



*Washington  
Department of*  
**FISH and  
WILDLIFE**

# **SWAKANE CANYON RIFLE AND PISTOL RANGE**

**DIRECTOR:  
KELLY SUSEWIND**

**ASSISTANT DIRECTOR:  
TIMOTHY W. BURNS, P.E.**

**CHIEF ENGINEER:  
GLENN F. GERTH, P.E.**



**DATE:  
FEBRUARY 2021**

**PROJECT NO.  
CN:R21:2019-1**

**PROJECT MANAGER:  
LANE SATER**

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## DIVISION 0 – BID AND CONTRACT DOCUMENTS

### SECTION 00030 NOTICE TO CONTRACTORS

Sealed bids for the following Public Works Project will be received until 2:00 p.m. on April 8, 2021 at 600 Capitol Way North, MS: 43158, Olympia, Washington, and will be publicly opened and read.

Due to the safety and health of the public and employees WDFW CAMP is temporarily closing Bid Openings to public attendance. Bid opening results will be made public within 24 hours of opening.  
**Please Note: The Public will not be able to attend this bid opening.**

**PROJECT:**

Swakane Canyon Rifle and Pistol Range

**NUMBER:**

CN:R21:2019-1

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Provide all labor, material, equipment, and permits to construct the following: Site grading, impact berms, swales, signing, striping, barrier rock, information kiosk, planting, gravel parking, wheel stops, gravel path, concrete ADA stall pavement, concrete shooting pads and gates at the Department's Swakane Canyon Rifle and Pistol Range, located at US Forest Service Road 7415, N047d, 33', 16.33", W120d, 18', 33.62", Washington, in Chelan County.

**Engineer's Estimate:** \$105,000

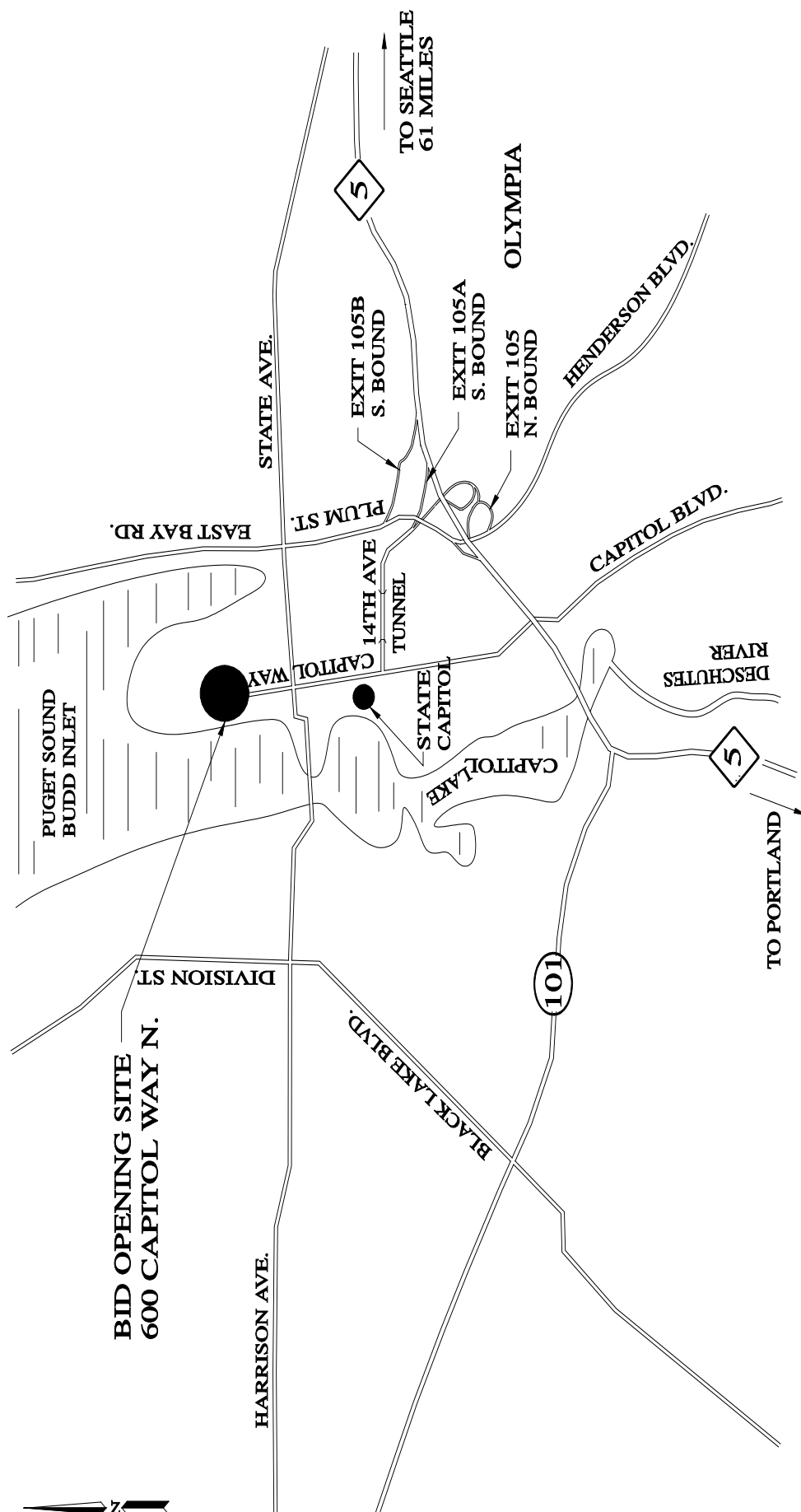
No pre-bid walkthrough is scheduled, **Contractors are strongly encouraged to independently visit the site.**

Plans, specifications, additional information, addenda and plan holders list for this project are available on-line through Builders Exchange of Washington, Inc. at <http://www.bxwa.com>. Click on "Posted Projects"; "Public Works", "Washington State Department of Fish and Wildlife", "Projects Bidding."

For information or technical questions regarding this project, email [camp.bids@dfw.wa.gov](mailto:camp.bids@dfw.wa.gov) with the project title and project number in subject line.

Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE  
Timothy Burns, Capital and Asset Management Program Director  
By  
Glenn F. Gerth, P.E., Chief Engineer  
Capital and Asset Management Program



**BID OPENING SITE  
600 CAPITOL WAY N.  
OLYMPIA, WA 98501-1091**

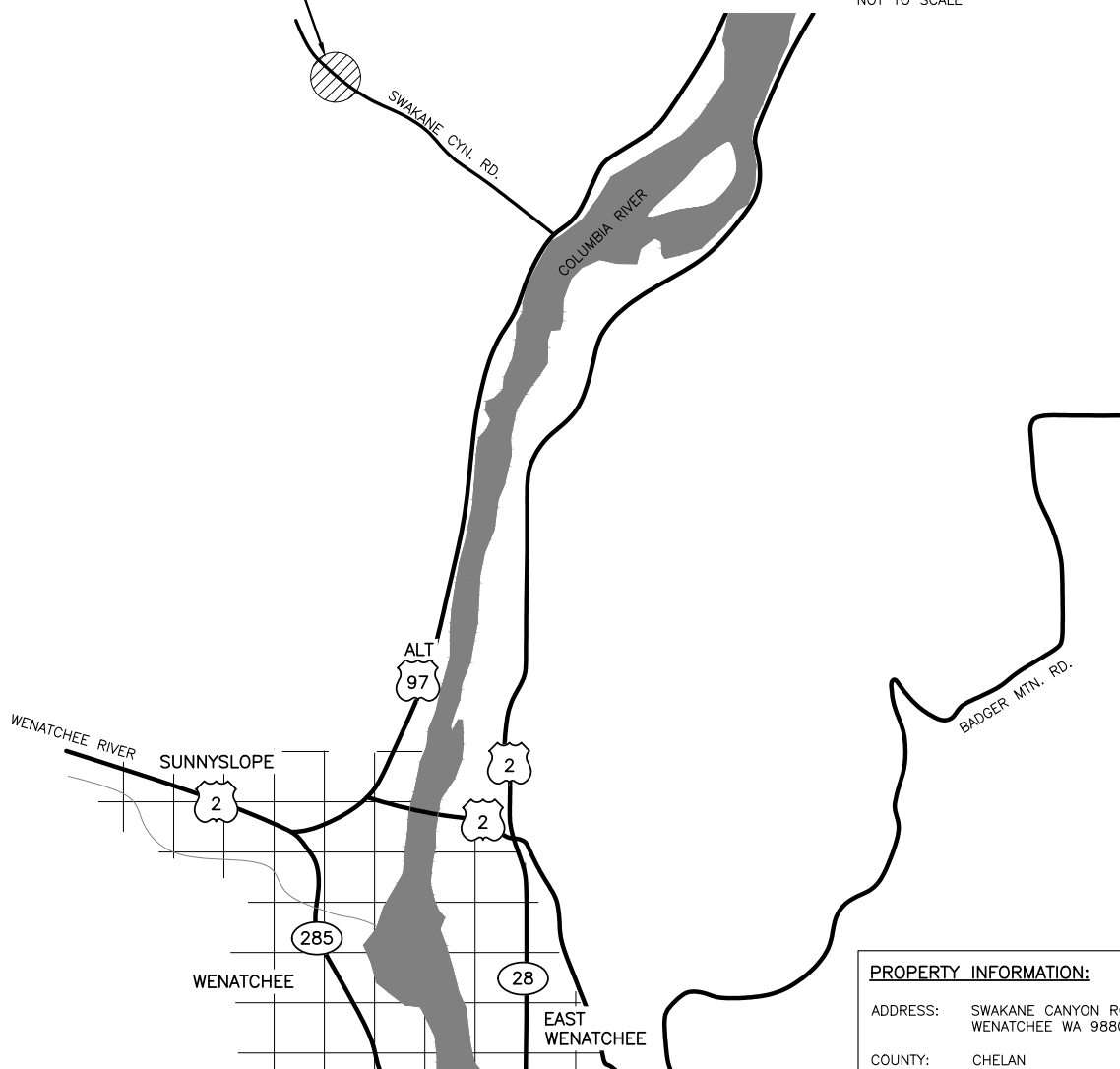
STATE OF WASHINGTON  
DEPARTMENT OF FISH AND WILDLIFE  
DATE DRAWN: 04-10-95 SCALE: N.T.S.



FACILITY NAME  
PROJECT LOCATION

STATE MAP  
NOT TO SCALE

PROJECT LOCATION



VICINITY MAP  
NOT TO SCALE

PROPERTY INFORMATION:

ADDRESS: SWAKANE CANYON ROAD  
WENATCHEE WA 98801

COUNTY: CHELAN  
PARCEL #: 242022100050  
242022865003

TOWNSHIP: 24N  
RANGE: 20EWM  
SECTION: 22

T 24 N, R 20 EWM, S 22

**WASHINGTON STATE  
DEPARTMENT OF FISH AND WILDLIFE**

DESIGNED BY L. SATER  
DRAWN BY J. LONG  
DATE 05/15/2020  
FILE NAME CN:R21:2019-1

APPROVED BY \_\_\_\_\_

CHELAN WLA – SWAKANE UNIT

RIFLE & PISTOL RANGE

STATE & SITE PLAN

VICINITY MAP

PROJECT NO.  
CN:R21:2019-1

SHEET	OF
1	1

## DIVISION 0 – BID AND CONTRACT DOCUMENTS

### SECTION 00100 INSTRUCTIONS TO BIDDER

#### 00110 PREBID REQUIREMENTS

- A. Carefully examine all project documents.
- B. Be fully informed of all existing conditions and limitations, including any activities by City, County, State, Federal or private entities affecting access to the project.
- C. Include in the bid sufficient amount to cover all costs required by Bid Documents to complete the work, but not limited to applicable federal, state, and local taxes (except State Retail Sales Tax), insurance, bonding license(s), payment of prevailing wage rates, L&I filing fees, and all costs that may be necessary to complete the work.
- D. No Apprenticeship Participation requirements for projects estimated less than \$1,000,000.
- E. The project is not federally funded.

#### 00120 REQUIRED BID DOCUMENTS

**Failure to submit ALL PAGES of the following forms shall be sufficient cause to reject the bid.**

- A. **Bid Form**: The ENTIRE current *Bid Form 00300* must be signed. Check for addenda at Builders exchange (<http://www.bxwa.com>) before submitting bid.
- B. **Standard Questionnaire for Qualification of Contractors Form**. Submit the completed form immediately following bid opening or submit with bid form.
- C. **Bid Bond**. For bids of \$35,000 or less, no bid guarantee is required. Bids greater than \$35,000 shall be accompanied by a certified check, cashier's check, or bid bond payable to the Treasurer of the State of Washington in an amount equal to at least five percent of the bid as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and give separate bond as required, see *SECTION 00702.06*.

#### 00130 BID FORMAT

- A. Each bid must be submitted on the current *Bid Form, SECTION 00300* contained in these Bid Documents. Place your required bid documents into an envelope clearly marked on the outside with "BID ENCLOSED", the project name, and project number. Envelope shall clearly identify your Company's name and address. **(See example below)**

Company Name  
Address  
City, State Zip

**BID ENCLOSED**  
PROJECT NAME  
PROJECT NUMBER  
BID OPENING DATE/TIME

## DIVISION 0 – BID AND CONTRACT DOCUMENTS

- B. No oral, email, telephonic, faxed bids or modifications will be accepted or considered.

### 00135 BID OPENING

Bidders must submit their bid to the Washington Department of Fish and Wildlife, Capital and Asset Management Program, located at 600 Capitol Way North, MS: 43158, Olympia, Washington 98501-1091 before the bid submittal deadline for this solicitation. Sending your bid through the United States Postal Services (USPS) or United States Express Mail will not guarantee your bid will be received at the above location on time.

**PLEASE NOTE: As a state agency, USPS mail is routed through the State's Consolidated Mail Service, creating an unpredictable delay in delivery. We encourage you to do the following:**

- Hand deliver;
- Courier;
- Allow sufficient amount of time;
- Use third party (i.e. Federal Express, United Parcel Service) for overnight delivery;
- Clearly label the outside of your envelope using the format in *SECTION 00130*

### 00140 BID SUBMITTAL DEADLINE

- A. Sealed bids for this project will be received by an authorized representative within the Washington Department of Fish and Wildlife, Capital and Asset Management Program located at 600 Capitol Way North, MS: 43158, Olympia, Washington, 98501-1091 until the time and date indicated on the current *Bid Form (SECTION 00300)*. **Due to the safety and health of the public and employees, WDFW CAMP is temporarily closing Bid Openings to public attendance. Bid opening results will be made public within 24 hours of opening.**
- B. Bids submitted after deadline will not be accepted.

### 00145 REASONABLE ACCOMMODATIONS

- A. Persons with disabilities who need reasonable accommodations to participate in the bid openings are invited to contact Capital and Asset Management Program at (360) 902-8300 or [CAMP.Bids@dfw.wa.gov](mailto:CAMP.Bids@dfw.wa.gov). Reasonable accommodation requests should be received at least three business days prior to the bid opening to ensure availability.
- B. **Bid Results:** After bid opening, bidders may obtain bid results from Builders Exchange of Washington, Inc. at <http://bxwa.com> the next business day.

### 00150 MANDATORY RESPONSIBILITY CRITERIA

Before award of a public works contract, 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:

- A. At time of bid submittal, have a certificate of registration in compliance with Chapter 18.27 RCW;
- B. Have a current state Unified Business Identifier (UBI) number;



## DIVISION 0 – BID AND CONTRACT DOCUMENTS

- C. 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;
- D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3);
- E. 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;
- F. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter [39.12](#) RCW. The bidder must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. The department, in consultation with the prevailing wage advisory committee, must determine the length of the training. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection. The department of labor and industries must keep records of entities that have satisfied the training requirement or are exempt and make the records available on its web site. Responsible parties may rely on the records made available by the department regarding satisfaction of the training requirement or exemption; and

LNI Training Information Link:

<https://www.lni.wa.gov/TradesLicensing/PrevWage/Contractors/Training.asp>

- G. Within the 3 year period immediately preceding the date of the bid solicitation, not have been 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 to have willfully violated, as defined in RCW 49.48.082, and provision of Chapter 49, 46, 49, 48 or 49.52 RCW.
- H. Before award of a public works contract, a bidder shall submit to the contracting agency a signed statement in accordance with RCW 9A.72.085 verifying under penalty of perjury that the bidder is in compliance with the responsible bidder criteria requirement of subsection G above. A contracting agency may award a contract in reasonable reliance upon such a sworn statement.

### 00155 BASIS OF AWARD

The lowest responsive bid and responsible bidder is based upon the *BASE BID*. The Owner reserves the right to award the contract amount based on any or all of the bid items listed, to restrict the contract amount to the funds available, and to reject any or all bids for any reason whatsoever and waive informalities.

**00160 PERIOD OF ACCEPTANCE**

All bids may be held 45 calendar days from bid opening date. At the end of this period, the three lowest bids may be retained for 15 additional days, or as may be further extended by the Owner with the approval of the bidding companies.

**00170 PAYMENT AND PERFORMANCE BONDS**

*Payment and Performance Bonds see SECTION 00702.04.*

- A. Base bids greater than \$150,000; Contractor shall provide separate Payment and Performance Bonds, each executed by Contractor and Contractor's Surety.
- B. Base bids \$150,000 or less, Contractor shall provide separate Payment and Performance Bonds, each executed by Contractor and Contractor's Surety, unless the Contractor agrees Owner may, in lieu of the bond(s), retain 10 percent of the Contract Sum for the period allowed by *RCW 39.08.010*.

**00175 BUILDERS RISK INSURANCE**

Builders Risk Insurance is not required, See *SECTION 00802.07*

**00180 INTERPRETATIONS**

For information or technical questions regarding this project email [CAMP.Bids@dfw.wa.gov](mailto:CAMP.Bids@dfw.wa.gov) with the project title and project number in subject line and address questions to the Project Manager. Questions resulting in changes to the scope or nature of the drawings, specifications, or bid documents will be answered by addendum/addenda reflective of the Owner's process.

The Owner will **NOT** answer questions received after 2:00pm on April 5, 2021. All addenda issued are part of the bid documents. The Owner will not be responsible for any oral interpretations.

**00190 MINORITY AND WOMEN'S BUSINESS ENTERPRISE (MWBE) PARTICIPATION**

Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.

**00195 CONTRACT RESPONSIVENESS**

Contractor shall return all required contract documents and signed contract no later than 21 calendar days from date of Award Letter.

END OF SECTION 00100

**SECTION 00200  
CONTRACTOR CHECKLIST**

**00230 PRIOR TO CONTRACT EXECUTION**

Submit the following within 21 calendar days from the date of the Award Letter:

- A. Two signed copies of the *Public Works Contract Agreement*.
- B. Performance and Payment Bonds Form, See *SECTION 00610*.
  - 1. Separate performance and payment bonds executed by Contractor and Contractor's Surety.
  - 2. Option: Contract sums of \$150,000 or less, Owner will not require performance and payments bonds; if Contractor agrees Owner may, in lieu of the bond, retain 10 percent of the Contract Sum.
- C. *Retainage Investment Option Form*. See *Section 00630*.
- D. *Certificate Insurance Form*. See *Section 00640*.
- E. *Statewide Payee Form, Form W-9, Request for Taxpayer ID Number and Certification* (for General Contractors and Subcontractors). Submit to the Contract Administrator, WDFW.

**00235 PRIOR TO NOTICE TO PROCEED**

- A. Attend preconstruction conference.
- B. Provide list of subcontractors and major suppliers greater than \$2,500.
- C. Provide Construction Schedule for approval.
- D. Provide a Schedule of Values for approval. See *Section 00650*

**00240 PRIOR TO SUBMITTING PAY REQUEST**

Submit the following:

- A. *Statement of Intent to Pay Prevailing Wage Rates* for Contractor (and all subcontractors), filed and approved by the Department of Labor and Industries (L&I) with your first invoice. Information regarding Prevailing Wages is found at the L&I website: <http://www.lni.wa.gov/TradesLicensing/PrevWage/IntentAffidavits/File/default.asp>.
- B. *Verification of Monthly Payments to MBEs* (with each pay request). See *Section 00660*.

**00250 DURING PROGRESS OF CONTRACT**

- A. Provide contractor submittals and shop drawings as required.
- B. If work exceeds 30 calendar days, Contractor may request partial payment once per month. If work is 30 calendar days or less Contractor may request payment when project is complete.

**00260 FOR SUBSTANTIAL COMPLETION**

- A. Owner provides written approval of Substantial Completion.
- B. Owner/operator training completed.
- C. Operation and Maintenance Manual (See *SECTION 01730*) draft to Owner for review and acceptance.
- D. A written Certificate of Occupancy received by Owner.
- E. Owner provides Contractor final punch list.

**00270 FINAL COMPLETION**

- A. Contractor completes final punch list.
- B. Owner completes walkthrough and validates final punch list.
- C. Contractor submits final Operation and Maintenance Manuals to Owner, See *SECTION 01730*.
- D. Contractor submits project record to Owner if required in the contract.
- E. All signed permits given to the Owner.
- F. All expressed warranties (greater than 1 year) received by Owner.
- G. Owner issues a formal *Final Completion Certificate to Contractor*.
- H. Contractor submits their final progress invoice after the *Final Completion Letter* is sent to the Contractor.
- I. Contractor submits *Affidavit of Wages Paid* to the Department of Labor and Industries for approval.
- J. The Department of Labor and Industries approve the *Affidavit of Wages Paid* for Contractor and all Subcontractors working on the project.
- K. Owner will submit a *Notice of Completion* Form to Department of Revenue, the Department of Labor and Industries, and Employment Security Department.
- L. Owner's Contract Administrator receives the notarized Contractor's Release of Claims Form.

**00280 FOR RETAINAGE TO BE RELEASED**

- A. Contract is not in dispute.
- B. Owner processes final progress payment.
- C. Owner administers legal lien period (60 days).
- D. Owner's Contract Administrator receives release from Department of Revenue.
- E. Owner's Contract Administrator receives release from Employment Security Department.
- F. Owner's Contract Administrator receives release from Department of Labor and Industries.

END OF SECTION 00200

**SECTION 00300  
BID FORM**

**FAILURE TO SUBMIT ALL PAGES OF BID FORM SHALL BE  
SUFFICIENT CAUSE TO REJECT THE BID.**

**To:** Washington Department of Fish & Wildlife  
Chief Engineer  
600 Capitol Way North, MS: 43158  
Olympia, WA 98501-1091

**Project Title:** Swakane Canyon Rifle and Pistol Range  
**Project No.:** CN:R21:2019-1  
**Bid Opening:** 2:00 p.m. April 8, 2021

**BID:**

**Pursuant to and in compliance with the Bid Documents, the undersigned Bidder agrees to submit all bid form pages and perform the Work for the following Base Bid amount for the above referenced project:**

<b>Lump Sum Items</b>	
<b>Bid Item 1:</b> Provide all labor, material, equipment, mobilization and miscellaneous items necessary and incidental to furnish and install 100 and 200 yard rifle ranges, including, grading, impact berms, fire break, stormwater swales, kiosk, and seeding.	\$
<b>Bid Item 2:</b> Provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install gravel access road and parking, including, grading, wheel stops, signing, striping, gravel access path, seeding and barrier rock.	\$
<b>Bid Item 3:</b> Provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install concrete shooting pad and concrete ADA parking pad.	\$
<b>Bid Item 4:</b> Provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install double swing gates.	\$
<b>Base Bid (Sum of bid items 1 thru 4)</b>	\$

**BID FOR TRENCH EXCAVATION SAFETY SYSTEMS:**

If the Contract Documents contain any work in which trench excavation will exceed a depth of four feet, all costs for adequate trench safety systems amount shall be included in base bid in compliance with RCW 39.04.180. The Bidder agrees to comply with all the relevant trench safety requirements of Chapter 49.17 RCW and WAC 296-155-66411.

**If trench excavation safety provisions do not pertain to this project, enter “N/A” for the dollar amount. Failure to complete this requirement shall be sufficient cause to reject the bid.**

<b>Trench Excavation Safety Systems</b>	\$
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**CONTRACT COMPLETION TIME**

Substantial Completion shall be achieved by July 9, 2021

Final Completion shall be achieved by July 26, 2021.

**LIQUIDATED DAMAGES**

The undersigned agrees to pay the Owner as liquidated damages the sum of \$300 for each consecutive calendar day that is in default after the Contract Time. Liquidated damages shall be deducted from the Contract by Change Order.

**MINORITY AND WOMEN'S BUSINESS ENTERPRISES (MWBE) UTILIZATION CERTIFICATION**

The bidder certifies they have, in good faith, afforded maximum opportunities to MWBEs, and if they are the successful bidder on this project, the following MWBE firms or approved substitutes shall be utilized on the project and compensated in the amounts shown. **If the bidder does not expect to utilize MWBE firms, enter "N.A." on line one below.**

Firm Name, Address and Federal I.D. #	Telephone Number	Type of Work	Certificate Number	MBE%	WBE%
1					
2					
TOTALS					

**IDENTIFICATION OF SUBCONTRACTORS FOR PROJECTS GREATER THAN \$1,000,000**

Not Used.

**ACKNOWLEDGEMENT**

I certify by signing the current Bid Form that all Addendum/Addenda, Contract Execution and Declarations have been acknowledged. Contractor shall review online bid documents at Builders Exchange of Washington, Inc. <http://www.bxwa.com> to ensure all information is considered in bid proposal.

Bidder's Business Name:		
Unified Business Number (UBI):	Contractor's License Number:	
Physical Business Street Address		
City:	State:	Zip Code:
Phone Number:		
Email Address:		
If the above address is not in Washington State, check ONE of the boxes below:		
<input type="checkbox"/> Physical office in WA: _____ <div style="display: flex; justify-content: space-between; width: 100%;"> <span>Street Address</span> <span>City</span> <span>Zip Code</span> </div> <div style="text-align: center; margin-top: 5px;">OR</div> <input type="checkbox"/> State of incorporation or where business entity was formed, if not corporation: _____		

**OFFICIAL AUTHORIZED TO SIGN FOR BIDDER:**

"I certify (or declare) under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct":	
Signature of Authorized Official:	Date:
Print Name	Title

**FAILURE TO SUBMIT ALL PAGES OF BID FORM SHALL BE  
SUFFICIENT CAUSE TO REJECT THE BID.**

END OF SECTION 00300



**SECTION 00400  
SUPPLEMENTS TO BID FORM**

**00420 QUALIFICATION QUESTIONNAIRE**

A. **Information and Instructions - Standard Questionnaire for Qualification of Contractors:**

1. Any person, firm, or corporation bidding on this project shall execute and submit with their bid a Standard Questionnaire for Qualification of Contractors Form. Failure to submit the completed form immediately following the bid opening may be sufficient cause to reject the bid.
2. The Chief Engineer will make the sole determination as to the adequacy of the experience and responsibility of the bidder.
3. All information furnished will be treated as confidential to the extent that such policy is compatible with the provisions of the general statutes affecting the conduct of public offices.

B. **Preparation of Standard Questionnaire for Qualification of Contractors Form:**

1. Bidder shall submit the Standard Questionnaire for Qualification of Contractors Form only in the exact name under which the bid is submitted. Answers and entries shall be specific and complete in detail.
2. Bidder shall verify that Representative or Project Manager Contact information is current and valid prior to submission.

C. **Joint Ventures:** The bids of Joint Ventures will be accepted if qualification has been satisfactorily established by each of the firms bidding in the name of the Joint Venture.



**DIVISION 0 – BID AND CONTRACT DOCUMENTS**

C. Has your organization ever failed to complete a construction contract?

☐ YES    ☐ NO

If Yes, state reason why:

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**00440 SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA**

Not Used.

END OF SECTION 00400



## PUBLIC WORKS CONTRACT

TITLE: [REDACTED]

CONTRACT NUMBER: [REDACTED]

CONTRACTOR: [REDACTED]

ENGINEERING #: [REDACTED]

CONTRACT AMOUNT: [REDACTED]

MASTER INDEX: [REDACTED]

TYPE: Payable / Engineering / Public Works

PROJECT MANAGER: [REDACTED]

CONTRACT PERIOD: [REDACTED]

### A. PARTIES TO THIS CONTRACT

This Contract is entered into under the authority of Chapter 39.04 of the Revised Code of Washington (RCW) between the Washington State Department of Fish and Wildlife (WDFW), 600 Capitol Way North, Olympia, WA 98501-1091; and (Contractor), Company Address, Company City, Company State, Company Postal Code; and shall be binding upon the agents and all persons acting by or through the parties.

### B. PURPOSE OF CONTRACT

The Contractor shall provide those goods and /or services in accordance with and as described in the plans and drawings designated as "State of Washington Department of Fish & Wildlife Engineer Number XX:XX:XXXX together with the Contractor's bid opened at 2:00 P.M. Pacific Time on XX/XX/XXXX; and in full compliance with terms, conditions and stipulations of the General Conditions of the Contract, Release of Claims, the Special Conditions of the contract and material, Rights-of-Way and Easements (other than those provided by the State), licenses, permits, for this contract, now referred to and by this reference incorporated herein and made a part hereof as fully, for all purposes as if here set forth at length.

### C. DESCRIPTION OF PROJECT

The Contractor shall perform the project as described in Attachments, which are incorporated herein by this reference:

Attachment "A" Specifications and Drawings (WDFW Engineer Number: XX/XXXX/XXXX)

### D. PERIOD OF PERFORMANCE

The Contractor shall begin work as stated in the Notice to Proceed letter from WDFW; and shall complete all work under this contract not later than **DATE**. No expenditures made before or after this period are eligible for reimbursement unless incorporated by written amendment into this Contract. The Contract may be terminated or the performance period extended pursuant to terms set forth in Attachment "A."

WDFW may suspend the work of the Contractor due to weather or other needs of WDFW. The Contractor shall suspend all work on the contract upon the receipt of a Notice to Suspend from WDFW; and shall not re-commence work until a Notice to Resume Work is received from WDFW.

### E. COMPENSATION / PAYMENT

WDFW hereby promises and agrees with the Contractor to employ, and does employ the Contractor to provide the materials and to do and cause to be done the above-described work, and to complete and finish the same according to the plans designated, and the attached specifications and the terms and conditions herein contained, and hereby contracts to pay for the same in the manner set out in the specifications the sum of **\$00.00** plus applicable Washington State sales tax at the time and upon the conditions provided for in this contract and every part thereof.

## DIVISION 0 – BID AND CONTRACT DOCUMENTS

That WDFW further agrees to employ the Contractor to perform any alterations in or additions to the work covered by this contract and any force account work that may be ordered, if the construction or labor required by such changes or force work is to be executed during the period specified herein for the completion of the work under this contract, and to pay for the same under the terms of this contract. Except as otherwise provided in Section 00707 of Attachment "A" of the contract, no alteration or modification of any of the terms, conditions, price, quality, quantity or specifications of this contract will be effective if not in writing and signed by WDFW.

The Contractor is required to be registered in the Statewide Vendor Payment System prior to submitting a request for payment under this contract. The Washington State Office of Financial Management (OFM) maintains the Statewide Vendor Payment System; to obtain registration materials, forms are available on the OFM payee registration [website](#) or contact the Statewide Payee Help Desk at [HereToHelp@ofm.wa.gov](mailto:HereToHelp@ofm.wa.gov) (360) 407.9100.

### **F. RIGHTS AND OBLIGATIONS**

All rights and obligations of the parties of this Contract are subject to this Contract, including the Attachments, which are incorporated herein by this reference. By signing this Contract the Contractor acknowledges that they have read, fully understand, and agree to be bound by all terms and conditions set forth in this Contract.

### **G. ORDER OF PRECEDENCE**

In the event of an inconsistency in this contract, unless otherwise provided herein, the inconsistency shall be resolved by giving precedence in the following order:

Applicable Federal and State of Washington statutes and regulations;  
Special Terms and Conditions as contained in this basic contract instrument;  
Attachment "A" Specifications and Drawings (WDFW Engineer Number: XX/XXXX/XX); and  
Any other provision, term or material incorporated herein by reference or otherwise incorporated.

### **H. CONTRACT REPRESENTATIVES**

The below named representatives for each of the parties shall be the contact people for all communications and billings regarding the performance of this Contract. All written communications regarding this Contract shall be sent to the designated representatives at the addresses below unless notified in writing of any change.

#### **Contractor's Representative**

Name:   
Company Name:   
Address:   
Office Phone:   
Email:

#### **WDFW's Representative**

Project Manager:   
Capital and Asset Management Program  
PO Box 43158  
Olympia, WA 98504-3158  
(360) 902-8300  
Email:

### **I. ENTIRE CONTRACT**

This Contract, along with all attachments and exhibits, constitutes the entire agreement of the parties. No other understandings, verbal or otherwise, regarding this Contract shall exist or bind any of the parties.

### **J. APPROVAL**

This contract shall be subject to the written approval of WDFW'S authorized representative and shall not be binding until so approved. This Contract may be altered, amended, or waived only by a written amendment executed by both parties.

**DIVISION 0 – BID AND CONTRACT DOCUMENTS**

IN WITNESS WHERE, WDFW and the Contractor have signed this contract.

