

EW-C6526

PROJECT MANUAL

FOR

SWALE CANYON TRAIL IMPROVEMENTS

AT

KLICKITAT STATE PARK TRAIL

IN

KLICKITAT COUNTY

BID OPENING: 1:00 P.M., THURSDAY, FEBRUARY 29, 2024

WASHINGTON STATE PARKS & RECREATION COMMISSION 1111 ISRAEL ROAD SW TUMWATER, WA 98501-6512 POST OFFICE BOX 42650 OLYMPIA, WASHINGTON 98504-2650



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KLICKITAT TRAIL STATE PARK SWALE CANYON TRAIL IMPROVEMENTS

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DIVISI	ION 5 - METALS	
	Section 051200 - Structural Steel Framing	es
DIVISI	ION 6 – WOOD, PLASTICS, AND COMPOSITES	
	Section 061000 - Rough Carpentry	ges
DIVISI	ION 31 - EARTHWORK	
	Section 310000 - Earthwork	
DIVISION 32 – EXTERIOR IMPROVEMENTS		
	Section 323400 – Prefabricated Bridge	

END OF SECTION

Diana Dupuis, Director



STATE OF WASHINGTON

WASHINGTON STATE PARKS AND RECREATION COMMISSION

1111 Israel Road SW • PO Box 42650 • Olympia, WA 98504-2650 • (360) 902-8500 Internet Address: http://www.parks.wa.gov

January 26, 2024

Re: <u>Letter of Advertisement – Klickitat Trail State Park Trail – Swale Canyon</u> <u>Trail Improvements – EW-C6526</u>

To whom it may concern:

Please publish the following legal advertisement under your "Advertisement for Bid" section for two (2) consecutive days beginning on **Monday, January 29, 2024**, <u>or at your</u> <u>earliest possible convenience</u>. An Affidavit of Publication will be required by this office. A voucher form is enclosed for your convenience in billing.

ADVERTISEMENT FOR BID

Sealed proposals will be received for the following project:

Klickitat Trail State Park Trail – Swale Canyon Trail Improvements

PROJECT DESCRIPTION:	The Klickitat Trail State Park Trail project involves repair and/or deck replacement of seven (7) existing timber railroad trestles, removal of two (2) existing railroad trestles and installation of one (1) new, pre- engineered steel bridge with concrete foundation, grading of the existing trail off both ends of the bridges and numerous locations along the trail and installation of new gates.
PROJECT LOCATION:	The project is in Klickitat County at Klickitat Trail, between Harms Road and Horseshoe Bend Road.
ESTIMATED BID RANGE:	\$ 1,420,000 - \$ 1,740,000
BID OPENING TIME:	1:00 PM on Thursday, February 29, 2024
PREBID WALKTHROUGH:	11:00 AM on Tuesday, February 20, 2024. Meet at the gravel parking lot at the corner of Horseshoe Road and Schilling Road. Location: <u>https://maps.app.goo.gl/gWD1MXD4tgQYQ3hYA</u>

PLANS, SPECIFICATIONS, ADDENDA, AND PLAN HOLDERS LIST: Are available online through Builders Exchange of Washington, Inc. at <u>http://www.bxwa.com</u>. Click on: "bxwa.com"; "Posted Projects"; "Public Works", "Washington State Parks & Recreation", and "**02/29/2024**". (Note: Bidders are encouraged to "Register as a Bidder", in order to receive automatic email notification of future addenda and to be placed on the "Bidders List". This service is provided free of charge to Prime Bidders, Subcontractors, and Vendors bidding this project.)

"PLANS MAY ALSO BE VIEWED THROUGH: Builders Exchange, Everett WA; Associated Builders And Contractors, Spokane WA; Tri City Construction Council, Kennewick WA; Daily Journal of Commerce, Seattle WA; Weekly Construction Reporter, Bellingham WA; Daily Journal Of Commerce Plan Center, Portland OR; Southwest Washington Contractors Association, Vancouver WA; Lower Columbia Contractor Plan Center, Longview WA.

Technical questions regarding this project shall be directed to: *Brian Patnode, East Capital Program Manager at (509) 885-0397, brian.patnode@parks.wa.gov, 270 9th Street Northeast, Suite 200, East Wenatchee, WA 98802.*

Voluntary numerical MWBE goals of 10% MBE and 6% WBE have been established for this project. Achievement of the goals is encouraged. Bidders may contact the Office of Minority and Women's Business Enterprise to obtain information on certified firms.

Mandatory 15% apprentice labor hours of the total labor hours are a requirement of this construction contract. Voluntary workforce diversity goals for this apprentice participation are identified in the Instructions to Bidders. Bidders may contact the Department of Labor & Industries, Apprenticeship Section, to obtain information on available apprenticeship programs.

Washington State Parks reserves the right to accept or reject any or all proposals and to waive informalities.

Sincerely,

Brett Taylor

Brett Taylor, Contracts Specialist Contracts and Grants Program

BAT

cc: Kyle Murphy, Capital Program Manager Jason Both, Region Manager Brian Patnode, East Capital Region Manager Kimberly Urdahl, Project Representative Park Manager

KLICKITAT TRAIL STATE PARK SWALE CANYON TRAIL IMPROVEMENTS

INVITATION TO BID

1.1 DESCRIPTION OF WORK

A. This project includes the repair and/or replacement of the deck on a total of seven (7) existing timber railroad trestles, removal of two (2) existing railroad trestles, and installation of one (1) new pre-engineered steel bridge with concrete foundation. The trail runs along Swale Creek and starts at Harms Road north of Centerville Highway north of Dallesport and extends along Swale Creek to the Klickitat River near Wahkiacus. Additional work includes, but is not limited to, grading of the existing trail off both ends of the bridges and at numerous locations along the trail, and installation of new gates.

1.2 LOCATION OF PROJECT

A. The project is located along Swale Creek in Klickitat Trail State Park between Harms Road and Horseshoe Bend Road.

1.3 TECHNICAL QUESTIONS

A. Direct project questions to Brian Patnode, East Capital Program Manager at (509) 885-0397, Brian.Patnode@parks.wa.gov, 270 9th Street Northeast, Suite 200, East Wenatchee, WA 98802.

1.4 PRE-BID PROJECT SITE TOUR

DATE:	February 20, 2024
TIME:	11:00 am
LOCATION:	Gravel parking lot at the corner of Horseshoe Road and Schilling Road

1.5 BID OPENING

- A. Bid responses will only be accepted electronically via email/email attachment BidBox@parks.wa.gov. See Section 7.1 of the Instructions to Bidders for expanded details. Subject line shall read, BID: EW-C6526 [YOUR COMPANY NAME]. Bids are due at 1:00 p.m., Thursday, February 29th, 2024.
- B. Bid result notification is made by e-mail within two (2) days of the bids due date. Bid results can be obtained on the State Parks webpage at <u>www.parks.state.wa.us/contracts</u> or through Builders Exchange of Washington at <u>www.bxwa.com</u>
- C. The Commission reserves the right to accept or reject all bids and to waive informalities. No bidder may withdraw their bid after the bid deadline, or before award of contract, unless award is delayed over thirty (30) days.

KLICKITAT TRAIL STATE PARK SWALE CANYON TRAIL IMPROVEMENTS

1.6 COVID 19

A. COVID-19 Refer to the Department of Labor & Industries website for requirements regarding any safety plans needed. <u>Novel Coronavirus Outbreak (COVID-19) Resources (wa.gov)</u>

1.7 FOR INFORMATION ON:

- A. Reciprocal Preference, see Instructions to Bidders 2.1 Reciprocal Preference for Resident Contractors.
- B. Apprenticeship Requirements, For projects estimated at or over \$1,000,000, Apprenticeship Participation, Mandatory 15 percent apprentice labor, see Instructions to Bidders 4.1B Apprenticeship Participation.
- C. MWBE goals, see Instructions To Bidders 3.1 Minority And Women's Business Enterprise (MWBE) Utilization
- D. Modification of Bid, see Instructions to Bidders 7.1 Modification of Bid.
- E. Bid Security, see Instructions to Bidders 10.1 Bid Bond. No particular bid bond form is required.

1.8 ACCESSIBILITY

A. Sites may not be fully accessible to people with disabilities. Please contact the Project Representative at least five (5) days prior to scheduled pre-bid tour if special accommodations are required for your attendance.

END OF SECTION

1.1 <u>BIDDER DEFINED</u>

- A. A "*Bidder*" is an entity or person who submits a bid proposal for the work described in the contract documents.
- B. The Bidder must be registered by the Washington State Department of Labor and Industries in accordance with RCW 18.27.020. Insert the contractor registration number, expiration date, Uniform Business Identifier (UBI) number, and federal tax identification number on the Bid Proposal Form in the applicable spaces.

2.1 <u>RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS</u>

A. In accordance with RCW 39.04.380 the State of Washington is enforcing a Reciprocal Preference for Resident Contractors. Any public works bid received from a nonresident contractor from a state that provides an in-state percentage bidding preference, a comparable percentage disadvantage must be applied to the bid of that nonresident contractor.

A nonresident contractor from a state that provides a percentage bid preference means a contractor that:

- a) is from a state that provides a percentage bid preference to its resident contractors bidding on public works contracts.
- b) at the time of bidding on a public works project, does not have a physical office located in Washington.

The state of residence for a nonresident contractor is the state in which the contractor was incorporated or, if not a corporation, the state where the contractor's business entity was formed, and for an individual, the individual's state of residence.

All nonresident contractors will be evaluated for out of state bidder preference. If the state of the nonresident contractor provides an in-state contractor preference, a comparable percentage disadvantage will be applied to their bid prior to contract award.

This section does not apply to public works procured pursuant to <u>RCW 39.04.155</u>, <u>39.04.280</u>, or any other procurement exempt from competitive bidding.

B. A Comparable Percentage Disadvantage (CPD) will be applied to the bid of that nonresident contractor. The CPD is the in-state contractor percent advantage provided by the contractor's home state. For the purpose of determining the successful bidder, multiply the Nonresident Contractor bid amount by the CPD. The "bid amount" is be the total of the base bid and all accepted alternate bid items. The CPD is added to the Nonresident Contractor bid amount which equates to the Nonresident Disadvantage Total. The Nonresident Disadvantage Total is compared to the Washington contractor bid amounts. The bidder with the lowest total is the successful bidder. See example below.

EXAMPLE: Alaska Nonresident Contractor Bid Amount \$100,000 Multiplied by the Alaska CPD x 0.05 Alaska CPD Total \$ 5,000 Alaska Nonresident Contractor Bid Amount \$100,000 Alaska CPD Total \$ 5,000 Nonresident Disadvantage Total \$105,000*

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* Note – If the Nonresident Disadvantage Total is lower than all other Washington contractor bid amounts, the Alaska Nonresident Contractor is the successful bidder and will be awarded a contract for the bid amount of \$100,000.

If the Nonresident Disadvantage Total is higher than a Washington contractor bid amount, the successful Washington bidder will be awarded a contract for the bid amount.

3.1 MINORITY AND WOMEN'S BUSINESS ENTERPRISE (MWBE) UTILIZATION

In accordance with the legislative findings and policies set forth in Chapter 39.19 RCW, the State of Washington encourages participation in contracts by MWBE firms certified by the Office of Minority and Women's Business Enterprises (OMWBE). Participation may be either on a direct basis in response to this solicitation/invitation or as a subcontractor to a Bidder. However, unless required by federal statutes, regulations, grants, or contract terms referenced in the contract documents, no preference will be included in the evaluation of bids, no minimum level of MWBE participation is required as a condition for receiving an award, and bids will not be rejected or considered non-responsive on that basis. Any affirmative action requirements set forth in federal regulations or statutes included or referenced in the contract documents will apply.

4.1 REQUIREMENTS FOR PROJECTS ESTIMATED AT \$1,000,000 OR MORE

A. <u>Any bid that is expected to cost one million dollars (\$1,000,000.00) or more</u> for the construction, alteration, or repair of any public building or public work of the state shall require each Bidder to submit <u>as part of the bid</u> the names of subcontractors with whom the Bidder, if awarded the contract, will subcontract for performance of the work of heating, ventilation and air conditioning, plumbing, and electrical or to name itself for the work. The Bidder shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the Bidder to submit as part of the bid, the names of such subcontractors, or to name itself to perform such work, or the naming of two or more subcontractors to perform the same work, <u>shall render the bid as non-responsive</u>.

B. APPRENTICESHIP PARTICIPATION

In projects estimated to cost One Million Dollars or more, be aware that the following requirements will be part of the resulting contract.

In accordance with <u>RCW 39.04.320</u> (Apprenticeship Training Programs), for all public works estimated by the WSPRC Project Engineer to cost **one million dollars or more**, the state of Washington requires no less than **15% of the labor hours be performed by apprentices.** A contractor or subcontractor may not be required to exceed the 15% requirement. The bid advertisement and Bid Proposal Form shall establish a minimum required percentage of apprentice labor hours compared to the total labor hours.

- 1. **Incentives** The Contractor who meets or exceeds this utilization requirement on eligible contracts, will be awarded a monetary incentive described in the Apprentice Utilization Requirements section of the Bid Form.
- 2. **Penalties** The Contractor who fails to meet the utilization requirement and fails to demonstrate a Good Faith Effort, as outlined below, is subject to penalties described in the Apprentice Utilization Requirements section of the contract Bid Form. Contractor will receive an invoice payable to the Owner within 30 days.

- 3. **Cost Value** The expected cost value associated with meeting the goal is included in the Base Bid as described on the Bid Form.
- 4. **Utilization Plan** The Contractor shall provide an Apprentice Utilization Plan (Plan) demonstrating how and when they intend to achieve the Apprenticeship Utilization Requirement. The Plan shall have enough information to track the Contractor's progress in meeting the utilization requirement. The Contractor shall submit the Plan on the Apprentice Utilization Plan template within 10 business days of Notice to Proceed of the contract and prior to submitting the first invoice. The Contractor shall provide an updated Plan during the course of construction when there are significant changes to the Plan which may affect their ability to meet the requirement.
 - a) The Plan shall be uploaded to the Department of Labor & Industries' (L&I): *Prevailing Wage Intents and Affidavit (PWIA) system on L&I's website.*
 - b) The Plan is not submitted for approval.
 - c) It is expected that the Contractor will actively seek out opportunities to meet the Apprentice Utilization Requirement during construction even if the Plan indicates a shortfall in meeting the requirement.
 - d) If the Plan indicates that the Contractor will not attain the Apprentice Utilization Requirement, then Contractor must submit "Good Faith Effort" (GFE) documentation with their Plan to L&I's PWIA system.

C. APPRENTICESHIP - GOOD FAITH EFFORT (GFE)

- 1. Good Faith Effort (GFE) documentation shall describe in detail why the Contractor is not or was not able to attain the Apprentice Utilization Requirement.
 - a) Contractors may submit Good Faith Effort (GFE) documentation at any time during the construction.
 - b) All GFE documentation must be submitted no later than 30 days before substantial completion.
 - c) Good Faith Effort (GFE) documentation must be in signed letter format uploaded to the PWIA system and include:
 - 1. The contract number, title and the apprentice utilization requirements,
 - 2. The amount of apprentice labor hours the contract can or did attain along with the percentage of labor hours,
 - 3. Contractors may receive a GFE credit for graduated Apprentice hours through the end of the calendar year for all projects worked on as long as the Apprentice remains continuously employed with the same Contractor they were working for when they graduated. If an Apprentice graduates during employment on a project of significant duration, they may be counted towards a GFE credit for up to one year after their graduation or until the end of the project (whichever comes first). Determination of whether or not Contract requirements were met in good faith will be made by subtracting the hours from the journeyman total reported hours for the project and adding them to the apprentice hour total. If the new utilization percentage meets the Contract requirement, the Contractor will be reported as meeting the requirement in good faith,
 - 4. Anticipated or actual shortfall (in apprentice labor hours and percentage) and the reason(s) for not attaining the required apprentice labor hours,
 - 5. Information from one or more of the following areas:
 - (a) Names of any State-Approved Apprentice Training Programs contacted with the name(s) of person(s) contacted and dates of contacts, and a copy of each response from the Training Program(s),

- (b) Reference Contract Specifications or documents that affected the Contractor's ability to attain apprentice utilization,
- (c) Discuss efforts the Contractor has taken to require Subcontractors to solicit and employ apprentices,
- 6. Backup documentation to the letter consisting of the following: Letters, emails, phone logs including names dates and outcomes, posters, photos, payrolls, time cards, schedules, copies or references to other contract specifications or documents.

Additional Resource Information

- (a) For questions regarding how to complete the Apprentice Utilization Plan template or Good Faith Effort documentation, please contact the Project Manager listed in the Bid Advertisement.
- (b) Step-by-step instructions on how to access and navigate the L&I's PWIA system, including uploading required documents can be found on the L&I website.
- (c) Additional information about apprentice utilization on Public Works Project can be found on the L&I website.

5.1 EXAMINATION OF THE WORK SITE AND BIDDING DOCUMENTS

- A. Bidder acknowledges that it has taken steps necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and road; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during the work. The bidder also acknowledges that it has satisfied itself as to character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Owner, as well as from the drawings and specifications made a part of this contract. Any failure of the Bidder to take the actions described and acknowledged in this paragraph will not relieve the Bidder from responsibility for estimating properly the difficulty and cost of successfully performing the work.
- B. No statement by any officer, agent, or employee of the Agency pertaining to the physical conditions of the site of the work will be binding on the Agency other than those statements issued in the contract documents.
- C. Bidders shall promptly notify the Agency of ambiguities, inconsistencies, or errors, if any, which they may discover upon examination of the Bidding Documents or of the site and local conditions.
- D. Interpretations and Clarifications
 - 1) Every request for interpretation or clarification should be submitted to the project representative as listed in the Invitation to Bid. If a Bidder does not have on-line capability, then submit in writing, addressed to the project representative at the address as listed in the Invitation to Bid. To be given consideration the request must be received seven (7) working days prior to the date fixed for the opening of the bids.

- 2) The Agency's responses, if there are any, which do not change the Scope of Work described in the contract documents may be mailed, delivered, faxed, or by other electronic means, to all planholders of record, at the respective address furnished for such purposes, prior to the date fixed for the receipt of bids. Such letters of clarification shall not be considered part of the contract documents and therefore need not be acknowledged by the Bidders as part of the Bid Form. The Agency will determine at its sole discretion whether or not any clarification or interpretation changes the Scope of Work and should be included in the Contract Documents.
- 3) Clarifications, interpretations, or supplemental instructions which do change the Scope of Work and or schedule described in the contract documents, will be issued only in the form of written ADDENDA.
- 4) Oral interpretations or clarifications will be without legal effect.
- E. Substitutions
 - 1) The product, equipment, materials, or methods described or noted within the Bidding Documents, whether currently available or not, are to establish a standard of quality, function, appearance and dimension. A proposed substitution shall have equal attributes in all respects.
 - 2) No substitution will be considered unless a written request for approval is submitted by the Contractor, after Award, in accordance with the applicable provisions of Section 012500 of the specifications. If no Section 012500 is available, then see section 016000 Product Requirements, sub-section 1.5. Each such request shall describe the proposed substitution in its entirety including name of the material or equipment, drawings, catalog cuts, performance or test data and all other information required for an evaluation. The submittal shall also include a statement noting all changes required in adjoining, dependent or other interrelated work necessitated by the incorporation of the proposed substitution. The Bidder shall bear the burden of proof of merit of the proposed substitution. The Project Representative's decision of approval or disapproval of a proposed substitution shall be final.

6.1 <u>BID PROPOSAL</u>

- A. The Bidder shall submit its bid on the forms included with these instructions. All blank spaces in the Bid Proposal Form must be properly filled in. If the bid is made by a partnership or copartnership, it must be so stated and it must be signed in the firm's name, followed by the written signature of the signing partner. If the bid is made by a corporation, it must be signed in the name of the corporation, followed by the written signature of the officer signing, and the printed or typewritten designation of their office within the corporation. The full and complete address of the Bidder must be typed or printed on the bid in the spaces provided. The bid must be a scan of the original bid, complete with an original signature (pen to paper).
- B. Except as otherwise provided in these instructions, bid proposals that are incomplete, or that are conditioned in any way, or that contain erasures, alterations, or items not called for in the contract documents, or that do not conform to the call for bids, may be rejected as non-responsive at the discretion of the Agency unless the law requires that the omission be deemed non-responsive, in which case the bid will be rejected as non-responsive. Only the amounts and information asked for on the Bid Proposal Form and the plans and

INSTRUCTIONS TO BIDDERS - 5

specifications furnished will be considered as the bid. Bid amounts include all taxes imposed by law, **except** for Washington Sales Tax unless noted otherwise.

- C. Each Bidder shall bid upon the work exactly as specified and as provided in the Bid Proposal Form. The Bidder shall bid upon all alternates if alternates are indicated on the Bid Proposal Form. When bidding on alternates for which there is no charge, the Bidder shall write the words "no charge" in the space provided on the Bid Proposal Form.
- D. Bidders shall acknowledge receipt of any ADDENDA to the solicitation for bids on the Bid form.

7.1 SUBMISSION OF BID

- A. Bid responses will only be accepted electronically via email/email attachment BidBox@parks.wa.gov.
- B. Marking of The Bid Response (Email Subject Line):

Subject line should include the bid's identification number, "Bid" and Company name.

- Example email subject line: SWR-SW-C9999 Bid ACME Construction Inc.
- Example email subject line: NW-C9999 Bid John Smith Construction LLC
- Example email subject line: EW-C9999 Bid Sunshine Construction Corp.
- C. Signature (what is acceptable):

The purpose of a signature is to ensure a manifestation of asset by the signer and to legally bind the signer to the documents submitted.

In 2020 Washington State enacted law allowing for alternatives to hardcopy original wet-ink signatures. While the Bidder cannot force any process upon the Agency, the Agency can mandate and accept alternatives to an original wet-ink signature.

The Agency will accept a picture of an original wet-ink signature, such as a PDF scan. .JPG, TIFF-Group 4 (or similar technology). These three (3) technologies are known to work. The Bidder's use of other technology is at the Bidder's risk and peril. Bids or bid formats that the Agency cannot open and view shall be deemed non-responsive.

For clarity: Print out the competition document, review it, include any other required document(s) (such as the Bid Bond if required), complete where necessary, sign where indicated with a pen onto the paper, when you believe your bid response is ready to be submitted to the Agency, scan it as a PDF file, check the PDF file to make sure all pages are legible, then attach the file to your business email and send it to <u>BidBox@parks.wa.gov</u>.

It is the Agency's expectation that the Bidder's bid response email will contain a PDF attachment with all of the required documents scanned as a PDF, including any required signatures.

7.2 <u>Bid Clock:</u>

After the bid opening (due date deadline), Agency staff will review the bids. The email's date and timestamp that is visible on the email, from the Agency's perspective, shall serve as the bid clock and it is this information that will be used to determine if the bid was timely.

CAUTION: Submit your bid response early as a safeguard against any technological slow-down or delays and/or malfunctions. Bids received after the deadline for any reason, no matter the cause, regardless of responsibility, will be rejected. When and whatever time the email comes in, the Contracts Specialist will reference the email's timestamp to determine responsiveness.

You are welcome to follow up with an email to <u>contracts@parks.wa.gov</u> and ask confirmation of receipt and the Contracts Specialist can send a reply to the sender of the bid response. However, our ability to respond is not instantaneous, not guaranteed, and works best if there's at least three (3) business days of time to respond.

8.1 MODIFICATION OF BID

A. Modifying And Supplementing Prior To Bid Opening:

<u>Modifying</u>: Modifying refers to a bid that has already been submitted to the Agency. Modifying means altering information already contained in the Bidder's bid response that has already been submitted to the Agency.

<u>Supplementing</u>: Supplementing refers to a bid that has already been submitted to the Agency. Supplementing means adding to the bid response for materials, documents, or information not already in the Bidder's bid response.

<u>HOW</u>: Bidder may modify or supplement its bid prior to the bid due date by sending a replacement bid by email to: <u>BidBox@parks.wa.gov</u>. In the body of the email clearly explain that this bid response is replacing an earlier one. Follow the example subject line.

Example email subject line: SWR-SW-C9999 Replacement Bid ACME Construction Inc.

Do not send in a piece of a bid response asking the Agency to link it up with the earlier bid response. Send in a full and complete replacement.

9.1 <u>WITHDRAWAL OF BID</u>

- A. Withdrawal refers to a bid that has already been submitted to the Agency. A bid response may be withdrawn by a Bidder before the Bid Opening (due date deadline) for the bid. The FAILURE TO WITHDRAW a bid prior to the bid due date deadline exposes the Bidder to the possibility that the Agency will make a demand against the Bidders bid bond.
- B. <u>HOW</u>: Bidder may withdraw its bid prior to the bid due date by sending an email to: BidBox@parks.wa.gov. In the body of the email clearly explain that the earlier bid submission is being withdrawn. Follow the example subject line.

Example email subject line: SWR-SW-C9999 Withdraw Bid ACME Construction Inc.

10.1 <u>REJECTION OF BID</u>

A. The Agency reserves the right to reject any or all bids and to waive informalities in connection with the bids.

11.1 <u>BID BOND</u>

- A. When the total bid amount is \$35,000 or less, a bid bond is not required. When the sum of the base bid plus all additive bid alternates is \$35,000.00 or less, bid security is not required.
- B. When the sum of the base bid plus all additive alternates is greater than \$35,000.00, a bid guarantee in the amount of 5% of the base bid amount is required. Failure of the Bidder to provide bid guarantee when required shall render the bid non-responsive.
- C. Acceptable forms of bid guarantee are: A bid bond. A copy of the bid bond must be included along with your bid response to the Agency. See also, Section 7.1 SUBMISSION OF BIDS SECTION A.
- D. Should the successful Bidder fail to enter into a contract and furnish a satisfactory performance bond within 15 days after receiving properly prepared contract forms from the Agency, the bid bond may be forfeited as liquidated damages for advertisements and administration of bid procedures.
- E. Bid bonds must be held for the three low bids for 30 days or until a contract is executed with the successful Bidder. All other bid bonds will be returned to the Bidders within 15 days of the bid opening.

12.1 BID EVALUATION AND AWARD OF CONTRACT

A. Award of contract will be made by the Agency based upon any combination of the base bid and alternates that, in the Agency's sole discretion, is in the Agency's best interest considering price, schedule, and other factors. The numbering of the alternates in the bid proposal bears no relationship to the order in which the alternates may be selected by the Agency. Additionally, the Agency reserves the right to negotiate base bid prices (including changes to the contract plans and specifications) with the low responsive, responsible Bidder to bring the final contract amount within the funds available.

B. BID TABULATION AND ANNOUNCEMENT OF APPARENT LOW BID:

DON'T CALL STATE PARKS TO OBTAIN BID RESULTS.

The Agency does not guarantee when the Bid results will be released to the public. The bid results are usually released within three business days of the bid opening and often the same day. Bid results can be obtained by accessing the Washington State Parks webpage at <u>www.parks.wa.gov/contracts</u> (see "Construction Projects- Public works bid results"). The Bid Tabulation results may also be released through Builders Exchange of Washington at <u>www.bxwa.com.</u> But, Bidders are cautioned that the Washington State Parks website is the official release point for the Bid Tabulation for this competition.

The bid tabulation will identify all bids received by the Agency. Bids that were not rejected and not withdrawn prior to the bid opening will be ranked by base bid price. The first three lowest base bids will reflect detailed pricing information. The remaining Bidders will reflect

only the base bid pricing. Bids that were rejected for any reason will reflect **Non-Responsive** in the bid tabulation but may include its total pricing.

Release of the Bid Tabulation information that a Firm was identified as the apparent low base bid simply means that at this point in time the Agency believes the subject bid was the lowest cost responsive bid, but designation as the apparent low responsive bid is not a guarantee of a contract with the Agency. The Agency reserves the right to consider Alternate Bid Items in any combination. The Agency reserves the right to reevaluate the bid and determine whether the bid was responsive and responsible and successful as first thought. The Bidder identified as the apparent low responsive bid is cautioned not to commit funds, resources, and effort prior to receiving an actual executed contract. The Bidder identified as the apparent low responsive bid that commit funds, resources, and effort prior to a contract do so at its own risk and peril.

BID TABULATION & PROTEST: Within three (3) business days following the day of the release of the Bid Tabulation/Announcement of the Apparent Low bid (on the Washington State Parks website), the Bidder may file a Protest (Protest procedures are outlined in Section 13.1).

- C. REJECTION LETTER & PROTEST: No matter the phase of the evaluation, if the Agency determines that the bid is not responsive or the Bidder is not responsible, the Agency will reject the bid/bidder, and send the bidder a Rejection Letter explaining why the bid/bidder was rejected. Within three (3) business days following the day of the release of the Rejection Letter, the Bidder may file a Protest, provided it meets one of the three (3) protest grounds (Protest procedures are outlined in Section 13.1). The Rejection Letter will be sent by email/email attachment to the email address provided by the Bidder in the Bidder's bid response.
- D. The intent of the Agency is to award a contract to the low responsive, responsible bidder by considering the following:

Responsible - A Bidder must meet the following mandatory responsibility criteria under RCW 39.04.350 (1) to be considered a responsible Bidder and qualified to be awarded a public works project. The Bidder must:

- 1. At the time of bid submittal, have a certificate of registration in compliance with Chapter18.27 RCW;
- 2. Have a current state Unified Business Identifier (UBI) number;
- If applicable, have industrial insurance coverage for the Bidder's employees working in Washington as required in Title 51 RCW; an employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW;
- 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3);
- 5. If bidding on a public works project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington State Apprenticeship and Training Council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under Chapter 49.04 RCW for the one-year period immediately preceding the date of the bid solicitation; and

INSTRUCTIONS TO BIDDERS - 9

- 6. Within the three-year period immediately preceding the bid solicitation, not have been determined by a final a binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, or 49.52 RCW. By signing the Bid Proposal Form, the bidder verifies under penalty of perjury, pursuant to RCW 9A.72.085. that the bidder is in compliance with this subsection
- 7. Supplemental Responsibility Criteria: In addition to the mandatory Bidder responsibility, the Agency may adopt relevant supplemental criteria for determining Bidder responsibility applicable to a particular project which the Bidder must meet (RCW 39.04.350 (3)).
 - a. If applicable, the Agency shall consider an overall accounting of the attached supplemental criteria for determining Bidder responsibility "DIVISION 00 SUPPLEMENTAL RESPONSIBILITY CRITERIA".
 - b. At least seven (7) days prior to the bid submittal deadline, a potential Bidder may request that the Agency modify the supplemental responsibility criteria. The Agency will evaluate the information submitted by the potential Bidder and respond before the bid submittal deadline. If the evaluation results in a change of the criteria, the Agency will issue an ADDENDA to the bidding documents identifying the new criteria.
 - c. Upon the Agency's request, the apparent low Bidder must supply the requested responsibility information within two (2) business days of request by the Agency. Withholding information or failure to submit all the information requested within the time provided may render the bid non-responsive and the bid/Bidder may be rejected by Rejection Letter.

Responsive - A bid will be considered responsive if its electronic response meets the following requirements:

- 1. It is received at the proper time and place.
- 2. It meets the stated requirements of the Bid Proposal Form.
- 3. It meets the requirements as stated in section 6.1.A of the Instructions To Bidders.
- 4. It is submitted by a licensed/registered contractor within the state of Washington at the time of bid opening.
- 5. It is accompanied by a bid guarantee, if required.

If inconsistencies or errors are noted in the bid proposal prices, <u>prices shown in words</u> <u>have precedence over prices shown in figures</u>. The <u>unit and lump sum prices have</u> <u>precedence over their total amounts</u>; and the <u>total amounts have precedence over the</u> <u>total bid</u>.

The apparent low Bidder, for purpose of award, is the responsive and responsible Bidder offering the low aggregate amount for the base bid plus selected additive or deductive bid alternates and meeting all other bid submittal requirements.

13.1 <u>PROTEST PROCEDURES</u>

A. GENERAL:

This protest process is a courtesy provided by the Agency and it is not governed by Washington's Administrative Procedures Act (APA), RCW 34.05, nor does it confer any additional rights above and beyond what the Bidder already enjoys as a taxpayer. The

purpose of this process is to allow the Agency to correct evaluation process errors and problems before a contract is executed.

Only a Bidder may file a protest regarding this competition.

The Bidder must strictly adhere to the protest process as set forth herein, the failure of which may result in a summary determination that the protest is without merit without an opportunity to cure.

B. FORM AND CONTENT:

All protests must:

- Be in writing.
- The protest must state and clearly articulate the grounds for the protest with specific facts and complete statements of the action(s) being protested.
- A description of the relief or corrective action being requested should also be included.
- All protests shall be addressed to the Procurement Coordinator.

C. CONTENT LIMITATIONS:

The Agency does not currently mandate any page limitation. However, the protest must be clearly articulated, succinct, organized, logical, and professional.

The Agency will reject protests that:

- fail to state and clearly articulate at least one of the three GROUNDS;
- contain rants, attacks, and/or disparaging or abusive remarks;
- include multiple attachments or references (document dumping, document overload); or,
- appear to require the reader piece together voluminous amounts of material to decipher the argument being made.

D. SUBMISSION OF PROTEST:

- All protests must be submitted within (5) business days after the formal Rejection Letter is sent. For purposes of timing the day the Rejection Letter is sent to the Bidder shall not count.
- Bidders must send all protests to: <u>contracts@parks.wa.gov</u>. See also Subject Line.
- SUBJECT LINE: Must include the competition's Number Identifier and "PROTEST" in the subject line. Failure by the Bidder to include this information in the subject line may result in Bidder's protest not being timely recognized.
- E. GROUNDS WHICH MAY BE PROTESTED:
 - Conflict of Interest on the part of Agency staff.
 - Errors in computing the score.
 - Non-compliance with procedures described in the procurement document.

Protests will be rejected as without merit if they do not clearly and convincingly meet one of the GROUNDS above and/or seems to address issues such as:

• An evaluator's professional judgment on the quality of a response, or

INSTRUCTIONS TO BIDDERS - 11

- The Agency's assessment of its own and/or other agencies' needs or requirements, or,
- Issues, concerns, objections, or requests for changes that were or could have been addressed prior to the bids due date deadline.

Protests that do not clearly and convincingly meet the requirements and standards described herein are without merit and may be rejected.

F. MANAGER ASSIGNMENT AND REVIEW:

Upon receipt of a protest that meets the requirements described herein, a protest review will be held by the Agency. The Agency will assign a Manager. The Manager is responsible for reviewing and investigating the Bidder's written protest and may meet with agency staff or the agency program that was involved in the competition. The Manager may consider the record and all reasonably available facts and will issue a protest determination in writing within fifteen (15) business days from receipt of the protest. If additional time is needed, the Manager will notify the protesting party of the need for additional time within 15 business days from receipt of the protest.

In the event a protest may affect the interest of another Bidder that submitted a response, the Agency may reach out to that Bidder, may provide an unedited copy of the protest to that Bidder, and may invite that Bidder to submit its views and any relevant information on the protest to the Manager.

G. PROTEST DETERMINATION AND FINDINGS AND DISSEMINATION:

The Manager's protest determination may:

- Find the protest lacking in merit and reject the protest;
- Find only technical or harmless errors in the Agency's acquisition process and determine the Agency to be in substantial compliance and reject the protest; OR
- Find merit in the protest and provide THE AGENCY options which may include:
 - Correcting the errors and re-evaluating all responses;
 - Canceling the competition and possibly for a new competition to take place; OR
 - Making other findings and determining other courses of action as appropriate.

If the Agency rejects the protest, the Agency will enter into a contract with the Apparent Successful Bidder no sooner than two business days after issuance of the protest determination by email to the protesting party at the email address indicated on the party's bid documents. For the purposes of timing, the date the protest determination is sent to the protesting party shall not count.

Dissemination: The Agency will disseminate the decision to all interested Bidders vie email/email attachment to the email address provided by the Bidder in the Bidder's bid response.

H. AGENCY DECISION IS FINAL:

The Manager's protest determination constitutes the agency's final decision regarding the protest. If the protesting party disagrees with the protest determination, the Bidder may seek judicial relief in the Washington Superior Court for Thurston County within 2 business days of the issuance of the protest determination.

I. STRICT COMPLIANCE

Strict compliance with these protest procedures is essential in furtherance of the public interest. Any aggrieved party that fails to comply strictly with these protest procedures is deemed, by such failure, to have waived and relinquished forever any right or claim with respect to alleged irregularities in connection with the solicitation or award of the Contract. No person or party may pursue any judicial or administrative proceedings challenging the solicitation or award of this Contract, without first exhausting the administrative procedures specified herein.

J. REPRESENTATION

An aggrieved party may participate personally or, if a corporation or other artificial person, by a duly authorized representative. Whether or not participating in person, an aggrieved party may be represented, at the party's own expense, by counsel.

K. COMPUTATION OF TIME

In computing any period of time prescribed by this procedure, the day of the act or event from which the designated period of time begins to run is not included. The last day of the period is included. The term "business day" does not include Sunday, Saturday, or Washington State recognized holiday.

L. ACKNOWLEDGEMENT

By submitting a bid in response to this solicitation, the Bidder acknowledges that it has reviewed and acquainted itself with the bid protest procedures herein and agrees to be bound by such procedures as a condition of submitting a bid.

14.1 EXECUTION OF CONTRACT

A. The successful bidder will be required to execute the contract and furnish performance bond and insurance certificate satisfactory to the Agency within 15 days after receiving properly prepared contract documents from the Agency.

END OF INSTRUCTIONS TO BIDDERS

| | | | |

Diana Dupuis Director



WASHINGTON STATE PARKS AND RECREATION COMMISSION

EASTERN REGION HEADQUARTERS • CAPITAL DIVISION 270 9th Street NE, Suite 200 • East Wenatchee, WA 98802-4477 • (509) 665-4319 TDD (Telecommunications Device for the Deaf): (360) 664-3133 www.parks.wa.gov

June 12, 2023

To: Brian Patnode, Construction Project Coordinator, Eastern Region Jillian Sprance-Carr, Area Manager, East Columbia Gorge Area

From: Chelsea Harris, Environmental Planner, Eastern Region

Subject: Environmental Transmittal for Klickitat State Park Trail Phase 1: Trail work

The following environmental approvals and permits are being transmitted to you, as Project Representatives, for project implementation. With this transmittal, you are assuming the responsibilities and duties of Applicant/Permittee on behalf of State Parks' and are legally responsible for ensuring compliance with all environmental permits, approvals, conditions, and mitigation measures.

State Environmental Policy Act (SEPA): A Determination of Nonsignificance (DNS) was issued on October 7, 2020, and the public comment period ended October 21, 2020. No adverse comments were received in response to the DNS. (Attachment 1).

2. <u>Shoreline Management Act:</u>

1.

The Klickitat County Planning Department issued an exemption from Shoreline Management Act Substantial Development permit requirements on May 3, 2022 (Attachment 2).

3. <u>Section 404 and Section 10:</u>

The U.S. Army Corp of Engineers determined that a Department of the Army (DA) permit is not required for the proposal at Klickitat State Park Trail on July 19, 2021. The proposal does not include work in, over, or under a navigable water, nor does it require discharge of dredged or fill material (Attachment 3).

4. <u>Hydraulic Project Approval (HPA):</u>

The Washington Department of Fish and Wildlife issued a Hydraulic Project Approval (HPA), permit #2022-5-20+01, on February 25, 2022. Please review all **15 provisions** listed within the attached document before you begin your work (Attachment 4).

5. <u>Cultural Resources:</u>

A background review and consultation with the tribe and DAHP identified 12 precontact archaeological sites within the project area, and three within the Area of Impact (AI). A cultural resource survey of the trail, trestle areas, access, and staging areas has been completed. After multiple discussions with the tribe and DAHP, the two staging areas were reduced to previously modified areas and the staging area at Warwick excluded the archaeological site completely. The project has been modified to minimize impacts to cultural resources. In addition, archaeological monitoring of ground disturbing activities will occur, and a monitoring plan developed with procedures in place for when and where monitoring will take place and how any cultural resources found during construction will be handled. An archaeological site monitoring permit application is in process for the trail and staging area at precontact site Wahkiacus. Upon completion of archaeological site monitoring, if no new cultural resources are encountered, a monitoring report will be provided to the tribes and DAHP. Any new cultural resources encountered during monitoring will require additional consultation and consideration for the project construction.

You can reach Sarah Dubois at (360) 972-5884 or (509) 665-4336 and Jennifer Wilson at (360) 902-8637.

Permit and environmental approval provisions should be reviewed at the pre-construction conference with the contractor and subsequently, with any subcontractors. Permits should be read and understood by all responsible parties prior to undertaking construction activities. A copy of the permits should be located on site with the contractor and any subcontractors during construction activities.

All requests for modifications, revisions, or renewals are to be processed through this office. Please contact me as soon as possible if any of such actions are needed.

