract from this RFP.

#### 1.10 CONTRACT TERMS & CONDITIONS

See RFP Attachment C - Sample Contract, which is incorporated in the RFP by this reference, for the terms and conditions that will apply to the prospective Contract from this RFP. Unless an official Addendum has modified or reserved the right to negotiate any terms and conditions contained in the Sample Contract or exhibits thereto, Agency will not negotiate any term or condition after the solicitation protest deadline, except the SOW and pricing with the selected Proposer(s). Changes to standard Contract terms and conditions may be subject to approval by ODOT.

By Proposal submittal, the selected Proposer agrees to be bound by the terms and conditions as set out in the Sample Contract associated with this RFP, and as they may have been modified or reserved by Agency for negotiation. Any Proposal that is received conditioned on Agency's acceptance of any other terms and conditions or rights to negotiate will be rejected.

### 2.0 INSTRUCTIONS TO PROPOSERS & SUBMITTAL REQUIREMENTS

#### 2.1 PROPOSER QUESTIONS, RFP PROTESTS and REQUESTS FOR CHANGE

All questions, RFP protests or requests for change relating to any aspect of this RFP or the associated project(s) must be submitted in Writing via e-mail to the Purchaser/Single Point of Contact identified on page 1 of this RFP. RFP protests and requests for change submitted after the due date on page 1 of this RFP will not be considered. Any RFP protest or request for change must identify the RFP number and project name it applies to and must be in conformance with requirements set forth in <u>OAR 137-048</u>-0240(1). The foregoing procedures and deadline shall also apply to protests and requests for change respecting the contents of Addenda to the RFP, unless the Addenda specify a different deadline. Failing to follow the foregoing requirements regarding the Single Point of Contact for inquiries may result in Proposal rejection by Agency.

Answers to substantive questions and/or any changes to the RFP will be issued as official Addenda to this RFP, no later than 5 Business Days prior to the Proposal due date.

If a pre-Proposal conference is scheduled, it is so stated on page 1 of this RFP.

#### 2.2 ADDENDA (referred to as "Amendment" in OregonBuys)

When appropriate, as determined by Agency in its sole discretion, changes to Closing/Proposal due date and time or revisions, additions, substitutions, clarifications of the RFP or attached terms and conditions will be issued as Addenda to this RFP. Modifications to this RFP are binding on Agency and Proposer only if in the form of written Addenda issued by Agency. Any such Addenda are incorporated into this RFP as if fully set forth herein. Except for officially issued Addenda, no person has been authorized to provide any other written or oral representation, clarification, warranty or assurance with respect to this RFP or the project.

#### Agency will advertise addenda, if any, on OregonBuys and at the following website:

<u>https://www.linncountyor.gov/roads/page/proposals-and-quotes</u>. Anyone who has downloaded or received a copy of this RFP will only be alerted to the existence of any Addenda by monitoring and downloading from the above website, or by checking with the Purchaser/Single Point of Contact for this RFP. Agency is not responsible for sending Addenda to any potential Proposers.

#### 2.3 MINIMUM QUALIFICATIONS

- 2.3.1 Registered Professional Engineer. In the space provided on the Proposal Cover Sheet (RFP Attachment A), list the name and registration number of at least one Oregon Registered Civil Engineer in active status (or that will be prior to Contract execution) employed by Proposer and proposed to be in responsible charge of engineering Services under the prospective Contract.
- **2.3.2** Registered Professional Land Surveyor (PLS). In the space provided on the Proposal Cover Sheet (RFP Attachment A), list the name and registration number of at least one PLS intending to perform Services under the Contract.
- 2.3.3 Maximum Subcontracting. Proposers are advised that, to be considered for award, the prime consultant must have qualified employees and capacity to self-perform (without subconsultant assistance) at least 51 percent of the Contract value for the proposed services (this does not apply to CA/CEI phase which may be subcontracted without the 51% self-performance requirement). The prime must have qualified employees to self-perform the Services and conduct quality control reviews of the core deliverables required under the Contract. For example, if a bridge design project includes some survey, environmental, and geotechnical services, Agency intends to select a firm with employees qualified to perform bridge design, instead of selecting a survey, environmental, or geotechnical firm that will subcontract the bridge design.

#### 2.4 PROPOSAL & SUBMITTAL REQUIREMENTS

**2.4.1** Time, Date and Place for Submission. Proposals and all required submittal items must be submitted at the email or at the physical address and received by the deadline specified on page 1 of this RFP (or such other deadline as may be revised by Addenda issued by Agency). Agency will not accept Proposals submitted after the Proposal submittal deadline.

If submittal by email or Electronic Procurement System is allowed under this RFP, in the event of a system failure that interferes with the ability of Proposer to submit Electronic Submittals, to protest or to otherwise participate in the procurement, Agency may cancel the procurement or may extend the date and time of receipt of Electronic Submittals by issuing an Addendum immediately after the Electronic Procurement System or electronic mail system becomes available.

**2.4.2 Proposal Page Limit.** The Proposal is limited to **10 pages**. Any pages exceeding this limit will not be considered in the evaluation. Items excluded and not counted as pages toward the page limit include:

- RFP Attachment A Proposal Cover Sheet,
- Any additional forms required in section 2.4.5.
- **2.4.3 Proposal Format.** One page is defined as: one side of any 8-1/2" x 11" page, partial page, tab, index or table of contents that contains substantive text, tables, graphics, charts, resumes, etc. Any page over this size will be counted as 2 pages. Proposals must use a minimum of 12-point font for substantive text (including text in tables or resumes, if any).

Proposal and other submittal requirements must be submitted in the following electronic format: Adobe Acrobat (pdf), or Microsoft Word (docx).

- 2.4.4 Required Proposal Contents. Proposals must include:
  - A completed and signed Proposal Coversheet RFP Attachment A (not counted toward page limit)
  - Responses to the scored criteria identified in RFP section 3 and any other requirements specified in this RFP or the Proposal Coversheet.
  - Any content in the Proposal which Proposer believes to be a trade secret or exempt from public disclosure must be so indicated in conformance with <u>section 5.4</u> of this RFP.

[This is a qualifications based selection. Cost information shall not be submitted with Proposals (see RFP section 4.0).]

- **2.4.5** Additional Required Forms/Documents. The following do not count toward the Proposal page limit and must be submitted with the Proposal package (but separate from Proposal):
  - Signed Subcontractor Solicitation and Utilization Report SSUR (form available at: <u>https://www.oregon.gov/ODOT/Forms/2ODOT/2721.pdf</u>.) [Submit 1 copy of a completed, signed SSUR with Proposal. Also email a copy of the completed, signed SSUR directly to ODOT Office of Equity and Civil Rights (<u>ocr.psk@odot.oregon.gov</u>) within 10 Business Days following Proposal submittal due date. If unable to open form, see <u>instructions for</u> <u>changing browser settings</u>.]
  - Signed Conflict of Interest Disclosure (form available at: http: https://www.oregon.gov/ODOT/Business/Procurement/DocsLPA/COI\_LPA.docx)

(Note: Proposers should review <u>section 4</u> of this RFP to ensure they can comply with submittal requirements for the selected Proposer.)

#### 2.4.6 Proposal Package.

**OPTION 1** - Provide 1 hard copy of Proposal and all required submittal items electronically on a CD, DVD, or USB flash drive, enclosed in a sealed envelope or package, with the following information conspicuously and legibly written or typed on the outside:

- Name and address of proposing firm
- RFP Number
- RFP Title
- RFP Closing date and time
- Name of Agency's Purchaser/Single Point of Contact identified on page 1 of this RFP

**OPTION 2** - Provide all required submittal items electronically to the Purchaser/Single Point of Contact via the email address specified on page 1 of the RFP. Include the RFP number and RFP Title on the email subject line.

**Electronic File Size.** Proposer shall make reasonable efforts to compress or optimize files to not exceed a combined **total of 15 megabytes for all submittals**. For tips on reducing file size, see information at the following links: <u>How to reduce PDF file size</u>; <u>How to reduce the size of Word documents that contain images</u>.

**Electronic Signatures.** By submitting an electronic Proposal in response to this RFP, the Proposer (and if selected for award, also as the Consultant) agrees with the Agency that signatures showing on PDF documents submitted or exchanged electronically are "Electronic Signatures" under ORS Chapter 84 and bind the signing party and are intended to be and can be relied upon by the parties.

#### 2.4.7 Proposal Withdrawals or Modifications.

A Proposal may be withdrawn or replaced with a modified Proposal by written request from Proposer, provided the request (and any modified Proposal) is signed by Proposer's authorized representative and received by Agency prior to the deadline for Proposal submittal.

### 3.0 EVALUATION PROCESS & CONSULTANT SELECTION

#### 3.1 PROPOSAL EVALUATION

Submittals will be reviewed by Agency for responsiveness to all requirements (allowing for minor informalities) set forth in the RFP and RFP Coversheet. Responsive Proposals will be forwarded to an evaluation committee of at least 3 members that will independently review, score and rank Proposals according to the Scoring Criteria set forth in **section 3.2**. Evaluators will independently judge the merits of the Proposals by comparing the requirements and criteria stated in the RFP with the responsiveness and the relevance of experience/qualifications presented in the Proposal. The outcome of the Evaluation process may, in Agency's sole discretion, result in:

(a) notice to Proposers of selection or rejection for Contract negotiation and possible award; or

(b) further steps to gather additional information for evaluation (e.g. checking references, notice of placement on an interview list, requesting clarification).

Agency may require any clarification it needs to understand the Proposer's Proposal. Clarifications may not be used to rehabilitate a non-responsive Proposal.

	Criteria	Maximum Points
1	Knowledge, experience & qualifications of administering and delivering federal aid projects through the ODOT Local Agency Certification Program.	25
2	Knowledge, experience & qualifications of project team members and firm related to the overall project components and ability to self-perform the work. List the services that your firm will be self-performing and which services you will be subcontracting.	20
3	The proportion of time Proposers estimate that the staff would spend on the Architectural, Engineering, or Land Surveying Services or Related Services described in the RFP.	15
4	A list of similar Architectural, Engineering, and Land Surveying Services or Related Services and references concerning past performance, including but not limited to price and cost data from previous projects, quality of work, ability to meet schedules, cost control and contract administration.	10
5	Provide references on similar projects completed in the last 5 years. Include names, addresses, and phone numbers for at least 2 references from 4 groups (Architect/Engineer, Owner, Contractor/Subcontractor, ODOT staff directly associated with the project) totaling 8 references.	10

#### 3.2 EVALUATION CRITERIA

#### 3.3 INTERVIEWS

Agency may, in its sole discretion, conduct and score interviews with the top ranked Proposers following Proposal evaluation. **If interviews are conducted, the following will apply:** 

- A minimum of 3 evaluators shall score the interviews;
- Evaluation and scoring will be based on the criteria in section 3.2;
- Interviews will have a maximum score of 80 points;
- The number of Proposers selected for interviews is at the sole discretion of Agency;
- Interviews may require physical attendance at Agency's offices; however, Agency may elect to conduct interviews via teleconference or video conference. Further details will be included with notification of time and date of interviews, if conducted.

#### 3.4 REFERENCES

Agency reserves the right to investigate references including customers other than those provided in the Proposal or Proposal Coversheet (RFP **Attachment A**). Investigation may include past performance of any Proposer with respect to its successful performance of similar projects, compliance with specifications and contractual obligations, its completion or delivery of a project on schedule, and its lawful payment to employees and workers or any other criteria as determined by Agency.

#### 3.5 METHOD OF AWARD

The scores for Proposer ranking and tentative award will be determined as follows:

- Total Proposal Score = Total of all evaluator scores for a given Proposal, divided by the number of evaluators.
- Total Interview or Follow-up Questions Score (if conducted) = Total of all evaluator scores for a given Proposer, divided by the number of evaluators.
- Final Score = Total Proposal Score plus Total Interview or Follow-up Questions Score (if conducted).

#### 3.6 **RESPONSIBILITY DETERMINATION**

At any time prior to Contract execution, Agency may rescind the intent to award notice, if applicable, and reject any Proposer found to be not responsible.

#### 3.7 INTENT TO AWARD NOTICE

If an apparent successful Proposer is selected, Agency will issue an intent to award notice on the Procurement Systems specified in RFP section 0.0 and will provide a copy of the notice to all Proposers. Award to the apparent successful Proposer is subject to successful negotiation of the Contract.

#### 3.8 PROTEST of CONSULTANT SELECTION

A Proposer who claims to have been adversely affected or aggrieved by the selection of the highest ranked Proposer may submit a written protest of the selection to the Purchaser/Single Point of Contact, identified on page 1 of this RFP, no later than 7 calendar days after the date of the selection notice. Selection protests submitted after this deadline will not be considered. Selection protests must identify the RFP number and project name it applies to, and must be in conformance with requirements set forth in <u>OAR 137-048</u>-0240(2). All costs of a protest shall be the responsibility of the protestor and undertaken at the protestor's expense.

#### 3.9 PUBLICITY

Any publicity giving reference to this project, whether in the form of press releases, brochures, photographic coverage, or verbal announcement, shall be done only after prior written approval of the Agency.

### 4.0 CONTRACT AWARD REQUIREMENTS & NEGOTIATIONS

The submittal requirements in this section 4 apply only to a Proposer that receives intent to award notice following Agency's evaluation and scoring of Proposals (and interviews, if conducted). Cost information shall not be submitted as part of the Proposal package and shall be submitted only when requested by Agency.

Failure to submit required submittal items in a timely manner may result in Agency rescinding the intent to award notice and issuing notice of intent to award to the next ranked Proposer.

#### 4.1 COST INFORMATION

- **4.1.1** Approved Cost Data on File with ODOT. If awardee or its subconsultants have current, approved overhead, salary, or Negotiated Billing Rate (NBR) rate schedules on file at ODOT, awardee and its subconsultants will submit those approved rate schedules and any required certifications to Agency (or Agency may obtain approved rate schedules from ODOT) in lieu of the submittal requirements in section 4.1.3 below. If awardee or any of its subconsultants do not have approved cost data on file with ODOT, then the cost data and certification forms required under section 4.1.3 must be submitted as applicable.
- **4.1.2** Conformance with Federal Cost Principles. Direct and indirect costs as applied to cost estimates and invoices under federally funded Agency Contracts and subcontracts must be in conformance with Federal Cost Principles (48CFR Part 31). Costs may not be discriminatory against the Agency. It is discriminatory against the Agency if employee (or owner/sole proprietor) compensation (in whatever form or name) is in excess of that being paid for similar non-Agency work under comparable circumstances. Any cost data submitted by Proposer pursuant to this solicitation may be shared with ODOT, FHWA and Oregon Secretary of State as necessary for audit purposes.
- **4.1.3 Billing Rates.** Following notice of intent to award, the selected Proposer shall submit (electronically in Excel format) billing rate information within 5 Business Days of request by Agency. Compensation related forms/templates are available at <a href="https://www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx">https://www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx</a>. Billing rate information must include either "Direct Salary and Overhead Information" or "Negotiated Billing Rate Schedule" described below, as applicable to your firm's (and subconsultant's) accounting method:

#### a. Direct Salary and Overhead Information:

- (i) Direct Salary Rate Schedule. This schedule includes the name, classification and actual direct salary rate for each employee that may be used under the Contract. The direct salary rate schedule will not be included in the Contract but will be used by Agency for negotiations and to develop an approved billing rate schedule, if applicable, for the Contract.
- (ii) Calculation of Overhead Rate (if applicable for your firm's type of accounting). Current overhead accounting information on a form using the standard 3-column format. Firms shall condense or expand categories as applicable to the firm's method of accounting. Firms that have not established an overhead rate, based upon their particular financial reporting methodology, shall be reviewed by Agency to determine whether an overhead rate schedule will be required or a negotiated non-provisional billing rate will be used. If a firm does calculate overhead, the information must be submitted to Agency and updates must be provided annually.
- (iii) Cognizant Audit If an audit for the most recent fiscal year has been completed for your firm (or any sub-contractors) by the appropriate federal cognizant agency, this must be submitted with the billing rate information (electronically in PDF format).

- (iv) Independent Audit If an audit for the most recent fiscal year has been completed for your firm (or any sub-consultants) by an independent, third party accounting firm, this must be submitted with the billing rate information (electronically in PDF format).
- (v) Certification of Indirect Rate <u>FHWA directive 4470.1A</u> requires firms to submit a signed certification of compliance with <u>48CFR Part 31 Federal Cost Principles</u>. If your firm calculates overhead, submit a signed copy of the <u>Certification of Final Indirect Costs form</u>.
- b. Negotiated Billing Rate Schedule (NBR): This schedule is used by firms that do not have an acceptable overhead rate with independent audit as part of their normal accounting practice and Agency determines it is in the best interest of the government to negotiate fully loaded billing rates. The negotiated billing rate schedule includes rates that are fully loaded with direct salary, indirect expenses and profit. Provide name, classification (project role) and fully loaded rate for each employee. Use of a negotiated billing rate schedule may be required by Agency (or ODOT) for consultants or subcontractors that do not have audited overhead rates or that, upon cursory review, appear not to be calculating overhead correctly and in conformance with Federal Cost Principles.
- **4.1.4 Cost Estimate Breakdown.** The cost estimate must include a detailed breakdown of the costs for each element of the work regardless of compensation method. Unless specified otherwise in the solicitation, Contract, or by Agency, the estimate must identify:
  - the proposed staff assignments (job classifications, and names if requested) and hours per task and sub-task.
  - an itemization of any necessary rental equipment, flaggers, travel and other direct non-labor expenses (estimates from vendors or other documentation shall be provided upon request);
  - hours per task and sub-task for each subconsultant with job classifications (and names if requested), and itemized direct non-labor costs.
  - **Contingency Tasks.** Each contingency task, if any, must be shown as a separate line-item on the estimate with same requirements for breakdown of costs as non-contingency tasks. The total amount for a contingency task must include all labor, overhead, profit, and direct non-labor expenses for the contingency task. Do not include expenses for contingency tasks in the amounts or totals for non-contingency tasks; they must be reported separately on the estimate.

#### Notes:

- Consultant must submit their initial cost estimate breakdown without profit included. Profit will be negotiated and added to cost estimates following agreement on the SOW, labor costs and expenses.
- Do not add profit to costs based on fully-loaded NBR billing rates. Profit is already included in the hourly rate.

#### 4.2 CERTIFICATION REGARDING DEBARMENT & OTHER RESPONSIBILITY MATTERS

Within 5 Business Days of receipt of notice of intent to award, for Contracts that will exceed \$150,000 (including as may be amended) the selected Proposer shall submit a signed Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters form available on line at: <u>https://www.oregon.gov/ODOT/Business/Procurement/DocsPSK/CertFederal.pdf</u> (ref 48CFR 52.209-5)

#### 4.3 CERTIFICATES OF INSURANCE

Prior to Contract execution, selected Proposer shall provide certificates of insurance via e-mail for insurance coverage required in **Exhibit C** of the Sample Contract (RFP **Attachment C**).

#### 4.4 COMMITTED DBE BREAKDOWN & CERTIFICATION FORM

The selected Proposer must submit, prior to execution of the Contract (during negotiations), a completed and signed Committed DBE Breakdown and Certification Form (one for each DBE sub). Instructions for

submittal are on the "Instructions" tab of the form. The **Committed DBE Breakdown and Certification Form**-AE is available at: <u>https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx</u>. For additional information, see **Exhibit E** of the Sample Contract (RFP **Attachment C**).

### 4.5 TAX ID NUMBER

The selected Proposer shall provide their Taxpayer Identification Number (TIN) and backup withholding status on a completed <u>W-9 form</u> if either of the following apply:

- When requested by Agency prior to Contract execution, or
- When the backup withholding status or any other information of Proposer has changed since the last submitted W-9 form, if any.

#### 4.6 BUSINESS REGISTRY NUMBER/REGISTERED AGENT

If selected for Contract award, Proposer must be duly authorized by the State to transact business in the State before executing the Contract. The selected Proposer shall submit a current Oregon Secretary of State business registry number (unless operating as your <u>real and true name</u>). See process for obtaining a business registry number. All Corporations and other business entities (domestic and foreign) must have a Registered Agent in Oregon. See requirements and exceptions regarding <u>Registered Agents</u>. For more information, see <u>Oregon Business Guide</u>, How to Start a Business in Oregon and Laws and Rules. The titles in this subsection are available at the following Internet site: <a href="https://sos.oregon.gov/business/Pages/default.aspx">https://sos.oregon.gov/business/Pages/default.aspx</a>.

#### 4.7 NEGOTIATIONS

Agency will negotiate in the best interest of the government, the SOW, costs, and any provision(s) Agency has indicated in the RFP or any Addenda it will negotiate. Agency will, either orally or in Writing, formally terminate negotiations with the highest ranked Proposer if Agency and Proposer are unable for any reason to reach agreement on a Contract within a reasonable amount of time. Agency may thereafter negotiate with the second ranked Proposer, and if necessary, with the third ranked Proposer, and so on until negotiations result in a Contract. Agency may end this solicitation if negotiations do not result in a Contract within a reasonable amount of time, as determined in the sole discretion of Agency.

### 5.0 GENERAL TERMS & CONDITIONS FOR THIS RFP

#### 5.1 NON-DISCRIMINATION

Agency, in accordance with the Title VI of the Civil Rights Act of 1964, 78 Stat. 252. 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all Proposers that it will affirmatively ensure that all business enterprises will be afforded full opportunity to submit Proposals in response to this solicitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

#### 5.2 FUTURE WORK LIMITATIONS

(For these purposes, "Affiliate" or "Affiliates" of a consultant means any Person or entity that controls, is controlled by or is under common ownership or control with that consultant.)

- If a consultant is awarded a Contract to prepare an Environmental Impact Statement, Environmental Assessment, Categorical Exclusion or designs and plans/specifications for a project, that consultant and its Affiliates will not be eligible to propose/bid on or enter into a Contract to construct that project.
- If preliminary engineering and final design will be performed under the prospective Contract, Agency is not obligated to proceed with final design for any alternative. All reasonable alternatives

will be evaluated and given appropriate consideration, and consultant may not proceed with final design until the relevant NEPA decision documents have been issued (e.g., Categorical Exclusion, Finding of No Significant Impact, or Record of Decision).

 If a consultant or any Associate of consultant enters into personal services Contract(s) with Agency for the purpose of advising or assisting in developing specifications, a scope or statement of work, an invitation to bid, an RFP or other solicitation documents and materials related to a given procurement, the consultant may not be eligible to propose/bid on the prospective procurement (based on a case-by-case assessment by Agency, ODOT or FHWA).