**CONTRACTOR NAME**

**WASHINGTON DEPARTMENT OF FISH AND WILDLIFE**

\_\_\_\_\_  
**Signature and Date**

\_\_\_\_\_  
**Signature and Date**

\_\_\_\_\_  
**Printed Name and Title**

**Timothy W. Burns, PE**  
**Program Director**  
**Capital and Asset Management Program**

APPROVED AS TO FORM BY THE OFFICE OF THE ATTORNEY GENERAL 12/19/2014

**00620 RETAINAGE IN LIEU OF PERFORMANCE BOND OPTION ON CONTRACTS  
OF \$150,000 OR LESS**



**Contract No.** \_\_\_\_\_

**Project Name:** \_\_\_\_\_

**Agency:** DEPARTMENT OF FISH AND WILDLIFE

**Contractor:** \_\_\_\_\_

Pursuant to *RCW 39.08.010* you are permitted to exercise your option, IN WRITING, on whether to provide a performance bond, or in lieu of bond to have retention increased to 10 percent. You are therefore requested to complete and return this form prior to receiving the *Notice to Proceed*.

**OPTION 1:**

Provide a performance bond in accordance with *SECTION 00702.04* of the *GENERAL CONDITIONS*.

I request Option #1 \_\_\_\_\_

**OPTION 2:**

Retain 10 percent of the contract payments in lieu of providing a performance bond in accordance with *SECTION 00702.04* of the *GENERAL CONDITIONS*.

I request Option #2 \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## 00630 RETAINAGE OPTIONS



**Contract No.:** \_\_\_\_\_ **Project:** \_\_\_\_\_

*Chapter 60.28 RCW* requires in part that all contracts for public improvements or work by a public body must provide for retention from the amounts earned by the Contractor. Such monies are to be retained in accordance with the provision of the law for the protection and payment of any person supplying labor or material for such work and the State for taxes due from the Contractor.

The monies reserved from amounts due a Contractor at his/her option shall be: (Contractor mark choice):

- \_\_\_\_\_ A. Retained in a fund by the public body until 60 days following the final acceptance of said improvement or work as completed; or
- \_\_\_\_\_ B. Deposited by the public body in an interest bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until 60 days after the final acceptance of said improvement or work as completed, or until agreed to by both parties: Provided, that interest on such account shall be paid to the Contractor.
- \_\_\_\_\_ C. Placed in escrow with a bank or trust company until 60 days following final acceptance of said work or improvement as completed.
- \_\_\_\_\_ D. Contractor will submit a retainage bond for all or any portion of funds to be retained by. Washington State Department of Fish and Wildlife.

The warrant or check representing monies to be placed in escrow shall be made payable jointly to the bank or trust company and the Contractor. Such monies must be converted into bonds and securities and held in escrow. The bonds and securities are to be chosen by the Contractor and approved by the State. When interest on such investments accrues and is paid, it must be forwarded to the Contractor.

The escrow agreement, in the form prescribed by *WAC Chapter 82-32* and in addition to other requirements, must also provide for payment of all escrow costs and fees by the Contractor. A copy of the completed escrow agreement shall be provided by the escrow agent, the Contractor and the state agency prior to the time the first progress payment is made.

This completed option must be returned with the signed Contract Documents. No progress payment shall be made until the Contractor has exercised this option in writing.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date





00640

**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No. Ext):	FAX (A/C, No):
INSURED	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	NAIC #	
	INSURER A :	
	INSURER B :	
	INSURER C :	
INSURER D :		
INSURER E :		
INSURER F :		

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b>						EACH OCCURRENCE \$
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
							MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$
	OTHER:						\$
	<b>AUTOMOBILE LIABILITY</b>						COMBINED SINGLE LIMIT (Ea accident) \$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
							\$
	<b>UMBRELLA LIAB</b>						EACH OCCURRENCE \$
	<input type="checkbox"/> OCCUR						AGGREGATE \$
	<b>EXCESS LIAB</b>						\$
	<input type="checkbox"/> CLAIMS-MADE						\$
	DED <input type="checkbox"/> RETENTION \$						
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>						<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**CERTIFICATE HOLDER****CANCELLATION**

	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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STATE OF WASHINGTON  
00650 SCHEDULE OF VALUES

CERTIFICATE FOR PAYMENT. For period from: date to date  
Contract for: project title Date: 01/00/00  
Location: project location Certificate No.: \_\_\_\_\_  
Contractor: \_\_\_\_\_ Contract No.: \_\_\_\_\_

Original Contract Amount: \$0.00  
Net change in Contract Amount to Date: \$0.00  
Adjusted Contract amount \$0.00

ITEM NO.	SCHEDULE OF VALUES DETAIL	ESTIMATED VALUE	AMOUNT EARNED	%	PREVIOUSLY CLAIMED	THIS INVOICE
1		\$0.00	\$0.00	####	\$0.00	\$0.00
2		\$0.00	\$0.00	####	\$0.00	\$0.00
3		\$0.00	\$0.00	####	\$0.00	\$0.00
4		\$0.00	\$0.00	####	\$0.00	\$0.00
5		\$0.00	\$0.00	####	\$0.00	\$0.00
6		\$0.00	\$0.00	####	\$0.00	\$0.00
7		\$0.00	\$0.00	####	\$0.00	\$0.00
8		\$0.00	\$0.00	####	\$0.00	\$0.00
9		\$0.00	\$0.00	####	\$0.00	\$0.00
10		\$0.00	\$0.00	####	\$0.00	\$0.00
11		\$0.00	\$0.00	####	\$0.00	\$0.00
12		\$0.00	\$0.00	####	\$0.00	\$0.00
13		\$0.00	\$0.00	####	\$0.00	\$0.00
14		\$0.00	\$0.00	####	\$0.00	\$0.00
15		\$0.00	\$0.00	####	\$0.00	\$0.00
16		\$0.00	\$0.00	####	\$0.00	\$0.00
17		\$0.00	\$0.00	####	\$0.00	\$0.00
18		\$0.00	\$0.00	####	\$0.00	\$0.00
19	Change Orders:					
20	1.	\$0.00	\$0.00	####	\$0.00	\$0.00
21	2.	\$0.00	\$0.00	####	\$0.00	\$0.00
22	3.	\$0.00	\$0.00	####	\$0.00	\$0.00
23	4.	\$0.00	\$0.00	####	\$0.00	\$0.00
24	5.	\$0.00	\$0.00	####	\$0.00	\$0.00
25	6.	\$0.00	\$0.00	####	\$0.00	\$0.00
26	7.	\$0.00	\$0.00	####	\$0.00	\$0.00
27	8.	\$0.00	\$0.00	####	\$0.00	\$0.00
28	6.	\$0.00	\$0.00	####	\$0.00	\$0.00
SUBTOTAL		\$0.00	\$0.00	####	\$0.00	\$0.00
TAX 0.00% SALES TAX		\$0.00	\$0.00		\$0.00	\$0.00
TOTAL		\$0.00	\$0.00		\$0.00	\$0.00
Less Retainage.. 5%			\$0.00		\$0.00	\$0.00
NET			\$0.00		\$0.00	\$0.00
Less Previous Payments....			\$0.00			
Additional Tax 0.00%		\$0.00			\$0.00	
AMOUNT DUE THIS ESTIMATE			\$0.00			\$0.00

check  
\$0.00  
\$0.00  
\$0.00  
\$0.00  
\$0.00

This is to certify that the contractor, having complied with the terms and conditions of the above mentioned contract, is due and payable from the State of Washington, the amount set after "AMOUNT DUE THIS ESTIMATE."

By 0 (Contracting Firm) By \_\_\_\_\_ (Architect or Engineer)  
By \_\_\_\_\_ SIGN IN INK By \_\_\_\_\_ SIGN AND DATE



00660 VERIFICATION OF MONTHLY PAYMENTS TO MWBES

State of Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington, 98501-1091, (360) 902-8300

Project No \_\_\_\_\_ Project Title \_\_\_\_\_ Sheet \_\_\_\_\_ of \_\_\_\_\_

Contractor \_\_\_\_\_ Payment # \_\_\_\_\_

Federal Tax Identification #	Contractor/Supplier	WBE or MBE	Nature of Work or Type of Supplies	Bid Total Utilization Dollars	Amount Paid This Month	Amount Paid to Date

CONTRACTOR: \_\_\_\_\_  
Authorized Signature

DATE: \_\_\_\_\_

## Washington Department of Fish and Wildlife

## STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

Firm Name, Address, City, State & ZIP+4	Project Name (Title)	Contract No.
	Contract Award Amount: \$	Notice to Proceed Date
Reporting Period from: to		Required Apprenticeship Percentage: 15%

## APPRENTICE SUMMARY

Apprentice Name	Craft or Trade	Apprentice Registration Number	Name of Contractor or Sub-Contractor	Apprentice	
				Total Number	Hours Worked

## JOURNEYMEN SUMMARY

Journeyman Name	Craft or Trade	Journeyman Registration Number	Name of Contractor or Sub-Contractor	Journeyman	
				Total Number	Hours Worked

Apprentice total hours worked this period:	0									
Journeyman total hours worked this period:	0									
	<table border="1"> <tr> <td>Previous Total</td> <td>New Total</td> <td>Percentage</td> </tr> <tr> <td>previous total</td> <td></td> <td></td> </tr> <tr> <td>previous total</td> <td></td> <td></td> </tr> </table>	Previous Total	New Total	Percentage	previous total			previous total		
Previous Total	New Total	Percentage								
previous total										
previous total										

I, the undersigned, do hereby certify under penalty of perjury that the items listed herein represent the proper hourly totals for Apprenticeship/Journeyman participation during this reporting period.

Printed Name:	Signature:	Date:	Title:
---------------	------------	-------	--------

DES Labor Form 100412

END OF SECTION 00600

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\$1,000,000

**PART 1 - 00701.00 DEFINITIONS**

**00701.01 DEFINITIONS**

- A. Application for Payment: 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, Owner, or A/E: A person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. Change Order: 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: 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 *SECTION 00708 - CLAIMS AND DISPUTE RESOLUTION*.
- E. Contract Documents: The Advertisement for Bids, Instructions to 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.
- F. Contract Sum: The total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents.
- G. Contract Time: The number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- H. Contractor: The person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- I. Drawings: 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.
- J. Final Acceptance: The written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents.
- K. Final Completion: The Work is fully and finally completed in accordance with the Contract Documents.

## DIVISION 0 – GENERAL CONDITIONS

- L. Force Majeure: Those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in *SECTION 00703.05A*.
- M. Notice: A written notice that 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.
- N. Notice to Proceed: A notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- O. Owner: The state agency, institution, or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- P. Person: A corporation, partnership, business association of any kind, trust, company, or individual.
- Q. Prior Occupancy: Owner's use of all or parts of the Project before Substantial Completion.
- R. Construction Schedule: A schedule of the Work, in a form satisfactory to Owner, as further set forth in *SECTION 00703.02*.
- S. Project: 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.
- T. Project Manual: The volume usually assembled for the Work, which may include documents such as the bidding requirements, sample forms, and other Contract Documents.
- U. Project Record: The separate set of Drawings and Specifications as further set forth in *SECTION 00704.02A*.
- V. Schedule of Values: A written breakdown allocating the total Contract Sum to each principle category of Work, in such detail as requested by Owner.
- W. Specifications: 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.
- X. Subcontract: A contract entered between the Contractor and a Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for, or in connection with, the Work.
- Y. Subcontractor: Any person other than the Contractor who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- Z. Substantial Completion: 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 00706.07*.

## DIVISION 0 – GENERAL CONDITIONS

- AA. Work: 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.

### 00701.02 ORDER OF PRECEDENCE

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

- A. Signed Public Works Contract, including any Change Orders and any Special Forms
- B. *SUPPLEMENTAL CONDITIONS*
- C. *GENERAL CONDITIONS*
- D. Specifications: Provisions in *DIVISION 1* shall take precedence over provision of any other division.
- E. Drawings: In case of conflict within the Drawings, large-scale drawings (24" x 36" shall take precedence over reduced scale drawings.
- F. Signed and Completed *Bid Form*
- G. Instructions to Bidder
- H. Notice to Contractor

### 00701.03 EXECUTION AND INTENT

Contractor makes the following representations to Owner:

- A. 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.
- B. 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, labor, materials, equipment, goods, supplies, 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.
- C. 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.
- D. Contractor is able to furnish the plants; tools, materials, supplies, equipment, and labor required to complete the Work and perform the obligations required by the Contract Documents and have sufficient experience and competence to do so.



**PART 2 - 00702.00 INSURANCE AND BONDS****00702.01 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 section 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 bonds required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents shall be rated "B+" or better by A.M. Best and ratings shall be indicated on the insurance certificates.

- A. Contractor shall maintain the following insurance coverage during the Work and for 1 year after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by *SECTION 00705.16*.
  - 1. General liability on the *ISO 1986 New Occurrence Form* or its equivalent, which will include:
    - a. Completed operations/products liability
    - b. Explosion, collapse, and underground
    - 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.

**00702.02 COVERAGE LIMITS**

- A. Required Insurance Coverages:
  - 1. For a contract less than \$100,000.00, the coverage required is:
    - a. Comprehensive General 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.

## DIVISION 0 – GENERAL CONDITIONS

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:

Each Occurrence	\$1,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$1,000,000.00
Products – Commercial Operations Limited	\$1,000,000.00
Personal and Advertising Injury Limit	\$1,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expenses Limit (any one person)	\$5,000.00

- b. If the contract is for underground utility work 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	\$2,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$4,000,000.00
Products – Commercial Operations Limited	\$4,000,000.00
Personal and Advertising Injury Limit	\$2,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expenses 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.

## DIVISION 0 – GENERAL CONDITIONS

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 Pollution Liability insurance for the hazardous substance removal as follows:

<u>EACH OCCURRENCE</u>	<u>AGGREGATE</u>
\$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 1 year following the project’s “final completion” through official completion of the project, plus 1 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.

### 00702.03 INSURANCE COVERAGE CERTIFICATES

- A. Prior to the commencement of the Work, Contractor shall furnish acceptable proof of insurance on the State of Washington Certificate of Insurance Form SF500A, as well as copies of insurance policies.
- B. All insurance certificates shall name Owner's Project number and Project title.
- C. All insurance certificates shall specifically require 45 days prior notice to Owner of cancellation or any material change, except 30 days for surplus line insurance.

### 702.04.1 PAYMENT AND PERFORMANCE BONDS

- A. Contractor shall provide separate performance and payment bonds, each executed by the Contractor and the Contractor’s Surety.
- B. Option: Contract sums of \$150,000 or less, Owner will not require performance and payments bonds; if Contractor agrees Owner may, in lieu of the bond, retain 10 percent of the Contract Sum.

**00702.05 ADDITIONAL BOND SECURITY**

Contractor shall promptly furnish additional 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.

**00702.06 BID BOND OR PROPOSAL GUARANTEE**

- A. For bids of \$35,000 or less, no bid bond is required. Bids greater than \$35,000 shall be accompanied by a certified check, cashier's check, or bid bond payable to the Treasurer of the State of Washington in an amount equal to at least 5 percent of the bid as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and give Performance Bond as required. All proposal guarantees may be held a maximum of 30 calendar days, and the 3 lowest bids may be held 45 calendar days from the date of the bid opening. At the end of the 30 calendar day period, all proposal guarantees, except those accompanying the 3 lowest bids, will be returned to the respective bidders. After the Contract and bonds have been executed, the remaining 3 proposal guarantees will be returned to their respective bidders.
- B. Only a cashier's check or certified check will be accepted in lieu of a bid bond. State statute requires deposit of negotiable receipts at the time of receipt. The bidder should be prepared to accept an additional 60 to 90 day delay in obtaining repayment from the State Treasurer.
- C. Fiscal procedures in preparing repayment are time consuming, and result in the requirement for additional time. Failure to comply with this section will cause bid to be considered nonresponsive.

**00702.07 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 Final Completion. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.
- 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/Es' 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/Es' sub consultants, separate contractors described in *SECTION 00705.20*, 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 - 00703.00 TIME AND SCHEDULE**

**00703.01 PROGRESS AND COMPLETION**

Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within a reasonable period thereafter.

**00703.02 CONSTRUCTION SCHEDULE**

- A. The Contractor shall, at the Preconstruction Conference and prior to Notice to Proceed, submit a Construction Schedule showing the sequence in which the Contractor proposes to perform the work, including dates on which the contractor plans to start and finish major portions of the work, dates for submitting shop drawings and other submittals, and dates for acquisition of materials and equipment.
- B. The Construction Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Construction Schedule may be general, showing the major portions of the Work, with more specific Construction Schedules in subsequent months as directed by Owner.
- C. Owner shall return comments on the preliminary Construction Schedule to Contractor within 14 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 progress payments until a Construction Schedule has been submitted that meets the requirements of this section.
- D. Contractor shall utilize and comply with the Construction Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Construction Schedule at its own expense to Owner indicating actual progress. If, in the opinion of the Owner, Contractor is not in conformance with the Construction Schedule for reasons other than acts of *force majeure* as identified in *SECTION 00703.05*, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Construction Schedule, or revise the Construction Schedule to reconcile with the actual progress of the Work.

## **DIVISION 0 – GENERAL CONDITIONS**

- E. Contractor shall promptly notify Owner in writing of any actual or anticipated event that 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 Construction 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.
- F. The Contractor shall notify the Owner or Owner at least two weeks in advance if work is to be performed on a Saturday, Sunday, and/or state holiday.
- G. No excavation work, as defined by *SECTION 00705.09*, will be allowed on Saturdays, Sundays and/or state holidays unless specifically authorized by the Owner.

### **00703.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE**

- A. Owner may, at its sole discretion, order the Contractor in writing to suspend all or any part of the Work for up to 90 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 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 of *SECTION 00709.00*.
- C. If a written notice suspending the Work is canceled or the period of the notice or any extension thereof expires, Contractor shall resume the 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 *SECTION 00707.00*.

### **00703.04 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 the 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.

**00703.05 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 conditions that could not have been reasonably anticipated
  - 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 00707.03*. 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 00707.02* and *00707.03*.
- 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 00707.03*, 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.

**00703.06 NOTICE TO OWNER OF LABOR DISPUTES**

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.

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.

**00703.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION**

A. Liquidated Damages:

1. 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 - 00704.00 SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS**

**00704.01 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.



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- 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 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 in 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.

### **00704.02 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. 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.

### **00704.03 SHOP DRAWINGS**

- A. "Shop Drawings" 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. Shop drawings 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.

## DIVISION 0 – GENERAL CONDITIONS

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 shop drawings 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 that are not required by the Contract Documents may be returned without action.

- C. Approval or other appropriate action with regard to shop drawings by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such shop drawings, 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 on the Project Record.
- E. Unless otherwise provided in *DIVISION 1*, Contractor shall submit to A/E for approval one electronic or paper copy of all shop drawings and submittals, unless otherwise indicated.

### 00704.04 ORGANIZATION OF SPECIFICATIONS

Specifications are prepared in sections that 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.

**00704.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

- A. 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. 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 nonexclusive 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.
- D. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in *SECTION 00705.22* 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.
- E. The shop drawings and other submittals prepared by Contractor, Subcontractors, 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 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 - 00705.00 PERFORMANCE**

**00705.01 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.

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- 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.
- 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 that 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 keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed shop drawings, and permits and permit drawings.
- F. Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the *Executive Conflict of Interest Act, RCW 42.18*, 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.

### 00705.02 PERMITS, FEES, AND NOTICES

- A. Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.
- B. If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.
- C. Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.
- D. The Contractor shall conform to all local, state, and national codes in all phases of this project. Where conflicts arise between the code requirements and Drawings or Specifications requirements, the code shall govern and prevail unless the Drawings or Specifications impose requirements or limitations that are more stringent than the code requirements, in which case the more stringent requirements or limitations shall govern and prevail...

**00705.03 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.

**00705.04 PREVAILING WAGES**

- A. Contractor 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 (L&I). The schedule of prevailing wage rates for the locality or localities of the Work, as determined by the Industrial Statistician of L&I, is by reference made a part of the Contract Documents as though fully set forth herein.
1. Before commencing the Work, Contractor shall file a statement under oath with Owner and with the Director of L&I 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.
  2. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of L&I. 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*.
  3. Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefilled 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 L&I where a complaint or inquiry concerning prevailing wages may be made.
  4. In compliance with *CHAPTER 296-127 WAC*, Contractor shall pay to L&I the currently established fee for each statement of intent and/or affidavit of wages paid submitted to L&I for certification.
  5. Per EHB 2805, public works contracts estimated to cost over \$1 million requires the Contractor and Subcontractor to submit information regarding any off-site, pre-fabricated, non-standard, project-specific items produced under each contract and produced outside Washington.
  6. Contractor and Subcontractor must have the following information on their Affidavit of Wages Paid form:
    - a. The estimated cost of the public works project;
    - b. The name of the awarding agency and the title of the public works project;

## DIVISION 0 – GENERAL CONDITIONS

- c. The contract value of the off-site, pre-fabricated, non-standard, project specific items produced outside Washington; and
  - d. The name, address, and federal employer identification number of the contractor that produced the off-site, pre-fabricated, non-standard, project specific items.
- B. Projects identified as having federal financing, excluding FEMA shall comply with *Federal Davis Bacon Act* requirements.
  - 1. All laborers, mechanics, and other workers employed by the Contractor or Subcontractors to work on construction projects financed by federal assistance must be paid wages not less than those established for the locality of the project by the U.S. Secretary of Labor (40 Stat 1494, Mar, 3, 1921, Chap, 411, 40 USC276A 276A S).
  - 2. When the project is subject to both state and federal wage rates, and when the rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate. The area in which the worker is physically employed shall determine which federal wage and fringe benefit rate shall be used to compare against the state wage and fringe benefit rate.
  - 3. Washington State's prevailing wage rate for this project can be found at the Department of Labor and Industries' (L&I) website: <https://fortress.wa.gov/lni/wagelookup/prvwagelookup.aspx>.
- C. Projects identified as having FEMA funding shall comply with Stafford Act Requirements. Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121 et seq., and Related Authorities.
  - 1. All laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed with the assistance of any contribution of Federal funds made by the Administrator under this subsection shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40, and every such employee shall receive compensation at a rate not less than one and 1/2 times the basic rate of pay of the employee for all hours worked in any workweek in excess of 8-hours in any workday or 40 hours in the workweek, as the case may be. The Administrator shall make no contribution of Federal funds without first obtaining adequate assurance that these labor standards will be maintained upon the construction work. The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40.
  - 2. When the project is subject to both state and federal wage rates, and when the rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate. The area in which the worker is physically employed shall determine which federal wage and fringe benefit rate shall be used to compare against the state wage and fringe benefit rate.

**00705.05 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 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 8 hours of each calendar day shall be not less than 1½ times the rate allowed for this same amount of time during 8 hours of 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 10 hours in a calendar day. No such agreement may provide that the employees work 10 hour days for more than 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 40 hours per week, worked pursuant to any such agreement.

**00705.06 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*, *Presidential Executive Order 11375*, *Presidential Executive Order 13672*, 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, sexual orientation, 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 all qualified applicants will be considered for employment without regard to race, creed, color, national origin, sex, sexual orientation, age, marital status, or the presence of any physical, sensory, or mental disability.
  - 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*.

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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.

### 00705.07 SAFETY PRECAUTIONS

- A. Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.
- 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 onsite or stored offsite; 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
    - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and Safety Data Sheets (SDS) 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.



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- 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.
  - d. The details of the hazard communication program developed by Contractor or its Subcontractors, including an explanation of the labeling system and the SDS, 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:
  - 1. 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 that 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.

**00705.08 OPERATIONS, MATERIAL HANDLING, EASEMENTS AND STORAGE AREAS**

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas. The Owner has acquired ownership and/or easement of lands for the construction as indicated on the Drawings without cost to the Contractor. It is understood and agreed by the Contractor that if it should 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, its officers, and employees which the Contractor may sustain by reason of delay in the Work.
- 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.

**00705.09 PRIOR NOTICE OF EXCAVATION**

"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 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 and utilities through locator services.

**00705.10 UNFORSEEN 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 before conditions are disturbed and in no event later than 7 days after the first observance of the conditions.
- 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 thereof as provided in *SECTION 00707.00 - CHANGES*.

**00705.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, STOCK, 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. Damage to facility production resulting in death or sickness of stock shall result in claims against the Contractor for loss of production or costs incurred by any extraordinary measures required to save production.

**00705.12 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.

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- 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 reasonable 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 state of completion, may be rejected by Owner.

### **00705.13 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. It shall be the responsibility of the Contractor to furnish proof of equality in all respects to specified items when proposing alternate brands or items. Any significant deviations from Specifications, Drawings, or equality must be noted by the Contractor when submitting alternate materials for approval. The Owner 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, at their own expense, make any secondary changes required to incorporate an approved substitute or alternate into the project. No offers for substitution will be acknowledged from suppliers, distributors, manufacturers, or Subcontractors.
- C. 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.
- D. 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.

### **00705.14 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.

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- 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 Final Completion, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

### **00705.15 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
  - 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. In addition to any inspections required by local authorities or permitting agencies, the State will appoint its own inspector for the project. Construction inspectors employed by the State shall assist the Owner in making all necessary inspections and measurements and shall enforce a strict compliance with the terms of the Contract and the orders of the Owner. The Inspector will have the authority to reject materials or workmanship which do not fulfill the requirements of these Specifications. In case of dispute, the Contractor may appeal to the Owner 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 remedied by the Contractor, without additional cost to the Owner.

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- D. 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.
- E. 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.

### **00705.16 CORRECTION OF NONCONFORMING WORK**

- A. If a portion of the Work is covered contrary to the requirements of 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 any time prior to Final Completion Owner desires to examine the Work or any portion of it that 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 *SECTION 00707.00 - CHANGES*. 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 1 year after the date of Substantial Completion of the Work, or designated portion thereof, or within 1 year after the date for commencement of any system warranties established under *SECTION 00706.08*, 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 1 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 1 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 that are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

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- 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 that Contractor might have according to the Contract Documents. Establishment of the time period of 1 year, as described in *SECTION 00705.16D*, 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 that 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.

### **00705.17 CLEANUP**

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.

### **00705.18 ACCESS TO WORK**

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

### **00705.19 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 Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with Contract Documents to reasonably accommodate the other work.

### **00705.20 SUBCONTRACTORS AND SUPPLIERS**

- A. Before submitting its first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. 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.

## **DIVISION 0 – GENERAL CONDITIONS**

- B. 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 with respect 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.
- C. 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.
- D. 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 00709.01* 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 that 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.

### **00705.21 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.
  - 4. Be responsible to enforce any subcontractor's, manufacturers', 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.



**00705.22 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
  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*.

**00705.23 REQUIRED PAYROLL DOCUMENTS**

- A. The Contractor shall submit to the Owner the following for itself and for each subcontractor and each agent to a Subcontractor that performed work on the Contract:
1. *A Statement of Intent to Pay Prevailing Wages.* The Contracting Agency will make no payment under this Contract for the work performed until this statement has been completed and submitted.
  2. *An Affidavit of Wages Paid with the Final Contract Voucher Certification.* The Contracting Agency will not release to the Contractor any funds retained under *RCW 60.28.010* until all of the *Affidavit of Wages Paid* forms have been completed and submitted.
- B. In addition, the Prime Contractor shall submit a Request for Release to the Washington State Labor and Industries (L&I), (L&I provides the form).
- C. Certified payrolls are required to be submitted by the Contractor to the Owner for the Contractor and all Subcontractors or agents on all federally funded projects, and when requested in writing by the Owner, on projects funded with only Contracting Agency funds. If these payrolls are not supplied within 10 calendar days of the end of the proceeding weekly payroll period for federally funded projects, or within 10 calendar days from the date of the written request on projects with only Contracting Agency funds, any or all payments may be withheld until compliance is achieved. Also, failure to provide these payrolls could result in other sanctions as provided by state laws (*RCW 39.12.050*) and/or federal regulations (*29 CFR 5.12*). All certified payrolls shall be complete and explicit.

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Employee work classification codes used on certified payrolls shall coincide exactly with the occupation codes listed on the minimum wage schedule, unless the Owner specifically approves an alternate method to identify the occupation coding used by the Contractor to compare with the codes listed. When an apprentice is shown on the certified payroll at a rate less than the minimum prevailing journey wage rate, the apprenticeship registration number for that employee from the State Apprenticeship and Training Council shall be shown, along with the correct employee classification code.

### 00705.24 STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

In accordance with *RCW 39.04.320*, the State of Washington requires a mandatory 15 percent apprenticeship (labor hours) participation for projects estimated to cost \$1,000,000 or more. 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*).

- A. For each project that has apprentice requirements, the contractor shall submit a **“Statement of Apprentice/Journeyman Participation** (See *SECTION 00670*)” on forms provided by the Washington Department of Fish and Wildlife, 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 submitted data includes the following:
1. Contractor name and address;
  2. Contract number;
  3. Project name;
  4. Contract value;
  5. Reporting period “Notice to Proceed” through “Invoicing Date”;
  6. Name and registration number of each apprentice;
  7. Total number of apprentices and labor hours worked by them, categorized by trade or craft;
  8. Total number of journeymen and labor hours worked by them, categorized by trade or craft;
  9. Cumulative combined total of apprentice and journeymen labor hours; and
  10. Total percentage of apprentice hours worked.
- B. 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.

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- C. Any substantive violation of the mandatory requirements of this part of the contract may be a material breach of the contract by the Contractor.

### 00705.25 FEDERALLY FUNDED CONTRACT CONDITIONS

A. Equal Employment Opportunity :

1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status, or other presence of any sensory, mental, or physical handicap. The Contractor will take affirmative action to ensure that applications are employed and that employees are treated during employment without regard to their race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status or the presence of any sensory, mental, or physical handicap.

Such action shall include, but not be limited to the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status, or the presence of any sensory, mental, or physical handicap.
3. The Contractor will send to each labor union, or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the labor union or workers' representative of the Contractor's commitments under *Section 202 of Executive Order No. 11246 of September 24, 1965*, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of *Executive Order No. 11246 of September 24, 1965*, and the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by *Executive Order No. 11246 of September 24, 1965*, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

## DIVISION 0 – GENERAL CONDITIONS

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further government contracts in accordance with procedures authorized in *Executive Order No. 11246 of September 24, 1965*, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The Contractor will include the provisions of *Paragraphs "1" through "7"* in every Subcontract or Purchase Order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to *Section 204 of Executive Order No. 11246 of September 24, 1965*, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including the sanctions for noncompliance, provided however that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

B. *Civil Rights Act of 1964 (P.L. 88-352, 78 STAT. 241):*

1. *Section 601 (In General):* No person in the United States shall, on the grounds of race, color, national origin, sex, religion, marital status, age, Vietnam era and disabled veteran status, or the presence of any sensory, mental, or physical handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.
2. *Section 602 (Effecting Compliance):* Each federal department and agency which is empowered to extend federal financial assistance to any program or activity by way of grant, loan, or contract other than a contract of insurance or guaranty, is authorized and directed to effectuate the provisions of *Section 601* with respect to such program or activity by issuing rules, regulations, or orders of general applicability which shall be consistent with achievement of the objectives the statute authorizing the financial assistance in connection with which the action is taken. No such rule, regulation, or order shall become effective unless and until approved by the President. Compliance with any requirement adopted pursuant to this section may be effected by:
  - a.) The termination of or refusal to grant or to continue assistance under such programs or activity to any recipient as to whom there has been an express finding on the record, after opportunity for hearing, of a failure to comply with such requirement, but such termination or refusal shall be limited to the particular political entity, or part thereof, or other recipient as to whom such a finding has been made, and shall be limited in its effect to the particular program, or part thereof, in which such noncompliance has been so found, and;

## DIVISION 0 – GENERAL CONDITIONS

- b.) By any other means authorized by law, provided, however, that no such action shall be taken until the department or agency concerned has advised the appropriate person or persons of the failure to comply with a requirement imposed pursuant to this section, the head of the federal department or agency shall file with the committees of the House and Senate having legislative jurisdiction over the program or activity involved a full written report of the circumstances and the grounds for such action. No such action shall become effective until 30 days have elapsed after the filing of such report.
- 3. Section 603 (Judicial Review): Any department or agency action taken pursuant to Section 602 shall be subject to such judicial review as may otherwise be provided by law for similar action taken by such department or agency on other grounds. In the case of action not otherwise subject to judicial review, terminating or refusing to grant or to continue financial assistance upon finding or failure to comply with any requirement imposed pursuant to Section 602, any assistance upon a finding or failure to comply with any requirement imposed pursuant to Section 602, any person aggrieved (including any State or political subdivision thereof or any agency of either) may obtain judicial review of such action in accordance with Section 10 of the Administrative Procedure Act, and such action shall not be deemed committed to unreviewable agency discretion within the meaning of that section.
- 4. Section 604 (Restriction on Action): Nothing contained in this title shall be construed to authorized action under this title by any department or agency with respect to any employment practice of any employer, employment agency, or labor organization except where a primary objective of the federal financial assistance is to provide employment.
- 5. Section 605 (Existing Authority Not Impaired): Nothing in this title shall add to or detract from any existing authority with respect to any program or activity under which federal financial assistance is extended by way of a contract of insurance or guaranty.
- C. Contracts in excess of \$10,000 shall comply with *Executive Order No. 11246*, entitled *Equal Employment Opportunity*, as amended by *Executive Order No. 11375*, *Executive Order No. 13672* and as supplemented in *Department of Labor Regulations (41 CFR, Part 60)*.
- D. This Contract shall comply with the *Copeland Anti-Kick Back Act (18 U.S.C. 874)* as supplemented in *Department of Labor Regulations (29 CFR, Part 3)*. The Contractor shall not induce by any means any person employed in the construction, completion, or repair of public work to give up any part of the compensation to which he is otherwise entitled.
- E. Contracts in excess of \$2,000 shall comply with the *Davis-Bacon Act (40 U.S.C. 276a to a-7)* and as supplemented by *Department of Labor Regulations (29 CFR, Part 5)*. Contractors shall pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor, and shall pay wages not less often than once a week.