Attachments: DNS and SEPA checklist, shoreline exemption, USACE no permit required letter, and HPA

Cc: Scott Griffith, Eastern Region Manager: South Jennifer Wilson, Archaeology Program Manager, Headquarters Sarah Dubois, Archaeologist, Eastern Region Jessica Logan, Environmental Program Manager, Headquarters

Attachment 1

Don Hoch Director



WASHINGTON STATE PARKS AND RECREATION COMMISSION

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State Environmental Policy Act

Determination of Nonsignificance

Date of Issuance: October 7, 2020

Project Name: Klickitat State Park Trail Development

Proponent: Washington State Parks and Recreation Commission

Lead Agency: Washington State Parks and Recreation Commission

Description of Proposal: The Klickitat State Park Trail is a rails-to-trails project, which serves as a nonmotorized, multi-use trail for hikers, bikers, and equestrians in Klickitat County. The trail follows an old railroad corridor that was constructed between Lyle and Goldendale, Washington in 1902 and 1903. In August 1993, the Rails-to-Trails Conservancy purchased the railroad corridor from Burlington Northern for interim trail use under the National Trails System Act. In January 1994, State Parks accepted the title of the railbanked corridor.

The Klickitat Trail runs 31 miles from just west of the town of Lyle in the Columbia Gorge, up along the Klickitat River through the town of Klickitat to Wahkiacus, then down through Swale Canyon to Uecker Road on the Goldendale plateau. The lowest 13 miles from the Lyle trailhead to Klickitat are managed by the USFS, and the upper 18 miles are managed by State Parks.

This Klickitat Trail Development project continues the previous trail improvement work completed by the USFS and the trail planning process completed by State Parks. This is the first phase of a phased environmental review under the State Environmental Policy Act (SEPA) that expands on the previous 2003 Environmental Assessment prepared by the USFS, and adopted by Washington State Parks in 2005 as the document used for the original Determination of Non-significance (DNS) to satisfy SEPA requirements. This phased review specifically addresses updated site information identified since the original review, new information for project modifications, new projects not previously reviewed and specific comments received from Tribes and other agencies. Specific elements of this proposal include the construction of a trailhead at Pitt and resurfacing approximately 12 miles of trail through Swale Canyon. Additionally, a preliminary concept for a potential trailhead at Warwick will be completed. Work also includes minor structural repairs, new decking and railings on seven existing trestles, decommission one trestle and install a free span bridge, and removal of one existing damaged trestle. Park staff will coordinate with staff from the Yakama Nation at the design stage for each project within this phase of the proposal.

Phased Review: This SEPA checklist analyzes the potential impacts associated the Klickitat Trail Development plan pursuant to WAC 197-11-060(5)(iii). Phasing allows the agency to identify alternatives and impacts at a time when they can be meaningfully evaluated. All subsequent project designs will be reviewed

as necessary resulting with some alternatives being, depending on the proposal, categorically exempt. For example, projects described in WAC 197-11-800. Categorically exempt projects do not require preparation of an environmental checklist or threshold determination.

Location of Proposal: Project activities will occur along portions of the Klickitat State Park Trail right-ofway corridor in Klickitat County. The right-of-way varies from 60- to 200-feet-wide. Specifically, work will be conducted within the following Townships (T), Ranges (R) and Sections listed below.

Pitt Trailhead: T4N, R13E, Section 32 Warwick Trailhead: T3N, R14E, Section 25 Swale Canyon: T4N, R14E, Sections 19, 20, 21, 28, 33 T3N, R14E, Sections 4, 5, 8, 9, 17, 20, 21, 22, 23, 25, 26, 27, 28

Threshold Determination: After review of the completed environmental checklist, the lead agency for this proposal has determined it does not have probable significant adverse impact to the environment nor does it need mitigation to avoid significant adverse environmental impacts.

The project will make site improvements to an existing recreational trail along the disturbed railbed footprint and bridges. The proposed trailhead is located on a previously disturbed site and the project will make site improvements to protect waterways, native habitat, and native species. The project does not pose a threat to public health or safety and is not anticipated to adversely affect cultural or historic resources. The project has been reviewed by the State Parks Historic Preservation Officer and determined to be consistent with allowable reuse of the rails-to-trails corridor.

The lead agency for this proposal has determined that it does not have a probable significant adverse impact to the environment, nor does it need mitigation to avoid significant adverse environmental impacts. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal until the comment period has closed. Comments must be submitted by <u>October 21, 2020</u> or they may not be considered.

Responsible Official: Position/Title: Phone: Address: Jessica Logan Environmental Program Manager (360) 902-8679 1111 Israel Road NW Tumwater, WA 98501

Date: October 7, 2020

Signature:

farrier P

"All Washington State Parks are developed and maintained for the enjoyment of all persons regardless of age, sex, creed, ethnic origin, or physical limitations."

There is no agency SEPA appeal; however, all comments are welcome and will be thoroughly considered.

<u>SEPA</u> ENVIRONMENTAL CHECKLIST

A. Background [help]

1. Name of proposed project, if applicable:

Klickitat Trail Development

2. Name of applicant:

Washington State Parks and Recreation Commission

3. Address and phone number of applicant and contact person:

Washington State Parks and Recreation Commission Attn: Chelsea Harris Eastern Region Headquarters 270 9th Street NE, Suite 200 East Wenatchee, WA 98802 <u>chelsea.harris@parks.wa.gov</u> (509) 665-4339

4. Date checklist prepared:

March 2020 - October 2020

5. Agency requesting checklist:

Washington State Parks and Recreation Commission

6. Proposed timing or schedule (including phasing, if applicable):

This checklist considers potential impacts associated with the Klickitat Trail Development project. This is the first phase of a phased environmental review under the State Environmental Policy Act (SEPA) that expands on the previous 2003 Environmental Assessment prepared by the U.S. Forest Service (USFS) for the Klickitat Rails-to-Trails, adopted by the Washington State Parks and Recreation Commission (State Parks) in 2005 as the document used for the Determination of Non-significance to satisfy SEPA requirements. This phased review specifically addresses updated site information identified since the original review, and new information for project modifications or new projects not previously reviewed.

This first phase of review addresses specific actions associated with trailhead development at Pitt, approximately 12 miles of trail resurfacing through Swale Canyon, renovations to eight trestles and removal of one damaged trestle. Proposed timing for this work is as follows; however, this may change based on permit conditions (e.g., fish work windows) and weather constraints (the trail is seasonally closed due to fire danger):

- Bid Awarded/Contractor Hired: Spring 2021
- Construction Started: Spring 2021
- Construction Complete: Winter 2021

Subsequent phases will include additional environmental review for specific project actions at such time developments are proposed unless they are categorically exempt. The proposed timing or schedule of any project actions associated with future phases is dependent on securing adequate funding and all required

regulatory approvals. If appropriate, future proposals may rely on this checklist to avoid duplication and excess paperwork, consistent with SEPA rules governing phased review (WAC 197-11-060(5)(f)).

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Plans for future phases involve completing similar trailhead development at Warwick and other potential areas, trail resurfacing and trestle improvements to the remaining segments of the trail (including the segment between Pitt and Wahkiacus) and the construction of two bridges to establish full continuity for the 31-mile Klickitat Trail. A preliminary concept for a trailhead at Warwick will be completed as part of Phase 1; however, final design, engineering and construction of the trailhead will be completed as part of a future phase. To the extent practicable, this SEPA checklist considers the potential foreseeable environmental impacts associated with future project actions.

Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process pursuant to WAC 197-11-055. Depending upon the nature of the proposal, some future projects may be considered categorically exempt from additional review under SEPA (WAC 197-11-305). Categorically exempt projects do not require preparation of an environmental checklist or threshold determination. Future phases may include capital projects, land use or acquisition agreements, or other facility improvements. All future projects will be in compliance with State Parks policy as well as local, state, and federal environmental regulation.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Aspect Consulting. 2007. Hydrologic Information Report Supporting Water Availability Assessment: Swale Creek and Little Klickitat Subbasins, WRIA 30. Prepared for WRIA 30 Water Resource Planning and Advisory Committee.

Aspect Consulting. 2009. Riparian Vegetation Assessment, Little Klickitat River and Swale Creek: Water Resource Inventory Area 30. Prepared for WRIA 30 Water Resource Planning and Advisory Committee.

Bartkowski, Kaci. 2016. Quality Assurance Project Plan: Little Klickitat River & Swale Creek, Water Quality, Little Klickitat and Swale Creek TMDL Implementation Project.

Conley, Will. 2015. Geomorphic Assessment of Thirty Miles of Railroad Infrastructure along the Klickitat River and Swale Creek, Klickitat County, WA – Preliminary Report. Prepared for U.S. Department of Energy Bonneville Power Administration Environment, Fish and Wildlife Program and Washington State Recreation and Conservation Office Salmon Recovery Funding Board.

Klickitat Lead Entity (KLE). 2018. Klickitat Lead Entity Region Salmon Recovery Strategy.

Morrison, P.H. and H.M. Smith IV. 2009. Rare Plant and Vegetation Survey of Klickitat Rail Trail State Park. Pacific Biodiversity Institute, Winthrop, WA. Prepared for Washington State Parks and Recreation Commission.

National Marine Fisheries Service (NMFS). 2009. Recovery Plan for the Klickitat River Population of the Middle Columbia River Steelhead Distinct Population Segment.

Northwest Power & Conservation Council. 2004. Klickitat Subbasin Plan.

Spencer, J., H. Simmons-Rigdon, B. Sharp and J. Zendt. 2004. Klickitat Subbasin Supplement. Prepared for the Northwest Power and Conservation Council.

USDA Forest Service (USFS). 1991. Lower Klickitat River, Wild and Scenic River Management Plan, Final Environmental Impact Statement (EIS).

USFS. 2003. Environmental Assessment for the Klickitat Rails-to-Trails. Columbia River Gorge National Scenic Area.

Washington Department of Fish and Wildlife (WDFW). 2016. Klickitat Wildlife Area Management Plan.

Washington State Parks and Recreation Commission (WSPRC). 2010. Klickitat Trail Management Plan.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

- Klickitat County Critical Areas Review
- Klickitat County Shoreline Conditional Use Permit
- Klickitat County Shoreline Substantial Development Permit
- Klickitat County Zoning Conditional Use Permit
- Klickitat County Building/Grading Permit
- Governor's Executive Order 05-05 compliance
- Washington Department of Fish & Wildlife Hydraulic Project Approval
- Washington Department of Ecology Clean Water Act Section 401 Water Quality Certification
- Washington Department of Transportation Access Connection Permit
- Department of Archaeology & Historic Preservation Excavation Permit
- U.S. Army Corps of Engineers Clean Water Act Section 404 Nationwide Permit
- National Environmental Policy Act compliance
- Endangered Species Act compliance
- National Historic Preservation Act Section 106 compliance

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Klickitat State Park Trail is a rails-to-trails project, which serves as a non-motorized, multi-use trail for hikers, bikers, and equestrians in Klickitat County. The trail follows an old railroad corridor that was constructed between Lyle and Goldendale, Washington in 1902 and 1903. In August 1993, the Rails-to-Trails Conservancy purchased the railroad corridor from Burlington Northern for interim trail use under the National Trails System Act. In January 1994, State Parks accepted the title of the railbanked corridor.

The Klickitat Trail runs 31 miles from just west of the town of Lyle in the Columbia Gorge, up along the Klickitat River through the town of Klickitat to Wahkiacus, then down through Swale Canyon to Uecker Road on the Goldendale plateau. The lowest 13 miles from the Lyle trailhead to Klickitat are managed by the USFS, and the upper 18 miles are managed by State Parks.

The first planning process for the Klickitat Trail began when the USFS held a series of public scoping meetings (from July 1994 to April 1996) to determine public interest in trail development and to discuss trail-related issues. Ongoing trail user conflicts led to additional public meetings held by State Parks in Lyle and Olympia in 2002. In January 2003, the State Parks Commission decided to retain the trail property for public use. In December 2003, the USFS, working cooperatively with State Parks, released a draft Environmental Assessment (EA) considering different management alternatives for the Klickitat Rails-to-Trails. In 2005, State Parks adopted the EA document and issued a Determination of Nonsignificance (DNS) to satisfy SEPA requirements for the phased development of the trail pursuant to WAC 197-11-610, which allows the use of NEPA documents for that purpose. To date, the USFS has completed construction of a trailhead at Lyle, trail resurfacing of the first 13 ½ miles of trail, and improvements to the Fisher Hill Bridge.

In June 2007, State Parks initiated a Classification and Management Plan (CAMP) planning process for the entire 31-mile trail. The process, which included public participation and input, gathered initial planning information for the State Parks-managed portion of the trail and identified new management issues raised since publication of the EA in 2003. The planning process resulted in development of the Klickitat Trail Management Plan (WSPRC 2010), which is intended to: 1) orient readers to the park and the agency's park management planning system; 2) identify natural, cultural, and recreation/facility management issues; and 3) provide initial direction to park staff (suggested management approaches) to address these issues.

This Klickitat Trail Development project continues the previous trail improvement work completed by the USFS and the trail planning process completed by State Parks. Phase 1 of this project proposes to construct a trailhead at Pitt and resurface approximately 12 miles of trail through Swale Canyon. Additionally, a preliminary concept for a potential trailhead at Warwick will be completed. Work also includes minor structural repairs, new decking and railings on seven existing trestles, decommission one trestle and install a free span bridge, and removal of one existing damaged trestle. Where feasible, State Parks will strive to meet the U.S. Access Board Standards for Outdoor Developed Areas in order to allow all people to enjoy accessible recreation opportunities. Exceptions may be permitted in accordance with these guidelines if it is determined that certain conditions apply (e.g., compliance is not practical due to terrain). Additional details on Phase 1 are provided below.

Pitt Trailhead

Construction of trailhead improvements will include car and horse trailer parking, a CXT vault toilet, a kiosk and ADA access. Trailhead work elements include clearing and grubbing, rough grading, finish grading, crushed surfacing and/or asphalt, revegetation and landscaping, and installation of signage and a gate. No water, sewer or electricity is being proposed for the trailhead, except solar is proposed to power the vault toilet vent/fan.

Warwick Trailhead Pre-design

A preliminary concept for a proposed trailhead at Warwick will be completed as part of Phase 1; however, final design, engineering and construction of the trailhead will be completed as part of a future phase. The preliminary concept will include car and horse trailer parking, a vault toilet, and associated site amenities.

Trail Resurfacing

Phase 1 trail resurfacing is proposed for approximately 12 miles of existing railroad grade between Wahkiacus and Harms Road through Swale Canyon. Work elements include minor clearing and grubbing to accommodate a trail up to eight-foot-wide with one-foot shoulders, and rough and finish grading of the existing trail surface in order to achieve suitable surface conditions, and improve drainage and hillslope processes along the trail. The proposed improvements are also intended to accommodate emergency vehicles and facilitate vehicle and equipment access for future restoration projects. Minor excavation will be required along the trail in several areas to remove earth and rock that has sloughed from adjacent slopes and blocked the trail. Excavated material will be removed to re-establish the trail grade and provide positive drainage across the trail surface.

Trestle Repairs

Proposed structural repairs include removal of the existing ties, decks, and bull rails on seven of the nine trestles in Swale Canyon. Existing rotted wood structural members in the superstructure will be replaced and new pre-cast concrete or wood decking panels and safety rails will be installed (similar to the Fisher Hill Bridge). Due to the current state of deterioration of Trestle #1, the project will remove portions of the trestle, where required, to install a free span metal bridge.

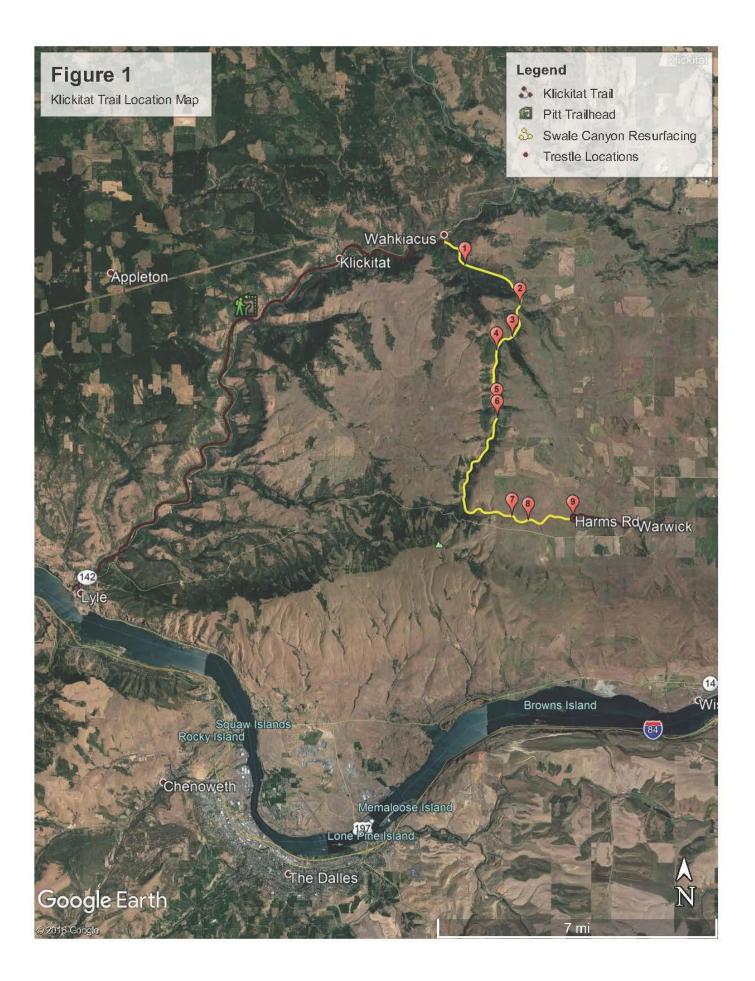
Trestle Removal

One damaged trestle (Trestle #3), will be completely demolished and the trail grade regraded to provide a rolling dip.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Project activities will occur along portions of the Klickitat State Park Trail right-of-way corridor in Klickitat County (see Figure 1). The right-of-way varies from 60- to 200-feet-wide. The proposed Pitt trailhead would be located at trail mile 10 on State-owned property north of SR-142 (latitude 45.795424° / longitude - 121.200646°). Specifically, work will be conducted within the following Townships (T), Ranges (R) and Sections listed below.

Pitt Trailhead:	T4N, R13E, Section 32
Warwick Trailhead:	T3N, R14E, Section 25
Swale Canyon:	T4N, R14E, Sections 19, 20, 21, 28, 33 T3N, R14E, Sections 4, 5, 8, 9, 17, 20, 21, 22, 23, 25, 26, 27, 28



B. Environmental Elements [help]

1. Earth [help]

a. General description of the site (circle one): Flat, rolling hilly, steep slopes, mountainous, other:_____

The proposed trailheads are located on flat slopes. The existing railbed lies on relatively flat slopes adjacent to the Klickitat River and Swale Creek. These slopes increase moving away from the railbed through Swale Canyon.

b. What is the steepest slope on the site (approximate percent slope)?

Some side slopes of 60 to 75% are located adjacent to the railbed.

c. What general types of soils are found on the site (e.g., clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Soils in the Klickitat Trail corridor vary with local topography and characteristics of the substrate. The corridor is dominated by fluvial deposits adjacent to the river and steep bedrock and talus slopes leading up to the higher plateau areas. Most of the developed soils along the river and within the corridor are derived from deposits of mixed river sediments, ranging from silt to extremely cobbly sand, with soil typically 60 inches or more thick.

All of the trail surfaces are on top of existing railroad ballast, except for a small number of water crossings (trestles). Most of the route has at least some imported fill material under the ballast that was placed to keep the track above the floodplain.

According to the Natural Resources Conservation Service Web Soil Survey, the soils on site consist of:

Pitt Trailhead

- Fluventic Haploxerolls-Riverwash complex, 0 to 5 percent slopes (gravelly sandy loam)
- Legall-Rock outcrop-Rubble land complex, 30 to 65 percent slopes

Warwick Trailhead

- Konert silt loam, drained, 0 to 2 percent slopes
- Konert silt loam, 0 to 2 percent slopes

Swale Canyon

- Blockhouse silt loam, 0 to 5 percent slopes
- Fluventic Haploxerolls-Riverwash complex, 0 to 5 percent slopes
- Goldendale silt loam, 5 to 10 percent slopes
- Gunn stony loam, 8 to 30 percent slopes
- Konert silt loam, 10 to 2 percent slopes
- Legall-Rock outcrop-Rubble land complex, 30 to 65 percent slopes
- Legall cobbly loam, 5 to 30 percent slopes
- Leidl-Dillcourt-Rock outcrop complex, 30 to 75 percent slopes
- Leidl extremely cobbly ashy loam, 2 to 30 percent slopes
- Rock outcrop-Rubble land complex, 30 to 75 percent slopes

- Sauter gravelly loam, 30 to 75 percent slopes
- Sauter-Rock outcrop-Rubble land complex, 30 to 75 percent slopes

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Several small deposits of material derived from upslope failures are located on the railbed through Swale Canyon. This includes rockfall from cutfaces and adjacent hillslopes. A geomorphic assessment of the railroad infrastructure along the Klickitat River and Swale Creek (Conley 2015), documented fresh facies along the valley toe, which indicate erosion opposite of floodplain fill and bank armor. It is not anticipated that the proposed trail improvements will increase the likelihood of slope failure. The project will occur within the existing railbed and flat trailhead areas, and no work is proposed on sloped areas.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Grading will be required for the construction of the trailheads and for trail resurfacing. Grading for the trailheads will generally involve balancing cut and fill at each site. Resurfacing activities will require minor clearing and grubbing of the existing railbed to accommodate a trail up to eight-foot-wide with one-foot shoulders, and rough and finish grading of the existing trail surface in order to achieve suitable surface conditions, and improve drainage and hillslope processes along the trail. State Parks will continue to work with interested tribes prior to construction once actual cut and fill amounts are available.

Pitt Trailhead

The proposed ground disturbance area (excavation, grading and fill) at Pitt is approximately 32,740 square feet. Work will include balancing cut and fill and adding crushed rock or hot mix asphalt (HMA) to the parking surfaces. Additional topsoil may need to be brought in to supplement the proposed planting areas depending on site conditions. Any soil fill will be sourced from an approved commercial facility.

Warwick Trailhead

At this stage of pre-design, the details for any filling, excavation or grading proposed for a trailhead at Warwick is unknown. However, it is anticipated that it would be similar in scope and size to the Pitt Trailhead. Additional review will be completed as part of a future phase.

Swale Canyon

Due to the current state of deterioration of Trestle #1, the project will remove portions of the trestle, where required, to install a new free-span metal bridge that may involve up to approximately 100 cubic yards of excavation. Most of this material will be used as compacted backfill. It is anticipated this work will import approximately 10 cubic yards of 3/4" gravel and four to five cubic yards of concrete for new bridge abutments. The footings for the two internal piers will remain in place to minimize disturbance to Swale Creek and the stream bank. The existing riprap will be replaced to stabilize the area and prevent erosion if needed. All work will be conducted above the ordinary high water mark and there will be no in-water work associated with Trestle #1. Future restoration projects will explore removal of the remaining existing bridge components left in place.

Trail resurfacing through Swale Canyon, including removal of Trestle #3 and replacement with a rolling dip, will involve clearing and grubbing, grading and roller compacting along 12 miles (63,360 linear feet), and potential fill of up to 16,400 tons (9,000 cubic yards); The Yakama Nation Tribe have provided comment specifically about concerns over impacts that may result from the quantity of potential fill. Figures included in this checklist are conservative estimates. Fill quantities will be reduced to the maximum extent feasible. Park staff will consult with Tribal staff at the project design level to address any additional concerns once actual quantities are determined.

Following clearing and grubbing, the trail will be graded, and roller compacted to achieve a firm and stable surface in compliance with U.S. Access Board Standards for Outdoor Developed Areas. Additional surfacing material will only be added if suitable trail conditions cannot be achieved with grading and rolling alone. Placement of fill will adhere to all applicable local, state, and federal regulations and permitting requirements.

In select locations, the trail will be graded to create subtle rolling dips that will route water runoff and mineral and organic material across the trail for eventual recruitment into Swale Creek. Preliminary design anticipates trail sections consisting of 12 to 18 inches of 4-6" quarry spalls, capped with four inches of 5/8" minus or possibly a smaller trail specific gradation of 1/2-1/4" minus trail surfacing in these areas; however this may be revised based on consultation with Yakama Nation Fisheries Program staff. Any new quarry spalls and gravel surfacing placed on the trail will be imported from a local quarry in the area of the Klickitat Trail.

Additionally, minor excavation to remove two existing debris piles along the trail will require removal of approximately 150 cubic yards and 81 cubic yards (total of 231 cubic yards) of material. Excess material will be spoiled alongside the existing trail prism outside of any critical area in a manner that does not impede or obstruct drainage or impact native vegetation.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur during construction of the trailheads, resurfacing of the trail, removal of the damaged trestle and other construction activities. However, the project will occur within the existing railbed and flat trailhead areas, and no work is proposed on sloped areas. Minor erosion may occur as a result of land surface disruption and compaction by vehicles transporting surfacing materials. However, erosion control measures (described in B.1.h below) would be implemented to minimize erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (e.g., asphalt or buildings)?

Pitt Trailhead

Existing impervious surfaces on site total approximately 44,052 square feet, which equates to roughly 4% of the project parcel. The project will add an additional 16,182 square feet of impervious surfaces, bringing the total impervious surface to 60,234 square feet or 5.5% of the site.

Warwick Trailhead

At this stage of pre-design, the total amount of impervious surfaces for the proposed Warwick Trailhead is unknown. However, it is anticipated that it would be of similar size to the Pitt Trailhead. Additional review will be completed as part of a future phase.

Swale Canyon

The existing railbed consists of impervious surfaces; this maintenance surfacing of the existing grade will not increase the amount of impervious surfaces. The bridge decks will provide spacing to allow stormwater to drain through trestles and bridges.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Phase 1 of the project will occur within the existing railbed and flat trailhead areas, and no work is proposed on sloped areas. Construction equipment used for resurfacing activities will be stationed and operated on the existing trail. A Temporary Erosion and Sedimentation Control plan (TESC) will be prepared prior to ground disturbing activities that will specify typical erosion control measures and best management practices (BMPs) for site clearing and grading such as operating in the dry period of the year, buffer zones, and erosion barriers (e.g., silt fencing).

Subsequent phases of the project will include environmental review for specific project actions as they are developed. All future proposals will be located in appropriate locations and evaluated individually to meet established development criteria specific to the existing Klickitat Trail Management Plan and State Parks policies (73-04-1 Natural Resources and 73-03-1 Critical Areas policies), as well as local, state and federal regulations. Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process consistent with WAC 197-11-055.

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Construction and renovation activities will generate temporary, low-level exhaust and some dust from vehicles transporting materials, and equipment used to install the trail and bridge surfaces. Upon completion, the trail will be patrolled by administrative/maintenance vehicles, consistent with current use, and will not result in any new emissions.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No, there are no off-site sources of emissions or odor that may affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

During Phase 1 construction, standard dust suppression measures will be used to limit and/or control dust, such as adding water to surfaces during construction in dry weather. All construction equipment will be maintained in good working order as to minimize emissions to the immediate surrounding environment. After construction, the site will be stable; therefore, no measures to control dust or odor to the air are required.

Subsequent phases of this project will include environmental review for specific project actions as they are developed. All future proposals will be located in appropriate locations and evaluated individually to meet established development criteria specific to the existing Klickitat Trail Management Plan and State park policies, as well as local, state and federal regulations. Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process consistent with WAC 197-11-055. Any future development will: 1) be designed to comply with all Klickitat County Code requirements; and 2) implement BMPs to reduce emissions, such as using dust control during dry weather.

3. Water [help]

- a. Surface Water: [help]
- 1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project is located within the Klickitat River Basin (Water Resource Inventory Area (WRIA) 30) adjacent to the Klickitat River and Swale Creek, a tributary to the river. The Klickitat River flows approximately 95 miles south from its source in the Cascades through Klickitat County to the Columbia

River near Lyle. Swale Creek flows north through Swale Canyon and meets up with the Klickitat River near Wahkiacus. Portions of the trail through Swale Canyon cross several small, unnamed, perennial, and intermittent streams that feed into Swale Creek. The flows of both the Klickitat River and Swale Creek are primarily fed by rain and snowmelt in late spring and early summer.

Based on an analysis of Ecology's online Water Quality Atlas Map (accessed November 19, 2018), both the Klickitat River and Swale Creek are DNR Type F (fish-bearing) perennial water bodies. The Klickitat River is designated Shorelines of the State and a small portion of the river near Wahkiacus is on the Washington State's list of impaired water bodies (303(d)) as Category 2 for pH. Portions of the lower reach of Swale Creek (within Swale Canyon) are on Washington State's list of impaired water bodies (303(d)) as Category 5 for water temperature and dissolved oxygen.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, construction of the Pitt Trailhead will occur adjacent to (within 200 feet) of the Klickitat River and the renovation or removal of the existing water crossings (abandoned railroad bridges and trestles) and 12 miles of trail resurfacing will occur adjacent to or above Swale Creek and several unnamed tributaries. In Swale Canyon, 53% of the railroad embankment (by overall length) is in direct contact with the active channel of Swale Creek. Therefore, roughly half of the resurfacing work in Swale Canyon will be adjacent to Swale Creek and nearly the entire length will be within 200 feet of the creek (Conley 2015).

However, materials and equipment will not contact the water directly; BMPs will be implemented throughout these renovations, such as operating in the dry period of the year, and the use of silt fencing and/or tarps to contain any debris generated by these surfacing activities. In addition, plans for the Pitt Trailhead include removal of existing asphalt and other debris, and revegetation with native species within the 50-foot natural buffer zone between the project and the ordinary high water mark (OHWM) of the river. All conditions of the required Hydraulic Project Approval and Clean Water Act Section 404 permits will be strictly adhered to.

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge material will be placed in or removed from surface water or wetlands.

4. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No, the project will not require any surface water withdrawals or diversions.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes, according to the 1981 FEMA Flood Insurance Rate Map (FIRM), the lower portion of the proposed Pitt Trailhead site closest to the river, and per the 2003 EA, approximately 48% of the existing railroad right-of-way is located within the 100-year floodplain. Most of the existing railbed has at least some imported fill material under the railroad ballast that was placed to keep the track above the floodplain.

The 2015 geomorphic assessment of the railroad infrastructure along the Klickitat River and Swale Creek prepared by the Yakama Nation Fisheries Program (Conley 2015) found that approximately 82% of the entire existing railroad embankment (by overall length) from Lyle to Uecker Road was within the 100-year floodplain, and 73% of the embankment within Swale Canyon (Wahkiacus to Harms Rd) was within the

100-year floodplain.

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, the project does not involve any uses that will discharge any waste materials or wastewater to surface waters. No discharge of waste materials will be permitted per the State Parks project contract, and the Hydraulic Project Approval issued by WDFW. Best management practices shall be implemented that may include use of tarps or webbing underneath trestles and directly above surface waters, and silt fencing on adjacent land.

b. Ground Water: [help]

1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No, the project does not require a groundwater supply and no groundwater will be withdrawn from a well. Water will be required to spray fines and gravel used in construction to minimize dust and to compact the trail surface. This water will be brought to the site on a water truck. Use of water during construction will be minimal and any excess will evaporate or infiltrate the ground.

Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (e.g., domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground from septic tanks or other sources.

c. Water Runoff (including Stormwater):

1. Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff from proposed trailheads will be directed for infiltration into planned landscape areas, adjacent swales or buffer areas, and the parking areas themselves will be utilized as particular site conditions allow. Prior to construction, a site-specific design will be completed and approved for each trailhead. Site drawings will include, at a minimum, demolition, temporary erosion and sediment control, layout and materials, grading and drainage, planting and all associated details.

Stormwater from the trail trestles will fall to the water bodies below. All materials will meet the guidelines presented in WAC 173-303-071(3)(g). The bridges do not meet the definition for a pollution generating impervious surface by Ecology's Stormwater Management Manual for Eastern Washington.

2. Could waste materials enter ground or surface waters? If so, generally describe.

It is possible that waste materials (e.g., oil from leaking vehicles/equipment, etc.) could potentially enter ground water or surface waters during construction; however, the project will implement BMPs, such as the use of fiber rolls and/or silt fences and requiring the contractor to maintain vehicles in good working order, during construction as preventative avoidance measures.

3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe

The railroad embankment that the trail follows was constructed in 1902 and 1903. The building of the original railbed contributed to a variety of effects that generally interrupted the geomorphic processes through Swale Canyon. The Yakama Nation prepared a geomorphic assessment of the railroad infrastructure along the Klickitat River and Swale Creek (2015), which evaluated the geomorphic effects associated with the former railroad.

Based on consultation with the Yakama Nation, Phase 1 of the project includes the removal of a damaged trestle (Trestle #3) that spans an ephemeral stream that flows into Swale Canyon. Once the trestle is removed, the trail will be graded to a rolling dip, which will remove all impediments and restore a more natural flow of the ephemeral stream to Swale Creek. Additional rolling dips are proposed for select locations to improve drainage and hillslope processes along the trail. In these locations, the trail will be graded to create subtle grade dips that will route water runoff and mineral and organic material across the trail for eventual recruitment into Swale Creek. Other projects to enhance drainage, such as culvert removal, will be considered as part of future phases.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The project will implement BMPs including, but not limited to: 1) operating in the dry period of the year; 2) use of fiber rolls, silt fencing and/or tarps to contain debris; and 3) requiring the contractor to maintain vehicles in good working order. Stormwater runoff from proposed trailheads will be directed for infiltration into planned landscape areas, adjacent swales or buffer areas, and the parking areas themselves will be utilized as particular site conditions allow. Prior to construction, a site-specific design will be completed and approved for each trailhead. Site drawings will include, at a minimum, demolition, temporary erosion and sediment control, layout and materials, grading and drainage, planting and all associated details.

Additional measures specific to Phase 1 include enhancement of the 50-foot natural buffer zone along the river at the proposed Pitt Trailhead site by removing existing asphalt and other debris, and revegetating disturbed areas with native species to preserve the natural riparian zone and assure water quality. The project will also remove damaged trestle #3 in Swale Canyon and replace it with a rolling dip, which will remove all impediments and restore a more natural flow of the ephemeral stream to Swale Creek at this location.

Subsequent phases of this project will include environmental review for specific project actions as they are developed. All future proposals will be located in appropriate locations and evaluated individually to meet established development criteria specific to the existing Klickitat Trail Management Plan and State Park policies, as well as local, state and federal regulations. Additional SEPA reviews will be conducted at the earliest opportunity during the planning process consistent with WAC 197-11-055. Any future development occurring in the vicinity of water or that has the potential to affect water resources will: 1) undergo a site-specific review to verify the presence of water resources within the proposed project site; 2) be designed to comply will all Klickitat County Code requirements; and 3) be designed to meet Ecology's most current stormwater manual and comply with state water quality standards

4. Plants [help]

a. Check the types of vegetation found on the site:

Deciduous tree: Alder, maple, aspen, other
Evergreen tree: Fir, cedar, pine, other
Shrubs
Grass
Pasture
Crop or grain
Orchards, vineyards, or other permanent crops.
Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other
Water plants: Water lily, eelgrass, milfoil, other
Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

The vegetation communities and land cover within the trail corridor is nearly all categorized as developed or highly disturbed and very little native vegetation communities occur within the corridor (Pacific Biodiversity Institute 2009). State Parks will preserve native vegetation adjacent to Swale Creek that provides overwater shade. Select vegetation removal adjacent to the creek will be done by hand (e.g., hand lopping) as needed to make the proposed trail improvements, maintain and preserve trail use, and complete any future habitat restoration projects.

Trees and native vegetation in the proposed trailhead areas will be avoided to the extent practicable, and removal of on-site vegetation shall be limited to the minimum necessary for the development of the trailheads. State Parks will identify hazard trees and other trees that will require removal based on critical root zone impacts. The resulting number and types of trees proposed for removal will be reviewed and approved by the agency's Forester and Stewardship staff per State Parks policy. It is estimated that fewer than 10 trees will need to be removed for trailhead construction at Pitt, and there are no existing trees (only minimal shrubs and other vegetation) at the future Warwick trailhead location.

Following construction, the Pitt trailhead site will be revegetated with native species along the southern boundary to enhance the natural buffer zone between the trailhead and the river, and along the eastern boundary to provide screening for the adjacent landowner. An appropriate native planting plan will be developed for this area by the agency's Region Steward.

c. List threatened and endangered species known to be on or near the site.

Based on an analysis of the Washington Department of Fish and Wildlife's Priority Habitat and Species (PHS) GIS records (accessed February 1, 2018), Oregon white oak woodland has been mapped within the Pitt Trailhead site and adjacent to the trail through Swale Canyon. This is a Washington State high priority habitat for conservation because it supports a variety of wildlife species. Site design for the Pitt trailhead focuses development below the oak woodland habitat in the existing disturbed areas. Some tree and vegetation removal area will occur in and adjacent to the disturbed area, but construction will not impact the intact oak woodland habitat on site.

Washington Department of Natural Resource's National Heritage Program Geographic Information System (GIS) records (accessed February 1, 2018) indicate the presence of Suksdorf's desert parsley (*Lomatium suksdorfii*), a state sensitive and federal species of concern, approximately a quarter mile to the west of the Pitt Trailhead site. Additionally, obscure buttercup (Ranunculus reconditus), a state endangered and federal species of concern, has been recorded in four locations within the trail right-of-way through Swale Canyon, but outside the project boundary. No impacts to these species are anticipated due to their location outside the project area.

The 2008 rare plant and vegetation survey of the Klickitat Rail Trail State Park (Pacific Biodiversity Institute 2009) verified the desert parsley location near the Pitt Trailhead site and mapped three populations of gooseberry-leaved alumroot (*Heuchera grossulariifolia* var. *tenuifolia*), a state sensitive species, along Swale Creek approximately one mile west of Harms Road. These populations were found growing on north-facing basalt cliffs on the uphill side of the trail and no impacts to this species are anticipated due to its location outside the proposed work area.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Construction equipment used for this project will operate stationed on the existing railbed and trail, and other disturbed areas. Vegetation adjacent to Swale Creek that provides overwater shade will be preserved. Select vegetation removal adjacent to the creek will be done by hand (e.g., hand lopping) as needed to make the proposed trail improvements, maintain and preserve trail use, and complete any future habitat restoration projects. Trees and other native vegetation in the area will be avoided to the extent practicable, and the removal of on-site vegetation shall be limited to the minimum necessary for development of the trailheads and trail resurfacing. The Pitt Trailhead site will be revegetated with native species along the southern boundary to enhance the natural buffer zone between the trailhead and the river, and along the eastern boundary to provide screening for the adjacent landowner. An appropriate planting plan will be developed by the agency's Region Steward.

Subsequent phases of this project will include environmental review for specific project actions as they are developed. All future proposals will be carefully located and designed in such a way as to avoid or minimize impacts to native species and habitat to the extent possible consistent with State Parks Natural Resources Management Policy (73-04-1 *Protecting Washington State Parks Natural Resources*) and the Klickitat Trail Management Plan. Additionally, future proposals will be consistent with and adhere to all applicable local, state and federal regulations. Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process consistent with WAC 197-11-055.

e. List all noxious weeds and invasive species known to be on or near the site.

There are significant occurrences of noxious weeds near the trail. The weeds have not been mapped as they occur in diffuse patches. The Washington State Noxious Weed List Class B and C noxious weeds that have been recorded in the project vicinity include:

<u>Class B</u>

- Diffuse knapweed (Centaurea diffusa)
- Yellow starthistle (Centaurea solstitialis)
- Spotted knapweed (Centaurea stoebe ssp. Micranthus)
- Scotch broom (*Cytisus scoparius*)
- Dalmatian toadflax (Linaria dalmatica ssp. dalmatica) approximately 1 mile south of Wahkiacus
- Houndstongue (Cynoglossum officinale) at the Northwest natural gas line crossing
- Sulfur cinquefoil (Potentilla recta)

<u>Class C</u>

- Queen Anne's lace/Wild carrot (Daucus carota)
- Hairy cat's ear (Hypochaeris radicata)
- Common St. Johnswort (Hypericum perforatum)
- Reed canarygrass (Phalaris arundinacea)
- Tree of heaven (*Ailanthus altissima*)
- Canada thistle (*Cirsium vulgare*)
- Himalayan blackberry (Rubus armeniacus)
- Medusahead (Taeniatherum caput-medusae)

5. Animals [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Birds:	Song birds, wild turkey, quail, eagle and other raptors, corvids, kingfishers, and other water birds
Mammals:	Deer, elk, beaver, black bear, squirrel, marmot, coyote, bobcat and cougar
Reptiles:	Southern alligator lizard, ringneck snake, sharptail snake and California mountain king snake
Fish:	Salmon, steelhead, bull trout and rainbow trout

b. List any threatened and endangered species known to be on or near the site.