### 5.3 ELECTRONIC FILES LINKED OR ATTACHED TO RFP

This RFP document must be viewed electronically to access files, attachments, forms, provisions or other documents that are attached electronically (shown as icons) or provided via hyperlinks from the Internet in this RFP. All files, attachments forms, provisions or other documents attached electronically or linked from the Internet are incorporated in this RFP with the same force and effect as though fully set forth in this RFP.

#### 5.4 PUBLIC RECORDS

Proposals shall be open to public inspection in accordance with ORS 279C.107. If a Proposal contains any information that may be considered exempt from disclosure as a trade secret under either ORS 192.311(2) or ORS 646.461(4), or under other grounds specified in Oregon Public Records Law, ORS 192.311 through 192.478, the Proposer must clearly designate on or with the Proposal the portions of its Proposal which Proposer claims are exempt from disclosure, along with a justification and citation to the authority relied upon. Identifying the Proposal in whole as trade secret, confidential or otherwise exempt from disclosure is not acceptable. In such circumstances Agency will require Proposer to submit a memorandum citing the statutory justification for each specific area of the Proposal that Proposer claims to be exempt. If Proposer fails to identify, on or with the Proposal, the portions of the Proposal Proposer claims are exempt from disclosure and the authority used to substantiate that claim, Proposer is deemed to have waived any later claim of an exemption or request for nondisclosure of that information. Agency will not be held liable for any disclosure of information which Proposer considers to be exempt from disclosure if required by a Public Records Order. Notwithstanding any rights under 17 USC 101 et seq., (the United States Copyright Act), when Agency is required to provide copies of the non-exempt portion of the Proposal pursuant to a Public Records Order, Proposer hereby grants a license to Agency to copy those portions of the Proposal that are subject to disclosure.

#### 5.5 USE of RECYCLED PRODUCTS

Consultants/contractors shall use recyclable products to the maximum extent economically feasible in the performance of the Contract work set forth in this document.

#### 5.6 RFP CANCELLATION

Agency may reject any or all Proposals and may cancel this RFP at any time if doing either would be in the public interest as determined by Agency. In no event shall Agency have any liability for the cancellation of this solicitation.

### ATTACHMENT A - PROPOSAL COVER SHEET

#### Part I - Proposer Information and References

#### RFP#: BS148B; Project Name: Cox Creek (Waverly) Drive Bridge (City of Millersburg)

#### Legal Name of Firm as provided to IRS: \_\_\_\_\_

#### DBA Name (if different than legal name): \_\_\_\_\_

DUNS Number:	Is Proposer registered as a foreign corporation in Oregon? Yes	
Corporation Professional Corporation	n ☐ Ltd. Liability Company ☐ Partnership ☐ Limited Partnership ☐ Ltd. p ☐ Other:	
State of Incorporation/Organization:	<u>.</u>	
Mailing Address:		
Type name of authorized contact for this R	(FP:	
Email address:		
Telephone:	Fax:	
Type name of person(s) authorized to sign	Contract:	

#### MINIMUM QUALIFICATIONS

#### Registered Professional Engineer per requirements of RFP section 2.3.1:

Name	Registration Number

#### Registered Professional Land Surveyor (PLS) per requirements of RFP section 2.3.2:

Name	Registration Number

#### REFERENCES

Provide references for 3 clients for which Proposer has provi this RFP (please verify contact information):	ded, in the last 3 years, similar services to those described in
1) Name of Firm:	_Reference Contact Person
Telephone:email	
Project Title:	
Scheduled Contract Completion Date:	Actual Contract Completion Date:
Contract Est. Cost: Contract Actual Cost:_	
Project Delivery Method: DBB; CMGC; DB;	
2) Name of Firm:	_Reference Contact Person
Telephone:email	
Project Title:	
Scheduled Contract Completion Date:	Actual Contract Completion Date:
Contract Est. Cost: Contract Actual Cost:_	
Project Delivery Method: DBB; CMGC; DB;	
3) Name of Firm:	Reference Contact Person
Telephone:email	<u> </u>
Project Title:	
Scheduled Contract Completion Date:	Actual Contract Completion Date:
Contract Est. Cost: Contract Actual Cost:_	
Project Delivery Method: DBB; CMGC; DB; .	

### ATTACHMENT A - PROPOSAL COVER SHEET

#### Part II - Proposer Certifications

#### By signing below, the authorized representative on behalf of Proposer certifies that:

- 1. Proposer agrees to and shall comply with the terms and conditions of the sample Contract associated with this RFP and all requirements, specifications and terms and conditions contained within the RFP (and all Addenda, if any).
- 2. All contents of the Proposal (including any other forms or documentation, if required under this RFP) and this Proposal Cover Sheet, are truthful and accurate and have been prepared independently from all other Proposers, and without collusion, fraud, or other dishonesty. No attempt has been made or will be made by Proposer to induce any other person to submit or not submit a Proposal. Proposer understands that any statement or representation it makes, in response to this solicitation, if determined to be false or fraudulent, a misrepresentation, or inaccurate because of the omission of material information could result in a "claim" (as defined by the **Oregon False Claims Act**, ORS 180.750(1)), made under the resulting Contract being a "false claim" (ORS 180.750(2)) subject to the Oregon False claim under that Act.
- 3. Proposer has available the appropriate material, equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise, necessary to demonstrate the capability of the firm to meet all contractual responsibilities.
- 4. Proposer is not experiencing financial distress or having difficulty securing financing, and has sufficient cash flow to fund day-to-day operations throughout the proposed Contract period.
  - a. Within the last 3-year period, has your firm filed a bankruptcy action, filed for reorganization, made a general assignment of assets for the benefit of creditors, or had an action for insolvency instituted against it? YES [] / NO [].
  - b. If "YES" above, indicate the filing dates, jurisdictions, type of action, ultimate resolution, and dates of judgment or dismissal, if applicable:
- 5. Proposer has not been notified within the last 3-year period of any delinquent Federal, State or local taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied.
- 6. Proposer, its principals and major subcontractors (major subcontractor is defined as receiving 10% or more of the total Contract amount) have not presently, or within the last 3 years, been convicted of, indicted for, or otherwise criminally or civilly charged by a governmental entity with the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) Contract or subcontract; violation of federal or state antitrust statutes relating to the submission of bids or Proposals; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property.
- 7. Proposer has not and will not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation or national origin. And, pursuant to ORS 279A.110, Proposer has not and Proposer will not discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business certified under ORS 200.055.
- 8. Proposer has an operating policy supporting equal employment opportunity. If proposing firm has 50 or more people, Proposer also has a formal equal opportunity program.
  - Does Proposing firm have 50 or more employees? ☐ Yes, ☐ No.
  - Does Proposing firm have a formal equal employment opportunity program? Set Yes, No

Firms of 49 people or less do not need to have a formal equal employment opportunity program, but shall have an operating policy supporting equal employment opportunity. Firms of 50 people or more shall also have a formal equal employment opportunity program.

9. Proposer's employees and agents are not included on the list entitled "Specially Designated Nationals and Blocked Persons" maintained by the Office of Foreign Assets Control of the United States Department of the

Treasury and currently found at <u>https://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx</u>

- 10. Proposer and its Principals, and any of its prospective subcontractors for this award are not presently debarred, suspended, disqualified, proposed for debarment or declared ineligible for the award of contracts by any federal agency or agency of the State of Oregon, and does not have an Active Exclusion on the System for Award Management (SAM) which is available at <a href="https://sam.gov/">https://sam.gov/</a>.
- 11. Proposer, acting through its authorized representative, has read and understands the RFP instructions, specifications, and terms and conditions contained within the RFP (including the sample Contract) and all Addenda, if any. The Proposal submitted is in response to the specific language contained in the RFP, and Proposer has made no assumptions based upon either (a) verbal or written statements not contained in the RFP, or (b) a previously-issued RFP, if any.

Signature:		Date:	
	(President or Authorized Representative of Proposer)		

Print Name:	Title:	

### ATTACHMENT B - STATEMENT of WORK

#### TASK 1 PROJECT MANAGEMENT

Consultant shall provide management and coordination of Services under this SOW for delivery of Tasks and Deliverables according to the agreed upon delivery schedule.

#### 1.1 Administration & Record Keeping

Consultant shall:

• Prepare a Quality Assurance/Quality Control ("QA/QC") Plan for Agency review and approval. The QA/QC Plan must be developed consistent with requirements of ODOT's Guidance/Template for Consultants" available online at:

http://www.oregon.gov/ODOT/HWY/OPL/docs/SEOPL/Consultant\_Quality\_Plan\_Model.doc.

- Prepare a Project design schedule using the Critical Path Method, prepared with MS Project software or approved equal. The Project schedule must include, but is not limited to: all major authorized tasks as agreed upon by the Parties, Project design team meetings, and milestones (including, but not limited to, draft and final Design Acceptance Package ("DAP"), National Environmental Policy Act ("NEPA") Approval, Right of Way ("R/W") Authorization, Preliminary, Advance and Final PS&E and Advertisement date specified in this SOW and required to complete all Services under this Contract.
- Consultant shall update the Project schedule during the Project if milestone or deliverable due dates are modified. For budgeting purposes, it is estimated that up to 2 Project schedule updates will be necessary.
- Prepare invoices and progress reports according to the requirements set forth in the Compensation Exhibit of the Contract. Each progress report must:
  - Include a summary of previous period's activities and the planned activities for the upcoming period;
  - Identify percentage completed of each Task/Deliverable;
  - Reconcile the budget with the actual amount billed to date;
  - Identify unresolved issues and concerns that may affect the SOW, schedule and budget necessary for Services.

For budgeting purposes, it is assumed that up to 19 progress reports will be necessary.

• Develop and maintain a Project file to include survey and engineering computations, assumptions, meeting agendas and minutes, working drawings, quality control and review documentation, correspondence, and memoranda. (See Contract Terms & Conditions, Records Maintenance; Access)

#### 1.1 Consultant Deliverables and Schedule

Consultant shall submit:

- QA/QC plan (.pdf) to APM within 7 calendar days of NTP.
- Draft Project design schedule (.pdf) to APM within 7 calendar days of NTP.
- Final approved Project design schedule (.pdf) to the APM within 1 week following draft review comments.
- Updated Project design schedule (.pdf) to APM, as necessary, via timeline agreed to by APM.
- Progress reports and invoices (.pdf) to APM no later than the 20th calendar day of each month following the reporting period.

#### 1.2 Coordination

Consultant shall:

- Coordinate with the APM as the main point of contact for coordination and management of Consultant Services under the Contract.
- Contact other Agency staff and regulatory agency staff, if necessary throughout the Contract, to gather any additional information needed for the Project, Project site, regulations and guidance.
- Provide overall management, direction and coordination of staff (including sub-consultants, if any) to include any necessary internal Consultant staff meetings.

- Contact APM via telephone or other agreed upon communication means on a bi-weekly basis to provide Project status information.
- Prepare meeting minutes and phone memoranda as requested by APM.

#### 1.2 Consultant Deliverables and Schedule

Consultant shall provide:

• On-going coordination and communication as needed to appropriately manage the Services under this Contract (no tangible deliverables for this task).

Meeting Road Department with Agency, Consultant's Project Manager ("PM") and other necessary Consultant staff in attendance. Consultant shall prepare the meeting agenda with input from the Agency. The purpose of the Project kickoff meeting is to review Project issues such as SOW; work products and deliverables; schedules; budgets; ROW; utility coordination/design; design criteria; guidance documents; standards and QC. Consultant shall schedule Project kickoff meeting within 10 business days of NTP.

Consultant shall prepare draft meeting minutes for review by Agency. For budgeting purposes, it is assumed that up to 4 Consultant staff shall attend the 2 hour Project kickoff meeting, excluding travel time.

#### Project Development Team Meetings

Consultant shall organize, conduct, prepare for and attend up to 6 Project Development Team ("PDT") Meetings; up to 2 via telephone and up to 4 in-person or virtually. Each in-person PDT meeting will be held at the Agency Road Department or virtually with Agency, Consultant's PM and other necessary Consultant staff in attendance. Consultant shall prepare the meeting agenda with input from the Agency. Consultant shall prepare draft and final meeting minutes to be distributed to Agency and all other meeting participants. For budgeting purposes, it is assumed that up to 2 Consultant staff shall attend each in-person PDT meeting.

#### 1.3 Consultant Deliverables and Schedule

For each meeting, Consultant shall submit:

- Meeting agenda submitted electronically to APM and all other meeting participants at least 5 business days prior to meeting.
- Draft meeting minutes submitted electronically to APM and all other meeting participants within 2 business days after meeting.
- Final meeting minutes submitted electronically to APM and all other meeting participants within 7 business days after meeting.

#### TASK 2 SURVEY

Consultant shall survey this Project for the areas as described in Section A of this SOW unless otherwise noted in specific tasks.

Consultant shall adhere to the standards stipulated by the ORS 672. Consultant's Professional Land Surveyor, registered in the State of Oregon ("State"), shall review and stamp as "Approved" all survey related deliverables and shall be responsible for all land surveying services including conformance to all State statutes pertaining to survey and land boundary laws under this SOW. These include, but are not limited to, the following State statutes: ORS Chapters 92, 93, 209 and 672.

#### 2.1 Research

Consultant shall obtain the research data for the area as described in Section A of this SOW.

Consultant shall perform data research as necessary to prepare for and support Project activities, and to produce Project maps and reports as called for in subsequent tasks. The typical records required for research are, but not limited to; vesting deeds, land sales contracts, Linn County ("County") assessor plats and road

records, subdivision plats, General Land Office plats, Agency or ODOT R/W drawings, as applicable, railroad maps, County surveys, related easements, road dedications and vacations.

#### Existing Water Way Data

Consultant shall research and obtain maps and data about rivers, creeks, and streams, springs or flowing water in or near the Project area from Agency, federal, State and other governmental agencies. Consultant shall include items such as but not limited to: Federal Emergency Management Administration ("FEMA") Flood maps, tide gage data and stream navigability per Division of State Lands designation.

#### 2.1 Consultant Deliverables and Schedule

Consultant shall incorporate information from this task into the deliverables listed in Task 2.2, Task 2.3, Task 2.4, Task 2.5 and Task 2.7 as required for delivery of documents in subsequent tasks.

#### 2.2 Horizontal and Vertical Control Network

The purpose of this task is to provide the means by which the Project can be located relative to horizontal and vertical datum, map projection, and coordinate systems. Consultant shall establish a horizontal and vertical control network using the datum associated with the Project area or as approved by the Agency.

#### Existing Horizontal/Vertical Control Stations

Consultant shall research and obtain data about horizontal and vertical control points as required for the Project area including triangulation stations, Global Navigation Satellite System ("GNSS") stations, vertical benchmarks, and prior Project control surveys from Agency, federal, State and other governmental agencies.

Consultant shall establish horizontal control according to ODOT standards using Terrestrial (Total Station), Global Navigation Satellite Systems ("GNSS") (Static or Rapid Static) or a combination of both. Consultant shall set and adjust control points in conformance with ODOT guidelines.

Consultant shall use monuments that comply with ORS 92.060 and ORS 209.250, or 5/8" Rebar with plastic or aluminum caps, or other Agency approved control points, for the GNSS and network points. Consultant shall establish a minimum of 3 GNSS control points through the length of the survey. A minimum of at least 3 intervisible control points is required through the Project area.

Consultant shall establish vertical control using differential leveling. Consultant shall get Agency approval before using other methods such as trigonometric leveling and elevations derived from GNSS and identify with Agency the accuracies of determined methods prior to proceeding.

#### 2.2 Consultant Deliverables and Schedule

Consultant shall:

- Place control points in the ground at the Project location.
- Incorporate the information listed below into the deliverables listed in Task 2.4 and Task 2.5 as required for delivery of documents in subsequent tasks:
  - An adjustment report for 1 or more of the following: Least Squares adjustment for networks, an approved traverse adjustment method for traverses and a GNSS adjustment report when using GNSS, as necessary.
  - An American Standard Code for Information Interchange ("ASCII") file containing the coordinates for every network point set and found.
  - If the levels were electronically processed then 1 copy each of the following: original raw level file as collected in the field, ASCII file showing level closure data, ASCII file with elevations on all network points and an ASCII file showing the level rod readings, as necessary.
  - Original field notes for the control network and 1 scanned copy of the original field notes (.pdf).

- An Autodesk Civil 3D design file (.dwg) containing all the set and tied control points to show elevations.
- An Autodesk Civil 3D file (.dwg) containing all vertical and horizontal control points stored as cogo points to show elevations.

#### 2.3 Monument Recovery

The purpose of this task is to address the requirements of ORS 209.140, ORS 209.150 and 209.155, and other survey related statutes for construction Projects.

Consultant shall survey for but not limited to: Government corners, geodetic control stations, benchmarks, R/W monuments, property boundary markers, and roadway alignment markers.

#### Identify, Search and Recover Monuments

Consultant shall recover existing monuments to preserve the locations of any monuments of record that are endangered by any activity related to the Project and to resolve roadway and property lines. Consultant shall provide a record (field notes) of monuments searched for, the date of the search and the results of the search.

#### Field Survey of Recovered Monuments

Consultant shall locate, measure and document the location of survey markers and monuments of record for property boundaries and any R/W needed within the areas.

#### 2.3 Consultant Deliverables and Schedule

Consultant shall incorporate the information gathered in this task including field notes into the deliverables listed in Task 2.4 and Task 2.5 as required for delivery of documents in subsequent tasks.

#### 2.4 Topographic Data, Detailed Base Map and Digital Terrain Model ("DTM")

The purpose of this task is to collect the existing topographic features and create a detailed basemap and DTM for the Project.

#### **Existing Utility Records**

Consultant shall research and obtain available facility maps and as-built construction plan data pertaining to utilities in or near the Project area from the Agency, One-Call Service, State or other governmental agencies and utility companies.

#### Topographic Data Collection

Consultant shall collect topographic data between the boundaries described in Section A of this SOW.

Consultant shall collect and tie topographic data of man-made and natural features using a variety of Agency approved methods. These methods include but are not limited to: collecting the data using terrestrial (Total Station), GNSS (Static, Rapid Static or Real time Kinematics ("RTK")), 3D Laser Scanning (Mobile or Static), or station and offset.

Consultant shall contact Oregon Utility Notification Center to request pre-survey utility locates. Consultant shall keep the locate request number and ticket information within the Project file.

Consultant shall record in the field notes the utility ownership, if available, when describing the line data points. Consultant shall record all visible utility identifications in the field notes, such as numbers shown on power and telephone poles as necessary, vault tags, telephone pedestals (aka risers), cabinets, meters, fences or screened enclosures for gas regulators, and sanitary sewer pump stations. This data is needed for the Agency or Consultant to communicate where the facilities may be in conflict with the Project.

Consultant shall measure and record all utility facility structures (e.g. concrete pads, top slab of vaults, pump station housing, barrier screens or fenced enclosures). Consultant shall make a request to the utility owner to pull the cover whenever a manhole is found locked or bolted.

Consultant shall collect the hydraulic, bridge and culvert information in accordance with the "ODOT Hydraulics Manual" on streams and rivers that pass under or are parallel to any roadways in the area. Consultant shall provide for the hydraulic feature, a profile of the thread 250 feet up and 250 feet down stream of the Project. Consultant shall provide cross sections 250 feet up and down stream of the structure or utilize hydrographic surveying techniques to collect required data. A DTM is also acceptable.

Consultant shall tie environmental and archaeological features that have been identified within the Project area. These features include, but are not limited to, wetlands, high water mark, Threatened and Endangered ("T&E") species, hazmat sites, archaeology sites and sensitive plants.

#### Detailed Basemap

Consultant shall take applicable topographic data collected in this subtask and create a detailed basemap file. A detailed basemap has all features drafted to Agency provided criteria.

#### DTM

Consultant shall create a 3D digital terrain surface using all relevant topographical data collected in this subtask.

Consultant shall collect the topographical data to create points and break lines in adequate quantity and in proper placement, to accurately represent the surface of the ground. Consultant shall collect confidence points in the field and generate a confidence point report, as outlined in the ODOT Survey Policy and Procedure Manual. The topographical data and confidence points must meet ODOT Criteria. Consultant shall generate 0.2 foot minor contours and 1 foot major contours throughout the DTM for a QC analysis of the surface.

#### 2.4 Consultant Deliverables and Schedule

Consultant shall submit the following deliverables electronically (.pdf), unless otherwise indicated, to APM with the draft DAP deliverable (Task 13):

- 1 copy of field notes;
- Copy of the Autodesk Civil 3D Computer Aided Design and Drafting ("CADD") Files (\*.dwg) Detailed Base Map with Civil 3D DTM;
- All files for the network control points in (ASCII) format;
- Files of listing kits;
- Files of survey research;
- Files of tax maps;
- Confidence Point Report; and
- Control Point Worksheet within construction documents showing locations of identified control points in relation to the Project, including datum, description, and whether found or set.

#### 2.5 R/W - Boundary Resolution

The purpose of this task is to identify the location of the existing Centerline(s), R/W lines and property line(s) as necessary, to perpetuate the location of the monuments found, to document the control used for this Project area, and establish property lines for area calculations when new R/W is acquired. This task addresses the requirements of ORS 209.150 and 209.155 and other survey related statutes.

#### Existing Vesting Deeds and Property Ownerships

Consultant shall obtain a "Trio listing kit" (typically provided by a Title Company). Consultant shall identify property ownership within and adjacent to the Project site by investigating property deeds and County tax records. Consultant shall itemize and report property ownership and owner contact information to Agency. Consultant shall submit each deed in its own electronic file. Consultant shall include all vesting deeds referenced in the Property Vesting Deeds if needed to resolve the property boundary.

#### Existing R/W Records

Consultant shall research and obtain copies of surveys, subdivision plats, and land partition plats filed in the County surveyor's office related to the properties potentially impacted by the Project. This information is used to find monuments that might be impacted from the Project and establish property lines for area calculations when new R/W is acquired.

Consultant shall research and obtain copies of County assessor maps, General Land Office plats, and County road records related to the properties potentially impacted by the Project.

Consultant shall research and obtain available data about Government Public Lands Survey Corners and their references in the Project area as defined in the SOW.

#### Resolve R/W and Property Boundaries

Consultant shall resolve the location of the R/W within the present limits as described in this SOW.

Consultant shall resolve identified R/W centerlines alignments, R/W lines and property boundaries abutting the roadway and along the proposed route of construction, using accepted concepts and rationale methods of survey professional judgment. Consultant shall evaluate the available evidence for relevance, adequacy, and reliability; use professional judgment in determining the type and quantity of evidence available, and the influence given each factor; and determine a best-fit with the evidence and probable location of R/W alignments and property boundaries for the area as described.