## **DIVISION 0 – GENERAL CONDITIONS**

- F. Contracts in excess of \$2,000 which involve the employment of mechanics or laborers shall comply with *Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330)* as supplemented by *Department of Labor Regulations (29 CFR, Part 5)*. Each Contractor shall compute the wages of every mechanic and laborer on the basis of a standard workday of eight hours, and a standard workweek of 40 hours. Work in excess of the standard workday or workweek is permissible, provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of eight hours in any calendar day of 40 hours in the workweek. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction, safety, and health standards promulgated by the Secretary of Labor.
- G. Contracts in excess of \$100,000 require the recipient to agree to comply with applicable standards, orders, or regulations pursuant to the Clean Air Act of 1970 (42 U.S.C. 1857 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), amended.
- H. Contractor shall submit Certified Payrolls as described in *Section 00705.23*.

### **PART 6 - 00706.00 PAYMENTS AND COMPLETION**

#### **00706.01 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.

#### **00706.02 SCHEDULE OF VALUES**

Prior to Notice to Proceed, 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, operation and maintenance 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.

#### **00706.03 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 00701.03* are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.

## **DIVISION 0 – GENERAL CONDITIONS**

- C. At the time the Contractor submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Construction 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 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. The Contractor and its surety assume total responsibility for the stored materials.
  - 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.

### **00706.04 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 percent of the amount of each progress payment until 30 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. For Base Bids of \$150,000 or less, Owner may at Contractor Request, retain 10% of the amount of each progress payment, in lieu of payment and performance bonds.

## **DIVISION 0 – GENERAL CONDITIONS**

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

### **00706.05 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 00705.16*
  - 4. Failure to perform in accordance with the Contract Documents
  - 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*.

### **00706.06 RETAINAGE AND BOND CLAIM RIGHTS**

*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.

### **00706.07 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 have been 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.



**0706.08 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 or damage to the Work resulting from its prior occupancy. Contractor's 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.

**00706.09 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 *SECTION 00708.00*.

**PART 7 - 00707.00 CHANGES**

**00707.01 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 00707.02* or *00707.03*, respectively, and such adjustment(s) shall be incorporated into a Change Order.

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- B. If Owner desires to order a change in the Work, it may request a written Change Order proposal from Contractor. Contractor shall submit a Change Order proposal within 14 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 00707.02 and 00707.03*, 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 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 *SECTION 00708.00*.

### 00707.02 CHANGE 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 that 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 00703.05*.

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- a. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 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 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, 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 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 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 00707.03C*. 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.

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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 *SECTION 00707.02B*.
    - b. By application of unit prices to the quantities of the items involved as determined *SECTION 00707.02C*.
    - c. On the basis of time and material as determined in *SECTION 00707.02D*.
  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 of 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 of 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, materials, 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 on 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

## DIVISION 0 – GENERAL CONDITIONS

- c. Lump sum equipment usage
  - d. Overhead and profit as set forth below
  - 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 L&I approved Statement of Intent to Pay Prevailing Wages. Direct supervision shall be a reasonable percentage not to exceed 15 percent of the cost of direct labor. No supervision markup shall be allowed if a working supervisor's hours are included in the breakdown.
    - 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 L&I.
      - a. Federal Insurance: Direct contributions required by the *Federal Insurance Compensation Act*, *Federal Unemployment Tax Act*, and the *State Unemployment Compensation Act*.
    - 4) Safety: Costs incurred due to the *Washington Industrial Safety and Health Act*, which shall be a reasonable percentage not to exceed 2 percent of the sum of the amounts calculated in SUBPARAGRAPHS (1), (2), and (3) above.
    - 5) 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.
  - 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 from actual known costs, supplier quotations or standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges shall be itemized.

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- 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 developed from the current edition of one of the following sources:
- 1) *Associated General Contractors - Washington State Department of Transportation Equipment Rental Agreement; latest edition.*
  - 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.
  - 5) *Equipment Watch Rental Rate (Blue Book) for Construction Equipment* 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 50 percent of the applicable rate.
- d. Allowance for Small Tools, Expendables, and Consumable Supplies: Small tools consist of tools that 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 percent of direct labor costs.
  - 2) For Subcontractors, 5 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.

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- f. Allowance for Overhead and Profit: 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 Order, or any request for additional Work or extra payment of any kind on the Project. This allowance shall compensate Contractor for all non-craft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, Business and Occupation 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 following:
- 1) For Contractor, for any Work actually performed by Contractor's own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
  - 2) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
  - 3) For Contractor, for any Work performed by its Subcontractor(s), 8 percent of the first \$50,000 of the amount due each Subcontractor and 6 percent of the remaining amount, if any.
  - 4) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 8 percent of the first \$50,000 of the amount due the sub-Subcontractor and 6 percent of the remaining amount, if any.
  - 5) The cost to which overhead and profit is to be applied shall be determined in accordance with *SUBPARAGRAPHS a-e* above.
- g. 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(s): 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 profit are calculated in accordance with *SUBPARAGRAPH "f"* 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

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- b. Type of reimbursement including pre-agreed rates for material quantities
- 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.
- c. Not exceed any cost limit(s) without Owner's prior written approval.

3. Contractor shall submit costs in accordance with *SECTION 00707.02B* 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.
- 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
- 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 timesheets all labor performed in accordance with this authorization. Submit copies of daily timesheets 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.
- e. Not exceed any cost limit(s) without Owner's prior written approval.



## DIVISION 0 – GENERAL CONDITIONS

3. Contractor shall submit costs in accordance with *SECTION 00707.02B* and additional verification supported by:
  - a. Labor detailed on daily timesheets
  - b. Invoices for material

### **00707.03 CHANGE 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 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 records and, if requested, shall promptly furnish copies of such records to Owner.
  2. Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 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 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 *SECTION 00707.03B.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.

## DIVISION 0 – GENERAL CONDITIONS

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 Construction 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 re-sequencing 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 section, *00707.03D*, 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 00707.02*.
  3. Contractor shall follow the procedure set forth in *SECTION 00707.03B*.
  4. Contractor shall establish the extent of the change in Contract Time in accordance with *SECTION 00707.03C*.
  5. The daily cost of any change in Contract Time shall be limited to:
    - 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 percent of Contract Sum divided by the Contract Time for each day of the delay.

**PART 8 - 00708.00 CLAIMS AND DISPUTE RESOLUTION**

**00708.01 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 00707.01*, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in *SECTION 00707.02* or the Contract Time as provided in *SECTION 00707.03*, 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 days from Owner's final offer in accordance with either *SECTION 00707.01E* or *SECTION 00707.04C*; 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 that 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 Construction 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 00707.02*.
  - 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.

## DIVISION 0 – GENERAL CONDITIONS

- D. After Contractor has submitted a fully documented Claim that complies with all applicable provisions of *SECTIONS 00707.00* and *00708.00*, Owner shall respond, in writing, to Contractor as follows:
1. If the Claim amount is less than \$50,000, with a decision within 60 days from the date the Claim is received; or
  2. If the Claim amount is \$50,000 or more, with a decision within 60 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 00708.02*.
- 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.

### 00708.02 ARBITRATION

- A. If Contractor disagrees with Owner's decision rendered in accordance with *SECTION 00708.01D*, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 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.

## **DIVISION 0 – GENERAL CONDITIONS**

- 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.

### **00708.03 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's 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. Canceled checks (payroll and vendors)
  - 14. Job cost report, including monthly totals
  - 15. Job payroll ledger

## **DIVISION 0 – GENERAL CONDITIONS**

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 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. Worksheets 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, hours for the individuals, and rates for individuals.
  24. Worksheets, 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 - 00709.00 TERMINATION OF THE WORK**

### **00709.01 TERMINATION BY OWNER FOR CAUSE**

- A. Owner may, upon 7 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.

## DIVISION 0 – GENERAL CONDITIONS

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.
  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 00705.21*.
  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 *SECTION 00709.02B* 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 *SECTION 00709.01A* exist, then such termination shall be deemed a termination for convenience pursuant to *SECTION 00709.02*.

### 00709.02 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.

## **DIVISION 0 – GENERAL CONDITIONS**

- 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 rights, 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.
  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 and 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 *SECTION 00707.00*.
- D. If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

## **PART 10 - 00710.00 MISCELLANEOUS PROVISIONS**

### **00710.01 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 Thurston County unless otherwise specified by the Owner.

### **00710.02 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.



**00710.03 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 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 are required to complete the installation.

**00710.04 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.

**00710.05 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*.

**00710.06 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 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

**0710.07 RECORDS RETENTION**

The wage, payroll, and cost records of Contractor and its Subcontractors, and all records subject to audit in accordance with *SECTION 00708.03*, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

**00710.08 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.

**00710.09 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 that result from antitrust violations commencing after the Contract Sum is established and that 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.

**00710.10 IDENTIFICATION OF SUBCONTRACTORS FOR PROJECTS GREATER THAN \$1,000,000**

When an Owner's Estimate is in excess of \$1,000,000 for Public Works described in these documents, the bidder must as part of the bid, submit the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of the following:

- A. Heating, Ventilation, and Air Conditioning (HVAC);
- B. Plumbing, per RCW Chapter 18.106; and
- C. Electrical, per RCW Chapter 19.28 or to name itself for the work.

The Prime Contractor shall not list more than one subcontractor, or self, for each category of work identified.

Failure of the Prime Contractor to submit, as part of the bid names of such sub-contractors or itself to perform such work, or naming two (2) or more subcontractors to perform such work shall render the Contract bidder's bid as non-responsive and therefore void, in accordance with RCW 39.30.060.

END OF SECTION 00700

## DIVISION 0 – SUPPLEMENTAL CONDITIONS

### SECTION 00800 TABLE OF CONTENTS

#### 00800 SUPPLEMENTAL CONDITIONS

In accordance with the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS* take precedence over *GENERAL CONDITIONS*.

00802.07	Builders Risk Insurance
00810.13	Abbreviations of Administrative Organizations

**00802.07 BUILDERS RISK INSURANCE**

This section supersedes Section 00702.07.  
Builders Risk Insurance is not required.

**00810.13 ABBREVIATIONS OF ADMINISTRATIVE ORGANIZATIONS**

This section supplements **SECTION 00710.03** of the **GENERAL CONDITIONS**.

<b>TABLE 00810.13</b>	
<b>ABBREVIATIONS OF ADMINISTRATIVE ORGANIZATIONS</b>	
<i>AASHTO</i>	<i>American Associations of State Highway and Transportation Officials</i>
<i>ACI</i>	<i>American Concrete Institute</i>
<i>AFPA</i>	<i>American Forest &amp; Paper Association</i>
<i>AIA</i>	<i>American Institute of Architects</i>
<i>AIEE</i>	<i>American Institute of Electrical Engineers</i>
<i>AISC</i>	<i>American Institute of Steel Construction</i>
<i>AISI</i>	<i>American Iron and Steel Institute</i>
<i>AITC</i>	<i>American Institute of Timber Construction</i>
<i>ANSI</i>	<i>American National Standards Institute</i>
<i>APA</i>	<i>American Plywood Association</i>
<i>APWA</i>	<i>American Public Works Association</i>
<i>AREA</i>	<i>American Railway Engineering Association</i>
<i>ASA</i>	<i>American Standards Association</i>
<i>ASCE</i>	<i>American Society of Civil Engineers</i>
<i>ASME</i>	<i>American Society of Mechanical Engineers</i>
<i>ASTM</i>	<i>American Society of Testing and Materials</i>
<i>AWPA</i>	<i>American Wood Preservers' Association</i>
<i>AWPI</i>	<i>American Wood Preservers' Institute</i>
<i>AWS</i>	<i>American Welding Society</i>
<i>AWWA</i>	<i>American Water Works Association</i>
<i>CSI</i>	<i>Construction Specifications Institute</i>
<i>NEC</i>	<i>National Electrical Code</i>
<i>IBC</i>	<i>International Building Code</i>
<i>NEMA</i>	<i>National Electrical Manufacturer's Association</i>
<i>NFPA</i>	<i>National Fire Protection Association</i>
<i>OSHA</i>	<i>Occupational Safety and Health Administration</i>
<i>RCW</i>	<i>Revised Code of Washington</i>
<i>SAE</i>	<i>Society of Automotive Engineers</i>
<i>SSPC</i>	<i>Steel Structures Painting Council</i>
<i>UL</i>	<i>Underwriter's Laboratories, Inc.</i>
<i>UMC</i>	<i>Uniform Mechanical Code</i>

## DIVISION 0 – SUPPLEMENTAL CONDITIONS

<i>UPC</i>	<i>Uniform Plumbing Code</i>
<i>USCS</i>	<i>United States Commercial Standard</i>
<i>WAC</i>	<i>Washington Administrative Code</i>
<i>WISHA</i>	<i>Washington Industrial Safety and Health Administration</i>
<i>WSDOT</i>	<i>Washington State Department of Transportation</i>
<i>WWPA</i>	<i>Western Wood Products Association</i>

Reference herein to specifications issued by the above named or other organization shall mean the latest edition of said specifications, unless otherwise noted.

## **DIVISION 1 – GENERAL REQUIREMENTS**

### **SECTION 01000 GENERAL REQUIREMENTS**

#### **01010 SUMMARY OF WORK**

Construction of this project will improve an existing shooting area by creating a professional shooting range including sand-lined impact berms, a concrete shooting pad, a gravel walking path, gravel parking, information kiosk, signing, access gates, fire break, stormwater drainage paths and specialized planting. Construction is intended to improve safety by minimizing fire danger, minimizing or eliminating ricochet, limiting access during closures, reducing lead dispersion and limiting direction of fire.

Contractor shall provide all labor, material, equipment and miscellaneous items necessary and incidental to improve the existing shooting range at the Department's Swakane Canyon Rifle and Pistol Range on USFS Road 7415 in Chelan County. Items include:

- A. Contractor shall furnish, install, maintain and remove all necessary erosion control measures including, dust control, wattles, seeding and mulch, and appropriate BMP's necessary to prevent erosion and sedimentation in accordance with Department of Ecology requirements.
- B. Contractor shall provide all necessary construction surveying and staking. Contractor may request an ACAD file for aid in construction staking layout and shall provide as-built drawings prior to project close-out.
- C. Contractor shall provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install the 100 yard and 200 yard rifle ranges including grading, compaction, raking and loose rock removal, impact berms with sandy soil cushion, non-vegetated areas, cleared and grubbed fire break, stormwater swales, soil compaction, gravel access path, seeding and stockpiling of excess soils for use in the phase 2 construction elements, which are not included in this contract.
- D. Contractor shall provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install the gravel access road and parking including, grading, compaction, concrete wheel stops, signing, seeding disturbed areas, 3-4 man barrier rock and wood information kiosk with galvanized metal roof.
- E. Contractor shall provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install concrete shooting pad for 100- and 200-yard range and concrete ADA parking pad with thickened edge, ADA stall pavement striping and painted accessible symbol.
- F. Contractor shall provide all labor, material, equipment and miscellaneous items necessary and incidental to furnish and install two hot-dip galvanized steel, double swing gates and gate lock posts.

#### **01011 OWNER FURNISHED ITEMS**

Not Used.

**01012 CONTRACT TIME**

Substantial Completion shall be achieved by July 9, 2021

Final Completion shall be achieved by July 26, 2021.

**01025 UNIT PRICE BASE BID MEASUREMENT AND PAYMENT**

Not Used.

**01030 SCHEDULE OF VALUES**

- A. Prior to the preconstruction meeting, the Contractor shall submit on the provided form a detailed *Schedule of Values* to the Engineer for approval. The *Schedule* shall show in detail all items performed on this Project. For each major line item, list sub-values of material and installation. The sum of all values listed in the *Schedule* shall equal the total Base Bid.
- B. The Contractor shall include a line item identified as "Submittal of Signed Permits, Project Record, and Operation and Maintenance Manuals." This item shall be assigned a value of \$1,000. The amount will be withheld from the final payment until Project Engineer has received and approved the above mentioned document(s).

**01040 COORDINATION**

- A. The Contractor shall, before preparing the construction schedule, consult with the Engineer to determine any particular scheduling or operational coordination conditions that will arise during the course of construction and coordinate work accordingly to minimize disruption to Engineer or to progress of the work.
- B. The Contractor shall coordinate all materials, supplies, subcontract work, and its own work to ensure conflict-free and uniform flow of construction activities to completion within time set forth in *SECTION 01012*.

**01060 REGULATORY REQUIREMENTS**

- A. Washington Department of Fish and Wildlife has obtained the following listed permits:
  - State Environmental Policy Act (SEPA) Determination and Checklist and Drawings
  - Conditional Use Permit
  - Grading Permit
1. The permits with provisions affecting the construction methods or schedule of this project have been incorporated in *ATTACHMENT 1* at the end of this division. The Contractor shall abide by all restrictions noted in these permits as the construction is in progress.

## DIVISION 1 – GENERAL REQUIREMENTS

2. All other permits or fees required by local, state, or federal governmental agencies necessary for the accomplishment of this project shall be obtained and paid for by the Contractor, except that any utility company costs for new permanent service shall be paid directly to the utility company by the State.
  3. All costs associated with obtaining the permits, including labor, materials, and equipment shall be included in the Base Bid, except for permit fees.
  4. The Contractor shall pay all permit fees. The Contractor shall not include any permit fees in the Base Bid. The State shall reimburse the Contractor by Change Order for the actual fees charged by city, state, or county authorities with no Contractor markup. The Contractor shall provide to the State documentation regarding costs for fees paid.
- B. The Contractor shall notify city, county, and state authorities of any inspections and/or approvals required.

### 01100 SPECIAL PROJECT PROCEDURES

- A. Due to existing fire danger, the following conditions apply on the Wildlife Area, until Industrial Fire Precaution Levels (IFPL) warrant lifting of some or all of the conditions. If any conditions are lifted, it shall be done in writing by the Engineer. If any additional conditions are required it shall be done in writing by the Engineer.
1. No smoking in the Wildlife Area except in an enclosed vehicle, per *WAC 232-13-07000A*.
  2. No fires or campfires in the Wildlife Area, per *WAC 232-1307000A*.
  3. No open flame, welding, metal cutting, chainsaw operation, or any activity that may cause a spark or hot metal in the Wildlife Area, per *WAC 232-13-05000A*.
  4. No operation or parking of a motor vehicle (road vehicles and off-road vehicles) off developed roadways in the Wildlife Area. However, it is permissible to park in an area devoid of vegetation within 10 feet of a developed roadway. For purposes of this paragraph, a developed roadway is a roadway constructed for standard highway vehicles with an asphalt, gravel or dirt surface with no vegetation, 14 feet wide or more. Trails or tracks are not such roadways.
  5. A violation of these provisions is punishable under RCW 77.15.160(5)(b). A violation of these provisions may result in removal of offending personnel from the work, per General Conditions Section 00705.01 Contractor Control and Supervision.
  6. All vehicles shall be equipped with a fire extinguisher, 2 gallons of water, and a shovel. All worksites shall have a fire extinguisher and shovel present. The Contractor shall take all reasonable precautions to prevent fires.
  7. The Contractor shall have an employee remain at the worksite with sufficient firefighting capability, for at least one hour after work has ceased for the day, or if leaving for more than one hour, to ensure no fires have started.



## **DIVISION 1 – GENERAL REQUIREMENTS**

8. The Contractor shall contact the Wildlife Area Manager or Assistant Manager at the beginning of each week; Monday mornings, for any special instructions.

### **01200 PROJECT MEETINGS**

Contractor shall attend a preconstruction meeting with the Engineer's representative prior to receiving the *Notice to Proceed*, to discuss the work and contracting procedures.

### **01300 CONTRACTOR SUBMITTALS**

#### **A. PRELIMINARY SUBMITTALS**

Within 7 calendar days after the date of Notice to Proceed, the Contractor shall submit the following items to the Engineer for review:

1. A preliminary schedule of Shop Drawings and Samples. The schedule of submittals shall be based on Contractor's priority, planned construction sequence and schedule, long lead items, and size of submittal package. Allow time for project resubmittals. The Owner is not responsible for any delay associated with project resubmittals. The schedule shall include at a minimum the submittal number, Specification section and description of the submittal contents.
2. A list of permits and licenses the Contractor shall obtain, indicating the agency required to grant the permit, e.g., building permits, equipment or clearance permits, etc. and the expected date of submittal for the permit and required date for receipt of the permit.

#### **B. PRECONSTRUCTION CONFERENCE SUBMITTALS**

At the preconstruction conference of SECTION 01010 - Summary of Work, the Contractor shall submit the following items to the Engineer for review:

1. A preliminary schedule of values
2. An Initial Schedule Submittal in accordance with DIVISION 0 – GENERAL CONDITIONS 00703.2.

#### **C. SHOP DRAWINGS**

1. Wherever called for in the Contract or where required by the Engineer, the Contractor shall furnish 1 hardcopy (to be retained by the Engineer) plus one complete electronic copy in Acrobat (pdf) format, of each Shop Drawing submittal unless otherwise indicated in the Contract. Shop Drawings may include, but not limited to detail design calculations, shop-prepared drawings, fabrication and installation drawings, erection drawings, lists, graphs, catalog sheets, data sheets, and similar items.
2. Whenever the Contractor is required to submit design calculations as part of a submittal, such calculations shall bear the signature and seal of an engineer registered in the appropriate branch and in the state wherein the work is located, unless otherwise indicated.

## DIVISION 1 – GENERAL REQUIREMENTS

### 3. Organization:

- a. A single submittal transmittal form shall be used for each technical Specification section or item or class of material or equipment for which a submittal is required. A single submittal covering multiple sections will not be acceptable, unless the primary Specification references other sections for components.

Example: if a pump section references other sections for the motor, shop-applied protective coating, anchor bolts, local control panel, and variable frequency drive, a single submittal would be acceptable and should be submitted under the pump section. A single submittal covering vertical turbine pumps and horizontal split case pumps would not be acceptable.

- b. On the transmittal form, index the components of the submittal and insert tabs in the submittal to match the components. Relate the submittal components to Specification paragraph and subparagraph, Drawing number, detail number, schedule title, room number, or building name, as applicable.
- c. Terminology and equipment tag names and numbers used in submittals shall match those used in the Contract. Where a submittal includes multiple pieces covered under a section the submittal shall clearly indicate the tag name or number for each piece included on all pages related to that piece.
- d. Disorganized submittals that do not meet the requirements of the Contract will be returned without review.

### 4. Format:

- a. Minimum sheet size shall be 8½ inches by 11 inches. Maximum sheet size shall be 11 inches by 17 inches. Every page in a submittal shall be numbered in sequence. Each copy of a submittal shall be collated and stapled or bound, as appropriate. The Engineer will not collate sheets or copies.
- b. Where product data from a manufacturer is submitted, clearly mark which model is proposed, along with all complete pertinent options, data, capacities, dimensions, clearances, diagrams, controls, connections, anchorage, and supports indicated. Sufficient level of detail shall be presented for assessment of compliance with the Contract. Indicating marks or methods shall be such that they are reproducible and remain legible when scanned or copied in black and white system. The Contractor shall clearly indicate what is to be provided, the Engineer will make no assumptions from unmarked options lists.
- c. Each submittal shall be assigned a unique number. Submittals shall be numbered sequentially, and the submittal numbers shall be clearly noted on the transmittal and shall include the primary Specification number.

## DIVISION 1 – GENERAL REQUIREMENTS

Original submittals shall be assigned a numeric submittal number followed by a numeric resubmittal number to distinguish between the original submittal (0) and each resubmittal (1, 2 etc.). In the name of the electronic file; number submittals sequentially using a set brief descriptor followed by the unique sequential submittal number, submittal content title and 6-digit primary specification section number.

Examples: "Rebuild Submittal 1.0-Schedule of Values- 01300.pdf" "Rebuild Submittal 2.0-Construction Schedule-01300.pdf" Resubmittals Examples: "Rebuild Submittal 1.1-Schedule of Values- 01300.pdf" for the first resubmittal and "Rebuild Submittal 1.2-Schedule of Values- 01300.pdf" for the second resubmittal and so on.

Resubmittals shall include only information directly related to the previous submittal. If portions of a submittal are changed and other portions remain the same upon resubmittal, the resubmittal shall include all changed and unchanged portions so that each resubmittal is a complete document.

### 5. Review Process

- a. Except as may otherwise be indicated, the Engineer will return each submittal to the Contractor with comments noted thereon, within 14 calendar days following receipt by the Engineer. It is considered reasonable that the Contractor will make a complete and acceptable submittal to the Engineer by the first resubmittal on an item. For example, for a submittal that requires 2 resubmittals before it is complete, the accumulated review period could be 42 calendar days.
- b. If a submittal is returned to the Contractor marked "NO EXCEPTIONS TAKEN," formal revision and resubmission of the submittal will not be required. If a component or section of the submittal is returned to the Contractor specifically marked "NO EXCEPTIONS TAKEN," formal revision and resubmission of that component or section of the submittal will not be required.
- c. If a submittal is returned marked "Make Corrections Noted," Contractor shall make the corrections on the submittal, but formal revision and resubmission will not be required. If a component or section of the submittal is returned to the Contractor specifically marked "Make Corrections Noted," formal revision and resubmission of that component or section of the submittal will not be required.
- d. If a submittal, or portion of a submittal, is returned marked "AMEND-RESUBMIT," the Contract shall revise it and shall resubmit the required number of copies. If any portion of a submittal is returned marked "AMEND-RESUBMIT," the status of the entire submittal shall be considered "AMEND-RESUBMIT," however, only the portions indicated need to be updated in the resubmittal.

## **DIVISION 1 – GENERAL REQUIREMENTS**

- e. If a submittal is returned marked "REJECTED-RESUBMIT," it shall mean either that the proposed material or product does not satisfy the Specification, the submittal is so incomplete that it cannot be reviewed or is a substitution request that will not be reviewed because it is not submitted in accordance with the Contract. The Contractor shall prepare a new submittal and shall submit the required number of copies.
- f. Resubmittal of rejected portions of a previous submittal will not be allowed. Every change from a submittal to a resubmittal or from a resubmittal to a subsequent resubmittal shall include a summary page at the front of the submittal listing responses to previous review comments and a list of items that have changed from the previous submittal/resubmittal. Changed items shall be flagged where they occur in the resubmittal.
- g. Fabrication of an item may commence only after the Engineer has reviewed the pertinent submittals and returned copies to the Contractor with the submittal marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED." Corrections indicated on submittals shall be considered as changes necessary to meet the requirements of the work and shall not be taken as changes to the Contract.
- h. Submittals shall be carefully reviewed by an authorized representative of the Contractor prior to submission to the Engineer. Each submittal shall be dated and signed by the Contractor as being correct and in strict conformance with the Contract. In the case of Shop Drawings, each sheet shall be so dated and signed. Any approved deviations from the Contract shall be noted on the transmittal sheet.

The Engineer will only review submittals that have been so verified by the Contractor. Non-verified submittals will be returned to the Contractor without action taken by the Engineer, and any delays caused thereby shall be the total responsibility of the Contractor.
- i. Corrections or comments made on the Contractor's Shop Drawings during review do not relieve the Contractor from compliance with Contract Drawings and Specifications. Review is for conformance to the design concept and general compliance with the Contract only. The Contractor is responsible for confirming and correlating quantities and dimensions, fabrication processes and techniques, coordinating work with the trades, and satisfactory and safe performance of the work.

### **D. SAMPLES**

- 1. The Contractor shall submit the number of samples indicated by the Specifications. If the number is not indicated, submit not less than 1 sample. Where the amount of each sample is not indicated, submit such amount as necessary for proper examination and testing by the methods indicated.

## DIVISION 1 – GENERAL REQUIREMENTS

2. Samples shall be individually labeled or tagged, indicating the salient physical characteristics and manufacturer's name. Upon acceptance by the Engineer, one set of the samples will be stamped and dated by the Engineer and returned to the Contractor, one set of samples will be retained by the Engineer, and one set shall remain at the Work Site in the Engineer's field office until completion of the work.
3. Unless indicated otherwise, the Engineer will select colors and textures from the manufacturer's standard colors and standard materials, products, or equipment lines. If certain samples represent non-standard colors, materials, products, or equipment lines that will require an increase in Contract Times or Price, the Contractor shall clearly state so on the transmittal page of the submittal.
4. The Contractor shall schedule sample submittals such that:
  - a. Sample submittals for color and texture selection are complete so the Engineer has 14 calendar days to assemble color panels and select color and texture dependent products and materials without delay to the construction schedule.
  - b. After the Engineer selects colors and textures, the Contractor has sufficient time to provide the products or materials without delay to the construction schedule. The Contract Times will not be extended for the Contractor's failure to allow enough review and approval or selection time, failure to submit complete samples requiring color or texture selection, or failure to submit complete or approvable samples.

### E. RECORD DRAWINGS

1. The Contractor shall maintain one set of Drawings at the Project Site for the preparation and weekly update of record drawings.
  - a. To reflect the current as-built condition, including all items required for Blackline and Blueline Drawings defined herein.
2. The Record Drawings shall mark every project condition, location, configuration, and any other change or deviation which may differ from the Contract Drawings at the time of award, including buried or concealed construction and utility features that are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of buried utilities that differ from the locations indicated, or that were not indicated on the Contract Drawings.
3. Record drawings shall be supplemented by any detailed sketches as necessary or as Contractor is directed, to fully indicate the work as actually constructed. These record drawings are the Contractor's representation of as-built conditions, shall include revisions made by addenda and change orders, and shall be maintained up-to-date during the progress of the work.

## **DIVISION 1 – GENERAL REQUIREMENTS**

- a. **Blackline Drawings:** The Contract drawings shall be used as the basis for the record drawings.
  - i. All new drawings issued during construction or bidding that are incorporated into the Contract via RFIs, Deviations, Design Changes, or other means shall be included in the drawings as the basis for the record drawings (Blackline Drawings).
  - ii. All drawings issued during construction or bidding that are incorporated into the Contract via RFIs, Deviations, Design Changes, or other means to replace previous versions of the same drawing shall be included in the drawings as the basis for the record drawings (Blackline Drawings).
- b. **Blueline Drawings:** The Contractor shall incorporate all RFIs, Deviations, Design Changes, and other changes and clarifications to the Contract Documents into the Blackline Drawings in the color blue Blueline Drawings. All blue marks shall identify the relevant RFIs, Deviations, Design Changes, etc. Identification alone or partial incorporation of RFIs, Deviations, Design Changes, etc. shall not be considered as meeting the requirements of the Contract. RFIs, Deviations, Design Changes, etc. must be fully incorporated and identified.
- c. The Contractor shall document the as-built condition of the project by marking changes to the Blueline Drawings in the color red. This drawing set shall be the final Record Drawings.
- d. Where red marks are not shown on the Record Drawings it is understood that the Blueline Drawings match the as-built condition.

### **F. QUALITY CONTROL ("QC") SUBMITTALS**

- 1. Quality control submittals are defined as those required by the Specifications to present documentary evidence to the Engineer that the Contractor has satisfied certain requirements of the Contract.
- 2. Unless otherwise indicated, QC submittals shall be submitted: Before delivery and unloading, for the following types of submittals:
  - a. Manufacturers' installation instructions
  - b. Manufacturers' and Installers' experience qualifications
  - c. Ready mix concrete delivery tickets
  - d. Design calculations
  - e. Affidavits and manufacturers' certification of compliance with indicated product requirements
  - f. Laboratory analysis results

## **DIVISION 1 – GENERAL REQUIREMENTS**

- g. Factory test reports
  - h. Inspection results and reports of Contractor's testing firm for special inspections.
- 3. Unless otherwise indicated, QC submittals shall be submitted within 30 Business Days of the event documented for the following types of submittals:
  - a. Manufacturer's field representative certification of proper installation
  - b. Field measurement
  - c. Field test reports
  - d. Receipt of permit
  - e. Receipt of regulatory approval
- 4. The Engineer will record the date that a QC submittal was received and review it for compliance with submittal requirements, but the review procedures and Engineer time limits above for Shop Drawings and samples will not apply.

### **01510 TEMPORARY UTILITIES**

- A. Contractor shall supply and maintain all necessary and temporary electrical services as required for construction of this project. These services shall include temporary lighting receptacles for extension cords and outlets for power tools. Contractor shall pay for all power.
- B. The Contractor shall provide adequate temporary toilet facilities, where directed, when work is started for all those connected with the work. The Contractor shall keep the toilet facilities in a sanitary condition and remove the toilet facilities at the end of the project and disinfect the premises.
- C. Drinking water is not available at the site. Provide single-service containers or a sanitary drinking device from a proven safe source for all those connected with the work.
- D. Water for construction purposes is not available at the site.

### **01730 OPERATING AND MAINTENANCE MANUALS**

Not Used.