The species listed below are known to occur on or near the project area based on review and analysis of: 1) the Biological Evaluation prepared for the Environmental Assessment for the Klickitat Rails-to-Trails (USFS 2003); 2) WDFW's Priority Habitat and Species (PHS) GIS records; and 3) U.S. Fish and Wildlife Service's Environmental Conservation Online System (ECOS) online mapper and Information for Planning and Consultation website.

- Western gray squirrel (*Sciurus griseus*) State Threatened
- Bald eagle (Haliaeetus leucocephalus) Federally Protected
- Mule deer (Odocoileus hemionus hemionus) State Priority Species
- Black-tailed deer (Odocoileus hemionus columbianus) State Priority Species
- Merriam's wild turkey (Meleagris gallopavo) State Priority Species
- Mid-Columbia steelhead (Oncorhynchus mykiss) Federally Threatened
- Columbia River bull trout (Salvelinus confluentus) Federally Threatened

The Klickitat region has been identified by WDFW as a priority western gray squirrel nest area. There are multiple recorded observations of western gray squirrel in the project vicinity. Construction activities occurring during summer have the potential to disrupt nesting activities. Trail users are not expected to disrupt squirrel nest activities, as the vast majority of past documented nests are not adjacent to the trail (USFS 2003). State Parks has consulted with WDFW regarding potential impacts to western gray squirrels and conducted additional western gray squirrel surveys at the Pitt Trailhead site. The project will not remove any active nest trees and is not anticipated to significantly impact squirrels.

The project vicinity is a wintering area for bald eagle. Regular concentrations of bald eagle typically occur along the Klickitat River from October 31 to March 31. Bald eagle was removed from the federal endangered species list in 2007 and from Washington's list of endangered species in 2017. However, they are still protected under the provisions of the federal Bald and Golden Eagle Protection Act. There are no

recorded nests or roost sites within ¹/₂ mile of the trail, and no visible nests were observed by State Parks staff during multiple site visits conducted in 2017/2018. Therefore, no impacts are anticipated.

Although not listed species, mule deer, black-tailed deer, and Merriam's wild turkey are considered priority species and are managed by WDFW as game species. Increase in trail use could potentially cause these species to avoid the trail and adjacent riparian area during periods of use. It is expected that deer and turkey would move into the upland areas during the mid-morning to late afternoon when trail users are present and adjust their use of the Klickitat River and Swale Creek to early morning and evening. Critical winter periods would have much fewer human users, and this should allow for some use as winter refuges for these species.

The Klickitat River currently supports important anadromous fish resources and fisheries, including critical habitat for Mid-Columbia steelhead and Columbia River bull trout. Steelhead are actively managed by the WDFW and Yakama Nation, and are known to spawn and rear in the lower 17 miles of the Klickitat River. Yakama Nation biologists have reported steelhead spawning in Swale Creek, but rearing habitat is limited by the creek's intermittent nature. Bull trout are documented at the mouth of the Klickitat River as well as above river mile 60. Due to warmer temperatures, of which bull trout are intolerant, it is unlikely that the lower and mid portions of the Klickitat River or Swale Creek would be used by bull trout for more than short periods of time for migration or foraging. The river and creek adjacent to the trail is highly unlikely to provide spawning or rearing habitat for bull trout.

State parks has incorporated project recommendations from the Yakama Nation Fisheries Program staff regarding hillslope processes, runoff, and vegetation management in order to improve habitat conditions along the trail as discussed in B.5.d below. The project is not expected to degrade existing river habitat conditions and is not expected to negatively impact steelhead or affect migration or foraging by bull trout.

c. Is the site part of a migration route? If so, explain.

Yes, the Klickitat Trail is within the Pacific Flyway, and the Klickitat River and Swale Creek corridors function as migratory routes for wildlife species. Bull trout and steelhead migrate through this river system. The project area is also within the Klickitat winter range for mule and black-tailed deer and is a wintering bald eagle area.

d. Proposed measures to preserve or enhance wildlife, if any:

The railbed itself, which would be the most impacted aspect of the project, is an existing disturbed area covered by railroad ballast and most of the route has at least some imported fill material under the ballast that was placed to keep the track above the floodplain. This area is not suitable habitat for sensitive species and no species of concern have been observed on the railbed.

In accordance with WDFW management recommendations for western gray squirrel, State Parks has completed surveys of primary squirrel habitat (mixed pine/oak woodland) at the proposed Pitt Trailhead site to identify and protect any active nest locations prior to the start of construction. If new active nest locations are found prior to the start of construction, then appropriate conservation or mitigation measures will be planned in consultation with WDFW before heavy machinery construction would take place.

If any bald eagle nests or roosts are observed in the project vicinity, construction work will maintain a buffer of at least 330-feet or 660-feet, depending on activity type. If this buffer cannot be avoided, State Parks will consult with the U.S. Fish and Wildlife to determine what, if any, avoidance and minimization measures are necessary.

Vegetation adjacent to Swale Creek that provides overwater shade will be preserved. Select vegetation

removal adjacent to the creek will be done by hand as needed to make the proposed trail improvements, maintain and preserve trail use, and complete any future habitat restoration projects. In select locations, the trail will be graded to create subtle rolling dips that will improve hillslope processes and route water runoff and mineral and organic material across the trail for eventual recruitment into Swale Creek.

State Parks will enforce Washington Administrative Code 352-32-060, which requires that dogs in state parks and on established trails be on a leash no longer than eight feet and under control at all times to prevent any potential harassment of wildlife. In addition, State parks will post signs at trailheads to notify trail users of this requirement.

Subsequent phases of this project will include environmental review for specific project actions as they are developed. All future proposals will be carefully located and designed in such a way as to avoid or minimize impacts to native species and habitat to the extent possible consistent with State Parks Natural Resources Management Policy (73-04-1 *Protecting Washington State Parks Natural Resources*) and the Klickitat Trail Management Plan. Additionally, future proposals will be consistent with and adhere to all applicable local, state and federal regulations. Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process consistent with WAC 197-11-055.

e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and Natural Resources [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

This project proposes a small solar unit to power the vault toilet vent/fan at the Pitt Trailhead. No other energy needs are currently proposed for the Klickitat Trail Development project.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, there will be no impacts to potential solar use by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not applicable - the project will not result in any energy impacts.

7. Environmental Health [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

During construction activities there is potential for vehicles and equipment to spill or leak hazardous materials, primarily petroleum products (e.g. gas, oil and lubricants). Best management practices, such as proper maintenance of vehicles, and inspection for leaks prior to use, will be used to prevent contamination resulting from the use of vehicles. In addition, trail improvements may increase visitation, which has the potential to increase the risk of wildfire ignited from human causes. However, the trail is seasonally closed due to fire danger.

1. Describe any known or possible contamination at the site from present or past uses.

Based on previous site visits and a records search, there is no known contamination within the project site. Per the U.S. Environmental Protection Agency's Multisystem Search, and Ecology's Cleanup Site Search and What's in My Neighborhood interactive mapping tool (accessed August 24, 2018), there are no recorded releases of hazardous substances in Swale Canyon or the proposed trailhead sites.

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

A portion of the Williams' Northwest Pipeline system crosses under the Klickitat trail through Swale Canyon. This pipeline transfers hazardous liquid and high-pressure natural gas above 250 psi. State Parks staff will contact Williams Northwest Pipeline for a locate prior to work in the vicinity of the Northwest Natural Gas Pipeline crossing, if necessary, in order to avoid any potential impacts.

3. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Vehicles and construction equipment used to repair the trail require petroleum products (e.g., gas, oil and lubricants) to run. Vehicles and/or machinery may be stored at staging areas during construction periods. Their use in the project area will be short-term and temporary. Best management practices, such as regular inspection for leaks prior to use, will be implemented to prevent contamination. Any pre-treated lumber stored on-site will be contained with tarps.

4. Describe special emergency services that might be required.

Emergency service that may be required along the trail would most likely be either fire (the trail is seasonally closed due to fire danger) or medical services for trail users.

5. Proposed measures to reduce or control environmental health hazards, if any:

Best management practices, including proper maintenance of vehicles and equipment, and inspection for leaks prior to use, will be implemented to prevent contamination. Machine operators are required to have proper training in order to run equipment safely. Regular maintenance and administrator vehicles will be required to have spark arresters, fire extinguishers or some other type of fire prevention equipment. All wood treated with preservatives and concrete slabs will be pre-treated and pre-cast offsite prior to installation; any shavings produced during installation will be collected and disposed of at an approved upland facility by the contractor, as specified in the contract. State Parks staff will contact Williams Northwest Pipeline for a locate prior to work in the vicinity of the Northwest Natural Gas Pipeline crossing, if necessary, in order to avoid any potential impacts.

Subsequent phases of this project will include environmental review for specific project actions as they are developed. All future proposals will be carefully considered and designed to avoid and/or minimize the potential for environmental health hazards. Additionally, future proposals will be consistent with and adhere to all applicable local, state, and federal regulations. Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process consistent with WAC 197-11-055.

b. Noise:

1. What types of noise exist in the area which may affect your project (e.g., traffic, equipment, operation, other)?

Noise in the area is minimal and will not affect the project. Existing noise along the trail includes river and nature sounds, vehicular traffic where the trail and trailheads are adjacent to roads, and residential and human sounds where the trail and trailheads are adjacent to local communities.

2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (e.g., traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Operation of construction equipment will result in a temporary, short-term increase in noise levels along the trail. Equipment operations will only occur during standard daylight hours and all vehicles transporting materials will have mufflers to help minimize noise.

The proposed trail improvements could result in an increased number of people accessing and using the trail, which may increase low noise levels from hikers talking while on the trail and possibly dogs barking on the trail. There could also be an increase in traffic and human noise near trailheads. However, trail use is limited to daylight hours and any increase in these types of noise would be minimal and well within permissible environmental noise levels.

3. Proposed measures to reduce or control noise impacts, if any:

The project will meet all requirements of WAC 173-60-040 Maximum permissible environmental noise levels. Potential noise impacts will be reduced or controlled by: 1) using BMPs during construction; 2) limiting work to daylight hours; 3) scheduling work to minimize impacts on trail users (e.g., schedule work during the off-season), if at possible; and 4) requiring contractors to meet noise control requirements for vehicles and equipment.

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The Klickitat Trail and State-owned right-of-way affected by this project is currently used by recreationists for hiking, biking, equestrian use, and de facto parking for access to the trail. Adjacent lands are used for grazing and a number are residential. Public land, including the adjacent Swale Creek Unit of the Klickitat Wildlife Area, is used for hiking, wildlife viewing and upland game bird hunting. The proposed project is for previously planned trailhead development, trail resurfacing and other site improvements to the existing Klickitat State Park Trail and is not anticipated to affect any current land uses.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No impacts to or from working farm or forest lands are anticipated from this project. The Klickitat Trail corridor is an old railroad right-of-way that was constructed in 1902-1903, and the project does not propose any land conversions to other uses. The eastern section of the trail through Swale Canyon crosses actively used rangeland and there is cattle grazing occurring within the trail corridor between Klickitat and Warwick. Cattle are typically grazed in this section between March and July. This use would not change as a result of

this project.

1. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

This proposed work should not affect any normal business operations for working farm or forest lands; access and staging areas will be located along the Klickitat Trail property, and the scope of work is confined to the State-owned railroad right-of-way and parcels.

c. Describe any structures on the site.

The trail corridor through Swale Canyon includes nine railroad trestles that cross Swale Creek and several of its tributaries. The project proposes to improve these trestles by installing wood or concrete decking and safety railings. One of the trestles is damaged beyond repair and will be removed as part of this proposal.

d. Will any structures be demolished? If so, what?

Due to the current state of deterioration of Trestle #1, the project will remove portions of the trestle, where required, to install a free span bridge. The damaged trestle in Swale Canyon (Trestle #3), will be demolished and removed, and the trail grade regraded to provide a rolling dip.

e. What is the current zoning classification of the site?

Zoning classifications vary along the existing 31-mile Klickitat Trail. The majority of the trail is zoned Open Space. Zoning around the towns of Lyle, Pitt and Klickitat include areas zoned as General Rural, Residential and Rural Residential. The area surrounding the eastern end of the trail is zoned Extensive Agriculture. Zoning specific to Phase 1 project sites are listed below.

Pitt Trailhead

The southern half of the site nearest to SR 142 and the Klickitat River is zoned Rural Residential 2. The northern half of the site is zoned Open Space.

Warwick Trailhead

The proposed future trailhead site at Warwick is zoned Extensive Agriculture.

Swale Canyon

The majority of the project area through Swale Canyon is zoned Open Space except for the easternmost end near Harms Road, which is zoned Extensive Agriculture.

A Klickitat County Zoning Conditional Use Permit is required for any property zoned Extensive Agriculture that is outside the 200-foot shoreline buffer (i.e., future Warwick Trailhead location and the eastern portion of Swale Canyon near Harms Road). State Parks will apply for the required Zoning Conditional Use permit and all other required permits in accordance with Klickitat County Code.

f. What is the current comprehensive plan designation of the site?

Comprehensive plan designations vary along the existing 31-mile Klickitat Trail. The western portion of the trail is designated Open Space except where it runs through the towns of Lyle and Klickitat. The portion of the trail in Lyle is designated High Density Residential and the portion of the trail in Klickitat is designated Rural Center. The remaining eastern portion of the trail is designated Agriculture/Forest.

g. If applicable, what is the current shoreline master program designation of the site?

Both the Klickitat River and Swale Creek are Shorelines of the State, which are designated as Conservancy. Under the Conservancy designation, "recreation" is a conditional use. Therefore, any improvements that are not normal maintenance and repair, and extend outside of existing disturbed buffer will require a Shoreline Conditional Use Permit. In addition, any work that does not fall below the \$7,047 substantial development threshold and/or is not normal maintenance and repair will also require a Shoreline Substantial Development Permit. State Parks will apply for the required conditional use and substantial development permits in accordance with the Klickitat County Shoreline Master Program.

Development of the Pitt Trailhead proposed for Phase 1 will require both a Shoreline Conditional Use and Shoreline Substantial Development permit. The Pitt Trailhead has been designed to maintain a 50-foot natural buffer zone from the OHWM of the riverbank and the project proposes to enhance this buffer area by removing asphalt and other debris and revegetating the disturbed areas with native vegetation.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The project area contains Critical Fish/Wildlife Habitat Conservation Areas and Frequently Flooded Areas as defined in the Klickitat County Critical Areas Ordinance. Based on review of the WDFW's Priority Habitat and Species (PHS) GIS records (accessed February 1, 2018), the project area contains the following critical fish/wildlife habitat conservation areas:

- Klickitat River Winter Range Black-tailed deer winter range
- Klickitat Oak Woodlands
- Klickitat River Bald Eagle Range
- Klickitat/Skamania Counties Western gray squirrel nest areas
- Swale Creek Western gray squirrel nest areas (year-round colony)
- USFWS Critical Habitat for steelhead (Klickitat River & Swale Creek)
- USFWS Critical Habitat for bull trout (Klickitat River)

According to the 1981 FEMA Flood Insurance Rate Map (FIRM), the lower portion of the proposed Pitt Trailhead site closest to the river, and per the 2003 EA, approximately 48% of the existing railroad right-ofway is located within the 100-year floodplain. Most of the existing railbed has at least some imported fill material under the railroad ballast that was placed to keep the track above the floodplain.

As part of the 2003 EA, the USFS discussed all proposed project sites with WDFW and was determined that the project would not compromise the integrity of the sites or priority habitat or occur during a time of year when the subject species are sensitive to disturbance. State Parks will re-initiate consultation with WDFW, as part of the permitting process, to discuss updated site information since the original review, and new information for project modifications or new projects not previously reviewed.

In addition, State Parks has placed an emphasis on protecting the conservation areas by including the following design features described below to avoid and minimize impacts to the proposed trailhead development sites:

Pitt Trailhead

The Pitt Trailhead is located within the 200-foot shoreline buffer and, therefore, is subject to the requirements of the Klickitat County Shoreline Master Plan. However, the Pitt Trailhead design meets the general purpose and intent of the County's Critical Areas Ordinance. The proposed trailhead is located in an existing disturbed area adjacent to the trail and a private access road, which will avoid and minimize new impacts to intact native habitat. The project will also enhance the 50-foot natural buffer zone between the project and the OHWM of the Klickitat River by removing existing asphalt and other debris, and

revegetating disturbed areas with native species to restore the functions and values of the wildlife habitat on site. The enhancements to the natural buffer zone will also help to preserve the shoreline natural riparian zone, assure water quality, and preserve the aesthetic qualities along the river.

Warwick Trailhead

A preliminary review for a proposed trailhead at Warwick does not indicate any critical areas on site. In accordance with the State Parks Critical Areas Policy (73-03-1), new park facility developments shall not be built in critical areas except where the theme, character, quality or other park planning provides overriding justification for development in such areas, and appropriate mitigation can be provided. "Overriding justification" means no feasible alternative can be demonstrated to achieve the same or comparable purposes, environmental impacts can and will be demonstrably mitigated, and risk of damage or reduced life to facilities is explicitly addressed and a favorable cost/benefit ratio is demonstrated. When a new park facility development is justified in a critical area, environmental permit considerations shall be prerequisite to the planning, design, and scope of the development.

i. Approximately how many people would reside or work in the completed project?

No people would reside on the trail. State Parks personnel and their contractors would work on the trail at different times.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable, the proposed project will not result in any displacement impacts and it is not anticipated that any future proposals associated with this project will result in any displacement impacts.

1. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Review of the Klickitat Trail Management Plan (State Parks 2010) shows that the proposed work is necessary to fulfill the purpose of the corridor's development as a multi-use trail system. Applications for the shoreline substantial development, shoreline conditional use, zoning conditional use, and any other required permit(s) will be submitted to the Klickitat County Planning Department and will ensure the project adheres to all local laws and zoning regulations. State Parks will re-initiate consultation with WDFW, as part of the permitting process, to discuss updated site information since the original review, and new information for project modifications or new projects not previously reviewed.

In addition, State Parks has incorporated design features to avoid and minimize impacts to the proposed Pitt Trailhead development site. The proposed trailhead is located in an existing disturbed area adjacent to the trail and a private access road, which will avoid and minimize new impacts to intact native habitat. The project will also enhance the 50-foot natural buffer zone between the project and the OHWM of the Klickitat River by removing existing asphalt and other debris, and revegetating disturbed areas with native species to restore the functions and values of the wildlife habitat on site. The enhancements to the natural buffer zone will also help to preserve the shoreline natural riparian zone, assure water quality, and preserve the aesthetic qualities along the river.

Subsequent phases of this project will include environmental review for specific project actions as they are developed. All future proposals will be located in appropriate locations and evaluated individually to meet established development criteria both specific to CAMP and existing State Parks policies (73-04-1

Natural Resources and 73-03-1 Critical Areas policies), as well as local, state and federal regulations. Additional SEPA reviews will be conducted at the earliest possible opportunity during the planning process consistent with WAC 197-11-055.

State Parks staff will continue to work closely with Klickitat County during the planning process. Any future project actions will: 1) undergo an assessment to verify the presence of shorelines of the state and/or critical areas within the proposed project site; 2) be designed to comply with all Klickitat County requirements (i.e., zoning, comprehensive plan, SMP and critical areas); and 3) obtain and adhere to any and all required permits, approvals and conditions.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Not applicable, the proposed project will not result in any impacts to agricultural and forest lands of longterm commercial significance, and it is not anticipated that any future proposals associated with this project will result in any such impacts.

9. Housing [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or lowincome housing.

None, the project does not propose any residential use.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable, the project will not result in any housing impacts.

10. Aesthetics [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The majority of development proposed would occur at ground level on top of the existing railbed. The tallest proposed structures along the trail would be the safety railings that will be added to the existing atgrade bridges. The proposed railings will be a combination of steel and wood and will extend approximately 54 inches above the top of the bridges. The tallest proposed structures at the trailheads will be the one-story CXT vault toilets, which will be approximately 12-feet tall at the top of the roof and 15-feet-tall at the highest point (top of vent pipe). The principal exterior building materials for the vault toilets will be wood dimensional lumber, wood siding, or other material consistent with the existing restroom at the Lyle Trailhead.

In accordance with State Parks Park Improvements Policy (32-1), any authorized proposals associated with this project will be carefully considered and designed to ensure that park improvements "are consistent with the agency mission and strategic direction; ensure protection of park natural, cultural, historic, and recreational resources; are consistent with state statutes and agency rules and policies; adhere to applicable safety guidelines, local building codes, state and local and federal regulations including environmental permits; are consistent with park master plans, management plans (CAMP), and park area

classifications; conform with the architectural themes of the park; and adhere to standard practices for design and construction of state park facilities."

b. What views in the immediate vicinity would be altered or obstructed?

The only views that may be altered are from the Klickitat River, Highway 142, and the trail itself. Existing views from the proposed trailhead sites to the river may be somewhat obstructed when the parking lots are full. The Pitt Trailhead would meet visual subordinance from the Klickitat River because of vegetative screening. Future proposed trailheads will rely on vegetative screening to be visually subordinate from the trail, Highway 142 and adjacent landowners. Toilet buildings are located to minimize dominance at the site. The appearance of the trestles will change, and spaces between railroad ties will be covered by decking material; however, no views will be altered or obstructed from these minor alterations. Removal of the damaged trestle (Trestle #3) will return the area to a more natural view improving the aesthetics to the portion of the trail.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Project actions will be guided by design standards that help to minimize potential visual impacts through the use of appropriate building materials, colors, sizes, shapes, and other design elements, such as landscaping. Project actions may also help to preserve and enhance existing visual characteristics on site through a variety of means including restoration of degraded sites, sensitive placement of more intrusive facilities (e.g., vault toilets) to more shielded locations, and through the use of landscape buffering.

Phase 1 development of the Pitt Trailhead will rely on vegetative screening to be visually subordinate from the trail, Highway 142 and adjacent landowners. The proposed toilet building has been located away from neighboring properties, which will help with screen the view from the neighboring properties.

All future proposals associated with this project will be carefully considered and designed to ensure that trail improvements are consistent with the agency mission and strategic direction; ensure protection of park natural, cultural, historic, and recreational resources; adhere to applicable safety guidelines and local building codes; are consistent with the Klickitat Trail Management Plan (State Parks 2010); conform with the architectural themes of the park; and adhere to standard practices for design and construction of State Park facilities.

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None, this project does not propose any lighting or reflective surfaces that could produce glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No, there will be no light or glare from the trailheads or the trail repairs.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

Not applicable, the project will not result in any light or glare impacts.

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed project is located on the 31-mile Klickitat River State Park Trail. This non-motorized multiuse trail provides day-use opportunities for wide variety of recreation uses including, hiking, biking, horseback riding, and appreciation of natural and cultural resources.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No, the project will not displace any existing recreational uses. Phase 1 of this project will provide one new trailhead and resurface approximately 12 miles of trail through Swale Canyon, which will greatly improve the overall use and experience for trail users. In addition, improvements to the existing trestles in Swale Canyon will open up this area to equestrians providing an additional use. However, the proposed project will require temporary closure of trail through Swale Canyon during construction, which is anticipated to take approximately two to four months. State Parks will notify the public of trail closures at least 30 days prior to start of work.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The purpose of this proposal is to allow for enhanced recreational opportunities along the existing Klickitat Trail. In order to reduce recreational impacts during construction, State Parks will notify the public of all trail closures associated with the project at least 30 days prior to the start of work.

13. Historic and Cultural Preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

The rail corridor, originally the Columbia River and Northern Railroad, was constructed between 1902 and 1903 and has been determined eligible for listing on the National Register of Historic Places under Criterion A. The alignment of the rail line, surfacing materials, and individual trestles along its route have been altered somewhat due to large flood events in the Swale Canyon area but the last major flood event requiring significant rebuilding of the line occurred in 1964. The rail bed was constructed more than 45 years ago. More recent alterations include the removal of tracks and ties along the corridor in anticipation of the conversion of this corridor to a multi-use trail, and trestle replacements.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

The project site contains two cultural resources with prehistoric associations, Site 45KL218 (Wahkiacus Site) and Site 45KL257 (Warwick Site). One additional prehistoric/historic resource Site 45KL640 (Pitt Mill Site) extends into one area of the proposed Pitt Trailhead site. Site 45KL218 (Wahkiacus Site) was previously determined eligible for listing on the National Register of Historic Places. Latter sites 45KL957 (Warwick Site) and 45KL640 (Pitt Mill Site) appear un-evaluated, at present. Previous significant professional studies related to these cultural resources include:

Boynton, Michael

1994 Rails to Trails Klickitat River EA Cultural Resources Long Form. US Forest Service, Columbia Gorge Commission, Hood River.

Luttrell, Charles T.

2017 Klickitat Trail State Park – Fencing Repair Project, Klickitat County, Washington Letter Report. Washington State Parks and Recreation Commission, Olympia.

Mack, Cheryl

2003 Klickitat Rails to Trails Heritage Resource Inventory Report. US Forest Service, Gifford Pinchot National Forest, Vancouver.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

This project is subject to Governor's Executive Order 05-05 (GEO 05-05) compliance or Section 106 of the National Historic Preservation Act in those locations with a federal nexus. For Phase 1, the U.S. Army Corps of Engineers has jurisdiction over the removal of Trestle #3, which will occur within a jurisdictional ephemeral stream channel (see B.3.a.2 above). The U.S. Army Corps of Engineers, as the lead agency, will be responsible for assessment for potential impacts to cultural and historic resources on or near the project site in this location.

Internal review of the project and background research by State Parks Archaeologists (Charles Luttrell and Dan Meatte) and Historic Preservation Officer (Alex McMurry) was initiated in January 2018 and staff visited the site several times throughout 2018. Consultation specific to this phase of work was initiated with DAHP and Johnson Meninick from the Yakama Nation on January 11, 2019. Additional surveys, including pedestrian and vehicular transects and shovel testing, to verify previous survey reports and confirm site specific conditions were conducted on January 15-16 and April 10-11, 2019. The survey report documenting this effort is currently being prepared and will be submitted to DAHP and the Yakama Nation.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The proposed project will be submitted to DAHP, the Yakama Nation, and the U.S. Army Corps of Engineers for review and concurrence under GEO 05-05 or Section 106 of the National Historic Preservation Act, as appropriate. It is not expected that the project will negatively affect the historic significance of the rail corridor. Individual trestles will be altered as a part of the project to improve trail safety for users, and the corridor itself will be resurfaced within the project area. However, the former rail line will continue to serve a transportation corridor and the proposed project will not alter the characteristics of the property that contribute to its historic significance, since much of the original fabric along the corridor has been previously altered.

Few impacts to prehistoric resources are anticipated; however, additional efforts may be necessary at site 45KL640 (Pitt Mill Site). Construction staging areas for trail resurfacing activities are currently proposed at Wahkiacus and Warwick and potential impacts to sites 45KL218 and 45KL957 will be avoided or mitigated by application of barrier cloth and surface gravel. Additional measures may be proposed based on recommendations provided by DAHP and the Yakama Nation resulting from the GEO 05-05 and Section 106 consultation processes.

14. Transportation [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

State Route 142 provides access to the Klickitat Trail at the existing Lyle Trailhead and the proposed Pitt Trailhead. Centerville Highway off Highway 14 (WA-14) provides access to the proposed Warwick Trailhead. The Swale Canyon portion of the trail can also be accessed from Harms Road north of Centerville Highway.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Neither the site nor the geographic region is currently served by public transit.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

This project will formalize existing de facto parking along the Klickitat Trail. Phase 1 development of the Pitt Trailhead would provide up to 13 standard car parking spaces, one ADA parking space, and three horse trailer parking spaces (17 total parking spaces). Future trailhead developments are anticipated to be of similar size. No designated parking spaces would be eliminated.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No new roads or streets would be needed for the proposed project. This project proposes parking and pedestrian improvements along the Klickitat Trail. Phase 1 development of the Pitt Trailhead includes improvements to the existing private access road (Fish On Road), including minor realignment within the existing disturbed area, finish grading and new asphalt or crushed surfacing. Any future proposals associated with this project will be carefully considered and designed to be consistent with State Parks policy and all applicable local, state and federal regulations.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Proposed trail improvements will occur along the Klickitat Trail, which follows an abandoned railroad, but will not occur in the vicinity of water or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Pitt Trailhead

A total of 17 parking spaces are proposed including ADA, car and horse trailer parking at the Pitt Trailhead. Consistent with the previous review conducted for the EA (USFS 2003), it is expected that 90% of spaces (15) would get used once a day and the other 10% (2) would get used twice a day. Based on this assumption, at peak use (about 25 days per year, typically during summer weekends), 19 vehicles would enter and leave the trailhead. The number of vehicles is expected to be lower during other seasons and on weekdays.

Based on review of the Washington Department of Transportation (WSDOT) Traffic GeoPortal (accessed November 21, 2018), the 2017 average daily traffic count at Pitt (the Klickitat River Bridge) is 730. Trailhead use would, at peak use, increase average daily traffic along SR 142 at this location by 2.6%.

Warwick Trailhead

At this stage of pre-design, the total number of parking spaces for the proposed Warwick Trailhead is unknown. However, it is anticipated that parking would be of similar size to the Pitt Trailhead. The WSDOT Traffic GeoPortal does not provide any average daily traffic counts for Centerville Highway.

Given the minor increase in the number of trips anticipated for proposed project, implementation of the project will not result in a significant traffic impact to the existing road network. Furthermore, future development of additional trailheads along the trail will help spread out traffic and prevent concentration of use at existing trailhead areas.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

It is unlikely that the proposed work would affect or be affected by agriculture and/or forest product movement.

h. Proposed measures to reduce or control transportation impacts, if any:

No significant transportation impacts are anticipated as a result of this project. Subsequent phases of this project will include environmental review for specific project actions as they are developed. State Parks will continue to work closely with local governments and private landowners during the planning process. Any future project actions associated with the project will: 1) be required to have local jurisdiction or private landowner approval if located outside of the existing park boundary; 2) be designed to comply with all local, state and federal requirements; 3) conduct a traffic study, as needed; and 4) obtain and adhere to any and all required permits, approvals, and conditions.

15. Public Services [help]

a. Would the project result in an increased need for public services (e.g., fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The proposed trail improvements could result in an increased number of people accessing and using the trail and, over time, an increased number of fire starts, emergency medical responses, and search and rescue incidents. Higher levels of use could also potentially correspond to a higher number of law enforcement incidents, but from some perspectives, a higher number of people on the trail could deter illegal activity.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Current measures to reduce or control impacts on public services from the existing Klickitat Trail include:

- Trail use hours are limited to dawn to dusk.
- Motorized recreation vehicles, camping, campfires, and fireworks are currently prohibited along the trail.
- "No Hunting" signs are posted along the trail.
- The trail is seasonally closed during extreme fire risk conditions.
- Commissioned Park Rangers and Forest Service Law Enforcement and Forest Protection Officers patrol the trail to enforce hunting laws, State laws and park rules for the safety and wellbeing of park visitors and the protection of property and resources.

- During fire season, State Park patrol vehicles are equipped with a fire pumper to control spot fires. Local fire districts and the Forest Service have authorized trail access to control fires on and near State Parks property.
- When the trail, or part of the trail, is considered unsafe by State Parks and/or USFS staff (e.g., fires, flooding, rockslides and other occurrences) staff will post signs, establish barriers, and notify trail users of closures. Notification procedures should include: 1) submission of a local and statewide press release to news organizations (both when trail is closed and when temporarily or permanently reopened); and 2) addition of closures on agency information hotlines and websites.

This project proposes the following additional safety measures:

- Decking the entire width of the trestles and installing safety railings.
- Additional "No Hunting" signs will be clearly posted, as needed, at proposed trailhead locations.
- Proposed trail resurfacing and trestle improvements will be designed to accommodate the width and weight of emergency and administrative vehicles.

16. Utilities <u>[help]</u>

a. Indicate the utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

In the towns of Lyle and Klickitat, water, sewer and electricity are available at the existing trailhead or near the trail. No utilities are currently available along the remainder of the trail.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No utilities are proposed for this project.

C. Signature [help]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Aug. dui

Name of signee: <u>Chelsea Harris</u>

Position and Agency: Environmental Planner, Washington State Parks and Recreation Commission

Date Submitted: October 21, 2020

Attachment 2



KLICKITAT COUNTY PLANNING DEPARTMENT

115 W. Court St., MS-302, Goldendale, Washington 98620 VOICE: 509-773-5703 1-800-765-7239 FAX: 509-773-6206

EXEMPTION FROM SHORELINE MANAGEMENT ACT SUBSTANTIAL DEVELOPMENT PERMIT REQUIREMENT

WA State Parks is proposing to resurface approximately 12 miles of the existing Klickitat Trail through Swale Canyon. The work includes renovations to 12 trestles and removal of one damaged trestle. All proposed work activities lie within the existing trail right-of-way. Swale Creek has a Shoreline Environmental Designation of Conservancy.

The site is located along the Klickitat Trail lying within portions of T3N and T4N, R14E, W.M. Klickitat County, WA beginning at Wahkiacus and ending at Harms Road in Centerville.

This proposal is exempt from the requirement of a substantial development permit because the development is considered: Normal maintenance and repair of existing structures or developments, including damage by accident, fire, or elements.

The processing of a shoreline exemption still requires compliance with the Klickitat County Shorelines Master Plan. Best Management Practices shall be used during any construction activity related to the proposal.

The proposal is consistent or inconsistent with:

CONSISTENT

INCONSISTENT



The WA State Shoreline Management Act The Klickitat County Shorelines Master Plan

Denice Lee, Assistant Planner

Date

Attachment 3



Regulatory Branch

July 19, 2021

Ms. Chelsea Harris Washington State Parks and Recreation Commission 270 9th Street NE, Suite 200 East Wenatchee, Washington 98802

> Reference: NWS-2021-606 Klickitat State Park Trail: Development

Dear Ms. Harris:

We have received your application for a Department of the Army (DA) permit to conduct various trail improvements along the Klickitat Trails, near Lyle, Klickitat County, Washington, as depicted on the enclosed drawings dated March 1, 2020. We have reviewed the information you provided to us pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (RHA). We have determined that no action by the U.S. Army Corps of Engineers (Corps) is required for the proposed work described in your application and drawings.

Under Section 10 of the Rivers and Harbors Act of 1899, a Section 10 DA permit is normally required for work or structures in or affecting navigable waters of the U.S. Because work is not proposed in, over, or under a navigable water, a Section 10 DA permit is not required.

Under Section 404 of the Clean Water Act, a DA permit is normally required for the discharge of dredged or fill material (e.g., fill, excavation, or mechanized land clearing) into waters of the U.S., including wetlands and navigable waters of the U.S. However, because the proposed trail improvement project does not involve a discharge of dredged or fill material, a Section 404 DA permit is not required.

While a DA permit is not required, local, State, and other Federal requirements may still apply. For assistance in determining other permit requirements for the proposed project, we recommend you contact the Washington State Office of Regulatory Assistance via the internet at www.ora.wa.gov. If you have any questions, please contact me at danette.l.guy@usace.army.mil or (206) 348-3999.

Sincerely,

Danette L. Guy, Senior Project Manager Regulatory Branch

Enclosures

Attachment 4



Issued Date: February 25, 2022 Project End Date: December 31, 2023 Permit Number: 2022-5-20+01 FPA/Public Notice Number: N/A Application ID: 26657

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
Parks and Recreation Commission	
ATTENTION: Chelsea Harris	
270 9th Street NE, Suite 200	
East Wenatchee, WA 98802	

Project Name: Klickitat State Park Trail: Development



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 25, 2022 Project End Date: December 31, 2023 Permit Number: 2022-5-20+01 FPA/Public Notice Number: N/A Application ID: 26657

Project Description: This Klickitat Trail Development project continues the previous trail improvement work completed by the USFS and the trail planning process completed by State Parks. Phase 1 of

completed by the USFS and the trail planning process completed by State Parks. Phase 1 of this project proposes to construct a trailhead at Pitt and resurface approximately 12 miles of trail through Swale Canyon. Additionally, a preliminary concept for a potential trailhead at Warwick will be completed. Work also includes minor structural repairs, new decking and railings on seven existing trestles, decommission one trestle and install a free span bridge, and removal of one existing damaged trestle. Where feasible, State Parks will strive to meet the U.S. Access Board Standards for Outdoor Developed Areas in order to allow all people to enjoy accessible recreation opportunities. Exceptions may be permitted in accordance with these guidelines if it is determined that certain conditions apply (e.g., compliance is not practical due to terrain). Additional details on Phase 1 are provided below.

Pitt Trailhead

Construction of trailhead improvements will include car and horse trailer parking, a CXT vault toilet, a kiosk and ADA access. Trailhead work elements include clearing and grubbing, rough grading, finish grading, crushed surfacing and/or asphalt, revegetation and landscaping, and installation of signage and a gate. No water, sewer or electricity is being proposed for the trailhead, except solar is proposed to power the vault toilet vent/fan.

Warwick Trailhead Pre-design

A preliminary concept for a proposed trailhead at Warwick will be completed as part of Phase 1; however, final design, engineering and construction of the trailhead will be completed as part of a future phase. The preliminary concept will include car and horse trailer parking, a vault toilet, and associated site amenities.

Trail Resurfacing

Phase 1 trail resurfacing is proposed for approximately 12 miles of existing railroad grade between Wahkiacus and Harms Road through Swale Canyon. Work elements include minor clearing and grubbing to accommodate a trail up to eight-foot-wide with one-foot shoulders, and rough and finish grading of the existing trail surface in order to achieve suitable surface conditions, and improve drainage and hillslope processes along the trail. The proposed improvements are also intended to accommodate emergency vehicles and facilitate vehicle and equipment access for future restoration projects.

Minor excavation will be required along the trail in several areas to remove earth and rock that has sloughed from adjacent slopes and blocked the trail. Excavated material will be removed to re-establish the trail grade and provide positive drainage across the trail surface.

Trestle Repairs

Proposed structural repairs include removal of the existing ties, decks, and bull rails on seven of the nine trestles in Swale Canyon. Existing rotted wood structural members in the superstructure will be replaced and new pre-cast concrete or wood decking panels and safety rails will be installed (similar to the Fisher Hill Bridge). Due to the current state of deterioration of Trestle #1, the project will remove portions of the trestle, where required, to install a free span metal bridge.

Trestle Removal

One damaged trestle (Trestle #3) will be completely demolished and the trail grade regraded to provide a rolling dip.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 25, 2022 Project End Date: December 31, 2023 Permit Number: 2022-5-20+01 FPA/Public Notice Number: N/A Application ID: 26657

PROVISIONS

1. The project may begin 3/1/2022 and shall be completed by 12/31/2023; Provided: work in or near unnamed tributaries are seasonal and dry as possible.

2. NOTIFICATION: You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by email at HPAapplications@dfw.wa.gov and the local Area Habitat Biologist; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least three business days before starting work. The notification must include the permittee's name, project location, starting date, and the Hydraulic Project Approval permit number.

3. Work shall be accomplished per plans and specifications approved by the Washington Department of Fish and Wildlife entitled 'Klickitat State Park Trail: Development' and dated January 20, 2022, except as modified by this Hydraulic Project Approval. A copy of these plans shall be available on site during construction.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

4. Establish staging areas (used for equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.

5. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.

6. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.

CONSTRUCTION MATERIALS

7. Store all construction and deconstruction material in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.

8. Use only clean, suitable material as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).

9. Do not use wood treated with oil-type preservatives (creosote, pentachlorophenol) in any hydraulic project. You may use wood treated with waterborne preservatives (ACZA, ACQ) provided the wood is approved by the Western Wood Preservers Institute for use in the aquatic environment. Any use of treated wood in the aquatic environment must follow guidelines and best management practices available at www.wwpinstitute.org.

BRIDGE

10. Use material for the approaches that is structurally stable and that will not harm fish life if it erodes into the water.

11. Prevent the existing structure and associated construction materials from entering the stream when removing them.

WATER CROSSING REMOVAL

12. Remove the trestle and any imported fill. Restore the site to a similar width, depth, gradient, and substrate composition as the channel segments upstream and downstream from the crossing (ie the rolling dip).

DEMOBILIZATION AND CLEANUP

13. Upon completion of the project, restore the disturbed bed, banks, and riparian zone to preproject condition to the extent possible.

14. Seed areas disturbed by construction activities with a native seed mix suitable for the site that has at least one quick-establishing plant species.

15. Replace native riparian zone and aquatic vegetation, and wetland vascular plants (except noxious weeds) damaged or destroyed by construction using a proven methodology.