#### 2.5. Consultant Deliverables and Schedule

Consultant shall submit the following deliverables (.pdf) to the APM with the draft DAP deliverable (Task 13):

- Itemized property ownership and owner contact information. Consultant shall submit each deed in its own .pdf.
- A detailed narrative of available evidence, desirable evidence not available, rationale for decisions made, and a summary of the conclusions in the establishment of the R/W centerline, R/W lines (including all jogs) and property boundary lines.

#### 2.6 Record of Survey / Control, Recovery, Retracement

### Control, Recovery, Retracement Record of Survey ("ROS")

The destruction of found monuments necessitates a record of survey (ORS 209.150,155).

If the Project will impact property or existing survey monuments, Consultant shall create a ROS which meets County and ORS requirements. The survey(s) must be prepared for 18-inch by 24-inch sheet plots. The "**Control**" survey must consist of Geodetic and Terrestrial points set for the Project. The "**Recovery**" is the documentation of the monuments recovered for the Project. The "**Retracement**" is a record of resolved R/W centerlines, R/W lines and/or property boundaries. These surveys may be combined or separate surveys as directed by Agency.

Consultant shall submit a draft ROS to Agency for review. Consultant shall address comments received from Agency and submit the final ROS for filing to the County in the format required.

#### 2.6 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft ROS to APM with the draft DAP deliverable (Task 13).
  - Final ROS to the County for filing within 2 weeks of receipt of comments from the APM.
  - Copy of Final ROS to APM upon acceptance by County for filing.

#### 2.7 R/W Engineering (Mapping & Descriptions)

The purpose of this subtask is to prepare R/W engineering products used in the acquisition of property. The estimated number of R/W files is 3. These products are:

- 1. R/W acquisition map;
- 2. Autodesk Civil 3D CADD files used to prepare the acquisition map;
- 3. POR-stamped R/W legal descriptions and exhibits; and
- 4. R/W basemap and alignment file (.alg).

Consultant shall prepare the R/W acquisition map, exhibits, and legal descriptions in accordance with ODOT guidelines.

#### 2.7 Consultant Deliverables and Schedule

Consultant shall submit the following deliverables 2 weeks prior to NTP for the R/W acquisition phase per Task 1.1 Project design schedule:

- POR-stamped legal descriptions and exhibits (.pdf) to APM.
- R/W staking.
- Final R/W acquisition map (.pdf and CADD) to APM.

#### TASK 3 ENVIRONMENTAL SERVICES

Consultant shall complete necessary field and literature investigations to provide Agency and ODOT environmental documentation and permits required for completion of this Project.

Consultant shall complete the appropriate environmental services tasks presented below based on the DAP.

Consultant is responsible for obtaining all Right of Entry ("ROE"s). Consultant shall not conduct any fieldwork outside of Public R/W or property until all ROEs for private property have been obtained and are in field staff's possession.

#### 3.1 NEPA Categorical Exclusion ("CE") and Programmatic CE ("PCE") and Supporting Documentation [RESERVED]

#### 3.2 Archaeological Resources

All archaeological sub tasks must be completed by registered professional archaeologists who meet the Secretary of the Interior's professional standards for Archaeology (<u>36 Code of Federal Regulations ("CFR") 61,</u> <u>Appendix A</u>) and who have been "qualified" through the <u>ODOT Cultural Resources Consultant Qualification</u> <u>Training Program.</u>

#### 3.2.1 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 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 provide the ODOT Archaeologist with a minimum of 5 business days advance notice prior to Field Reconnaissance.

Consultant shall examine the following:

- the State Historic Preservation Office ("SHPO") database in Salem, OR;
- appropriate Tribal Historic Preservation Office ("THPO") database if APE is within a recognized reservation boundary;
- GLO maps;
- Sanborn Fire Insurance Maps; and
- Other records archives (i.e. historical societies; tribal archives) for known/potential prehistoric and historic archaeological resources within a 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 <u>SHPO guidelines</u>. 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; and
  - 7. Total acreage of impact.
- Results of SHPO/THPO database search including:
  - 1. Brief summary of previous archaeological research completed within 1 mile of APE; and
  - 2. Brief summary of recorded archaeological features within 1 mile of APE; include eligibility discussion if available.
- Results of and Sanborn map review including:
  - 1. 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 for appropriate level of additional survey and subsurface exploratory probing, if any;
- Site and isolate forms (hard copies) for newly discovered archaeological sites and isolates. Consultant shall also 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.

#### 3.2.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Baseline Report (MS Word) to ODOT Region Environmental Coordinator ("REC") and APM for review within 4 weeks of Final Baseline Report (Task 3.2.1).
- Final Baseline Report to REC and APM (MS Word and .pdf) 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### C3.2.2 Phase I Archaeological Investigation with Technical Report (CONTINGENCY)

The purpose of this task is for Consultant to establish the presence or absence of archaeological sites in, or eligible for the NRHP, which may be in the APE for the Project. Investigations under this task must comply with Guidelines for Conducting Field Archaeology in Oregon, The Phase I investigation must comply with the latest updated SHPO guidelines and the latest updated SHPO guidelines for Reporting on Archaeological Investigations. These investigations must include pedestrian survey or subsurface exploratory probing or both, as applicable. Subsurface probing must be conducted in areas where ground visibility is low and in areas of high probability for archaeological resources, unless documented proof of previous fill is available i.e. asbuilts/geomorphological work.

Consultant shall conduct record searches and literature review for the APE provided by ODOT and a 1 mile radius, prior to any fieldwork. Consultant shall, at a minimum, examine the following databases and documents:

- The SHPO database in Salem, OR;
- Appropriate THPO database if APE is within a recognized reservation boundary;
- General Land Office maps;
- Historic topographic maps;
- Sanborn Fire Insurance Maps; and
- Other records archives (i.e. historical societies; tribal archives) for known/potential prehistoric and historic archaeological resources within a 1 mile radius of the APE.

Consultant shall conduct pedestrian field 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. Consultant shall provide the ODOT Archaeologist with a minimum of 5 business days advance notice prior to conducting a pedestrian survey. Pedestrian survey methods must be consistent with the latest updated SHPO guidelines. The recommended maximum spacing of transects is 20 meters apart and no more than 30 meters apart; and may be as close as 10 meters apart vary depending on terrain features or ground visibility. Consultant shall determine transect spacing based on professional judgment to ensure that all probable sites are discovered. All cultural resources observable on the surface and in exposed subsurface profiles during the inventory must be identified and recorded.

Consultant shall obtain all required excavation permits and conduct subsurface exploratory probing in the APE. Copies of the draft excavation permits must be provided to the ODOT Archaeologist prior to submittal to SHPO. Consultant shall provide the ODOT Archaeologist with a minimum of 5 business days advance notice of exploratory probing. Subsurface Exploratory Probing field methodology must be consistent with the latest updated SHPO guidelines.

Probing must be based on an established research design. Probes must be at least 30cm in diameter and dug to sterile (at least 2 levels void of cultural material) or to 50 cm and 2 sterile levels where possible, or as appropriate based on varying field conditions. Materials must be screened with a 1/8-inch mesh screen (1/4-inch as needed, see SHPO guidelines).

Auguring may be used, to establish soil stratigraphy or depth of archeological deposits and may be incorporated into the research design, if approved by ODOT Archaeologist. Materials must be screened with a 1/8-inch mesh screen.

Consultant shall prepare Phase I Archaeological Investigation Report. The Report must include:

- A purpose statement and full Project description including:
  - 1. ODOT Key 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; and
  - 8. Anticipated direct, indirect and cumulative impacts.
- Results of SHPO/THPO data base searches including:
  - 1. Brief summary of previous archaeological research completed within one mile of APE with eligibility description if available.
  - 2. Brief summary of recorded archaeological features within one mile of APE with an eligibility description if available.
- Results of GLO and Sanborn map review including:
  - 1. Brief summary of features (trails, buildings, etc.) depicted on maps and within APE.
- Discussion of ethno-historic information and historic context of APE and surrounding environment;
- Description of pedestrian survey methods including date(s) of survey, types of transects used, and names and duties of personnel conducting the survey;
- Results of pedestrian survey including ground conditions (percent visibility) and difficulties encountered, if any; descriptions of any archaeological artifacts encountered and other pertinent information;
- Description of subsurface exploratory probing methodology including date(s) of probing, and names and duties of personnel completing probes;
- Results of subsurface exploratory probing, including descriptions of soil conditions and any archaeological artifacts encountered and other pertinent information. Negative findings must be reported also;
- Summary of Tribal consultation(s), to be provided by ODOT;
- A summary with recommendations that must include a discussion of the site(s) identified and whether or not they meet NRHP criteria and maintain integrity;
- 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;
- Site forms and isolate forms (hard copies) for newly discovered archaeological sites and isolates. Consultant shall also complete the SHPO Online Site Form;
- Site update forms for previously identified archaeological sites;
- A modified <u>Determination of Eligibility ("DOE")</u>, a maximum of 2-3 pages long, must be included in the Appendix for historic sites with no subsurface component. This Appendix must include a short discussion on Boundaries (vertical and horizontal), Integrity as well as Statement of Significance and discussion of the NRHP Criteria. Consultant shall provide enough information to write a detailed DOE; and
- Maps, photos and an artifact catalogue.

Establishing eligibility without testing for prehistoric sites may be difficult; however, this is possible with historic sites if sufficient historic documentation is provided. Please refer to SHPO guidelines.

Consultant shall provide final Phase I Technical Report and site forms in .pdf; digital images of each photo and illustration; raw GPS files (\*ssf and \*.cor), and edited Geographic Information System ("GIS") files (\*shp, \*.shx, and \*.dbf).

#### C3.2.2 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Phase I Technical Report (MS Word) with site forms (and isolate forms, if applicable) to REC and APM for review within 4 weeks of Final Phase I Technical Report (Task C3.2.2).
- Final Phase I Technical Report with site forms (.pdf) (and isolate forms, if applicable) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### C3.2.3 Phase II Archaeological FIELD Investigation (CONTINGENCY)

Note: If cultural sites have been identified during the Phase I study, Phase II investigation may be required. Phase II investigations must be used to establish NRHP eligibility, which includes establishing vertical and horizontal site boundaries. Investigations under this task must comply with the latest updated <u>SHPO guidelines</u> for conducting field archaeology in Oregon and the latest updated SHPO guidelines for <u>Reporting on</u> <u>Archaeological Investigations</u>.

Consultant shall:

•

- Review information from the Phase I investigations; and
  - Develop a draft investigation plan showing:
    - o APE;
    - Areas of previous disturbance;
    - Previously recorded site(s);
    - Areas where cultural materials were discovered (Phase I investigation);
    - Probable boundary of new sites;
    - Proposed locations of each Shovel Test Unit ("STU"), Excavation Unit ("EU") or other subsurface investigation;
    - Proposed locations of remote sensing;
    - o Location of additional transects; and
    - o <u>A comprehensive research design</u>

Consultant shall submit the draft investigation plan to ODOT Archaeologist for approval before starting fieldwork.

Consultant shall obtain all required permits (i.e. SHPO) for subsurface investigations and submit draft copies to the ODOT Archaeologist for review. Consultant shall provide the ODOT Archaeologist with a minimum of 5 business days advance notice prior to Phase II testing. Consultant shall conduct subsurface investigations within the APE.

#### Subsurface Investigation

Consultant shall conduct an intensive inventory and subsurface testing program to identify site boundaries and assess site significance. STUs must be based on the approved investigation plan.

At a minimum, the subsurface testing program must include STUs excavated at 10-meter intervals, or less as appropriate, across identified archaeological sites to help determine the presence or absence of subsurface cultural materials, as well as to help define site boundaries.

STUs must measure 50x50cm square and must be excavated to a minimum of 50cm in depth (and 2 levels below sterile where possible). Larger or deeper STUs composed of abutting 50x50 cm units may be required and must be identified in the investigation plan. STUs must be excavated in arbitrary 10-cm levels and all sediments screened through 1/8-inch mesh hardware cloth. Special studies, such as obsidian sourcing and hydration analyses, can be conducted as part of the preliminary evaluation effort, only if previously agreed to with the ODOT Archaeologist. Collected materials must be curated at the State Museum of Anthropology, University of Oregon upon conclusion of laboratory analyses, unless other arrangements have been made and agreed to by SHPO. Consultant shall coordinate with the ODOT Archaeologist prior to shipment of artifacts.

Consultant shall identify/fence all No Work Zones with orange plastic mesh fencing or lath and flagging, as shown prior to construction.

Consultant shall map the archaeological site using GPS equipment, with reference to existing benchmarks or existing bridges for survey control. Consultant shall provide a technical report summarizing all identified archaeological materials and results of the record search and field studies. If significant cultural materials are recorded, recommendations for mitigation must be provided in the Report. The Phase II Technical Report must include:

- A purpose statement and full Project description, including APE map, anticipated direct, indirect and cumulative impacts, location and total acreage, map reference, legal description, general environmental description, and the historic context by which sites shall be evaluated;
- Background information, including ethno-historic information and previous archaeological studies;
- A summary of previous archaeological research in the general area;
- Description of soils encountered, along with description of all features;
- Inventory and general analysis of artifacts;
- GPS datum(s);
- A thorough description of the field methods used, including types of transects used, difficulties encountered during the Project, and other pertinent information;
- A section on field methodology with maps showing placement of STUs;
- A section on findings, artifact descriptions, recommendations and a summary includes a discussion of the site(s) tested and whether or not it/they meet(s) the NRHP criteria and maintains integrity, and recommendations;
- A <u>modified DOE</u>, not to exceed 3 pages, must be included in the Appendix, for each site when attempting to establish eligibility. The DOE must include a short discussion on the Statement of Significance, as well as a discussion on Integrity, and discussion of each the NRHP Criteria.
- An artifact catalogue must be provided;
- Site forms and isolate forms for newly discovered archaeological sites and isolates and site update forms for previously recorded sites. Consultant shall also complete the SHPO Online Site Form; and
- Names and duties of personnel conducting the inventory and dates of fieldwork.

Consultant shall provide the final report and site forms in \*.pdf, digital images of each photo and illustration, raw GPS files (\*ssf and \*.cor), and edited GIS files (\*shp, \*.shx, and \*.dbf).

#### C3.2.3 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft investigation plan (MS Word or .pdf) to REC and APM for review within 1 week of NTP for Task C3.2.3.
- Final investigation plan (.pdf) within 2 weeks following draft review comments.
- Subsurface investigation permits (i.e. SHPO), (.pdf), due before fieldwork starts.
- Draft Phase II Technical Report (MS Word or .pdf) to REC and APM for review 4 weeks prior to Final Phase II Technical Report (Task C3.2.3).

• Final Phase II Technical Report (.pdf) 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### 3.3 Historic Resources

All historic sub tasks must be completed by professional historians who meet the Secretary of the Interior's professional standards for architectural history or history (<u>36 CFR 61, Appendix A</u>) and who have been "qualified" through the <u>ODOT Cultural Resources Consultant Qualification Training Program.</u>

#### 3.3.1 Historic Resources Baseline Report

The purpose of the ODOT Historic Resource Baseline Report is to identify and characterize the historic resource issues using APE to determine what may be impacted by a transportation project. The Historic Resource Baseline Report is a scoping report that is not intended to be a comprehensive technical report. As part of developing the Historic Resource Baseline Report, Consultant shall review the SHPO Statewide Inventory and conduct an on-site reconnaissance of the Project area.

Consultant shall prepare the draft and final Historic Resources Baseline Report which must include, but is not limited to:

- Project description and a description of the APE;
- Photographs of resources that are 45 years old or older;
- Descriptions of historic resources that are 45 years old or older, including a discussion of each potential NRHP eligibility (A-D); and
- Map that identifies the location of each potential historic resource within the APE.

It is anticipated that up to 1 resource will be identified in the baseline report. Consultant shall incorporate Agency comments into the final Historic Resources Baseline Report.

#### 3.3.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Historic Resources Baseline Report (MS Word) to REC and APM for review 4 weeks prior to Final Historic Resources Baseline Report (Task 3.3.1).
- Final Historic Resources Baseline Report (MS Word and .pdf) to REC and APM in 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### C3.3.2 Section 106 DOE (CONTINGENCY)

A DOE is a finding that a property meets the eligibility criteria (A-D) for inclusion in the NRHP. If requested by ODOT and Agency staff, then Consultant shall prepare draft and final DOE Reports for each historic resource that is considered potentially eligible for the NRHP. For authorized DOE Report(s), Consultant shall also prepare a Project Submittal Letter in ODOT-approved format.

Consultant shall prepare each DOE using the most recent ODOT form.

The DOE must include but is not limited to:

- Brief physical description of the resource and contributing and non-contributing features, including the history, significance and context of the resource, the design, setting, materials, workmanship, feeling, and association;
- Map showing the location and orientation of the resource and its historic boundary; and
- Photographs of the resource, including historic photographs and current photographs.

Consultant shall prepare DOE(s) for up to 1 resource. ODOT Cultural/Historic Resource Specialist will transmit the final DOE(s) to SHPO and will obtain the necessary concurrence documentation from SHPO.

#### C3.3.2 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft DOE(s) (MS Word) to REC and APM for review for each resource that is potentially eligible for the NRHP within 4 weeks following completion of Task 3.3.1.
- Final DOE(s) (.pdf) to REC and APM for each resource that is potentially eligible for the NRHP 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### C3.3.3 Section 106 Finding of Effect ("FOE") (CONTINGENCY)

Following coordination with ODOT and Agency staff, Consultant shall prepare a FOE Report for each resource that is listed or has been determined eligible for the NRHP following the format provided by ODOT (including coordination of public outreach). When requested by ODOT and Agency, Consultant shall coordinate with APM to discuss available options to avoid or minimize adverse effects to listed or eligible historic resources.

Consultant shall coordinate with ODOT to ensure that Federal Highway Administration ("FHWA") concurs with the proposed FOE on the resources prior to transmittal to SHPO. A Project Submittal Letter must be submitted with an FOE Report.

Consultant shall coordinate with ODOT and Agency to obtain FHWA concurrence with the proposed FOE on the resource(s), prior to submittal to SHPO.

Consultant shall prepare the draft and final FOE using the most current ODOT form. The FOE(s) must include:

- Narrative assessment of the Project's potential effects of the Project to the historic resource's qualities that make it significant and/or eligible or listed, including: physical destruction or damage; alteration or rehabilitation; removal; change of setting; introduction of visual, atmospheric or audible elements; neglect of a property; or transfer or sale of ownership; and
- Discuss alternatives to avoid or minimize adverse effects to the resource.

Consultant shall prepare FOE(s) for up to 1 resource. ODOT Historic Resource Specialist will transmit the final FOE(s) to SHPO and will obtain the necessary concurrence documentation from SHPO.

#### C3.3.3 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft FOE(s) with Project Submittal Letter (MS Word) for each effected resource that is listed or eligible for the NRHP to REC and APM for review within 2 weeks following completion of Task 3.3.1.
- Final FOE(s) with Project Submittal Letter (MS Word and .pdf) for each effected resource that is listed or eligible for the NRHP to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### 3.4 Hazardous Materials

This work is intended to identify potential sources of environmental contamination (hazardous waste, hazardous substances, toxic substances and other hazardous materials regulated under federal and State statutes and regulations/administrative rules) that could impact the Project.

Performance of this task must be in accordance with ODOT's HazMat Program Manual and applicable industry standards. Deliverable submittals must be in an electronic format (MS Word and .pdf).

The purpose of this task is to facilitate Agency compliance with environmental regulations pertaining to site cleanup and waste management. The Services to be provided shall include:

- Conduct a Hazardous Materials Corridor Study ("HMCS") to identify potential sources of contamination that could impact property acquisition or construction;
- Inspect Bridge No. 12752 for lead-based paint and asbestos containing materials;
- Conduct geophysical surveys to identify potential underground storage tanks or buried debris;

- Collect surface soil samples from road shoulders to determine if the soil meets Oregon Department of Environmental Quality ("DEQ") standards for clean fill;
- Conduct site-specific subsurface investigations to determine if soil or groundwater are contaminated within the Project corridor; and
- Prepare contract bid documents for handling and disposal of contaminated materials.

#### 3.4.1 HMCS

Consultant shall conduct a HMCS according to the following standards and guides:

- "Hazardous Waste Guide for Project Development", by the American Association of State Highway and Transportation Officials ("AASHTO") Special Committee on Environment, Archaeology and Historic Preservation;
- "ODOT Hazmat Program Procedures Guidebook," ODOT;
- "Level 1 Corridor Study" report template, ODOT; and
- The requirements listed below.

Consultant shall conduct a site reconnaissance to identify potential sources of contamination that could impact construction or result in Agency acquiring contaminated property.

Consultant shall review available federal and State environmental databases to identify sites that could potentially impact the Project, using the minimum search radii listed below.

Environmental Database	Search Radius
State-Equivalent NPL List (ECSIS)	0.5 mile
Oregon Permitted Landfill List	0.5 mile
State Leaking Underground Storage Tank ("LUST") List	0.25 mile
Federal RCRA Generators List	Site and Adjoining
State Fire Marshal's Spill Response List	Site and Adjoining
Oregon Motor Carrier Spill List	Site and Adjoining
State Certified UST List	Site and Adjoining

Consultant shall review DEQ files, available using DEQ's Facility Profiler web site at <a href="http://deq12.deq.state.or.us/fp20/">http://deq12.deq.state.or.us/fp20/</a>, to determine whether contamination from adjacent facilities is likely to impact Project construction. Alternatively, this review may be conducted using commercially available database reports such as provided by EDR.

Consultant shall review the Oregon Water Resources Department on-line database at <u>http://apps.wrd.state.or.us/apps/gw/well\_log/Default.aspx</u> to determine if water wells or monitoring wells are located on or adjacent to the Project corridor.

Consultant shall review Project files at the appropriate DEQ Region office, based on the Project location, for all facilities considered to be high risk for impacting Project construction. Consultant shall use DEQ file information to delineate contaminated areas within the Project corridor and identify if that information is sufficient to develop construction plans and specifications without additional sampling.

Consultant shall conduct historical research to identify past uses of the Project corridor and adjacent properties, using 1 or more of the following resources:

- Sanborn Fire Insurance Maps;
- Aerial Photographs;
- Reverse Agency Directories; or
- Historic property ownership/occupancy records or building permits.