END OF SECTION 01000

## **ATTACHMENT 1**

County Conditional Use  
SEPA Determination



BEFORE THE CHELAN COUNTY HEARINGS EXAMINER

Findings of Fact/Conclusions of Law/Decision/Conditions of Approval  
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12. The applicant submitted an Aquifer Recharge Disclosure Form, date stamped September 21, 2020. The proposed project does not require a vulnerability report, pursuant to Chelan County Code (CCC) Chapter 11.82.
13. Pursuant to the Washington State Department of Fish and Wildlife Priority Habitat Species Maps, the subject properties contain mule deer and bighorn sheep habitat. Therefore, the provisions of CCC Chapter 11.78, do apply.
14. Pursuant to the Natural Resources Stream Typing Maps, Swakane Creek, a fish bearing stream, flows across Parcel # 24- 20-22-865-003 and a non-fish bearing stream flows across Parcel # 24-20-22-100-050; therefore, the proposal is subject to the provisions of CCC Chapter 11.78..
15. Chelan County GIS mapping indicates that the subject property is located within a potential geologic hazard area due to potential erosion hazards found on the property. Therefore, the provisions of CCC Chapter 11.86 do apply.
16. Based on the National Wetlands Inventory Maps prepared by the US Department of Fish and Wildlife Services, no wetlands are located on or adjacent to the subject property. Therefore, the provisions of CCC Chapter 11.80 Wetland Areas Overlay District would not apply to the project.
17. Pursuant to Revised Code of Washington (RCW) 27.53.020, if cultural resources are found, the applicant will be required to stop work and contact the Department of Archaeology and Historic Preservation, the Confederated Tribes of the Colville Reservation, and Chelan County Community Development. No comments were received on the proposal from DAHP or Tribes.
18. WDFW proposes to construct the public shooting range in two phases. Phase 1 would consist of creating a rifle range (to be built in 2021), and Phase 2 would consist of creating a pistol range (to be built in 2022).
19. The subject properties would be accessed from a parking lot off of Swakane Canyon Road.
20. There is currently no domestic water available and none is proposed.
21. Power is by an extension of the Chelan County PUD.
22. There are currently no sanitation facilities, and none are proposed.
23. The applicant must comply with CCC, Chapter 7.35 Noise.
24. As conditioned, the visual impact is anticipated to be minimal. The proposed use is compatible to the current open space and recreational uses of the surrounding properties.
25. The Notice of Application was referred to surrounding property owners within 300 ft. (excluding 60' of right-of-way), jurisdictional agencies and departments of the County. These agencies and surrounding property owners were notified on October 27, 2020 with comments due November 10, 2020. Agency comments are considered by the Hearing Examiner and, when appropriate, set forth as Conditions of Approval. The following is a list of Agencies who received notice and the date comments were received:

Agencies Notified	Response Date	Nature of Comment
Chelan County Assessor		No Comment.
Chelan County Building Official		No Comment.
Chelan County Fire Marshal	November 12, 2020	The subject property is located outside of Fire District #1. Alternate fire flow provisions are not necessary.

Chelan County Fire District No. 1		No Comment.
Chelan Douglas Health District (CDHD)		No Comment.
Chelan County Public Works (CCPW)	November 16, 2020	No road improvements are required to Swakane Canyon Rd. The applicant would be required to dedicate additional right-of-way to make right-of-way on Swakane Canyon Rd. 30' from centerline. The applicant would need to obtain a Road Approach Permit. The applicant would be required to construct the Private Internal Access at a minimum, to meet a Rural Emergency Vehicle Access Road (Standard Plan PW-22) with an Emergency Vehicle Turnaround (Standard Plan PW-23 A or B) within the proposed project.
Chelan County PUD (PUD)		No Comment.
WA Dept. of Ecology		No Comment.
WA Dept. of Archaeology and Historic Preservation		No Comment.
Yakama Nation		No Comment.
Confederated Tribes of Colville		No Comment.

26. No public comments were received.
27. A Determination of Non-Significance (DNS) was issued by WDFW on August 20, 2020.
28. The application was submitted on September 21, 2020.
29. The Determination of Completeness was issued on October 19, 2020.
30. The Notice of Application was provided on October 27, 2020.
31. The Notice of Public Hearing was provided on December 5, 2020.
32. The purpose of the Rural Residential/Resource 20 (RR20) land use designation of the Rural Element is to allow for low intensity rural development, agricultural and forestry uses which do not require the extension of services or infrastructure. These areas provide greater opportunities for protecting sensitive environmental areas and creating open space typical of a rural setting. Additional uses may be considered with supplemental provisions, such as "...intensification of existing development or new development of small scale recreational or tourist uses that rely on a rural location or setting but that do not include a new residential component... home occupations; bed and breakfasts; and community facilities."
- 32.1 The Hearing Examiner has reviewed the proposed development for consistency with the Rural Residential/Resource 20 (RR20) designation. The applicant is proposing to utilize the undeveloped properties to construct a shooting range that is open to the public.

- 32.2 The proposed uses are consistent with the goals and policies of the Rural Element within the Chelan County Comprehensive Plan.
33. Chelan County Code Section 11.04.010 District Use Chart:
- 33.1 The applicant is proposing to construct a shooting range on the subject properties. In Phase 1, a rifle shooting range would be constructed and in Phase 2, a pistol shooting range would be constructed. This use is listed as an Essential Public Facilities in the district use chart, Chelan County Code (CCC) Section 11.04.020, and requires a conditional use permit (CUP) in the RR20 zoning district.
- 33.2 The proposed use is permitted with an approved conditional use permit.
34. Chelan County Code, Section 11.93.040, Conditional Use Permit Criteria: A conditional use permit may be approved only if all of the following review criteria and any special criteria listed in this chapter are met:
- 34.1 All criteria required for a specific use by this chapter can be satisfied.
- 34.1.1 Criteria for Essential Public Facilities have been addressed below.
- 34.1.2 Based on review of the application materials submitted, the criteria for this use can be satisfied.
- 34.2 The design standards of the zoning district within which the lot is located, critical area regulations, and all other applicable development standards and regulations can be met.
- 34.2.1 The subject property is located in the RR20. The proposed use is allowed as a Conditional Use as identified in the District Use Chart in Chapter 11.04.
- 34.2.2 The site plan of record, date-stamped September 21, 2020, demonstrates the existing development meets the applicable zoning setbacks identified in CCC Section 11.08.020.
- 34.2.3 The proposed use is identified in Table 11.90-3 CCC Chapter 11.90 and has the requirement of 0.3 parking spaces for every attendee for off-street parking. The proposal has a parking lot with 11 parking spaces and one handicap parking space, which would allow for a maximum capacity of 40 users at one time.
- 34.2.4 Landscaping for new public facilities is required per CCC Chapter 15.50.020(1)(a). However, pursuant to CCC Section 15.50.055, existing conditions on the property such as no irrigation water make compliance impractical. In addition, due to fire safety concerns, vegetation needs to be cleared from around the proposed shooting range.
- 34.2.5 Based on the site plan of record, date stamped September 21, 2020, the proposed development meets the applicable requirements of CCC Chapter 11.08.
- 34.3 Compatibility with the adjacent uses and the protection of the character of the surrounding area.
- 34.3.1 As proposed, the shooting range meets the definition of Essential Public Facility as defined in CCC Section 14.98.705.

- 34.3.2 The proposed development is located in a rural canyon to the north of Wenatchee near the Rocky Reach Dam. There is no residential development further up Swakane Canyon Road and the properties in this area are all owned by various governmental agencies. The proposed shooting range would reduce conflict that has occurred between different user groups on the Swakane Wildlife Area. Although the shooting range is not a park or trail, it does support active communities, in that it provides target shooters with a designated place to practice, thereby reducing dispersed target shooting that may impact other users of the wildlife area, such as hikers, campers, and bird watchers.
- 34.3.3 As conditioned, the proposed use would be compatible with the character of the surrounding area.
- 34.4 Detrimental impacts on the natural environment and productive use of surrounding natural resource lands can be mitigated or avoided.
  - 35.4.1 The subject properties are not identified as a classified resource land pursuant to the Chelan County Comprehensive Plan. Although there are protected critical areas on or nearby the subject properties, the shooting range has gone through several rounds of environmental review, including public comment periods, which ensure that it preserves ecological functions while still creating recreation opportunities for residents (it is part of the adopted Chelan Wildlife Area Master Plan). The subject property is located within an area that is shown to have potential erosion concerns per Chelan County GIS mapping; however, the proposed shooting ranges are located in the lower flat areas of the canyon.
  - 34.4.2 As conditioned, the use will not be detrimental to the natural environment.
- 34.5 No conditional use permit shall be issued without a written finding that:
  - 34.5.1 After adequate opportunity for review and comment, all providers of water, sewage disposal, schools, and fire/police protection serving the development have issued a letter that adequate capacity exists or arrangements have been made to provide adequate services for the development;
  - 34.5.2 Chelan County provided a Notice of Application to all providers and received comments are included in the file of record.
  - 34.5.3 Through the process of public and agency noticing, opportunity for review and comments were provided for the proposed use.
  - 34.5.4 No county facilities will be reduced below adopted levels of service as a result of the development
  - 34.5.5 The proposed use is not anticipated to result in county facilities being reduced below adopted levels of service as a result. Chelan County Public Works indicated in their November 16, 2020 comment letter that no traffic impact study will be required at this time, but if the permitted uses change, additional review may be required.

- 34.5.6 As conditioned, the proposed use would not result in county facilities being reduced below adopted levels of service.
- 34.6 The proposed use shall not result in undue adverse impacts affecting the public health, safety and welfare.
  - 34.6.1 The proposed use of the subject properties does not include sanitation facilities or potable water. No comment was received from the Chelan-Douglas Health District.
  - 34.6.2 The proposed uses are not anticipated to result in an adverse impact on public health, safety and welfare.
- 34.7 Adequate provisions have been provided for roads, ingress and egress, stormwater, parking and loading, domestic and irrigation water, sanitary facilities, power, fire protection, and other necessary facilities, improvements or services consistent with the requirements of Titles 11 and 15 of the Chelan County Code.
  - 34.7.1 Roads, ingress and egress: The subject property is accessed from Swakane Canyon Road, which is designated as a primitive road.
  - 34.7.2 Stormwater: The applicant shall comply with CCC Title 13; Chelan County Stormwater Guidelines and Procedure.
  - 34.7.3 Parking and Loading: According to Table 11.90-3 in CCC Chapter 11.90, the applicant shall provide 0.3 parking spaces for every attendee (up to 40 users at a time) for the proposed use of the subject properties as a shooting range.
  - 34.7.4 Domestic and Irrigation Water: No domestic water is available on site. The properties do not benefit from irrigation water.
  - 34.7.5 Sanitary Facilities: The properties do not offer sanitary facilities.
  - 34.7.6 Power: Power is provided by Chelan County PUD.
  - 34.7.7 Fire Protection: The proposed development is located outside of Chelan County Fire District #1. Comments received from the Chelan County Fire Marshal, dated November 12, 2020, state that alternative fire flow provisions are not necessary for this project.
  - 34.7.8 All necessary facilities, improvements and services are consistent or can be conditioned per the requirements of Titles 11, 13 and 15 of the Chelan County Code.
- 34.8 Noise, light, heat, steam, erosion, water quality, glare, odors, air pollution, smoke, wastes, dust, vibration, electrical disturbance, physical hazards and related impacts on adjacent properties and to the vicinity can be mitigated or avoided.
  - 34.8.1 Based on the application materials, and as conditioned, the proposed use of the subject property would not impact adjacent properties in the vicinity with noise, light, heat, steam, water quality, glare, odors, air pollution, smoke, wastes, dust, vibration, electrical disturbance, physical hazards, or any other related impacts. No public comments were

received indicating that nearby property owners were concerned with the proposal.

34.8.2 Based on the above facts, noise, light, heat, steam, erosion, water quality, glare, odors, air pollution, smoke, wastes, dust, vibration, electrical disturbance, physical hazards and related impacts on adjacent properties can be avoided or mitigated as conditioned.

34.9 The granting of the proposed conditional use permit is consistent and compatible with the intent, goals, objectives and policies of the comprehensive plan, and any implementing regulation.

34.9.1 The construction of a shooting range on the subject properties would be consistent with the goals and policies of the Rural Element of the Comprehensive Plan.

34.9.2 The project is consistent with the Chelan County Comprehensive Plan.

35. Chelan County Code, Section 11.93. 165: Essential Public Facilities - The following minimum conditions shall apply to Essential Public Facilities:

35.1 The proposal is consistent with the goals and policies of the Comprehensive Plan and all applicable county code provisions.

35.1.1 Applicant Response: Chelan County's vision for recreation is stated as: "Chelan County provides a mix of parks, recreation and open space that complements community character, creates diverse opportunities for residents and visitors, and preserves ecological functions." This project meets this vision in that it will provide a new facility (shooting range) for an activity which currently occurs but does not have a designated area. This shooting range will reduce conflict that has occurred between different user groups on the Swakane Wildlife Area (conflicts between competing interests are mentioned on page 12 of the Park & Recreation Element of the plan). Additionally, the shooting range has gone through several rounds of environmental review, including public comment periods, which ensure that it preserves ecological functions while still creating recreation opportunities for residents (see Chelan Wildlife Area Master Plan).

35.1.2 This project meets four of the goals listed in the Chelan County Comprehensive Plan's Park & Recreation Element.

35.1.3 Goal 1: Encourage open space and public land use for the enjoyment of County residents and visitors This goal is met by the project in that it will add a designated location for a recreational pursuit (target shooting) in an open space on public land (Swakane Unit of the Chelan Wildlife Area, managed by WDFW).

35.1.4 Goal 3: Park and recreation planning and development should consider impacts to surrounding land uses, critical areas, and significant natural scenic, historic, or cultural features This goal is met through the extensive review process that the project underwent. The 2018 Chelan Wildlife Area Management Plan was developed by an interdisciplinary team of WDFW staff with significant public involvement. This included input from the local stakeholder-based Chelan Wildlife Area Advisory

Committee (WAAC), input from other public agencies, and input from interested citizens gathered from two public meetings. The management plan includes the development of the shooting range, and the plan considers all aspects of the environment found within the Chelan Wildlife Area.

- 35.1.5 Goal 5: Support active communities through park and trail use and development Although the shooting range is not a park or trail, it does support active communities, in that it provides target shooters with a designated place to practice, thereby reducing dispersed target shooting that may impact other users of the wildlife area, such as hikers, campers, and bird watchers. Additionally, the shooting range supports the tradition of hunting by providing hunters with a location to practice prior to their chosen hunting season(s).
- 36.1.6 The applicant provided a site plan that shows these proposed parking areas, date stamped September 8, 2020 respectively, which illustrate the location of activities and movement of vehicles on and off the property.
- 35.1.6 Goal 6: Provide and maintain acceptable levels of public facilities and services The project provides a new location for target shooters to practice. WDFW staff will provide upkeep of the facility to maintain a safe environment for target shooting..
- 35.1.7 In their application materials, dated September 21, 2020, the applicant provided a project narrative and site plan that demonstrates how the proposal is consistent with the goals and policies of the Chelan County Comprehensive Plan as well as how it meets the applicable provisions of the Chelan County Code.
- 35.1.8 The Hearing Examiner finds that the proposal is consistent with the Chelan County Comprehensive Plan and applicable provisions of the Chelan County Code.
- 35.2 There shall be a demonstrated need for the essential public facilities and/or special use within the community at large which shall not be contrary to the public interest.
  - 35.2.1 Applicant Response: The need for a designated shooting range arises from the fact that there are no nearby shooting ranges, causing target shooters to discharge firearms in areas where other forms of recreation occur (hiking, wildlife viewing, etc). This is disruptive to people taking part in other forms of recreation, and unsafe for everyone involved. It also results in garbage being left behind. The shooting range will provide a safe place to responsibly target shoot and help reduce litter left on other regions of the wildlife area.
  - 35.2.2 The need for a proposed shooting range was identified in the Chelan Area Wildlife Management Plan, which went through public review during its development.
  - 35.2.3 The Hearing Examiner finds that the proposal is an essential need for the community at large and is not contrary to the public interest



- 35.3 The applicant shall demonstrate that they have conducted a site selection process that has evaluated alternative sites within the county. The administrator may request review of specific sites or areas.
  - 35.3.1 Applicant Response: The location for the shooting range was selected through the planning process while developing the Chelan Wildlife Area Management Plan.
  - 35.3.2 The site was selected during the development of the Chelan Wildlife Area Management Plan.
  - 35.3.3 The Hearing Examiner finds that the proposal adequately underwent a site selection process that evaluated alternative sites in the County.
- 35.4 The applicant shall demonstrate that appropriate public participation in the siting decision has occurred consistent with state law.
  - 35.4.1 The Chelan Wildlife Area Management Plan included a public comment period.
  - 35.4.2 The Chelan Wildlife Area Management Plan underwent the appropriate public participation during its development that was consistent with state law.
  - 35.4.3 The Hearing Examiner finds that the proposal adequately underwent public participation during the development of the Chelan Wildlife Area Management Plan.
- 35.5 The proposal/development incorporates specific features to ensure that it is consistent with the existing or intended character, appearance, and physical characteristics of the site and surrounding property.
  - 35.5.1 The shooting range gives a home to an activity (target shooting) that already occurs in the area. The shooting range is designed to use the natural features of the area – a canyon – to contain the shooting. No light fixtures, electricity, non-native plants, or other features that detract from the area's intended purpose will be installed.
  - 35.5.2 The proposal is consistent with the existing characteristics of the properties and the open space / recreational uses found in the nearby proximity.
  - 35.5.3 The Hearing Examiner finds that the proposal is consistent with the existing characteristics of the sites and surrounding properties.
- 35.6 The applicant shall document known impacts to county services (water, sewer/septic, road, power, police/fire, etc.) and mitigation options to be reviewed and approved by the administrator.
  - 35.6.1 The shooting range is not expected to impact county services.
  - 35.6.2 There are no existing or proposed potable water sources or available sanitary services located on the properties. Access to the site would be from Swakane Canyon Road, which is designated as a primitive road. The properties are not within the established Chelan County Fire District #1 boundaries.

35.6.3 The Hearing Examiner set as a condition of approval that the proposal establish a fuels reduction zone to create a fire break around the perimeter of the shooting range as suggested by the Fire Marshal in his comment letter dated November 12, 2020.

36. An open record public hearing after due legal notice was held using Zoom video conferencing on January 6, 2021.
37. Appearing and testifying on behalf of the Washington State Department of Fish and Wildlife (WDFW) was its agent, Stephanie Kuhns. Ms. Kuhns has authorization to testify in this matter. Ms. Kuhns indicated that all of the proposed conditions of approval were acceptable to the Applicant, except proposed Condition of Approval No. 10.2. The Applicant testified that their conversation with Chelan County surveyor, Mark Sele, indicated Mr. Sele's opinion that the road fronting the project site is owned by the federal government and that the road exists on a 60 ft. easement. Mr. Sele did not testify. The Applicant further stated that if there was a requirement to dedicate right-of-way, that the overall cost to transfer right-of-way would be cost prohibitive and the project would not have sufficient funding.
38. Andrew Brunner, for Chelan County Public Works, testified that he would defer to any findings of the Chelan County surveyor.
39. It should be noted that Mark Sele did not testify at the hearing.
40. Also testifying at the hearing on behalf of the Applicant was Ron Fox. Mr. Fox testified that the road is owned and maintained by the National Forest Service. He testified that the width of the road varies from between 10 to 30 feet depending upon the topography.
41. No member of the public attended the hearing.
42. The Hearing Examiner has reviewed the application and submitted materials. Based on the information contained in the applications and compliance with the Revised Code of Washington, the Washington Administrative Code, Chelan County Comprehensive Plan, and the Chelan County Code, the Hearing Examiner provides the attached Conditions of Approval.
43. Any Conclusion of Law that is more correctly a Finding of Fact is incorporated herein as such by this reference.

## **II. CONCLUSIONS OF LAW**

1. The Hearing Examiner has authority to render this Decision.
2. The proposed uses are consistent with the goals and policies of the Rural Element within the Chelan County Comprehensive Plan.
3. The proposed use is permitted with an approved conditional use permit.
4. Based on the site plan of record, date stamped September 21, 2020, the proposed development meets the applicable requirements of CCC Chapter 11.08.
5. As conditioned, the proposed use would be compatible with the character of the surrounding area.
6. As conditioned, the use will not be detrimental to the natural environment.
7. As conditioned, the proposed development would not have an adverse impact on public health, safety and welfare.
8. Through the process of public and agency noticing, opportunity for review and comments were provided for the proposed use.

9. As conditioned, the proposed use would not result in county facilities being reduced below adopted levels of service.
10. All necessary facilities, improvements and services are consistent or can be conditioned per the requirements of Titles 11, 13 and 15 of the Chelan County Code.
11. Based on the above facts, noise, light, heat, steam, erosion, water quality, glare, odors, air pollution, smoke, wastes, dust, vibration, electrical disturbance, physical hazards and related impacts on adjacent properties can be avoided or mitigated as conditioned.
12. The project is consistent with the Chelan County Comprehensive Plan and applicable provisions of the Chelan County Code.
13. The proposal is an essential need for the community at large and is not contrary to the public interest.
14. The proposal adequately underwent a site selection process that evaluated alternative sites in the County.
15. The proposal adequately underwent public participation during the development of the Chelan Wildlife Area Management Plan.
16. Any Finding of Fact that is more correctly a Conclusion of Law is incorporated herein as such by this reference.

### **III. CONDITIONS OF APPROVAL**

All conditions imposed by this decision shall be binding on the applicant, which includes the owner or owners of the properties, heirs, assigns, and successors.

1. Pursuant to CCC Section 11.93.080, the granting of a conditional use permit and the conditions set forth runs with the land; compliance with the conditional use permit is the responsibility of the current owner of the property, whether that is the applicant or a successor.
2. Pursuant to Chelan County Code Section 11.93.110, a conditional use permit shall become void if not acted upon, within three years after approval or such other time period as established by the hearing examiner. The applicant may request a one-year extension, to be reviewed administratively, if the applicant submits a written request with community development thirty days prior to expiration.
3. Pursuant to Chelan County Code Section 11.93.090, upon final action of the hearing examiner to deny an application for a conditional use permit, the department shall not accept filing of an application for substantially the same matter within one year from the date of the final denial of the application.
4. Pursuant to Chelan County Code Section 11.93.120, action of the Hearing Examiner is final, unless appealed pursuant to the judicial appeal provisions of Title 14 of the Chelan County Code.
5. Pursuant to CCC Chapter 11.93, the proposed use is not authorized unless and until all listed conditions are satisfied.
6. Pursuant to CCC Section 11.93.040(10), the final Conditional Use Permit shall be in conformance with the submitted application of record, including the site plans date stamped September 21, 2020 or as amended by this decision.
7. Pursuant to CCC Chapter 11.93, the applicant is authorized to use the subject property as Essential Public Facilities for a shooting range. The number of users will be no more than 40 at a

time in strict accordance with the standards established by this decision and any conditions imposed by the Hearing Examiner

8. Pursuant to CCC Section 11.90.060, the applicant will need to provide 0.3 parking spaces per attendee for a total of 12 parking spaces (11 regular and 1 handicap).
  - 8.1 The parking lot design requirements described in CCC Section 11.90.030 shall be met and reviewed by Public Works as part of their condition of approval.
9. The subject property and final Conditional Use Permit shall conform to the comments and conditions of approval as found in the Chelan County Fire Marshal memorandum dated November 12, 2020.
  - 9.1. Establish a fuels reduction zone to create a fire break around the perimeter of the shooting range.
10. The subject property and final Conditional Use Permit shall conform to the comments and conditions of approval as found in the Chelan-Douglas Health District memorandum dated November 16, 2020:
  - 10.1. No road improvements required to Swakane Canyon Road.
  - 10.2. In the event the Swakane Canyon Road is not owned by the United States Government, then pursuant to Chelan County Code Title 11.88.070(3); and Chapter 4, Sec. 6.14 of the Chelan County Transportation Element, the applicant is required to dedicate additional right-of-way to make the right-of-way on Swakane Canyon Road 30' from centerline. This right-of-way dedication shall be done by deed. A surveyor will need to verify the right-of-way and provide a survey to the County. The survey shall indicate the existing right-of-way and the portion being dedicated so that your surveyor can establish a legal description for that dedicated right-of-way for the deed. If Swakane Canyon Road is owned by the United States Government, then this condition is stricken in its entirety.
  - 10.3. Pursuant to CCC, Title 15.30.340, the applicant shall obtain a Road Approach Permit from Chelan County Public Works, and construct the approach according to code.
  - 10.4. Primary Access: Pursuant to Chelan County Code Title 15.30.825 monumentation will be required to be placed on Swakane Canyon Road if not already monumented. Confirm with the County Surveyor for locations.
  - 10.5. No Traffic Impact Study will be required at this time, but if the permitted use changes, then a review from Chelan County Public Works will be required to determine if a Traffic Impact Study will be required.
  - 10.6. Pursuant to CCC Section 10.20.410(2) Addresses are assigned based on road origin and shall contain digits indicating the address from the origin of the road to the primary access location for the site.
  - 10.7. Pursuant to Chelan County Code Title 15.30, the applicant will be required to construct the Private Internal Access at a minimum, to meet a Rural Emergency Vehicle Access Road (Standard Plan PW-22) with an Emergency Vehicle Turnaround (Standard Plan PW-23 A or B) within the proposed project.
  - 10.8. The applicant will be required to show the dimensions and type of material proposed for the guest parking area on the CUP Site Plan for the proposed project. Prior to commencement of activities, the applicant shall provide Chelan County Public Works

with a parking area, type of surface material proposed for the parking lot, number of parking spaces, and general parking schematic for the proposed project.

- 10.9. **If** improvements are required, the applicant is required to submit construction plans and reports in accordance with Title 15. The plans must be submitted simultaneously under one Letter of Transmittal. The applicant will be required to have the Construction Plans approved by Chelan County Public Works Department prior to construction. The following are the minimum construction plan elements:
- 10.9.1 Road Improvement Plan (including location of utilities).
  - 10.9.2 Erosion and Sedimentation Control Plan.
  - 10.9.3 Lot Access Plan.
  - 10.9.4 Signage Plan.
  - 10.9.5 Drainage Report & Plan
- 10.10. A Pre-Construction Meeting with the owner/contractor and Chelan County Public Works Department will be required prior to commencement of access road construction.
- 10.11. The applicant will be required to submit signed As-built Construction Plans by the applicant's engineer prior to Chelan County Public Works issuing final approval.
- 10.12. Pursuant to CCC Section 12.08.020, the applicant will be required to demonstrate legal and perpetual access for the proposed Facility.
- 10.13. Pursuant to Title 15.30.340 the applicant will be required to construct the access approach onto Swakane Canyon Road to meet an Industrial/Commercial Driveway Approach (Standard Plat PW-26). The applicant will be required to obtain a Chelan County Approach Permit prior to constructing the Commercial Driveway Approach. The approach apron will not be required to be paved.
- 10.14. Pursuant to CCC Section 13.18.030(9) **if** a Drainage System is required, show any necessary easements in accordance with the approved drainage plan;
- 10.15. Pursuant to CCC Chapter 13.18, A Drainage Report & Plan will be required to be submitted to Chelan County Public Works if any new impervious surface of 5000 square feet is created and must be reviewed and approved. This shall be completed during the submittal of any building permits.
- 10.16. **If** a drainage system is required, or an existing drainage system is in place, this system shall be privately owned and maintained to its originally designed condition by all the property owners having a vested interest. A "Notice to Title" shall be filed with the Chelan County Auditor's office prior to the submittal of a Building Permit, stating:

*"The area within this site plan contains a private storm drainage system designed to control runoff originating from this site. This site shall burden and benefit the parties' successors and assigns; that its contents are binding upon the parties' successors in interest and runs with the land. The Drainage Plan for this development was prepared by the engineering firm of \_\_\_\_\_, dated \_\_\_\_\_, a copy of which is on file with the Chelan County Public Works Department. It shall be the responsibility of the property owner(s) and/or their successors to thereafter maintain the storm drainage system to the originally designed condition. Chelan County personnel shall have the right of access to the property for purpose of inspection of the storm drainage system. If Chelan County personnel determine that the storm system maintenance is unsatisfactory, and the property owner has had due notice and opportunity to satisfactorily maintain the system, Chelan County personnel and equipment may enter the property to perform the necessary maintenance. Such maintenance shall be at the property owner's expense."*

11. Pursuant to CCC Section 11.93.030, a letter of compliance from Chelan County Public Works demonstrating that their conditions of approval have been met shall be submitted by the applicant to Chelan County Community Development prior to using the subject property as a shooting range.

#### IV. DECISION

Based upon the above noted Findings and Fact and Conclusions, Conditional Use CUP 20-016 is hereby **APPROVED**.

Dated this 7th day of January, 2021.

CHELAN COUNTY HEARING EXAMINER



Andrew L. Kottkamp

**Anyone aggrieved by this decision has twenty-one (21) days from the issuance of this decision, to file an appeal with Chelan County Superior Court, as provided for under the Judicial Review of Land Use Decisions, RCW 36.70C.040(3). The date of issuance is defined by RCW 36.70C.040 (4)(a) as “(t)hree days after a written decision is mailed by the local jurisdiction or, if not mailed, the date on which the local jurisdiction provides notice that a written decision is publicly available” or if this section does not apply, then pursuant to RCW 36.70C.040(3) (c) “...the date the decision is entered into the public record.” Anyone considering an appeal of this decision should seek legal advice.**

**Chelan County Code Section 1.61.130 provides that any aggrieved party or agency may make a written request for reconsideration by the Hearing Examiner within ten (10) days of the filing of the written record of decision. The request for reconsideration shall be submitted to the Community Development Department. Reconsideration of the decision is wholly within the discretion of the Hearing Examiner. If the Hearing Examiner chooses to reconsider, the Hearing Examiner may take such further action deemed proper and may render revised decision within five (5) days after the date of filing of the request for reconsideration. A request for reconsideration is not a prerequisite to filing an appeal under Section 1.61.160.**

The complete case file, including findings, conclusions, and conditions of approval (if any) is available for inspection during the open office hours at Chelan County Department of Community Development. Their address is 316 Washington Street, Suite 301, Wenatchee, WA 98801. Their telephone number is (509) 667-6225.



State of Washington  
**DEPARTMENT OF FISH AND WILDLIFE**

Mailing Address: P.O. Box 43200, Olympia, WA 98504-3200 • (360) 902-2200 • TDD (360) 902-2207  
Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

**DETERMINATION OF NONSIGNIFICANCE (DNS)**

**Name of Proposal:** DNS 20-038: SWAKANE CANYON RIFLE AND PISTOL RANGE

**Description of Proposal:**

The Washington Department of Fish & Wildlife (WDFW) proposes to construct a shooting range in Swakane Canyon, part of the Swakane Unit of the Chelan Wildlife Area (WLA). The shooting range falls under the WLA management plan in Goal 9, Objective C. Goal 9 is to “support and maintain appropriate recreation opportunities,” while Objective C is to “develop options to lessen the conflicts among target shooters and other recreation user groups in the Swakane Canyon” (WDFW, 2018). Target shooting is already a popular activity at the Swakane Unit, “to such an extent that it is impacting wintering mule deer and precluding use of the canyon bottom for other recreation activities such as birding, hiking, and horseback riding” (WDFW, 2018).

The goal of the shooting range is to continue to provide recreation opportunities (target shooting) while reducing conflict between humans and wildlife (primarily mule deer using nearby overwintering habitat) and conflict between multiple user groups (target shooters and non-target shooters).

The shooting range will be constructed in two phases. Phase 1 will consist of creating a rifle range, and Phase 2 will consist of creating a pistol range. Phase 2 will be scheduled only after additional funding is secured.

**Phase 1 sequencing:**

1. Field stake project limits and grade stakes
2. Install erosion control elements
3. Clear and grub site area in phases as construction proceeds
4. Excavate site and use cut material as berm fill
5. Install subgrade and gravel surfacing parking area
6. Install concrete walkway and shooting pad
7. Install back berm material
8. Seed disturbed areas (excess material from phase 1 will be stockpiles and seeded)
9. Remove erosion control when site established

**Construction Methods and equipment:**

Construction equipment used will be tracked excavators and dozers for cut and fill grading.

Berm material will be placed in lifts and compacted.

Gravel will be placed by dozers and graders and compacted with rollers.

Material will be moved on site with dump trucks and loaders.

**Proponent/Applicant:** Washington State Department of Fish and Wildlife (WDFW)  
Contact: Stephanie Kuhns  
600 Capitol Way N  
Olympia, WA 98501  
(360) 584-3841  
[Stephanie.Kuhns@dfw.wa.gov](mailto:Stephanie.Kuhns@dfw.wa.gov)

**Location of Proposal, including street, if any:** Swakane Unit of the WDFW Chelan Wildlife Area, Swakane Canyon Road, approximately 7 miles north of Wenatchee, Chelan County, Washington: Township 24N, Range 20E, Section 22.

**Lead Agency:** Washington Department of Fish and Wildlife (WDFW)

WDFW has determined that this proposal will likely not have a significant adverse impact on the environment. Therefore, state law<sup>1</sup> does not require an environmental impact statement (EIS). WDFW made this determination of nonsignificance (DNS) after we reviewed the environmental checklist and other information on file with us.

We issued this DNS according to state rules.<sup>2</sup> **We will not act on this proposal for 14 days** from the date we issued the DNS. Agencies, affected tribes, and members of the public are invited to comment on this proposal or DNS. We must receive your comments within 14 days of the date of this letter. The comment period will end at **5:00 pm on September 3, 2020.**

**Method of Comment:**

The following procedures shall govern the method to comment on agency SEPA proposals. Comments received through these procedures are part of the official SEPA record for this proposal.