Issued Date: February 25, 2022 Project End Date: December 31, 2023 Permit Number: 2022-5-20+01 FPA/Public Notice Number: N/A Application ID: 26657

LOCATION #1:	Site Name: Klickitat Trail , , WA					
WORK START:	March 1, 2022			WORK END:	December 31, 2023	
WRIA Waterbody:					Tributary to:	
30 - Klickitat		Klickitat River (rb)		Columbia River		
<u>1/4 SEC:</u>	Section:	<u>Township:</u>	<u>Range:</u>	Latitude:	Longitude:	<u>County:</u>
	19	04 N	14 E	45.822	-121.105	Klickitat
Location #1 Driving Directions						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person (s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in civil action against you, including, but not limited to, a stop work order or notice to comply, and/or a gross misdemeanor criminal charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 25, 2022 Project End Date: December 31, 2023 Permit Number: 2022-5-20+01 FPA/Public Notice Number: N/A Application ID: 26657

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 25, 2022 Project End Date: December 31, 2023 Permit Number: 2022-5-20+01 FPA/Public Notice Number: N/A Application ID: 26657

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist Amber Johnson Amber.Johnson@dfw.wa.gov

360-701-2738

an Ch

for Director

WDFW

The following list of major items of construction has been included for Bidder's convenience in preparing a bid proposal. Exclusion of items from this summary does not indicate exclusion from project. For lump sum items, the bidder is cautioned that the drawings are the only source for measurement of project quantities, and drawings have been detailed for this purpose. In preparing a bid proposal, Bidder should note apparent discrepancies between the list below and the drawings and consult with Engineer for verification.

BASE BID ITEMS

BID ITEN	1 DESCRIPTION	ESTIMATED QUANTITY	PAYMENT
1.	TRENCH EXCAVATION SAFETY PROVISIONS	L.S.	PER LUMP SUM
See ins	tructions on Bid Proposal Form.		
2.	MOBILIZATION	L.S.	PER LUMP SUM

This item shall consist of preparatory Work and operations including, but not limited to those necessary for fire protection, the movement of equipment, supplies and incidentals to the Project site; and bonding, insurance, etc.

- A. Payment shall be based on a percentage of actual construction completed at time of payment estimate.
- B. Bonding/insurance and equipment hauling costs will be paid for up front upon receipt of cost verification.

3. TEMPORARY EROSION & SEDIMENT CONTROLS L.S. PER LUMP SUM

Complete in place, including all labor, equipment, and materials necessary to implement and maintain temporary erosion and sediment controls as required by the contract drawings and specifications. This includes, but is not limited to:

- A. Hyrdoseed Erosion Control.
- B. Silt Fencing.
- C. Erosion Control Blankets.
- D. Other BMP measures.
- E. Dust control measures.
- F. BMP monitoring and maintenance.
- G. BMP replacement as needed.
- H. BMP removal.
- I. Landscape restoration.
- J. Other miscellaneous items of construction.
- K. Cleanup.

L.S.

PER LUMP SUM

PER LUMP SUM

4. TRESTLE REMOVAL

Includes all work associated with demolition and disposal of existing timber running planks, decking, ties, girders, caps, abutments, columns, bracing, piles and associated hardware, and appurtenances for Trestle #7 and #9 not indicated to be salvaged, and safe removal and delivery of salvaged items to the location requested by the Owner. Major items of work include:

5.	GRADING AND SURFACING		L.S.	PER LUMP SUM
A. B. C. D. E.	Trestle #7 Trestle #9 Salvage of existing girders Other miscellaneous items of construction Cleanup	670	S.F. S.F. EA.	

Includes all work associated with grading and resurfacing along the trail to repair wet trail sections, debris piles, washouts, and related construction. All quantities shall be taken from the plans and site observations. Major items of work include:

A.	Clearing, Grubbing, and Material Removal	1.3	ACRE	
B.	Grading & Excavation	720	C.Y.	
C.	Compacted Aggregate Surfacing	840	TON	
D.	Spall Sized Fill for Drainage	295	C.Y.	
E.	Precast Concrete Planks	26	EA.	
F.	Other miscellaneous items of construction			
6.	TRESTLE #9 REPLACEMENT		L.S.	PER LUMP SUM

Complete in place, including all labor, equipment, and material necessary to complete the design (stamped by licensed PE), manufacture and construction of the steel bridge with glulam deck panels, wood and steel railing including approach railings, approach grading, and concrete foundations as required by the contract drawings and specifications. Major items of work include:

A.	New Bridge with Glulam Decking	720	S.F.
B.	Pedestrian Railing	168	L.F.
C.	Approach Regrading	2	EA.
D.	Concrete Footings and Steel Backwalls	2	EA.
E.	Other miscellaneous items of construction		
F.	Cleanup.		
7.	TRESTLE REPAIRS		L.S.

Complete in place, including all labor, equipment, and material necessary to complete the decking repair and/or replacement for Trestles 1, 2, 3, 4, 5, 6, and 8 including new wood and steel railing including approach railings, and approach grading as required by the contract drawings and specifications. Major items of work include:

A.	Trestle #1 Deck Repairs	1	L.S.
	a. 2" Planking	240	S.F.
	b. 2x Decking (Wearing Surface)	1200	S.F.

SUMMARY OF PAY ITEMS AND QUANTITIES - 2

	c. Curbs	240	L.F.
	d. Railing		L.F.
	e. Approach Regrading		EA.
B.	Trestle #2 Deck Repairs		L.S.
Ъ.	a. 2" Planking		S.F.
	b. 2x Decking (Wearing Surface)		S.F.
	c. Curbs		L.F.
	d. Railing		L.F.
	e. Approach Regrading		EA.
C.	Trestle #3 Deck Replacement	1	L.S.
	a. Remove Existing Deck	1560	S.F.
	b. Glulam Deck Panels	1872	S.F.
	c. Curbs	312	L.F.
	d. Railing	360	L.F.
	e. Approach Regrading	2	EA.
D.	Trestle #4 Deck Replacement	1	L.S.
	a. Remove Existing Deck	1640	
	b. Glulam Deck Panels	1968	S.F.
	c. Curbs		L.F.
	d. Railing	376	L.F.
	e. Approach Regrading	2	
E.	Trestle #5 Deck Repairs	1	
	a. 2" Planking	80	
	b. 2x Decking (Wearing Surface)		S.F.
	c. Curbs		L.F.
	d. Railing		L.F.
-	e. Approach Regrading		EA.
F.	Trestle #6 Deck Repairs		L.S.
	a. 2" Planking	1232	
	b. 2x Decking (Wearing Surface)	1760	
	c. Curbs	352	
	d. Railing		L.F.
C	e. Approach Regrading		EA.
G.	Trestle #8 Deck Replacement		L.S.
	a. Remove Existing Deck	1780	S.F.
	b. Glulam Deck Panelsc. Curbs	1958	
		356	L.F.
	d. Railing	404 2	L.F. EA.
	e. Approach Regrading	Z	ĽA.
8.	GATES		L.S.

PER LUMP SUM

Complete in place, including all labor, equipment, and material necessary to complete the demolition of existing gates, and the construction and installation of new gates as required by the contract drawings and specifications. Major items of work include:

A.	Remove Existing Gates	1	EA.
B.	Install New Vehicle Gates	3	EA.
C.	Other miscellaneous items of construction.	1	L.S.
D.	Cleanup.		

9. CONTAINMENT AND FALSEWORK L.S. PER LUMP SUM

Complete in place, including all labor, equipment, and material necessary to complete the design, installation, implementation, and maintenance of the containment and falsework required by the contract drawings and specifications. Major items of work include:

A.	Debris Containment	1	L.S.
В.	Falsework	1	L.S.
C.	Other miscellaneous items of construction.	1	L.S.
D.	Cleanup.		

ALTERNATE BID ITEMS

ALTER	NATE		
BID		ESTIM	ATED
ITE	M DESCRIPTION	QUAN	FITY PAYMENT

A1. V-FRAME GATES L.S. PER LUMP SUM

Complete in place, including all labor, equipment, and material necessary to complete the demolition of existing gates, and the construction and installation of new V-frame gates as required by the contract drawings and specifications. Major items of work include:

A2.	RESURFACING TRAIL TO TRESTLE SITE 2		L.S.
D.	Cleanup		
C.	Other miscellaneous items of construction	1	L.S.
B.	Install New V-Frame Gates	2	EA.
A.	Remove Existing Gates	2	EA.

PER LUMP SUM

Includes all work associated with grading and resurfacing along the trail from Harms road to the east end of Trestle 2. All quantities shall be taken from the plans and site observations. Major items of work include:

A.	Clearing, Grubbing, and Material Removal	2.0	ACRE
B.	Compacted Aggregate Surfacing	1255	TON
C.	Other miscellaneous items of construction		

A2.1. TSA REPLACEMENT FOR ALT A2 L.S. PER LUMP SUM

Includes all work associated with using Trail Surface Aggregate in place of Compacted Aggregate Surfacing for Alternate Bid Item A2. All quantities shall be taken from the plans and site observations. Major items of work include:

A.	Deduct for Compacted Agg. Surfacing	-1255	TON
B.	Trail Surface Aggregate	1255	TON

C. Other miscellaneous items of construction

SUMMARY OF PAY ITEMS AND QUANTITIES - 4

PER LUMP SUM

A3. RESURFACING TRAIL TO TRESTLE SITE 9 L.S.

Includes all work associated with grading and resurfacing along the trail from the gate at the Wahkiakus Trailhead to the west end of Trestle 9. All quantities shall be taken from the plans and site observations. Major items of work include:

A3.1.	TSA REPLACEMENT FOR ALT A3	L.S.	PER LUMP SUM
A. B. C.	Clearing, Grubbing, and Material Removal Compacted Aggregate Surfacing Other miscellaneous items of construction	 ACRE TON	

Includes all work associated with using Trail Surface Aggregate in place of Compacted Aggregate Surfacing for Alternate Bid Item A3. All quantities shall be taken from the plans and site observations. Major items of work include:

В. С.	Trail Surface Aggregate Other miscellaneous items of construction	965	TON	

A4. TSA REPLACEMENT FOR ITEM 5.C. L.S. PER LUMP SUM

Includes all work associated with using Trail Surface Aggregate in place of Compacted Aggregate Surfacing for Base Bid Item 5.C. All quantities shall be taken from the plans and site observations. Major items of work include:

D.	Deduct for Compacted Agg. Surfacing	-840	TON
E.	Trail Surface Aggregate	840	TON

F. Other miscellaneous items of construction

END OF SECTION



BIDS DUE: 1:00PM, THURSDAY, FEBRUARY 29TH, 2024

BID DELIVERY LOCATION:

DELIVER BIDS ELECTRONICALLY TO <u>BIDBOX@PARKS.WA.GOV</u> Subject line to read: "BID: EW-C6526 [YOUR COMPANY NAME]."

*** <u>Bid Proposal and Signature:</u> See Section 7.1 of the Instructions to Bidders for expanded instructions for bid submittal.***

** PLEASE PRINT CLEARLY BELOW **

(NOT INCLUDING SALES TAX)

${\mathbb Q}$ PRICE WRITTEN-OUT COMPLETELY IN WORDS ${\mathbb Q}$	
(U.S.) DOLLARS	\$

Printed Name of Person Signing Bid Proposal û	Firm Name (Printed legibly) û
Title û (Estimator, Vice-President, Owner, Principal, etc.)	Physical Street Address û (NO PO Boxes Here)
Contractor Registration No. & Expiration Date û	City û State Zip + PLUS 4 ()
Taxpayer Identification Number ①	Area Code Phone Number û ()
Washington UBI Number	Area Code Fax Number û ()
Employment Security Department Number பி	Area Code Cellular Phone Number ৫
PO Box for US Mail Delivery (if any) û	E-Mail Address (Enter N/A if none) û

<u>Unit prices and estimated quantities shall be used to determine the Base Bid</u>. These prices shall also be used to adjust the Contract in the event there is an increase or decrease in the estimated quantities. All costs shall be "in place" costs and complete, **excluding State Sales Tax**. In the event of an irregularity, the unit price prevails. The Owner reserves the right to make mathematical corrections of multiplication or addition errors on the bid form.

<u>Trench Excavation Safety Provisions</u>: If the contract contains any work which requires trenching exceeding a depth of four (4) feet, all costs for adequate trench safety systems shall be identified as a separate bid item in compliance with Chapter 39.04 RCW. The purpose of this provision is to ensure that the bidder agrees to comply with all relevant trench safety requirements of Chapter 49.17 RCW. This bid amount shall be considered part of the total base bid. **Include a lump sum dollar amount (even if the value is \$0.00) to be considered responsive to the bid solicitation.**

<u>Wage Certification</u>. The bidder certifies under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct: within the three-year period immediately preceding the bid solicitation date, the bidder has not been a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

ITEM NO.	DESCRIPTION	EST QTY	UNIT PRICE	TOTAL AMOUNT
1.	Trench Excavation Safety Provisions	L.S.		
2.	Mobilization	L.S.		
3.	Temporary Erosion and Sediment Controls (TESC)	L.S.		
4.	Trestle Removal	L.S.		
5.	Grading and Surfacing	L.S.		
6.	Trestle #9 Replacement	L.S.		
7.	Trestle Repairs	L.S.		
8.	Gates	L.S.		
9.	Containment and Falsework	L.S.		
	ITEM TOTAL MUST AGREE WITH PAGE 1 BID AMOUNT ->			\$

BASE BID ITEMS

BE SURE TO INCLUDE UNIT PRICES IF THE BOX IS NOT SHADED

ALTERNATE BID ITEMS

ITEM NO.	DESCRIPTION	EST QTY	UNIT PRICE	TOTAL AMOUNT
A1	V-Frame Gates	L.S.		
A2	Resurface Trail to Trestle 2	L.S.		
A2.1	TSA Replacement for Alt A2	L.S.		
A3	Resurface Trail to Trestle 9	L.S.		
A3.1	TSA Replacement for Alt A3	L.S.		
A4	TSA Replacement for Item 5.C	L.S.		

The Bidder declares that they have carefully examined the site of the proposed work, the Drawings, Specifications and all of the conditions affecting the work. Therefore, the Bidder proposes to provide all labor, equipment, materials, and permits and to perform all work as required by, and in strict accordance with the Contract Documents for the bid amounts as follows.

The Commission reserves the right to accept or reject all bids and to waive informalities. No withdrawal of bids after bid deadline, or before award of contract, unless award is delayed over thirty (30) days.

Bidder agrees to complete project (including accepted alternates) in accordance with drawings and specifications within <u>240</u> calendar days from the date provided on the Notice to Proceed letter.

It is agreed that liquidated damages, in the amount of \$200.00, shall be levied for each and every calendar day by which the completion of the work is delayed beyond the time fixed for completion or extension of the contract.

Apprentice Utilization Requirements. The apprentice labor hours required for this project are 15% of the total labor hours. The undersigned agrees to utilize this level of apprentice participation. A monetary incentive of \$1,000 will be paid to the contractor meeting the apprentice utilization requirement. A monetary penalty will be applied to the contractor failing to meet the utilization requirement and failing to demonstrate a Good Faith Effort. The penalty will be \$100 per percentage point not utilized.

Expected Apprenticeship Utilization cost value to be included in the bid associated with meeting the goals: \$_____.

Addenda: Receipt of addenda numbered [___] through [___] is hereby acknowledged.

Signature of Authorized Official

SUBCONTRACTORS UTILIZATION LIST

Any bid expected to cost one million dollars (\$1,000,000) or more for construction, alteration, or repair of public buildings or public work of the state requires Bidder to submit <u>as part of the bid</u> names of subcontractors Bidder, if awarded the contract, will subcontract for performance of heating, ventilation and air conditioning, plumbing, and electrical or to name itself for the work. Do not list more than one subcontractor for each category, unless subcontractors vary with bid alternates, in which case Bidder must indicate which subcontractor for which alternate. Failure of Bidder to submit as part of the bid, the names of such subcontractors, or to name itself to perform such work, or the naming of two or more subcontractors to perform the same work, shall render bid non-responsive.

CONTRACTOR'S, OR SUBCONTRACTORS' NAME, CITY & STATE	REGISTRATION NUMBER	CATEGORY OF WORK	DOLLAR AMOUNT
1. NAME CITY STATE			
2. NAME CITY STATE			
3. NAME CITY STATE			
4. NAME CITY STATE			
5. NAME CITY STATE			
6. NAME CITY STATE			
7. NAME CITY STATE			

Signature of Authorized Official

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PART 1 - GENERAL PROVISIONS

1.01 DEFINITIONS

- A. "Application for Payment" means a written request submitted by Contractor to A/E for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.
- B. "Architect," "Engineer," or "A/E" shall mean that person designated by the State Parks and Recreation Commission to be in charge of the work covered by this contract.
- C. "Change Order" means a written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.
- D. "Claim" means Contractor's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in part 8.
- E. "Contract Award Amount" is the sum of the Base Bid and any accepted Alternates.
- F. "Contract Documents" means the Advertisement for Bids, Instructions for Bidders, completed Form of Proposal, General Conditions, Modifications to the General Conditions, Supplemental Conditions, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- G. "Contract Sum" is the total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents, including all taxes imposed by law and properly chargeable to the Work, except Washington State sales tax.
- H. "Contract Time" is the number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- I. "Contractor" means the person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- J. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.
- K. "Final Acceptance" means the written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents, as more fully set forth in Section 6.09 B.
- L. "Final Completion" means that the Work is fully and finally completed in accordance with the Contract Documents, as more fully set forth in Section 6.09 A.
- M. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in paragraph 3.05 A.
- N. "Notice" means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.
- O. "Notice to Proceed" means a notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- P. "Owner" shall mean the Washington State Parks and Recreation Commission and its authorized representative with the authority to enter into, administer and/or terminate contracts and make related determinations and findings.
- Q. "Person" means a corporation, partnership, business association of any kind, trust, company, or individual.

- R. "Prior Occupancy" means Owner's use of all or parts of the Project before Substantial Completion, as more fully set forth in Section 6.08 A.
- S. "Progress Schedule" means a schedule of the Work, in a form satisfactory to Owner, as further set forth in section 3.02.
- T. "Project" means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.
- U. "Project Manual" means the volume usually assembled for the Work which may include the bidding requirements, sample forms, and other Contract Documents.
- V. "Project Record" means the separate set of Drawings and Specifications as further set forth in paragraph 4.02A.
- W. "Schedule of Values" means a written breakdown allocating the total Contract Sum to each principle category of Work, in such detail as requested by Owner.
- X. "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, and workmanship for the Work, and performance of related services.
- Y. "Subcontract" means a contract entered into by Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for or in connection with the Work.
- Z. "Subcontractor" means any person, other than Contractor, who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- AA. "Substantial Completion" means that stage in the progress of the Work where Owner has full and unrestricted use and benefit of the facilities for the purposes intended, as more fully set forth in section 6.07.
- AB. "Work" means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

1.02 ORDER OF PRECEDENCE

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order.

- 1. Signed Public Works Contract, including any Change Orders, and any Special Forms.
- 2. Supplemental Conditions.
- 3. General Conditions.
- 4. Addenda
- 5. Specifications--provisions in Division 1 shall take precedence over provisions of any other Division.
- 6. Drawings--in case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings.
- 7. Signed and Completed Form of Proposal.
- 8. Instructions to Bidders.
- 9. Advertisement for Bids.

1.03 EXECUTION AND INTENT

Contractor makes the following representations to Owner:

- 1. The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;
- 2. Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;
- 3. Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and
- 4. Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

PART 2 - INSURANCE AND BONDS

2.01 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured. Review of the Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this part shall be licensed to do business under Chapter 48 RCW or comply with the Surplus Lines Law of the State of Washington. Contractor shall include in its bid the cost of all insurance and bond costs required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents shall be acceptable to Owner, and its A. M. Best rating shall be indicated on the insurance certificates.

- A. Contractor shall maintain the following insurance coverage during the Work and for one year after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by section 5.16.
 - 1. Commercial General Liability (CGL) on an Occurrence Form:
 - a. Completed operations/products liability;
 - b. Explosion, collapse, and underground; and
 - c. Employer's liability coverage.
 - 2. Automobile liability
- B. Contractor shall comply with the Washington State Industrial Insurance Act and, if applicable, the Federal Longshoremen's and Harbor Workers' Act and the Jones Act.
- C. All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.
- D. All insurance coverages shall be endorsed to include Owner as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner as an additional insured.

2.02 COVERAGE LIMITS INSURANCE COVERAGE CERTIFICATES

A. Insurance Coverage Certificates

The Contractor shall furnish acceptable proof of insurance coverage on the State of Washington Certificate of Insurance form SF500A dated 07/02/92 or an acceptable ACORD form.

- B. Required Coverages
 - 1. For a contract less than \$100,000.00, the coverage required is:
 - Public Liability Insurance The Contractor shall at all times during the term of this contract, at its cost and expense, carry and maintain general public liability insurance, including contractual liability, against claims for bodily injury, personal injury, death or property damage occurring or arising out of services provided under this contract. This insurance shall cover claims caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or servants. The limits of liability insurance, which may be increased as deemed necessary by the contracting parties, shall be:

\$1,000,000.00
\$1,000,000.00
\$1,000,000.00
\$1,000,000.00
\$50,000.00
\$5,000.00

- b. If the contract is for underground utility work, then the Contractor shall provide proof of insurance for that above in the form of Explosion, Collapse and Underground (XCU) coverage.
- c. Employers Liability on an occurrence basis in an amount not less than \$1,000,000.00 per occurrence.
- 2. For contracts over \$100,000.00 but less than \$5,000,000.00 the contractor shall obtain the coverage limits as listed for contracts below \$100,000.00 and General Aggregate and Products Commercial Operations Limit of not less than \$2,000,000.00.
- 3. Coverage for Comprehensive General Bodily Injury Liability Insurance for a contract over \$5,000,000.00 is:

Each Occurrence	\$2,500,000.00
General Aggregate Limits	\$5,000,000.00
(other than products – commercial operations)	
Products – Commercial Operations limit	\$5,000,000.00
Personal and Advertising Injury Limit	\$2,500,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expense Limit (any one Person)	\$5,000.00

- 4. For all Contracts Automobile Liability: in the event that services delivered pursuant to this contract involve the use of vehicles or the transportation of clients, automobile liability insurance shall be required. If Contractor-owned personal vehicles are used, a Business Automobile Policy covering at a minimum Code 2 "owned autos only" must be secured. If Contractor employee's vehicles are used, the Contractor must also include under the Business Automobile Policy Code 9, coverage for non-owned autos. The minimum limits for automobile liability is: \$1,000,000.00 per occurrence, using a combined single limit for bodily injury and property damage.
- 5. For Contracts for Hazardous Substance Removal (Asbestos Abatement, PCB Abatement, etc.)
 - a. In addition to providing insurance coverage for the project as outlined above, the Contractor shall provide Environmental Impairment Liability insurance for the hazardous substance removal as follows:

EACH OCCURRENCE	AGGREGATE
\$500,000.00	\$1,000,000.00

or \$1,000,000.00 each occurrence/aggregate bodily injury and property damage combined single limit.

- 1) Insurance certificate must state that the insurer is covering hazardous substance removal.
- 2) Should this insurance be secured on a "claims made" basis, the coverage must be continuously maintained for one year following the project's "final completion" through official completion of the project, plus one year following.

For Contracts where hazardous substance removal is a subcomponent of contracted work, the general contractor shall provide to the Owner a certificate of insurance for coverage as defined in 5a. above. The State of Washington must be listed as an additional insured. This certificate of insurance must be provided to the Owner prior to commencing work.

2.03 INSURANCE COVERAGE CERTIFICATES

- A. Prior to commencement of the Work, Contractor shall furnish to Owner a completed certificate of insurance coverage.
- B. All insurance certificates shall name Owner's Project number and Project title.
- C. All insurance certificates shall specifically require 45 (forty-five) days prior notice to Owner of cancellation or any material change, except 30 (thirty) days for surplus line insurance.

2.04 PAYMENT AND PERFORMANCE BONDS

AlA Payment and Performance Bonds, form A312, or equivalent, is required by the Owner for the work of this contract. The forms shall be obtained from the Contractor's bonding company. The Payment Bond shall cover payment to laborers and mechanics, including payments to Employee Benefit Funds, and payments to subcontractors, material suppliers, and persons who shall supply such person or persons, or subcontractors with materials and supplies.

2.05 ALTERNATIVE SURETY

Contractor shall promptly furnish alternative security required to protect Owner and persons supplying labor or materials required by the Contract Documents if:

- A. Owner has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if requested by Owner.

2.06 BUILDER'S RISK

- A. Contractor shall purchase and maintain property insurance in the amount of the Contract Sum including all Change Orders for the Work on a replacement cost basis until Substantial Completion. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear. For projects not involving New Building Construction, 'Installation Floater' is an acceptable substitute for the Builder's Risk Insurance.
- B. Contractor property insurance shall be placed on an "all risk" basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for A/E's services and expenses required as a result of an insured loss.
- C. Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E's subconsultants, separate contractors described in section 5.20, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

PART 3 - TIME AND SCHEDULE

3.01 PROGRESS AND COMPLETION

- A. Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within 30 (thirty) calendar days thereafter, unless otherwise noted in Division 1 of the specifications.
- B. The Contractor shall notify the Engineer at least two (2) weekdays in advance if work is to be performed on a Saturday, Sunday, or legal holiday. No excavation work will be allowed on Saturdays, Sundays, or legal holidays unless specifically authorized by the Engineer.

3.02 CONSTRUCTION SCHEDULE

- A. Unless otherwise provided in Division 1, Contractor shall, within 14 (fourteen) calendar days after issuance of the Notice to Proceed, submit a preliminary Progress Schedule. The Progress Schedule shall show the sequence in which Contractor proposes to perform the Work, and the dates on which Contractor plans to start and finish major portions of the Work, including dates for shop drawings and other submittals, and for acquiring materials and equipment.
- B. The Progress Schedule shall be in the form of a Critical Path Method (CPM) logic network or, with the approval of the Owner, a bar chart schedule may be submitted. The scheduling of construction is the responsibility of the Contractor and is included in the contract to assure adequate planning and execution of the work. The schedule will be used to evaluate progress of the work for payment based on the Schedule of Values. The schedule shall show the Contractor's planned order and interdependence of activities, and sequence of work. As a minimum the schedule shall include:
 - 1. Date of Notice to Proceed;
 - 2. Activities (resources, durations, individual responsible for activity, early starts, late starts, early finishes, late finishes, etc.);
 - 3. Utility Shutdowns;
 - 4. Interrelationships and dependence of activities;
 - 5. Planned vs. actual status for each activity;
 - 6. Substantial completion;
 - 7. Punch list;
 - 8. Final inspection;
 - 9. Final completion, and
 - 10. Float time

The Schedule Duration shall be based on the Contract Time of Completion listed on the Bid Proposal form. The Owner shall not be obligated to accept any Early Completion Schedule suggested by the Contractor. The Contract Time for Completion shall establish the Schedule Completion Date.

If the Contractor feels that the work can be completed in less than the Specified Contract Time, then the Surplus Time shall be considered Project Float. This Float time shall be shown on the Project Schedule. It shall be available to accommodate changes in the work and unforeseen conditions.

Neither the Contractor nor the Owner have exclusive right to this Float Time. It belongs to the project.

- C. Owner shall return comments on the preliminary Progress Schedule to Contractor within 14 (fourteen) days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted which meets the requirements of this section.
- D. Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in section 3.05, Contractor shall take

such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, or revise the Progress Schedule to reconcile with the actual progress of the Work.

E. Contractor shall promptly notify Owner in writing of any actual or anticipated event which is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

3.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

- A. Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 (ninety) days, or for such longer period as mutually agreed.
- B. Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 (ninety) days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:
 - 1. Cancel the written notice suspending the Work; or
 - 2. Terminate the Work covered by the notice as provided in the termination provisions as more fully set forth in Part 9.
- C. If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work.
- D. Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in Part 7.

3.04 OWNER'S RIGHT TO STOP THE WORK FOR CAUSE

- A. If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- B. Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

3.05 DELAY

- A. Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party ("Force Majeure"). Acts of Force Majeure include, but are not limited to:
 - 1. Acts of God or the public enemy;
 - 2. Acts or omissions of any government entity;
 - 3. Fire or other casualty for which Contractor is not responsible;
 - 4. Quarantine or epidemic;
 - 5. Strike or defensive lockout;
 - 6. Unusually severe weather, in excess of weather conditions which could not have been reasonably anticipated; and

- 7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.
- B. Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment according to section 7.03. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.
- C. Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to sections 7.02 and 7.03.
- D. Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
- E. To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to section 7.03, but shall not be entitled to an adjustment in Contract Sum.
- F. Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise.
- G. The Owner has acquired ownership and/or easement of lands for the construction, as indicated on the drawings, without cost to the Contractor. The Contractor understands and agrees that, should it appear at any time that the Owner has not acquired title to all of the right-of-ways and lands necessary for the performance of the work under the provisions of this contract, and that if any delay in the performance of said work occasioned by the failure of the Owner, its officers, or employees to acquire a title of any of said lands or right-of-way, such failure shall extend the contract completion date the number of days equal to the period of such delay. The Contractor waives any and all claims for damages against the Owner which the Contractor may sustain by reason of this delay in the work.

3.06 NOTICE TO OWNER OF LABOR DISPUTES

- A. If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.
- B. Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

- A. Liquidated Damages
 - Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.
 - 2. The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.

- 3. Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.
- B. Actual Damages

Actual damages will be assessed for failure to achieve Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Final Completion should have been achieved, based on the date Substantial Completion is actually achieved, to the date Final Completion is actually achieved. Owner may offset these costs against any payment due Contractor.

PART 4 - SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.
- B. The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing.
- D. Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or Shop Drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.
- E. Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

4.02 PROJECT RECORD

- A. Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order Proposals (COP). This separate set of Drawings and Specifications shall be the "Project Record."
- B. The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD". The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.
- C. Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

4.03 SUBMITTALS

A. "Submittals" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural

elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Submittals include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose Submittals provided in accordance with the Contract Documents.

- B. Contractor shall coordinate all Shop Drawings, and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Shop Drawings shall be stamped by an appropriate professional licensed by the state of Washington. Shop Drawings submitted to A/E without evidence of Contractor's approval shall be returned for resubmission. Contractor shall review, approve, and submit Shop Drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Shop Drawings. Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Shop Drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Shop Drawings. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.
- C. Approval, or other appropriate action with regard to Submittals, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Submittals, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.
- D. If Shop Drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Shop Drawings, at the time it submits the Shop Drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded upon the Project Record.
- E. Unless otherwise provided in Division I, Contractor shall submit to A/E for approval 5 (five) copies of all Submittals. Unless otherwise indicated, 3 (three) sets of all Submittals shall be retained by A/E and 2 (two) sets shall be returned to Contractor.

4.04 ORGANIZATION OF SPECIFICATIONS

Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS

- A. The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any

Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.

- C. Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Shop Drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Shop Drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Shop Drawings, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in section 5.03 and 5.23 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Shop Drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.
- D. The Shop Drawings and other submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Shop Drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

PART 5 - PERFORMANCE

5.01 CONTRACTOR CONTROL AND SUPERVISION

- A. Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.
- B. Performance of the Work shall be directly supervised by a competent superintendent who is satisfactory to Owner and has authority to act for Contractor. The superintendent shall not be changed without the prior written consent of Owner. Owner may require Contractor to remove the superintendent from the Work or Project site, if Owner reasonably deems the superintendent incompetent, careless, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition. The superintendent shall be on-site at all times while the Work is being performed, unless approved in writing by owner, in advance.
- C. Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor shall enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor shall, at all times, keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Shop Drawings, permits, and permit drawings.
- F. Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Contractor shall remove, at its sole cost and expense, any of its, or its Subcontractors', employees, if they are in violation of this act.

5.02 PERMITS, FEES, AND NOTICES

- A. The Owner has obtained a Shorelines Substantial Development Permit and/or other environmental permits as required for this project. The permits with provisions which affect the construction methods or schedule have been incorporated into these specifications. The Contractor shall abide by all restrictions noted in these permits as the construction is in progress.
- B. All other permits or fees required by local, state or federal governmental agencies necessary for the construction of this project shall be obtained and paid by the Contractor. Only the cost for the building permit will be reimbursed by the Owner.
- C. The Contractor shall conform to all local, State and National Codes in all phases of this project. Where conflicts arise between plans, specifications and code requirements, the code shall prevail unless the plans or specifications are more stringent.

5.03 PATENTS AND ROYALTIES

Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

5.04 PREVAILING WAGES

- A. Contractor and all subcontractors shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work is determined by the Industrial Statistician of the Department of Labor and Industries. It is the Contractor's responsibility to verify the applicable prevailing wage rate.
- B. Before payment is made by the Owner to the Contractor for any work performed by the Contractor and subcontractors whose work is included in the application for payment, the Contractor shall submit, or shall have previously submitted to the Owner for the Project, a Statement of Intent to Pay Prevailing Wages, approved by the Department of Labor and Industries, certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.
- C. Prior to release of retainage, the Contractor shall submit to the Owner an Affidavit of Wages Paid, approved by the Department of Labor and Industries, for the Contractor and every subcontractor, of any tier, that performed work on the Project.
- D. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.
- E. Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefiled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.
- F. In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.
- G. Copies of approved Intents to Pay Prevailing Wages for the Contractor and all subcontractors shall be submitted with the Contractor's first application for payment. As additional subcontractors perform work on

the project, their approved Intent forms shall be submitted with the Contractor's next application for payment.

H. The Contractor or subcontractor directly contracting for "Off-Site, Prefabricated, Non-Standard, Project Specific Items" shall identify and report information required on the affidavit of wages paid form filed with the Department of Labor and Industries. The Contractor shall include language in its subcontracts requiring subcontractors and lower-tier subcontractors to comply with the reporting requirements for "Off-Site, Prefabricated, Non-Standard, Project Specific Item(s)" on the affidavit of wages paid.

The reporting requirement for Items shall apply for all public works contracts estimated to cost over \$1 million entered into by the Owner and Contractor between September 1, 2010 and December 31, 2013.

"Off-site, prefabricated, nonstandard, project specific item(s)" means products or items that are:

- 1. Made primarily of architectural or structural precast concrete, fabricated steel, pipe and pipe systems, or sheet metal and sheet metal duct work;
- 2. Produced specifically for the public work and not considered to be regularly available shelf items;
- 3. Produced or manufactured by labor expended to assemble or modify standard items; and
- 4. Produced at an off-site location outside Washington.

The Contractor or subcontractor shall comply with the reporting requirements and instructions on the affidavit of wages paid form, and shall report the following information on the affidavit of wages paid form submitted to the Department of Labor and Industries in order to comply with the reporting requirements for use of "Off-Site, Prefabricated, Non-Standard, Project Specific item(s)":

- 1. The estimated cost of the public works project;
- 2. The name of the awarding agency and the project title;
- 3. The contract value of the off-site, prefabricated, nonstandard, project specific item(s) produced outside of Washington State, including labor and materials; and
- 4. The name, address, and federal employer identification number of the contractor that produced the offsite, prefabricated, nonstandard, project specific item(s).

The owner may direct the contractor, at no additional cost to the owner, to remove and substitute any subcontractor(s) found to be out of compliance with the "Off-Site Prefabricated Non-Standard Project Specific Item(s)" reporting requirements more than one time as determined by the Department of Labor and Industries.

I. The Contractor and all subcontractors shall promptly submit to the Owner certified payroll copies if requested.

5.05 HOURS OF LABOR

- A. Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference. Pursuant to that statute, no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work, shall be permitted or required to work more than eight (8) hours in any one calendar day, provided, that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of eight (8) hours of each calendar day shall be not less than one and one-half times (x1.5) the rate allowed for this same amount of time during eight (8) hours service.
- B. Notwithstanding the preceding paragraph, RCW 49.28 permits a contractor or subcontractor in any public works contract subject to those provisions, to enter into an agreement with its employees in which the employees work up to ten (10) hours in a calendar day. No such agreement may provide that the employees work ten-hour days for more than four (4) calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of RCW 49.28 shall not apply to the hours, up to forty (40) hours per week, worked pursuant to any such agreement.

5.06 NONDISCRIMINATION

A. Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of

1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Gubernatorial Executive Order 85-09. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

- B. During performance of the Work:
 - 1. Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in RCW 49.60.
 - 2. Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that the contractor is an "equal opportunity employer".
 - 3. Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and RCW 49.60.
 - 4. Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
 - 5. Contractor shall include the provisions of this section in every Subcontract.
- C. Nondiscrimination Requirement. During the term of this Contract, Contractor, including any subcontractor, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, Contractor, including any subcontractor, shall give written notice of this nondiscrimination requirement to any labor organizations with which Contractor, or subcontractor, has a collective bargaining or other agreement.
- D. Obligation to Cooperate. Contractor, including any subcontractor, shall cooperate and comply with any Washington state agency investigation regarding any allegation that Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).
- E. Default. Notwithstanding any provision to the contrary, Owner may suspend Contractor, including any subcontractor, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until Owner receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), Owner may terminate this Contract in whole or in part, and Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. Contractor or subcontractor may be given a reasonable time in which to cure this noncompliance, including implementing conditions consistent with any court-ordered injunctive relief or settlement agreement.
- F. Remedies for Breach. Notwithstanding any provision to the contrary, in the event of Contract termination or suspension for engaging in discrimination, Contractor, subcontractor, or both, shall be liable for contract damages as authorized by law including, but not limited to, any cost difference between the original contract and the replacement or cover contract and all administrative costs directly related to the replacement contract, which damages are distinct from any penalties imposed under Chapter 49.60, RCW. Owner shall have the right to deduct from any monies due to Contractor or subcontractor, or that thereafter become due, an amount for damages Contractor or subcontractor will owe Owner for default under this provision.

5.07 SAFETY PRECAUTIONS

A. In performing this contract, the Contractor shall provide for protecting the lives and health of employees and other persons; preventing damage to property, materials, supplies, and equipment; and avoid work interruptions. For these purposes, the Contractor shall:

- 1. Follow Washington Industrial Safety and Health Act (WISHA) regional directives and provide a sitespecific safety program that will require an accident prevention and hazard analysis plan for the contractor and each subcontractor on the work site. The Contractor shall submit a site-specific safety plan to the Owner's representative prior to the initial scheduled construction meeting.
- 2. Provide adequate safety devices and measures including, but not limited to, the appropriate safety literature, notice, training, permits, placement and use of barricades, signs, signal lights, ladders, scaffolding, staging, runways, hoist, construction elevators, shoring, temporary lighting, grounded outlets, wiring, hazardous materials, vehicles, construction processes, and equipment required by Chapter 19.27 RCW, State Building Code (International Building, Electrical, Mechanical, Fire, and Uniform Plumbing Codes); Chapter 212-12 WAC, Fire Marshal Standards, Chapter 49.17 RCW, WISHA; Chapter 296-155 WAC, Safety Standards for Construction Work; Chapter 296-65 WAC; WISHA Asbestos Standard; WAC 296-62-071, Respirator Standard; WAC 296-62, General Occupation Health Standards, WAC 296-24, General Safety and Health Standards, WAC 296-24, General Safety and Health Standards, Chapter 49.70 RCW, and Right to Know Act.
- Comply with the State Environmental Policy Act (SEPA), Clean Air Act, Shoreline Management Act, and other applicable federal, state, and local statutes and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources.
- 4. Post all permits, notices, and/or approvals in a conspicuous location at the construction site.
- 5. Provide any additional measures that the Owner determines to be reasonable and necessary for ensuring a safe environment in areas open to the public. Nothing in this part shall be construed as imposing a duty upon the Owner or A/E to prescribe safety conditions relating to employees, public, or agents of the Contractors.
- 6. The Contractor shall make available a list of hazardous products being used on the project, and their respective Material Safety Data Sheets (MSDS) to the Engineer. This information will be required at the pre-construction conference.
- B. In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.
- C. Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.
- D. Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
 - 1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
 - a. The requirements of chapter 296-62 WAC, General Occupational Health Standards;
 - b. Any operations in their work area where hazardous chemicals are present; and
 - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.
 - 2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:

- a. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
- b. The physical and health hazards of the chemicals in the work area;
- c. The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
- d. The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.
- E. Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
 - Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances", in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 days on the Project site.
 - 2. Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.
- F. All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- G. In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- H. Nothing provided in this section shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

5.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas.
- B. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall remain the property of Contractor and shall be removed by Contractor at its expense upon completion of the Work.
- C. Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.
- D. Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all

laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.

- E. Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.
- F. Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.
- G. Any removed item shall be salvaged without undue damage and stockpiled in a neat and orderly fashion in an area designated by the Engineer. All removed items shall remain the property of the Owner, unless, due to their condition, they are rejected by the Engineer. All materials of whatever nature that are rejected shall be properly disposed by the Contractor in compliance with all laws and regulations.
- H. If designated campsites or emergency overflow areas are approved for use, the Contractor shall comply with all campground rules and regulations of the Washington State Parks and Recreation Commission and the park manager.