The resource(s) selected must, if possible, provide historic information regarding land use back to 1935 at 10 year intervals, or the Consultant must demonstrate that such information is not readily available.

Consultant shall review pertinent records that may be made available by the Agency as they relate to the environmental condition of the Project corridor.

Consultant shall assess if soil sampling is necessary to determine if soil excavated from the Project corridor shall meet DEQ clean fill screening levels for contaminants-of-concern including pesticides, herbicides, metals, polynuclear aromatic hydrocarbons, petroleum hydrocarbons, and solid waste.

Consultant shall prepare a HMCS report summarizing the information obtained through the activities listed above, using ODOT's Corridor Report Template available under "Guidance Materials" at <a href="https://www.oregon.gov/odot/GeoEnvironmental/Pages/Haz-Mat.aspx">https://www.oregon.gov/odot/GeoEnvironmental/Pages/Haz-Mat.aspx</a>. The report shall include photographs documenting Project corridor observations. The report must include conclusions that identify specific sources of contamination that could impact Project construction and recommendations for further investigation, if needed.

#### 3.4.1 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft HMCS report (.pdf) to REC and APM for review 4 weeks prior to Final HMCS report (Task 3.4.1).
- Final HMCS report (.pdf) to APM and REC 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

# C3.4.2 American Society for Testing and Materials ("ASTM") Phase I Environmental Site Assessment (CONTINGENCY)

Consultant shall prepare a draft and final ASTM Phase I Environmental Site Assessment for Agency acquisition parcel(s). Consultant shall complete work in accordance with the ASTM International E1527-13 Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process. As the ASTM standards are revised or updated, Consultant shall apply the most recent ASTM Standard Practice.

#### Environmental database search

Consultant shall review available federal and State environmental records for identified hazardous waste sites using government web-based databases or using a commercial database search report. At a minimum the Consultant shall use the search radii set forth in the table below. Consultant shall review DEQ files for all sites identified as high or medium priority that could impact the Project acquisition parcel(s) to determine the nature and extent of contamination.

Database Record	Search Radius
Federal Resource Conservation and Recovery Act	Acquisition parcel(s) and adjoining properties
("RCRA") Generators List	
DEQ Environmental Cleanup Site Information Database	1.0 mile
State Fire Marshal's Spill Response List	0.5 mile
Oregon Permitted Landfill List	0.5 mile
State LUST List	0.5 mile
State Certified UST List	Acquisition parcel(s) and adjoining properties

#### Site reconnaissance

Consultant shall conduct a site reconnaissance that consists of systematically traversing the acquisition parcel(s) and viewing adjacent properties from roadways and public access areas. The final report must include photographs documenting the observations of Project acquisition parcel(s). Consultant shall use the reconnaissance to identify potential sources of contamination that could impact the proposed Project during

construction or that could result in Agency acquiring contaminated property. Consultant shall not enter any private property or contact the property owners or occupants without a permit of entry that Agency supplies.

#### **Historical research**

Consultant shall conduct historical research to identify past uses of the Project acquisition parcel(s) and adjacent properties. Such research must include 1 or more of the following:

- Sanborn Fire Insurance Maps;
- Aerial photographs;
- Reverse city directories;
- Historic property ownership/occupancy records or building permits; and
- Other historic resources.

The resource (or combination of resources) that Consultant selects must, if possible, provide historic information regarding land use back to at least 1940 at 5-year intervals, or Consultant shall demonstrate that such information is not readily available.

#### ASTM Phase I Environmental Site Assessment report

Consultant shall prepare a draft ASTM Phase I Environmental Site Assessment report for Project acquisition parcel(s) summarizing the information that Consultant obtained through prior tasks. The report must include field observations, environmental database information, historic land use, a scaled map showing the location of all identified potential sources of contamination, photographs, copies of historic data, copies of State and federal databases, copies of relevant portions of DEQ files for sites that may impact the Project, and any other relevant documentation.

The report must include conclusions that identify specific sources of contamination that could impact the Project acquisition parcel(s) or the proposed construction work. The report must also include recommendations for further investigation or remediation, along with cost estimates for such work. The report must summarize the findings in accordance with ASTM-recommended methodologies.

#### C3.4.2 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft ASTM Phase 1 Environmental Site Assessment report (.pdf) to REC and APM for review within 2 weeks of NTP for Task C3.4.2.
- Final ASTM Phase 1 Environmental Site Assessment report (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### C3.4.3 Level 1 Initial Site Assessment ("ISA")

Consultant shall prepare a draft and final Level I ISA for Agency acquisition parcel(s), where ASTM Standards and Liability Protections are not required. Consultant shall complete work according to generally accepted environmental procedures as outlined in the Hazardous Waste Guide for Project Development, by the AASHTO Special Committee on Environment, Archaeology and Historic Preservation.

#### Environmental database search

Consultant shall review available federal and State environmental records for identified hazardous waste sites using government web-based databases or using a commercial database search report. At a minimum Consultant shall use the search radii set forth in the table below. Consultant shall review DEQ files for all acquisition sites identified as high or medium priority that could impact the Project acquisition parcel(s) to determine the nature and extent of contamination.

Database Record	Search Radius
RCRA Generators List	Acquisition parcel(s) and adjoining properties
DEQ Environmental Cleanup Site Information	1.0 mile
Database	
State Fire Marshal's Spill Response List	0.5 mile
Oregon Permitted Landfill List	0.5 mile
State LUST List	0.5 mile
State Certified UST List	Acquisition parcel(s) and adjoining properties

#### Site reconnaissance

Consultant shall conduct a site reconnaissance that consists of systematically traversing the acquisition parcel(s) and viewing adjacent properties from roadways and public access areas. The final report must include photographs documenting observations of Project acquisition parcel(s). Consultant shall use the reconnaissance to identify potential sources of contamination that could impact the proposed Project during construction or that could result in Agency acquiring contaminated property. Consultant shall not enter any private property or contact the property owners or occupants without a permit of entry that Agency supplies.

#### **Historical research**

Consultant shall conduct historical research to identify past uses of the Project acquisition parcel(s) and adjacent properties. Such research must include 1 or more of the following:

- Sanborn Fire Insurance Maps;
- Aerial photographs;
- Reverse city directories;
- Historic property ownership, occupancy records or building permits; and
- Other historic resources.

The resource (or combination of resources) that Consultant selects must, if possible, provide historic information regarding land use back to at least 1940 at 5-year intervals, or Consultant shall demonstrate that such information is not readily available.

#### Level 1 ISA report

Consultant shall prepare a Level 1 ISA Report according to the following standards and guides:

- Hazardous Waste Guide for Project Development by the AASHTO Special Committee on Environment, Archaeology and Historic Preservation; and
- ODOT HazMat Program Manual.

Consultant shall prepare a draft Level 1 ISA report for Project acquisition parcel(s) summarizing the information that Consultant obtained through prior tasks. The report must include field observations, environmental database information, historic land use, a scaled map showing the location of all identified potential sources of contamination, photographs, copies of historic data, copies of State and federal databases, copies of relevant portions of DEQ files for sites that may impact the Project, and any other relevant documentation.

The report must include conclusions that identify specific sources of contamination that could impact the Project acquisition parcel(s) or the proposed construction work. The report must also include recommendations for further investigation or remediation, along with cost estimates for such work.

#### C3.4.3 Consultant Deliverables and Schedule:

Consultant shall submit:

• Draft Level 1 ISA report (.pdf) to REC and APM for review 4 weeks prior to Final Level 1 ISA report (Task C3.4.3).
• Final Level 1 ISA report (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

#### 3.4.4 Minimal Assessment Memorandum ("MAM")

Consultant shall prepare a MAM according to the following standards and guides:

- Hazardous Waste Guide for Project Development, by the AASHTO Special Committee on Environment, Archaeology and Historic Preservation;
- ODOT HazMat Program Manual; and
- Minimal Assessment Memorandum template, ODOT.

Consultant shall conduct site reconnaissance through in-person visit to identify potential sources of contamination that could impact construction.

Consultant shall review available federal and State environmental databases to identify sites that could potentially impact the Project. Search radii are for each environmental database listed below.

Environmental Database	Search Radius
ESCI [NPL]	Site and adjoining
Oregon Permitted Landfill List	Site and adjoining
State LUST List	Site and adjoining
Federal RCRA Generators List	Site and adjoining
State Fire Marshal's Spill Response List	Site and adjoining
Oregon Motor Carrier Spill List	Site and adjoining
State Certified UST List	Site and adjoining

Consultant shall review DEQ files, available using DEQ's Facility Profiler website, to determine whether contamination from adjacent facilities is likely to impact Project construction. Alternatively, Consultant may conduct this review using commercially available regulatory database reports. The MAM must review and discuss information that DEQ published for ECSI sites and UST sites to further evaluate whether the Project has the potential to encounter contamination associated with listed sites.

Consultant shall review the Oregon Water Resources Department ("OWRD") on-line database to determine whether water wells or monitoring wells are located on or adjacent to the Project area.

Consultant shall submit a public information request to DEQ for all facilities considered to have a high risk of impacting Project construction. Consultant shall use DEQ file information to delineate contaminated locations adjacent to the Project area and identify whether that information is sufficient to develop construction plans and specifications without additional sampling.

Consultant shall review pertinent records that Agency may make available as they relate to the hazardous materials condition of the Project area.

Consultant shall assess whether soil sampling is needed to determine whether excavation of soil from the Project area will meet DEQ clean fill screening levels for potential contaminants-of-concern. Consultant shall indicate which contaminants are a concern and therefore which contaminants Consultant shall evaluate during soil sampling.

Consultant shall prepare a MAM summarizing the information that Consultant obtained through the activities listed above, using Agency's MAM template. The MAM must include photographs documenting the Project area observations. The MAM must include conclusions that identify specific sources of contamination that could impact Project construction and recommendations for further investigation, if needed.

## 3.4.4 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft MAM (.pdf) to REC and APM for review 4 weeks prior to Final MAM (Task 3.4.4).
- Final MAM (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.4.5 Shoulder Soil Investigation

Consultant shall perform the following tasks to evaluate handling and disposal options for surface and nearsurface shoulder soil within Project limits. This evaluation may involve the collection of surface and nearsurface soil samples within the limits of the Project corridor for laboratory analysis. Comparison of the results of the analyses with the DEQ guidelines will determine whether surface soil excavated for Project construction can be handled and disposed as clean fill.

Shoulder Soil Investigations must be completed in accordance with the ODOT HazMat Program Manual.

## 3.4.5.1 Shoulder Soil Investigation Work Plan and Health and Safety Plan ("HASP")

Consultant shall prepare a Shoulder Soil Investigation Work Plan and a HASP describing how to collect samples for Task 3.4.5.2. The Shoulder Soil Investigation Work Plan must describe sample collection methods, sampling equipment, equipment decontamination, and handling and shipment of samples. Consultant shall complete the HASP in accordance with 29 CFR 1910.120, OAR 437-002-0100 *et seq.*, and all other State and federal worker health and safety regulations applicable for Task 3.4.5.2. The HASP must reflect the sampling and characterization activities described in the Shoulder Soil Investigation Work Plan. The HASP must cover the activities of all Consultant, subconsultant, and Agency employees. The HASP must include a Traffic Control Plan ("TCP"), if needed.

Consultant shall obtain all required permits from the City of Albany and the City of Millersburg before initiating fieldwork activities. The current City contacts are:

Jurisdiction	Contact Name	Contact Number	Contact Email
Albany	Aaron Hiemstra, P.E.	541-704-2325	aaron.Hiemstra@albanyoregon.gov
Albany	Civil Engineer		
Millorsburg	Janelle Booth, P.E.	458-233-6302	jbooth@cityofmillersburg.org
Willersburg	Assistant City Manager/City Engineer		

## 3.4.5.1 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Shoulder Soil Investigation Work Plan and HASP (.pdf) to APM for review within 2 weeks of field work.
- Final Shoulder Soil Investigation Work Plan and HASP (.pdf) to APM prior to beginning Task 3.4.5.2.

Consultant shall not proceed with any fieldwork activities under this task until after Consultant has received written authorization email from Agency.

## 3.4.5.2 Sample Collection and Reporting

Consultant shall collect surface soil samples from up to 4 locations. Consultant shall provide flagging and traffic control as needed to complete sample collection. At each location, Consultant shall collect samples at 10 feet and 20 feet from edge of pavement, as specific site conditions allow. Consultant shall obtain soil samples from 0 to 0.5 feet, from 0.5 to 1.0 feet, and from 1 to 1.5 feet below ground surface. Consultant shall mark the proposed sample locations in white paint and obtain utility locates for all locations. Consultant shall backfill sample locations with excavation spoils and shall not generate any investigative derived waste ("IDW"). Consultant may dispose of equipment decontamination water on-site, unless indications of contamination (i.e., staining, sheen) were observed during sampling or equipment decontamination.

Consultant shall ship the discrete samples to a laboratory that is accredited by the Oregon Environmental Laboratory Accreditation Program. The laboratory must be capable of compositing processing samples according to Agency's October 2016 Sampling and Analysis Plan – Statewide Highway Shoulder Soil Evaluation, using Incremental Sampling Method sample processing methods. The laboratory must be capable of generating analytical results where the detection limits for each analysis must be below the clean fill criteria set forth in DEQ's Clean Fill Determination Internal Management Directive document.

Analysis of the samples must be for contaminants-of-concern that include the following:

- Method 8270 SIM PAHs, and total metals according to Methods 6020 and 7471A;
- NWTPH-Gx, NWTPH-Dx, Method 8270 SIM PAHs, Method 8151 herbicides, Method 8081 pesticides, Method 8082 polychlorinated biphenyls ("PCBs"), and total metals according to Methods 6020 and 7471A; and
- Total metals analyses must include antimony, arsenic, barium, cadmium, chromium, copper, lead, selenium, silver, zinc, and mercury.

Consultant shall submit discrete samples using the State's chain-of-custody form, which must indicate that the laboratory shall bill Agency directly and must request a turnaround time of 10 business days. Consultant shall ship samples under chain-of-custody procedures, such that the samples arrive at the laboratory undamaged. Agency will pay all shipping costs directly to the laboratory.

Consultant shall prepare a 3- to 7-page technical memorandum with attachments that summarizes the results of this task. The technical memorandum must include the following:

- Field observations, photographs, detailed sample locations, description of sampling methods, laboratory reports, figures showing Project site location and sample locations, and tables summarizing the analytical results; and
- Tabulation of the laboratory results compared to DEQ's clean fill screening levels.

## 3.4.5.2 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft SSI technical memorandum (.pdf) to REC and APM for review 4 weeks prior to Final SSI technical memorandum (Task 3.4.5.2).
- Final SSI technical memorandum (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.4.6 Asbestos Survey

Consultant shall conduct an asbestos materials survey at the site structure(s) that Agency designates. Performance of the survey must be by an asbestos inspector accredited under the Asbestos Hazards Emergency Response Act ("AHERA") to perform building inspections. The asbestos survey must include:

- Compiling a homogeneous materials list;
- Collecting bulk samples of suspected asbestos-containing building or construction materials;
- Submit samples to a National Voluntary Laboratory Accreditation Program ("NVLAP")-certified laboratory for analysis; and
- Analyzing bulk samples using polarized light microscopy ("PLM"), or a DEQ-accepted equivalent.

Consultant shall collect bulk samples in general accordance with AHERA protocols and DEQ standards, rules, and guidance. Collection of bulk samples requires the removal of small quantities of building or construction materials. Consultant shall apply a temporary patch that may not match the original finish when the sampled material is friable, or a seal, membrane, or other water-tight material has been damaged or compromised. Consultant shall prepare an Asbestos Survey Report that includes field observations, analytical results, diagrams indicating sample locations, and estimates of the quantity of asbestos-containing materials ("ACMs") and their locations.

## 3.4.6 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Asbestos Survey report (.pdf) to REC and APM for review <mark>4</mark> weeks prior to Final Asbestos Survey report (Task 3.4.6).
- Final Asbestos Survey report (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## C3.4.7 Asbestos Abatement Specification (CONTINGENCY)

Consultant shall prepare a brief Project specification for abatement of ACMs. The specification must be a performance-based document for use by Agency in demolition plans for designated buildings and must conform with OAR 340-248, OAR 437-003, and all other applicable State and federal rules and regulations pertaining to asbestos inspection and abatement. The specifications must not include instructions to bidders, contracts, or bonding requirements.

## C3.4.7 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft asbestos abatement specification (MS Word and .pdf) to REC and APM for review with Preliminary PS&E deliverable (Task 15.1).
- Final asbestos abatement specification (MS Word with "track changes" and .pdf) to REC and APM review with Advance PS&E deliverable (Task 15.2).

## C3.4.8 Asbestos Abatement Oversight and Clearance Monitoring (CONTINGENCY)

Agency will contract directly with an asbestos abatement contractor for the removal of ACMs from designated buildings and structures. Consultant shall provide oversight of abatement activities as the owner's representative; this oversight must include pre- and post-abatement visual surveys to observe whether the asbestos abatement contractor established negative pressure enclosures in buildings, removed ACMs, and detailed, cleaned, and encapsulated the regulated areas.

For indoor building abatement, Consultant shall confirm that the asbestos abatement contractor has conducted proper clearance air monitoring of buildings after the asbestos abatement contractor has passed the post-abatement visual survey. Consultant shall collect up to 5 clearance air samples per negative pressure enclosure in general accordance with the National Institute for Occupational Safety and Health ("NIOSH") 582 procedures for analysis by phase contrast microscopy ("PCM") or transmission electron microscopy ("TEM"). Consultant shall collect and archive 1 background sample. Consultant shall collect and analyze 1 lab blank and 1 field blank (if PCM is the selected clearance analysis). Consultant shall select PCM or TEM clearance analyses based on factors such as the size of the negative pressure enclosure, the source of make-up air, and the type of ACMs to be abated.

## C3.4.8 Consultant Deliverables and Schedule:

Consultant shall submit:

• Clearance Air Monitoring report (.pdf) to REC and APM within 2 weeks following receipt of clearance air monitoring results.

## 3.4.9 Structure Survey

Consultant shall conduct a survey of the hazardous materials in any structures to be demolished as part of the Project, in accordance with the following subsections.

## 3.4.9.1 Structure Survey Work Plan and HASP

Consultant shall prepare a structure survey work plan and a HASP that describe how to collect samples for Task 3.4.9.2. The structure survey work plan must describe sample collection methods, sampling equipment, equipment decontamination, and handling and shipment of samples.

Consultant shall complete the HASP in accordance with 29 CFR 1910.120, OAR 437-002-0100 *et seq.*, and all other State and federal worker health and safety regulations that may be applicable for Task 3.4.9.2. The HASP must reflect the sampling and characterization activities described in the structure survey work plan. The HASP must cover the activities of all Consultant, subconsultant, and Agency employees. The HASP must include a TCP, if needed.

Consultant shall obtain all required permits from the City of Millersburg before initiating fieldwork activities. The City's current contact person is:

Janelle Booth, P.E., Assistant City Manager/City Engineer jbooth@cityofmillersburg.org 458-233-6302

## 3.4.9.1 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Structure Survey Work Plan and HASP (.pdf) to REC and APM for review within 2 weeks of field work.
- Final Structure Survey Work Plan and HASP (.pdf) to REC and APM prior to beginning Task 3.4.9.2.

## 3.4.9.2 Structure Survey Sample Collection and Reporting [20320]

Consultant shall collect paint and coating samples from all painted surfaces on Bridge No. 12752. Consultant shall collect at least 2 samples and as many as 4 samples for each paint type observed for analysis. Consultant shall not separate paint layers into individual samples. Consultant shall provide flagging and traffic control as needed to complete sample collection.

Consultant shall ship the samples to Pace Analytical (formerly ESC Lab Sciences) in Mt. Juliet, Tennessee. Analysis of the samples must be for the following:

- Total lead, cadmium, and chromium; and
- PCBs according to Method 8082.

Consultant shall submit samples using the State's chain-of-custody form, which must indicate that the laboratory shall bill Agency directly and must request a turnaround time of 10 business days. Consultant shall ship samples under chain-of-custody procedures, such that the samples arrive at the laboratory undamaged. Agency will pay all shipping costs directly to the laboratory.

Consultant shall inspect Bridge No. 12752 for ACMs and collect samples of all suspected ACMs that construction will disturb. Consultant shall use an AHERA-accredited asbestos inspector to perform the inspection and sampling. The asbestos survey must include:

- Compiling a homogeneous materials list;
- Collecting bulk samples of suspected ACMs;
- Submit samples to a NVLAP-certified laboratory for analysis; and
- Analyzing bulk samples using polarized light microscopy ("PLM"), or a DEQ-accepted equivalent.

Consultant shall collect bulk samples in general accordance with AHERA protocols and submit samples to a National Voluntary Laboratory Accreditation Program certified laboratory for analysis and shall request a turnaround time of 10 business days. Consultant shall collect as many as 6 samples for asbestos analysis.

Consultant shall summarize the results of the materials testing described above in a structure survey report. The report must discuss sample methods and laboratory analytical results, and must provide recommendations for materials handling. The report must include:

• A map showing sample locations;

- Photographs of materials sampled;
- Data tables summarizing laboratory results; and
- Laboratory reports and chain-of-custody forms.

## 3.4.9.2 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Structure Survey report (.pdf) to REC and APM for review 4 weeks prior to Final Structure Survey report.
- Final Structure Survey report (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.4.10 Geophysical Survey [RESERVED]

## 3.4.11 Site-Specific Investigation [RESERVED]

## 3.4.12 NEPA Hazardous Materials Technical Memorandum or Report for EA and EIS Projects [RESERVED]

## 3.5 Biological Resources Compliance and Permitting

Consultant shall complete the appropriate biological resources tasks presented below based on the Design Acceptance Plans. General biological work must be executed by a qualified biologist who meets the following minimum qualifications: 3 full years of environmental analysis or resource Project management experience and a Bachelor's degree that included 30-quarter or 20-semester hours in biology, environmental science, natural science, or closely related field. An individual who makes determinations of effect under the Endangered Species Act ("ESA") and prepares ESA documentation must also be an ESA qualified biologist as per ODOT Technical Services Bulletin GE14-03(B) or most current

(http://www.oregon.gov/ODOT/Engineering/Doc\_TechnicalGuidance/GE14-03b.pdf).