You can submit your comments any one of the following ways:

- Email to [SEPAdesk2@dfw.wa.gov](mailto:SEPAdesk2@dfw.wa.gov)
- Online at the WDFW SEPA website comment link at:  
<http://wdfw.wa.gov/licenses/environmental/sepa/open-comments>
- Fax to (360) 902-2946
- Mail to the address below.

**Responsible Official:** Lisa Wood

**Position/Title:** SEPA/NEPA Coordinator, WDFW Habitat Program, Protection Division

**Address:** P.O. Box 43200, Olympia, WA 98504-3200

After the comment period closes, applicants may view the updated status of this proposal on the WDFW SEPA website: <https://wdfw.wa.gov/licenses/environmental/sepa/closed-final>. Once the status is posted as final, applicants and permittees may take action on the proposal. When a proposal is modified or withdrawn, notice will be given in accordance with state law.<sup>1</sup>



If you have questions about this DNS or the details of the proposal, contact Lisa Wood at the address above or email [SEPADesk2@dfw.wa.gov](mailto:SEPADesk2@dfw.wa.gov).

**DATE OF ISSUE:** August 20, 2020

**SIGNATURE:**



Footnotes

1. RCW 43.21C.030(2)(c)
2. WAC 197-11-340(2).

SEPA Log Number: 20-038.dns

*Individuals who need to receive this information in an alternative format or language, or who need reasonable accommodations to participate in WDFW-sponsored public meetings or other activities may contact Dolores Noyes at (360-902-2349), or TTY 771, or email ([dolores.noyes@dfw.wa.gov](mailto:dolores.noyes@dfw.wa.gov)). For more information [https://wdfw.wa.gov/accessibility/reasonable\\_request.html](https://wdfw.wa.gov/accessibility/reasonable_request.html).*

## **ATTACHMENT 2**

Inadvertent Discovery Plan  
Geologic Assessment Report

**WASHINGTON STATE DEPARTMENT OF FISH & WILDLIFE  
INADVERTENT DISCOVERY PLAN FOR CULTURAL RESOURCES  
FOR THE SWAKANE RIFLE AND PISTOL RANGE DEVELOPMENT PROJECT IN  
CHELAN COUNTY, WASHINGTON**

The Inadvertent Discovery Plan is intended to provide clear guidance related to the management of an unexpected discovery or unearthing of cultural artifacts, archaeological features or other evidence of cultural materials and/or of skeletal material of human or unknown origin during WDFW projects not governed by a DAHP-issued excavation permit, or by a Monitoring or Site Protection Plan for a specific area or activity.

This plan is to be implemented without exception whenever such discoveries occur, and applies to WDFW staff, contractors, subcontractors, volunteers, and others who may be involved with projects initiated by WDFW, or occurring on WDFW-managed land. This plan does not supersede or satisfy requirements for Monitoring, Site Protection, or other plans developed to address concerns at known archaeological and historic sites.

**PRE-FIELD ACTIONS**

Prior to ground disturbance, the WDFW project or program manager (PM) will notify work crews/machine operators that they are obligated to cease work in the immediate area and notify supervisory personnel upon discovery of any bones or objects of human manufacture, particularly suspected Native American artifacts. This action will be repeated prior to commencement of work in new locations, after significant changes in field staff, and if work is re-started after a hiatus. Field supervisors will be made aware of their responsibilities for interim protection and notification as detailed below.

**FIELD ACTIONS**

**Specific Procedures for the Inadvertent Discovery of Archaeological Resources**

In the event that cultural resources (not including human remains) are encountered during project implementation, the following actions will be taken:

1. All work within the discovery area and a surrounding buffer adequate and sufficient to prevent further disturbance will cease. The field supervisor will notify the PM immediately.
2. The PM will immediately contact WDFW archaeologist or archaeological monitor. If an archaeological monitor is present, he/she will notify the WDFW archaeologist.
3. If the WDFW archaeologist determines that potentially significant archaeological materials or historic sites are present, the PM will be advised of interim protective measures. Work may resume outside the buffer, unless the WDFW archaeologist directs otherwise.

4. The WDFW archaeologist will initiate Tribal and DAHP consultation regarding evaluation of the find's significance, potential for effects caused by the project, and subsequent treatment plans or Memoranda of Agreement (MOA).
5. Wherever possible, the preferred treatment of significant archaeological resources and historic sites will be in situ preservation. If a treatment plan requires that such resources be excavated or removed, an agreement must first be reached between WDFW and the consulting parties.

### **Specific Procedures for the Inadvertent Discovery of Human Remains**

Inadvertent finds of what appear to be human remains introduce cultural concerns and legal requirements that initiate a different response than cultural resources. Human remains must be treated with utmost respect. Four presumptions regarding identification guide the treatment of possible human remains:

- Unidentified bones will be considered human until there is evidence that they are not.
- Human remains will be considered non-forensic until and unless the county coroner has determined them to be forensic.
- Non-forensic human remains will be treated as Native American until and unless the DAHP physical anthropologist, in consultation with interested Tribes, has determined that they are not.
- Only the coroner and physical anthropologist may handle human remains until a burial treatment plan developed with the WDFW and consulting parties has been established. Examination and recording beyond that required to make the legally required determination is not authorized except through a burial treatment plan developed by WDFW and the consulting parties.

If human remains are found within the project area, the following actions will be taken, consistent with Washington State RCWs 68.50.645, 27.44.055, and 68.60.055:

1. If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains.
2. The area of the find will be secured and protected from further disturbance. The project supervisor will cover the remains with a tarp or other fabric when available, notify workers that the area is off limits, and will maintain a watch to ensure that the area is not disturbed. The remains will be treated respectfully at all times. News of the discovery is not to be communicated beyond the people who need to know.

3. The finding of human skeletal remains will be reported to the county medical examiner/coroner, local law enforcement, and the WDFW archaeologist in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed.
4. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to DAHP, which will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find.
5. WDFW archaeologist will serve as WDFW's lead for Tribal and DAHP consultation process should the remains be determined non-forensic.
6. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes by certified letter within two business days of examination.
7. Interim protective measures will be maintained until the required determinations have been made and a burial treatment plan has been finalized. The WDFW will develop the plan in cooperation with all consulting parties and lineal descendants (if any). Parties defined in the burial treatment plan will implement its provisions.
8. Under no conditions are WDFW staff or other project personnel to make the location or contents of inadvertent human remains finds public, unless specifically authorized to do so in the burial treatment plan.

## CONTACTS

### **WASHINGTON STATE DEPARTMENT OF FISH & WILDLIFE**

#### **Department Archaeologist**

Adam Rorabaugh, CAMP Archaeologist 360-789-3290

Katherine Kelly, WDFW Archaeologist 360-688-0676

#### **Project Manager and Alternative Contact**

Lane Sater, WDFW Project Manager 360-688-6027

### **CONFEDERATED TRIBES OF THE COLVILLE RESERVATION**

Guy Moura, Tribal Historic Preservation Officer 509-634-2695

### **CONFEDERATED TRIBES AND BANDS OF THE YAKAMA NATION**

Kate Valdez, Tribal Historic Preservation Officer 509-865-1068

### **WASHINGTON STATE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION**

Allyson Brooks, State Historic Preservation Officer 360-586-3066

Rob Whitlam, State Archaeologist 360-586-3080

Guy Tasa, State Physical Anthropologist 360-586-3534

### **CHELAN COUNTY**

Chelan County Sheriff's Office 509-667-6851

Chelan County Coroner's Office 509-667-6431

**Definitions:**

*Archaeological Features* are physical alterations in the natural environment such as pits or house foundations.

*Archaeological materials* are the physical remains of human cultural behavior, including artifacts and features left on the landscape.

*Artifacts* are the physical objects of a culture, including tools with evidence of intentional modification (such as flaked stone blades) as well as those objects such as fire-cracked rock that reflect human activity.

*Burial statutes* include the 2008 Washington State legislation that established current practices for inadvertent burial treatment through additions and amendments to the code, including 27.44 RCW (Indian Graves and Records, as amended), 27.53 (Archaeological Sites and Resources, as amended), as well as chapters 27.34, 43.334, 68.60, and 68.60 RCW.

*Consulting parties* are those which have a legal right to comment on determinations of significance and NRHP eligibility, project effects on cultural resources, and human remains. This may vary according to projects, but typically includes DAHP and Tribes whose Ceded Lands or Usual and Accustomed areas include the project area.

*Coroner* refers to the office of the local county coroner or medical examiner, and is responsible for confirming that the remains are human and determining whether they are forensic (dead less than 50 years, and therefore a law enforcement matter) or non-forensic (more than 50 years, and therefore subject to burial statutes).

*Cultural Deposits* are layers or features of sediment containing cultural materials.

*Cultural Resources* include archaeological resources and historic sites.

*Historic sites* are locations 50 years old or older, where native or non-native events and activities have taken place since the arrival of Euro-Americans, and which are considered by DAHP to be historic site types.

*Human remains* are any physical remains that are known to be human, or could be human but have not yet been positively identified.

*Physical anthropologist* in this case refers to the professional physical anthropologist employed at DAHP, who determines whether human remains are Native American (if possible), and is the individual responsible for handling human remains.

November 9, 2020

Washington Department of Fish & Wildlife  
Capital and Assets Management Program  
1111 Washington St SE  
Olympia, WA 98501

Attn: Mr. Lane C. Sater, Construction Project Coordinator II

**Transmitted via email to: *Lane.Sater@dfw.wa.gov***

**Re: Geologic Site Assessment  
Swakane Canyon Rifle and Pistol Range Site  
Chelan County, Washington  
Project No. 1213041.010.011**

Dear Mr. Sater:

This letter report summarizes the results of a geologic site assessment completed by Landau Associates, Inc. (LAI) in support of the Swakane Canyon Rifle and Pistol Range Site project in Chelan County, Washington (site; Figure 1).

This letter report was prepared with observations made during LAI's October 8, 2020 site visit, conducted by Mr. Shane Kostka, LG, and with geologic and hydrogeologic information obtained from the Chelan County Assessor's website, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey, the U.S. Geological Survey (USGS), the Washington State Department of Ecology's Water Resources Well Construction website, and the Washington State Department of Natural Resources (DNR).

## **Project Description**

The site is located on two parcels (126.2-acre Chelan County Parcel No. 242022865003 and 440-acre Parcel No. 242022100050), both owned by WDFW (project owner; Figure 2; Chelan County 2020).

The Washington Department of Fish & Wildlife (WDFW) plans to develop the site with 100- and 200-yard rifle ranges (Phase 1) and a 25-yard pistol range (Phase 2), an associated gravel access road, and a parking area with a handicap-accessible concrete parking pad and gravel access path. Other proposed site improvements include covered, concrete slab shooting platforms and bullet-impact berms for the pistol and rifle ranges and three stormwater swales (west, south, and north) and straw wattles for stormwater management.

The proposed site improvements will be constructed within a relatively wide draw on the northeast side of Swakane Canyon. Steep slopes are present on both sides of the draw. Preliminary design plans,



dated May 15, 2020 provided by WDFW, indicate a net cut volume of approximately 1,241 cubic yards for Phase 1 of the project and a net fill volume of approximately 1,289 cubic yards for Phase 2.

The site is located in a Geologically Hazardous Areas Overlay District, as defined in Chapter 11.86 of the Chelan County Code. A Geologic Site Assessment is required prior to site development.

## **Scope of Services**

This geologic site assessment was prepared in accordance with the scope outlined in LAI's September 14, 2020 proposal and the requirements outlined in Chapter 11.86 of the Chelan County Code. On September 22, 2020, LAI's proposal was authorized by WDFW under On-Call Agreement No. 19-13077, Authority to Proceed No. 4.

## **Site Description**

The site is located on the northeast side of Swakane Creek and Swakane Canyon Road, approximately 1.8 miles west-northwest of the Columbia River and U.S. Route 97 Alternate (site coordinates: 47.554617°, -120.309232°). Site elevations range from approximately 1,165 feet (ft) to 1,265 ft (USGS 2011). The ground surface at the site slopes downward to the southwest at an average grade of 14 percent.

A small, unnamed creek channel on the northwest side of the draw slopes from northeast to southwest. A culvert beneath Swakane Canyon Road drains the channel to the Swakane Canyon floor, where it joins Swakane Creek, located approximately 770 ft southwest of the site. The unnamed creek channel was dry at the time of LAI's October 2020 site visit.

The site is accessed from the southwest, via Swakane Canyon Road. The site is currently undeveloped and appears to be used for informal target shooting as evidenced by the targets and ammunition debris observed during LAI's site visit. Surrounding development is relatively sparse. A small farm with orchards is located approximately 450 ft south (downgradient) of the site.

Selected site photographs are presented on Figures 3 through 5.

## **Site Topography and Geomorphology**

Swakane Canyon is a relatively narrow canyon, approximately 720 ft wide in the vicinity of the site and surrounded by steep slopes and gullies to the northeast and southwest. In the vicinity of the site, Swakane Creek is located on the southwest side of the canyon and Swakane Canyon Road lies on the northeast side. Hillsides southwest of Swakane Canyon Road feature slopes ranging from 80 to 90 percent; hillsides on the opposing side of the canyon and surrounding the site feature 40 to 50 percent slopes.

The site is located in an alluvial fan, in a wide draw at the foot of steep slopes northeast of Swakane Canyon. Several rock outcrops with talus slopes are located on the northwest hillside of the draw. Approximately 780 ft northwest of Swakane Canyon Road, the draw narrows and forks to the north and west. Light detection and ranging imagery (LIDAR) shows two features, interpreted to be folds, located south of the west fork (DNR 2020a).

## Hydrology

The small creek channel on the northwest side of the draw is generally narrow and deepens as it approaches the culvert beneath Swakane Canyon Road. There, the channel is incised to a maximum depth of approximately 5 ft. The culvert drains to Swakane Valley with little to no apparent stream incision downgradient of Swakane Canyon Road. Un-infiltrated runoff from the small creek channel drains to Swakane Creek (USGS 2011). The portion of Swakane Creek that traverses Parcel No. 242022865003 is narrow and shallowly incised with little or no developed floodplain.

At the time of LAI's site visit, no surface drainage or seepage was observed at the site or on adjacent hillsides. No other erosional features were noted at the site.

## Geologic Conditions

**Surface geology.** Surficial geology in the vicinity of the site is mapped as quaternary alluvium, consisting of poorly sorted, gravelly sand (USGS 1987). During LAI's October 2020 site visit, surficial soils appeared to consist of valley alluvial sands and sand with silt mixed with colluvium—specifically, brown, fine sand with silt and gravel- to boulder-sized, angular clasts composed of schist, gneiss, and quartz. Rock outcrops and talus slopes were observed near the dry creek channel on the northwest side of the draw. The talus slopes were comprised of blocky or angular clasts.

**Subsurface geology.** Bedrock in hillsides in the vicinity of the site is mapped as late Cretaceous age Swakane biotite gneiss and amphibolite and hornblende schist (USGS 1987). Based on observations made during LAI's October 2020 site visit, rock outcroppings in nearby hillsides feature schist-gneiss composition with quartz sills and blocky cleavage along horizontal and vertical planes. Jointing was generally observed along the plane of cleavage.

Weathering was noted on rock outcrops adjacent to the creek channel; the weathering was observed above the current elevation of the creek and presumably occurred when the creek was at a higher elevation.

The exposed rock outcrops had a relatively high fracture frequency, resulting in the talus slopes and rockfalls observed on the northwestern side of the draw. Bedrock at the base of the outcrops appeared to be primarily competent with minimal weathering. Most loose rocks at the base of the hillside were blocky or angular in appearance.

A major anticlinal fold is mapped northeast of the site, near the two interpreted folds identified in LIDAR imagery (USGS 1987). The axis of the anticline is approximately horizontal, and its strike is roughly parallel with the alignment of Swakane Creek (northwest-southeast; DNR 2020b). The closest mapped fault (no known displacement) is located approximately 3.5 miles to the southwest. Normal faults are mapped 6 and 7 miles to the southwest. The faults trend in the northwesterly direction (USGS 1987).

**Groundwater.** Based on a review of well construction logs, the static groundwater level in the portion of Swakane Canyon located near the site is more than 90 ft below ground surface (Ecology, accessed October 26, 2020).

**Soil properties.** Soils in the vicinity of the site are mapped as Cashmont sandy loam (CcB), 3 to 8 percent slopes. CcB has a typical profile of sandy loam from 0 to 8 inches and gravelly, sandy loam from 8 to 60 inches. This soil unit is described as well-drained with a high capacity to transmit water; available water capacity is moderate (NRCS USDA 1975). Depth-to-water is typically greater than 80 inches and the frequency of flooding or ponding is none. The origin of these soils is hillslopes, alluvial fans, or terraces, and the parent material is described as alluvium, glaciofluvial deposits, or ablation till (NRCS USDA, accessed October 26, 2020).

Soils in the hillsides surrounding the project site are mapped as Tyee gravelly, loamy coarse sand (TyF), 25 to 65 percent slopes. TyF has a typical profile of gravelly, ashy, loamy, coarse sand from 0 to 2 inches; gravelly, sandy loam from 2 to 12 inches; and weathered bedrock from 12 to 22 inches. This soil is described as well-drained with a high capacity to transmit water; available water capacity is very low (NRCS USDA 1975). Depth-to-water is typically greater than 80 inches and the frequency of flooding or ponding is none. The origin of these soils is hillslopes, and the parent material is described as residuum from granodiorite with a minor amount of loess and volcanic ash in the surface (NRCS USDA, accessed October 26, 2020).

**Geologic hazards.** During LAI's October 2020 site visit, no evidence of snow avalanches, surface creep, faults, landslides, or mass wasting was observed in the vicinity of the site. Soil in the valley bottom and beneath the site has an estimated liquefaction susceptibility rating of "moderate to high" (DNR 2004). The Washington Geological Survey Landslide Inventory indicates that the site is located in an area without landslide inventory (DNR 2020c).

Chelan County Code Chapter 11.86.020 (1)(B)(i), states "sites that are located on or within two hundred fifty feet of areas of documented or historic failures" are considered landslide hazard areas (Chelan County; accessed October 26, 2020). A quaternary landslide deposit is mapped near the mouth of Swakane Canyon, approximately  $\frac{3}{4}$  mile southeast of the site (USGS 1987). In LAI's opinion, the site is not located within a landslide hazard area.

## Site Safety

Scattered angular and subangular cobbles and small boulders were observed on the nearby Swakane Canyon Road cut and in the portion of the draw that contains the site. Most of the fallen rocks on the steep northwest slope appeared to have been retained by the dry creek channel at the toe of the slope. LAI did not identify any other issues (other than the liquefaction risk noted above) that could impact public health and safety or the safety of the proposed development.

## Summary and Conclusions

In LAI's opinion, the site is free of recognizable geologic hazards and appears to be suitable for the proposed development. Based on the results of LAI's geologic site assessment, the proposed development will not affect the stability of the site or adjacent properties or result in a significant increase in sedimentation or erosion, provided the following measures are taken:

- Excavation and grading near the toe of surrounding slopes should be minimized to the extent possible.
- Site grading should be performed in a manner that limits disruption of existing topography, vegetation, and natural drainage paths.
- An erosion control plan should be implemented during construction; disturbed areas of the site, not covered by pavement or crushed rock surfacing, should be revegetated within 1 year of the completion of construction.
- Clearing, grading, and filling activities should be limited to periods of dry weather.
- The faces of all cut and fill slopes should be prepared and maintained to limit soil erosion.
- The stormwater control measures (swales) as put forth in the preliminary design plans are constructed to accommodate an appropriate volume of runoff during a design storm event.

## Use of This Letter Report

Landau Associates has prepared this letter report for the exclusive use of the Washington State Department of Fish & Wildlife for specific application to the Swakane Canyon Rifle and Pistol Range Site in Chelan County, Washington. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Reuse of the information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that, within the limitations of scope, schedule, and budget, its services have been provided in a manner consistent with that level of skill and care ordinarily exercised by members of the geologic and geotechnical engineering profession currently practicing in the same locality under similar conditions as this project. Landau Associates makes no other warranty, either express or implied.

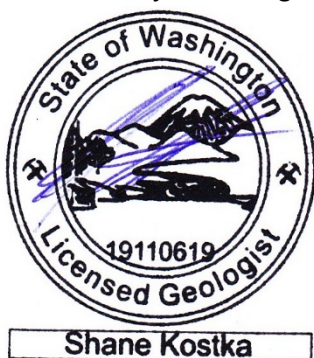
## Closing

We appreciate the opportunity to assist you with this project. If you have questions or comments, please contact the undersigned at (425) 778-0907 or at [swright@landauinc.com](mailto:swright@landauinc.com).


LANDAU ASSOCIATES, INC.



Shane Kostka, LG  
Senior Project Geologist



11/9/2020



Steven R. Wright, PE  
Principal



11/9/2020

SRK/SZW/mcs

[P:\1213\041.010\R\SWAKANE CANYON RIFLE AND PISTOL RANGE SITE ASSESSMENT 11.9.2020.DOCX]

Attachments: Figure 1. Vicinity Map  
Figure 2. Site Map  
Figures 3–5. Selected Site Photographs

## References

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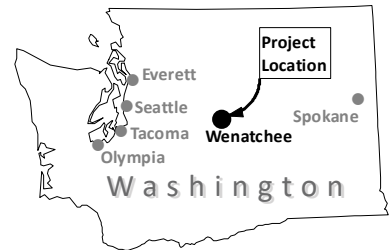
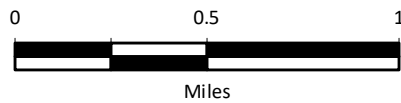
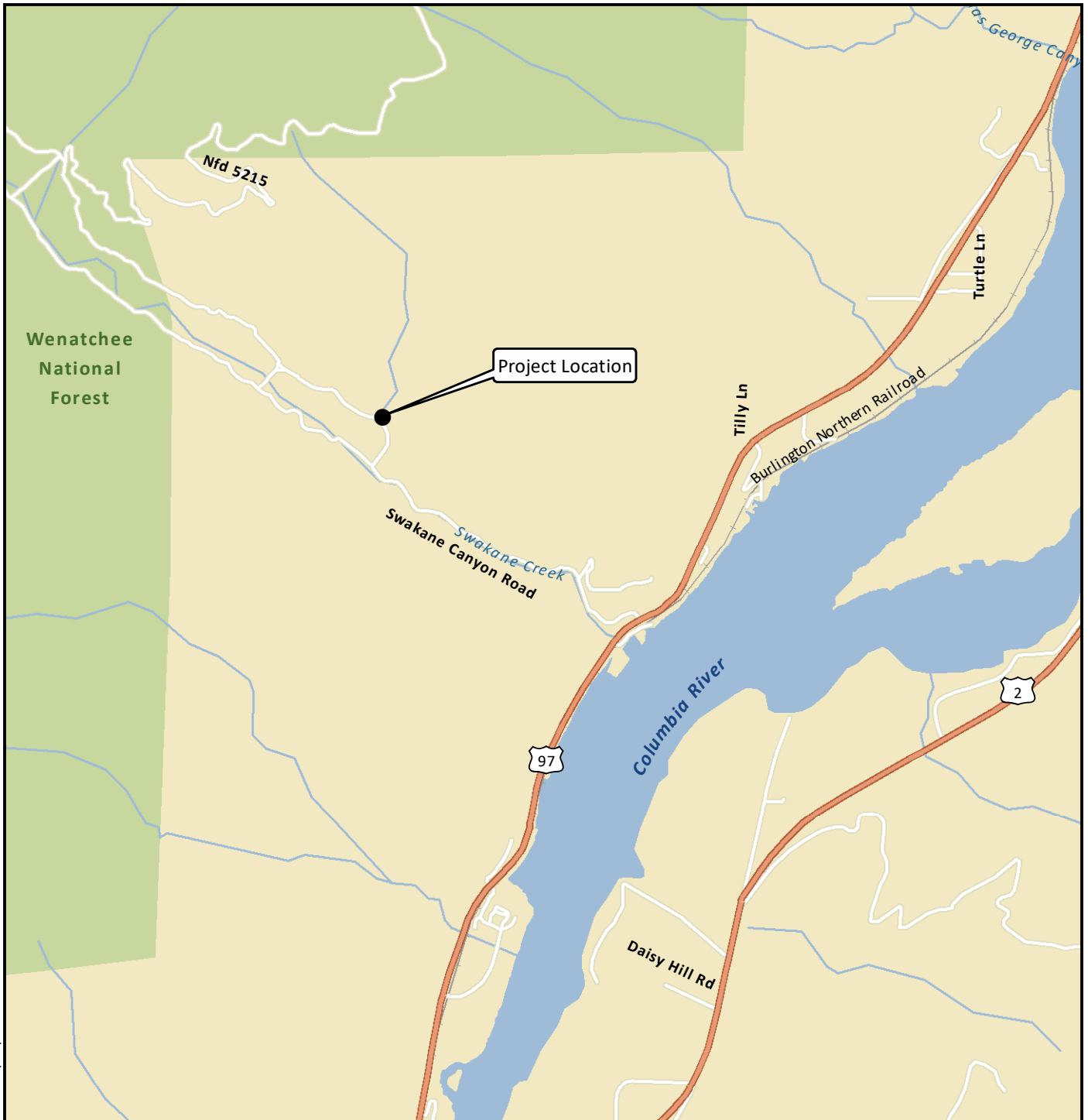
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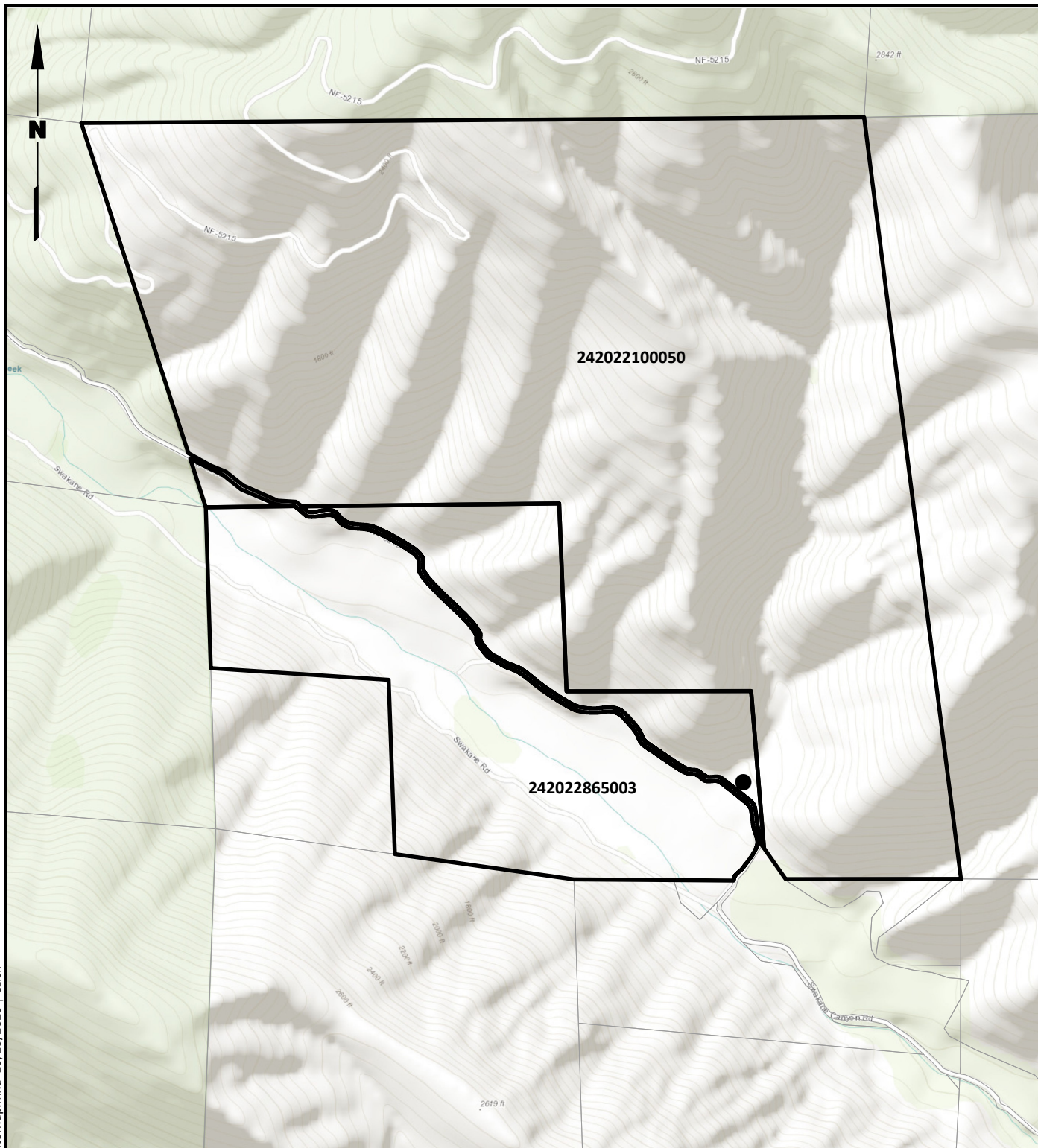
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Data Source: Esri 2012



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**Legend**

- Site Location
- ▭ Primary Parcel

**Note**

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 1,000 2,000



Scale in Feet

Source: Esri 2020; Washington Department of Fish and Wildlife 2020





1. View of site, looking northeast.



2. View of site, looking southwest.





1. View of dry creek channel on northwest side of draw, looking northeast.



2. View of blocky cleavage in outcrops on northwest hillside, looking northwest.





1. View of hillside southeast of draw, looking east.



2. View of talus slopes on northwest side of draw, looking north.

**SECTION 02000  
GENERAL SITE WORK PROVISIONS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies general requirements for all sections of *DIVISION 2 - SITE WORK*.

**1.02 RELATED WORK**

Provisions of the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, and *DIVISION 1* of the Contract are by this reference a part of this division and shall govern work under this division where applicable.

**1.03 REFERENCES**

References listed in *DIVISION 2* are from the following organizations' publications and reference standards:

- A. *AASHTO*      *American Association of State Highway and Transportation Officials*
- B. *ANSI*        *American National Standards Institute*
- C. *ASTM*        *American Society of Testing and Materials*
- D. *OSHA*        *Occupational Safety and Health Administration Construction Standards*
- E. *RCW*         *Revised Code of Washington*
- F. *IBC*          *International Building Code*
- G. *WAC*         *Washington Administrative Code*
- H. *WSDOT*      *Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction latest edition*

**1.04 SUBMITTALS**

Submit shop drawings for all items in all sections of *DIVISION 2* in accordance with the *GENERAL CONDITIONS*.

- A. Product Data: Submit 1 copy of manufacturer's data for all items in *DIVISION 2*, indicating shapes, sizes, grade, and physical and structural properties.
- B. Shop Drawings: Submit 1 copy of shop drawings including complete plan and profiles, size, details, and schedules for fabrication and assembly. Include material identification, details of cuts, connections, fastener types and material, fastener locations, and other pertinent data.

## **DIVISION 2 - SITE WORK**

- C. Include erection drawings, elevations, and details. The Contractor shall verify field dimensions for all prefabricated items and provide drawings for the Engineer's review and acceptance prior to installation.

### **1.05 SHIPPING, STORAGE, AND HANDLING**

- A. Protect all materials from exposure to moisture, wind, sunlight, or other excessive weather conditions that will render them unsuitable for usage as intended and be cause for rejection. Contractor shall be responsible for all costs associated with replacement of all rejected items.
- B. Stockpile or store in areas protected from contamination and physical damage.
- C. Storage and handling of all items to be incorporated into the project shall be such that items are not damaged. Damaged items shall be subject to rejection, and costs associated with replacement shall be the Contractor's responsibility.

## **PART 2 - PRODUCTS**

Not Used.

## **PART 3 - EXECUTION**

Not Used.

END OF SECTION 02000

**SECTION 02010  
SUBSURFACE INVESTIGATION**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section summarizes available soil investigations and, at Contractor's option, additional subsurface investigation.

**1.02 PREVIOUS SOILS INVESTIGATIONS**

- A. A Geologic Site Assessment for the design of this project was prepared by Landau Associates, dated November 9, 2020.
- B. Bidders shall satisfy themselves as to actual field conditions and shall assume full responsibility for any use or interpretations of the information and recommendations contained in the report. The Engineer does not guarantee the correctness of the designations of any materials shown in the report and other documents, nor any interpretations, deductions, or conclusions in any documents relative to subsurface conditions.
- C. A copy of the report discussed in *PARAGRAPH A* is included in Attachment A.

**1.03 ADDITIONAL SOILS INVESTIGATION**

- A. The Contractor may conduct his/her own independent subsurface investigation at the Contractor's expense following the award of the Contract. Prior to any onsite soil investigation work, the Contractor shall provide the Engineer with the following:
  - 1. Proposed test locations.
  - 2. Work schedule.
  - 3. Proposed backfill placement techniques and levels of compaction equipment to be used.
- B. No onsite work shall be performed prior to receiving written approval from the Engineer.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

Not Used.

END OF SECTION 02010

**SECTION 02050  
DEMOLITION**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

Removing and disposing of or salvaging existing structures, utilities and materials. Underground structures and utilities may not be in the exact locations shown. The work includes the requirements for the removal, wholly or in part, and satisfactory disposal of utilities, pipelines, fences, structures, light fixtures, conduits, wires and other obstructions which are designated to be demolished on the Drawings, within these Specifications or incidental to the work.