5.09 PRIOR NOTICE OF EXCAVATION

A. "Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 (twelve) inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

5.10 UNFORESEEN PHYSICAL CONDITIONS

- A. If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 7 (seven) days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.
- B. If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefore as provided in part 7.

5.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES, AND IMPROVEMENTS

- A. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation: at or near the Project site; and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.
- B. Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.
- C. In general, the locations of existing major utilities and equipment, whether above ground or underground, are indicated on the drawings. This information has been obtained from utility maps and verbal

descriptions. The Engineer does not guarantee the accuracy or completeness of this information. Other above ground or underground facilities not shown on the drawings may be encountered during the course of the work for which the Contractor is fully responsible to properly locate and identify within the construction area.

- D. Existing above ground and underground facilities and appurtenant structures, which includes but is not limited to, power transmission and distribution, telephone, alarm systems, sanitary sewers, gas services, water service and house or yard drains and fences, shall be located, protected, maintained, relocated, rerouted, removed and restored as may be necessary by the Contractor for completion of the work, but in a manner satisfactory to their respective owners and operators of the services and to the Engineer with the least possible interruption to existing services.
- E. The Contractor shall be responsible for location and maintenance of existing utilities and improvements. Under no circumstances will errors or omissions in location of utilities or improvements, whether they be visible from the surface, buried, or otherwise obscured, be considered as a basis for a claim for additional compensation by the Contractor.
- F. All utilities shall be protected and maintained in continuous operation except where special arrangements have been made with the appropriate utility owner. All damaged utilities shall be restored to original condition, subject to the approval of its owner and at the Contractor's own expense.
- G. If requested, the Contractor shall provide record information about locations, depths, and dimensions of lines, appurtenances, and structures, and any other relevant information about electrical power, water, sewer, and other utilities.
- H. The Contractor shall provide the Engineer with the data required to make a detailed set of record plans. This data will be obtained and recorded by the Contractor during construction on plans supplied by the Engineer. The Contractor shall ensure that the data is obtained. Typical information to be gathered includes the locations of:
 - 1. Buried utilities
 - 2. Junctions of sewer wyes
 - 3. Junctions of electrical taps
 - 4. Clean-outs
 - 5. Deflection points of utilities
 - 6. Valves
- I. Procedure for obtaining this information will be developed by the Engineer working with the Contractor.
- J. Contractor shall protect all existing facilities using whatever methods are necessary, subject to the Engineer's approval. Trees, shrubs, vegetation, or lawn shall not be damaged, scarred, or destroyed unless deemed necessary for work on this contract. All trees damaged during construction shall be immediately repaired using SEAL AND HEAL or other materials as directed by the Engineer. Any damage to the above-mentioned items shall be repaired at the Contractor's expense and to the Engineer's satisfaction.
- K. In the event that archaeological resources are found or unearthed on public land during the performance of this contract, the Contractor shall be required to comply with RCW 27.44 and RCW 27.53 and the rules and regulations of the office of Archaeology and Historic Preservation, including compliance with all archaeological excavation permit requirements.

5.12 LAYOUT OF WORK

- A. Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.
- B. Contractor shall lay out the Work from Owner-established baselines and bench marks indicated on the Drawings, and shall be responsible for all field measurements in connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. Contractor shall be responsible for executing the Work to the lines

and grades that may be established. Contractor shall be responsible for maintaining or restoring all stakes and other marks established.

- C. The indicated limits of work shall be the controlling factor in the Contractor's scope of operation and no payment shall be due for work done out of the limits. Damage to areas not in the Contractor's work area shall be repaired at the Contractor's expense. Questions of what constitutes the work area shall be determined by the Engineer. Only the best methods of construction will be allowed.
- D. The Engineer may adjust or relocate any portion of the system to meet site requirements or to improve the system without additional compensation to the Contractor, provided such adjustments do not represent appreciable costs for additional labor and materials.

5.13 MATERIAL AND EQUIPMENT

- A. All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E, is equal to that named in the specifications, unless otherwise specifically provided in the Contract Documents.
- B. Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- C. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever stage of completion, may be rejected by Owner.
- D. The Contractor shall furnish proof of equality in all respects to the specified items when proposing alternate brands or materials. Any significant deviations from specifications, drawings, or equality must be noted by the Contractor when submitting alternate products or materials for approval. The Engineer shall be the sole judge of the equality and suitability of any products, materials, or components proposed by the Contractor as alternates to specified items. The Contractor shall bear all costs and make all secondary changes required to incorporate an approved substitute or alternate into the work. No offers for substitution will be acknowledged from suppliers, distributors, manufacturers, or subcontractors.

5.14 AVAILABILITY AND USE OF UTILITY SERVICES

- A. Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.
- B. Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices, and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to the date of Final Acceptance, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

5.15 TESTS AND INSPECTION

A. Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and

inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.

- B. Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:
 - 1. Constitute or imply acceptance;
 - 2. Relieve Contractor of responsibility for providing adequate quality control measures;
 - 3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;
 - 4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or
 - 5. Impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.
- C. Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.
- D. Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes re-inspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.
- E. The Owner shall have the right to appoint an Inspector who will have the authority to reject materials or workmanship which does not fulfill the requirements of these specifications. In case of dispute, the Contractor may appeal to the Engineer whose decision shall be final. The acceptance of any material by the Inspector shall not hinder its subsequent rejection if found defective. Rejected materials and workmanship shall be replaced promptly or be made good by the Contractor without additional cost to the Owner.
- F. Contractor shall deliver one (1) key for each type of lock installed on the project to the Engineer to enable the Engineer to enter all facilities under construction for the purpose of inspection. This includes temporary as well as State Parks' key-coded locks. All keys for key-coded locks shall be delivered to the Engineer as they are made available to the Contractor. These coded keys shall then be signed out to the Contractor on an accountable basis for security purposes.

5.16 CORRECTION OF NONCONFORMING WORK

- A. If a portion of the Work is covered contrary to the requirements in the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.
- B. If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes a request therefore as provided in part 7. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.
- C. Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.

- D. If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under section 6.08, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of one year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.
- E. Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.
- F. If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- H. Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the time period of one (1) year as described in paragraph 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.
- I. If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

5.17 CLEAN UP

Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

5.18 ACCESS TO WORK

Contractor shall provide Owner and A/E access to the Work in progress wherever located.

5.19 OTHER CONTRACTS

Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and with Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

5.20 SUBCONTRACTORS AND SUPPLIERS

A. The Contractor shall include the language of this paragraph in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors regardless of tier. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

- 1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
- 2. Have a current Washington Unified Business Identifier (UBI) number;
- 3. If applicable, have:
 - a. Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department number, as required in Title 50 RCW;
 - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d. An electrical contractor license, if required by Chapter 19.28 RCW;
 - e. An elevator contractor license, if required by Chapter 70.87 RCW.
- 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).
- 5. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner's first advertisement of the project.
- B. Prior to submitting the first Application for Payment, Contractor shall furnish in writing to Owner, on Owner provided form(s), the names, addresses, telephone numbers, and Tax Identification Numbers (TIN) of all subcontractors, as well as suppliers providing materials in excess of \$2,500.00 which Contractor believes to be MBE or WBE owned businesses, or have identified themselves to the Contractor as MBE or WBE, or are Washington State OMWBE certified. The Contractor shall indicate the anticipated dollar value of each MWBE subcontract. Contractor shall utilize subcontractors and suppliers, which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any subcontractor or supplier to whom the Owner has a reasonable objection, and shall obtain Owner's written consent before making any substitutions or additions. The Owner may direct the Contractor, at no additional cost to the Owner, to remove and substitute any subcontractor(s) found to be out of compliance with the "Off-Site Prefabricated Non-Standard Project Specific Items" reporting requirements more than one time as determined by the Department of Labor and Industries and as defined in EHB 2805 that amends RCW 39.04.
- C. All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents. Each Subcontract to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.
- D. Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- E. Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:
 - 1. The assignment is effective only after termination by Owner for cause pursuant to section 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
 - 2. After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.
 - 3. The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

5.21 WARRANTY OF CONSTRUCTION

- A. In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed, by Contractor.
- B. With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:
 - 1. Obtain all warranties that would be given in normal commercial practice;
 - 2. Require all warranties to be executed, in writing, for the benefit of Owner;
 - 3. Enforce all warranties for the benefit of Owner, if directed by Owner; and
 - 4. Be responsible to enforce any subcontractor's, manufacturer's, or supplier's warranty should they extend beyond the period specified in the Contract Documents.
- C. The obligations under this section shall survive Final Acceptance.

5.22 INDEMNIFICATION

- A. Contractor shall defend, indemnify, and hold Owner and A/E harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:
 - 1. The sole negligence of Contractor or any of its Subcontractors;
 - 2. The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor; and
 - 3. The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret.
- B. In any action against Owner and any other entity indemnified in accordance with this section, by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under RCW Title 51, the Industrial Insurance Act, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with RCW Title 51.

PART 6 - PAYMENTS AND COMPLETION

6.01 CONTRACT SUM

Owner shall pay Contractor the Contract Sum for performance of the Work, in accordance with the Contract Documents. The Contract Sum shall include all taxes imposed by law and properly chargeable to the Project, including sales tax.

6.02 SCHEDULE OF VALUES

Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principle category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, O&M manuals, and any other requirements for Project closeout, and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

6.03 APPLICATION FOR PAYMENT

- A. At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.010, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in section 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.
- C. At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule.
- D. If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:
 - 1. The material will be placed in a warehouse that is structurally sound, dry, lighted, and suitable for the materials to be stored;
 - 2. The warehouse is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;
 - 3. Only materials for the Project are stored within the warehouse (or a secure portion of a warehouse set aside for the Project);
 - 4. Contractor furnishes Owner a certificate of insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;
 - 5. The warehouse (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;
 - 6. Owner shall at all times have the right of access in company of Contractor;
 - 7. Contractor and its surety assume total responsibility for the stored materials; and
 - 8. Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish notice to Owner when materials are moved from storage to the Project site.

6.04 PROGRESS PAYMENTS

- A. Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with RCW 39.76 if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Owner shall retain 5% (five percent) of the amount of each progress payment until forty-five (45) days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage. In accordance with RCW 60.28, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.
- C. Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents.

D. Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in RCW 39.76.

6.05 PAYMENTS WITHHELD

- A. Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
 - 1. Work not in accordance with the Contract Documents;
 - 2. Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;
 - 3. Work by Owner to correct defective Work or complete the Work in accordance with section 5.17;
 - 4. Failure to perform in accordance with the Contract Documents; or
 - 5. Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.
- B. In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with RCW 39.76.

6.06 RETAINAGE AND BOND CLAIM RIGHTS

- A. Prior to release of the contract retainage, an "Affidavit of Wages Paid", approved by the Washington State Department of Labor and Industries, must be on file in the Owner's office. Contracts over \$20,000, including tax, necessitate a clearance from the Washington State Department of Revenue and the Washington State Department of Employment Security. The Owner shall initiate action for the releases from the Departments of Revenue and Employment Security.
- B. RCW chapters 39.08 and 60.28, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.
- C. In accordance with RCW 60.28, the lien period for filing liens against the contract retainage shall be fortyfive (45) days. Persons performing labor or furnishing supplies toward the completion of the contract who intend to file a lien against the contract retainage must do so within forty-five (45) days from the date of Final Acceptance of the contract by the Owner and in the manner as described in RCW 39.08.030.

6.07 SUBSTANTIAL COMPLETION

Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner can fully occupy the Work (or the designated portion thereof) for the use for which it is intended. All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

6.08 PRIOR OCCUPANCY

A. Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the

obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.

B. Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy. Contractor's one (1) year duty to repair and any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

6.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

- A. Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing.
- B. Final Acceptance is the formal action of Owner acknowledging Final Completion. Prior to Final Acceptance, Contractor shall, in addition to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance, nor final payment, shall release Contractor or its sureties from any obligations of these Contract Documents or the Public Works Bond, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Acceptance of final payment by Contractor, or any Subcontractor, shall constitute a waiver and release to Owner of all claims by Contractor, or any such Subcontractor, for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in part 8.

PART 7 - CHANGES

7.01 CHANGES IN THE WORK

- A. Owner may, at any time and without notice to Contractor's surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in section 7.02 or 7.03, respectively, and such adjustment(s) shall be incorporated into a Change Order.
- B. If Owner desires to order a change in the Work, it may request a written Change Order Proposal (COP) from Contractor. Contractor shall submit a Change Order Proposal within 14 (fourteen) days of the request from Owner, or within such other period as mutually agreed. Contractor's Change Order Proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.
- C. Upon receipt of the Change Order proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in sections 7.02 and 7.03, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.
- D. If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.

- E. If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 (thirty) days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer, or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in part 8.
- F. Field Authorization
 - 1. The Field Authorization (FA) is executed as a directive to proceed with work when the processing time for an approved change order would impact the project.
 - 2. A scope of work must be defined, a maximum not to exceed cost agreed upon, and any estimated modification to the contract completion time determined. The method of final cost verification must be noted and supporting cost data must be submitted in accordance with the requirements of Part 7 of the General Conditions. Upon satisfactory submittal and approval of supporting cost data, the completed FA will be processed into a change order. No payment will be made to the Contractor for FA work until that FA is converted to a Change Order.

7.02 CHANGES IN THE CONTRACT SUM

- A. General Application
 - 1. The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order Proposal.
 - 2. If the cost of Contractor's performance is changed due to the fault or negligence of Owner, or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent: Contractor's changed cost of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of Force Majeure as defined in Section 3.05.
 - a. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 (seven) days of the occurrence of the event giving rise to the request. For purposes of this part, "occurrence" means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.
 - b. Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 (seven) days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
 - c. Within 30 (thirty) days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis

of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with section 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are-prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- d. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- e. Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.
- 3. The value of any Work covered by a Change Order, or of any request for an equitable adjustment in the Contract Sum, shall be determined by one of the following methods:
 - a. On the basis of a fixed price as determined in paragraph 7.02B.
 - b. By application of unit prices to the quantities of the items involved as determined in paragraph 7.02C.
 - c. On the basis of time and material as determined in paragraph 7.02D.
- 4. When Owner has requested Contractor to submit a Change Order proposal, Owner may direct Contractor as to which method in subparagraph 3 above to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work, or a request for an equitable adjustment, on the basis of the fixed price method.
- B. Change Order Pricing -- Fixed Price

When the fixed price method is used to determine the value of any Work covered by a Change Order or a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:

- 1. Contractor's Change Order Proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below, and shall be submitted on breakdown sheets in a form approved by Owner.
- 2. All costs shall be calculated based upon appropriate industry standard methods of calculating labor, material quantities, and equipment costs.
- 3. If any of Contractor's pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state them in the proposal or request for an equitable adjustment.
- 4. The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, small tools, overhead, profit, bond, and insurance markups will apply to the net difference.
- 5. If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.
- 6. If the total cost of the change in the Work or request for equitable adjustment is between \$1,000 and \$2,500, Contractor may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:
 - a. lump sum labor;
 - b. lump sum material;
 - c. lump sum equipment usage;
 - d. overhead and profit as set forth below; and
 - e. insurance and bond costs as set forth below.

- 7. Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:
 - a. Craft labor costs: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor, as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:
 - 1) Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved "statement of intent to pay prevailing wages." Direct supervision shall be a reasonable percentage not to exceed 15% (fifteen percent) of the cost of direct labor. No supervision markup shall be allowed for a working supervisor's hours.
 - 2) Worker's insurance: Direct contributions to the state of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.
 - 3) Federal insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.
 - 4) Travel allowance: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
 - 5) Safety: Cost incurred due to the Washington Industrial Safety and Health Act, which shall be a reasonable percentage not to exceed 2% (two percent) of the sum of the amounts calculated in (1), (2), and (3) above.
 - b. Material costs: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs, second from supplier quotations or if these are not available, from standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges, shall be itemized.
 - c. Equipment costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work, or for additional rental costs actually incurred by the Contractor. Equipment charges shall be computed on the basis of actual invoice costs or if owned, from the current edition of one of the following sources:
 - 1) Associated General Contractors Washington State Department of Transportation (AGC-WSDOT) Equipment Rental Agreement; current edition, on the Contract execution date.
 - 2) The state of Washington Utilities and Transportation Commission for trucks used on highways.
 - 3) The National Electrical Contractors Association for equipment used on electrical work.
 - 4) The Mechanical Contractors Association of America for equipment used on mechanical work.

The Data Quest Rental Rate (Blue Book) shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement, current edition, on the Contract execution date.

d. Allowance for small tools, expendables, and consumable supplies: Small tools consist of tools which cost \$250 or less and are normally furnished by the performing contractor. The maximum rate for small tools shall not exceed the following:

- 1) For Contractor, 3% (three percent) of direct labor costs.
- 2) For Subcontractors, 5% (five percent) of direct labor costs.

Expendables and consumable supplies directly associated with the change in Work must be itemized.

- e. Subcontractor costs: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor.
- f. Allowance for overhead: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any change in the Contract Sum but not to the cost of any change in the Contract Time for which contractor has been compensated pursuant to the conditions set forth in Section 7.03. This allowance shall compensate Contractor for all non-craft labor, temporary construction facilities, field engineering, schedule updating, record drawings, home office cost, B&O taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the rates below:
 - 1) For projects where the Contract Award Amount is under \$3 million, the following shall apply:
 - a) For Contractor, for any Work actually performed by Contractor's own forces, 16% (sixteen percent) of the first \$50,000 of the cost, and 4% (four percent) of the remaining cost, if any.
 - b) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 16% (sixteen percent) of the first \$50,000 of the cost, and 4% (four percent) of the remaining cost, if any.
 - c) For Contractor, for any work performed by its Subcontractor(s), 6% (six percent) of the first \$50,000 of the amount due each Subcontractor, and 4% (four percent) of the remaining amount if any.
 - d) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% (four percent) of the first \$50,000 of the amount due the sub-Subcontractor, and 2% (two percent) of the remaining amount if any.
 - e) The cost to which overhead is to be applied shall be determined in accordance with subparagraphs a.-e. above.

2) For projects where the Contract Award Amount is equal to or exceeds \$3 million, the following shall apply:

- a) For Contractor, for any Work actually performed by Contractor's own forces, 12% (twelve percent) of the first \$50,000 of the cost, and 4% (four percent) of the remaining cost, if any.
- b) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 12% (twelve percent) of the first \$50,000 of the cost, and 4% (four percent) of the remaining cost, if any.
- c) For Contractor, for any Work performed by its Subcontractor(s), 4% (four percent) of the first \$50,000 of the amount due each Subcontractor, and 2% (two percent) of the remaining amount if any.
- d) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% (four percent) of the first \$50,000 of the amount due the sub-Subcontractor, and 2% (two percent) of the remaining amount if any.

- e) The cost to which overhead is to be applied shall be determined in accordance with subparagraphs a.- e. above.
- g. Allowance for profit: This is an amount to be added to the cost of any change in contract sum, but not to the cost of change in Contract Time for which contractor has been compensated pursuant to the conditions set forth in section 7.03. It shall be limited to a reasonable amount, mutually acceptable, or if none can be agreed upon, to an amount not to exceed the rates below:
 - 1) For Contractor or Subcontractor of any tier for work performed by their forces, 6% (six percent) of the cost developed in accordance with Section 7.02 b. 7a.- e.
 - For Contractor or Subcontractor of any tier for work performed by a subcontractor of a lower tier, 4% (four percent) of the Subcontractor cost developed in accordance with Section 7.02 b. 7a. - h.
- h. Cost of change in insurance or bond premium: This is defined as:
 - 1) Contractor's liability insurance: The cost of any changes in Contractor's liability insurance arising directly from execution of the Change Order; and
 - 2) Public works bond: The cost of the additional premium for Contractor's bond arising directly from the changed Work.

The costs of any change in insurance or bond premium shall be added after overhead and allowance for profit are calculated in accordance with subparagraph f. and g. above.

- C. Change Order Pricing -- Unit Prices
 - 1. Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner's authorization shall clearly state:
 - a. Scope of work to be performed;
 - b. Type of reimbursement including pre-agreed rates for material quantities; and
 - c. Cost limit of reimbursement.
 - 2. Contractor shall:
 - a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working;
 - b. Leave access as appropriate for quantity measurement; and
 - c. Not exceed any cost limit(s) without Owner's prior written approval.
 - 3. Contractor shall submit costs in accordance with paragraph 7.02B. and satisfy the following requirements:
 - a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit, and bond and insurance costs; and
 - b. Quantities must be supported by field measurement statements signed by Owner.
- D. Change Order Pricing -- Time-and-Material Prices
 - 1. Whenever Owner authorizes Contractor to perform Work on a time-and-material basis, Owner's authorization shall clearly state:
 - a. Scope of Work to be performed;
 - b. Type of reimbursement including pre-agreed rates, if any, for material quantities or labor; and
 - c. Cost limit of reimbursement.
 - 2. Contractor shall:

- a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working;
- b. Identify on daily time sheets all labor performed in accordance with this authorization. Submit copies of daily time sheets within 2 working days for Owner's review;
- c. Leave access as appropriate for quantity measurement;
- d. Perform all Work in accordance with this section as efficiently as possible; and
- e. Not exceed any cost limit(s) without Owner's prior written approval.
- 3. Contractor shall submit costs in accordance with paragraph 7.02B and additional verification supported by:
 - a. Labor detailed on daily time sheets; and
 - b. Invoices for material.

7.03 CHANGES IN THE CONTRACT TIME

- A. The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order Proposal.
- B. If the time of Contractor's performance is changed due to an act of Force Majeure, or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible.
 - 1. A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 (seven) days of the occurrence of the event giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such record and if requested, shall promptly furnish copies of such record to Owner.
 - 2. Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 (seven) days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
 - 3. Within 30 (thirty) days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph 7.03B.2 with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
 - 4. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- C. Any change in the Contract Time covered by a Change Order, or based on a request for an equitable adjustment in the Contract Time, shall be limited to the change in the critical path of Contractor's schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Progress

Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by resequencing of the Work or other reasonable alternatives.

- D. Contractor may request compensation for the cost of a change in Contract Time in accordance with this paragraph, 7.03D, subject to the following conditions:
 - 1. The change in Contract Time shall solely be caused by the fault or negligence of Owner or A/E;
 - 2. Compensation under this paragraph is limited to changes in Contract Time for which Contractor is not entitled to be compensated under section 7.02;
 - 3. Contractor shall follow the procedure set forth in paragraph 7.03B;
 - 4. Contractor shall establish the extent of the change in Contract Time in accordance with paragraph 7.03C; and
 - 5. The daily cost of any change in Contract Time shall be limited to the items below, less funds that may have been paid pursuant to a change in the Contract Sum that contributed to this change in Contract Time:
 - a. cost of nonproductive field supervision or labor extended because of the delay;
 - b. cost of weekly meetings or similar indirect activities extended because of the delay;
 - c. cost of temporary facilities or equipment rental extended because of the delay;
 - d. cost of insurance extended because of the delay;
 - e. general and administrative overhead in an amount to be agreed upon, but not to exceed 3% (three percent) of Contract Sum divided by the Contract Time for each day of the delay.

PART 8 - CLAIMS AND DISPUTE RESOLUTION

8.01 CLAIMS PROCEDURE

- A. If the parties fail to reach agreement on the terms of any Change Order for Owner-directed Work as provided in section 7.01, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in section 7.02 or the Contract Time as provided in section 7.03, Contractor's only remedy shall be to file a Claim with Owner as provided in this section.
- B. Contractor shall file its Claim within the earlier of: 120 (one hundred twenty) days from Owner's final offer in accordance with either paragraph 7.01E or the date of Final Acceptance.
- C. The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented. At a minimum, the Claim shall contain the following information:
 - 1. A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim;
 - 2. The date on which facts arose which gave rise to the Claim
 - 3. The name of each employee of Owner or A/E knowledgeable about the Claim;
 - 4. The specific provisions of the Contract Documents which support the Claim;
 - 5. The identification of any documents and the substance of any oral communications that support the Claim;
 - 6. Copies of any identified documents, other than the Contract Documents, that support the Claim;
 - 7. If an adjustment in the Contract Time is sought: the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and

Contractor's analysis of its Progress Schedule to demonstrate the reason for the extension in Contract Time;

- 8. If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail required by, section 7.02; and
- 9. A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is liable.
- D. After Contractor has submitted a fully documented Claim that complies with all applicable provisions of parts 7 and 8, Owner shall respond, in writing, to Contractor as follows:
 - 1. If the Claim amount is less than \$50,000, with a decision within 60 (sixty) days from the date the Claim is received; or
 - 2. If the Claim amount is \$50,000 or more, with a decision within 60 (sixty) days from the date the Claim is received, or with notice to Contractor of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.
- E. To assist in the review of Contractor's Claim, Owner may visit the Project site, or request additional information, in order to fully evaluate the issues raised by the Claim. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision as set forth above shall be final and conclusive as to all matters set forth in the Claim, unless Contractor follows the procedure set forth in section 8.02.
- F. Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time, shall be conclusively deemed to have been waived by the Contractor unless timely made in accordance with the requirements of this section.

8.02 ARBITRATION

- A. If Contractor disagrees with Owner's decision rendered in accordance with paragraph 8.01D, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 (thirty) days after the date of Owner's decision on such Claim; failure to demand arbitration within said 30-day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.
- B. Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), with a copy provided to Owner. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of the AAA, or mutually acceptable service, before seeking arbitration in accordance with the Construction Industry Arbitration Rules of AAA as follows:
 - 1. Disputes involving \$30,000 or less shall be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or
 - 2. Disputes over \$30,000 shall be conducted in accordance with the Construction Industry Arbitration Rules of the AAA, unless the parties agree to use the expedited rules.
- C. All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.
- D. Claims between Owner and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Owner and A/E shall, upon demand by Owner, be submitted in the same arbitration or mediation.
- E. If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

8.03 CLAIMS AUDITS

- A. All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.
- B. In support of Owner audit of any Claim, Contractor shall, upon request, promptly make available to Owner the following documents:
 - 1. Daily time sheets and supervisor's daily reports;
 - 2. Collective bargaining agreements;
 - 3. Insurance, welfare, and benefits records;
 - 4. Payroll registers;
 - 5. Earnings records;
 - 6. Payroll tax forms;
 - 7. Material invoices, requisitions, and delivery confirmations;
 - 8. Material cost distribution worksheet;
 - 9. Equipment records (list of company equipment, rates, etc.);
 - 10. Vendors', rental agencies', Subcontractors', and agents' invoices;
 - 11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
 - 12. Subcontractors' and agents' payment certificates;
 - 13. Cancelled checks (payroll and vendors);
 - 14. Job cost report, including monthly totals;
 - 15. Job payroll ledger;
 - 16. Planned resource loading schedules and summaries;
 - 17. General ledger;
 - 18. Cash disbursements journal;
 - 19. Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 (three) years preceding execution of the Work;
 - 20. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;
 - 21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;
 - 22. All non-privileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim;
 - 23. Work sheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors,

all documents which establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals; and

- 24. Work sheets, software, and all other documents used by Contractor to prepare its bid.
- C. The audit may be performed by employees of Owner or a representative of Owner. Contractor, and its Subcontractors, shall provide adequate facilities acceptable to Owner, for the audit during normal business hours. Contractor, and all Subcontractors, shall make a good faith effort to cooperate with Owner's auditors.

PART 9 - TERMINATION OF THE WORK

9.01 TERMINATION BY OWNER FOR CAUSE

- A. Owner may, upon 7 (seven) days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:
 - 1. Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;
 - 2. Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors or a receiver is appointed on account of its insolvency;
 - 3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
 - 4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment;
 - 5. Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;
 - 6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
 - 7. Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Upon termination, Owner may at its option:
 - 1. Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;
 - 2. Accept assignment of subcontracts pursuant to section 5.20; and
 - 3. Finish the Work by whatever other reasonable method it deems expedient.
- C. Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
- D. When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 9.02B, and shall not be entitled to receive further payment until the Work is accepted.
- E. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.
- F. Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.

G. If Owner terminates Contractor for cause, and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to section 9.02.

9.02 TERMINATION BY OWNER FOR CONVENIENCE

- A. Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.
- B. Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:
 - 1. Stop performing Work on the date and as specified in the notice of termination;
 - 2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
 - 3. Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;
 - 4. Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;
 - 5. Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and
 - 6. Continue performance only to the extent not terminated.
- C. If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus a reasonable allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of part 7.
- D. If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

PART 10 - MISCELLANEOUS PROVISIONS

10.01 GOVERNING LAW

The Contract Documents and the rights of the parties herein shall be governed by the laws of the state of Washington. Venue shall be in the county in which Owner's principal place of business is located, unless otherwise specified.

10.02 SUCCESSORS AND ASSIGNS

Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other, except that Contractor may assign the Work for security purposes, to a bank or lending institution authorized to do business in the state of Washington. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

10.03 MEANING OF WORDS

Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or

to the code of any governmental authority, whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in these Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the drawings, or required to complete the installation.

10.04 RIGHTS AND REMEDIES

No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

10.05 CONTRACTOR REGISTRATION

Pursuant to RCW 39.06, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27.

10.06 TIME COMPUTATIONS

When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 (seven) days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

10.07 RECORDS RETENTION

The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records subject to audit in accordance with section 8.03, shall be retained for a period of not less than 6 (six) years after the date of Final Acceptance.

10.08 THIRD-PARTY AGREEMENTS

The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

10.09 ANTITRUST ASSIGNMENT

Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

10.10 MINORITY AND WOMEN'S BUSINESS ENTERPRISES (MWBE) PARTICIPATION

In Accordance with the legislative findings and policies set forth in Chapter 39.19 RCW the State of Washington encourages participation in all of its contracts by MWBE firms certified by the Office of Minority and Women's Business Enterprises (OMWBE). Participation may be either on a direct basis in response to this solicitation or as a subcontractor to a Bidder. Any affirmative action requirements set forth in federal regulations or statutes included or referenced in the contract documents will apply. Bidders may contact OMWBE to obtain information on certified firms for potential subcontractors/suppliers.

A. When referred to in this Contract, the terms Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) will be as defined by OMWBE, WAC 326-02-030.

B. The OMWBE has compiled a directory of certified firms. Copies of this directory may be obtained through the OMWBE. For information regarding the certification process or the certification status of a particular firm, contact:

OMWBE, 406 South Water Street, PO Box 41160, Olympia, WA 98504-1160, telephone (360) 753-9693.

C. Eligible MWBEs or M/W firms

MWBE firms utilized for this project for voluntary MWBE goals may be certified by Washington State OMWBE or self identified as minority or women owned (M/W firm).

D. MWBE Voluntary Goals

The Owner has established voluntary goals for MWBE participation for this project. The voluntary goals are set forth in the Advertisement for Bids.

- E. If any part of the contract, including the supply of materials and equipment, is anticipated to be subcontracted, then prior to receipt of the first payment, Contractor shall submit, pursuant to Section 5.20 A, a list of all subcontractors/suppliers it intends to use, designate whether any of the subcontractors/suppliers are MWBE firms, indicate the anticipated dollar value of each MWBE subcontract, and provide Tax Identification Number (TIN).
- F. If any part of the contract, including the supply of materials and equipment is actually subcontracted during completion of the work, then prior to final acceptance or completion of the contract or as otherwise indicated in the contract documents, the Contractor shall submit a statement of participation indicating what MWBEs were used and the dollar value of their subcontracts.
- G. The provisions of this section are not intended to replace or otherwise change the requirements of RCW 39.30.060. If said statute is applicable to this contract then the failure to comply with RCW 39.30.060 will still render a bid non-responsive.
- H. The Contractor shall maintain, for at least three years after completion of this contract, relevant records and information necessary to document the level of utilization of MWBEs and other businesses as subcontractors and suppliers in this contract, as well as any efforts the Contractor makes to increase the participation of MWBEs as listed in section I below. The Contractor shall also maintain, for at least three years after completion of this contract, a record of all quotes, bids, estimates, or proposals submitted to the Contractor by all businesses seeking to participate as subcontractors or suppliers in this contract. The state shall have the right to inspect and copy such records. If this contract involves federal funds, Contractor shall comply with all record keeping requirements set forth in any federal rules, regulations, or statutes included or referenced in the contract documents.
- I. Bidders should advertise opportunities for subcontractors or suppliers in a manner reasonably designed to provide MWBEs capable of performing the work with timely notice of such opportunities, and all advertisements shall include a provision encouraging participation by MWBE firms. Advertising may be done through general advertisements (e.g. newspapers, journals, etc.) or by soliciting bids directly from MWBEs. Bidders shall provide MWBEs that express interest with adequate and timely information about plans, specifications, and requirements of the contract.
- J. Contractors shall not create barriers to open and fair opportunities for all businesses including MWBEs to participate in all State contracts and to obtain or compete for contracts and subcontracts as sources of supplies, equipment, construction and services.
- K. Any violation of the mandatory requirements of this part of the contract shall be a material breach of contract for which the Contractor may be subject to a requirement of specific performance, or damages and sanctions provided by contract, by RCW 39.19.090, or by other applicable laws.

10.11 MINIMUM LEVELS OF APPRENTICESHIP PARTICIPATION

In accordance with Executive Order 00-01 the State of Washington may require apprenticeship participation for projects of a certain cost. The bid advertisement and Bid Proposal form shall establish the minimum percentage of apprentice labor hours as compared to the total labor hours.

- Voluntary workforce diversity goals have been established for the apprentice hours. These goals are that Α. one-fifth (1/5) of the apprentice hours be performed by minorities, and one-sixth (1/6) of the apprentice hours be performed by women.
- Β. Apprentice participation, under this contract, may be counted towards the required percentage (%) only if the apprentices are from an apprenticeship program registered and approved by the Washington State Apprenticeship and Training Council (RCW 49.04 and WAC 296-04).
- C. Bidders may contact the Department of Labor and Industries, Specialty Compliance Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530 by phone at (360) 902-5320, and email at thum235@lni.wa.gov, to obtain information on available apprenticeship programs.
- D. For each project that has apprentice requirements, the contractor shall submit a "Statement of Apprentice/Journeyman Participation" on forms provided by the Department of General Administration, with every request for progress payment. The Contractor shall submit consolidated and cumulative data collected by the Contractor and collected from all subcontractors by the Contractor. The data to be collected and submitted includes the following:
 - Contractor name and address
 - 2. Contract number
 - Project name
 - 4. Contract value
 - 5. Reporting period "Notice to Proceed" through "Invoicing Date"
 - 6. Craft/trade/occupation of all (contractor and subcontractor trades working on the project) apprentices and journeymen
 - 7. Total number of apprentices and total number of hours worked by apprentices, both categorized by gender and ethnicity
 - 8. Total number of journeymen and total number of hours worked by journeymen, both categorized by gender and ethnicity
 - 9. Cumulative combined total of apprentice and journeymen labor hours.

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- 10. Total percentage of apprentice hours worked
- 11. No changes to the required percentage (%) of apprentice participation shall be allowed without written approval of the Owner. In any request for the change the Contractor shall clearly demonstrate a good faith effort to comply with the requirements for apprentice participation.
- 12. Any substantive violation of the mandatory requirements of this part of the contract may be a material breach of the contract by the Contractor. The Owner may withhold payment pursuant to Part 6.05, stop the work for cause pursuant to Part 3.04, and terminate the contract for cause pursuant to Part 9.01.

10.12 HEADINGS AND CAPTIONS

Headings for convenience only: All headings and captions used in these General Conditions are only for convenience of reference, and shall not be used in any way in connection with the meaning, effect, interpretation, construction, or enforcement of the General Conditions, and do not define the limit or describe the scope or intent of any provision of these General Conditions.

END OF CONDITIONS 1

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Approved as to Form: William Van Hook /s/ Asst. Attorney General 02/2007 08/2010 GA Updates - jrc 09/2010 to AAG Schwartz

PREVAILING WAGES

The State of Washington prevailing wage rates for this public works project, which is located in Klickitat County, may be found at the following website address of the Department of Labor and Industries:

https://fortress.wa.gov/Ini/wagelookup/prvWagelookup.aspx.

The prevailing wages for this project are those that are <u>in effect</u> on the date that the bids are due.

A copy of the applicable wage rates is available for viewing at the Washington State Parks and Recreation Commission; Contracts, Grants, and Procurement Office; 1111 Israel Road SW, Tumwater, WA 98501-6512; or Washington State Parks and Recreation Commission will mail a hard copy of the applicable wage rates upon request; telephone (360) 902-8554; emailContractsandProcurement@parks.wa.gov.

SECTION 010000 – GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. Project includes the repair and/or replacement of the deck on a total of seven (7) existing timber railroad trestles, removal of two (2) existing railroad trestles, and installation of one (1) new preengineered steel bridge with concrete foundation. The trail runs along Swale Creek and starts at Harms Road north of Centerville Highway north of Dallesport and extends along Swale Creek to the Klickitat River near Wahkiakus. Additional work includes, but is not limited to, grading of the existing trail off both ends of the bridges and at numerous locations along the trail, and installation of new gates.

1.2 TIME FOR COMPLETION OF PROJECT

A. Substantially complete project in accordance with the drawings and specifications within 240 calendar days from date on Notice to Proceed letter. Final completion in accordance with Contract Documents within 30 calendar days from substantial completion date.

1.3 HOURS OF WORK

A. Work hours are between 7:00 a.m. and & 5:00 p.m. Monday through Friday, excluding national holidays.

1.4 LIQUIDATED DAMAGES

- A. If Contractor fails to complete Contract within stipulated time, an assessment of <u>\$200</u> per day will be made against Contractor for each additional day required to complete contract, unless an extension of time was granted through Change Order. This assessment is to cover Commission's liquidated damages and is not to be construed as a penalty.
- B. Contract authorizes the Washington State Parks and Recreation Commission to deduct liquidated damages from money due at completion of contract.

1.5 PRE-CONSTRUCTION CONFERENCE

- A. Following notification of award to Contractor, the date for an on-site pre-construction conference will be set. Do not commence Work prior to conference or until written clearance has been obtained from Project Representative.
- B. Furnish Project Representative with following:
 - 1. Complete list of sub-contractors, including business address, telephone numbers, items of Work, and registration numbers. List is to be updated during contract life.

GENERAL REQUIREMENTS - 010000 - 1

- 2. Name and contact information of Contractor's staff who is in charge and responsible for site safety and will be on site at all times.
- 3. A Site-Specific Safety Plan that is in compliance with the Department of Labor and Industries and 000011 General Conditions specifically for this project.
- 4. A progress schedule in accordance with General Conditions.
- 5. A detailed cost breakdown for lump sum bid items. Furnish a fair evaluation of actual cost of each items of Work listed. This will be used in processing Contractor's requests for partial payment. Submittal of breakdown does not affect the Contract terms.
- 6. Written document detailing plans to comply with 15 percent Apprenticeship Participation requirement stated in Instruction to Bidders 4.1B.
- C. Project Representative will supply a list of hazardous products that could be encountered on Project. Appropriate Safety Data Sheet (SDS) will be on file at park.

1.6 PROGRESS CLEANING

- A. Remove rubbish and debris from park property daily unless otherwise directed do not allow accumulation. Store materials that cannot be removed daily only in areas specified by the Project Representative.
- B. Maintain worksites in a neat and orderly condition.
- C. Cleanup operations are incidental to the Contract and no extra compensation will be made.

1.7 WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT)

- A. None of WSDOT General Requirements, measurement or payment provisions apply.
- 1.8 AS-BUILT DRAWINGS
 - A. Keep a clean set of full-sized drawings at job site to use to identify changes.

1.9 PROJECT CONDITIONS

- A. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Project Representative and Owner. Owner will remove hazardous materials under a separate contract.

1.10 PROJECT SIGN

A. Provide following temporary sign. Sign location is shown on drawings or determined by Project Representative. Upon Project completion, remove sign and restore area to original condition.

1.11 PROJECT SIGN LETTERING

TITLE OF PROJECT:	SWALE CANYON TRAIL IMPROVEMENTS
NAME OF FACILITY:	KLICKITAT TRAIL STATE PARK
NAME OF CONTRACTOR:	(Place Contractor's Name here)
ADDRESS OF CONTRACTOR:	(Place Contractor's Address here)
FUNDING TITLE NUMBER 1:	STATE BUILDING CONSTRUCTION ACCOUNT
FUNDING TITLE NUMBER 2:	Washington State Recreation and Conservation Office
	(RCO) WWRP State Parks Program.