## 3.5.1 ESA No Effect ("NE") Memo

When ODOT determines or approves Consultant's determination that a proposed action will not affect State or federal ESA listed or proposed species or critical habitat, a NE Memo is prepared to document compliance with the State and federal ESAs. The NE Memo must be completed by an ESA qualified biologist as described above. Consultant shall:

- Use a qualified ESA biologist(s) to conduct 1 field survey of the Area of Potential Impact ("API") at the appropriate time for <u>each</u> ESA listed plant and wildlife species with the potential to be present in the API and their potential suitable habitats following standard/appropriate field survey techniques.
- Conduct Oregon Department of Agriculture ("ODA"), Oregon Department of Fish and Wildlife ("ODFW"), National Marine Fisheries Services ("NMFS"), and U.S. Fish and Wildlife Service ("USFWS") database searches to acquire ESA information for the Project area.
- Contact ODOT or Oregon Biodiversity Information Center ("ORBIC") or both, as needed, to obtain data regarding listed threatened and endangered species as well as those proposed for listing under the federal and State ESA that may occur within the API. Consultant shall determine if Federally-listed species and their habitat will be affected by the Project.
- Communicate with local ODA, ODFW, NMFS and USFWS staff via phone or email to acquire additional specific ESA information for the Project area. Make ESA effects determinations following the analysis of gathered ESA information. If a determination is No Effect for at least 1 listed or proposed species, obtain ODOT concurrence on the No Effects determination.
- Coordinate with design staff and APM to develop appropriate measures (i.e., construction special provisions) to avoid impacting listed species proposed for coverage in the NE Memo if avoidance measures are necessary to obtain the No Effect determination.
- Prepare draft NE Memo for the Project area using the most recent ODOT provided form; provide to APM for review and comment.

- Prepare final NE Memo for ODOT and Agency acceptance.
- Notify ODOT and Agency immediately if Consultant determines that an ESA determination of No Effect is no longer appropriate.

## 3.5.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft NE Memo (.pdf) to REC and APM for review 4 weeks prior to Final NE Memo (Task 3.5.1).
- Final NE Memo (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.
- Draft construction special provisions (.pdf) relevant to NE determination to REC and APM for review with Preliminary PS&E deliverable (Task 15.1).
- Final construction special provisions (.pdf) relevant to NE determination to REC and APM with Final PS&E deliverable (Task 15.3).

## 3.5.2 Federal-Aid Highway Program ("FAHP") ESA Programmatic Documentation

Consultant shall coordinate and document compliance with the federal ESA for NMFS trust species using the FAHP ESA Programmatic. The FAHP ESA Programmatic is appropriate for most Projects with Federal-Aid funding. ESA documentation must be completed by a qualified biologist (as per Section B.3 of this SOW). All documentation for the Project design phase must follow procedures contained in the most recent version of the ODOT FAHP Programmatic User's Guide available on the ODOT Biology ESA website:

(<u>http://www.oregon.gov/ODOT/GeoEnvironmental/Pages/ESA.aspx</u>). FAHP ESA programmatic documentation must be completed by an ESA qualified biologist as described above.

Consultant shall:

- Facilitate early coordination with NMFS (and USFWS if applicable) according to Section 2.3 of the FAHP Programmatic User's Guide.
- Coordinate with the APM and ODOT biologist to complete the FAHP Project Stakeholder list as shown in Table 4 of the FAHP Programmatic User's Guide.
- Utilizing the latest template available on the FAHP Programmatic website, prepare and submit the Project Initiation Form to the REC for the Project.
- Contact the ODOT biologist via phone or email for site-specific information on ESA species including but not limited to background reports and ORBIC special status species lists.
- Contact via phone or email ODA, ODFW, NMFS for additional site-specific information on ESA species.
- Review all ESA information provided or obtained.
- Facilitate and attend up to 1 site visit with the ODOT, Agency, NMFS to discuss Project impacts, applicable FAHP Programmatic standards, and possible modifications to the Project to meet FAHP Programmatic standards; Consultant shall prepare site visit meeting notes that include topics discussed and recommendations.
- Coordinate with NMFS to determine if NMFS has any fish passage concerns on the Project and obtain verification from NMFS on the average active channel width in instances where the active channel width is not readily determinable; facilitate communication between ODFW and NMFS to document agreement on fish passage requirements for the Project.
- Prepare and submit all required FAHP Programmatic forms to Agency and REC for the Project, utilizing the latest templates available on the ODOT ESA website. In addition to the Stakeholder List and Initiation Form detailed above, the following forms are required as part of the FAHP Project Notification documents:
  - Notification Form;
  - Bridge Supplement;
  - Additional Info;
  - Additional Stormwater; and
  - Change Form.

## 3.5.2 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Site Visit Meeting Notes (.pdf) to REC and APM for review within 1 week of the meeting.
- Final Site Visit Meeting Notes (.pdf) to REC and APM within 1 week of receiving review comments.
- Draft FAHP Programmatic Project Initiation Form (.pdf) to REC and APM for review within 2 weeks of Project Kickoff Meeting (Task 1.3).
- Final FAHP Programmatic Project Initiation Form (.pdf) to REC and APM within 1 week of receiving review comments.
- Draft FAHP Programmatic Project Notification documents (.pdf) to REC and APM for review 4 weeks prior to Final PS&E deliverable (Task 15.3).
- Final FAHP Programmatic Project Notification documents (.pdf) to REC and APM within 2 weeks of receiving review comments.

# 3.5.3 Scope to Determine if Project Must Address the Oregon Fish Passage Law (OARs 635-412-0005 to 625-412-0040) [RESERVED]

## 3.5.4 Fish Passage Scoping Field Visit [RESERVED]

## 3.5.5 Determine Appropriate Approach to Meet Fish Passage Requirements

Consultant shall collect necessary data to determine the appropriate approach to meet fish passage requirements.

Consultant shall:

- Conduct up to 1 visit to the Project area to document existing site conditions and, if applicable, confirm background information.
  - Field work to complete this task shall be accomplished by a qualified fish biologist with a Bachelor's degree in biology, fisheries or equivalent, and a minimum of 2 years of experience in the Pacific Northwest evaluating fish passage conditions, fish presence and habitat use by species and life stage, and fish habitat quality.
  - If available, Consultant shall utilize maps with existing Native Migratory Fish ("NMF") fish distribution and fish passage barrier information and confirm this information in the field.
  - If existing maps are incomplete or inaccurate, Consultant shall collect information on locations of fish passage barriers, potential NMF fish distributions, and habitat quantity and quality as described below.
  - If necessary to collect the above information, Consultant shall obtain ROEs to public and private property to walk the watercourse over suitable distances upstream and downstream of the Project site.
- Determine the number and locations of artificial obstructions and natural barriers above and below the Project site.
  - Consultant shall map locations and document distances of all natural and artificial barriers upstream of the Project site to the first full barrier or to the end of fish use.
  - Consultant shall map locations and document distances of all natural and artificial barriers downstream of the Project site to the first full barrier or to the location of documented fish use downstream of the Project area, whichever is closer.
  - A qualified fish biologist, as described above, shall determine the level of barrier to NMF according to the definitions in the ODFW Fish Passage Priority List (Loffink 2013 or current version).
- Determine the amount and quality of habitat and potential NMF species use above the artificial obstruction occurring at the Project site.
  - Consultant shall determine the distance and map the amount of suitable habitat to the next full fish passage barrier or the end of fish use upstream of the Project site.

- Consultant shall take average active channel widths above and below the road crossing outside of the influence of the crossing.
- A qualified fish biologist shall evaluate the amount and quality of the habitat to support the life stages and life cycle needs of NMF that would use the habitat if they had full access to area between the Project site and the next full fish passage barrier (including spawning, rearing, sheltering and feeding, migration).
- Consultant shall document the species and life stages of NMF that would use the habitat above the Project area if full volitional access were provided.
- Coordinate and attend 1 on-site visit with the ODFW District Fish Biologist (or their designated representative), NMFS Liaison (if appropriate), and ODOT Biologist to discuss the Project and the appropriate strategy to address fish passage..
  - Consultant shall discuss the appropriate fish passage design methodology with ODFW and ODOT, including whether "Larger-Scale Crossing Design," "Hydraulic Design," or "Stream Simulation Design" will be used to meet passage requirements.
  - If the passage standard can be met with Project modifications or design exceptions, Consultant shall discuss applicable fish passage standards, Project challenges, and possible modifications to the Project to meet Oregon Fish Passage Law and ODFW/NMFS fish passage standards.
  - Consultant shall prepare site visit meeting notes that include topics discussed and recommendations from ODFW/NMFS for the Project to address fish passage requirements.
  - Following the site visit and dissemination of meeting notes, Consultant shall coordinate with ODFW/NMFS via email and phone to verify ODFW/NMFS Project design requirements, expectations and documentation necessary to address fish passage to the approval of ODOT and ODFW.
  - Consultant shall document the fish passage approach recommendation in a Fish Passage Memo with inclusion of the following information:
    - Description of the Project location and proposed in-water work activity(s) triggering fish passage requirements;
    - Confirmation of current or historic NMF presence or absence at the Project site and if present, a map identifying existing or historic NMF distribution above and below the Project area;
    - Description of evaluation methods, including any field survey dates, field personnel and qualifications, background information reviewed, and summary of meetings or other communications with ODFW and ODOT and Agency;
    - Summary of amount and quality of stream habitat types and conditions upstream of the Project area to the next full barrier, if appropriate;
    - A map and quantification of potential NMF distribution upstream of the Project area to the next full barrier, if appropriate;
    - A table with fish passage barriers upstream of the Project to the first full barrier and fish passage barriers downstream of the Project to the first full barrier or to documented fish presence. The table shall contain:
      - Barrier location (latitude and longitude);
      - Distance upstream or downstream from the triggering action in the Project area;
      - Barrier description and status; and
      - Level of passage provided at the barrier;
    - A map of barriers identified in the above table; and
    - An analysis and recommendation of appropriate fish passage approach.

## 3.5.5 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Fish Passage Memo (MS Word) containing findings from Task 3.5.1 and Task 3.5.2 to REC and APM for review 2 weeks prior to Final Fish Passage Memo (Task 3.5.5).
- Final Fish Passage Memo (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.5.6 Fish Passage Exemption Application [RESERVED]

## 3.5.7 Fish Passage Waiver [RESERVED]

## 3.5.8 Fish Passage Plan

Consultant shall prepare 1 Fish Passage Plan. Meeting fish passage criteria is required at the Project site when:

- There are current or were historic NMF present at the Project site.
- Oregon's fish passage law will be triggered (OARs 635-412-0005 to 625-412-0040).
- There is habitat for NMF upstream of the Project site and providing passage at the Project location would provide a significant or cost effective benefit to NMF.
- The Project will not trigger the need for fish passage mitigation or a fish passage waiver.
- The Project will meet stream simulation or hydraulic fish passage criteria.

Consultant shall:

- Determine and document ("Larger-Scale Crossing Design," or "Hydraulic Design,") fish passage criteria in the Fish Passage Plan.
- Prepare 1 draft fish passage plan in ODFW's form format and submit to Agency for review.
- Revise the draft plan and submit the final fish passage plan to REC and Agency for approval of changes.
- Submit ODOT approved final fish passage plan to ODFW for review and concurrence; also submit plan to the Oregon Division of State Lands ("DSL").
- If ODFW requests changes to the plan, revise plan, get ODOT and Agency's approval to changes, and resubmit plan to ODFW and DSL.
- Provide ODFW concurrence documentation to REC and Agency.
- Incorporate fish passage requirements and ODFW concurrence documentation into permit documents and Project PS&E as applicable.

## 3.5.8 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Fish Passage Plan (MS Word) to REC and APM for review 2 weeks prior to Final Fish Passage Plan (Task 3.5.8).
- Final Fish Passage Plan (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.
- ODOT approved Final Fish Passage Plan to ODFW at least 1 month prior to triggering even if the plan is straight forward; ODOT approved Final Fish Passage Plan to ODFW at least 3 months prior to the triggering action if it is a non-stream Fish Passage Plan or if the plan requires design exceptions.
- ODFW concurrence documentation to REC and APM within 1 week of receiving concurrence from ODFW and include with permits as applicable.

## C3.5.9 Scientific Take Permit for Fish Salvage Operations (CONTINGENCY)

Consultant shall obtain a Scientific Take Permit ("STP") from ODFW for fish salvage operations during Project construction. This task assumes no more than 1 STP and 1 fish salvage operation.

Consultant shall:

- Submit the application for 1 STP to ODFW.
- Obtain and provide to REC and APM a copy of the approved STP for the fish salvage associated with the in-stream isolation area.
- Coordinate as necessary with ODFW and other regulatory agencies to comply with terms of the STP.
- Provide to REC and APM required documentation in accordance with NMFS and ODFW guidance and regulations to conduct the fish salvage operations at the Project site.

## C3.5.9 Consultant Deliverables and Schedule

Consultant shall submit:

- Copy of STP application (MS Word) to REC and APM for review within 2 weeks following Task 3.5.8.
- Copy of the ODFW approved STP (.pdf) to REC and APM within 2 weeks of receipt from ODFW and prior to salvage operation.

## 3.5.10 Bird Protection

Consultant shall comply with laws that protect birds including the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and State and federal ESA.

Consultant shall:

- Alert ODOT and Agency environmental staff and USDA Animal and Plant Health Inspection Service ("APHIS") Wildlife Services personnel as soon as possible whenever an active bird nest is observed in the Project area.
- Avoid disturbing, relocating or removing active bird nests, the eggs, or chicks; if avoidance is not possible, stop all actions that may disrupt the nest and contact the APM. Do not resume work that may disrupt nesting until approved by the APM.
- Avoid prolonged activity near any active nest that might prevent parent birds from adequately caring for eggs and chicks, and that might negatively impact successful fledging; if avoidance is not possible, stop all actions that may disrupt the nest and contact the APM. Do not resume work that may disrupt nesting until approved by the APM.
- Avoid disturbing or removing vegetation from March 1 through August 31.

# 3.5.10 Consultant Deliverables and Schedule

There are no deliverables for this subtask.

## 3.6 Wetland and Water Resources

Consultant shall research and prepare documentation necessary to satisfy the requirements of Section 404 of the Clean Water Act and Oregon's Removal Fill Law (ORS 196.795-196.990).

# 3.6.1 Wetland/Waters of the U.S./State Fieldwork

Consultant shall complete a wetland field determination and Ordinary High Water Mark ("OHWM") demarcation for the Project Study Area ("PSA").

Consultant shall use available data (including but not limited to: soil surveys, aerial photos, National/Local Wetland Inventory maps ("NWI/LWI")) as well as data gathered in the field to document the presence or absence of wetlands within the PSA.

Consultant shall:

- Determine wetland boundaries within the PSA in accordance with the criteria and methods described in the 1987 Corps of Engineers Wetland Delineation Manual (Environmental Laboratory Technical Report Y-87-1) and appropriate Regional Supplements.
- Place flags in the field to show wetland and upland sample plot locations, and the wetland boundaries. Label and number the flags to identify their function. Consultant shall collect the flag locations with a GPS unit and incorporate into Task 2.4.
- Prepare sketch maps of approximate wetland boundaries with numbering of flags or stakes.
- Ensure that field methods used and data collected meet the U.S. Army Corps of Engineers ("USACE") and DSL technical requirements for wetland delineations and ordinary high water demarcations. Collect and record wetland delineation data on approved wetland determination data sheets for possible inclusion with a wetland delineation report.

- Place flags in the field to show the OHWM elevation of all jurisdictional surface waters. Assess the OHWM elevation using ODOT accepted field indicators.
- Prepare sketch map of approximate OHWM boundaries concurrently with the wetland and OHWM field work with sequential numbering of flags or stakes to be provided prior to site survey for Project base mapping.
- Consultant shall notify ODOT and Agency if wetlands are present and will be impacted.

If wetland(s) or waters(s) are impacted, Consultant shall collect field data during this task and use it for, and submit it with, the deliverables for Task 3.6.2, Task 3.6.3, or Task 3.6.4 as applicable.

## 3.6.1 Consultant Deliverables and Schedule

Consultant shall:

• Flag the boundaries of wetlands and waters inside the PSA (if present) and incorporate into Task 2.4.

## 3.6.2 Wetland/Waters of the U.S./State Delineation Report

Consultant shall prepare a Wetland/Waters of the U.S./Delineation Report (Wetland Delineation Report) in accordance with DSL and USACE requirements and standards. The Wetland Delineation Report must include all required information outlined in OAR 141-090-035, as well as all wetland data sheets obtained in the field under Task 3.6.1.

Consultant shall prepare appropriate graphics required by USACE and DSL to accompany the Wetland Delineation Report. This shall include a site location map, tax lot map, NWI/LWI map (if available), soil survey map, and aerial overlay map. Consultant's Wetland Delineation Report must also include wetland delineation boundary mapping (figures) as finalized by Consultant and as per the requirements of DSL, and a color photographic record depicting existing conditions.

Consultant shall also complete the appropriate DSL cover page for submitting the Wetland Delineation Report to for review and approval. Consultant shall attend 1 site visit with ODOT and Agency representatives if determined necessary by USACE or DSL, and shall respond to their comments.

Consultant shall submit the Wetland Delineation Report to DSL and USACE. Consultant shall sign the wetland delineation report cover page. Consultant shall make payment of any associated fees. ODOT and Agency will review the draft Wetland Delineation Report and will provide comments to Consultant within 2 weeks of receipt of the draft. Consultant shall make appropriate modifications to the draft Wetland Delineation Report in response to the comments and shall prepare the final for submittal.

## 3.6.2 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Wetland Delineation Report (MS Word) to REC and APM for review 4 weeks prior to Final Wetland Delineation Report (Task 3.6.2).
- Final Wetland Delineation Report (.pdf) to REC and APM in 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.
- Final Wetland Delineation Report to DSL and the USACE (.pdf) 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.6.3 Wetland Functional Assessment Report

Consultant shall prepare a Wetland Functional Assessment Report if wetland impacts are unavoidable. The report must be submitted as a component of the Joint Permit Application to both USACE and DSL.

Consultant shall calculate wetland impact areas by wetland type, including permanent and temporary impacts, based on the wetland survey and Project design. If the impacted wetlands are classified under the

Hydrogeomorphic ("HGM") classification as tidal or riverine impounding wetlands, or are within the slopes/flats subclass, the assessment must be conducted in accordance with the methodologies outlined in the appropriate guidebook for HGM-based assessments. Consultant shall assess all other wetlands using the methodologies outlined in the Oregon Rapid Wetland Assessment Protocol ("ORWAP"). The Best Professional Judgment ("BPJ") method may be used if impacts to non-tidal wetlands do not exceed 0.2 acre.

Consultant shall prepare a standalone Functional Assessment Report that includes, at minimum, the following information:

- A description of the impacted wetlands, including the HGM and Cowardin classifications;
- A discussion of the proposed Assessment Unit for each wetland;
- A summary table depicting the results of the HGM or ORWAP assessment;
- A discussion of each assessed function, including rationale for the resulting scores;
- A wetland values assessment for each impacted wetland;
- A discussion of the anticipated functions and values impacts, and the appropriate means by which to mitigate for those impacts; and
- A copy of all prepared data sheets for the HGM or ORWAP assessment.

Agency will review the draft Wetland Functional Assessment Report and provide comments to Consultant within 2 weeks of receipt of the draft. Consultant shall make appropriate modifications to the draft report in response to the draft document comments.

## 3.6.3 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Wetland Functional Assessment Report (MS Word) to REC and APM for review 4 weeks prior to Final Wetland Functional Assessment Report (Task 3.6.3).
- Final Wetland Functional Assessment Report (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.6.4 Stream Functional Assessment

Consultant shall complete a Stream Functional Assessment if impacts to non-wetland waters are unavoidable. The assessment must be function-based per the current DSL requirements outlined in OAR 141-085-0765(3). This must include an assessment of the current hydrologic, geomorphic, biological, and chemical and nutrient functions and values provided by all on-site non-wetland waters that will be impacted. The assessment must be subjective and qualitative, and must include a discussion of the anticipated changes in stream function and value post-construction to determine if a net gain, net loss, or no net change in the assessed functions and values will occur as a result of the Project. The results of the assessment must be included in the Joint Permit Application document prepared under Task 3.7.1.

# 3.6.4 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Stream Functional Assessment results (MS Word) to REC and APM for review with the draft USACE/DSL Joint Permit Application ("JPA") (Task 3.7.1).
- Final Stream Functional Assessment results (.pdf) to REC and APM 2 weeks prior to NEPA Approval per Task 1.1 Project design schedule.

## 3.7 Environmental Permits and Clearances

Consultant shall research and prepare State and federal permit applications required for the Project as described in the subtasks listed below.

# 3.7.1 USACE/DSL JPA and DEQ Section 401 Certification

Consultant shall prepare a complete JPA meeting all the applicable requirements of the most recent version of the DSLs Removal-Fill Guide and USACE permit application standards. Consultant shall submit the JPA and Stormwater Management Plan to DEQ to obtain Section 401 Water Quality Certification.

Agency will select the preferred design for the Project prior to the preparation of the JPA.

Consultant shall:

- Prepare JPA for a USACE Section 404 Nationwide Permit and a DSL General Permit, to authorize work within the jurisdictional waters and any wetlands found in the Project area.
- Provide pre submittal coordination with DEQ to inform them of the Project and verify requirements and documentation necessary to apply for Section 401 Water Quality Certification.
- Provide pre-submittal coordination with representatives of the USACE and DSL to confirm permitting requirements and application procedures. Conduct pre-submittal coordination by phone and email. No pre-submittal site visit will be required.
- Verify that features and impacts are correctly identified for the permit application.
- Prepare all JPA required drawings, maps, photographs, site descriptions, and any additional information required by DSL or the USACE for inclusion in the JPA.
- Prepare narratives and descriptions on Project purpose and need and Project alternatives using Project development information provided by Agency as necessary to complete the JPA.
- Respond to questions or comments raised by the USACE and DSL following the submission of the JPA. This task may include correspondence and clarification of the JPA in the form of telephone calls, letters, or e-mails, to clarify regulatory Agency concerns and to facilitate the issuance of the USACE and DSL permits for this Project. No regulatory Agency site visit or in person meetings will be required.
- Submit the complete JPA package to the DSL and USACE on behalf of Agency
- Submit to DEQ a copy of the complete Joint Permit Application, Stormwater Management Plan, and provide a transmittal letter to DEQ requesting Section 401 Water Quality Certification for the Project.

All required wetland and waters mitigation will be satisfied with Payment-to-Provide or purchase of mitigation bank credits. On-site or off-site compensatory wetland/waters mitigation coordination and planning will not be required.