**1.02 RELATED SECTION**

Placing and compacting of fill material in holes or pits created by the removals (see *SECTION 02220*).

**1.03 JOB CONDITIONS**

The Contractor represents that it has visited the site to become familiar with the quantity and character of all materials to be demolished. The Contractor agrees that the premises were made available prior to deadline for submission of bids for whatever inspection and tests the Contractor deemed appropriate. The Contractor assumes full responsibility for the proper disposal, reuse, recycling, or salvage of all demolition materials.

**1.04 SUBMITTALS**

The Contractor shall submit a demolition plan that at a minimum, addresses the following:

- A. Worker safety
- B. Protection of the public
- C. Work sequence
- D. Means and methods to minimize waste and maximize salvage
- E. Disposal procedures
- F. Protection of the environment
- G. Disposal site(s) approved by all environmental agencies, including permits and permissions as necessary.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

**3.01 DEMOLITION**

- A. Prior to demolition, the method of demolition shall be determined by the Contractor and approved by the Engineer.
- B. Blasting is not permitted.

**3.02 REMOVAL**

Remove all structures or designated portions thereof, and other materials without disturbing adjoining facilities.

**3.03 DISPOSAL**

- A. Materials designated to be salvaged shall be carefully and neatly stockpiled in a location shown on the Drawings, or as approved by the Engineer.
- B. All materials not designated to be salvaged shall become the property of the Contractor. Remove from the project site and dispose of legally. Prior to disposal, the Contractor shall provide the Engineer with the locations of all disposal sites to be used and copies of applicable permits and approvals for each site.
- C. Burning shall not be allowed at the designated disposal site.

**3.04 BACKFILLING**

Holes and pits created by removing existing structures and materials shall be backfilled with structural fill material in accordance with *SECTION 02220*.

END OF SECTION 02050



**SECTION 02100  
SITE PREPARATION****PART 1 - GENERAL****1.01 DESCRIPTION OF WORK**

The work of this section consists of clearing, grubbing, stripping, and storage of topsoil and protection of vegetation to remain, including other related work.

**1.02 JOB CONDITIONS**

Bidders shall examine the work site to determine the character of materials to be encountered, trees to be removed or protected, and nature of the work in general. All required excavation is unclassified.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION****3.01 SITE CLEARING**

- A. Clearing: Clear all trees, stumps, brush, roots, rubbish and other objectionable matter within clearing limits shown on the Drawings, staked in the field, or as directed by the Engineer. Do not disturb any vegetation or roots thereof designated to remain more than absolutely necessary to assure completion of new construction.
- B. Grubbing: Remove all stumps and roots within clearing limits to a depth of at least 12 inches below natural ground.
- C. Stripping: Remove all humus, vegetation, existing roadway aggregate or other objectionable material encountered within the top 6 inches of soil in areas of project construction, areas to be excavated, and areas where embankment or excess earth will be placed. Upon removal of objectionable material, the top 6 inches of soil shall be stripped and stockpiled as topsoil at a site designed by the Engineer. This material is to be stockpiled separately and not mixed with any other material.

**3.02 PROTECTION**

Trees, shrubs, roots, and other landscape features designated on Drawings or in the field for preservation, or those located outside of the construction limits shall be carefully protected from marring or damage during construction operations. Continual parking and/or servicing of equipment within areas designated for preservation will not be permitted. Trees and shrubs designated for preservation and pruning shall be trimmed as directed. At no time shall excavation be within the drip line of trees designated to remain.

**3.03 DISPOSAL**

All debris resulting from clearing and grubbing shall be removed from the project site and disposed of properly. Prior to disposal, the Contractor shall provide the Engineer with the locations of all disposal sites to be used.

END OF SECTION 02100

**SECTION 02210  
GRADING**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies excavation, filling and grading requirements. Related section includes 02220.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

**3.01 GENERAL**

Final slopes and grades shall be as indicated on the Drawings and described herein. Final grades shall be within 1/10<sup>th</sup> of one foot of those shown on the Drawings, unless otherwise noted.

**3.02 CONSTRUCTION STAKING**

Contractor shall provide all construction staking and shall notify the Owner when project elements are staked and provide the Owner 48 hours for inspection prior to beginning construction.

**3.03 EARTHEN BERM**

- A. Excavation spoils shall be loaded from existing stockpiles, hauled to the berm location and placed as indicated on the drawings and as directed by the Engineer. Transitions to existing ground shall be made smooth/gradual.
- B. Spoils shall be placed in 12 inch maximum lifts. Provide roller or track compaction of each lift.
- C. Maximum fill slope shall not exceed 3H:1V, or as indicated on the drawings or by the Engineer.

END OF SECTION 02210

**SECTION 02220  
EXCAVATION, BACKFILL, AND COMPACTION**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section consists of excavation, filling, compaction, grading, trenching, bedding and backfilling, placement of excess earth, and fill material.

**1.02 RELATED SECTIONS**

- A. Complete all topsoil stripping and clearing and grubbing in accordance with *SECTION 02100* prior to any excavation, embankment construction, or placement of excess earth.
- B. Temporary sediment and erosion control measures shall be provided and maintained as specified in *SECTION 02270*.

**1.03 REFERENCES**

WSDOT – Standard Specifications for roads, bridges, and municipal construction (M41-10), latest edition.

**1.04 SUBMITTALS**

Submit the following information in accordance with *SECTION 02000*. Gradation analysis and certified test results for all imported fill material and onsite material to be incorporated into the work.

**1.05 JOB SITE CONDITIONS**

- A. Earthwork operations shall not be performed if the weather conditions, in the opinion of the Engineer, are inappropriate. Work in muddy or frozen ground will not be allowed.
- B. Maintain proper drainage at all times.
- C. Stockpiles:
  - 1. All stockpile locations shall be approved by the Engineer and shall be located so as not to interfere with other work or disturb adjoining property owners.
  - 2. Stockpiles shall not exceed 10 feet in height.
- D. Contractor shall maintain stormwater and erosion controls at all times.

**1.06 SAFETY AND PROTECTION**

- A. Contractor shall barricade open excavations occurring as part of this work and post warning lights. Operate warning lights during hours from dusk to dawn each day and as otherwise required by applicable safety regulations.

## DIVISION 2 - SITE WORK

- B. Contractor shall protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining washout, and other hazards created by all earthwork related operations.
- C. Contractor shall be responsible for contacting utility companies to locate service lines prior to any excavation.
- D. Contractor shall proceed with caution in the excavation so that damage to underground structures, both known and unknown, may be avoided.
- E. Contractor shall take extreme precautions for the protection of utility lines and other subsurface improvements. Any improvements damaged by construction operations shall be repaired at the Contractor's expense in compliance with the requirements of the utility owner and to the Engineer's satisfaction.
- F. Trenches and excavations shall be sheeted, shored, and braced where required in a manner consistent with established safe practices and in accordance with all applicable safety regulations.
- G. Contractor shall comply with *Chapter 49.17 RCW*, the *Washington State Industrial Safety and Health Act*, if trench excavation exceeds 4 feet in depth. Contractor shall also include cost of required safety systems in all bid schedules and shall list as a separate Bid Item on the Bid Proposal Form.

## PART 2 - PRODUCTS

### 2.01 EXCAVATION MATERIALS

- A. Common Excavation includes all material other than rock as described below required for the construction of this project. It includes, but is not restricted to earth, gravel, hardpan, cemented gravel, soft or disintegrated rock, and boulders or detached pieces of solid rock not exceeding 1 cubic yard in volume.
- B. Rock excavation consists of rock boulders greater than 1 cubic yard in volume and bedrock. Rock excavation shall be approved by the Engineer and will be considered a change in the work.
- C. For the purpose of this bid, all excavated material shall be assumed to meet the specifications for common borrow.
- D. Excavated materials may be used for fill and backfill applications required for construction of this project; provided the material meets the specifications for the intended use and has been properly protected from water conditions that would render it undesirable.

### 2.02 FILL MATERIALS

- A. Common Borrow: Common borrow shall be defined as fill required to raise existing grade or backfill excavations beyond 5 feet of a structure or as trench backfill above pipes or conduits. Common borrow shall be material from common excavation or from a borrow site which is free of deleterious materials. Deleterious material includes wood, organic waste, or any other objectionable material greater than 3% by weight.

## DIVISION 2 - SITE WORK

- B. Sand shall be clean and uniformly graded and meet the gradation of *WSDOT 9-03.1(2)B, Class 1*.
- C. Ballast Rock: Rock shall be hard, sound, and durable with at least one (1) face fractured. Rock shall be free of frozen material, debris, and organics, and meet the gradation of *WSDOT 9-03.9(1)*.
- D. Crushed Surfacing Base Course (CSBC) and Top Course (CSTC) shall be manufactured from ledge rock, talus or gravel, uniform in quality, substantially free of wood and other extraneous material, meeting the requirements of *WSDOT 9-03.9(3)*.
- E. Trench Backfill shall meet the requirements of *WSDOT 9-03.10* with 100% of material passing through a 2 ½ inch screen.
- F. Structural Fill shall meet the following requirements for Gravel Backfill:

TABLE 02220 - 2.02F	
Sieve Designation	Percent Passing by Weight
2 Inches	100
1/2 Inch	60-80
No. 4	30 Maximum
No. 200	0-5
Sand Equivalent	45 Minimum

- 1. Foundations: *WSDOT 9:03.12(1) A or B*
- 2. Walls: *WSDOT 9-03-12(2)*
- G. Pipe Bedding: Clean sand/gravel mixture free from wood waste or other extraneous materials and conforming to the gradation of *WSDOT 9-03.12(3)* when tested in accordance with *ASTM C136*.
- H. Drain Rock: Shall be washed and have the gradation of *WSDOT 9-03.12(4)*.
- I. Gravel Borrow: Selected granular material, free-draining mineral soil, free from organic matter, frozen or lumpy material, meeting the requirements of *WSDOT 9-03.14(1)*.
- J. Quarry spalls: Shall meet the gradation of *WSDOT 9-13.1(5)*

## PART 3 - EXECUTION

### 3.01 EXCAVATION

- A. Excavation consists of the removal of material required to establish the proposed subgrade surface elevations. Excavations shall be conducted in such a manner as to avoid disturbance to all materials located outside the limits of the work area, unless specifically identified by the Engineer as an acceptable borrow source. Methods of excavation will be the Contractor's option, but Contractor shall exercise care when approaching final grade. If final grade is disturbed, it shall be replaced with suitable materials and compacted at Contractor's expense.

## DIVISION 2 - SITE WORK

- B. Large rocks, which size qualifies them as common excavation, encountered during excavation or trenching may be partially removed as required to reach subgrade elevations. With Engineer's approval, Contractor has the option to remove these rocks by excavation and subsequent backfilling the overexcavated portions. No extras will be paid for such overexcavations.
- C. Protect bottoms of all excavations from freestanding water and frost. Protect excavations from caving, flooding, or other source of damages. Damage to excavation shall be repaired at the Contractor's expense.
- D. Any excess excavation performed by the Contractor for his convenience shall be at the expense of the Contractor.
- E. All disposal of excavated materials shall be at a permitted offsite location. Prior to disposal, Contractor shall provide the Engineer with a letter authorizing disposal at selected locations.
- F. Excavated materials of any nature in excess of quantities needed for fill or backfill for construction of this project shall be disposed of. This disposal will not be considered a change in work, and no extra payment will be made.
- G. Excavated materials determined by the Engineer to be unsuitable for use as common borrow shall be disposed of. This disposal shall be considered a change in work. Extra payment will be determined per the change clause in the *GENERAL CONDITIONS*. However, the disposal quantity considered for extra payment will be limited to the amount of common borrow imported to replace the unsuitable material.
- H. Any excavation and replacement of unsuitable materials below final grade will be as directed by the Engineer. "Unsuitable material" is any type of soil (particularly clays and silts) or organic materials that will not compact to specified compaction percentage or does not meet the specification for its intended use.

### 3.02 ROCK REMOVAL

- A. Large rocks greater than 1 cubic yard encountered within the excavation limits may be partially or entirely removed; however, the subsequent backfill for such overexcavation shall be done at the Contractor's expense.
- B. No blasting will be allowed on this project.

### 3.03 BACKFILL AND COMPACTION

- A. No backfill materials shall be placed until the foundation has been suitably dewatered and prepared as specified herein.
- B. When backfilling, extra care must be taken so that no damage will occur to foundations or related structures. Where backfill is to be placed against both sides of concrete walls, the backfill shall be brought up evenly on both sides of the wall.

## DIVISION 2 - SITE WORK

Where backfill is to be placed against one side of concrete walls, backfill shall not be placed until the concrete has developed sufficient strength to resist the loading imposed by the backfill. Any abutting concrete walls or beams shall also have attained sufficient strength. In any case, the backfill placement shall not begin until 72 hours after concrete placement and shall not exceed the following schedule (unless high-early strength concrete has been approved for use):

Age of Concrete	Backfill Depth
72 hours	1/2 Wall Height
7 Days	2/3 Wall Height
28 Days	Full Wall Height

- C. Each lift of fill material shall be spread uniformly in horizontal layers and compacted in accordance with the following table:

TABLE 02220 - 3.03C			
Type of Material	Max. Loose Lift Placed (inches)	Percent Compaction*	Application
Common borrow	24	90	General fill**
Sand	6		Impact berms
Ballast rock	8	90	Fill under other materials, where noted
Crushed surfacing base course	<u>Total Depth</u> 2	95	Subgrade for crushed rock or asphalt pavement surface/finished crushed rock surface such as parking lots, driving areas
Trench backfill	6	90	Fill above pipe bedding
Structural fill	6	95	Fill under structures and wall backfill***
Structural fill	12	90	Fill around structures**
Pipe bedding	6	95	Pipe and conduit bedding
Drain rock	6	95	Backfill in drain trenches
Gravel borrow	12	90	Select Fill****
Quarry spalls	12	90	Rock lining for outfall channel

\* Percent compaction at maximum dry density as determined in accordance with *ASTM D1557*.

\*\* All fill and backfill not under structures and beyond 5-feet concrete slabs, walls, and footings.

\*\*\* All fill and backfill under concrete slabs and footings (interior and exterior) and all fill and backfill within 5 feet of concrete slabs, walls and footings..

\*\*\*\* All fill under roadways and trench backfill under paving.

- D. Compaction shall be accomplished with power-operated tampers, rollers, idlers, or vibratory equipment. Water jetting for compaction purposes will not be permitted.
- E. Any application of water or any working of fill material required to bring it within acceptable moisture content and density limits during compaction operations shall be done at the Contractor's expense.



- F. Backfill materials shall not be placed, spread, or compacted at an unsuitably high moisture content during adverse weather conditions. When work is interrupted by heavy rain, backfill operations shall not be resumed until field tests indicate the moisture content density of the backfill areas are within specified limits.

**3.04 TRENCH EXCAVATION**

- A. Except with specific approval of Engineer, no more than 200 feet of open trench shall be excavated in advance of laying pipe. All operations shall be carried out in an orderly fashion.
- B. Width of trenches for pipes shall not be less than outside pipe diameter plus 16 inches, nor greater than outside pipe diameter plus 36 inches of the pipe installed unless otherwise shown on the Drawings.
- C. Side walls of the trench shall be vertical from the trench bottom to at least the height of the top of the pipe.
- D. Where soil encountered in the bottom of the trench is unstable or unsuitable as a base, such soil shall be removed to a depth specified by the Engineer and replaced with compacted common borrow or other material as directed by the Engineer. This overexcavation and replacement shall only be done as directed by the Engineer and will be paid for as an extra.
- E. Bottom of trench shall be carried to the lines and grades shown on the Drawings with proper allowance for thickness and type of pipe bedding specified.
- F. Excavation below designated lines shall be filled at the Contractor's expense. Excess excavation below pipes shall be replaced with gravel borrow or as directed by the Engineer.
- G. Excavated material shall be placed a sufficient distance from the trench walls to avoid sliding of materials into the trench.
- H. The Contractor shall not excavate across any existing roads without notifying the Engineer at least 48 hours in advance.

**3.05 PIPE BEDDING PLACEMENT**

- A. After bottom of trench has been excavated to proper depth and grade and brought to a reasonably flat surface and dewatered, bedding material shall be placed as shown on the Drawings.
- B. Pipe bedding shall be placed in trench without causing any excavated material to slide into trench or any cave in of trench walls. Pipe bedding shall be placed and compacted into a 6 inch minimum depth and shall provide a continuous, uniform bedding for the full length of the pipe.
- C. Utility lines and flexible pipe, such as PVC, shall be backfilled to 6 inches above the top of pipe or line using bedding material only. Rigid pipe, such as steel, may be backfilled using gravel material as specified.

- D. Any pipe bedding material required due to unauthorized overexcavation or made unsuitable due to mixture with trench side material or excavated material shall be removed and replaced at the Contractor's expense.

**3.06 TRENCH BACKFILL.**

- A. Trenches at pipe joints shall not be backfilled until pipeline has been tested.
- B. Remove screeds, shoring, wood forms, debris, and other decomposable matter from areas to be filled.
- C. Initial Backfill: Place backfill by hand in a maximum of 6 inch lifts using bedding material to the level shown on the Drawings. Backfill shall contact entire periphery of pipe.
- D. Place and compact each subsequent lift so that pipe is not displaced. Misalignment of pipe or other damage shall be repaired at the Contractor's expense. Material shall be carried up evenly on both sides of pipe. Compact in accordance with *TABLE 02220 - 3.03C*.
- E. Excess trench material shall be left neatly mounded over trenches (except in roadways or parking areas) so that a depression is not formed if backfill settles. Maximum mounding shall be 3 inches. Any depression formed by settlement within 1 year from final acceptance shall be filled at the Contractor's expense.

**3.07 ROAD AND PARKING FILL**

- A. Base course and top course shall each be placed in two (2) lifts on top of a prepared and compacted subgrade.
- B. Contractor shall provide the water and equipment necessary for adequately distributing moisture on the material. Apply water lightly and frequently to avoid having free water running out of the material and building up on the subgrade.
- C. No materials shall be placed when snow is falling or blowing or when the weather is such that, in the Engineer's opinion, satisfactory results cannot be obtained.

**3.08 FIELD QUALITY CONTROL**

- A. Field observation and testing shall be performed by the Contractor as required to control his work.
- B. Density and moisture-content testing of embankment fill and excess earth placements will be performed by the Engineer's testing lab in accordance with *ASTM D2922* and *ASTM D3017*, respectively.
- C. Fill Around Structures: The variation above or below the testing edge of a 10 foot straightedge between any two (2) contacts with the finished surface shall not exceed 1/10 foot.

- D. Any area which has been tested and shown as not meeting the requirements of these Specifications shall be reworked and retested at the Contractor's expense until it complies.

END OF SECTION 02220

**SECTION 02270  
SLOPE PROTECTION AND EROSION CONTROL**

**PART 1 - GENERAL**

1.01 DESCRIPTION OF WORK

This Section specifies riprap, sediment control, silt fences, and slope protection as required for completion of this project.

1.02 REFERENCES

*ASSHTO T-85 Standard method of test for specific gravity and absorption of course aggregate.*

*WSDOT Standard Specification for Road, Bridge, and Municipal Construction.*

1.03 JOB SITE CONDITIONS

Work area shall be maintained to prevent stormwater or sediment runoff into the adjoining water body.

**PART 2 - PRODUCTS**

2.01 RIPRAP

Not Used.

2.02 RECLAIMED ARMOR STONE

Not Used.

2.03 SILT FENCE

Material shall meet the requirements *WSDOT 9-33.2(1), Table 6.*

2.04 POSTS

Silt fence support posts shall be steel or wood of sufficient length to support the fence without sagging, bending, or otherwise collapsing.

2.05 SUPPORT WIRE

Support filter fabric where shown on the Drawings or required for strength with 14 gauge woven wire mesh field fencing.

2.06 STRAW WATTLES

Straw wattles shall consist of straw wrapped in biodegradable tubular plastic or similar encasing material. Wattles shall be 8 to 10 inches in diameter.

**PART 3 - EXECUTION**

**3.01 RIPRAP**

Not Used.

**3.02 TEMPORARY SILT FENCES**

- A. The Contractor shall be fully responsible to install and maintain temporary silt fences when used.
- B. The silt fence shall prevent soil carried by runoff water from going beneath, through, or over the top of the silt fence, but shall allow the water without soil to pass through the fence.
- C. The minimum height of the top of the silt fence shall be 30 inches above the original ground surface, and fence shall follow the contours of the ground.
- D. Damaged and otherwise improperly functioning portions of silt fences shall be repaired or replaced to the Engineer's satisfaction at the Contractor's expense.
- E. Sediment deposits shall either be removed when the deposit reaches approximately half the height of the silt fence, or a second silt fence shall be installed as determined by the Engineer.
- F. At the completion of all earthwork, remove only those silt fences that are no longer necessary to control sediment. Review with Engineer prior to removing silt fences. Remove and properly dispose of all accumulated deposits, silt fence, and associated components.
- G. Attach support wire and filter fabric with staples or wire rings.

END OF SECTION 02270

**SECTION 02280  
SOIL TREATMENT**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies the use of soil treatments.

**PART 2 - PRODUCTS**

**2.01 SOIL STERILANT**

- A. A nonselective, wettable, powder herbicide approved for use under concrete and gravel pavement by the Washington State Department of Agriculture shall be applied to all areas to be concrete and gravel paved including parking areas and paths. A recommended soil sterilant for treatment of paved areas is *Dupont Inc.'s Karmex Herbicide*.
- B. Materials shall be specifically approved by the Engineer prior to application.

**2.02 DELIVERY AND STORAGE**

All chemicals shall be delivered to the job site in unopened containers with original labels intact.

**PART 3 - EXECUTION**

**3.01 APPLICATION**

- A. All usages of a soil sterilant shall be handled and applied in strict accordance with manufacturer's instructions.
- B. The applicator shall be licensed by the Washington State Department of Agriculture for the class of herbicide used.

END OF SECTION 02280

**SECTION 02930  
LAWNS AND GRASSES**

**PART 1 - GENERAL****1.01 DESCRIPTION OF WORK**

This section specifies seed, fertilizer, and mulch to restore areas disturbed by excavations and construction equipment. All disturbed areas, excluding fire-break and areas non-vegetated areas as shown on the Drawings, shall be seeded.

**1.02 SEQUENCING**

Seeding shall take place after ground disturbing activities have been completed. Notify Engineer at least 72-hours prior for seeding.

**PART 2 - PRODUCTS****2.01 SEED**

Seed shall meet the following requirements:

<b>TABLE 02930 - 2.01</b>			
<b>Kind/Variety Seed in Mixture</b>	<b>Percent by Weight</b>	<b>Percent Pure Seed</b>	<b>Minimum Percent Germination</b>
Sandberg Bluegrass	100	98.0 Minimum	90
Inert and Other Crops		2.0 Maximum	
Noxious Weed			None
"Ladino"	Not Acceptable		

**2.02 FERTILIZER**

Fertilizer shall consist of a commercial fertilizer with the following formulation:

- A. Nitrogen (inorganic as Ureaform) - 12.8 percent
- B. Phosphoric Acid (P205) - 18.0 percent
- C. Potash (K20) - 18.0 percent

**2.03 MULCH**

Mulch shall consist of a straw mulch or wood cellulose fiber.

**PART 3 - EXECUTION**

**3.01 PREPERATION**

Ensure backfilled excavations have been compacted to match surrounding terrain and scarify disturbed areas to a minimum 2 inch depth.

**3.02 SEEDING, FERTILIZING, AND MULCHING**

A. Seed shall be applied at a rate of 0.3 pounds per 100 square feet.

B. Mulch shall be applied at a rate of 4.6 pounds per 100 square feet

**3.03 WATERING**

Contractor shall be responsible for watering of seeded areas until final project completion.

END OF SECTION 02930



**SECTION 03000  
GENERAL CONCRETE PROVISIONS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies general requirements for all sections of *DIVISION 3 - CONCRETE*.

**1.02 RELATED WORK**

Provisions of the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, and *DIVISION 1* of the Contract are by this reference a part of this division and shall govern work under this division where applicable.

**1.03 REFERENCES**

References listed in *DIVISION 3* are from the following organizations' latest editions of their publications and reference standards (unless indicated otherwise):

- A. *AASHTO*      *American Association of State Highway and Transportation Officials  
(Standard Specifications for Highway Bridges, 17<sup>th</sup> Edition)*
- B. *ACI*            *American Concrete Institute (ACI 318-02-318-02)*
- C. *APA*            *American Plywood Association*
- D. *ASTM*          *American Society for Testing and Materials*
- E. *AWS*            *American Welding Society*
- F. *CRSI*           *Concrete Reinforcing Steel Institute*
- G. *IBC*            *International Building Code, Latest Washington State Approved Edition*
- H. *WSDOT*        *Washington State Department of Transportation (Standard Specification  
for Road, Bridge, and Municipal Construction)*

**1.04 SUBMITTALS**

Submit shop drawings in all sections of *DIVISION 3* in accordance with the *GENERAL CONDITIONS*.

- A. Product Data: Submit manufacturer's data for all items in Division 3 indicating shapes, sizes, and chemical, physical, and structural properties.
- B. Shop Drawings: Submit shop drawings including complete plan and profiles, size, details, spacings, splicing details, supporting and spacing devices, schedules for fabrication, and assembly of members, and other pertinent data. Indicate welds by AWS symbols and show size, length, and type of weld. Identify details by reference to sheet and detail number on the Drawings.

**1.05 QUALITY ASSURANCE**

All installation and product use shall be in accordance with the manufacturer's written instructions.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

See other sections of *DIVISION 3*.

**PART 3 - EXECUTION**

**3.01** See other sections of *DIVISION 3*.

END OF SECTION 03000

**SECTION 03210  
REINFORCING STEEL**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies reinforcing steel and accessories for concrete work.

**1.02 QUALITY ASSURANCE**

Contractor shall perform concrete reinforcement work in accordance with the current *ACI 318*.

**1.03 SHOP DRAWINGS**

- A. Contractor shall submit mill test certificates of supplied concrete reinforcing, indicating physical and chemical composition.
- B. Contractor shall indicate on the shop drawings sizes, spacings, locations, and quantities of reinforcing steel, bending and cutting schedules, splicing, stirrup spacing, and supporting and spacing devices.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

- A. Uncoated-finish steel reinforcing bars shall consist of Grade 60 (unless noted otherwise) round, deformed bars. Deformed reinforcing bars for concrete reinforcement shall conform to the requirements of *ASTM A615*. Reinforcing bars requiring welding as shown on the Drawings shall conform to *ASTM A706*.
- B. Epoxy-coated reinforcing bars, when specified by the Engineer, shall be coated in accordance with *ASTM A775*. Epoxy-coated bar supports, form ties, and nylon, epoxy, or plastic-coated tie wire shall be used when epoxy-coated reinforcing bars are specified.
- C. Reinforcing steel shall be protected at all times from injury, and when placed in the formwork be free from dirt, loose mill scale, rust scale, paint, oil, or any other foreign substance.

**2.02 ACCESSORY MATERIALS**

- A. General: Chairs, bolsters, bar supports, and spacers shall be sized and shaped for strength and support of reinforcement during installation and placement of concrete. Materials shall be manufactured from standard bright basic wire.

**B. Bar Supports:**

1. Girder and slab reinforcement steel shall be supported on mortar blocks not more than 1½ inches square. The blocks shall be constructed of mortar mixed in the same proportions of sand and cement as used in the concrete.
2. Mortar blocks shall have a tie wire embedded, and the protruding ends shall be tied to the reinforcing steel to hold the mortar blocks in place. Mortar blocks with a grooved top may be used for supporting steel in slabs. If metal chair supports are used as steel supports for reinforcing bars, all surfaces of the chair supports not covered by at least 1/2 inch of concrete shall be treated by one of the following methods:
  - a. Hot-dip galvanized after fabrication in accordance with *ASTM A153 Class D*.
  - b. Plastic coating, provided that the plastic is firmly bonded to the metal, has a minimum thickness of 3/32 inch at point of contact with the form and is not chemically reactive with the concrete. The plastic shall not shatter or crack at temperatures down to -5°F, nor will it deform sufficiently to expose the metal at a temperature of 200°F. Plastic coatings that have shattered, cracked, or deformed enough to expose the metal will be rejected.
  - c. Stainless steel conforming to the requirements of *ASTM A493 Type 302*.

**C. Tie Wire:**

1. Ties shall be made with a minimum 16 gauge, annealed-type tie wire.
2. Use epoxy-coated tie wire when using epoxy-coated reinforcement.

**2.03 FABRICATION AND BENDING**

- A. All bars shall be bent cold. If approved by the Engineer, welding shall be performed by certified welders in accordance with *AWS D1.4*.
- B. Unless otherwise shown on the Drawings, the Contractor shall fabricate reinforcing to provide clearances as listed under Minimum Cover.
- C. Reinforcement partially embedded in concrete shall not be field bent, except as permitted by the Engineer, or as shown on the Drawings.

**2.04 HOOKS AND BENDS**

Hooks and bends of steel reinforcing bars shall be bent to the inside diameters specified in *ACI 318*, as shown below.

TABLE 03210 - 2.04	
<b>Stirrups and Ties:</b>	
Sizes No. 5 and Smaller	4 Bar Diameters
Sizes No. 6 through No. 8	6 Bar Diameters
Sizes No. 9 through No. 11	8 Bar Diameters
Sizes No. 14 and No. 18	10 Bar Diameters
<b>Other than for Stirrups and Ties:</b>	
Sizes No. 3 through No. 8	6 Bar Diameters
Sizes No. 9 through No. 11	8 Bar Diameters
Sizes No. 14 and No. 18	10 Bar Diameters

## 2.05 SPLICING

- A. General: All steel bars used for concrete reinforcement shall be furnished in the full lengths where possible. Splices that are permitted or shown on the Drawings shall be well distributed or located at points of low tensile stress. Locate reinforcing lap splices not indicated on the Drawings at points of minimum stress. Indicate location of splices on shop drawings. No splices will be permitted at points where the section is not sufficient to provide a minimum distance of 2 inches between the splice and the nearest adjacent bar or the surface of the concrete. The bars shall be rigidly clamped or wired at all splices. Bars that are lapped for splicing shall be placed in contact for the length of the splice and tied together. Splices shall be staggered where possible.
- B. Seismic: (for regions of low, moderate or high seismic risk) see the Drawings for specific seismic detailing requirements.
- C. Unless otherwise detailed on the Drawings, the minimum splice lengths shall be as follows:

TABLE 03210 - 2.05C				
BAR#	GRADE 60 PLAIN		GRADE 60 EPOXY COATED	
	Concrete Compressive Strength		Concrete Compressive Strength	
	3000 psi	4500 psi	3000 psi	4500 psi
3 & under	2'	2'	2'-3"	2'-3"
4	2'	2'	2'-3"	2'-3"
5	2'-4"	2'-4"	2'-10"	2'-10"
6	3'	2'-9"	3'-7"	3'-4"
7	4'	3'-6"	4'-11"	4'-3"
8	5'-3"	4'-7"	6'-5"	5'-7"
9	6'-8"	5'-9"	8'-1"	7'

**PART 3 - EXECUTION****3.01 INSTALLATION****A. Placing Reinforcing Steel:**

1. Reinforcing steel shall be accurately placed in the positions shown on the Drawings and held securely during the pouring of the concrete. In general, all reinforcement shall be put in proper position and securely wired and blocked before concrete is poured in any section. Stirrups and ties shall always pass around and be securely tied to the main flexural/tension steel members. Girder and slab reinforcing steel shall be supported on mortar blocks or other approved means of support. Tack welding of reinforcing bars shall not be allowed. If approved by the Engineer, welding shall be performed by certified welders in accordance with *AWS D1.4*.
2. Before placing concrete, clean reinforcement of foreign particles, loose scale, or coatings. The Contractor shall place, support, and secure reinforcement against displacement. Do not deviate from alignment or measurement.
3. At all openings in structural slabs and walls, provide a minimum of 1 No. 4 bar at each of the top and bottom of slab or faces of wall or slab at 45 degrees on all 4 corners, in addition to a minimum of 1 No. 4 bar on all sides of square or rectangular openings, and hoops at each face for each round opening, unless otherwise shown on the Drawings.
4. The Contractor shall notify the Engineer when reinforcing is in place for inspection of reinforcement prior to placement of concrete. No concrete shall be placed until the Engineer or his representative has inspected the placing of the reinforcing steel and has given permission to pour concrete. All concrete placed in violation of this provision may be rejected and removal required.