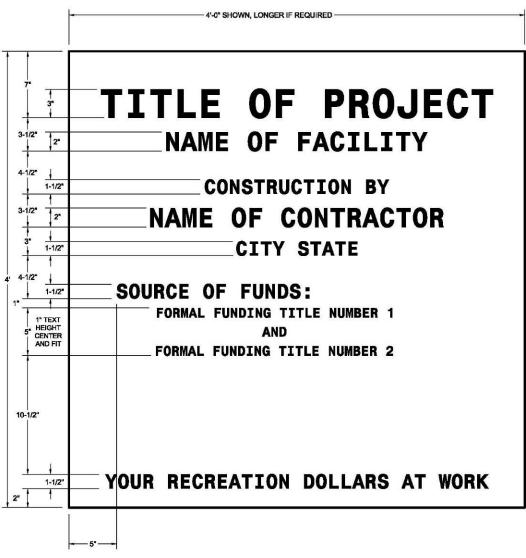
1.12 PARTNERSHIP IN THE CONTRACT

A. As partners in this contract, both Contractor and Commission recognize the value of a successful Project. Both parties recognize, besides the tangible benefits to Contractor and the Commission, the citizens of Washington State and visitors to Washington State Parks will benefit immensely from the successful completion of a quality Project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

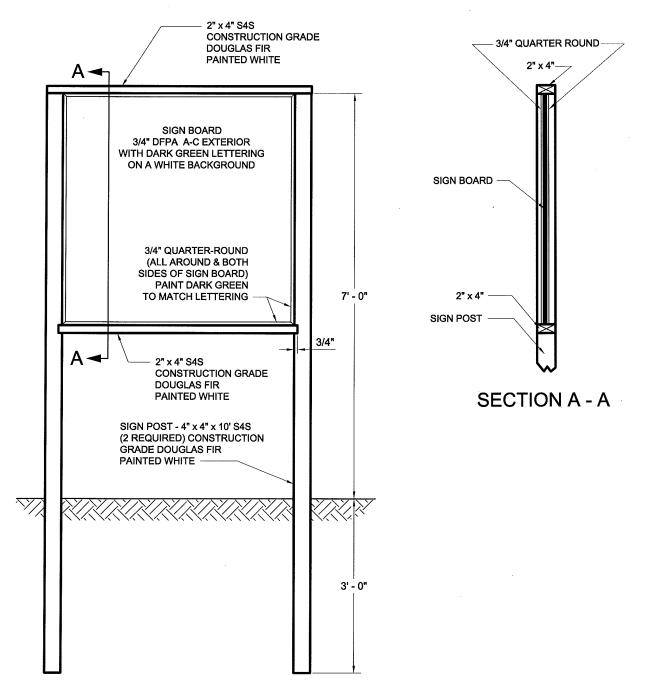
PROJECT SIGN DETAIL



LAY OUT SIGN TO FIT ON A PORTION OF ONE (1) SHEET OF PLYWOOD. IF PLYWOOD IS THE FINAL SURFACE, PAINT IT WITH TWO (2) OR MORE COATS OF WHITE PAINT TO FORM A SMOOTH, NONABSORBENT SURFACE. PROVIDE DARK GREEN WELL FORMED LETTERS, EVENLY SPACED, NEAT IN APPEARANCE, AND ALIGNED AS SHOWN ABOVE.

> WASHINGTON STATE PARKS PROJECT SIGN DETAIL

PROJECT SIGN DETAIL



PLAN

END OF SECTION

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of Work only if accepted by the Commission.
 - 2. The cost or credit for each alternate is the net addition to or deduction from Contract Sum to incorporate alternate into Work. No other adjustments are made to Contract Sum.

1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve work described under each alternate.

1.4 REINSTATEMENT OF BID ALTERNATES

A. The Commission reserves the right to reinstate, within sixty (60) calendar days after Notice to Proceed date, any bid alternates not incorporated into the contract, at the stated alternate bid price.

1.5 ORDER OF CONSIDERATION

A. Bid alternates may be selected in any order or combination by the Commission in any order.

ALTERNATES - 012300 - 1

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. A1 V-Frame Gates:
 - 1. Base Bid: Existing fencing, posts, and gates to remain.
 - 2. Alternate: Remove existing fence and post as necessary to install new V-Frame Gates per the Contract Documents.
- B. Alternate No. A2 Resurface Trail to Trestle 2:
 - 1. Base Bid: No work.
 - 2. Alternate: Resurface all portions of the trail not already scheduled for repairs from Harms Road to the east end of Trestle 2 per the Contract Documents.
- C. Alternate No. A2.1 TSA Replacement for Alternative No. A2:
 - 1. Base Bid: No work.
 - 2. Alternate: Resurface the trail using Trail Surface Aggregate in place of Compacted Aggregate Surfacing for work proposed under Alternate Bid Item A2.
- D. Alternate No. A3 Resurfacing Trail to Trestle Site 9:
 - 1. Base Bid: No work.
 - 2. Alternate: Resurface all portions of the trail not already scheduled for repairs from the vehicle gate at the Wahkiakus trailhead to the west end of Trestle 9 per the Contract Documents.
- E. Alternate No. A3.1 TSA Replacement for Alternative No. A3:
 - 1. Base Bid: No work.
 - 2. Alternate: Resurface the trail using Trail Surface Aggregate in place of Compacted Aggregate Surfacing for work proposed under Alternate Bid Item A3.
- F. Alternate No. A4 TSA Replacement for Base Bid Item No. 5.C:
 - 1. Base Bid: No work.
 - 2. Alternate: Resurface the trail using Trail Surface Aggregate in place of Compacted Aggregate Surfacing for all base bid work.

END OF SECTION

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.1 WORK IN THIS SECTION

- A. General: The types of submittal requirements specified in this Section include Shop Drawings, product data, Samples and miscellaneous Work-related submittals. Specialized submittal requirements are specified in applicable Sections for each unit of Work. Refer to other Division 01 Sections and other Contract documents for requirements of administrative submittals.
- B. Definitions: Work-related submittals of this Section are categorized for convenience as follows:
 - 1. Shop Drawings: Specially-prepared technical data for this Project, including Drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for general application to several projects.
 - 2. Product Data: Standard printed information on materials, products and systems; not specially-prepared for this Project, other than the designation of selections from among available choices printed therein.
 - 3. Samples: Fabricated and unfabricated physical examples of materials, products and units of Work; both as completed units and as smaller portions of units of Work; either for limited visual inspection or (where indicated) for more detailed testing and analysis.
 - 4. Miscellaneous: Submittals related directly to the Work (non-administrative) include warranties, informational, maintenance agreements, workmanship bonds, Project photographs, survey data and reports, physical Work records, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operating and maintenance materials, overrun stock, and similar information, devices and materials applicable to the Work and not processed as Shop Drawings, product data or Samples. See Specification Sections.

1.2 RELATED REQUIREMENTS

- A. General Conditions 4.03
- B. Section 014000 Quality Requirements
- C. Section 017700 Closeout Procedures

1.3 GENERAL SUBMITTAL REQUIREMENTS

- A. Coordination and Sequencing: Coordinate preparation and processing of submittals with performance of the Work so that Work will not be delayed by submittals. Coordinate and sequence different categories of submittals for same Work, and for interfacing units of Work, so that one will not be delayed for coordination with another.
- B. Preparation of Submittals: Provide permanent marking on, or with, each submittal to identify Project, date, Contractor, sub-contractor, submittal name and similar information to distinguish it from other submittals.

1.4 SPECIFIC SUBMITTAL REQUIREMENTS

A. General:

- 1. Except as otherwise indicated in individual Work Sections, comply with requirements specified herein for each indicated category of submittal.
- 2. Provide and process intermediate submittals, where required between initial and final, similar to initial submittals.
- 3. Include a transmittal with all submittals.
- B. Shop Drawings:
 - 1. General: No claims for extras may be initiated, based on Work shown on Shop Drawings.
 - 2. Where Work of more than one sub-contractor is involved, submit composite Drawings, clearly defining the Work of each separate sub-contractor.
 - 3. No extension of time in respect to the final completion date of building will be granted to Contractor because of failure to have any Shop Drawings submitted in ample time to allow for checking.
 - 4. Verify all dimensions by taking field measurements. Do not begin Work until required submittals have been returned by the Engineer with stamp and initials indicating review. If Work has been done which is contrary to the approved Drawings, it will be corrected at no additional cost to the Commission. Maintain one complete set of shop drawings at the site for use by the Engineer.
 - 5. Submit four (4) copies. Engineer will retain two (2) copies and return two (2) copies.
- C. Product Data:
 - 1. General:
 - a. Collect required data into one submittal for each unit of Work or system; and mark each copy to show which choices and options are applicable to Project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked, and modify details as required for application into the Work. Include color selection information where necessary.
 - b. Do not proceed with installation of materials, products or systems until final copy of applicable product data is in possession of Installer. Maintain one complete set of product data at the site for use by Project Representative.

- 2. Preparation and Processing: Do not submit product data, or allow its use on the Project, until compliance with requirements of Contract documents has been confirmed by Contractor. Submittal is for information and record, unless otherwise indicated. Initial submittal is final submittal unless returned by Engineer, marked with an "Action" which indicates an observed noncompliance.
- 3. Submit four (4) copies. Engineer will retain two (2) copies and return two (2) copies to the Contractor.
- D. Samples:
 - 1. General: Provide units identical with final condition of proposed materials or products for the Work. Include "range" Samples (not less than three (3) units) where there are unavoidable variations between units of each set. Provide full set of optional Samples where Engineer's selection is required. Prepare Samples to match Engineer's sample where indicated. Include information with each sample to show generic description, source or product name and manufacturer, limitations, and compliance with standards. Samples are submitted for review and confirmation of color, pattern, texture and "kind" by Engineer. Engineer will not "test" Samples (except as otherwise indicated) for compliance with other requirements, which are, therefore, for exclusive responsibility of the Contractor.
 - 2. Processing: Submit two (2) sets of Samples for Engineer's review and "Action"; one (1) set will be returned. Large Samples, which may be incorporated into the Work, may be submitted singly.
 - 3. Reusable Samples: Returned Samples which are intended or permitted to be incorporated in the Work are so indicated in the individual Work sections, and must be in undamaged condition at time of use.
- E. Warranties and Guarantees: In addition to copies desired for Contractor's use, furnish three (3) executed copies, except furnish additional copies where required for maintenance manuals.
- F. Survey Data: Refer to other Sections for specific general requirements on property surveys, field measurements, quantitative records of actual Work, damage surveys, photographs and similar data required by individual Work Sections of these specifications. None of specified copies will be returned.

1.5 ACTION ON SUBMITTALS

- A. Engineer's Action: Engineer will review each submittal, mark with "Action", and where possible return within two (2) weeks of receipt. Where submittal must be held for coordination, they will be returned to the Contractor within two (2) weeks of receipt for the Contractor to resubmit when it is appropriate.
 - 1. Final Unrestricted Release: Work may proceed, provided it complies with Contract documents, when submittal is returned with marking: "Approved as Submitted".
 - 2. Final-But-Restricted Release: Work may proceed, provided it complies with notations and corrections on submittal and with Contract documents, when submittal is returned with the marking: "Approved as Noted".
 - 3. Returned and Rejected: Do not proceed with Work. Submittal item is not acceptable and may not be used on the Project when noted as "Not Approved".

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 013501 – INADVERTENT DISCOVERIES OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

PART 1 - GENERAL

1.1 PROJECT SPECIFIC REQUIREMENTS

- A. Cultural resource sites are known to exist within Work areas see Special Conditions for requirements.
 - 1. Special Conditions: An archaeological monitor must be onsite during the following construction activities:
 - a. Placement of additional gravel in the Wahkiacus staging area.
 - b. Landslide debris removal.
 - c. Inspecting staging areas near recorded archaeological sites to ensure that staging is entirely within the area selected by State Parks.
 - d. The removal of Trestle 7 and the subsequent grading and streambed material removal.
 - 2. Contact Jennifer Wilson (360) 787-6511, Sarah Dubois (360) 972-5884, or Ayla Aymond (509) 743-8251 at least 14 calendar days in advance of construction to make arrangements with the contract archaeologist for archaeological monitoring. The contractor must contact any of the above archaeologist at least 48 hours prior to any work starting at the locations listed above.

1.2 EMERGENCY CONTACTS

WSPRC Archaeologists	
Jennifer Wilson, Archaeology Program Manager	(360) 787-6511 (cell)
Email: jennifer.wilson@parks.wa.gov	(360) 902-8637 (office)
Shari Silverman, Archaeologist SW Region	(435) 260-9894 (cell)
Email: <u>shari.silverman@parks.wa.gov</u>	(360) 902- 8640 (office)
Kayley Bass, Archaeologist SW Region	(360) 701-1277 (cell)
Emails: kayley.bass@parks.wa.gov	
Sarah DuBois, Archaeologist Eastern Region	(360) 972-5884 (cell)
Email: <u>sarah.dubois@parks.wa.gov</u>	(509) 665-4336 (office)
Ayla Aymond, Archaeologist Eastern Region	(509) 743-8251 (cell)
Email: ayla.aymond@parks.wa.gov	
Sean Stcherbinine, Archaeologist NW Region	(360) 770-1419 (cell)
Email: sean.stcherbinine@parks.wa.gov	
Laura Syvertson, Archaeologist NW Region	(360) 770-0444 (cell)
Email: <u>laura.syvertson@parks.wa.gov</u>	
Maurice Major, Stewardship Archaeologist	(360) 701-6218 (cell)
Email: maurice.major@parks.wa.gov	(360) 902-8503 (office)

<u>WSPRC Curator of Collections/NAGPRA Specialist</u> Alicia L. Woods, Statewide Curator of Collections & NAGPRA Specialist (360) 586-0206 (office)

INADVERTENT DISCOVERIES OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS – 013501 - 1 10/31/2023

State Physical Anthropologist Guy Tasa, PhD, Dept. of Archaeology and Historic Preservation	(360) 790-1633 (cell)
Assistant State Physical Anthropologist Jackie Berger, DAHP	(360) 890-2633 (cell)
County Coroner/Examiner David R. Quesnel, Prosecuting Attorney/Coroner	(509) 773-5838 (office)
Local Law Enforcement Andrew Kallinen	(541) 993-2111 (cell)
<u>Area Manager</u> Jill Sprance-Carr	(509) 314-0559 (cell)
Ranger 3 Andrew Kallinen	(541) 993-2111 (cell)
<u>Capital Project Manager</u> Brian Patnode	(509) 885-0397 (cell) (509) 750-7301

1.3 INADVERTENT DISCOVERIES OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

- A. Many of Washington's most important heritage sites reside on lands owned or managed by the Washington State Parks and Recreation Commission (WSPRC). Nearly all Washington State Parks contain one or more important historic buildings, structures, or archaeological sites. For this reason, archaeological surveys and historic building inventories are ordinarily commissioned as a part of background analysis and information gathering for park developments and undertakings. Results of these surveys are used during project planning to ensure every effort is made to avoid impacts to cultural resources. Yet, despite these efforts, there always remains some potential for unanticipated discoveries while working in Washington State Parks.
- B. All unanticipated discoveries, both cultural resources and human skeletal remains, are subject to all applicable federal and state statues, regulations, and executive orders. For these reasons, the Inadvertent Discovery Plan (IDP) provides useful guidance and instructions for circumstances when cultural resources or human skeletal remains are found. Please carefully read these instructions. If you have any questions, please contact the appropriate WSPRC Area Manager or the WSPRC archaeologist assigned to the undertaking. It is also strongly recommended that anyone conducting ground-disturbing activities watch the training video produced by Washington State Dept of Ecology: <u>Inadvertent Discovery of Cultural Resources or Human Remains: Training for Field Staff</u>. This IDP for cultural resources and human skeletal remains is based on <u>RCW</u> 27.53, <u>RCW 68.50.645</u>, <u>RCW 27.44.055</u>, and <u>RCW 68.60.055</u> and <u>recommended language</u> from the Department of Archaeology and Historic Preservation (DAHP).

1.4 INADVERDENT DISCOVERY PLAN FOR CULTURAL RESOURCES

INADVERTENT DISCOVERIES OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS – 013501 - 2 10/31/2023

- A. If cultural resources are found during a project, activity in the immediate area of the find should be discontinued (stop), the area secured (protect), and the WSPRC archaeologists notified to assess the find (notify). *When in doubt, assume the material is a cultural resource and implement the IDP outlined below.*
- B. Recognizing Cultural Resources-Types of Historic/Prehistoric Artifacts and/or Activity Areas That May Be Found
 - 1. <u>Artifacts</u>- Both historic and prehistoric artifacts may be found exposed in backhoe trenches or back dirt piles.
 - a) Prehistoric artifacts may range from finished tools such as stone pestles, arrowheads/projectile points, shell beads, or polished bone tools to small pieces or "flakes" or "chips" of exotic stone such as chert, jasper, or obsidian.
 - b) Historic artifacts may include older (more than 50 years) nails, plates/ceramics, bottles, cans, coins, glass insulators, or bricks.
 - c) Old abandoned industrial materials from farming, logging, railways, lighthouses, and military installations.
 - 2. <u>Activity Area/Cultural Features-</u> While excavating trench lines look for evidence of buried activity areas/cultural features such as old campfire hearths or buried artifacts.
 - a) An area of charcoal or very dark stained soil with artifacts or burned rocks may be a fire hearth.
 - b) A concentration of shell with or without artifacts may be shell midden deposits.
 - c) Modified or stripped trees, often cedar or aspen, or other modified natural features, such as rock drawings or carvings
 - 3. <u>Historic building foundation/structural remains-</u> During excavation, buried historic structures (e.g., privies, building foundations) that are more than 50 years old may be found.
 - 4. <u>Bone-</u> Complete or broken pieces of bone may be discovered exposed in trench walls or in back dirt piles. Bone can come from either animal remains or human remains and requires a trained professional to identify. If you find bone, notify the WSPRC archaeologist immediately and follow their directions..

C. STEPS TO TAKE IF A CULTURAL RESOURCE IS FOUND DURING CONSTRUCTION

- 1. **Stop** if a cultural resource(s) is observed or suspected, all work within the immediate area of the discovery must stop.
- 2. Protect the area from further disturbance. Do not touch, move, or further disturb the exposed materials/artifacts. Create a protected area with temporary fencing, flagging, stakes, or other clear markings that is large enough (30 feet or larger) to protect the discovery location area. The WSPRC archaeologist can help determine the size of the protected area. Do not permit vehicles, equipment, or unauthorized personnel to traverse the discovery site.
- 3. **Notify** the WSPRC archaeologist. If the area needs to be secured, notify the Park Ranger or Park staff as well.
- 4. If requested by the WSPRC archaeologist, take photographs with a scale (e.g., pen, coin, etc.) and collect geospatial information of the discovery site to document the initial finds.

D. WHAT NOT TO DO IF A CULTURAL RESOURCE IS FOUND DURING CONSTRUCTION

INADVERTENT DISCOVERIES OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS – 013501 - 3

- 1. Do not remove any artifacts from the site of the discovery.
- 2. Do not dig out objects protruding from any trench walls as this may cause further damage to artifacts and/or destroy important contextual information.
- 3. Do not share any information about the find, including on social media, except as necessary to implement the IDP.

E. WHAT HAPPENS NEXT?

- 1. The find will be assessed by a professional archaeologist (may be a WSPRC archaeologist or an archaeology consultant).
 - a) If the find is not a cultural resource, construction work may resume.
 - b) If the find is a cultural resource, the WSPRC archaeologist will contact the DAHP and affected Tribes, as appropriate, to develop a suitable treatment plan for the resource.
- 2. Construction work may resume in the protected area after the WSPRC archaeologist assigned to the undertaking has determined that the find has been adequately investigated and, if necessary, a treatment plan and monitor are in place to protect any remaining archaeological deposits.

1.5 INADVERDENT DISCOVERY PLAN FOR HUMAN SKELETAL REMAINS

A. Native American burials and historic grave sites are uncommon features on Washington State Park lands. These remains, as well as any associated artifacts or funerary objects, are protected under state law and, if the park is a federal lease, applicable federal law. If you discover human remains (or bones that you believe may be human remains) during construction, please follow these important instructions. It is imperative that reporting and treatment of any human remains found during construction or any ground-disturbing activities are treated with utmost dignity and respect.

B. Steps to Take If Human Skeletal Remains are Found During Construction

- 1. **Stop** if human skeletal remains observed or suspected, all work within the immediate area of the discovery must stop.
- 2. **Protect** the area from further disturbance. Do not touch, move, or further disturb the remains. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and shield them from being photographed. Create a protected area with temporary fencing, flagging, stakes, or other clear markings that is large enough (30 feet or larger) to protect the discovery location area. The WSPRC archaeologist can help determine the size of the protected area. Do not permit vehicles, equipment, or unauthorized personnel to traverse the discovery site.
- 3. **Notify** law enforcement and the appropriate county medical examiner/coroner as soon as possible. If you are unsure if the remains are human, the physical anthropologist at DAHP may be called. Also notify the Park Ranger, the WSPRC archaeologist, and the WSPRC Curator of Collections/NAGRPA Specialist of the discovery of the remains.
- 4. If requested by law enforcement, the county coroner/examiner, the DAHP physical anthropologist, or the WSPRC archaeologist, take photographs with a scale (e.g., pen, coin, etc.) and geospatial information of the discovery site to document the initial finds.

C. What Not to Do If Human Skeletal Remains are Found During Construction

INADVERTENT DISCOVERIES OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS – 013501 - 4 10/31/2023

- 1. Do not pick up or remove anything.
- 2. Do not take any photographs of the remains unless instructed to do so by law enforcement, the county coroner/examiner, the DAHP physical anthropologist, or the WSPRC archaeologist. If pictures are requested, be prepared to photograph them with a scale (e.g., pen, coin, etc.) and collect geospatial information of the remains.
- 3. Do not call 911 unless you cannot reach law enforcement or the coroner/examiner by other means.
- 4. Do not share any information about the find, including on social media, except as necessary to implement the IDP.

D. What Happens Next?

- 1. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and decide whether those remains are forensic (crime-related) or non-forensic.
 - a) If forensic, the county medical examiner/coroner will retain jurisdiction over the remains.
 - b) If non-forensic, the county medical examiner/coroner will report that finding to the DAHP who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected Tribes of the remains. The State Physical Anthropologist will decide whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected Tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Note: The WSPRC archaeologist assigned to the undertaking will be coordinating and consulting with the DAHP, affected Tribes, and other groups as necessary. Additionally, WSPRC's Curator of Collections/NAGPRA Specialist should be included on all written and/or verbal correspondence until the remains have been officially transferred from WSPRC's possession to an outside authority. Until the remains are transferred off of WSPRC's property, it is the responsibility of the Curator of Collections/NAGPRA Specialist to document and track the information regarding all human remains and associated funerary objects (including all material from excavation areas/units from which the human remains were removed).

2. Construction work may resume in the protected area after the WSPRC archaeologist assigned to the undertaking has determined that the find has been adequately investigated and, if necessary, a treatment plan and monitor are in place.

END OF SECTION

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other qualityassurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and -control services required by Project Representative, Owner, or Authorities Having Jurisdiction are not limited by provisions of this Section.
- C. Related Requirements:
 - 1. Divisions 02 through 49 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Project Representative.
- C. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- D. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to Authorities Having Jurisdiction, to establish product performance and compliance with specified requirements.
- E. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- F. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- I. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of two (2) previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Project Representative for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Project Representative for a decision before proceeding.

1.4 QUANTITY SHEETS/WEIGHT TICKETS

- A. For bulk items, supply quantity sheets (load receipts) to account for each load delivered to the jobsite. Deliver quantity sheets to Inspector on job at delivery time. If Inspector is not on job, deliver quantity sheets on a daily basis to place designated by Project Representative.
- B. No payment shall be made for materials delivered for which quantity tickets have not been turned into Inspector or delivered to designated place at end of working day. Backdated tickets are not acceptable as a basis for payment, except at Project Representative's discretion.
- C. If bid item for material to be delivered to jobsite is stated in TONS, only weight slips from approved scale are acceptable for payment purposes, unless approved in advance by Project Representative.
- D. No payment for materials will be made until proper accounting has been made. Final quantity records are approved by Project Representative, with payment at Project Representative's discretion.

1.5 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Field Reports: Prepare written information documenting tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 4. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 5. Other required items indicated in individual Specification Sections.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 MOCK-UP REQUIREMENTS

- A. Tests will be performed under provisions identified in this section and identified in respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. The contractor is responsible for creating an acceptable mockup which can then be incorporated as part of the Work. Rejected mockups are the contractor's responsibility to properly dispose of. Contractor shall not proceed with remaining Work until an acceptable mockup can be provided.
- D. Accepted mock-ups shall be comparison standard for remaining Work.

E. Where mock-up has been accepted by Architect/Engineer and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so by Architect/Engineer.

1.7 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, and with additional qualifications specified in individual Sections.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- G. Manufacturer's Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.8 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Contractor shall engage a qualified testing agency to perform these quality-control services.
 - 2. Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspecting will be performed.

- 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
- 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
- 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Manufacturer's Field Services: Where indicated, engage a manufacturer's representative to observe and inspect the Work. Manufacturer's representative's services include examination of substrates and conditions, verification of materials, inspection of completed portions of the Work, and submittal of written reports.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Testing Agency Responsibilities: Cooperate with Project Representative and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Project Representative and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar qualitycontrol service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- E. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- F. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Project Representative.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Project Representative's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

SECTION 014100 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 PERMITS, CODES AND REGULATIONS

- A. The following permits have been applied for (or are on file) and incorporated into the contract:
 - 1. S.E.P.A. Determination of Non-Significance.
 - 2. Hydraulic Project Approval (HPA-WDFW No. 26657).
 - 3. Exemption from Shoreline Management Act issued by Klickitat County.
 - 4. No permit required letter from the U.S. Army Corps of Engineers for Section 404 and Section 10.
- B. Conform with the requirements of listed permits and additional or other applicable permits, codes, and regulations as may govern Work.
- C. Obtain and pay fees for licenses, permits, inspections, and approvals required by laws, ordinances, and rules of appropriate governing or approving agencies necessary for proper completion of Work (other than those listed under item 1.1A. above and Special Inspections called for by the International Building Code).
- D. Conform with current applicable codes, regulations and standards, which is the minimum standard of quality for material and workmanship. Provide labor, materials, and equipment necessary for compliance with code requirements or interpretations, although not specifically detailed in the Drawings or specifications. Be familiar with applicable codes and standards prior to bidding.
- E. Process through Project Representative, requests to extend, modify, revise, or renew any of the permits (listed in 1.1A above). Furnish requests in writing and include a narrative description and adequate Drawings to clearly describe and depict proposed action. Do not contact regulatory agency with requests for permit extensions, modifications, revisions, or renewals without the prior written consent of Project Representative.

1.2 VARIATIONS WITH CODES, REGULATIONS AND STANDARDS

- A. Nothing in the drawings and specifications permits Work not conforming to codes, permits or regulations. Promptly submit written notice to Project Representative of observed variations or discrepancies between the Contract documents and governing codes and regulations.
- B. Appropriate modifications to the Contract documents will be made by Change Order to incorporate changes to Work resulting from code and/or regulatory requirements. Contractor assumes responsibility for Work contrary to such requirements if Work proceeds without notice.
- C. Contractor is not relieved from complying with requirements of Contract documents which may exceed, but not conflict with requirements of governing codes.

1.3 COORDINATION WITH REGULATORY AGENCIES

- A. Coordinate Work with appropriate governing or regulating authorities and agencies.
- B. Provide advance notification to proper officials of Project schedule and schedule revisions throughout Project duration, in order to allow proper scheduling of inspection visits at proper stages of Work completion. Provide State Parks with a construction start date when available in order to provide WDFW the required three day notice associated with the HPA.
- C. Regulation coordination is in addition to inspections conducted by Project Representative. Notify Project Representative of scheduled inspections involving outside regulating officials, to allow Project Representative to be present for inspections.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 014200 – REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the General Conditions of the Contract.
- B. "Approved": When used to convey Project Representative's action on Contractor's submittals, applications, and requests, "approved" is limited to Project Representative's duties and responsibilities as stated in the General Conditions of the Contract.
- C. "Directed": A command or instruction by Project Representative. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Engineer", "Project Architect", "Engineer", and "Architect" are interchangeable terms.
- J. Project Representative and Owners Representative are interchangeable terms.
- K. "As-built Drawings": Drawings done by the Contractor in the field showing changes to the Work.
- L. "Record Drawings": Drawings prepared based on the information on the As-built Drawings.

1.2 GENERAL

A. Applicable standards of the construction industry have the same force and effect (and are made a part of the Contract Documents by reference) as if directly copied or bound herein.

1.3 PUBLICATION DATES

A. Where compliance with an industry standard is required, comply with the standard in effect on Bid Date.

1.4 ABBREVIATIONS AND NAMES

A. The following acronyms or abbreviations, referenced in the Contract documents, are defined to mean the associated name. Applicable standards include, but are not limited to the following:

1.	AASHTO	American Association of State Highway & Transportation Officials		
2.	ACI	American Concrete Institute		
3.	AGA	American Gas Association		
4.	AI	Asphalt Institute		
5.	AIA	American Institute of Architects (The)		
6.	AISC	American Institute of Steel Construction, Inc.		
7.	AISI	American Iron and Steel Institute		
8.	AITC	American Institute of Timber Construction		
9.	ANSI	American National Standards Institute		
10.	APA	Engineered Wood Association (The)		
11.	APWA	American Public Works Association		
12.	ASME	American Society of Mechanical Engineers		
13.	ASTM	American Society for Testing and Materials International		
14.	AWPA	American Wood Protection Association		
15.	AWS	American Welding Society		
16.	AWWA	American Water Works Association		
17.	BOB	Beginning of Bridge		
18.	CRSI	Concrete Reinforcing Steel Institute		
19.	EOB	End of Bridge		
20.	EPA	Environmental Protection Agency		
21.	ETC	Etcetera		
22.	HPVA	Hardwood Plywood and Veneer Association		
23.	IBC	International Building Code		
24.	IEEE	Institute of Electrical & Electronics Engineers, Inc. (The)		
25.	IES	Illuminating Engineering Society of North America		
26.	LPI	Lighting Protection Institute		
27.	MCAA	Mechanical Contractors Association of America, Inc.		
28.	NIST	National Institute of Standards and Technology		
29.	NCMA	National Concrete Masonry Association		
30.	NEC	National Electrical Code		
31.	NECA	National Electrical Contractors Association, Inc.		
32.	NFPA	National Fire Protection Association		
33.	NHLA	National Hardwood Lumber Association		
34.	NSF	National Sanitation Foundation International		
35.	OSHA	Occupational Safety & Health Administration		
36.	PCA	Portland Cement Association, (The)		
37.	SEPA	State Environmental Policy Act		
38.	SSPC	Society for Protective Coatings (The)		
39.	UNO	Unless Noted Otherwise		
40.	UL	Underwriters Laboratories, Inc.		

- 41. UPC Uniform Plumbing Code
- 42. WCLIB West Coast Lumber Inspection Bureau (Grading Rules)
- 43. WRI Wire Reinforcement Institute
- 44. WSDOE or ECY Washington State Department of Ecology
- 45. WSDOH or DOH Washington State Department of Health
- 46. WSDOT Washington State Department of Transportation
- 47. WSPRC Washington State Parks and Recreation Commission
- 48. WWPA Western Wood Products Association (Grading Rules)

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 PROTECTION OF PROPERTY AND EXISTING FACILITIES

- A. Provide protections necessary to prevent damage to park, City, County, and WSDOT property and facilities.
- B. Only rubber-tired equipment are permitted to operate on paved park roads.
- C. Protect existing trees and other vegetation indicated to remain in place against cutting, breaking or skinning of roots, skinning and bruising of bark, or smothering of trees by stockpiling materials within dripline. Provide necessary temporary guards to protect trees and vegetation to remain in place.
- D. Make every effort to minimize damage and cutting major tree roots during excavation operations. Provide protection for larger tree roots exposed or cut during excavation operations.

1.2 ENVIRONMENTAL PROTECTIONS

- A. Scope:
 - 1. Provide labor, materials, equipment and perform Work required for protection of environment during and as a result of construction operations under contract.
- B. Applicable Regulations:
 - 1. Comply with applicable federal, state and local laws and regulations concerning environmental pollution control and abatement, and specific requirements elsewhere in specifications and drawings to prevent and provide for control of environmental pollution.
 - 2. Maintenance of Storage Area
 - a. Keep fencing in a state of good repair and proper alignment. Grassed or unpaved areas, which are not established roadways, will be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways, should the Contractor elect to traverse them with construction equipment or other vehicles; gravel gradation will be at the Contractor's discretion. Mow and maintain grass located within the boundaries of the construction site for the duration of the project.
 - b. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers will be edged or trimmed neatly.
 - c. Additional specific requirements indicated on the drawings apply to the laydown/staging areas at Wahkiakus and Warwick.
- C. Fire Prevention Control and Countermeasures Plan

- 1. The Contractor shall prepare and implement a project-specific fire prevention, control, and countermeasures plan (FPCC Plan) for the duration of the project. The Contractor shall submit a Type 2 Working Drawing (per WSDOT Standard Specifications) no later than the date of the preconstruction conference.
 - a. FPCC Implementation Requirements. The Contractor's FPCC Plan shall be fully implemented at all times. The Contractor shall update the FPCC Plan throughout project construction so that the plan reflects actual site conditions and practices. The Contractor shall update the FPCC Plan at least annually and maintain a copy of the updated FPCC Plan that is available for inspection on the project site. Revisions to the FPCC Plan and the Industrial Fire Precaution Level (IFPL) shall be discussed at the weekly project safety meetings.
 - 1) The FPCC Plan shall include the following: 1. The names, titles, and contact information for the personnel responsible for implementing and updating the plan. 2. The names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a fire. 3. All potential fire causing activities such as welding, cutting of metal, blasting, fueling operations, etc. 4. The location of fire extinguishers, water, shovels, and other firefighting equipment. 5. The response procedures the Contractor shall follow in the event of a fire.
 - 2) Most of Washington State is covered under the IFPL system which, by law, is managed by the Department of Natural Resources (DNR). In some cases jurisdiction is transferred to the United States Forest Service (USFS) or to the local fire authority. It is the Contractor's responsibility to be familiar with the IFPL requirements and to verify whether or not IFPL applies to the specific project.
 - 3) If the Contractor wishes to continue a work activity that is prohibited under an industrial fire precaution level, the Contractor shall obtain a waiver from the fire authority with jurisdiction and provide a copy to the Engineer prior to continuation of work on the project.
 - 4) If the IFPL requirements prohibit the Contractor from performing Work the Contractor may be eligible for an unworkable day in accordance with the General Conditions.
 - 5) The Contractor shall comply with the requirements of these provisions at no additional cost to the Contracting Agency.
- D. Protection of Land Resources:
 - 1. Give special attention to the effect of Contractor's operations upon the project area and the surroundings. Take special care to maintain natural surroundings undamaged and conduct the Work in compliance with following requirements:
 - a. The Contractor shall flag all trees to be removed, proposed laydown areas, and all areas of clearing and grubbing for review by the Owner and/or by permitting agencies. The flagged items must be approved by the Owner PRIOR to the

Contractor proceeding with Work. Clearing, grubbing, and tree removal is to be kept to the minimum necessary to complete the Work.

- b. When Work is completed, remove storage and other Contractor buildings and facilities, and sites restored to a neat and presentable condition appropriate to surrounding landscape, unless otherwise specified. Remove debris resulting from Contractor's operation.
- c. Store petroleum products, industrial chemicals and similar toxic or volatile materials in durable containers approved by the Authority Having Jurisdiction and located in areas where accidental spillage will not enter water. Store substantial quantities of materials in an area surrounded by containment dikes of sufficient capacity to contain an aggregate capacity of tanks.
- E. Protection and Restoration of Property:
 - 1. Preserve public and private property, monuments, power and telephone lines, other utilities, prevention of damage to natural environment, etc., insofar as they may be endangered by Work.
 - 2. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect or misconduct in execution of Work, or in consequence of non-execution of Contractor, restore, or have restored at Contractor's expense, such property to a condition similar and equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring same, or make good damage or injury in some other manner acceptable to Project Representative.
- F. Protection of Water Resources:
 - 1. Perform Work not to create conditions injurious to fish or to their habitat, or which would make water unsuitable for private, municipal, or industrial use.
 - 2. Take special measures to prevent chemicals, fuels, oils, grease, bituminous materials, waste washings, herbicides, insecticides, lime, wet concrete, cement, silt or organic or other deleterious material from entering waterways.
 - 3. Dispose of offsite, in a lawful manner conforming to applicable local, state and federal laws wastes, effluents, trash, garbage, oil, grease, chemicals, cement, bitumen, etc., petroleum, and chemical products or wastes containing such products. Furnish Owner with documentation showing compliance with this requirement.
 - 4. Conform to applicable local, state and federal laws for disposal of effluents. Dispose of waters used to wash down equipment in a manner to prevent their entry into a waterway. If waste material is dumped in unauthorized areas, remove material and restore area to condition of adjacent, undisturbed area. If necessary, excavate contaminated ground and disposed of as directed by Project Representative and replace with suitable compacted fill material with surface restored to original condition.
- G. Dust Control:
 - 1. Dust control is required on roads used by Contractor. Maintain excavations, embankments, stockpiles, roads, plant sites, waste areas, borrow areas and other Work areas within or without the Project boundaries free from dust which would cause a hazard or nuisance to others. Provide approved, temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or equal methods to control dust. If

sprinkling is used, sprinkling must be repeated at intervals to keep disturbed areas at least damp.

- H. Temporary Water Pollution/Erosion Controls:
 - 1. Provide for prevention, control and abatement of soil erosion and water pollution within the limits of Project, to prevent and/or minimize damage to adjacent bodies of water and Work itself.
 - 2. Coordinate temporary soil erosion/water pollution control measures with permanent drainage and erosion control Work to ensure effective and continuous controls are maintained throughout Project life.
 - 3. Develop a written spill prevention and response plan for construction activities adjacent to/and over any surface waters and/or wetlands. "Adjacent" means within 150' as measured on a horizontal plane. Plan addresses:
 - a. Narrative description of the proposed construction methods, materials, and equipment to be used for Work
 - b. Assessment and listing of hazardous materials and/or potential contaminants that could be released during execution of Work
 - c. SDS sheets with cleanup instructions for potential contaminants
 - d. Spill response/cleanup materials and instructions for use
 - e. Procedures and precautions to prevent spills
 - f. Spill response training for on-site personnel, including the location of the containment and cleanup materials at site
 - g. Emergency notification in case of a spill or release. Park Manager and Project Representative must be included on the list of notified.
 - 4. Comply with applicable codes and ordinances for spill prevention and response plan and submit a copy to Project Representative before commencing Work adjacent to or over any waters and/or wetlands.
- I. Emergency Spill Response Notification
 - 1. Under state law, Ecology must be notified when any amount of regulated waste or hazardous material that poses an imminent threat to life, health, or the environment is released to the air, land, or water, or whenever oil is spilled on land or to waters of the state. The spiller is always responsible for reporting a spill. Failure to report a spill in a timely manner may result in enforcement actions. If you are not responsible for a spill, making the initial notification does not make you liable. However, please consult with Ecology's response team before attempting any type of response or cleanup. Also notify Park Manager and Project Representative.
 - 2. If oil or hazardous materials are spilled to state waters, the spiller must notify both federal and state spill response agencies. The federal agency is the National Response Center at 1-800-424-8802. For state notification, call the Washington Emergency Management Division (EMD) at 1-800-258-5990 or 1-800-OILS-911 AND the appropriate Ecology regional office for your county (see numbers below). An Ecology spill responder will normally call reporting party back to gather more information. The agency will then determine its response actions. Also notify Park Manager and Project Representative.
 - 3. Ecology Regional Spill Reporting Numbers:
 - a. Eastern Regional Office: (509) 329-3400

TDD: Washington Relay Service 711 or (800) 833-6388.

1.3 PUBLIC CONVENIENCE AND SAFETY

- A. Properly warn the public of construction equipment and activities, open trenches, and/or other unsafe conditions by providing all necessary warning equipment. Equipment includes warning signs, barricades, fencing, flashing lights and traffic control personnel (flaggers).
- B. Conduct operations with the least possible obstruction and inconvenience to the public in accordance with appropriate Section(s) of the WSDOT "Standard Specifications".
- C. The Contractor shall be responsible for providing adequate safeguards, safety devices, protective equipment, and any other needed actions to protect the life, health, and safety of the public in connection with the performance of the Work covered by the Contract. The Contractor shall perform any measures or actions the Engineer may deem necessary to protect the public. The responsibility and expense to provide this protection shall be the Contractor's except that which is to be furnished by the Contracting Agency as specified in other sections of these Specifications.

1.4 **PROTECTION OF WORK**

A. Protect Work, materials, and equipment against damage, weather conditions, or other hazards. Equipment, Work or materials found damaged or in other than new condition will be rejected by Project Representative.

1.5 REMOVAL AND REPLACEMENT OF STATE-OWNED ITEMS

A. Should any state-owned items, such as signs, bumper blocks, or related items, interfere with the proper construction process, remove and reinstall such items to the satisfaction of Project Representative.