Due to the varied nature of post-submittal coordination, it is expected that Consultant shall not expend more than 8 hours for office review and coordination time for post-submittal coordination with DSL, USACE, and DEQ. Consultant shall be responsible for obtaining Land Use Planning Signature on the JPA. Consultant shall be responsible for DSL, USACE, and DEQ to review and approve the submittals.

# 3.7.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Section 401 Water Quality Certification application (.pdf) to APM for review 2 weeks prior to Final Section 401 Water Quality Certification application (Task 3.7.1).
- Final Section 401 Water Quality Certification application (.pdf) to APM and DEQ 4 weeks prior to Preliminary PS&E deliverables (Task 15.1).
- Draft JPA Submittal Package (.pdf) to REC and APM for review 4 weeks prior to Final JPA Submittal Package (Task 3.7.1).
- Final JPA Submittal Package (.pdf) to REC and APM 2 weeks prior to Preliminary PS&E deliverables (Task 15.1).
- Final JPA Submittal Package to both the DSL and USACE (in file format as required) 2 weeks prior to Preliminary PS&E deliverables (Task 15.1).
- Final JPA and Final Stormwater Management Plan to DEQ (in file format as required) 2 weeks prior to Preliminary PS&E deliverables (Task 15.1).

## 3.7.2 DEQ 1200-C Permit Application [RESERVED]

## TASK 4 PUBLIC INVOLVEMENT SUPPORT

Consultant shall assist Agency with public involvement and outreach, as defined below, for the design phase of the Project through Final PS&E. Agency will have overall responsibility for the Project public involvement and outreach program.

## Applicable Standards:

 ODOT's NEPA Manual addresses public involvement requirements for FHWA funded NEPA projects, specifically for Categorical Exclusions and Programmatic Categorical Exclusions in Oregon. The requirement, as interpreted for Oregon in the ODOT NEPA Manual, was approved in 2017 by FHWA Oregon Division. The ODOT NEPA Manual is available at: <u>https://www.oregon.gov/odot/GeoEnvironmental/Docs\_NEPA\_Manual/412.NEPA\_Manual.pdf</u>

## 4.1 Public Involvement Plan ("PIP")

Consultant shall prepare a PIP, with input from the Agency, for the Project Design Phase through Final PS&E. The PIP must include interested party and community input into Project design details and aesthetic considerations and incorporate this input into Project planning. Consultant shall coordinate this PIP with the technical elements of the Project, to meet regulatory requirements and to address identified Project issues. The PIP must include a preliminary list of potential interested parties (by group or category only) for Agency review.

The PIP for the design phase of the Project must include appropriate public involvement elements as specified in the FHWA-approved ODOT NEPA Manual linked above.

Consultant shall discuss, modify and confirm with Agency the following items for inclusion in the PIP:

- Schedule for meetings and other deliverables associated with public involvement;
- Desired strategic approach for each phase of the Project;
- Target audience;
- Desired outcome for public involvement;
- Project message; and
- Which communications and outreach tools will most effectively engage and reach the desired audience.

## 4.1 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft PIP (MS Word or .pdf) to APM within 4 weeks of NTP.
- Final PIP (.pdf) to the APM within 10 business days after receiving draft review comments.

## 4.2 Public Involvement Meetings

Consultant shall attend up to 2 meetings, as listed below, to provide Project information and address specific questions and concerns related to the Project.

- Interested party meeting
- City council meeting
- County commissioners meeting

Consultant shall document input received from the meetings and prepare written summaries.

Consultant shall prepare:

• Meeting agenda;

- Project background statements;
- Project fact sheets;
- Media releases;
- Aerial graphics;
- Project drawings; and
- PowerPoint presentation.

Agency will schedule, coordinate the location and advertise the meetings. For budgeting purposes, it is assumed that up to 2 Consultant staff shall attend each 2 hour public meeting, excluding travel time.

## 4.2 Consultant Deliverables and Schedule:

## Consultant shall submit:

- Draft meeting agenda and Project information items (MS Word or .pdf) to APM for review within 3 weeks of scheduled meeting.
- Final meeting agenda (.pdf) to APM within 7 business days of scheduled meeting.
- Project information items prepared under Task 4.2 and a minimum of 20 hard copies of meeting agenda, aerial graphics and Project drawings to be presented at each meeting.
- Written meeting summaries (.pdf) to APM within 5 business days of each meeting.

#### 4.3 Electronic Communication

Consultant shall prepare Project information and other related materials for the items below:

- Social media (e.g. Twitter, Facebook, YouTube, on-line blogs, etc.); and
- Website(s)

For budgeting purposes it is assumed that 4 hours will be allocated by up to 1 Consultant staff to prepare social media and website information.

## 4.3 Consultant Deliverables and Schedule:

Consultant shall submit:

- Written document to include in electronic file or link, submitted to APM, as per schedule defined in the PIP (Task 4.1), for each of the following:
  - Facebook; and
  - Website
- Updates to the list above, up to **1 time quarterly for 12 months** to keep content current.

## TASK 5 UTILITIES

Consultant shall perform the coordination of all utility facilities within the Project limits in accordance with the Oregon Utility Relocation Manual (available at: <u>https://www.oregon.gov/ODOT/ROW/Pages/Utilities.aspx</u> under "Policies and Guidance").

If any utility is nonresponsive or uncooperative, Consultant shall notify Agency, and Agency will communicate with the utility to affect a solution.

## 5.1 Utility Location and Coordination

Consultant shall perform utility coordination and liaison activities with utility owners/operators for the Project. Consultant shall comply with the current version of the utility coordination policy requirements as described in the Oregon Utility Relocation Manual. This work includes reviewing utilities that may be in conflict with the Project work and utility relocation coordination with the utility owners to resolve those potential conflicts. Additionally, Consultant shall obtain system mapping from utilities located within the Project limits. Consultant shall use this information to confirm the survey map as developed under Task 2, Surveying. Where potential conflicts exist, Consultant shall work with the utility owner to acquire their "pothole" information for verification of utility size and depth.

## 5.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Existing utility information gathered in Task 5.1 to be included in the survey map / base map prepared in Task 2.4.
- Record of communications with each utility within the Project limits. Copies of communication record must be provided to APM within 3 business days of request.

## 5.2 Utility Report

Consultant shall prepare a draft and final "Utility Report" for those utilities located within the Project limits. The "Utility Report" must include as many of the following items that are known and applicable:

- Description of utilities located within the Project limits;
- Utility facility's structure dimension;
- Probable buried depth of cover or aerial lowest height of wire;
- General description of utility facility structure material;
- Reliance upon other utilities in the vicinity (joint use facility)
- Description of the means used to verify facility location and limits of conflict (test hole data a.k.a. "pothole" verification);
- Proposed Project construction requirements;
- Potential utility conflicts; and
- Probable conflict resolution (relocation, adjustment concept, or protect in place).

## 5.2 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Utility Report (.pdf) to APM with draft DAP deliverable (Task 13).
- Final Utility Report (.pdf) to APM within 2 weeks of receipt of draft review comments.

## 5.3 Utility Coordination Meetings

To facilitate the development of each utility relocation plan, Consultant shall organize, conduct, prepare for and attend the following utility coordination meetings with utilities within the Project limits:

• One on-site individual utility meeting, to coordinate relocation plan, construction constraints, means and methods, work sequence and schedule limitations.

Consultant shall prepare meeting minutes summarizing the discussions at the individual meeting. For budgeting purposes it is assumed that up to 2 Consultant staff shall attend the 1 hour meeting, excluding travel time.

## 5.3 Consultant Deliverables and Schedule

Consultant shall submit:

• Meeting Minutes (.pdf) to APM within 5 business days following meeting.

## 5.4 Utility Relocations

Consultant shall coordinate the efforts of the utility agencies in developing and executing a plan for relocating utilities to resolve conflicts with the Project design. As part of that effort, Consultant shall complete the following subtasks:

## 5.4.1 Utility Notices

For those utilities where no conflict is anticipated, Consultant shall provide a Project Notification (first notice per OAR 734-055045). Consultant shall use the Project Notification letter template located at:

<u>https://www.oregon.gov/ODOT/ROW/Pages/Utility-Forms.aspx</u> (under "Local Public Agency Resources" heading). The Project Notification letter must include plan sheets indicating location of existing utilities in relationship to proposed project.

For those Utilities where a conflict is anticipated, Consultant shall provide a Conflict Notice (first notice per OAR 734-055-045). Consultant shall use the Conflict Notice letter located at: <a href="https://www.oregon.gov/ODOT/ROW/Pages/Utility-Forms.aspx">https://www.oregon.gov/ODOT/ROW/Pages/Utility-Forms.aspx</a> (under "Local Public Agency Resources" heading).

Consultant's coordination schedule must allow each utility a 30-day period to respond with a proposal from date of the notice. If additional facility conflicts become apparent, Consultant shall create and deliver multiple notices or revised notices to utility owner, and the utility owner's response time may be shortened to 7 calendar days.

## 5.4.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Project Notification letter(s) and Conflict Notice(s) with enclosures to APM and State Utility Liaison ("SUL") (.pdf) 2 weeks prior to Final DAP deliverable (Task 13).
- Final Project Notification letter(s) and Conflict Notice(s) with enclosures to utilities (.pdf) with Final DAP deliverable (Task 13).
- Final Project Notification/ Utility Conflict letters with enclosures (.pdf) to APM and SUL within
  2 weeks following submittal to utilities.

## 5.4.2 [RESERVED]

## 5.4.3 Review Utility Relocation Plans and Relocation Time Requirement Letters

Consultant shall examine all received utility relocation plans for completeness and accuracy. If relocation plans do not resolve a utility conflict, Consultant shall provide comments to the utility for correction and resubmittal.

For those utilities that propose to attach to structures, Consultant shall provide guidance (e-mail acceptable) to the utility regarding Agency bridge accommodation policies and request protocol for bridge accommodation.

Consultant shall obtain acceptance or rejection of the utilities' request for bridge accommodation from APM.

Consultant shall negotiate with each utility a utility construction work schedule that conforms to the Project construction schedule. Consultant shall deliver a Time Requirement Letter (second notice) to each utility owner accepting or modifying the required utility facility construction time.

## 5.4.3 Consultant Deliverables and Schedule

Consultant shall submit:

- The final utility relocation plan(s) submitted to the APM within 10 business days after acceptance.
- Time Requirement Letter(s) submitted to each utility, APM and SUL within 10 business days following submittal of Advance PS&E deliverable (Task 15.2).

## 5.5 Utility Reimbursement [RESERVED]

## 5.6 Utility Certification

Consultant shall complete and sign the Utility Certification (Form 734-5162) verifying that all utility work has been completed or that all necessary arrangements have been made for it to be undertaken and completed as required for proper coordination with the physical construction schedule.

If an exception is required, Consultant shall prepare, for APM's signature, a Public Interest Finding as part of the Utility Certification including facts regarding the cause for the exception, an action plan and time table in securing a utility agreement (a.k.a. Time Requirements letter).

## 5.6 Consultant Deliverables and Schedule

Consultant shall submit:

- Utility Certification (.pdf) to APM and SUL for co-signature 10 business days prior to Final PS&E deliverable (Task 15.3).
- Signed Utility Certification form (.pdf) to APM with Final PS&E deliverable (Task 15.3).

## 5.7 Subsurface Utility Pothole Investigation [RESERVED]

## TASK 6 GEOTECHNICAL / PAVEMENT SERVICES

Consultant shall conduct geotechnical and pavement field investigations to explore the following:

- Surface and subsurface conditions in proposed improvement areas, including bridge foundations, abutment walls, and wing walls;
- Area of pavement preservation, rehabilitation and new pavement construction, as applicable; and
- Surface and subsurface conditions in area of potential slope instability.

Consultant shall provide documentation which summarizes and presents the results of the investigation, analyses, and recommendations.

## 6.1 Data Review/Reconnaissance

## Data Review:

Consultant shall review available existing information to evaluate the following:

- Existing pavement design; and
- Pavement construction history.

Consultant shall review available information from the following sources (as applicable):

- Existing published and unpublished literature from Agency, ODOT, federal, city, or County records;
- As-built roadway plans (as available);
- Bridge plans and Foundation or Geotechnical Data Sheets; and
- Maintenance records.

## Reconnaissance:

Consultant shall conduct a pavement and geotechnical reconnaissance of the site consisting of 1 site visit.

Consultant shall identify the following:

• General condition of the existing pavement and side-slopes.

As part of the site reconnaissance work, Consultant shall:

- Observe surface conditions that may be indicative of subsurface conditions of concern, as well as past or ongoing geologic processes (e.g., areas of seeps or springs, erosion, unstable slopes, shallow groundwater, roadway settlement, offsets and depressions, existing earthwork performance, exposed soil and bedrock units).
- Identify site constraints, staging concerns (for exploration and construction).
- Identify areas for core samples, rut measurements, photographs, and laboratory testing.
- Identify potential exploration and monitoring locations.
- Locate potential pavement core explorations and paint on the ground proposed core locations.
- Locate geotechnical explorations and stake or paint on the ground proposed boring locations.

## 6.1 Consultant Deliverables and Schedule:

Consultant shall incorporate information from this task into deliverables for Task 6.2, Task 6.5 and Task 6.6.

## 6.2 Exploration and Testing Work Plan ("ETWP")

Consultant shall prepare an ETWP prior to beginning field work. No field work is to be performed, other than initial site reconnaissance, before review and approval by Agency of the ETWP.

The ETWP shall address the proposed drilling (geotechnical borings and pavement cores); site access; exploration and sampling procedures; preliminary laboratory testing plan; safety plan; and the TCP. The TCP must address minor road encroachments as well as any lane or shoulder closures for activities associated with cores, borings, and restoration of pavements, shoulders, and other areas disturbed due to subsurface exploration activities, including erosion control measures.

Consultant shall comply with any and all environmental permits, including archeology clearance, and approvals prior to any geotechnical drilling work (as per ODOT Geotechnical Design Manual sections 3.8 and 3.8.4).

Consultant shall obtain required R/W permits from the City of Albany and the City of Millersburg, per Task 3.4.5.1, for exploration locations in public R/W prior to beginning field work.

Consultant shall obtain required ROE Agreement(s) from public and property owner(s) under Task 14.1 prior to beginning field work.

## 6.2 Consultant Deliverable and Schedule:

Consultant shall submit:

- Draft ETWP (MS Word) to APM for review within 2 weeks of completion of Task 3.2 and Task 3.3.
- Final ETWP (.pdf) to APM at least 5 business days prior to beginning field work.

## 6.3 Geotechnical and Pavement Explorations

Consultant shall conduct field investigation work in accordance with the most current versions of the <u>ODOT</u> <u>Geotechnical Design Manual</u> and the <u>ODOT Pavement Design Guide</u>.

Consultant shall perform all field explorations in conformance with the approved ETWP developed in Task 6.2. When possible, Consultant shall coordinate traffic control and other subcontractors, such as drillers, to provide exploration Services for both pavement and geotechnical explorations concurrently. Consultant shall follow all environmental permits and approvals prior to performing any exploration Services by drilling subcontractors. Consultant or their drilling contractor shall locate all underground utilities.

Once all environmental permits and approvals have been provided, consultant shall perform subsurface explorations to estimate and characterize the in situ soils and obtain design parameters for the purposes of addressing foundation support and other geotechnical or geological considerations for the following:

- Traffic Structures (Bridge)
- Abutment walls and wing walls
- Slope stability of approach embankments
- Embankment subgrade
- Onsite infiltration of storm water

Consultant shall use data from the subsurface explorations to determine if site conditions are adequate to provide soil bearing information to support the anticipated structure and provide lateral loads for the design of the wingwalls. The anticipated subsurface explorations to be performed for the Project are shown in the following table:

TEST METHOD	EST #	DEPTH(S) OF EXPLORATION(S)
Drilled Borings	2	80 ft
Pavement Cores	2	5 ft

Consultant shall provide an experienced Professional Engineer or Certified Engineering Geologist, licensed in the State to supervise the field operations for in situ data gathering.

Consultant shall perform appropriate pavement explorations and tests to estimate the following:

- Subgrade conditions for new or existing roadway alignments;
- Structural capacity of the existing pavement;
- Thickness of the existing pavement section; and
- Visual condition of the existing pavement.

Consultant shall perform a pavement field investigation program which includes the tests and explorations shown in the following table:

TEST METHODS	EST #	TEST INTERVALS
Pavement core explorations	2	As specified in ODOT Pavement Design Guide
Shallow borings (5ft minimum) or soil probe explorations	2	One off each end of the bridge
EXPLORATIONS		
Visual condition survey of the existing pavement within Project limits		
Shallow excavations (as needed per site conditions) to estimate topsoil stripping depth for alignments		

Consultant shall provide an experienced engineer or geologist, as applicable, to supervise the field operations and conduct a detailed visual pavement condition survey to identify the type, extent and severity of the distress present.

Consultant shall perform the exploration work while following additional requirements as follows:

- Boring locations that have restrictions must be performed in conformance with the permit requirements;
- Collect the drill cuttings and drilling mud in sealable steel drums and remove from the site, unless otherwise coordinated with Agency;
- The borings must be abandoned and backfilled according to OWRD regulations;
- All borings and core holes through pavement must be patched with cold patch asphalt emulsion, quick set Portland Cement Concrete ("PCC"), or as approved by Agency;
- Borings must be completed by drillers appropriately licensed by OWRD;
- Core samples of the pavement must be retrieved using a diamond bit core drill; and
- Pavement cores must be logged according to the ODOT Pavement Design Guide and photographed for inclusion in the report.

Consultant shall gather the appropriate traffic information in order to compute the 18-kip Equivalent Single Axle Loads ("ESAL"s) within the Project limits. Compute the ESALs as required by the ODOT Pavement Design Guide. Consultant shall estimate the growth rate based on available traffic forecasts and shall acquire the traffic data for ESAL calculations by conducting classified traffic counts or using data from City and Agency.

## 6.3 Consultant Deliverables and Schedule:

Information from this task shall be incorporated into deliverables for Task 6.5 and Task 6.6.

## 6.4 Laboratory Testing

Consultant shall perform laboratory tests on disturbed and undisturbed soil samples obtained from the explorations to:

- Characterize the subgrade and subsurface soils;
- Determine index properties;
- Develop engineering soil parameters for the design and construction of bridge foundations, pavement, abutment walls and wing walls, embankment design, or other geotechnical feature;
- Assist with determining engineering geologic unit boundaries; and
- Check field soil classification.

The laboratory testing program must be performed in accordance with standard ASTM, AASHTO, Agency, and ODOT practices to include the following:

- Atterberg limits;
- Natural moisture content;
- Gradation;
- Percent fines (washed);
- Organic content;
- Consolidation;
- Vane shear strength test;
- Electrochemical tests (pH, and resistivity); and
- Other standard tests as required.

## 6.4 Consultant Deliverables and Schedule:

Information from this task shall be incorporated into deliverables for Tasks 6.5 and Task 6.6.

#### 6.5 Pavement Design Report

Consultant shall prepare a Pavement Design Report indicating pavement design criteria, pavement design, and subgrade stabilization recommendations to be used for the Project, based on data and analysis provided or collected. Consultant shall provide alternative pavement design recommendations for 2 pavement sections for:

- New pavement for areas of widening or reconstruction; and
- Rehabilitation of the existing pavement.

Consultant shall develop a cost estimate for each of the design alternatives. Consultant shall evaluate the alternative designs to determine the alternative with the lowest life cycle cost. The life cycle cost analysis must be performed using the FHWA's RealCost software considering only Agency costs.

To be eligible for federal funding, pavements must be designed to provide a service life of 20 years for new or reconstructed pavements and 15 years for rehabilitated pavements. Any departure from these service life requirements will be considered a design deviation.

The pavement designs must be developed for design periods as provided in the current version of the ODOT Pavement Design Guide. Pavement section design must be performed in accordance with the most current versions of the ODOT Pavement Design Guide and AASHTO Guide for Design of Pavement Structures. Mechanistic design method(s) may also be used as stated in the current version of the ODOT Pavement Design Guide.

## 6.5 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Pavement Design Report (MS Word and .pdf) to APM 4 weeks prior to Final Pavement Design Report (Task 6.5).
- Final Pavement Design Report (.pdf) to APM with the Advance PS&E deliverable (Task 15.2).

## 6.6 Geotechnical Report and Foundation/Geotechnical Data Sheets

Consultant shall prepare a Geotechnical Report according to the ODOT Geotechnical Design Manual criteria for submittal to Agency for review. The Geotechnical Report must:

- Include design assumptions and calculations.
- Include Photo Logs.
- Geotechnical data sheets.
- Include Comments regarding Special Provisions.
- Summarize the geotechnical design and construction recommendations.
- Identify general specification criteria for the construction contract and provide recommendations for special provisions, if required.
- Summarize the results of the geotechnical analyses.
- Provide design recommendations for the bridge foundations, wingwalls and embankment design.

Consultant shall prepare up to 1 Geotechnical Data Sheet to be incorporated into the Advance and Final plan sheets.

## 6.6 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Geotechnical Report (MS Word and .pdf) to APM to be incorporated into draft DAP deliverable (Task 13).
- Final Geotechnical Report (.pdf) to APM with Preliminary PS&E deliverable (Task 15.1).
- Geotechnical Data sheets to be incorporated into Advance and Final PS&E deliverables under Task 15.2 and Task 15.3.
- Electronic data provided in the following formats (due with draft Geotechnical Report):
  - Memoranda, letters, reports, etc. in MS Office Suite or .pdf
  - CADD Files in .dwg format
  - Other files in standard software file formats

## TASK 7 HYDRAULICS RELATED SERVICES

Consultant shall provide stormwater management and hydraulic related design services under this SOW.

## 7.1 Hydraulic Site Investigation

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

- Obtain the Flood Insurance Study ("FIS") report and if available the Flood Insurance Rate Map using the FEMA web site.
- Review local floodplain ordinances to determine if there are any applicable to this water body.
- Determine if applicable stream gauge records exist, and obtain them, if possible.
- 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 2 locations and collect 2 streambed sediment samples in the vicinity of the bridge 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; and
  - Existing evidence of scour or erosion.

• Coordinate with Agency and review geotechnical report with regard to lateral stream stability and scour potential.

## 7.1 Consultant Deliverables and Schedule:

Consultant shall incorporate the information from this task into deliverables for Task 7.4.

#### 7.2 Hydrologic Analysis

The purpose of this subtask is to perform hydrologic analysis to determine appropriate flow rates for design of various Project elements.

Consultant shall:

- Review the ODOT Hydraulic Manual and available hydrologic data sources to determine the most appropriate 2-, 10-, 25-, 50-, 100-, and 500-year design flow for the proposed bridge/culvert.
- 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 delineate the tributary drainage basin utilizing available topographic maps and 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.