**B. Minimum Cover:**

1. The minimum clear space between reinforcing bars shall be as follows (unless otherwise shown on the Drawings):

<b>TABLE 03210 - 3.01 - B1</b>	
Between parallel bars in a layer	Bar Diameter (1 inch minimum)
Between adjacent layers	1 inch

2. Except as otherwise shown on the Drawings, the minimum thickness of concrete cover over reinforcing bars shall be as shown in the following tables:

<b>TABLE 03210 - 3.01 - B2 CAST IN PLACE CONCRETE (NON-PRESTRESSED)</b>	
Concrete cast against and permanently exposed to earth	3 inches
Concrete exposed to earth or weather: No. 6 through No. 18 bar No. 5 bar, W31 or D31 wire, and smaller	2 inches 1½ inches
Concrete not exposed to weather or in contact with ground: Slabs, walls, joists: No. 11 bar and smaller Beams, columns: Primary reinforcement, ties, stirrups, spirals Shells, folded plate members: No. 6 bar and larger No. 5 bar, W31 or D31 wire, and smaller	¾ inch  1½ inches  ¾ inch ½ inch

<b>TABLE 03210 - 3.01 – B3 CAST-IN-PLACE CONCRETE (PRESTRESSED CONCRETE) <i>Minimum Cover 1"</i></b>	
Concrete cast against and permanently exposed to earth	3 inches
Concrete exposed to earth or weather: Walls, panels, slabs, joists Other members	1 inch 1½ inches
Concrete not exposed to weather or in contact with ground: Slabs, walls, joists Beams, columns: Primary reinforcement Ties, stirrups, spirals Shells, folded plate members: No. 5 bar, W31 or D31 wire, and smaller Other reinforcement	¾ inch  1½ inches 1 inch ¾ inch  d <sub>b</sub> , but not less than ¾ inch

<b>TABLE 03210 - 3.01 – B4 PRECAST CONCRETE (Manufactured under plant control conditions)</b>	
Concrete exposed to earth or weather: <u>Wall panels:</u> No. 14 and No. 18 bars, pre-stressing tendons larger than 1½ inch diameter  No. 11 bar and smaller, pre-stressing tendons 1½ inch diameter and smaller W31 and D31 wire and smaller	  1½  ¾

<u>Other members:</u>	
No. 14 and No. 18 bars, pre-stressing tendons larger than 1½ inch diameter	2
No. 6 through No. 11 bars, pre-stressing tendons larger than 5/8 inch diameter through 1½ inch diameter	1½
No. 5 bar and smaller, pre-stressing tendons 5/8 inch diameter and smaller, W31 and D31 wire, and smaller	1¼
Concrete not exposed to weather or in contact with ground:	
<u>Slabs, Walls, Joists:</u>	
No. 14 and No. 18 bars, pre-stressing tendons larger than 1½ inch diameter	1¼
Pre-stressing tendons 1½ inch diameter and smaller	3/4
No. 11 bar and smaller, W31 or D31 wire, and smaller	5/8
<u>Beams, columns:</u>	
Primary reinforcement $d_b$ but not less than 5/8 and need not exceed	1½
Ties, stirrups, spirals	3/8
<u>Shells, folded plate members:</u>	
Pre-stressing tendons	3/4
No. 6 bar and larger	5/8
No. 5 bar and smaller, W31 or D31 wire, and smaller	3/8

C. Bar Placement Tolerances:

1. Between bars: 1/4 inch, plus or minus
2. Vertical position of bars in slabs and beams:
  - a. Members 8 inches deep or less: 3/8 inch, plus or minus
  - b. Members over 8 inches deep: 1/2 inch, plus or minus
3. Bars may be moved to avoid interference with other reinforcing steel, conduits, or embedded items. If moved more than 1 bar diameter or stipulated tolerances, consult with the Engineer to determine final placement.



- D. Tie Wire: At a minimum, 50 percent of reinforcing steel intersections shall be connected with tie wire.
- E. Welding: Welding of reinforcing shall be prohibited unless explicitly allowed by the Engineer in writing or as shown on the Drawings. If approved by the Engineer, welding shall be performed by certified welders in accordance with *AWS D1.4*.

END OF SECTION 03210

**SECTION 03300  
CAST-IN-PLACE CONCRETE**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

Cast-in-place concrete slabs, walls, footings, grade beams, columns, beams, and piers.

**1.02 QUALITY ASSURANCE**

- A. Perform work in accordance with *ACI 301*.
- B. Obtain materials from same source throughout the work.

**1.03 REGULATORY REQUIREMENTS**

Conform to the *IBC*, *WSDOT Standard Specifications* and *ACI*.

**1.04 TESTING**

- A. Testing and analysis of concrete shall be performed by the contractor under provisions of *ACI 301* and/or *WSDOT Standard Specifications*. Concrete testing and analysis shall include, at a minimum, compressive strength cylinders, temperature, slump, and air entrainment.
- B. The Engineer's representative may also perform tests at will in accordance with the above standards. The cost of tests conducted by the State shall be paid by the State. Additional testing costs resulting from substandard concrete as indicated by the State's tests, shall be paid by the Contractor at no additional cost to the State.
- C. During placement of concrete, the Contractors testing agency shall prepare standard test cylinders in accordance with *AASHTO T-23*, which shall represent concrete poured during the job. Concrete testing and analysis shall occur at a minimum at the following frequencies:
  - 1. For placement of one class of concrete, 50 cubic yards or less:
    - a. Sample each truck, after 1/2 cy has been discharged from truck, until one truck meets all applicable acceptance test requirements.
    - b. After one truck meets the acceptance test requirements, the remaining concrete may be visually inspected.
  - 2. For placement of one class of concrete greater than 50 cubic yards:
    - a. Sample initial truck after 1/2 cy has been discharged from the truck (this material may not be placed in the forms).

- b. Sample each truck until two successive loads meet all applicable acceptance tests requirements. Once two loads meet the acceptable standard, the sampling and testing frequency may decrease to one for every five truck loads.
  - c. For all trucks, after the initial truck, sample the concrete after a minimum of  $1/2 \text{ yd}^3$  ( $1/2 \text{ m}^3$ ) of concrete has been discharged into the forms.
- D. Two cylinders shall be tested for strength at the end of 28 days in accordance with *ASTM C39* or *WSDOT* Standard Test Methods as set forth in the *WSDOT* Materials Manual. Additional cylinders may be taken in sets of two (2), to verify concrete strength prior to 28 days at the contractor's discretion and cost.
- E. During cold or hot weather, one additional test cylinder shall be taken and cured at the site under the same conditions as the concrete pour from which it was taken.
- F. Concrete not conforming to the Specifications, concrete damaged from any cause, or concrete found to be defective for any reason shall be replaced by the Contractor with acceptable concrete at no additional cost to the State. Any concrete test that shows concrete in place that is below the specified requirements shall be reason for removal of the entire pour, and any subsequent concrete deposited will also be jeopardized. The concrete shall be removed and replaced by the Contractor at no additional cost to the State.

**1.05 SUBMITTALS**

- A. Manufacturer's Data - Concrete Work: Submit manufacturer's data with application and installation instructions for proprietary materials and items, including admixtures, patching compounds, water stops, joint systems, dry-shake finish materials, grout, and others as requested by the Engineer.
- B. Placement Schedule: Prepare a placement schedule and submit it for review prior to start of concrete placement operations.
- C. Delivery Tickets: Furnish copies of delivery tickets for each load of concrete delivered to the site. Provide items of information to the Engineer as specified under *ASTM C94 - Certification*.
- D. Submit proposed mix design to the Engineer for review and acceptance prior to commencement of work.
- E. Furnish results of tests certifying conformance made by a recognized testing laboratory acceptable to the Engineer.

**PART 2 - PRODUCTS****2.01 CONCRETE MATERIALS****A. Cement:**

1. Cement shall be classified as Portland Cement or blended hydraulic cement.
2. Portland cement shall conform to *ASTM C150 Type I or II (low alkali)*, gray color.
3. Blended hydraulic cement shall conform to ASTM C595, Type IP(X) or Type IS(X).
  - a. For Type IP(X), X shall be a maximum 35% fly ash, or 50% ground granulated blast furnace slag.
  - b. For Type IS(X), X shall be a maximum of 50% ground granulated blast furnace slag.
4. All cement used in this work shall be taken from stock bins at the place of manufacture.
5. Cement delivered to the site of the work shall at all times be suitably stored or protected from exposure to the atmosphere. If the cement shows signs of deterioration, it shall be removed from the work site unless additional tests show that it conforms to the requirements stated above.

**B. Fine and Coarse Aggregates:**

1. Fine Aggregate: Fine aggregate shall conform to *WSDOT Standard Specifications 9-03.1(2)B* and shall consist of sand or other inert materials or combinations thereof having hard, strong, durable particles free from adherent coating. Fine aggregate shall be washed thoroughly to remove clay, loam, alkali, organic matter, or other deleterious matter.
2. Coarse Aggregate: Coarse aggregate shall conform to *WSDOT Standard Specifications 9-03.1(4)C*, AASHTO Grading No. 67 or 57 and shall consist of gravel, crushed stone, or other inert material or combinations thereof having hard, strong, durable pieces free from adherent coatings. It shall be washed thoroughly to remove clay, silt, bark, sticks, alkali, organic matter, or other deleterious material. Use of pit or bank-run gravel is not permitted.
3. Combined Aggregate Gradation: As an option to using coarse and fine graded aggregates, aggregate gradation may consist of a combined gradation with a nominal maximum size of 1 inch or 3/4 inch per *WSDOT Standard Specifications 9-03.1(5)B*.
4. Approved aggregates shall be so stored as to prevent deterioration, segregation, or intrusion of foreign matter. Improper storage will be considered a reason for rejection of affected aggregate.

- C. Water: Water shall be any potable water, clean and free of injurious amounts of oil, acid, alkali, and organic material. Water containing 2 percent or more common salt shall not be used.

**2.02 ADMIXTURES**

- A. Air Entrainment: An air-entraining admixture meeting *ASTM C260* shall be used when specified in *PARAGRAPH 2.05 - CONCRETE MIX*.
- B. Chemical Admixture: Water-reducing, retarding, and/or accelerating admixtures shall be used when specified in *PARAGRAPH 2.05 - CONCRETE MIX*, meeting *ASTM C494* or as approved by the Engineer.
- C. Calcium chloride shall not be used.

**2.03 GROUT**

- A. Nonshrink grout shall consist of a hydraulic cementitious system conforming to *ASTM C 1107 (Grade C)*, specially graded and composed of processed natural fine aggregate and additives as required. The material shall meet all of the following requirements:
  - 1. 28 day compressive strength:  $f'c = 7500$  psi.
  - 2. Nonmetallic.
  - 3. Free of gas-producing or releasing agents.
  - 4. Free of oxidizing catalysts.
  - 5. Free of inorganic accelerators, including chlorides.
  - 6. SikaGrout 212 or approved equal.
- B. Epoxy grout for embedding rebar, brick ties, and bolts shall be a 2-component mixture conforming to IBC seismic requirements, Hilti HIT-RE 500-SD or Engineer approved equal. Application of all epoxy grout shall be in accordance with the manufacturer's specifications or instructions.
- C. General-purpose grout for grout fills shall consist of 1 part Portland cement, 1 part fine aggregate, and 2 parts coarse aggregate by volume. The aggregate in the nominal mix may be varied slightly to give the most workable mix, but in no case shall the volume of the coarse material be less than  $1\frac{1}{2}$  times the volume of the fine. No more than 5 gallons of mixing water, including moisture in the aggregate, shall be used for each sack of Portland cement. The consistency shall be the driest consistency possible.
- D. Grout used for anchoring reinforcing bars into rock shall be cementitious with *Sika Intraplast-N* grouting aid as an expansion/fluidifying water-reducing admixture, or Engineer approved equal. The grout mix design shall be in accordance with the admixture manufacturer's recommendations for the intended use. Contractor shall submit mix design for Engineer's approval.

## 2.04 MORTAR

Mortar for build-up at various surfaces and hand-sack rubbing shall be composed of approximately 1 part *Type II Portland Cement*, 1½ to 2 parts *Silica Sand* (for sack finishing) or sand passing No. 16 sieve (for build-up), an amount of air-entraining admixture per sack of cement to produce an air content of 9 percent by volume, and sufficient water to make a workable mix with consistency like thick cream. Masonry Sand shall not substitute for Silica Sand for sack finishing. Thicker mix is required for filling voids. Sand, cement, water, and air-entraining admixture shall be as specified for concrete.

## 2.05 CONCRETE MIX

- A. Mix concrete in accordance with *ASTM C94*. The specified compressive strength at 28 days are listed below. The Contractor shall ensure that the water/cement ratio does not exceed the specified amount. Refer to *PARAGRAPH 3.03.G* for slump requirements.

**FOR THIS PROJECT, USE MIX # 4**

<b>TABLE 03300 - 2.05- A</b>				
	<b>Mix Design</b>			
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Specified Compressive Strength at 28 days, minimum psi.	4500	4500	3000	3000
Air Entrainment	None <sup>1</sup>	4.5-7.5%	None <sup>1</sup>	4.5-7.5%
Cementitious, pounds per cubic yard, minimum pounds	564	564	540	540
Water/cement by weight, maximum	0.44 0.38 <sup>2</sup>	0.44 0.38 <sup>2</sup>	0.50 0.45 <sup>2</sup>	0.50 0.45 <sup>2</sup>

<sup>1</sup>No entrained-air content entrapped air only.

<sup>2</sup>Reduced water/cement ratio applies to concrete for underwater placement (4000W) or low-shrink concrete (LS) requirements. Use of a water-reducing admixture is mandatory for these applications. Increase coarse and fine aggregate weights to adjust the yield.

<sup>3</sup>Aggregate weights listed are based on a specific gravity of 2.67. The concrete plant shall adjust aggregate proportions for the specific gravity of the aggregates used and note the changes on the Submittal.

- B. Use accelerating admixtures in cold weather only when reviewed and accepted by the Engineer. Use of admixtures will not relax cold weather placement requirements.
- C. Use set-retarding admixtures during hot weather only when reviewed and accepted by the Engineer.
- D. Use water-reducing admixtures as reviewed and accepted by the Engineer.

## DIVISION 3 - CONCRETE

- E. Contractor may use flyash or ground granulated blast furnace slag (GGBFS) as a constituent of the concrete. A mix design shall be provided for Engineer's approval before usage.
- F. Failure of any concrete to meet the specified 28 day strength in place as determined by test cylinders shall be reason for removal of the entire pour, and any subsequently placed concrete will be thereby jeopardized. All work necessary for correction will be at the Contractor's expense.
- G. Should the concrete not meet the 28 day test strength, the Contractor may at his option and expense make test corings and tests to the satisfaction of the Engineer.

### 2.06 BONDING AGENT

- A. Bonding agent for bonding new concrete to hardened concrete shall conform to *ASTM-C-881*.
- B. Bonding agent shall be *Symons Rescon Epoxy Bonder MV*, or Engineer approved equal.

### 2.07 WATER STOP

Waterstop shall be 4 inches wide, PVC, 4 inch x 3/16 inch Ribbed Center Bulb, manufactured by Sika/Greenstreak Group, Inc. – Model Number 702 – Type CH2M Hill; or Engineer approved equal. Corners shall be miter, shop manufactured. Splices shall be welded in accordance with manufacturer's requirements and recommendations.

### 2.08 EXPANSION JOINT MATERIAL

- A. Pre-formed expansion joint material shall be rubber compound, conforming to *ASTM D1752, Type 1*, and be full depth of the joint, less expansion joint sealant and backer rod, 1/2 inch thick. A.P.S., Rubber Expansion Joint Filler or Engineer approved equal.
- B. Pre-formed expansion joint material for driveways, sidewalks, etc. shall be asphalt impregnated fiber, conforming to *ASTM D994*, full depth of joint, 1/2 inch thick. A.P.S. Fiber Board or Engineer approved equal.

### 2.09 EXPANSION JOINT SEALANT

Sealant shall be one part cold applied, non-sagging silicone. Color shall be gray. Movement capability shall be +100% / -50% per *ASTM C719. Dow Corning NS Parking Structure Sealant* or Engineer approved equal. Depth of sealant shall be 1/2 the joint width, utilizing closed-cell foam back rod under the sealant.

## PART 3 - EXECUTION

### 3.01 INSPECTION

Verify anchors, seats, plates, reinforcements, and other items to be cast into concrete are accurately placed, held securely, and will not be detrimental in placing concrete.

**3.02 EMBEDMENTS**

- A. Embedded items shall be installed where shown on the Drawings or as described in these Specifications. Expansion anchors shall not be acceptable substitution for anchor bolts.
- B. Any embedded items shall be accurately positioned prior to concrete placement and firmly held in place until concrete has set.
- C. Waterstops shall be installed in required joints as close to the center of the joint as possible, on the water side of the reinforcing. Flexible-type waterstop should be firmly tied and/or fixed in position to prevent movement during placement of concrete. Install waterstop in accordance with manufacturer's recommended forming procedures.
- D. All waterstops shall be heat-welded at all joints.

**3.03 BATCHING AND MIXING**

- A. Except for hand-mixed concrete, all concrete shall be batched in a prequalified manual, semi-automatic, or automatic plant. The prequalification shall consist of a current, annual certification inspection by WSDOT or as approved by the Engineer. If the plant has not been prequalified, the Contractor shall provide written notification to the Engineer 2 weeks prior to the anticipated use of the batch plant to allow for the necessary prequalification. The Engineer is not responsible for any delays to the Contractor due to problems in getting the plant certified.
- B. The Contractor has the option to site mix, transit mix, or plant mix the concrete. In all cases, concrete shall be mixed until a uniform distribution of the materials produces a homogeneous batch.
- C. Site-mixed concrete operations larger than 5 cubic yards total shall be subject to the prior approval of the Engineer.
- D. Transit-mixed concrete may be used provided it complies with these Specifications and *ASTM C94* or *WSDOT Standard Specifications*. The concrete supplier shall have adequate equipment to ensure weight and quality control.
- E. Concrete shall only be mixed in the quantities required for immediate use. The concrete shall be used while fresh before initial set has taken place. Any concrete that has developed initial set shall not be used. Partially hardened concrete shall not be retempered or remixed. One batch of mixed concrete shall be entirely discharged before the following batch is charged.
- F. Temperature and Time for placement (*WSDOT Standard Specification 6-02.3(4) D*).

Concrete temperature shall remain between 55 F and 90 F while it is being placed.

The batch of concrete shall be discharged:

- 1. Not later than 1½ hour after the cement is added to the concrete.



2. Not later than 1¾ hour if the temperature of the concrete being placed is less than 75 F.
  3. Not later than 2 hours with the approval of the Engineer if the concrete being placed is below 75 F.
  4. Dry batch mix procedures may be used, but only as approved by the Engineer.
- G. The maximum slump for vibrated concrete shall be 4½ inches. When a high range water reducer is used, the slump may be increased an additional 2 inches. Minimum slump is that required for proper placement and compaction. The maximum slump for non-vibrated concrete shall be 7 inches.
- H. Conformance to Mix Design
- Weights of the mix components shall be within the following tolerances of the mix design:
- Cement; +5%, -1%
- Fly Ash, Ground Granulated Blast Furnace Slag; +5%, -5%
- Aggregates; +5%, -1% for batch volumes greater than 4 cubic yards
- Aggregates; +10%, -2% for batch volumes equal to or less than 4 cubic yards
- Water; +0%

### 3.04 CONCRETE JOINTS

- A. Waterstop shall be installed in all joints for outside walls of ponds, raceways, and other water-holding or containing structures.
- B. Expansion Joints:
- Not Used.
- C. Crack-Control Joints:
1. Contractor shall provide crack-control plan for approval 72 hours prior to construction. Crack control joints are intended to have cracking occur in the joints to prevent uncontrolled transverse cracks from occurring in walls and slabs.
  2. Crack-control joints shall be straight and true. Crack-control joints shall have a formed crack a minimum depth of 1/4 of the concrete thickness (for walls, half from each side of the section) and may be formed using a plastic strip anchored to the form or other method approved by the Engineer. Slabs may be sawcut 1/4 of the concrete thickness before curing. Contractor shall inform Engineer of his cutting schedule.
  3. The Contractor may use a construction (stop pour) joint in place of the crack-control joint when approved by the Engineer.

**D. Construction Joints:**

1. Construction joints are stopping places in the process of concrete placement and shall be made only where shown on the Drawings or as approved by the Engineer.
2. All construction joints shall be neatly formed as shown on the Drawings. Irregular or undulating joint lines shall not be allowed. All construction joints shall be either horizontal or vertical, or if the main reinforcement is inclined, the joints shall be normal to the direction of the main reinforcement.
3. When the Drawings call for a construction joint with roughened surface, the surface shall be struck off to leave surface irregularities approximately 1/2 inch wide and 1/4 inch deep. Surface irregularities shall not exceed 1/2 inch in depth. If the desired roughness is not obtained by the initial strike-off, the surface shall be roughened prior to the concrete reaching its initial set in such a manner as to leave grooves approximately 1/4 inch deep at 1/2 to 1 inch centers in both transverse and longitudinal directions. The rough surface shall be clean and free of laitance and loose material. Shear keys are required where shown on the Drawings.
4. Waterstops shall be installed in all outside walls and slab construction joints in ponds, raceways, and other water-holding or containing structures.

**3.05 PLACING CONCRETE - GENERAL**

- A. Notify the Engineer a minimum of 48 hours prior to commencement of concreting operations. Placement of concrete shall occur only after the forms and reinforcing bar placement have been inspected and approved by the Engineer or his representative. The Contractor shall place concrete only when the Engineer or his representative is present.
- B. All building slabs, floor slabs, and pond floor slabs shall be placed over a 6-mil clear polyethylene vapor barrier (unless noted otherwise).
- C. Concrete shall be placed as soon as possible after mixing and shall be plastic and readily workable when placed in the forms. See *Division 03300 3.03F*. The method and manner of placing concrete shall avoid segregation of the aggregates or displacement of reinforcement.
- D. Immediately before concrete placement against existing hardened concrete, bonding agent shall be applied to existing clean concrete surface. New concrete shall be placed while agent is still tacky.
- E. Concrete shall not be placed if other work in the area, such as driving piles or sheets, causes vibrations that adversely affect the initial set or strength of the concrete.
- F. Aluminum conduits shall not be used in the pumping or placing of concrete.
- G. Ensure reinforcement, inserts, embedded parts, and formed joints are not disturbed during concrete placement.

- H. Place crack-control joints prior to initial set.
- I. Excessive honeycomb or embedded debris in concrete is not acceptable.

**3.06 PLACING CONCRETE INTO FORMS**

- A. Before placement of concrete, forms shall be cleaned and free of all debris and ice. The foundations and forms shall be dampened prior to placing concrete. Care must be taken to see there is no standing water on the foundation or in the forms when the concrete is placed. Where possible, all foundation excavations shall be pumped dry and concrete deposited in the dry. If it is not possible to proceed in this manner, a seal of concrete of sufficient thickness to resist any possible uplift shall be deposited underwater in accordance with the requirements specified in *PARAGRAPH 3.08 - PLACING CONCRETE IN WATER*.
- B. Deposit concrete in forms in continuous horizontal layers not deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints. Insert vibrator into previous layer to ensure homogeneous concrete placement.
- C. Remove temporary spreaders in forms when concrete being placed has reached the elevation of such spreaders.
- D. Concrete shall not be dropped more than 3 feet. This is to avoid material segregation. When placing operations would involve dropping the concrete more than 3 feet, it shall be deposited through sheet metal or other approved conduit. In sloping forms where concrete, if dropped, will tend to slide down one side of the form as it is placed, the concrete shall be placed through approved conduit without dropping. After initial set of the concrete, the forms shall not be jarred, and no strain shall be placed on the ends of the projecting reinforcement bars.
- E. The method of depositing and consolidating concrete shall be conducted so as to form a compact, dense, and impervious concrete that will show smooth faces on exposed surfaces. If any section of concrete is found to be defective, it shall be removed by the Contractor at no additional expense to the State. Plastering will not be permitted.

**3.07 PLACING CONCRETE SLABS**

- A. Deposit and consolidate concrete slabs in a continuous operation within the limits of construction joints until the placing of a panel or section is completed. When concrete is in place has sufficiently set up (at least 24 hours), an alternate section shall be placed. The edges of all sections shall be tooled with a minimum radius edging tool.
- B. Slope all exterior concrete slabs and interior slabs with floor drains in a manner to prevent the collection of water.
- C. Bring slab surfaces to the correct level with a straightedge and strike off. Use bullfloats or derbies to smooth the surface, leaving it free from humps or hollows. Do not sprinkle water on the plastic surface. Do not disturb the slab surfaces prior to beginning finishing operations.
- D. Maintain reinforcing steel in the proper position continuously during concrete placement operations.

**3.08 PLACING CONCRETE IN WATER**

- A. In no case shall concrete be placed in running water. Whenever permission is given to place concrete underwater, it shall be so placed within the confines of a watertight compartment such as a cofferdam, tube, or caisson.
- B. Concrete placed underwater shall include a water-reducing admixture within the manufacturer's recommended dose range as approved by the Engineer. Concrete placed in still water inside an open crib or cofferdam shall be placed by means of a tremie. The width of section of footing being poured shall not exceed 18 feet for each tremie or bucket used.
- C. When the concrete is to be placed by a tremie, the methods of construction shall comply with the following requirements:
  - 1. All tremies shall consist of a tube having a diameter not less than 10 inches and a hopper adequate to perform the work, or a method using a straight tremie tube on the end of a concrete pumper hose may be developed provided prior approval of the proposed method and procedure is obtained from the Engineer.
  - 2. A satisfactory method of expelling the water and first filling the tremie shall be used.
  - 3. The end of the tremie tube shall be kept deep enough into the seal concrete, and the concrete maintained in the tube at the elevation required to prevent water from entering the tremie tube at any time during the concrete placement. In placing concrete through a tremie, 2 distinct handling devices shall be used: One to raise, lower, and place the tremie, and the other to deliver concrete to the tremie. When a batch is dumped into the hopper at the top, the tremie shall be raised slightly (but not out of the concrete at the bottom) until the batch discharges to the bottom of the hopper or the top of the tremie tube. The flow shall then be stopped by lowering the tremie.
  - 4. The seal shall be completed by placing full thickness as the seal advances from one end of the placement to the other, keeping the finished surface of the concrete as level as possible.
  - 5. The concrete shall be placed continuously until the required seal is placed. If for any unavoidable reason it becomes necessary to discontinue the placing before the required seal is completed, the Contractor may be required to remove all concrete placed in the seal at no cost to the State.
- D. When concrete is placed underwater, the Contractor may use methods whereby the aggregates are preplaced within the cofferdam before the introduction of the cement grout, provided prior approval of the proposed method and procedure is obtained from the Engineer.

**3.09 PLACING CONCRETE IN HOT WEATHER**

- A. Concrete shall be placed when anticipated 24 hour range will exceed 89°F and shall conform to *ACI 305R*. Contractor shall submit a hot weather plan to the Engineer for review and approval prior to commencement of any work.

- B. The temperature of the concrete equipment and ingredients shall be maintained at such a level that the temperature of the concrete at the time it is placed shall not exceed 85°F.
- C. Water-reducing admixtures shall be used so that the maximum amount of water or slump shall not be exceeded. The mixing of the concrete and the time between mixing and placing shall be kept to a minimum. Mixer trucks shall not be exposed to the sun while waiting to be unloaded. Chutes, conveyors, and pump lines shall be shaded. To keep the forms and reinforcing steel cool prior to placing the concrete, the top layer of reinforcing steel shall be completely covered with clean, wet burlap and the forms and reinforcing steel shall be sprinkled with cool water immediately prior to placing the concrete or as ordered by the Engineer. The concrete shall be finished without delays. Equipment for applying a water-fog spray shall be available in case it is needed to prevent plastic cracks.
- D. When the combination of air temperature, humidity, temperature of the surface of the concrete, and the wind velocity produces an evaporation of 0.2 or more pounds per hour per square foot of surface as determined by the Engineer, the Contractor shall provide a windbreaker enclosure to protect the concrete from winds blowing over the surface of the concrete until the curing compound is applied.

### 3.10 PLACING CONCRETE IN COLD WEATHER

- A. When air temperature is expected to fall below 37°F during placement or within 7 days thereafter, the Contractor shall place and cure concrete in accordance with *ACI 306R*. Contractor shall submit a cold weather concreting plan to the Engineer for review and approval no less than 7 days prior to the proposed cold weather concreting.
- B. The following provisions shall govern cold weather concreting:
  - 1. Concrete shall not be mixed or placed while the atmospheric temperature is below 37°F.
  - 2. Concrete shall not be placed on frozen ground or against frozen forms.
- C. Frozen concrete shall be immediately removed when Contractor is directed to do so by the Engineer and replaced with new work at no cost to the State.

### 3.11 VIBRATION OF CONCRETE

- A. The Contractor shall provide suitable internal vibrating tampers for use in placing and compacting all concrete except that which is placed underwater. The vibrators shall be of the type designed to be placed directly in the concrete, and the vibrator's frequency of vibration shall be not less than 7,000 impulses per minute when in actual operation. The type of vibrator and its method of use shall be subject to the approval of the Engineer.
- B. Insert and withdraw vibrators vertically at uniformly spaced locations not farther than the visible effectiveness of the machine (between 2 to 3 feet). Place vibrators to rapidly penetrate the layer of concrete and at least 6 inches into the preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit the duration of vibration to the time necessary for consolidation around reinforcement and other embedded items without causing segregation of the mix.

## DIVISION 3 - CONCRETE

Generally, this will be from 5 to 15 seconds in accordance with *ACI 301*. Do not use vibrators to transport concrete inside of forms.

- C. Vibrators shall not be applied directly to steel that extends into partially hardened concrete.
- D. Vibration shall not continue in any one spot to the extent that pools of grout are formed. When vibrating and finishing top surfaces that are exposed to weather or wear, extreme care shall be exercised to avoid drawing water or laitance to the surface. For relatively high lifts, the top layer shall be comparatively shallow, and the concrete mix shall be as stiff as can be effectively vibrated into place and properly finished.
- E. The Contractor shall supply a sufficient number of vibrating tampers to effectively vibrate all of the concrete placed. Hand tamping shall be required wherever necessary to secure a smooth and dense concrete on the outside surfaces.
- F. Vibration of forms and reinforcing will not be allowed.

### 3.12 FINISHING CONCRETE SURFACES - GENERAL

- A. Forms on walls shall be removed not more than 72 hours after placing concrete.
- B. After removal of the forms, all concrete shall show a smooth, dense face. Any concrete that is porous shall be removed by the Contractor and replaced at no additional cost to the State.
- C. At the discretion of the Engineer, cracks in concrete work not covered by *PARAGRAPH 3.16 - DEFECTIVE CONCRETE AND REPAIR OF CONCRETE* and 0.010 inch wide and wider shall be repaired at the Contractor's expense by an *ACI*-recommended method as approved by the Engineer. Criteria for an acceptable method of repair will be based on the following elements:
  - 1. Structural or nonstructural crack.
  - 2. Exposure level/conditions of structures.
  - 3. Appearance.
  - 4. Cause of cracking.
- D. Unsightly stains and coloring caused by the Contractor's operations, equipment, or materials, or resulting because of unfinished construction either before or after a surface has been finished in accordance with this section shall be cleaned and refinished prior to final acceptance of the project and at no additional cost to the State.

### 3.13 FINISH OF SLABS

- A. Screed all slabs.
- B. Trowel by hand or machine to hard, dense, and mark-free surface. Do not absorb wet spots with neat cement or mixture of cement and sand. Wait until surfaces are dry enough for proper troweling. Chemical dryers not permitted.

- C. Interior concrete slabs to receive flooring materials or carpet shall be steel troweled. Slabs not receiving flooring materials shall also be light-broom finished across the direction of slope or flow to achieve a nonslip surface or as otherwise shown on the Drawings.
- D. Slabs in hatchery trough rooms shall be light-broom finished in the direction of floor slope.
- E. Exterior slabs and slabs in contact with fish rearing water, shall receive a light-broom finish.

**3.14 FINISH OF FORMED SURFACES**

**A. Surfaces Not Exposed to View, Not in Contact with Water:**

- 1. This includes formed concrete surfaces not exposed to view in the finish work or covered by other construction unless otherwise shown or specified.
- 2. Provide as-cast rough form finish.
- 3. Standard rough-form finish shall be the concrete surface having the texture imparted by the form-facing material used with tie holes and defective areas repaired and patched, and all fins and other projections exceeding 1/4 inch in height rubbed down or chipped off.

**B. Surfaces Exposed to View or in Contact with Fish-Bearing Water:**

- 1. This includes concrete surfaces that are visible but not in contact with water and all concrete water contacting surfaces that may come in contact with fish rearing water.
- 2. Grind entire surface of all interior and exterior walls with a rotary grinder to expose all air pockets, voids, and other imperfections to create a smooth wall surface.
- 3. Immediately after all required patching, grinding, and correction of major imperfections have been completed, hand sack-rub all vertical surfaces. The sacking process and desired finish quality shall conform to *WSDOT Class 1 Surface Finish (WSDOT 6-02.3 (14) (A))*. The sack finish process shall be accomplished immediately after the 7 day cure period or as approved in writing by the Engineer. No other methods/finishes will be accepted.
- 4. All pits, after being filled, that shows signs of air pockets or still show an indentation in the wall, shall be reopened (as necessary), refilled, and finished by repeating the hand-sacking process. The intent of the finish is to be very smooth and nonabrasive with no pinholes visible.
- 5. Top of walls in contact with fish bearing water shall be steel troweled, edged and light broom finished.