1.6 USE OF PARK SPACE

- A. Only in areas of park that Contract covers and only during active inclusive dates of Contract.
- B. Contractor vehicle and equipment parking only as designated by Project Representative.
- C. Contractor will be issued temporary parking passes for construction crew, vehicles and equipment, valid for the duration of the contract only.

1.7 ROADWAY CLOSURE

A. Closure of the park is not in the best interest of the general public, only close roads being trenched while conduits, etc., are being installed, and immediately reopened for traffic. Supply necessary barricades, etc., to effectively prevent automotive traffic from entering upon any traveled way while trenches are open, unless other approved appropriate safety measures are taken.

1.8 UTILITIES

A. Existing subsurface utilities on Project are represented on Contract Drawings to the best of the Commission's knowledge. It is Contractor's responsibility to verify existence of utilities, and determine exact location and depth. Maintain use of utilities during construction through temporary connections or other measures suitable to Commission. No extra compensation will be made for removal, temporary connections, relocations, or replacement of utilities.

1.9 SERVICE OUTAGES

A. Coordinate and schedule outages for, power, water, and sewer service connections/repairs with Park Manager, so as not to inconvenience park staff or public.

1.10 SANITARY FACILITIES

A. Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of Authorities Having Jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 015526 - TRAFFIC CONTROL

PART 1 – GENERAL

1.1 RELATED REQUIREMENTS

A. Section 015000 – Temporary Facilities and Controls

1.2 GENERAL

- A. Provide flaggers, signs, and other traffic control devices in accordance with the Washington State Department of Transportation (WSDOT) Current Edition, Standard Specifications for Road, Bridge, and Municipal Construction and the Manual on Uniform Traffic Control Devices (MUTCD). Erect and maintain construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public from injury or damage as a result of the Contractor's operations that may occur on highways, roads, drives, streets, or sidewalks and walkways. Do no work on or adjacent to the above locations until necessary signs and traffic control devices are in place.
- B. These flaggers, signs, and other traffic control devices are for the safety of the public, the Contractor's employees, and Commission's personnel and to facilitate the movement of the traveling public. They may be used for the separation or merging of public and construction traffic when in accordance with a specific approved traffic control plan.
- C. Upon failure of the Contractor to immediately provide flaggers; erect, maintain, and remove signs; or provide, erect, maintain, and remove other traffic control devices, the Commission may, without further notice to the Contractor, shut down the Contractor's activity until adjacent traffic control is implemented.
- D. Providing adequate flaggers, signs, and other traffic control devices for the protection of the work and the public at all times, regardless of whether or not the flaggers, signs, and other traffic control devices are ordered by the Project Representative, furnished by the Commission, or paid for by the Commission or by any modifications made by the Contractor. The Contractor shall be liable for injuries and damages to persons and property suffered by reason of the Contractor's operations or any negligence in connection therewith.
- E. Lane closure or diversion: advise Project Representative a minimum of two calendar days prior to implementation.

1.3 CONFORMANCE TO ESTABLISHED STANDARDS

A. Flagging, signs, and other traffic control devices: conform to the standards established in the latest edition of the WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, to the WSDOT Traffic Control Plans 1 through 18 (TC1-19) as published by WSDOT at <u>http://www.wsdot.wa.gov/Design/Standards/PlanSheet/TC_1_19.htm</u> and to the Manual on Uniform Traffic Control Devices (MUTCD).

1.4 SUBMITTALS

A. Submit a temporary traffic control plan for Project Representative review.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 CONSTRUCTION PARKING CONTROL

A. Control vehicular parking to prevent interference with public traffic and parking, and access by emergency vehicles. Monitor parking of construction personnel's vehicles. Maintain vehicular access to and through parking areas. Prevent parking on or adjacent to access roads or in non-designated areas.

SECTION 016000 – PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 IMPLIED/INCIDENTAL MATERIALS

A. Minor materials required for proper Project completion although not specifically mentioned or shown in Contract documents, are part of materials to be provided by Contractor as a part of Contract and are considered incidental to the total cost of Project. No additional compensation is due to the Contractor for providing such items.

1.2 QUALITY OF MATERIALS

- A. Materials are to be new, free from defects, and of quality specified in the drawings and specifications.
- B. Select and provide materials to ensure satisfactory operation and rated life in prevailing environmental conditions were installed.
- C. Same make and quality throughout the entire job, for each type. Furnish materials of latest standard design products of manufacturers regularly engaged in their production.

1.3 SPECIFIED MATERIALS

- A. Drawings and specifications generally reference only one make and model for each item of material or equipment required. This is not intended to be restrictive but indicates the standard of quality, design, and features required.
- B. Specified product is the basis of design regarding physical size, strength, and performance. Products named indicate minimum acceptable product and are "or equal" unless noted otherwise.

1.4 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Project Representative will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution is consistent with Contract Documents and will produce indicated results.
 - b. Requested substitution will not adversely affect Contractor's construction schedule.
 - c. Requested substitution is compatible with other portions of Work.
 - d. Requested substitution has been coordinated with other portions of Work.
 - e. Requested substitution provides specified warranty.

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- f. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Project Representative will consider requests for substitution if received within 30 days after Notice to Proceed.
 - 1. Conditions: Project Representative will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Engineer for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - b. Requested substitution does not require extensive revisions to Contract Documents.
 - c. Requested substitution is consistent with Contract Documents and will produce indicated results.
 - d. Requested substitution will not adversely affect Contractor's construction schedule.
 - e. Requested substitution is compatible with other portions of Work.
 - f. Requested substitution has been coordinated with other portions of Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

1.5 SUBSTITUTION OF MATERIALS ("OR EQUAL")

- A. Proposed equipment to be considered "or equal" will necessitate written approval by the Engineer prior to substitution.
- B. On requests for substitution of materials clearly define and describe proposed substitute.
- C. Accompany requests by complete specifications, samples, records of performance, certified test reports, and such other information as the Engineer may request to evaluate the substitute product.
- D. Contractor is responsible for a substitute item suiting the installation requirements and for additional costs incurred as a result of substitution.
- E. Final decisions regarding quality and suitability of proposed substitutions rests solely with Engineer and will be based on information submitted.

1.6 TECHNICAL DATA

A. Technical data and information contained herein relies entirely on tests and ratings provided by manufacturers who are solely responsible for their accuracy. Project Representative, by use of this information in no way implies that Project Representative has tested or otherwise verified the results of published manufacturer's information.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Transport products by methods to avoid product damage. Only deliver products to the site that are undamaged and free from defects.
- B. Provide proper equipment and personnel to handle and transport materials/products to the Project sites safely and undamaged.
- C. Promptly inspect material to assure that products comply with Contract requirements, quantities are correct, and products are undamaged.
- D. Store and/or stockpile materials and products only in areas of park designated and approved by Project Representative prior to delivery.
- E. Arrange storage to provide easy access for inspections. Original product labels, certifications, stamps, etc. to be intact and readily visible for inspection purposes.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 017329 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes procedural requirements for cutting and patching.

1.2 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.

1.3 SUBMITTALS

- A. Cutting and Patching Proposal: For work not clearly indicated as cutting and patching on the drawings or specifications, submit a proposal describing procedures at least seven (7) days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information, as applicable:
 - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 - 3. Products: List products to be used and firms or entities that will perform the Work.
 - 4. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
 - 5. Noise and Dust Protection Plan.
- B. Architect or Engineer's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.4 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity, load-deflection ratio, or seismic bracing capacity.
- B. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that result in increased maintenance or decreased operational life or safety.
- C. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or

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in occupied spaces in a manner that would, in Architect's/Engineer's opinion, reduce the aesthetic qualities of the Work. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

D. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection:
 - 1. Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
 - 2. Take precautions required by regulations and Standard Specifications to protect personnel and property.
 - 3. Take all necessary precautions for temporary fire protection during welding and cutting.
 - a. Carefully mask or shield adjacent surfaces to prevent damage from heat or welding materials. Take particular care to prevent fires.

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C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting. If a valve is used, provide access to the valve.
 - 5. Proceed with patching after construction operations requiring cutting are complete.
- C. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL (NOT USED)

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to Authorities Having Jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Waste and debris removed from the worksite and not specified for reuse becomes the responsibility of the Contractor and disposed of off park property in areas authorized by the applicable county and/or state agencies and in accordance with current rules and regulations governing the disposal of solid waste. Disposal fees and sundry charges are paid by the Contractor and are incidental to the contract.
- C. The Contractor's facilities and storage site shall be neat, clean and orderly at all times. There shall be no trash, debris or other objectionable material within the Contractor's area except in dumpsters or other manufactured receptacles used for disposal purposes. Materials shall be sorted, stacked in neat piles and separated. Dumpsters and other receptacles shall not be filled to overflowing and be located in the most inconspicuous area of the site visible from main roads.
- D. Burning: Do not burn waste materials.
- E. Disposal: Remove waste materials from Owner's property and legally dispose of them.

SECTION 017700 – CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 AS-BUILTS

- A. Before final acceptance of Project, furnish Project Representative "As-Builts" which shows asbuilt locations and dimensions of major items constructed. Include locations and elevations of existing utilities encountered during excavation. Show location of pipes, manholes, buildings, structures, etc. by field measurements consisting of at least two (2) ties to permanent surface objects such as hydrants, buildings, etc.
- B. Final payment: No more than 95 percent until As-Built Drawings received. Payment made after receipt and acceptance of drawings by Project Representative. Lack of As-Built Drawings will not be a cause for contract extensions.

1.2 SPECIAL TOOLS

A. Deliver special tools required for maintenance and adjustment of equipment to Project Representative upon completion and before final acceptance of Project.

1.3 SPARE MATERIALS AND PARTS

A. Before final acceptance, deliver spare materials, parts and other similar items to storage locations specified by Project Representative.

1.4 CERTIFICATES AND PERMITS

A. Submit signed original certificates of compliance and final approval from Authorities Having Jurisdiction.

1.5 OUTSTANDING DOCUMENTS

A. Expedite and submit outstanding administrative documents including outstanding cost proposals, Change Orders, etc.

1.6 SUBSTANTIAL COMPLETION

- A. Reference General Conditions.
- B. Notify Project Representative in writing a minimum of seven (7) days in advance of the scheduled date of completion. Project Representative will conduct a "pre-final" inspection and formulate a final punchlist of Work items to be completed prior to final inspection. Project Representative will establish the date of substantial completion based on pre-final inspection findings. Following this inspection, Project Representative will either issue notice of substantial completion or advise the Contractor of deficient items which must be corrected prior to issuance of substantial completion.

1.7 DAMAGE TO FACILITIES, ROADS, VEGETATION OR PROPERTY

- A. During the course of construction, should any park facility be damaged by the Contractor's actions, operations or neglect, repair any such damages to their original condition, as acceptable to the Project Representative, at no cost to the Commission.
- B. Repair, restore or replace any park, WSDOT, County, and/or Army roads, vegetation or property damaged by the Contractor to the original condition at the time construction began. Repair or replace trees and vegetation indicated to remain, which has been damaged by construction operations, in a manner acceptable to the Project Representative.

1.8 FINAL CLEAN-UP

- A. Clean up the entire construction site and all grounds occupied by the Contractor in connection with the Work. Upon completion of the Work and prior to final inspection and acceptance,
- B. Fine graded, rake clean and smooth all worksites and disturbed areas. Remove from the Park all rubbish, surplus and discarded materials, falsework, temporary structures, equipment and debris.
- C. Leave all phases of the Project clean and ready for public use prior to final acceptance.
- D. Inspect all materials and surfaces for damage, scratches, marring, untreated ends of sawcuts, etc. and repair to original or intended condition.

1.9 FINAL INSPECTION AND ACCEPTANCE

- A. Reference General Conditions.
- B. Notify Project Representative in writing when Work, including punchlist items, has been completed.
- C. Project Representative will schedule and conduct a final inspection to verify that outstanding Work items are complete.
- D. Owner will establish the date of final acceptance based on the results of final inspection. Complete/correct any items identified as outstanding during final inspection prior to final acceptance of Project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolishing existing elements of the structure, hardware, and designated construction.
 - 2. Protecting items designated to remain.
 - 3. Removing demolished materials.

1.2 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Shop Drawings:
 - 1. Indicate demolition and removal sequence.
 - 2. Indicate location and construction of temporary work.

1.3 QUALITY ASSURANCE

- A. Conform to Federal, State, and local laws, ordinances, and regulations for demolition work, dust control, products requiring electrical disconnection and re-connection.
- B. Conform to Federal, State, and local laws, ordinances, and regulations for procedures when hazardous or contaminated materials are discovered.
 - 1. Contractor shall assume existing paint on all existing structural steel members is lead based.
 - 2. Contractor shall assume all existing railroad ties to be removed are creosoted timber.

1.4 SCHEDULING

A. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owner's operation and use of any adjoining spaces.

1.5 PROJECT CONDITIONS

A. Cease operations immediately if structure appears to be in danger and notify Engineer. Do not resume operations until directed.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Mark location and termination of utilities.
- C. Erect, and maintain temporary barriers and security devices, including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
- D. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.

3.2 DEMOLITION

- A. Conduct demolition to minimize interference with adjacent areas.
- B. Do not close or obstruct adjacent roadways without permits.
- C. Cease operations immediately when structure appears to be in danger and notify the Engineer and Owner.
- D. Cap and identify abandoned utilities at termination points when utility is not completely removed. Annotate Record Drawings indicating location and type of service for capped utilities remaining after demolition.
- E. Demolish in orderly and careful manner. Protect existing improvements, and supporting structural members.
- F. Remove all demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- G. All hazardous materials shall be hauled to and disposed of at a site licensed for such materials.
- H. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- I. Remove temporary Work.

SECTION 031000 - CONCRETE FORMING AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Formwork for cast-in place concrete.
 - 2. Shoring, bracing, and anchorage.
 - 3. Form accessories.
 - 4. Form stripping.
- B. Related Sections:
 - 1. Section 032000 Concrete Reinforcing.
 - 2. Section 033000 Cast-In-Place Concrete.

1.2 **REFERENCES**

- A. American Concrete Institute:
 - 1. ACI 117 Standard Specifications for Tolerances for Concrete Construction and Materials.
 - 2. ACI 301 Specifications for Structural Concrete.
 - 3. ACI 318 Building Code Requirements for Structural Concrete.
 - 4. ACI 347 Guide to Formwork for Concrete.
- B. American Forest and Paper Association:
 - 1. AF&PA National Design Specifications for Wood Construction.
- C. The Engineered Wood Association:
 - 1. APA/EWA PS 1 Voluntary Product Standard for Construction and Industrial Plywood.
- D. American Society of Mechanical Engineers:
 - 1. ASME A17.1 Safety Code for Elevators and Escalators.
- E. ASTM International:
 - 1. ASTM D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).

- F. West Coast Lumber Inspection Bureau:
 - 1. WCLIB Standard Grading Rules for West Coast Lumber.

1.3 DESIGN REQUIREMENTS

A. Design, engineer and construct formwork, shoring and bracing in accordance with ACI 318 to conform to design and applicable code requirements to achieve concrete shape, line and dimension as indicated on Drawings.

1.4 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Shop Drawings: Signed and sealed by professional engineer.
 - 1. Submit formwork, shoring, and reshoring shop drawings.
 - 2. Indicate the following:
 - a. Pertinent dimensions, openings, methods of construction, types of connections, materials, joint arrangement and details, ties and shores, location of framing, studding and bracing, and temporary supports.
 - b. Means of leakage prevention for concrete exposed to view in finished construction.
 - c. Sequence and timing of erection and stripping assumed compressive strength at time of stripping, height of lift and height of drop during placement.
 - d. Vertical, horizontal and special loads in accordance with ACI 347, Section 2.2 and camber diagrams, when applicable.
 - e. Notes to formwork erector showing size and location of conduits and piping embedded in concrete in accordance with ACI 318, Section 6.3.
 - f. Procedure and schedule for removal of shores and installation and removal of reshores.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 347 and ACI 301.
- B. For wood products furnished for work of this Section, comply with AF&PA.

1.6 QUALIFICATIONS

A. Design formwork under direct supervision of Professional Engineer experienced in design of this Work and licensed in state of Washington.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Section 016000 - Product Requirements: Products storage and handling requirements.

CONCRETE FORMING AND ACCESSORIES - 031000 - 2

- B. Deliver void forms and installation instructions in manufacturer's packaging.
- C. Store off ground in ventilated and protected manner to prevent deterioration from moisture.

1.8 COORDINATION

A. Coordinate this Section with other sections of work, requiring attachment of components to formwork.

PART 2 - PRODUCTS

2.1 WOOD FORM MATERIALS

- A. Form Materials: At discretion of Contractor.
- B. Lumber Forms:
 - 1. Application: Use for edge forms and unexposed finish concrete.
 - 2. Boards: 6 inches or 8 inches in width, shiplapped or tongue and groove, "Standard" Grade Douglas Fir, conforming to WCLIB Standard Grading Rules for West Coast Lumber. Surface boards on four sides.
- C. Plywood Forms:
 - 1. Application: Use for exposed finish concrete.
 - 2. Forms: Conform to PS 1; full size 4 x 8 feet panels; each panel labeled with grade trademark of APA/EWA.
 - 3. Plywood for Surfaces to Receive Membrane Waterproofing: Minimum of 5/8 inch thick; APA/EWA "B-B Plyform Structural I Exterior" grade.
 - 4. Plywood where "Smooth Finish" is required, as indicated on Drawings: APA/EWA "HD Overlay Plyform Structural I Exterior" grade, minimum of 3/4 inch thick.

2.2 PREFABRICATED FORMS

- A. Preformed Steel Forms: Minimum 16 gage matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.
- B. Glass Fiber Fabric Reinforced Plastic Forms: Matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.
- C. Steel Forms: Sheet steel, suitably reinforced, and designed for particular use indicated on Drawings.
- D. Form Liners: Smooth, durable, grainless and non-staining hardboard, unless otherwise indicated on Drawings.
- E. Framing, Studding and Bracing: Stud or No. 3 structural light framing grade.

CONCRETE FORMING AND ACCESSORIES - 031000 - 3

2.3 FORMWORK ACCESSORIES

- A. Form Ties: Snap-off type, metal, fixed or adjustable length, cone type, free of defects capable of leaving holes larger than 1 inch in concrete surface.
- B. Spreaders: Standard, non-corrosive metal form clamp assembly, of type acting as spreaders and leaving no metal within 1 inch of concrete face. Wire ties, wood spreaders or through bolts are not permitted.
- C. Form Anchors and Hangers:
 - 1. Do not use anchors and hangers exposed concrete leaving exposed metal at concrete surface.
 - 2. Symmetrically arrange hangers supporting forms from structural steel members to minimize twisting or rotation of member.
 - 3. Penetration of structural steel members is not permitted.
- D. Form Release Agent: Colorless mineral oil that will not stain concrete, or absorb moisture, or impair natural bonding or color characteristics of coating intended for use on concrete.
 - 1. Manufacturers:
 - a. Arcal Chemical Corporation Arcal-80.
 - b. Industrial Synthetics Company Synthex.
 - c. Nox-Crete Company Nox-Crete Form Coating.
 - d. Substitutions: Section 016000 Product Requirements.
- E. Corners: Fillet or Chamfer, rigid plastic or wood strip type; size as required to attain the finish indicated on the Drawings; maximum possible lengths. Bituminous Joint Filler: ASTM D1751.
- F. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Size, strength and character to maintain formwork in place while placing concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify lines, levels, and centers before proceeding with formwork. Verify dimensions agree with Drawings.
- B. When formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement before proceeding, request instructions from Engineer.

3.2 INSTALLATION

- A. Earth Forms:
 - 1. Earth forms are not permitted.

- B. Formwork General:
 - 1. Provide top form for sloped surfaces steeper than 1.5 horizontal to 1 vertical to hold shape of concrete during placement, unless it can be demonstrated that top forms can be omitted.
 - 2. Construct forms to correct shape and dimensions, mortar-tight, braced, and of sufficient strength to maintain shape and position under imposed loads from construction operations.
 - 3. Camber forms where necessary to produce level finished soffits unless otherwise shown on Drawings.
 - 4. Carefully verify horizontal and vertical positions of forms. Correct misaligned or misplaced forms before placing concrete.
 - 5. Complete wedging and bracing before placing concrete.
- C. Forms for Smooth Finish Concrete:
 - 1. Use steel, plywood or lined board forms.
 - 2. Use clean and smooth plywood and form liners, uniform in size, and free from surface and edge damage capable of affecting resulting concrete finish.
 - 3. Install form lining with close-fitting square joints between separate sheets without springing into place.
 - 4. Use full size sheets of form lines and plywood wherever possible.
 - 5. Tape joints to prevent protrusions in concrete.
 - 6. Use care in forming and stripping wood forms to protect corners and edges.
 - 7. Level and continue horizontal joints.
 - 8. Keep wood forms wet until stripped.
- D. Forms for Surfaces to Receive Membrane Waterproofing: Use plywood or steel forms. After erection of forms, tape form joints to prevent protrusions in concrete. Framing, Studding and Bracing:
 - 1. Space studs at 16 inches on center maximum for boards and 12 inches on center maximum for plywood.
 - 2. Size framing, bracing, centering, and supporting members with sufficient strength to maintain shape and position under imposed loads from construction operations.
 - 3. Construct beam soffits of material minimum of 2 inches thick.
 - 4. Distribute bracing loads over base area on which bracing is erected.
 - 5. When placed on ground, protect against undermining, settlement or accidental impact.
- E. Erect formwork, shoring, and bracing to achieve design requirements, in accordance with requirements of ACI 301.
- F. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- G. Obtain Engineer's approval before framing openings in structural members not indicated on Drawings.
- H. Install fillet and chamfer strips on members as indicated in the Drawings.
- I. Install void forms in accordance with manufacturer's recommendations.

3.3 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces are indicated to receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.
- D. Reuse and Coating of Forms: Thoroughly clean forms and reapply form coating before each reuse. For exposed work, do not reuse forms with damaged faces or edges. Apply form coating to forms in accordance with manufacturer's specifications. Do not coat forms for concrete indicated to receive "scored finish". Apply form coatings before placing reinforcing steel.

3.4 INSTALLATION - INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. Install formed openings for items to be embedded in or passing through concrete work.
- B. Locate and set in place items required to be cast directly into concrete.
- C. Coordinate with Work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.
- D. Install accessories straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- E. Form Ties:
 - 1. Use sufficient strength and sufficient quantity to prevent spreading of forms.
 - 2. Place ties at least 1 inch away from finished surface of concrete.
 - 3. Leave inner rods in concrete when forms are stripped.
 - 4. Space form ties equidistant, symmetrical and aligned vertically and horizontally unless otherwise shown on Drawings.
- F. Arrangement: Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.
- G. Construction Joints:
 - 1. Install surfaced pouring strip where construction joints intersect exposed surfaces to provide straight line at joints.
 - 2. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage.
 - 3. Show no overlapping of construction joints. Construct joints to present same appearance as butted plywood joints.
 - 4. Arrange joints in continuous line straight, true and sharp.
- H. Embedded Items:

- 1. Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, water stops, and other features.
- 2. Do not embed wood or uncoated aluminum in concrete.
- 3. Obtain installation and setting information for embedded items furnished under other Specification sections.
- 4. Securely anchor embedded items in correct location and alignment prior to placing concrete.
- 5. Verify conduits and pipes, including those made of coated aluminum, meet requirements of ACI 318 for size and location limitations.
- I. Openings for Items Passing Through Concrete:
 - 1. Frame openings in concrete where indicated on Drawings. Establish exact locations, sizes, and other conditions required for openings and attachment of work specified under other sections.
 - 2. Coordinate work to avoid cutting and patching of concrete after placement.
 - 3. Perform cutting and repairing of concrete required as result of failure to provide required openings.
- J. Screeds:
 - 1. Set screeds and establish levels for tops of concrete slabs and levels for finish on slabs.
 - 2. Slope slabs to drain where required or as shown on Drawings.
 - 3. Before depositing concrete, remove debris from space to be occupied by concrete and thoroughly wet forms. Remove freestanding water.
- K. Cleanouts and Access Panels:
 - 1. Provide removable cleanout sections or access panels at bottoms of forms to permit inspection and effective cleaning of loose dirt, debris and waste material.
 - 2. Clean forms and surfaces against which concrete is to be placed. Remove chips, saw dust and other debris. Thoroughly blow out forms with compressed air just before concrete is placed.

3.5 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.6 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads and removal has been approved by Engineer.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
- D. Leave forms in place for minimum number of days as specified in ACI 347.

3.7 ERECTION TOLERANCES

A. Construct formwork to maintain tolerances required by ACI 301.

3.8 FIELD QUALITY CONTROL

- A. Section 014000 Quality Requirements.
- B. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.
- C. Notify Engineer after placement of reinforcing steel in forms, but prior to placing concrete.
- D. Schedule concrete placement to permit formwork inspection before placing concrete.

SECTION 032000 - CONCRETE REINFORCING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Reinforcing bars.
 - 2. Welded wire fabric.
 - 3. Reinforcement accessories.

B. Related Sections:

- 1. Section 031000 Concrete Forming and Accessories.
- 2. Section 033000 Cast-In-Place Concrete.

1.2 REFERENCES

- A. American Concrete Institute:
 - 1. ACI 301 Specifications for Structural Concrete.
 - 2. ACI 318 Building Code Requirements for Structural Concrete.
 - 3. ACI 530.1 Specifications for Masonry Structures.
 - 4. ACI SP-66 ACI Detailing Manual.

B. ASTM International:

- 1. ASTM A82/A82M Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
- 2. ASTM A184/A184M Standard Specification for Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
- 3. A185/A185M-07 Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
- 4. ASTM A496/A496M Standard Specification for Steel Wire, Deformed, for Concrete Reinforcement.
- 5. ASTM A497/A497M Standard Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.
- 6. ASTM A615/A615M Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
- 7. ASTM A704/A704M Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
- 8. ASTM A706/A706M Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement.
- 9. ASTM A767/A767M Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.

- C. American Welding Society:
 - 1. AWS D1.4 Structural Welding Code Reinforcing Steel.
- D. Concrete Reinforcing Steel Institute:
 - 1. CRSI Manual of Standard Practice.
 - 2. CRSI Placing Reinforcing Bars.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel and welded wire fabric, bending and cutting schedules, and supporting and spacing devices.
- C. Certificates: Submit AWS qualification certificate for welders employed on the Work.
- D. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.
 - 1. Submit certified copies of mill test report of reinforcement materials analysis.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with CRSI Manual of Standard Practice.
- B. Prepare shop drawings in accordance with ACI SP-66.

1.5 QUALIFICATIONS

A. Welders: AWS qualified within previous 12 months.

1.6 COORDINATION

A. Coordinate with placement of formwork, formed openings and other Work.

PART 2 - PRODUCTS

2.1 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M or A706/A706M, 60 ksi yield grade, deformed billet bars, uncoated finish.
- B. Plain Wire: ASTM A82/A82M; unfinished.
- C. Welded Plain Wire Fabric: ASTM A185/A185M; in flat sheets; unfinished.

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2.2 ACCESSORY MATERIALS

- A. Tie Wire: Minimum 16 gage annealed type.
- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions. Metal surfaces of any of the above listed items not covered by at least 1/2-inch of concrete shall be 1 of the following:
 - 1. Hot-dip galvanized after fabrication in keeping with AASHTO M 232 Class D,
 - 2. Coated with plastic firmly bonded to the metal. This plastic shall be at least 3/32-inch thick where it touches the form and shall not react chemically with the concrete. Plastic shall not shatter or crack at or above -5 degrees F and shall not deform enough to expose the metal at or below 200 degrees F., or
 - 3. Stainless steel that meets the requirements of ASTM A493, Type 302. Stainless steel items are not required to be galvanized or plastic coated.

2.3 FABRICATION

- A. Fabricate concrete reinforcement in accordance with CRSI Manual of Practice.
- B. Form standard hooks for 180 degree bends, 90 degree bend, stirrup and tie hooks, and seismic hooks as indicated on Drawings.
- C. Form reinforcement bends with minimum diameters in accordance with ACI 318.
- D. Weld reinforcement in accordance with AWS D1.4.
- E. Galvanized or Epoxy-Coated Reinforcement: Clean surfaces, weld and re-protect welded joint in accordance with CRSI.
- F. Locate reinforcement splices not indicated on Drawings, at point of minimum stress.

2.4 SHOP FINISHING

- A. Galvanized Finish for Steel Bars: ASTM A767/A767M, Class I, hot dip galvanized after fabrication.
- B. Epoxy Coated Finish for Steel Bars: ASTM A934/A934M.
- C. Epoxy Coated Finish for Steel Wire: ASTM A884/A884M; Class A using ASTM A934/A934M.

PART 3 - EXECUTION

3.1 PLACEMENT

A. Place, support and secure reinforcement against displacement. Do not deviate from required position beyond specified tolerance.

CONCRETE REINFORCING - 032000 - 3

- 1. Do not weld crossing reinforcement bars for assembly.
- B. Accommodate placement of formed openings.
- C. Space reinforcement bars with minimum clear spacing in accordance with ACI 318.
 - 1. Where bars are indicated in multiple layers, place upper bars directly above lower bars.
- D. Maintain concrete cover around reinforcement in accordance with ACI 318, unless shown otherwise in the Drawings.

3.2 ERECTION TOLERANCES

- A. Section 014000 Quality Requirements.
- B. Install reinforcement within the following tolerances for flexural members, walls, and compression members:

REINFORCEMENT DEPTH		CONCRETE COVER TOLERANCE
Greater than 8 inches	plus or minus 3/8 inch	minus 3/8 inch
Less than 8 inches	plus or minus 1/2 inch	minus 1/2 inch

3.3 FIELD QUALITY CONTROL

- A. Section 014000 Quality Requirements.
- B. Field quality-control inspection and tests shall be performed by Contractor in accordance with ACI 318.
- C. Reinforcement Inspection:
 - 1. Placement Acceptance: Specified material requirements and specified placement tolerances.
 - 2. Welding: Inspect welds in accordance with AWS D1.1.
 - 3. Periodic Placement Inspection: Inspect for correct materials, fabrication, sizes, locations, spacing, concrete cover, and splicing.
 - 4. Weldability Inspection: Inspect for reinforcement weldability when formed from steel other than ASTM A706/A706M.
 - 5. Continuous Weld Inspection: Inspect reinforcement as required by ACI 318.
 - 6. Periodic Weld Inspection: Other welded connections.

SECTION 033000 - STRUCTURAL CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes structural cast-in-place and/or precast concrete for the following:
 - 1. Concrete (cast in place or precast) abutments.
 - 2. Concrete (cast in place or precast) planks.
 - 3. Concrete footings for railing and signs.

B. Related Sections:

- 1. Section 031000 Concrete Forming and Accessories: Formwork and accessories.
- 2. Section 032000 Concrete Reinforcing.
- 3. Section 051200 Structural Steel Framing

1.2 **REFERENCES**

- A. American Concrete Institute:
 - 1. ACI 301 Specifications for Structural Concrete.
 - 2. ACI 305 Hot Weather Concreting.
 - 3. ACI 306.1 Standard Specification for Cold Weather Concreting.
 - 4. ACI 308.1 Standard Specification for Curing Concrete.
 - 5. ACI 318 Building Code Requirements for Structural Concrete.
- B. ASTM International:
 - 1. ASTM A36/A36M Standard Specification for Carbon Structural Steel.
 - 2. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 3. A185/A185M-07 Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
 - 4. ASTM A416/A416M Standard Specification for Steel Strand, Uncoated Seven-Wire for Prestressed Concrete.
 - 5. ASTM A497/A497M Standard Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.
 - 6. ASTM A615/A615M Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
 - 7. ASTM A666 Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
 - 8. ASTM A706/A706M Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement.
 - 9. ASTM C31/C31M Standard Practice for Making and Curing Concrete Test Specimens in the Field.

- 10. ASTM C33 Standard Specification for Concrete Aggregates.
- 11. ASTM C39/C39M Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- 12. ASTM C42/C42M Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
- 13. ASTM C94/C94M Standard Specification for Ready-Mixed Concrete.
- 14. ASTM C143/C143M Standard Test Method for Slump of Hydraulic Cement Concrete.
- 15. ASTM C150 Standard Specification for Portland Cement.
- 16. ASTM C172 Standard Practice for Sampling Freshly Mixed Concrete.
- 17. ASTM C173/C173M Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
- 18. ASTM C231 Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
- 19. ASTM C260 Standard Specification for Air-Entraining Admixtures for Concrete.
- 20. ASTM C309 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
- 21. ASTM C330 Standard Specification for Lightweight Aggregates for Structural Concrete.
- 22. ASTM C494/C494M Standard Specification for Chemical Admixtures for Concrete.
- 23. ASTM C595 Standard Specification for Blended Hydraulic Cements.
- 24. ASTM C618 Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
- 25. ASTM C685/C685M Standard Specification for Concrete Made By Volumetric Batching and Continuous Mixing.
- 26. ASTM C845 Standard Specification for Expansive Hydraulic Cement.
- 27. C881 / C881M 02 Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete.
- 28. ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete.
- 29. ASTM C989 Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.
- 30. ASTM C1017/C1017M Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
- 31. ASTM C1064/C1064M Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
- 32. ASTM C1107/C1107M Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
- 33. ASTM C1116 Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- 34. ASTM C1157 Standard Performance Specification for Hydraulic Cement.
- 35. ASTM C1218/C1218M Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
- 36. ASTM C1240 Standard Specification for Silica Fume Used in Cementitious Mixtures.
- 37. ASTM D994 Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
- 38. ASTM D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- 39. ASTM D1752 Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
- 40. ASTM D5363 Standard Specification for Anaerobic Single-Component Adhesives (AN).
- 41. ASTM D6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
- 42. ASTM E96/E96M Standard Test Methods for Water Vapor Transmission of Materials.

- 43. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials.
- 44. ASTM E1643 Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs.
- 45. ASTM E1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- C. American Welding Society:
 - 1. AWS D1.1 Structural Welding Code Steel.
 - 2. AWS D1.4 Structural Welding Code Reinforcing Steel.
- D. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1168 Adhesive and Sealant Applications.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Product Data:
 - 1. Submit data on joint devices, attachment accessories, and admixtures.
 - 2. Submit manufacturer's product data including mixing instruction for concrete pigment.
 - 3. Indicate standard component configurations, design loads, deflections, cambers, and bearing requirements for all precast lifting inserts used in the production and transport of precast slab panels.
- C. Shop Drawings:
 - 1. Indicate layout, unit locations, fabrication details, unit identification marks, reinforcement, connection details, support items, location and type of lifting devices, dimensions, openings, and relationship to adjacent materials.
- D. Design Data:
 - 1. Submit concrete mix design for each concrete strength. Submit separate mix designs when admixtures are required for the following:
 - a. Hot and cold weather concrete work.
 - b. Air entrained concrete work.
 - 2. Identify mix ingredients and proportions, including admixtures.
 - 3. Identify chloride content of admixtures and whether or not chloride was added during manufacture.
- E. Samples: Submit two (2) panels, minimum of 6 x 6 inch in size illustrating the surface finish, color and texture for the two colors chosen by the Owner for the colored concrete to be used on the project. Assume a minimum of four (4) total panels will be required. One panel with smooth finish and one with brushed finish for each of the two colors to be chosen by the Owner.

F. Manufacturer's Certification: Submit concrete pigment manufacturer's certification that materials comply with specified requirements and are suitable for intended application.

1.4 CLOSEOUT SUBMITTALS

- A. Section 017700 Closeout Procedures.
- B. Project Record Documents: Accurately record actual locations of embedded utilities and components concealed from view in finished construction.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Conform to ACI 305 when concreting during hot weather.
- C. Conform to ACI 306.1 when concreting during cold weather.
- D. Acquire cement and aggregate from one source for Work.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Section 016000 Product Requirements: Environmental conditions affecting products on site.
- B. Maintain concrete temperature after installation at minimum 50 degrees F for minimum 7 days.
- C. Maintain high early strength concrete temperature after installation at minimum 50 degrees F for minimum 3 days.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 Product Requirements: Product storage and handling requirements.
- B. Handle precast members in position consistent with their shape and design. Lift and support only from support points or as designed by licensed Professional Engineer.
- C. Lifting or Handling Devices: Capable of supporting member in positions anticipated during manufacture, storage, transportation, and erection.
- D. Protect members to prevent staining, chipping, or spalling of concrete.
- E. Mark each precast slab member with date of production and final position in structure.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cement: ASTM C150, Type I Normal, Type IA Air Entraining, Type III High Early Strength or Type IIIA Air Entraining Portland type. Color shall be gray or white as required to achieve desired finish concrete color.
- B. Normal Weight Aggregates: ASTM C33.
- C. Coarse Aggregate Maximum Size: In accordance with ACI 318.
- D. Water: ACI 318; potable, without deleterious amounts of chloride ions.

2.2 ADMIXTURES

- A. Air Entrainment: ASTM C260.
- B. Chemical: ASTM C494/C494M.
- C. Fly Ash: ASTM C618 Class C or F
- D. Silica Fume: ASTM C1240.
- E. Slag: ASTM C989; ground granulated blast furnace slag.
- F. Plasticizing: ASTM C1017/C1017M.

2.3 ACCESSORIES

- A. Epoxy Adhesive for Concrete Dowelling: ASTM C881; Type IV; 2 component epoxy resinbase system.
 - 1. Manufacturers:
 - a. Simpson Strong-Tie, SET-XP epoxy adhesive.
 - b. Hilti, HIT-RE 500 V3 epoxy adhesive.
 - c. Dewalt/Powers, Pure 110+ epoxy adhesive.
 - d. Substitutions: As specified in Section 016000 Product Requirements.
- B. Ferrule Insert: Plain steel loop insert with ferrule threaded to accept bolt threads.
 - 1. MeadowBurke: FX-5 Ferrule Insert Loop.
 - 2. Dayton Superior: F42 Loop Ferrule Insert.
 - 3. Substitutions: Section 016000 Product Requirements.
- C. Grout: Non-shrink, Non-metallic, minimum yield strength of 10,000 psi at 28 days.

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- D. Bearing Pads: Neoprene (Polychloroprene) or Natural Rubber (Polyisoprene); to Shore A Durometer 50 minimum. Use an adhesive recommended and approved by the pad manufacturer to secure the pad to the top of the steel girders.
- E. Anchor Bolts for Approach Rail Posts:
 - 1. ASTM A193; Grade B8 or B8M.
 - 2. Finish: Stainless steel.
 - 3. Shape: Straight with embedded heavy hex head or nut.
 - 4. Nuts: ASTM A194; Grade B8 or B8M to match bolt.
 - 5. Washers: 304 or 316 SS to match bolt grade, circular of similar size to ASTM F436 washer dimensions.
- F. Picking Hardware: Contractor shall provide lifting inserts or similar items as needed for any items they choose to precast.
- G. CONCRETE MIX
- H. Select proportions for concrete in accordance with ACI 318 trial mixtures or field experience or both.

I. Provide concrete to the following criteria:

MATERIAL AND PROPERTY	MEASUREMENT
Compressive Strength (28 day)	4000 psi
Cement Type	ASTM C150
Cement Content (minimum)	600 pounds/cu yd
Aggregate Type	Normal weight
Water-Cement Ratio (maximum)	0.46 by weight
Aggregate Size (maximum)	1.5 inch
Air Content	4 percent plus or minus 1.5 percent
Fly Ash Content:	20 percent of cementitious materials by weight, maximum
Silica Fume Content:	10 percent of cementitious materials by weight, maximum
Slag	50 percent of cementitious materials by weight, maximum
Slump	3 inches plus or minus 1 inch

- J. Admixtures: Include admixture types and quantities indicated in concrete mix designs only when approved by Engineer.
 - 1. Use accelerating admixtures in cold weather. Use of admixtures will not relax cold weather placement requirements.
 - 2. Do not use calcium chloride nor admixtures containing calcium chloride.
 - 3. Use set retarding admixtures during hot weather.
 - 4. Add air entrainment admixture to concrete mix.
 - 5. For concrete exposed to deicing chemicals, limit fly ash, pozzolans, silica fume, and slag content as required by applicable code.
- K. Average Compressive Strength Reduction: Not permitted.
- L. Ready Mixed Concrete: Mix and deliver concrete in accordance with ASTM C94/C94M.
- M. Site Mixed Concrete: Mix concrete in accordance with ACI 318.

2.4 FABRICATION

A. Ensure reinforcing steel, anchors, inserts, plates, angles, and other cast-in items are embedded and located as indicated on both the Drawings, and the approved shop drawings.

B. Weld steel fabrications in accordance with AWS D1.1. Weld reinforcing steel in accordance with AWS D1.4. Do not tack weld reinforcing.