## 7.2 Consultant Deliverables and Schedule:

Consultant shall incorporate information from this task into deliverables for Task 7.4.

## 7.3 Hydraulic Analysis

The purpose of this subtask is to perform a variety of hydraulic analysis in support of design, and provide hydraulic design recommendations related to bridge, scour, and open channel. Consultant shall:

- Simulate hydraulic conditions of the stream using Hydrologic Engineering Centers ("HEC")-River Analysis System ("RAS") (version 6.4.1) software.
- Create a model to simulate "Existing Conditions" at the proposed bridge site to determine current water surface profiles, velocities, depths, and flow area for the various design flows.
- Create a model to simulate "Natural Conditions" at the proposed bridge site to determine natural water surface profiles, velocities, depths, and flow area for the various design flows when there was not a bridge or culvert.

## Bridge Hydraulics

Consultant shall:

- Create a model for up to 2 alternatives to simulate "Proposed Bridge" at water way crossing to determine water surface profiles, velocities, depths, and flow area for the various design flows.
- Provide waterway opening design recommendations.
- Prepare Hydraulic data table.

## Scour Analysis

Consultant shall:

• Evaluate up to 2 bridge scour alternatives following ODOT guidelines and the methods as described in the FHWA publication HEC-18, Evaluating Scour at Bridges, and HEC-23, Bridge Scour and Stream Instability Countermeasures.

- Review past bridge inspection reports that might include evidence of past scour problems.
- Conduct a scour analysis using results from the hydraulic analysis including, evaluation of pier scour and contraction scour.
- Coordinate with the bridge and geotechnical engineers on the design of the bridge foundation
- Provide scour countermeasure design recommendations.
- Conduct supporting design calculations (e.g. riprap size calculations).
- Coordinate with bridge engineer on countermeasure design details.

#### **Open Channel Hydraulics**

Consultant shall:

- Design revetment and bank stabilization for up to 2 alternatives following ODOT guidelines and the methods as described in FHWA publication HEC-11, Design of Riprap Revetment, and HEC-18, Evaluating Scour at Bridges.
- Evaluate hydraulic conditions under fish passage high flow and fish passage low flow, provide fish passage design recommendations, and demonstrate compliance with Oregon Fish Passage Laws (ORS 509.580 through 910).
- Develop a streambed material gradation recommendation and prepare a material specification.
- Provide waterway enhancement design recommendations for stream boulders, large woody debris, and/or bioengineered stream bank restoration.
- Perform calculations to predict the stability of waterway enhancements.

## Sediment Transport Analysis and Channel Stability Analysis

Consultant shall:

- Evaluate the vertical and lateral stability of the Project reach of Cox Creek under existing conditions and to evaluate problems (i.e. aggradation, degradation, erosion) under Project conditions.
- Evaluate the results of the hydraulic site investigation to determine the dominate sediment transport mechanisms that are occurring within the Project reach.
- Utilize the information from the hydraulic site investigation to define geomorphic sub-reaches to be used in the sediment transport calculations.
- Evaluate upstream sediment supply conditions.
- Utilize the results of the hydraulic modeling (HEC-RAS) to perform sediment transport calculations for the Project reach under existing and Project conditions.
- Complete 1 of the following, depending upon the dominate sediment transport mechanisms that are occurring within the reach, as determined through hydraulic site investigation (Task 7.1). Consultant shall either:

1) Calculate erosive flow energy under existing and Project conditions for comparison and describe the potential risk for channel stability problems caused by the design. This occurs if sediment transport is low and channel stability is observed to be governed by the stability of the channel boundary sediments (i.e. threshold channel).

OR

2) Perform a sediment continuity analysis to determine the aggradation/degradation potential by geomorphic sub-reach and how that potential would change between existing and Project conditions. This occurs if sediment transport is observed to be significant and channel stability is governed by a balance in bedload transport rates (i.e. alluvial channel).

## 7.3 Consultant Deliverables and Schedule:

Consultant shall submit:

• HEC-RAS model files for Existing Conditions, Natural Conditions, and Proposed Conditions (.ZIP file) to the APM within 10 calendar days following submittal of the Final Hydraulics Report deliverable (Task 7.4).

## 7.4 Hydraulics Report

The purpose of this subtask is to summarize the findings of the hydraulic related services and document the design recommendations.

Consultant shall prepare a draft version of the Project Hydraulics Report per ODOT Hydraulics Manual guidelines containing preliminary design recommendations for the hydraulic related services.

• Consultant shall prepare a final Hydraulics Report to reflect Agency review comments and to include changes to hydraulic related design recommendations that need to be modified due to advancement of the overall Project design.

## 7.4 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Hydraulics Report containing the report narrative (MS Word and .pdf) to the APM for review with the Preliminary Bridge Design deliverable (Task 11.2).
- Final Hydraulics Report (.pdf) to APM with the Final Bridge Design deliverable (Task 11.5).

## 7.5 Stormwater Management Design

The purpose of this subtask is to design stormwater systems for the conveyance and treatment of drainage in the Project.

## Storm Sewer Conveyance

The purpose of this subtask is to provide design of stormwater conveyance facilities that collect and carry highway runoff in conformance with: 1) ODOT's Federal Aid Highway Program Programmatic Biological Opinion and 2) any Agency requirements that are stricter than the federal standards. Consultant shall:

- Determine the locations of flow entering and leaving the Project R/W.
- Review existing conditions downstream of locations where flow is leaving the Project R/W for deficiencies and document observations.
- Delineate on-site drainage basins, calculate peak flow rates for design, model the proposed pipe network, and calculate hydraulic grade line to check that proper freeboard design requirements are being met.
- Check inlet capacity and inlet spacing, calculate gutter flow to check spread, and provide design recommendations for inlet locations.
- Provide design recommendations for pipe network, associated pipe sizes, pipe material recommendations, and manhole access design recommendations (i.e. -spacing, location within a travel lane, etc.).
- Provide manhole diameter design recommendations based upon analysis of pipe connections at each manhole.
- Compare pipe network against known utilities in the Project area and provide design recommendations to minimize utility conflicts or to adjust existing utilities.
- Provide Stormwater Outfall design and energy dissipator design recommendations in compliance with applicable Project permits.

## Roadside Channel Conveyance

Consultant shall model ditches to calculate water surface elevation, depth, and velocity and provide channel lining design recommendations per HEC-15, Design of Roadside Channels with Flexible Linings.

## Stormwater Quality Design

The purpose of this subtask is to provide design of stormwater management facilities that provide water quality treatment of highway runoff per Agency standards. Consultant shall:

• Define Contributing Impervious area.

- Delineate on-site drainage subbasins.
- Identify treatment Best Management Practice ("BMP") types applicable for the site.
- Identify potential locations to site facilities within and outside the existing R/W.
- Estimate facility size, type and space needs at each of the potential locations.
- Evaluate constraints to siting a stormwater facility (i.e.-drainage area, adjacent grades, roadway safety, presence of existing utilities, protected resource areas, etc.)
- Prepare up to 2 stormwater management strategies that combine potential stormwater facilities into a comprehensive solution for meeting the needs of the Project.
- Compare alternative stormwater management strategies and recommend a preferred strategy.

#### Stormwater Quantity Design

The purpose of this subtask is to provide design of stormwater management facilities that control quantity and flow rate of highway runoff per Agency standards.

Consultant shall:

- Define Contributing Impervious Area ("CIA").
- Delineate on-site drainage subbasins.
- Identify potential locations to site facilities within and outside the existing R/W.
- Estimate facility size, type and space needs at each of the potential locations.
- Evaluate constraints to siting a stormwater facility (i.e. drainage area, adjacent grades, roadway safety, presence of existing utilities, protected resource areas, etc.).
- Prepare up to 2 stormwater management strategies that combine potential stormwater facilities into a comprehensive solution for meeting the needs of the Project.
- Compare alternative stormwater management strategies and recommend a preferred strategy.
- Provide written design recommendations in the Stormwater Design report (Task 7.6) for:
  - Pipe network and associated pipe sizes
  - Manhole diameter
  - Pipe material recommendations
  - Channel Lining
  - Stormwater outfall
  - Energy dissipator
- Provide documentation in the Stormwater Design report (Task 7.6) for up to 2 stormwater management strategies and include a recommended preferred strategy.

## 7.5 Consultant Deliverables and Schedule:

Information from this task shall be incorporated into deliverables for Task 7.6.

# 7.6 Stormwater Design Report

The purpose of this subtask is to provide preliminary stormwater design recommendations and document the final stormwater facility design recommendations.

- Consultant shall prepare a preliminary version of the Project Stormwater Design Report per ODOT Hydraulics Manual guidelines containing preliminary stormwater facility design recommendations.
- Consultant shall prepare a final Stormwater Design Report to reflect Agency review comments on stormwater facility design recommendations, changes to stormwater facility design due to advancement of the overall Project design, and supporting documentation of the final stormwater facility design.

## 7.6 Consultant Deliverables and Schedule:

Consultant shall submit:

• Draft Stormwater Design Report containing the report narrative (report narrative in MS Word and attachments in .pdf) to REC and APM for review with the draft DAP deliverable (Task 13).

• Final Stormwater Design Report (.pdf) to APM to be incorporated into the JPA Submittal Package (Task 3.7.1) and submitted with Final PS&E deliverable (Task 15.3).

## 7.7 Stormwater O&M Manual

The purpose of this subtask is to provide O&M Manual documentation of all proposed stormwater management facilities so that Agency has a record of the stormwater facilities that need to be operated and how to maintain them after the Project is constructed.

Consultant shall prepare a draft O&M Manual, 1 for each stormwater facility anticipated for the Project, per Chapter 4, Section 4.6.6 of the ODOT Hydraulics Manual (latest edition).

Consultant shall prepare operational plans as outlined in Technical Bulletin GE 16-01 (B) titled "Stormwater Control Facility Operation and Maintenance Plan Development Drafting Guidance".

## 7.7 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft O&M manual (.pdf and MS Word) to APM with Advance PS&E deliverable (Task 15.2).
- Draft operational plan (Computer Aided Design ("CAD") file) to APM with Advance PS&E (Task 15.2).
- Final O&M manual and operational plan (.pdf) to APM with Final PS&E deliverable (Task 15.3).

## 7.8 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.

## 7.8 Consultant Deliverables and Schedule:

Information from this task shall be incorporated into report deliverables for Task 7.6, and Technical Specifications and Plan Sheet deliverables for Advance PS&E (Task 15.2).

## 7.9 Floodplain Impact Analysis

Projects requiring work in a mapped Special Flood Hazard Area (100-year floodplain) are usually required to demonstrate compliance with the local floodplain development requirements. When a project requires work in a mapped floodway and cannot achieve a No-Rise condition, then FEMA's Letter of Map Revision process must be followed in order to remain in compliance with the National Flood Insurance Program. The purpose of this task is to evaluate and prepare documentation commensurate with the level of Project impacts on the 100-year water surface elevation.

## Floodplain Development Permit Application

Grading work and/or a structure proposed as part of this Project will be located within a mapped Special Flood Hazard Area and is subject to the City of Millersburg Floodplain Development requirements.

Consultant shall complete supporting information, prepare a No-Rise Analysis Memorandum, prepare a Floodplain Development Permit application, and submit to City of Millersburg.

#### TASK 8 TRAFFIC ENGINEERING AND MANAGEMENT [RESERVED]

#### TASK 9 RAILROAD COORDINATION [RESERVED]

#### TASK 10 ROADWAY DESIGN [RESERVED]

#### TASK 11 BRIDGE DESIGN

Consultant shall perform preliminary structural analysis and design. Consultant shall base the general design upon the applicable sections of the AASHTO Load and Resistance Factor Design ("LRFD") Bridge Design Specifications and the LAG. Consultant shall address other design requirements and costs conforming to AASHTO and Agency standards.

Deviations from these standards require prior approval by the APM.

#### 11.1 Bridge Type, Size and Location ("TS&L")

Consultant shall perform an alternatives analysis to determine the type, size and location of the proposed bridge work. Consultant shall evaluate up to 2 alternatives consisting of precast concrete slabs or girders, castin-place concrete and steel alternatives in order to develop a recommended structure type. Consultant shall develop a recommendation of the structure type by using evaluation criteria such as cost, stage construction, speed of construction, environmental impacts, R/W requirements and durability. Waterway crossings shall be sized as determined by environmental permitting and hydraulic requirements, foundations shall be as recommended and in agreement with the required Project geotechnical report.

Consultant shall address the following in the Bridge TS&L narrative:

- TS&L recommendation for the preferred structure type meeting ORS requirements and standards as agreed upon with the APM.
- Summary of existing conditions of the Bridge.
- Outline of site specific constraints, including but not limited to: topography, geology, hydrology, environmental constraints and requirements, permits, R/W, utilities, geotechnical, impacts to the Talking Water Gardens, impacts to the pedestrian path, maintaining public access across Cox Creek, and cost.

Consultant shall prepare bridge plan sheets as specified in Table 11 located at the end of Task 11.

Consultant shall prepare quantity based cost estimates for the alternatives considered with a 30% contingency applied.

Consultant shall resolve any comments received on draft Bridge TS&L not incorporated into the final TS&L with the APM, and incorporate remaining comments into the Final TS&L report to be included with the DAP submittal.

#### 11.1 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft bridge TS&L (CADD and .pdf) for all alternatives considered including narrative, plan sheets and cost estimates incorporated into draft DAP deliverable (Task 13).
- Final Bridge TS&L for the recommended alternative including narrative, plan sheets and cost estimate incorporated into Advance PS&E deliverable (Task 15.2).

#### 11.2 Preliminary Bridge Design

For the purpose of establishing the extents limits of construction and impacts the Consultant shall prepare preliminary bridge plans for the Project incorporating or resolving Agency comments on the DAP submittal.

Plan and elevation of the proposed structure extents, associated grading work and outline of all structural components is to be completed at this stage of development. All non-standard details, materials, or other specialty works are to be defined and presented for approval and acceptance. Level of effort for updating the cost estimate and identifying applicable specifications is included in Task 15.1.

Consultant shall complete design and prepare bridge plans to be in the construction bid package to a Preliminary design level. Consultant shall reference Agency and ODOT standard drawings and details as needed. The following bridge and structure plans are anticipated:

- Plan and Elevation
- General Notes
- Foundation Plan and Data Sheet
- Stage Construction Details, if necessary
- Footing Plan
- Deck Plan
- Typical Deck Sections
- Bent Plan and Elevation
- Bent Details
- Miscellaneous details
- Temporary work bridge/shoring details, if necessary

Consultant shall illustrate and report non-standard details, materials, or other specialty works sufficient for Agency reviewers to evaluate and provide acceptance for such items. Consultant shall address review comments and incorporate feedback into the final design.

Work for Task 11.2, Task 11.4, and Task 11.5 shall be incidental to Task 15.

## 11.2 Consultant Deliverables and Schedule

Consultant shall submit:

• Preliminary bridge design plans incorporated into Preliminary PS&E deliverable (Task 15.1).

## C11.3 Bridge Design Exceptions (CONTINGENCY)

Consultant shall prepare up to 1 Bridge Design Exception Request using ODOT's form. Consultant shall address review comments and incorporate feedback into the final design exception request. Consultant shall submit the final design exception requests to APM who will obtain necessary approvals.

## C11.3 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft design exception (.pdf) to APM with draft DAP deliverable (Task 13).
- Final design exceptions to APM within 2 weeks of receipt of review comments.

## 11.4 Advance Bridge Design

Consultant shall incorporate all comments received from the Agency during DAP plans review and prepare the advance bridge plans, specifications and cost estimate to be included in the construction bid package.

Consultant shall reference ODOT standard drawings, details, and other related drawings as required. Advance PS&E shall be a completed set ready for final comment by the Agency and technical Class I design check (as outlined in the ODOT Bridge Design Manual ("BDM")).

Consultant shall prepare/update bridge technical special provisions, construction cost estimate and advance bridge plans as specified in Task 15.2. Advance estimate shall have a contingency of 8% applied.

Consultant shall complete Class I design check of the Advance Plans.

#### 11.4 Consultant Deliverables and Schedule

Consultant shall submit:

- Advance bridge design documents incorporated into Advance PS&E deliverable (Task 15.2).
- A Class I design check (.pdf) to APM for review with Advance PS&E deliverable (Task 15.2).

#### 11.5 Final Bridge Design

Consultant shall incorporate or resolve all comments received from the Agency during Advance Plans review and prepare final bridge plans to be included in the construction bid package.

Consultant shall finalize bridge technical special provisions, construction cost estimate and final bridge plans as specified in Task 15.3. Final Cost estimates shall have a 3.5% contingency applied.

Consultant shall complete a Class I design check of the Final PS&E according to the BDM.

#### **11.5** Consultant Deliverables and Schedule:

Consultant shall submit:

- Final bridge design documents (see Table 11) with engineering seals affixed (.pdf) to APM with the Final PS&E deliverable (Task 15.3).
- Final Calculation book (.pdf) incorporating Class I design check to APM with the Final PS&E deliverable (Task 15.3).

#### Table 11

Drawing Title	Scale	Estimated # of Sheets
Replacement Bridge		
Type, Size & Location		
TSL - Plan and Elevation	1" = 20'-0"	1
TSL - Staging and Typical Section	Varies	1
Final Bridge Plans		
Plan and Elevation	1" = 20'-0"	1
General Notes	n/a	1
Foundation Data Sheet	1" = 20'-0"	1
Foundation Plan and Details	1" = 20'-0"	1
Staging Details - 1	Varies	1
Staging Details - 2	Varies	1
Typical Bridge Sections	1⁄4″ = 1′-0″	1
Deck Plan	1" = 10'-0"	1
Beam Details - 1	Varies	1
Beam Details – 2	Varies	1
Bent Plan & Elevation	1⁄4″ = 1′-0″	1
Bent Details	1⁄2″ = 1′-0″	1
Wingwall Details	1⁄2″ = 1′-0″	1
Miscellaneous Details	Varies	1

#### TASK 12 PERMITS [RESERVED]

TASK 13 DAP (30%)

The objective of the DAP is to identify the size of the Project footprint, required design exceptions, environmental impacts, NEPA classification and any required environmental permits prior to advancing needed environmental permit application(s), R/W acquisitions, and preparing the Advance and Final Plans. The DAP package is intended to be a complete deliverable with all submitted items completed to a well-defined state. Consultant shall develop the alternative chosen in Task 11 by the Agency to prepare the DAP.

Consultant shall prepare and submit a draft DAP for review by Agency and a final DAP that records and addresses comments received from draft review, which include design plans (30%), cost estimate and a design narrative and that address the following:

- 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 any design exceptions that will be necessary;
- Summary of roadway alignment and typical section alternatives considered, including recommendations;
- Outline of Project constraints such as topography, environmental, permits, R/W, utilities and cost (NOTE: these may be executive summaries prepared by Consultant for other deliverables associated with this Project);
- Completed engineering survey with Digital Terrain Model prepared as used to develop draft DAP plans;
- Summary of the Traffic Analysis;
- Environmental impacts and summary of proposed mitigation measures;
- Environmental permitting requirements identified;
- Utility conflicts;
- Public Involvement efforts;
- Description of geotechnical subsurface conditions;
- Draft and final Geotechnical Report;
- Draft and final Stormwater Management Plan;
- Draft and final Hydraulics Report;
- Draft and final Structures TS&L Report;
- Description of proposed drainage features;
- Proposed R/W needs;
- Local permit needs;
- Proposed construction staging, temporary detours, and temporary protection and direction of traffic during construction;
- Draft and final Access Management Strategy; and
- Design acceptance checklist.

Consultants shall prepare DAP plan sheets according to Table 13:

Name of Sheet	Scale	Estimated # of Sheets
Title sheet	n/a	1
Typical sections	varies	1
Details	varies	2
Temporary protection and direction of traffic		
(including bicycle and pedestrian traffic)	1" = 30'	1
Construction staging	1" = 30'	1
Roadway plans	1" = 30'	2

#### Table 13

Roadway profiles	1" = 30'	2
Roadway cross sections	1" = 30'	1
Drainage/stormwater plan/profiles	1" = 30'	2
Erosion control	1" = 30'	2
Drainage/water quality details	1" = 30'	2
Bridge TS&L plans	Varies	2
Sign and striping plans	1" = 30'	1
Landscaping	1″ = 30′	2

Consultant shall summarize and reference in the DAP all of the reports and technical memoranda pertinent to the Project. Consultant shall prepare and submit design plans and a cost estimate as appendices within the DAP. Drawings submitted with the draft DAP must be marked as "Design Acceptance Plans for Review." Engineered documents and reports that are finalized with the DAP must bear the responsible engineer's seal. Consultant shall prepare the Title sheet in accordance with Agency standards and provide an index to the drawing set.

Agency will provide comments on the draft DAP. Consultant shall address Agency comments. Consultant shall arrange and attend a DAP Plan Review Meeting to communicate and discuss resolution to Agency review comments. Consultant shall provide written responses to address review comments received from Agency after attending the DAP Plan Review Meeting and prepare the final DAP for the record.

For budgeting purposes it is assumed that up to 2 Consultant staff shall attend the 2 hour DAP Plan Review Meeting, excluding travel time.

## 13 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft DAP (.pdf) to APM for review within 8 weeks of NTP.
- Arrange and attend a DAP Plan Review Meeting within 2 weeks of draft DAP review comments.
- Written responses to DAP review comments (.pdf) to APM within 2 weeks of the DAP Plan Review Meeting.
- Final DAP (.pdf) to APM within **12** weeks of NTP.

## TASK 14 R/W

Consultant shall conduct the R/W activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- "ODOT Right of Way Manual"
- "ODOT Guide to Appraising Real Property"
- "ODOT Local Agency Guidelines (LAG), Section C, Chapter 7"
- ORS 35, with reference to the "Uniform Appraisal Standards for Federal Land Acquisitions"
- Federal Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Uniform Act), as amended
- All other applicable laws, rules, and regulations

Consultant shall utilize all forms, spreadsheets, brochures and pamphlets referenced in the *"ODOT Right of Way Manual"* or as provided by Agency. Consultant shall use Agency letterhead and contact information to all the documents that are sent out.

Consultant shall track status for all parcel files to be acquired for R/W purposes in the format provided by Agency. Consultant shall coordinate the details of this process with the APM or Designee at the Project kickoff meeting.

For estimating purposes, up to 3 files are anticipated for this Project.