2.5 FINISHES

- A. Finish exposed-to-view finish surfaces of precast concrete members uniform in color and appearance.
- B. Cure members under identical conditions to develop required concrete quality, and minimize appearance blemishes including non-uniformity, staining, or surface cracking.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify requirements for concrete cover over reinforcement.
- B. Verify anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

3.2 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent. Remove laitance, coatings, and unsound materials.
- B. In locations where new concrete is doweled to existing work, drill holes in existing concrete, anchor steel dowels into hole prepared per epoxy resin manufacturers requirements.
- C. Remove debris and ice from formwork, reinforcement, and concrete substrates.
- D. Remove water from areas receiving concrete before concrete is placed.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with ACI 301.
- B. Notify testing laboratory and Engineer minimum 48 hours prior to commencement of operations.
- C. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints are not disturbed during concrete placement.
- D. Apply sealants in joints in accordance with Section 079000, Joint Protection, and the Drawings.
- E. Do NOT add water to colored concrete mixture in the field as it will have an impact on consistency of colored concrete.
- F. Deposit concrete at final position. Prevent segregation of mix.

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- G. Place concrete in continuous operation for each panel or section determined by predetermined joints.
- H. Consolidate concrete.
- I. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- J. Place concrete continuously between predetermined expansion, control, and construction joints.
- K. Do not interrupt successive placement; do not permit cold joints to occur.

3.4 CONCRETE FINISHING

- A. Float finish concrete surfaces.
- B. Remove any laitance or thin grout.
- C. Provide a Sidewalk finish on driving/walking surfaces. After floating, broom the surface using a broom with stiff bristles. Broom perpendicular to the centerline from edge to edge with adjacent strokes lightly overlapped.
- D. Use 3/4" chamfer strips or 1/8-inch radius edging tool to finish all driving/walking surface edges as indicated in the drawings.

3.5 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Concrete may be continuously moisture cured for a minimum of 3 days or cured using a curing compound complying with ASTM C309. Contractor may provide continuous moisture by watering a covering of heavy quilted blankets, by keeping concrete surfaces wet with water continuously and covering with a white reflective type sheeting, or by wetting the outside surfaces of wood forms.
 - 1. Runoff water shall be collected and disposed of in accordance with all applicable regulations. In no case shall runoff water be allowed to enter any lakes, streams, or other surface waters.
- C. Apply curing compounds according to the manufacturer's instructions using manufacturer's recommended application techniques. Apply curing compound at consistent time for all colored concrete panels to maintain close color consistency.

3.6 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements.

- B. Field inspection and testing will be performed by the Contractor in accordance with ACI 318 and as indicated below.
- C. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of Work.
- D. Concrete Inspections:
 - 1. Continuous Placement Inspection: Inspect for proper installation procedures.
 - 2. Periodic Curing Inspection: Inspect for specified curing temperature and procedures.
- E. Strength Test Samples:
 - 1. Sampling Procedures: ASTM C172.
 - 2. Cylinder Molding and Curing Procedures: ASTM C31/C31M, cylinder specimens, standard cured.
 - 3. Sample concrete and make one set of three cylinders for every 75 cu yds or less of each class of concrete placed each day and for every 5,000 sf of surface area for slabs and walls.
 - 4. When volume of concrete for any class of concrete would provide less than 5 sets of cylinders, take samples from five randomly selected batches, or from every batch when less than 5 batches are used.
 - 5. Make one additional cylinder during cold weather concreting, and field cure.
- F. Field Testing:
 - 1. Slump Test Method: ASTM C143/C143M.
 - 2. Air Content Test Method: ASTM C173/C173M.
 - 3. Temperature Test Method: ASTM C1064/C1064M.
 - 4. Measure slump and temperature for each compressive strength concrete sample.
 - 5. Measure air content in air entrained concrete for each compressive strength concrete sample.
- G. Minimum Cylinder Compressive Strength Testing:
 - 1. Test Method: ASTM C39/C39M.
 - 2. Test Acceptance: In accordance with ACI 318.
 - 3. Test one cylinder at 7 days.
 - 4. Test two cylinders at 28 days.
 - 5. Retain one cylinder for testing when requested by Engineer.
 - 6. Dispose remaining cylinders when testing is not required.
- H. Core Compressive Strength Testing:
 - 1. Sampling and Testing Procedures: ASTM C42/C42M.
 - 2. Test Acceptance: In accordance with ACI 318.
 - 3. Drill three cores for each failed strength test from concrete represented by failed strength test.
- I. Maintain records of concrete placement. Record date, location, quantity, air temperature and test samples taken.

3.7 PATCHING

- A. Allow Engineer to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Engineer upon discovery.
- C. Patch imperfections in accordance with ACI 301.
- D. Patching will not be allowed on the running surface of the concrete planks used at the Washout Repair as shown in the Contract Drawings.

3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by Owner/Engineer.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Owner/Engineer for each individual area.

3.9 TOLERANCES

A. Minor variations in appearance of integrally colored concrete, which are similar to natural variations in color and appearance of uncolored concrete, are acceptable.

SECTION 051200 - STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Structural shapes.
 - 2. Angles.
 - 3. Structural plates and bars.
 - 4. Wire mesh.
 - 5. Fasteners, connectors, and anchors.
 - 6. Grout.

1.2 REFERENCES

- A. American Institute of Steel Construction:
 - 1. AISC 303 Code of Standard Practice for Steel Buildings and Bridges.
 - 2. AISC 341 Seismic Provisions for Structural Steel Buildings.
 - 3. AISC 360 Specification for Structural Steel Buildings.

B. ASTM International:

- 1. ASTM A36/A36M Standard Specification for Carbon Structural Steel.
- 2. ASTM A307 Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
- 3. ASTM A53/A53M Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- 4. ASTM A193/A193M Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service.
- 5. ASTM A194/A194M Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both.
- 6. ASTM A242/A242M Standard Specification for High-Strength Low-Alloy Structural Steel.
- 7. ASTM A563 Standard Specification for Carbon and Alloy Steel Nuts.
- 8. ASTM A588/A588M Standard Specification for High-Strength Low-Alloy Structural Steel with 50 ksi (345 MPa) Minimum Yield Point to 4-in. (100-mm) Thick.
- 9. ASTM A847/A847M Standard Specification for Cold-Formed Welded and Seamless High Strength, Low Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance.
- 10. ASTM D4956 Standard Specification for Retroreflective Sheeting for Traffic Control
- 11. ASTM E94 Standard Guide for Radiographic Examination.
- 12. ASTM E164 Standard Practice for Ultrasonic Contact Examination of Weldments.
- 13. ASTM E165 Standard Test Method for Liquid Penetrant Examination.
- 14. ASTM E709 Standard Guide for Magnetic Particle Examination.

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- 15. ASTM F2329 Standard Specification For Zinc Coating, Hot-Dip, Requirements For Application To Carbon And Alloy Steel Bolts, Screws, Washers, Nuts, And Special Threaded Fasteners
- 16. ASTM F3125 Standard Specification for Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, 120/150 ksi Minimum Tensile Strength.
- 17. ASTM F436 Standard Specification for Hardened Steel Washers.
- C. American Welding Society:
 - 1. AWS A2.4 Standard Symbols for Welding, Brazing, and Nondestructive Examination.
 - 2. AWS D1.1 Structural Welding Code Steel.
- D. Research Council on Structural Connections:
 - 1. RCSC Specification for Structural Joints Using High Strength Bolts.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Shop Drawings:
 - 1. Indicate profiles, sizes, spacing, locations of structural members, attachments, and fasteners.
 - 2. Connections.
 - 3. Indicate welded connections with AWS A2.4 welding symbols. Indicate net weld lengths.
- C. Manufacturer's Mill Certificate: Certify products meet or exceed specified requirements.
- D. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within previous 12 months.
- E. Shop inspection reports for all fabricated steel items.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with the following:
 - 1. Structural Steel: AISC 303.

1.5 QUALIFICATIONS

- A. Fabricator: Company specializing in performing Work of this section with minimum five years documented experience.
- B. Welders and Welding Procedures: AWS D1.1 qualified within previous 12 months.

1.6 COORDINATION

- A. Coordinate work with the following:
 - 1. Section 033000 Cast-in-Plance Concrete: Items to be cast in precast concrete panels.

PART 2 - PRODUCTS

2.1 STRUCTURAL STEEL

- A. Angles: ASTM A588 weathering steel.
- B. Square and Rectangular Hollow Structural Sections: ASTM A847 weathering steel.
- C. Structural Plates and Bars: ASTM A588 weathering steel.

2.2 FASTENERS, CONNECTORS, ANCHORS, AND ACCESSORIES

- A. Weathering Steel Bolts:
 - 1. ASTM F3125; Grade A325, Type 3.
 - 2. Finish: Weathering steel.
 - 3. Nuts: ASTM A563; Grade C3 or DH3 heavy hex type.
 - 4. Washers: ASTM F436; Type 3 weathering steel, circular.
- B. Hot Dipped Galvanized Steel Bolts:
 - 1. For attaching Parks' shield to bridge.
 - 2. ASTM A307, Grade A.
 - 3. Finish: Hot dipped galvanized per ASTM F2329.
 - 4. Nuts: ASTM A563A; hot dipped galvanized.
 - 5. Washers: ASTM F844; hot dipped galvanized.
- C. Weathering Steel Threaded Rod:
 - 1. For gate hinge rod.
 - 2. ASTM A588.
 - 3. Finish: Weathering steel.
 - 4. Nuts: ASTM A563; Grade C3 or DH3 heavy hex type.
- D. Thread Locker: ASTM D5363; red, high strength, anaerobic.
 - 1. LOCTITE: 262 or 271.
 - 2. Permatex: High Strength Threadlocker Red.
 - 3. Gorilla: AT150.
 - 4. Substitutions: Section 016000 Product Requirements.
- E. Reflective Tape: ASTM D4956, Type 5, white

- 1. 3M: Scotchlite Diamond Grade LDP 3970 Series.
- 2. ORAFOL: Oralite V82.
- 3. Avery Dennison: V-5720 10 Year
- 4. Substitutions: Section 016000 Product Requirements.

2.3 WIRE MESH

A. Rectangular, weathering steel, welded wire mesh, sized per Drawings.

2.4 WELDING MATERIALS

A. Welding Materials: AWS D1.1; type required for materials being welded.

2.5 STOP SIGNS

- A. Stop signs shall be 24-inch Type R1-1. Fabrication shall be per the requirements of the WSDOT Sign Fabrication Manual (M 55-05) and the WSDOT Traffic Manual (M 51-02.10).
- 2.6 QUALITY CONTROL AND TESTS
 - A. Section 014000 Quality Requirements: Testing, inspection and analysis requirements.
 - B. Contractor shall provide for third party inspections of all steel fabrications; inspector shall review all steel fabrications for quality ensuring all framing and connections are per the contract Drawings and the approved fabrication shop drawings.
 - 1. Fabrication work completed in an AISC or WABO registered or certified shop, with a written procedural and quality control manual, and approved by the Owner/Engineer may waive the inspection requirements noted above. When fabrication inspections are waived, the fabricator shall submit a certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify bearing surfaces are at correct elevation.

3.2 PREPARATION

- A. Furnish templates for installation of anchor rods and embedments in concrete and masonry work.
- B. Prepare steel surfaces as required by manufacturer for installation of reflective tape.

3.3 ERECTION

- A. Allow for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in alignment until completion of erection.
- B. Field weld only those components indicated on Drawings.
- C. Field connect members with threaded fasteners; apply red thread locker to all bolted connections, tighten to snug tight.
- D. Do not field cut or alter structural members without approval of Engineer.
- E. After erection, touch up welds and abrasions to match shop finishes.
- F. Follow manufacturer's installation requirements for reflective tape.

3.4 ERECTION TOLERANCES

- A. Section 014000 Quality Requirements.
- B. Maximum Offset From Alignment: 1/4 inch.

3.5 FIELD QUALITY CONTROL

- A. Section 014000 Quality Requirements.
- B. Bolted Connections:
 - 1. Visually inspect all bolted connections.
- C. Welding: Inspect welds in accordance with AWS D1.1.
 - 1. Certify welders and conduct inspections and tests as required. Record types and locations of defects found in work. Record work required and performed to correct deficiencies.
 - 2. Visually inspect all welds.
 - 3. Ultrasonic Inspection: ASTM E164; perform on all full penetration welds.
 - 4. Liquid Penetrant Inspection: ASTM E165.
- D. Correct defective bolted connections and welds.

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes miscellaneous wood framing and glulam deck panels; preservative treatment of wood.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A135.4 Basic Hardboard.
 - 2. ANSI A208.1 Mat-Formed Wood Particleboard.
- B. American Wood-Preservers' Association:
 - 1. AWPA M4 Standard for the Care of Preservative-Treated Wood Products.
 - 2. AWPA U1 Use Category System: User Specification for Treated Wood.

C. ASTM International:

- 1. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- 2. ASTM B695 Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
- 3. ASTM C1177/C1177M Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
- 4. ASTM C1280 Standard Specification for Application of Gypsum Sheathing.
- 5. ASTM C1396/C1396M Standard Specification for Gypsum Board.
- 6. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- 7. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials.
- 8. ASTM F1667 Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- D. Forest Stewardship Council:
 - 1. FSC Guidelines Forest Stewardship Council Guidelines.
- E. Green Seal:
 - 1. GS-36 Aerosol Adhesives.

- F. National Lumber Grades Authority:
 - 1. NLGA Standard Grading Rules for Canadian Lumber.
- G. Northeastern Lumber Manufacturers Association:
 - 1. NELMA Standard Grading Rules for Northeastern Lumber.
- H. The Redwood Inspection Service:
 - 1. RIS Standard Specifications for Grades of California Redwood Lumber.
- I. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1168 Adhesive and Sealant Applications.
- J. Southern Pine Inspection Bureau:
 - 1. SPIB Standard Grading Rules for Southern Pine Lumber.
- K. U.S. Department of Commerce National Institute of Standards and Technology:
 - 1. DOC PS 1 Construction and Industrial Plywood.
 - 2. DOC PS 2 Performance Standard for Wood-Based Structural-Use Panels.
 - 3. DOC PS 20 American Softwood Lumber Standard.
- L. West Coast Lumber Inspection Bureau:
 - 1. WCLIB Standard Grading Rules for West Coast Lumber.
- M. Western Wood Products Association:
 - 1. WWPA G-5 Western Lumber Grading Rules.
- N. Western Wood Preservers Institute:
 - 1. Best Management Practices for the Use of Treated Wood in Aquatic Environments.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit technical data on wood preservative materials, and application instructions.
- C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with the following:
 - 1. Lumber Grading Agency: Certified by DOC PS 20.
 - 2. Lumber: DOC PS 20.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Section 016000 - Product Requirements: Product storage and handling requirements.

PART 2 - PRODUCTS

2.1 LUMBER MATERIALS

- A. Lumber Grading Rules: WWPA.
- B. Miscellaneous Framing and Decking: Douglas-Fir or Larch species, Number 1 grade or better, 19 percent maximum moisture content, pressure preservative treat.

2.2 GLUE-LAMINATED DECK PANELS

- A. Glue-laminated members shall use exterior grade, wet use adhesive and be pressure treated after fabrication.
- B. Traffic surface of deck panels shall be intentionally roughened to improve traction.
- C. Lumber shall be Douglas Fir-Larch and panels shall use a column type layup such as EWS #1 with a minimum bending strength of 1450 psi.

2.3 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Fasteners: Refer to Section 051200 Structural Steel Framing.

2.4 FACTORY WOOD TREATMENT

- A. Preservative treatments for timber and lumber shall be per section 9-09.3 of the WSDOT Standard Specifications.
- B. Treat timber members according to "Best Management Practices for the Use of Treated Wood in Aquatic Environments" as published by the Western Wood Preservers Institute.

PART 3 - EXECUTION

3.1 FRAMING

- A. No field cutting of pressure treated lumber is allowed unless approved by the Engineer. Holes for bolting rail members to posts shall be field bored.
- B. Set members level and plumb, in correct position.
- C. Fasten framing in accordance with the Drawings.
- D. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in alignment until completion of erection and installation of permanent bracing.
- E. Place horizontal members, crown side up.
- F. Construct framing members full length without splices.

3.2 SITE APPLIED WOOD TREATMENT

- A. Treat field bored holes. Apply three coats of copper naphthenate (2% solution) to all field bored holes.
- B. Allow preservative to dry prior to erecting members.
- C. Treat timber members according to "Best Management Practices for the Use of Treated Wood in Aquatic Environments" as published by the Western Wood Preservers Institute.

3.3 TOLERANCES

- A. Section 014000 Quality Requirements.
- B. Framing and Decking Members: 1/4-inch from indicated position, maximum.
- C. Bridge Walking Surfaces: 1/4-inch maximum gap between members, and 1/4-inch maximum elevation difference between adjacent planks/panels.

SECTION 310000 - EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Clearing and grubbing.
 - 2. Grading.
 - 3. Aggregate materials.
 - 4. Boulders for gate barricades.

1.2 REFERENCES

- A. Washington State Department of Transportation (WSDOT):
 - 1. Standard Specifications for Road, Bridge and Municipal Construction, current edition.

B. ASTM International:

- 1. ASTM C136 Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- 2. ASTM D1556 Standard Test Method for Density of Soil in Place by the Sand-Cone Method.
- 3. ASTM D1557 Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (6,000 ft-lbf/ft3 (2,700 kN-m/m3)). ASTM D2167 Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
- 4. ASTM D2434 Standard Test Method for Permeability of Granular Soils (Constant Head).
- 5. ASTM D2922 Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- 6. ASTM D3017 Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Materials Source: Submit name of imported materials suppliers. Submit a minimum of two (2) sieve analysis reports for materials from each supplier to be used.
- C. Manufacturer's Certificate: Certify products meet or exceed specified requirements.
- D. Product Data: Submit data for herbicide. Indicate compliance with applicable codes for environmental protection.

1.4 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout the Work.
- B. Conform to applicable code for environmental requirements, disposal of debris, burning debris on site, and use of herbicides.

PART 2 - PRODUCTS

2.1 CRUSHED AGGREGATE SURFACING

A. Crushed aggregate surfacing shall meet the requirements of Crushed Surfacing Top Course (CSTC) per the WSDOT Standard Specifications section 9-03.9(3).

2.2 DRAIN ROCK

A. Drain rock shall meet the requirements of Gravel Backfill for Drywells per WSDOT Standard Specifications section 9-03.12(5).

2.3 SPALL SIZED FILL FOR DRAINAGE

A. Spalls shall meet the requirements of Quarry Spalls per WSDOT Standard Specifications section 9-13.1(5).

2.4 BOULDERS

- A. Boulders used as part of the gate barricade system shall be 3 man or 4 man Habitat Boulders per WSDOT Standard Specifications section 9-03.11(4).
- 2.5 TRAIL SURFACE AGGREGATE (TSA, used for Alternate Bid Item A4)
 - A. Trail surface aggregate can be made using a traditional sieve gradation, or using a "recipe" approach that mixes standard AASHTO gradations. Acceptable recipe and gradation along with additional aggregate properties shall be as noted in the attached Technical Bulletin Trail Surface Aggregate (TSA) dated 10/2013.

PART 3 - EXECUTION

3.1 PREPARATION

A. Call Local Utility Line Information service not less than three working days before performing Work.

1. Request underground utilities to be located and marked within and surrounding construction areas.

3.2 **PROTECTION**

- A. Protect trees, plant growth, and features designated to remain.
- B. Protect bench marks, survey control points, and existing structures from damage or displacement.

3.3 CLEARING AND GRUBBING

A. See Section 312216 – Subgrade Preparation: Subgrade for surfacing.

3.4 EXCAVATION

- A. Verify existing plant life designated to remain is tagged or identified prior to work.
- B. Waste all excavated materials not meeting requirements for Crushed Aggregate Surfacing as designated by the Engineer.

3.5 REMOVAL

A. Remove debris and extracted plant life not designated for reuse in the project, from the site.

3.6 STOCKPILING

- A. Stockpile materials on site at locations approved for laydown.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

3.7 STOCKPILE CLEANUP

- A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.
- 3.8 FILLING
 - A. Fill areas to contours and elevations with unfrozen materials.
 - B. Place and compact materials as required by Section 312216.
 - C. Make grade changes gradual. Blend slope into level areas.
 - D. Repair or replace items indicated to remain that are damaged by excavation or filling.

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3.9 GRADING

- A. Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
 - 3. Subgrades shall be compacted to 90% of maximum dry density.
- 3.10 BOULDER PLACEMENT
 - A. Boulders shall be located as shown on the drawings. Boulders shall be keyed into existing grade as to prevent their accidental displacement.

3.11 TSA TRANSPORT, PLACEMENT, AND COMPACTION

- A. See attached Technical Bulletin Trail Surface Aggregate (TSA) dated 10/2013, for additional TSA specifications and Other Important TSA Considerations for working with TSA.
- 3.12 TOLERANCES
 - A. Top Surface of Subgrades: Plus or minus 2-inches from required elevation.
 - B. Top Surface of Finish Grade: Plus or minus 1-inch from required elevation, and within a tolerance of 1/2-inch when tested with a 10-foot straightedge.
- 3.13 FIELD QUALITY CONTROL
 - A. Section 014000 Quality Requirements: Field inspecting, testing, adjusting, and balancing.
 - B. Perform laboratory material tests in accordance with ASTM C136 and ASTM D1557.
 - C. Perform in place compaction tests in accordance with the following:
 - 1. Density Tests: ASTM D1556, ASTM D2167, or ASTM D2922.
 - 2. Moisture Tests: ASTM D3017.
 - D. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.
 - E. Frequency of Tests: Minimum of two (2) compaction tests at each repair area.

Trail Surface Aggregate (TSA)

<u>Trail Surface Aggregate (TSA)</u>: A specific mixture of aggregate designed for surfacing trails that is designed to achieve very high densities to withstand traffic and erosion better than traditional aggregates.

Note that this specification was updated in October 2013. TSA changes were made to reduce the amount of loose surface stone in TSA placements. A plasticity index limit was added and a certification form is available.

Background:

Trail Surface Aggregate (TSA) is designed for use as a wearing surface for trails. It is different from traditional materials used to surface trails such as "number 10's". TSA is designed to have a uniform mixture of a range of rock sizes from 3/8-inch all the way down to fine material. This uniform mix allows excellent compaction to achieve a higher in-place aggregate density than commonly used aggregates to resist wear and erosion. The mix was designed by the PSU Center for Dirt and Gravel Road Studies, and is based on a "downsizing" of the successful and popular Driving Surface Aggregate (DSA) developed for use on roads.

Specification:

All TSA material is to be derived from natural stone formations. Stone is defined as rock that has been crushed; rock is defined as consolidated mineral matter. Both are restricted to that which has been mined or quarried from existing geologic bedrock formations.

All components of the aggregate mix, including fines passing the #200 sieve, are to be derived by crushing parent rock material that meets TSA purchasing specifications for abrasion resistance, pH, Plasticity, and freedom from contaminants. Determine the amount of particles less than #200 sieve size using the washing procedures PTM No. 100.

TSA can be made using a traditional sieve gradations, or using a "recipe" approach that mixes existing aggregate gradations. The "recipe approach" may be more cost effective for ordering small amounts of TSA for smaller jobs.

TSA RECIPE:

Combine existing aggregates and water in the ratio:

- 1 part AASHTO # 8
- 4 parts unwashed AASHTO # 10 (or B3 sand)
- 1 part minus #200 fines (collector fines)

Additional TSA Specifications:

Aggregate Properties:

- <u>Hardness</u>: The acceptable limit as measured by weight loss is "less than 40% loss". Los Angeles Abrasion test, AASHTO T-96 [ASTM C 131] shall be used to determine this property. Existing data obtained from tests made for and approved by PENNDOT will be accepted.
- **<u>pH</u>**: Aggregate must be in the range of pH 6 to pH 12.45 as measured by EPA 9045C.
- Plasticity: Material must not exceed Plasticity Index (PI) rating of 6 by ASTM D4318 Standard.
- <u>Parent Material</u>: TSA can be made from limestone, sandstone, or any other parent material that meets the hardness, pH, gradation, and other requirements as outlined in this document.

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Close-up of worker's gloved hand in TSA pile.

OD AD ATION

ISA GRADATION:		
Sieve Size	TSA Percent Passing	
1/2"	100%	
3/8"	96-100	
#4	75-90	
#8	55-75	
#16	35-50	
#200	12-20	



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Additional TSA Specifications (continued)

- **Optimum Moisture**: Material is to be delivered and placed at optimum moisture content as determined for that particular source. The optimum percentage moisture is to be identified by the supplier in the bid/purchasing documents. The optimum percentage moisture is to be determined using Proctor Test ASTM D698, procedure C, Standard.
- <u>Transport</u>: Truck tarps must be used to cover 100% of the load's exposed surface from the time of loading until immediately before dumping, including standing time waiting to dump.
- <u>Placement</u>: TSA should be placed from the furthest point working back towards the source to avoid running equipment on the final trail.
 - <u>Paver</u>: When possible on large jobs, a small paver should be used to place TSA. This will reduce aggregate segregation by size that occurs when any aggregate is dumped and spread. It is recommended that the minimum depth of placement should be 4 inches loose, 3 inches compacted.
 - <u>"Dump and Spread"</u>: On small trails, a paver may be cost-prohibitive. TSA can be placed using a "dump and spread" method on small trails. Be sure the aggregate is not "overworked" which may cause size segregation. TSA must be placed in one layer.
 - <u>Compaction</u>: A minimum 3 ton vibratory roller is to be used to compact the final surface. The initial pass of the roller should be in static mode. TSA must be compacted while it is at optimum moisture to achieve maximum density. If TSA sticks to the drum of the roller, stop and wait for the surface to dry further.

Other Important TSA Considerations:



Paver-placement of TSA is preferred for longer sections of trail as pictured above.



TSA can be successfully placed with small equipment for short sections of trail. Proper compaction at optimum moisture is crucial. Note the crown in the finished surface.

- <u>Mixing fines</u>: When mixing aggregates to create TSA, take care not to pre-wet any "minus #200" fines before they are added to the mixture. Doing so may cause the fines to clump into balls that can be difficult to break apart by mixing. These "balls" of fines will appear in the final trail, and may cause the rest of the trail to have insufficient fine material.
- <u>Weather</u>: Since TSA is to be placed at optimum moisture, TSA placement is not recommended if the forecasted weather is too cold or wet to allow the material to dry for 1-2 days after placement.
- **<u>Trail Closure</u>**: Trail use should be prohibited or restricted for TSA placement and the following day.
- Site Preparation:
 - **Drainage**: All trail drainage concerns must be addressed before TSA placement.
 - <u>Crown</u>: If possible, TSA (like all trail surfaces) should be placed with a crown or cross-slope of not less than ¼" per foot 3-4% for drainage. This same crown or cross-slope should be established in the trail base materials <u>before</u> TSA placement. Establish side-slope with your base, and reflect it in TSA.
 - **Base material**: On some existing compacted trails, no base modification is required. The ideal base course for TSA is a 2-6 inch thick layer of well graded compacted aggregate such as PennDOT's 2A. TSA placement directly over "open graded" stone (such as railroad ballast) is not recommended. When placing TSA <u>directly</u> on fabric, a minimum 6" uncompacted aggregate depth is recommended.
- <u>ADA accessibility</u>: Properly placed and compacted TSA will meet all Americans with Disabilities Act requirements for gravel surface on properly designed trails.



SECTION 312216 - SUBGRADE PREPARATION

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

A. This section covers preparing graded trailbed for surfacing.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 SUBGRADE FOR SURFACING

- A. In preparing the subgrade for surfacing, the Contractor shall:
 - 1. Remove all trees, brush, weeds, vegetation, grass, and other objectionable debris from the roadbed immediately before placing surfacing materials.
 - 2. Dispose of all debris as the Engineer directs.
 - 3. Drain water from all low spots or ruts.
 - 4. Shape the entire subgrade to a uniform surface running reasonably true to the line, grade, and cross-section staked by the Engineer.
 - 5. Process the subgrade, if necessary, in cut areas to remove materials too coarse for mechanical trimming and recompaction.
 - 6. Compact the subgrade to a depth of 6". Compaction shall achieve 95% of the maximum density as determined by compaction control test, WSDOT Test Method No. 606 or AASHTO T99 Method A as applicable. In the top 1', horizontal layers shall not exceed 4" in depth before compaction. No layer below the top 1' shall exceed 8" in depth before compaction. If the underlying material is too soft to permit proper compaction of the subgrade, the Contractor shall loosen, aerate (or excavate and remove) and compact the subgrade until the top layer can be recompacted as required.
 - 7. Remove excess material that does not drift to low spots during blading and shaping. The Contractor shall dispose of this excess by placing it where the subgrade lacks material or by wasting it, as the Engineer directs.
 - 8. Add materials as the Engineer directs where the subgrade needs more to bring it up to grade. The Contractor shall water and compact these added materials as needed to produce a true finished subgrade.

3.2 COMPACTION AND MOISTURE CONTROL TESTS/CORRECTIONS

- A. If the Engineer determines that field testing is required to determine compaction density/optimum moisture content, then the Contractor shall make arrangements with an independent lab to perform the testing. All certified test results shall be sent directly to the Engineer. Costs for testing required by the Engineer shall be paid as per General Conditions, Section 7.02.
- B. Compaction density
 - 1. If compaction tests ordered by the Engineer indicate that the Contractor's methods are not obtaining minimum compaction densities as stated above, then work already completed shall be removed and reprocessed until densities meet stated requirements. The Contractor's methods shall be revised to provide specified densities. The Contractor shall provide additional testing at the Contractor's own cost to verify that work redone meets specifications and/or that the Contractor's revised methods will obtain required results.
- C. Moisture content corrections
 - 1. The Engineer may permit the Contractor to place materials having a higher moisture content than specified in this section if:
 - a. The material consists of free-draining rock, gravel, or sand that produces a firm, stable embankment, and
 - b. The excess moisture will not impair the embankment.
 - 2. However, the Engineer may, at any time, require the Contractor to return to normal moisture content specifications.
 - 3. The state will consider all costs of drying embankment material incidental to other work.
 - 4. If weather prevents drying excavation or borrow materials to the required moisture content, the Engineer may order the Contractor to alter normal procedures or equipment to prevent damage to the partial or complete embankment. The Contractor shall repair at no expense to the Owner any partial or complete embankment that loses stability because of continued hauling across it. Evidence of lost stability shall include pumping or rutting. The Contractor shall also alter hauling equipment or procedures to prevent further damage.
 - 5. If it appears that rain or snow will soak an area that has been aerated, the Contractor shall temporarily seal it against the weather. Should the Contractor fail to do so, any additional aeration required to restore the area to its previous condition shall be done at no expense to the Owner.
 - 6. Maximum density and optimum moisture for non-granular materials will be determined using WSDOT Test Method No. 606 or AASHTO T99 Method A as applicable.
 - 7. In place density and moisture content will be determined using Test Methods WSDOT FOP for AASHTO T 310 and WSDOT SOP for T 615.

SECTION 323400 – PREFABRICATED BRIDGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Bridge design.
 - 2. Bridge fabrication.
 - 3. Bridge delivery and erection.
 - 4. Bridge load rating.

1.2 **REFERENCES**

- A. Governing Design Code:
 - 1. American Association of State Highway and Transportation Officials (AASHTO), LRFD Bridge Design Specifications, 9th Edition, 2020 (AASHTO LRFD).
- B. Other Reference Codes and Standards:
 - 1. AASHTO/NSBA, Steel Bridge Fabrication Guide Specification, S2.1, 2018.
 - 2. AISC, Steel Construction Manual, 15th Edition, 2017.
 - 3. American Welding Society, Structural Welding Code, D1.5, 2015.
 - 4. ANSI/AWC NDC-2015 National Design Specification for Wood Construction, 2015.
 - 5. ASTM A193 Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service.
 - 6. ASTM A194 Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both.
 - 7. ASTM A588 Standard Specification for High-Strength Low-Alloy Structural Steel, up to 50 ksi Minimum Yield Point, with Atmospheric Corrosion Resistance.
 - 8. ASTM A709 Standard Specification for Structural Steel for Bridges.
 - 9. ASTM A847/A847M Standard Specification for Cold-Formed Welded and Seamless High Strength, Low Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance.
 - 10. ASTM F3125 Standard Specification for Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, 120/150 ksi Minimum Tensile Strength.
 - 11. ASTM F436 Standard Specification for Hardened Steel Washers.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Bridge Drawings and Calculations: Manufacturer shall design the prefabricated bridge and prepare engineered drawings with supporting calculations for the bridge. The drawings and

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calculations shall be stamped by a Civil or Structural Engineer licensed in the State of Washington who has a minimum of five (5) years of experience as a bridge designer.

- C. Bridge Erection Plan: Submit an erection plan for the placement of the bridge at the bridge site. Include information on joining any prefabricated modules of the bridge.
- D. Material Certificates: Submit certificates for all materials within the bridge. Traceability of heat numbers is required for all steels.
- E. Inspection Reports: Submit all inspection reports performed as part of quality control checks and non-destructive testing.

1.4 QUALITY ASSURANCE

- A. Certified Weld Inspector: Manufacturer shall employ a Certified Weld Inspector (CWI) with AWS QC1 endorsement.
- B. Non-Destructive Testing: All welds within the structure shall be visually inspected for conformance to the approved shop drawings.
- C. Bridge Fabricator: Fabrication shop shall have an up to date quality certification by AISC as a Certified Bridge Fabricator Advanced (Major) with Fracture Critical Endorsement.

PART 2 - PRODUCTS

2.1 WEATHERING STEEL

- A. All structural steel for the bridge shall be weathering steel meeting the requirements of ASTM A588 or ASTM A709 Grade 50W.
- B. Secondary members may be weathering steel tube sections meeting the requirements of ASTM A847.
- C. All steel shall be domestically produced.

2.2 GLUED LAMINATED DECK PANELS

A. Glued-laminated deck panels shall be per Section 061000 – Rough Carpentry.

2.3 FASTENERS

- A. Fasteners shall be per Section 051200 Structural Steel Framing, unless noted otherwise.
- B. Anchor bolts shall ASTM A193, Grade B8 or B8M stainless steel. Use ASTM A194; Grade B8 or B8M nuts and 304 or 316 SS washers to match bolts.

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2.4 ELASTOMERIC BEARINGS

A. Elastomeric pads shall be Grade 4, 60-Durometer Neoprene or natural rubber. Pads need not meet AASHTO LRFD design criteria if used only as leveling pads.

PART 3 - EXECUTION

3.1 BRIDGE DESIGN

- A. Dead Loads: Design the bridge for total dead weight plus an additional wearing surface allowance of 35 pounds per square foot on the bridge deck.
- B. Live Loads: Design the bridge for the worst case of one lane of vehicular traffic, supporting HL-93 design vehicle plus Dynamic Load Allowance with an ADTT of 100; OR 90 pounds per square foot pedestrian loading.
- C. Lateral Loads: Wind and seismic loads shall be per AASHTO LRFD. Use Site Class D and an Operational Classification of Other for seismic design.
- D. Railing: The bridge railing has been designed and shall be fabricated as shown on the project drawings. The bridge structure shall be capable of resisting Bicycle Railing Loads per AASHTO LRFD imparted upon the railing shown in the drawings.
- E. Camber: Bridge shall have a vertical camber dimension at the mid-span equal to 100% of the anticipated full dead load deflection. If beam mill camber is adequate to accommodate full dead load deflection, the fabricator shall indicate such on the shop drawings.
- F. Deflection: Deflection from live loading shall be limited to L/500.

3.2 FABRICATION

- A. Welding: Welding procedures and weld qualification test procedures shall conform to the provisions of AWS D1.5. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification and shall match the corrosion properties of the base metal.
- B. Welders: Welders shall be qualified for each process and position used while fabricating the bridge. Qualification tests shall be in accordance with AWS D1.1/D1.5. All weld qualifications and records shall be kept in accordance with the Fabricator's Quality Assurance Manual which has been approved by AISC.
- C. Bolted Connections: For shipping purposes, the bridge may be fabricated in sections. Sections shall be field assembled using bolted connections and or field welding as indicated on the manufacturer's shop drawings. All bolted connections are considered to be pretensioned. All bolts are to be pretensioned per the requirements of section 8.2 of the Specification for Structural Joints Using High-Strength Bolts. Recommended tightening method of all structural bolts shall be Turn-of-the-Nut Pretensioning.

3.3 FINISH

- A. All exposed surfaces of structural steel to be cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 1, SSPC-SP1 solvent cleaning. Exposed surfaces of steel shall be defined as those surfaces seen from the deck or from the outside and bottom of the structure. All other surfaces to have standard mill finish.
- B. Bridge deck panels shall be installed with a maximum 1/4-inch gap between deck panels and a maximum deviation in surface elevations of 1/4-inch panel to panel.

3.4 DELIVERY & ERECTION

- A. Contractor is responsible for delivery of the bridge to the site. Contractor shall coordinate as needed with the bridge manufacturer.
- B. Contractor is responsible for installation of the bridge at the bridge site. Contractor shall coordinate as needed with the bridge manufacturer.
- C. Any field welding shall be performed by AWS Certified Welders.

3.5 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

SECTION 329219 – HYDROSEEDED EROSION CONTROL

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

A. This section covers hydroseeding of restored areas, drainage ditches and other areas disturbed by construction.

PART 2 – PRODUCTS

2.1 SEED

A. All seed shall be provided and planted on a Pure Live Seed (PLS) basis. The source of all seed shall be from within the geographic region that is limited to Eastern Washington and Eastern Oregon to ensure regional compatibility. All seed material provided shall be fully compliant with Washington Administrative Code, Title 16, Chapter 16-302, with respect to assuring identity, purity, germination, percent weeds, and percent noxious weeds. Evidence of such assurance will be attached to all units (bags) of seed provided. Minimum data to be provided on each unit (bag) of seed will include the following: Seed variety (species), lot number, net weight (total and for each species), percent of each species contained in the bag, origin (where the seed was harvested), percent purity for each species, percent germination for each species, percent weeds, percent noxious weeds, date of testing, and name and address of seller. Species contained in the Seed Mix, and percent of each species (on a PLS basis) are:

	PERCENT BY LIVE	APPLICATION RATE
SEED	WEIGHT	(LBS/ACRE)
Reliable Sandberg's Bluegrass (Poa sandbergii)	25	6
Secar Snake River Wheatgrass (Elymus	29	7
wawawaiensis)		
Bluebunch Wheatgrass (Pseudorognaria spicata)	29	7
Canby Bluegrass (Poa canbyi)	17	4

2.2 WOOD FIBER MULCH

A. The bonded fiber matrix (B.F.M.) shall be soil guard as manufactured by MAT, INCORPORATED (1-888-477-3028) or an approved equal

PART 3 - EXECUTION

3.1 GENERAL

A. Erosion control seeding shall be applied/placed on all areas requiring site restoration and other areas of the project outside the finished trail surfacing or trail parking areas where existing vegetation is disturbed by construction.

3.2 SEEDING METHODS

- A. All seed mixes shall be applied by an approved hydroseeder which utilizes water as the carrying agent, and maintains continuous agitation through paddle blades. It shall have an operating capacity sufficient to agitate, suspend, and mix into a homogeneous slurry the specified amount of seed and water or other material to be used. Distribution and discharge lines shall be large enough to prevent stoppage and shall be equipped with a set of hydraulic discharge spray nozzles which will provide a uniform distribution slurry.
- B. The seed mix and fertilizer shall be applied in the first application and the bonded fiber matrix shall be shot separately immediately afterwards as a separate application. The seed mixture shall have a colored tracer added to allow visual inspection of spray coverage.
- C. The Engineer may approve hand seeding methods for small isolated areas that are not ready when hydroseeding operations take place.

3.3 HYDROSEEDING

A. Tank design for hydroseeding shall be as follows:

APPLICATION	DESCRIPTION	MATERIAL
1 st	Seed Mix	24 lbs./acre
2 nd	B.F.M.	3,500 lbs./acre

- B. Mix the materials as per manufacturer's recommendation to obtain a homogeneous blend before application. The mixture shall not remain in slurry longer than 6 hours or re-circulated more than 90 minutes before or during application. Mixture shall be installed with the use of a gun.
- C. Application of the mixture shall *not be allowed* during periods of rain or 24 hours before a predicted rain storm or when rain is forecasted within 24 hours of the proposed application. The B.F.M. must dry to conform to the ground in a bonded fiber matrix. Coverage shall be 100 percent to form a uniform mat.

3.4 ESTABLISHMENT

A. The Contractor shall be responsible for maintaining seeded areas until final completion of the project. This responsibility shall include reseeding/replanting areas that do not show active, vigorous growth with no bare spots over 1' square, and the repair of rilled or gullied side slopes by placing lost soil and reseeding.

B. After the seeded areas are established and approved by the Engineer, completely remove the TESC measures

3.5 CLEAN UP

- A. Clean up excess materials and debris from project site upon completion of work or sooner if directed. Remove any seed or BFM slurry from adjacent surfaces including pavements, existing trees signs etc.
- B. Leave the site in a neat and tidy condition daily.