## 14.1 Obtain ROE Agreements

Consultant shall prepare, negotiate, and obtain public and private property owner signatures for temporary ROE documents for the purposes of preliminary engineering, and environmental investigations for up to 3 parcels. Consultant shall use templates provided by Agency. Consultant shall document conversations with property owners in the Report of Personal Interview form.

## 14.1 Consultant Deliverables and Schedule

Consultant shall submit:

- ROE documents (.pdf) for signature to APM within 3 weeks of NTP.
- Signed ROE documents (.pdf) to APM prior to onsite work occurring.

## 14.2 Title Reports and Document Requests

Consultant shall prepare and assemble all title documents, including vesting deeds, obtained in Task 2, necessary to accomplish acquisition of R/W for each impacted property.

Consultant shall obtain preliminary title reports for all permanent takes. Consultant shall review preliminary title reports for complete documentation of title vesting and notify APM of any major title encumbrances.

Consultant shall notify Agency if any acquisitions fall outside of Agency jurisdiction.

## 14.2 Consultant Deliverables and Schedule

Consultant shall submit:

- Preliminary Title Reports and Title Documents (.pdf) to APM with the Draft Offer Packet (Task 14.7).
- Clearance Documents from Lenders and Lessees (.pdf) to APM with the Draft Offer Packet (Task 14.7).

## 14.3 R/W Engineering, Maps & Descriptions [RESERVED see Task 2.7]

## 14.4 R/W Programming Estimate

Consultant shall prepare a R/W programming estimate for use by Agency to program funds for property acquisition. Consultant shall obtain the most current version of the Programming Estimate form to be used on all State and federally funded projects from Agency. The programming estimate must include the Project name and County in which the Project is located and all Project R/W costs, including separate Consultant, Agency, and ODOT R/W costs as provided by Agency. The R/W programming estimate must include dollar amounts for the following items: Land & Improvements; Damages/Cost to Cure; Relocation; Demolition; Personnel & Administration; Legal & Contingencies and totals for all Items. The programming estimate must be submitted to the APM for review. Consultant shall alert Agency if the estimate exceeds the Project budget and evaluate impacts to the R/W schedule.

Consultant shall revise and re-submit programming estimate, incorporating comments received from Agency and ODOT.

## 14.4 Consultant Deliverables and Schedule

Consultant shall submit:

- Draft Programming Estimate (MS Excel) to APM for review within 1 week following NEPA Approval per Task 1.1 Project design schedule.
- Final Programming Estimate to APM (MS Excel) within **1** week following draft review comments.

PLEASE NOTE:	Consultant shall not perform any Services described in Tasks 14.5 through 14.10
	below until Agency issues NTP for the R/W phase of the Project.

#### 14.5 Preliminary Activities

Upon receipt of authorization to proceed with R/W Acquisition, Consultant shall set up R/W parcel files and deliver an Agency-signed General Information Notice ("GIN"), on County Letterhead identifying the Consultant's contact, Agency provided acquisition and relocation brochures, and a copy of the applicable portion of the R/W Acquisition map {marked Preliminary and showing the parcel(s) to be purchased} to all owners and occupant(s) of affected properties. Consultant shall send GIN by certified mail with proof of delivery kept in the parcel file. Mailing and delivery of GIN must be included in the Report of Personal Interview.

Consultant shall prepare and maintain a Report of Personal Interview for each file. The Report of Personal Interview must include proof of delivery of all notices, date and place of contact, parties of interest contacted, a statement that brochures were delivered and explained, and record of other activities conducted during the Personal Interview.

#### 14.5 Consultant Deliverables and Schedule

Consultant shall submit:

- GINs (1 hard copy to each property owner and affected occupant(s) and a .pdf copy to APM) within 1 week following NTP for the R/W acquisition phase per Task 1.1 Project design schedule.
- Proof of receipt for each notice sent to each property owner and occupant(s) by sending APM the return receipt card(s) or United States Postal Service ("USPS") tracking printout(s), and documenting delivery information in the Report of Personal Interview. NOTE: If proof of delivery is not received from USPS, verbal confirmation of receipt by the owner/tenant must be documented in the Report of Personal Interview.

## C14.5.1 Donation Agreements (CONTINGENCY)

Prior to commencing discussions with a property owner regarding a potential property donation, Consultant shall confirm Agency has received ODOT clearance to make early contact with the property owner. For each property that is donated Consultant shall prepare a closing packet to include written documentation informing the property owner of their right to just compensation, the executed Donation Agreement and Conveyance Document, original recorded documents and title insurance policy.

## C14.5.1 Consultant Deliverables and Schedule

Consultant shall submit:

• Closing Packet (executed donation agreement and conveyance documents), original recorded documents and title insurance policy for any permanent R/W acquired through donation, 1 hard copy to APM no later than 14 weeks prior to bid date.

#### 14.6 Appraisal and Appraisal Review

Consultant shall use appraisers who are licensed or certified in the State, competent in eminent domain appraising, and on ODOT's Qualified Appraisers List. Consultant shall provide the name(s) of the appraiser(s) to Agency prior to beginning work on this Task.

Consultant shall provide 1 real estate appraisal for each property (or properties that constitute the "larger parcel" as described in the *ODOT Right of Way Manual*) from which an interest is to be acquired. If identification of the larger parcel is problematic, Consultant shall resolve the issue in consultation with the Agency and ODOT.

All real estate appraisals provided by Consultant shall be prepared using forms or formats of, or approved by, Agency. The types of appraisal reports must fall into the following categories:

- Abbreviated or short form (Taking & Damages) appraisals for simple takings; or
- Detailed (Before & After) appraisals for complex takings.

Consultant shall require appraisers to provide no less than 15 calendar day's written notice to owners of a planned appraisal inspection and shall provide the property owner or designated representative, if any, an invitation to accompany the appraiser on inspection of the property for appraisal purposes. This notice must be sent as specified by the ODOT Right of Way Manual.

Special Benefits, if any, must be quantified by the appraiser whether or not there are any compensable damages to the property.

Specialty reports, if necessary, must be provided to review appraiser for review and approval prior to incorporation in appraisal reports.

Consultant shall perform independent reviews of appraisals. Consultant shall ensure that the same firm does not perform both the appraisals and the appraisal reviews. Consultant shall forward both appraisal and review to Agency for final approval.

Agency will establish just compensation for each property owner and will notify the Consultant.

Consultant shall continue documentation in the Report of Personal Interview for each file.

## 14.6 Consultant Deliverables and Schedule

Consultant shall submit:

- 15-Day Notice of Appraisal Inspection to each property owner (1 hard copy to each property owner and affected occupant(s) and a .pdf copy to APM) within 2 weeks of NTP for the R/W acquisition phase per Task 1.1 Project design schedule.
- Report of Personal Interview, including date and place of contact, parties of interest contacted, a statement that a 15-Day Notice of Appraisal Inspection was mailed and delivered, and record of other activities conducted during the Appraisal to APM within 3 business days of request.
- The following Appraisal and Appraisal Review documentation (.pdf), as applicable, for each file to APM within 45 calendar days of NTP for the R/W acquisition phase per Task 1.1 Project design schedule:
  - Value Finding/Taking and Damages Appraisal (for simple takings),
  - Detailed Before & After Appraisal (for complex takings), and
  - $\circ$  Specialty reports, if necessary, prior to incorporation in appraisal reports.

## 14.7 Acquisition Services

All R/W must be acquired in the name of the Agency. Consultant shall conduct negotiations, on behalf of Agency, in good faith and in compliance with all federal and State laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the *ODOT Right of Way Manual* and all applicable State and federal laws and regulations.

Consultant is responsible for clearing title encumbrances identified on the Preliminary Title Report or making the offer subject to clearing title encumbrances. Consultant shall present any requests for taking title subject
to 1 or more outstanding interests to Agency for approval. Fee owners' and contract purchasers' ownership interests must be cleared. When impacted by the taking, lessees' interests must also be cleared.

Offer Packets must include, but are not limited to, acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, instruments of conveyance, and W-9 form. Each Offer Packet must contain all components necessary to fully compensate the property owner for rights taken and to convey adequate rights to Agency in order to clear the R/W for the Project.

If possible, Consultant shall make offers in person, especially where the acquisition involves either a major impact to the property or the displacement of persons occupying the property. If this is deemed not possible, Consultant shall send offer(s) by certified mail. Proof of delivery must be documented in the Report of Personal Interview and file.

Prior to the initiation of negotiations with the owner of the property, Agency must adopt a resolution of necessity to acquire any real property. Consultant shall not commence negotiations until it has received a signed resolution of necessity.

Consultant shall make every reasonable effort to acquire the R/W expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present material the owner believes is relevant to determining the value of the property. Consultant shall attempt to negotiate an approved administrative settlement, but shall not advance the time of condemnation, or defer negotiations or condemnation or the deposit of funds with the court or take any other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of R/W to Agency for final approval, payment, conveyance of title and recording.
- IF a COUNTEROFFER is received, Consultant shall contact Agency for discussion and approval or rejection. If accepted, Consultant shall generate a Final Report Packet for Agency final approval, payment, conveyance of title, and recording and a justification letter justifying the amount over just compensation.
- IF an acceptable agreement is not reached, Consultant shall prepare and submit a Recommendation for Condemnation.

Consultant shall maintain written Report of Personal Interview with property owners and tenants to document all verbal and written communication and events, such as: delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals.

# 14.7 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft Offer Packet (.pdf), for each file, to APM for review within 6 weeks of NTP for the R/W acquisition phase per Task 1.1 Project design schedule.
- Final Offer Packet (.pdf) for signature within 1 week of review comments.
- Final Offer Packet sent certified mail for each file within 1 week of receipt of Agency signature.
- Final Report Packet for each file for payment, conveyance of title and recording to APM upon receipt of accepted offer.
- Proposed counter offers with justification information, if applicable, for review and approval to APM within 45 calendars days from final Offer Packet.
- Recommendation for Condemnation, if applicable, to APM within 45 calendar days of the counter offer.
- Report of Personal Interview to APM within 3 business days of request.

## 14.8 Relocation [RESERVED]

## 14.9 Condemnation Process Assistance [RESERVED]

## 14.10 R/W Certification

Consultant shall certify to Agency on the most current approved Certification form from ODOT that:

- Agency has legal and physical possession of needed R/W.
- Relocation assistance has been completed for all displaced persons and businesses, all personal property relocations are complete or will be complete by bid let date and that all displaced residential occupants have relocated and have been offered decent, safe and sanitary housing.
- All acquisition of R/W and relocation activities have been completed in full compliance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 as currently amended as well as State laws, civil rights laws, and other applicable federal and State regulations and policies.

Consultant, in cooperation with Agency, shall submit the draft R/W Certification form to ODOT for review prior to Agency signature. Final R/W Certification will be signed by Agency and sent to ODOT for co-certification and processing.

# 14.10 Consultant Deliverables and Schedule:

Consultant shall submit:

- Draft R/W Certification form (.pdf) to APM 10 weeks prior to Final PS&E deliverable (Task 15.3).
- Final R/W Certification form (.pdf) to APM 8 weeks prior to Final PS&E deliverable (Task 15.3).
- Access to completed files for ODOT review. The nature and depth of the review is determined by ODOT. All files must be well organized and in auditable condition. Access to files shall be given at least 2 weeks prior to expected certification date.

#### TASK 15 PS&E

Consultant shall prepare plan sheets according to the following table:

		<b>F</b> . <b>1 1 1 1</b>	Preliminary	Advance	
Name of Sheet	Scale	of Sheets	PS&E (60%) Submittal	PS&E Submittal	Final PS&E Submittal
Title sheet	n/a	1	х		Х
Typical sections	n/a	2	х	Х	Х
Details	Varies	2	Х	Х	х
Temporary protection and direction of traffic and Temporary Pedestrian Accessible Routes ("TPAR") plan(s)	n/a	2	Х	Х	Х
Construction staging	Varies	1	Х		Х
Roadway plans	1" = 30'	3	Х	Х	Х
Roadway profiles	1" = 5'	3	х	Х	Х
Curb Ramp plans		1	Х	Х	Х
Drainage plan/profiles	1" = 30'	3	х	Х	Х
Erosion control	1" = 30'	3	х	Х	Х

#### Table 15

Drainage details		1	Х	Х	Х
Bridge plans	Varies	14	х	Х	Х
Sign and striping plans	1" = 30'	2	х	Х	Х
Landscaping		2		Х	Х

# 15.1 Preliminary PS&E (60%)

Consultant shall prepare preliminary (60%) documents for the Project incorporating comments from DAP review (Task 13).

Consultant shall prepare drawings, per Table 15 above and:

- Reference ODOT standard drawings and details;
- Prepare the 2024 Bid Booklet, using the Agency's Bid Booklet Template, and Special Provisions Document Assembly form; and
- Prepare preliminary construction cost estimate quantities and unit costs utilizing ODOT standard bid items. Consultant shall prepare the estimate on the Certified Local Public Agency ("CLPA") cost estimate form 734-5096 to include mobilization, contingency, and construction engineering (based on percentages agreed to by both parties). The estimate must be based on unit prices utilizing Agency, ODOT, and Consultant's historical bid information and considering a 2026 bid letting.

APM will submit a Preliminary PS&E Review Comment Log as a single electronic file to Consultant.

Consultant shall address comments received and communicate with the APM the proposed resolution to the comments. Consultant shall provide written response to address review comments received from the APM on the Preliminary PS&E.

# 15.1 Consultant Deliverables and Schedule

Consultant shall submit the following to the APM within 12 weeks of APM's written approval of the final DAP (Task 13):

- Preliminary Plans (.pdf);
- Special Provisions Document Assembly Form (.pdf); and
- Preliminary Construction Cost Estimate in (.pdf and MS excel).

Consultant shall submit Preliminary PS&E Review Comment Log with initial responses to the APM within 2 weeks of receipt of comments.

# 15.2 Advance PS&E (90%)

This task includes preparation of advance plans, Special Provisions, construction cost estimate, risk assessment, and quality control reviews, as well as incorporating comments from previous reviews.

# Advance Plans:

Consultant shall prepare drawings, per Table 15 above and reference Agency standard drawings and details, and other related drawings.

# Advance Special Provisions:

Consultant shall update Project Special Provisions based on changes and clarifications to the Project design, as determined at Preliminary plans (60%) and in accordance with 2024 *Oregon Standard Specifications for Construction as amended* and Agency *Specification and Writing Style Manual*. Consultant shall prepare the Special Provisions to the 90% level (the "Advance Special Provisions") in MS Word utilizing "Track Changes".

The Advance Special Provisions must incorporate Agency's boilerplate Special Provisions corresponding with the Project bid date. If a bid date has not been identified, Consultant shall use the most current boilerplate Special Provisions. Boilerplates, by bid date, can be found at the following website:

Consultant shall obtain concurrence from Agency for any unique special provisions or changes made to the boilerplate Special Provisions, beyond fill-in-the-blank changes. Consultant shall document the changes made to the Special Provisions and Agency concurrence.

Consultant shall submit the ODOT Civil Rights Request for Goals Worksheet to ODOT's ODOT Office of Equity and Civil Rights ("OECR") and incorporate the appropriate Disadvantaged Business Enterprise ("DBE") goals and On the Job Training ("OJT") hours into the Project Special Provisions;

Consultant shall consult with Agency and incorporate the required insurance information into the Special Provisions.

## Advance Cost Estimate:

Consultant shall update the construction cost estimate quantities and unit costs utilizing Agency standard bid items to support the Advance Plans (the "Advance Cost Estimate"). Consultant shall prepare the estimate to include mobilization, contingencies, and construction engineering based on the percentages agreed to by both parties. The estimate must be based on unit prices utilizing Agency, ODOT, and Consultant historic bid information and anticipating a 2026 bid letting. Consultant shall prepare the final cost estimate using excel or Agency required software.

## Construction Schedule:

Consultant shall prepare a construction schedule, using the Critical Path Method in MS Project (.pdf) that outlines a reasonable Project construction sequence and time frames. The schedule must include anticipated material lead times, Project milestones and anticipated construction phasing and staging.

#### Advance PS&E Revisions/Corrections:

The APM will submit a single electronic file of Advance PS&E Comment Log review comments to Consultant.

Consultant shall address comments received and communicate with the APM the proposed resolution to the comments. Consultant shall provide written response to address review comments received from the APM on the Advance PS&E.

#### 15.2 Consultant Deliverables and Schedule

Consultant shall submit the following to the APM within <mark>6</mark> weeks of APM's written approval of Preliminary Plans (Task 15.1):

- Advance Plans (.pdf);
- Advance Special Provisions in electronic format (MS Word, utilizing "Track Changes");
- Advance Construction Cost Estimate in electronic format (Excel and .pdf);
- Construction schedule in electronic format (.pdf); and
- Comment response log for plans and specifications in electronic format (Excel).
- Special Provisions changes and APM concurrence; and
- Civil Rights request for goals worksheet.

Consultant shall submit Advance PS&E Review Comment Log with initial responses to the APM within 2 weeks of receipt of comments.

#### 15.3 Final PS&E Package (100%)

Consultant shall prepare the Final PS&E package for bidding purposes. The final plans, Special Provisions, and construction cost estimate must incorporate all revisions agreed to and documented on the Advance PS&E Comment Log (Task 15.2).

Consultant shall coordinate with the APM to ensure all deliverables listed on the most current version of the Certified Local Public Agency PS&E Submittal Completeness Checklist will be satisfied. Refer to the latest version of the CLPA PS&E checklist (Form #734-5182) at: https://www.oregon.gov/odot/LocalGov/Pages/Forms-Apps.aspx

Agency will review final plan sheets and note any final revisions needed prior to preparation and submittal of POR-signed Final Plans within 2 weeks of receipt of documents from Consultant. Consultant shall incorporate final revisions into POR-signed Final Plans.

Upon request from Agency, Consultant shall resolve comments from Agency and ODOT.

## 15.3 Consultant Deliverables and Schedule

Consultant shall submit the following to Agency <mark>4 weeks prior to the Advertisement date</mark> per Task 1.1 Project design schedule:

Description	To APM	
	Electronically	
Unsigned Final Design Plans (11 x 17)	.pdf	
Project Special Provisions	MS Word & .pdf	
POR Certification with all Special Provisions sections stamped	.pdf	
Email from Civil Rights noting Applicable DBE goals and OJT hours	.pdf	
Construction Cost Estimate (Agency Format)	MS Excel, .pdf	
Certified Local Public Agency Cost Estimate Form (ODOT Form 734-5096)	MS Excel, .pdf	
CPM Construction Schedule (11 x 17 in color)	.pdf	
Fuel Escalation Worksheet	MS Excel, .pdf	
Steel Escalation Worksheet	MS Excel, .pdf	
NEPA Approval Documentation (delivered under Task 3)	.pdf	
R/W Certification (delivered under Task 14)	.pdf	
Utilities Certification (delivered under Task 5)	.pdf	
Certified LPA Railroad Agreement Assurance (ODOT Form 734-5285)	ndf	
(delivered under Task 9)	.pui	
Draft Certified Local Public Agency PS&E Submittal Completeness Checklist, Form 734-5182	.pdf	

Consultant shall submit the following to APM, <mark>2 weeks prior to the Advertisement</mark> date per Task 1.1 Project design schedule:

- POR-signed (electronic signature acceptable) Final Plans printed on 11 x 17 mylar;
- POR-signed (electronic signature acceptable) Final Plans in .pdf;
- Final, POR-signed Special Provisions in .pdf; and
- Final signed Certified Local Public Agency PS&E Submittal Completeness Checklist, Form 734-5182.

#### 15.4 Letter of Public Interest Findings ("LPIF") and Exemption Orders ("EO") [RESERVED]

#### TASK 16 ADVERTISE AND AWARD ASSISTANCE

This task includes the preparation of addenda, as needed, and responding to questions during the Advertisement or Ad phase of the Project. Consultant shall respond to questions from Agency and prospective bidders about the plans and specifications during the advertisement for bids and award process.

Consultant is Agency's point of contact for Project information during the solicitation (Advertisement) phase of the Project. Consultant is also the subject matter expert for constructability issues.

Consultant's name, address and e-mail address will be printed on the Bid Booklet with the instruction to Bidders: "All requests for information must be in writing with reference to the Project name."

The APM may not discuss possible or probable changes to the Project unless the changes have been formalized by issuance of an Addendum. Consultant shall alert the APM if the potential response to a Bidder's question conflicts with the Bid Documents, and then an Addendum will be issued by Agency if determined appropriate in Agency's discretion.

Consultant shall prepare all required Contract addenda. Consultant shall submit the addenda to APM for review, acceptance and distribution to prospective bidders.

## 16.1 Questions During Advertisement

Consultant PM, or Consultant's designee(s) approved by Agency, shall assist Agency with questions regarding the bid documents and bid process. Consultant shall respond to all questions in writing within 3 calendar day(s) to APM.

Consultant shall, during the bidding process, assist the Agency with the communications with prospective bidders and suppliers in a manner that assures that no prospective bidder 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 conversations and questions asked by prospective bidders or suppliers and the answers provided to the Agency. Consultant shall maintain the written log in the Project file and provide upon request of the APM.

# 16.1 Consultant Deliverables and Schedule

Consultant shall submit:

• Written log of conversations, questions and answers to APM upon request and no later than 5 calendar days prior to bid closing date.

# C16.2 Addenda to the Bid Documents (CONTINGENCY)

Consultant shall prepare up to **1** bid addendum to provide interpretation of construction documents.

If Agency chooses to authorize this work, Consultant shall submit Addendum documents within 3 working days from NTP for Task C16.2 unless a different timeframe is agreed to and stated in the NTP (prior to expiration of contract).

Consultant shall prepare and deliver to Agency the addenda text (.pdf and MS Word). Consultant shall prepare and deliver to Agency stamped drawings in .pdf and 11" x 17" Mylar. Consultant shall coordinate reviews of addenda by APM prior to submittal. Consultant shall not be responsible for distributing addenda to bidders. Agency will issue and distribute all addenda.

#### C16.2 Consultant Deliverables and Schedule

Consultant shall submit:

• Bid document addenda; POR-stamped .pdf and Mylar drawings; or special provision revisions to APM within 5 calendar days of NTP for Task C16.2.

#### 16.3 Pre-Bid Meeting [RESERVED]

#### 16.4 Bid Analysis Assistance [RESERVED]

# ATTACHMENT C - SAMPLE CONTRACT

The Sample Contract (including its terms, conditions and Exhibits) is not physically attached but incorporated into this RFP with the same force and effect as though fully set forth herein.

Attachment C is available as a separate file posted with this RFP on the Procurement Systems specified in RFP section 0.0.