## 3.15 FINISHED CONCRETE TOLERANCES

A. Formed concrete tolerances shall conform to the following requirements:

TABLE 03300 - 3.15A	
1. Variation from plumb:	
a. In lines and surfaces of columns, piers, walls:	$\frac{1}{8}$ inch in any 10 feet $\frac{1}{2}$ inch maximum for the entire length/height
b. For exposed corner columns, crack control joint grooves, and other conspicuous lines:	$\frac{1}{4}$ inch in any 20-foot length $\frac{1}{2}$ inch maximum for the entire length
2. Variation from the level or the grades:	
a. In slabs and beams soffits:	$\frac{1}{4}$ inch in any 10-foot length $\frac{3}{8}$ inch in any bay or in any 20-foot length $\frac{3}{4}$ inch maximum for the entire length
b. In exposed lintels, sills, parapets, horizontal grooves, and other conspicuous lines:	$\frac{1}{4}$ inch in any bay or in any 20-foot length $\frac{1}{2}$ inch maximum for the entire length
3. Variation of the linear building lines from established position in plan and related position of columns, walls, and partitions:	$\frac{1}{2}$ inch in any bay $\frac{1}{2}$ inch in any 20-foot length 1 inch maximum for the entire length
4. Variation in the sizes and location of sleeves, floor openings, and wall openings:	$\frac{1}{4}$ inch plus or minus
5. Variation in cross-sectional dimensions of columns and beams and in the thickness of slabs and walls:	$\frac{1}{4}$ inch minus $\frac{1}{2}$ inch plus
6. Footings:	
a. Variation in dimension in plan:	$\frac{1}{2}$ inch minus 2 inches plus
b. Misplacement or eccentricity:	2 percent of the footing width in the direction of misplacement, 2 inches maximum
c. Thickness:	
1. Decrease in specified thickness:	5 percent
2. Increase in specified thickness:	No limit



7. Variation in steps:	
a. In a flight of stairs:	
1. Rise:	1/8 inch plus or minus
2. Tread:	1/4 inch plus or minus
b. In consecutive steps:	
1. Rise:	1/16 inch plus or minus
2. Tread:	1/8 inch plus or minus

- B. Tolerances apply to concrete dimensions only, not to positioning of vertical reinforcing steel, dowels, or embedded items.

### 3.16 DEFECTIVE CONCRETE AND REPAIR OF CONCRETE

- A. Concrete that is not formed as shown on the Drawings, or for any reason is out of alignment, level, tolerances, or shows a defective surface shall be removed from the job at the Contractor's expense, unless the Engineer grants permission to patch the defective area. Permission to patch in such an area shall not be considered a waiver of the Engineer's right to require complete removal of defective work if patching does not, in his opinion, satisfactorily restore quality and appearance of the surface.
- B. Repair or replace concrete not properly placed or of the specified type.
- C. All concrete shall be inspected, and all pour joints, rough sections, cracks, and honeycombed areas shall be repaired by cutting back to solid concrete. Apply cement mortar fill after coating surface with bonding agent.
- D. Fill all tie holes and small imperfections with cement mortar fill.

### 3.17 PLACING ANCHOR BOLTS AND EMBEDDED METALWORK

- A. Cast-in-place anchor bolts and embedded metalwork shall be accurately placed as shown on the Drawings. The Contractor shall secure the cast-in-place anchor bolts and metalwork to the forms or reinforcing steel to prevent misalignment of these items while placing the concrete.
- B. Conduits, pipes, and other fabrications made of aluminum shall not be embedded in concrete unless effectively coated or covered to prevent aluminum-concrete reaction.

### 3.18 WATER-HOLDING STRUCTURE TEST

- A. Description: All concrete structures that are designed to hold, treat, or pass water or wastewater shall be constructed to be watertight. All structures shall be hydraulically tested for pressure and leakage after concrete has cured and obtained design strength. Leakage testing shall be performed at the expense of the Contractor prior to backfilling the structure.

**B. Testing Procedure:**

1. The structure shall be filled with water to the normal operating static level and maintained at that level for 7 days to allow for absorption and stabilization. For testing purposes, all inlets and outlets shall be closed or plugged. At the end of the 7 day period, the change in the volume shall be measured after 24 hours without any water flowing into or out of the structure. Acceptable water leakage criteria are as follows:
  - a. No visible leakage or visibly damp areas.
  - b. A leakage rate no greater than .001 of total tank volume in a 24 hour period.
2. Failure to meet these criteria will require repairs of the structure at the Contractor's expense by a method approved by the Engineer. The structure shall be tested after repairs. This process will be repeated until the leakage volume criteria are met.

END OF SECTION 03300

**SECTION 03370  
CONCRETE CURING**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

Concrete curing materials and methods.

**1.02 ENVIRONMENTAL CONDITIONS**

When the air temperature is expected to fall below 37°F during the 7 day initial cure period, the Contractor shall submit a written cold weather concreting plan conforming with *ACI 306R* to the Engineer for approval prior to the commencement of any concrete work.

**1.03 QUALITY ASSURANCE**

Contractor shall conform to requirements of *ACI 301*.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

- A. Water shall be clean, potable and not detrimental to concrete.
- B. Absorptive mat shall be burlap-polyethylene, 8 ounces per square yard, bonded to prevent separation during use.
- C. Concrete curing compound shall be of a standard and uniform quality, ready for use as shipped by the manufacturer. Contractor shall verify curing compound compatibility with required concrete surface finishes as specified in *SECTION 03300 - CAST-IN-PLACE CONCRETE* and as noted on the Drawings. The curing compound shall conform to *ASTM C309, Type 1, Class A or B*, and shall be clear with no discoloring. Curing compounds shall be certified nontoxic to fish or approved by the engineer.
- D. Curing compound for interior slabs and interior walls shall be WR Meadows 1300 Clear or Engineer approved equal.
- E. Polyethylene Film shall conform to *ASTM D2103* and shall be 6 millimeter thick and white in color.

**PART 3 - EXECUTION**

**3.01 CURING METHODS**

- A. All concrete surfaces shall be cured by one of the following methods for not less than 7 days after the concrete is placed.

- B. Using one of the methods listed below, the Contractor shall determine the best method for the project, as approved by the Engineer:

1. Walls:

Not Used.

2. Slabs and Curbs:

- a. Method 1: Cover surface by water ponding.
- b. Method 2: Cover with absorptive mats and keep continuously wet.
- c. Method 3: Continuously sprinkle exposed surface.
- d. Method 4: Apply specified curing compound to exposed surfaces.
- e. Other agreed upon method that will provide moisture to be present and uniform at all times on all surface of slabs.

C. Onset of Curing:

- 1. Slabs-on-Grade: Apply curing compound, if used as soon as free water has disappeared from concrete surface after placing and finishing.
- 2. Formed Concrete: Remove forms as specified in *SECTION 03100*, and patch and finish immediately. Apply curing method immediately to finished sections of the work.

**3.02 MEMBRANE CURING COMPOUND**

- A. Apply immediately after finishing of slabs and walls, etc. in accordance with manufacturer's instructions.
- B. Surfaces that have their forms removed after concrete has reached 2/3 of its design strength by test will not require curing compound applied.

**3.03 ABSORPTIVE MAT**

Contractor shall saturate burlap side of absorptive mat, place over slab areas burlap side down, lap edges and ends 12 inches, and maintain in place for duration of curing period.

**3.04 POLYETHYLENE FILM**

- A. Contractor shall spread polyethylene film over slab areas, lap edges and ends 3 inches, and seal with pressure-sensitive polyester tape.
- B. Contractor shall maintain polyethylene film in place with plywood sheets for duration of curing period.

END OF SECTION 03370

**SECTION 05000  
GENERAL METAL PROVISIONS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies general requirements for all sections of *DIVISION 5 - METALS*.

**1.02 RELATED WORK**

Provisions of the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, and *DIVISION 1* of the Contract are by this reference a part of this division and shall govern work under this division where applicable.

**1.03 REFERENCES**

References listed in *DIVISION 5* are from the following organizations' latest editions of their publications and reference standards:

- |    |                                 |   |
|----|---------------------------------|---|
| A. | <i>The Aluminum Association</i> | <i>Aluminum Design Manual</i>   |
| B. | <i>AISC</i>                     | <i>American Institute of Steel Construction, Steel Construction Manual, ASD</i> |
| C. | <i>AISI</i>                     | <i>American Iron and Steel Institute</i>  |
| D. | <i>ASTM</i>                     | <i>American Society of Testing and Materials</i>                                |
| E. | <i>AWS</i>                      | <i>American Welding Society</i>   |
| F. | <i>MFMA</i>                     | <i>Metal Framing Manufacturers Association</i>                                  |
| G. | <i>WABO</i>                     | <i>Washington Association of Building Officials</i>                             |
| H. | <i>IBC</i>                      | <i>International Building Code (current municipal standard)</i>                 |

**1.04 SUBMITTALS**

Submit shop drawings for all metal fabrication items in all sections of *DIVISION 5* in accordance with the *GENERAL CONDITIONS*.

- A. Product Data: Submit 5 copies of manufacturer's data for all items in *DIVISION 5* indicating shapes, sizes, and physical and structural properties.

- B. Shop Drawings: Submit paper or electronic (pdf) copy of shop drawings including complete plan and profiles, size, details, schedules for fabrication, and assembly of members. Include material identification, details of cuts, connections, fastener types and material, fastener locations, and other pertinent data. Indicate welds by AWS symbols and show size, length, and type of weld. Identify details by reference to sheet and detail number on the Drawings.
1. Include erection drawings, elevations, and details. The Contractor shall verify field dimensions for all metal fabrications and provide shop drawings for the Engineer's review and acceptance for all fabricated items prior to shop fabrication.
  2. Indicate welded connections using standard AWS welding symbols. Indicate weld lengths. Include data for welding materials and methods to be used. Waterproof welds shall be tested to ensure proper function for intended applications.

**1.05 QUALITY ASSURANCE**

- A. All welders shall be qualified in accordance with AWS and be WABO certified within the past 12 months. Written certification for welders performing fabrication work shall be furnished to the Engineer.
- B. Mill-spot markings of alloy and temper shall be on aluminum products. If such markings are obliterated or eliminated in fabrications, the fabricator shall furnish a certificate verifying the information.
- C. Waterproof welds shall be tested to ensure proper function for intended applications.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

See sections of *DIVISION 5*.

**PART 3 - EXECUTION**

See sections of *DIVISION 5*.

END OF SECTION 05000

**SECTION 05050  
FASTENERS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. This work consists of furnishing and installing metal fasteners for fabrication of work described in *DIVISION 5* or as described in other divisions.
- B. Provisions of the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, and *DIVISION 1* of the Contract are by this reference a part of this division and shall govern work under this division where applicable.
- C. Work includes, but is not limited to embedded and nonembedded metal work and fabrication of the following:
  - 1. General requirements;
  - 2. Galvanized steel grating fasteners;
  - 3. Fasteners for aluminum-fabricated items;
  - 4. Anchor bolts and expansion anchors;
  - 5. Bolts, nuts, washers, and sheet metal screws; and
  - 6. Steel epoxy-grouted anchors.

**PART 2 - PRODUCTS**

**2.01 GENERAL REQUIREMENTS**

- A. Furnish all connectors, fasteners, welded metal, and miscellaneous items required to complete the scope of work.
- B. Unless otherwise shown, the fasteners and connectors shall be of same material as the attached metal, except for aluminum where fasteners and connectors shall be stainless steel. All fasteners used for submerged or "wet" locations shall be stainless steel.
- C. Furnish washers and lock washers for all bolted connections unless otherwise noted. This includes washers for flange bolts. Washers and lock washers shall be of the same material as fasteners and connectors.
- D. Anchor bolts embedded in concrete and subjected to intermittent or continuous submergence during hatchery operations shall be stainless steel. Other anchor bolts shall be hot-dip galvanized unless otherwise noted.
- E. Hot-Dip Galvanizing: Unless otherwise specified, shall be after fabrication.

**2.02 FASTENERS FOR ALUMINUM FABRICATED ITEMS**

- A. All bolts, nuts, washers, and screws used for assembly or mounting of aluminum fabricated items shall be stainless steel *Type 304* or *316*. Do not use plated or galvanized assembly hardware with aluminum-fabricated items.
- B. All bolts, washers, lock washers, etc. shall be *Type 304 (18-8)* stainless steel for assembly of head troughs and denil fishways. The Contractor shall furnish all hardware necessary to assemble the troughs and fishways.

**2.03 ANCHOR BOLTS AND EXPANSION ANCHORS**

Anchor bolts and studs shall be *ASTM A 307* carbon steel, 60,000 psi tensile strength. Anchor bolts, nuts, expansion anchors, bolts, and washers shall be hot-dip galvanized.

**2.04 BOLTS, NUTS, WASHERS, AND SHEET METAL SCREWS**

- A. All bolts and nuts that will be continuously or intermittently in contact with water during hatchery or other facility operations shall be stainless steel conforming to *ASTM A193* and *ASTM A194* for the type approved. Type shall be *304* or *316*. All other general use bolts, nuts, and washers shall be *A307* and *A563* respectively, hot-dip galvanized, unless specifically identified as other materials, with the exception that all assembly hardware for aluminum fabrication shall be stainless steel. No galvanized, plated, or anodized materials shall be used with aluminum.
- B. High-strength bolts, where specified, shall be used to fasten structural steel members and shall conform to *ASTM A 490*, 150 ksi tensile strength.

**2.05 HEADED CONCRETE ANCHORS**

*ASTM A108* or *AISI Type 304*.

**PART 3 - EXECUTION**

**3.01 CONSTRUCTION GENERAL REQUIREMENTS**

- A. Anchor Bolts: Expansion anchors set in holes drilled in the concrete after the concrete is placed will not be permitted in substitution for anchor bolts except with the prior written acceptance of the Engineer.
- B. After anchor bolts have been embedded, their threads shall be protected by having the nuts screwed on or by other accepted means until the time of installation of the equipment or metalwork.

END OF SECTION 05050



**SECTION 05091  
WELDING****PART 1 - GENERAL****1.01 DESCRIPTION OF WORK**

This work includes furnishing all necessary material, labor, and equipment for completing welding required for metal fabrications.

**1.02 QUALITY ASSURANCE****A. Governing Specifications, Codes, and Standards:**

1. American Welding Society, *ANSI/AWS D1.1*, "Structural Welding Code - Steel," referred to hereafter as *AWS D1.1*
2. American Welding Society, *ANSI/AWS A5*.
3. American Welding Society – *AWS D19.0*, "Welding Zinc-Coated Steel," referred to hereafter as *AWS D19.0*.
4. WABO Standard No. 27-13, "WABO Welder and Welding Operator Performance Qualification Standard for Structural Steel, Sheet Steel, and Reinforcing Steel".
5. American Welding Society – *AWS D1.2*, "Structural Welding Code – Aluminum".
6. American Welding Society – *AWS D1.6*; Structural Welding Code – Stainless Steel"

**B. Qualifications:**

1. Welder Qualifications: all welders are required to be currently certified by AWS and WABO for structural welding. Contractor shall submit proof of certification. Welders shall be qualified in accordance with *AWS D1.1* and WABO Standard 27-13 for the processes and positions to be performed for structural steel. Welders shall be qualified in accordance with *AWS D1.2* for Aluminum Welding. Welders shall be qualified in accordance with *AWS D1.6* for stainless steel.
2. The Contractor shall submit all Welding Procedure Specifications (WPSs) to be used by the Contractor on the project. For WPSs that are not prequalified per *AWS D1.1*, the supporting Procedure qualification Record (PQR) shall also be submitted with the WPS.

**C. Certifications:**

1. The Contractor supplying welding filler metal and shielding gas products shall submit copies of all Manufacturers' certifications for all electrodes, fluxes, and shielding gases to be used. Certifications shall satisfy the applicable AWS A5 requirements. The Contractor shall also submit the manufacturer's product data sheets for all welding material to be used. The data sheets shall describe the product, limitations of use, recommended welding parameters, and storage and exposure requirements, including baking and rebaking, if applicable.
2. Certificate of Compliance: For all welding electrodes used on the project the contractor shall submit a Certificate of Compliance. The certificate of compliance shall be a letter stating that the Contractor has reviewed the submitted manufacturer's certifications and test reports, and that the materials being furnished for the project are in conformance with the applicable standards, specifications, and project documents.

**D. Testing and Inspection: NDT and inspection of welds will be performed by the State in accordance with this section.**

**1. Verification Inspection**

- a. The State will engage an independent testing agency to perform verification inspection and testing on all field and shop welding. Field and shop welding will be considered all welding not performed at the manufacturing plant.
- b. The independent testing agency will perform testing and inspection of 100 percent of all (field and shop) butt splice welds and 10 percent of all (field and shop) PJP welds.
- c. The inspection procedures, techniques, and methods will be in accordance with *AWS D1.1, Section 6*.
- d. All (field and shop) butt splice welds will be 100 percent tested by the following methods:
  - 1) Full-time visual inspection.
  - 2) Ultrasonic Inspection: *ASTM E 164*.
- e. All (field and shop) PJP welds will have a minimum of 10 percent of the total length tested by the following methods:
  - 1) Full-time visual inspection.
  - 2) Magnetic Particle Inspection: *ASTM E 709*.
- f. All (field and shop) butt splice and PJP welds shall meet the acceptance criteria set forth in *AWS D1.1, Section 6*.

- g. The State's Welding Inspector shall have the authority to determine compliance with the above acceptance criteria and order repairs or replacements of unacceptable welds at no additional cost to the State. All welds whether made at the manufacturing plant, or in the shop or field shall be subject to the acceptance of the State's Welding Inspector.
- h. All welds will be visually inspected.

### 1.03 SUBMITTALS

Prior to commencement of other Work in this Section, the Contractor shall submit the following items to the Engineer:

- A. Welder qualifications/certifications.
- B. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs).
- C. Electrode manufacturer's certifications and data sheets.
- D. Certificates of Compliance.

### 1.04 PRODUCT HANDLING

Welding electrodes shall be packaged, stored, and used in a manner consistent with AWS standards and the electrode manufacturer's specifications.

## **PART 2 - PRODUCTS**

### 2.01 ELECTRODES

- A. All electrodes, fluxes, and shielding gases shall meet the requirements of the applicable sections of *ANSI/AWS A5*.
- B. Welding electrode classification for carbon steel shall be E70XX and shall be "low hydrogen" electrodes.
- C. Welding electrode classification for stainless steel shall be E316L-XX.

## **PART 3 - EXECUTION**

### 3.01 PREPARATION

- A. Fabrication and joint preparation shall be in accordance with the applicable *AWS standard*.
- B. Hold back or remove all galvanizing a sufficient distance from the joint to prevent inclusion of the material into the weld. Galvanizing shall be removed from the joint in accordance with *AWS D19.0*.

C. Protection

1. Work shall comply with all municipal, state, and federal regulations regarding safety, including all applicable portions of OSHA and State safety standards for construction work.
2. Conform to *ANSI Z49.1*, "Safety in Welding, Cutting, and Allied Processes," published by the American Welding Society.
3. Follow "Safe Practices" recommended in Annex R of *AWS D1.1*

3.02 WELDING PROCEDURES

- A. Perform all work in accordance with procedures written and qualified in accordance with AWS requirements.
- B. Use a prequalified welding process in accordance with AWS, whenever possible.
- C. Use prequalified partial and complete joint penetration details in accordance with AWS, wherever possible.
- D. Qualify non-prequalified welds in accordance with AWS. Prepare Procedure Qualification Records (PQR's) and Welding Procedure Specifications (WPS's) and complete all welding in conformance with the WPS's.
- E. Qualify WPSs in accordance with *AWS D1.1, Section 4*.

3.03 FIELD QUALITY CONTROL

- A. Field welding shall meet the requirements of AWS.
- B. Verification Inspection will be performed by an independent testing agency provided by the State.
- C. The Contractor shall provide access to the State's Welding Inspector at all times while the work is being performed.

3.04 SCHEDULING

The Contractor shall coordinate the work with the State's Welding Inspector. The Contractor shall provide the State with a proposed work schedule and shall coordinate the work to meet the contract delivery schedule.

3.05 CLEANING

Clean in accordance with AWS requirements.

3.06 REPAIR

- A. Making weld repairs or replacements shall be the responsibility of the Contractor and shall be at no additional cost to the State.

- B. Weld repairs or replacements on PJP welds shall be performed in accordance with *AWS D1.1, Section 6*.
- C. Repair all galvanizing removed or damaged during welding in accordance with *Section 05126, "Galvanizing,"* of these Specifications and as directed by the Engineer or replace damaged items at no additional cost to State.

END OF SECTION 05091

**SECTION 05126  
GALVANIZING****PART 1 - GENERAL****1.01. DESCRIPTION OF WORK**

The Work includes the requirements to provide a galvanized coating as specified with all handling, prefinishing, cleaning, pickling, rinsing, dipping, cooling, draining, vibrating, centrifuging, inspection, and other processes or materials required.

**1.02. QUALITY ASSURANCE****A. Governing Specifications, Codes, and Standards:**

1. *ASTM A 123* Standard Specification for Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Products.
2. *ASTM A 153* Standard Specification for Zinc (Hot –Dipped Galvanized) Coatings on Iron and Steel Products.
3. *ASTM A 143* Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedures for Detecting Embrittlement.
4. *ASTM A 384* Practice for Providing High Quality Zinc Coating (Hot Dipped)
5. *ASTM A 384 780* Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings

B. The Manufacturer shall be required to test the finished product for thickness, uniformity of the coating, and adhesion in accordance with the applicable ASTM standard.

C. Conform to manufacturers' specifications, directions, and recommendations for best results in the use of each of their products for each condition. If results are at variance with these specifications, report the discrepancy to the Engineer for decision.

**1.03 SUBMITTALS**

Prior to commencement of other Work in this Section, the Contractor shall submit the following items:

Submit sample of galvanizing repair rod to be used, along with rod manufacturer's product data sheets.

**1.04 PRODUCT HANDLING**

Replacements: Repair or replace damaged work, if any, as necessary to the approval of the Engineer and at no additional cost to the State.

**PART 2 - PRODUCTS**

**2.01 GALVANIZING**

- A. All carbon steel elements, including fasteners, shall be hot-dip galvanized after fabrication in conformance with *ASTM A 123*, *A 143*, *A 153*, *A 384*, and *A 385* to a thickness Grade 100.
- B. Galvanizing repair shall be performed with zinc-based alloy solder rods.

**PART 3 - EXECUTION**

**3.01 FABRICATION**

Any drain or vent holes required to produce a high quality galvanized coating with minimal warpage and distortion not indicated on the contract plans shall be identified by the coating manufacturer, clearly shown on the shop drawings, and shall be subject to approval by the Engineer. Fabrication shall be in accordance with *ASTM A 384* and *ASTM A 385*.

**3.02 REPAIR OF GALVANIZED COATING**

- A. Repair all galvanized surfaces removed or damaged during welding, shipping, or erection in accordance with *ASTM A 780*, Annex A.1. The zinc-based solder repair rod shall be "Zaclon Repair Alloy" or approved equal. The minimum thickness of the coating shall be 4 mils.
- B. Galvanized coating damaged or removed during welding on items that will have the galvanizing embedded in concrete shall be repaired by the application of a cold galvanizing compound in accordance with *ASTM A 780*, Annex A.2. The cold galvanizing compound shall be "ZRC Cold Galvanizing Compound" or approved equal. The final thickness of the coating shall be 3 mils.

END OF SECTION 05126

**SECTION 05500  
METAL FABRICATION**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. Work consists of furnishing all labor, materials, and equipment for the fabrication and erection of all metal fabrications shown on the drawings.
- B. Work includes but is not limited to embedded and nonembedded metal work and fabrication of the loading platform railing.

**1.02 RELATED WORK**

- A. Hot-Dip Galvanizing and Coatings: Unless otherwise specified, ferrous metals shall be hot-dip galvanized after fabrication. See *DIVISION 9 - FINISHES* for galvanizing requirements.
- B. For connectors, fasteners, bolts, nuts, washers, anchor bolts, embedded bolts, welded studs, etc. see *SECTION 05050 - FASTENERS*.
- C. Provisions of the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, and *DIVISION 1* of the Contract are by this reference a part of this division and shall govern work under this division where applicable.

**PART 2 - PRODUCTS**

**2.01 ALUMINUM**

- A. Provide all aluminum fabricated items in the numbers, sizes, dimensions, and configuration as shown on the Drawings.
- B. Structural aluminum shapes and plates shall be fabricated from aluminum alloy *6061-T6* unless otherwise noted or approved by the Engineer. Protect all surfaces from damage by weld splatter and accidental scratching. Grind and polish (120 grit, A203 abrasive) all exposed weld surfaces to provide a smooth, uniform polished surface. Welding shall conform to *WA-20*. Provide full-length or perimeter aluminum welding unless specifically directed not to on the Drawings. Protect items from heat warp and distortion. Maintain true and square metered joints for all frames and similar items. Test all waterproof welds and repair or replace any that leak.
- C. Coat only aluminum items to be embedded or in surface contact with concrete with coal tar epoxy paint system as identified in *DIVISION 9 - FINISHES*. Do not paint the exposed portion of these aluminum items.
- D. Aluminum, unless otherwise noted, shall have a smooth, polished finish and be cleaned of oils, chemicals, or other foreign matter using acid wash after fabrication. No rough grinding marks or welding splatters shall be permitted on aluminum items. In all cases, edges shall be radiused to remove sharp edges.



- E. All bolts, nuts, washers, and screws used for assembly or mounting of aluminum-fabricated items shall be stainless steel *Type 304* or *316*. Do not use plated or galvanized assembly hardware with aluminum-fabricated items.
- F. Supplier/Manufacturer: Structural aluminum shapes, plate, tubing, and perforated plate are available from Joseph T. Ryerson & Son, Inc., (206) 624-2300.

## 2.02 MISCELLANEOUS METALWORK

Material for miscellaneous metalwork shall be *ASTM A36* steel, unless otherwise shown on the Drawings. This includes items such as angles, brackets, frames, light structural framing, and related miscellaneous fabricated items. Steel pipe shall conform to *ASTM A53, Grade B*, and structural tubing shall conform to *A500, Grade B*. All work shall be galvanized after fabrication in accordance with the requirements of *DIVISION 9*. Work shall be completed in accordance with *AWS D1.1* and *AWS D1.0.72*. Qualification for this work shall be in accordance with *AWS B3.0-41*.

## PART 3 - EXECUTION

### 3.01 CONSTRUCTION GENERAL REQUIREMENTS

- A. Metalwork shall be carefully installed as shown on the Drawings or as directed by the Engineer. Metalwork that is bent, broken, or otherwise damaged shall be repaired or replaced by the Contractor to the satisfaction of the Engineer, at no additional cost to the State.
- B. Metalwork to be embedded in concrete is to be placed accurately and held in the correct position while the concrete is placed, or if shown or accepted, recesses or blockouts shall be formed in the concrete and the metalwork shall be grouted in place. The surfaces of all metalwork in contact with or embedded in concrete shall be thoroughly cleaned of all rust, dirt, grease, loose scale, grout, mortar, and other foreign matter and coated with a coal tar epoxy coat. All metalwork shall have proper fit-up and shall be job-measured where necessary.

### 3.02 INSTALLATION

- A. Bearing Plates, Guides, and Angles: Units shall be set so that edges are flush and square with the floor and/or wall. Use extreme care to ensure that embedded items are set at correct spacing and are perpendicular as shown. All metal shall be cut and/or ground to match chamfer of concrete.
- B. After fabrication, metal items that are removable shall be tested in their intended location. Operation shall be verified fit by approval of the Engineer.

END OF SECTION 05500

**SECTION 05990  
MISCELLANEOUS METALS**

**PART 1 - GENERAL****1.01 DESCRIPTION OF WORK**

- A. Work consists of furnishing all labor, materials and equipment for the fabrication and erection of all metal fabrications shown on the Drawings and as specified which are not part of structural steel or other metal systems specified in Division 5.
- B. Work includes, but is not limited to, embedded and non-embedded metal work and fabrication of the following:
  - 1. Grating – aluminum and galvanized steel
  - 2. Aluminum angles, brackets, hangers, frames, channels, and assemblies
  - 3. Steel – angles, brackets, hanger, frame and channels, assemblies, and miscellaneous steel fabricated items
  - 4. Anchor bolts and expansion anchors
  - 5. Bolts, nuts and washers
  - 6. Ladders and steps (rungs)
  - 7. Stair assembly
  - 8. Handrails
  - 9. Guardrails
  - 10. Guides and other embedded items
  - 11. Metal Framing Systems

**1.02 SUBMITTALS**

- A. Product Data: Contractor shall submit manufacturer's descriptive literature and installation instructions.
- B. Shop Drawings: Contractor shall submit Shop Drawings that verify field dimensions for metal fabrications for the Engineer's review and acceptance (in accordance with the *GENERAL CONDITIONS*) of all fabricated items prior to shop fabrication. Contractor shall indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, welded connections (using standard AWS welding symbols), and weld lengths and shall included erection drawings, elevations, details and data for welding materials and methods to be used.

**1.03 QUALITY ASSURANCE**

- A. All welders shall be qualified in accordance with AWS 83.0-41 within the past 12 months. Written certifications for welders performing work shall be furnished to the Engineer.
- B. Mill-spot markings of alloy and temper shall be placed on aluminum products. If such markings are obliterated or eliminated in fabrication, the fabricator shall furnish a certificate verifying the information.
- C. Waterproof welds shall be tested to ensure proper function for intended applications.

**1.04 REFERENCE STANDARDS**

- A. A36 *Structural Steel*
- B. A53 *Steel pipe, Grade B*
- C. A123 *Zinc (Hot-dip Galvanized) Coatings on Products Fabricated from Rolled, Pressed and Forged Steel Shapes, Plates, Bars and Strip*
- D. A167 *Stainless Steel Plate, Sheet and Strip, Type 302, 304 and 316*
- E. A193 *Stainless Steel Bolts*
- F. A194 *Stainless Steel Nuts*
- G. A307 *Carbon Steel Externally Threaded Standard Fasteners*
- H. A386 *Zinc Coating (Hot-dip) on Assembled Steel Products*
- I. A526 *Steel Sheet, Zinc-coated (Galvanized) by the Hot-dip Process, Commercial Quality*
- J. B308 *Aluminum-alloy, 6061-t6, Standard Structural Shapes, Rolled or Extruded*
- K. F468 *Nonferrous Bolts, Hexcap Screws and Studs for General Use*
- L. AWS B3.0-41 *Standard Qualification Procedure*
- M. AWS D1.0.72 *Code for Welding in Building Construction*
- N. AWS D1.1. *Structural Welding Code – Steel*
- O. WA-20 *Welding Aluminum (Aluminum Association) Specifications for Aluminum Structures, April 1982 (Section 1 of Aluminum Construction Manual)*

## PART 2 - PRODUCTS

### 2.01 GENERAL REQUIREMENTS

- A. Furnish all connectors, fasteners, welded metal and miscellaneous items required to complete and construct the items shown on the Drawings.
- B. Unless otherwise shown, the fasteners and connectors shall be of the same material as the attached metal, except for aluminum where fasteners and connectors shall be stainless steel. All fasteners used for submerged or “wet locations” shall be stainless steel.
- C. Furnish washers and lock washers for all bolted connections unless otherwise noted. Washers and lock washers shall be of the same material as fasteners and connectors.
- D. Anchor bolts embedded in concrete and subjected to intermittent or continuous submergence during hatchery operations shall be stainless steel. Other anchor bolts shall be hot-dip galvanized unless otherwise noted.
- E. Hot-Dip Galvanizing: Unless otherwise specified, shall be after fabrication.
- F. Welded Studs and Anchors: Provide anchor units or approved equivalent of diameter and length indicated on the Drawings. Install in accordance with manufacturer's recommendations and as shown on the Drawings.

### 2.02 GRATING

- A. Galvanized Steel Grating:
  - 1. Walkway grating shall be GS Metals Corporation *Grip Strut* Regular-Duty Safety Grating (12 gauge steel), 3 inch channel height in widths as shown on the Drawings.
  - 2. All grating shall be field measured for proper cut-outs and fit, with all cuts banded and treated with a brush-applied, galvanizing protective coating as specified in *DIVISION 9– FINISHES*.
  - 3. Grating to be anchored to grating supports with 5/16 inch carriage bolts and *Grip Strut* anchoring device, 4 bolts per panel minimum, unless otherwise noted.
  - 4. All field cuts shall be cold galvanized.

### 2.03 ALUMINUM ANGLES, BRACKETS, FRAMES, LIGHT STRUCTURAL ALUMINUM FRAMING AND RELATED MISCELLANEOUS ALUMINUM FABRICATED ITEMS (NIC)

- A. General: Work consists of providing all aluminum fabricated items shown on the Drawings in the numbers, sizes, dimensions and configuration as indicated on the Drawings.

- B. Structural aluminum shapes and plates shall be fabricated from *aluminum alloy 6061-T6* unless otherwise noted or approved by the Engineer. Protect all surfaces from damage by weld splatter and accidental scratching. Grind and polish (120 grit, A203 abrasive) all exposed weld surfaces to provide a smooth, uniform, polished surface. Welding shall conform to *WA-20*. Provide full length or perimeter aluminum welding unless specifically directed not to in the Drawings. Protect items from heat warp and distortion. Maintain true and square mitered joints for all frames and similar items. Test all waterproof welds and repair or replace any that leak.
- C. Screens: (Provided by Owner)
  - 1. Screen guides fabricated from bent plates shall have all edges broken and rounded. All guides shall be trimmed and ground to match raceway wall bevel.
  - 2. Aluminum screens shall have a welded framework of rectangular tubing with all welds ground smooth. Frames shall be faced on one side with a perforated aluminum plate 1/8 inch thick, with perforations to be in a 3/32 inch x 1¼ inches vertical slot offset pattern, 43% open, perforated plate aluminum alloy 5052. The die side of the slots (smooth side) shall face away from the frame, unless shown otherwise on Drawings.
- D. Coat only aluminum items to be embedded or in surface contact with concrete with coal tar epoxy paint system as identified in *DIVISION 9*. Do not paint the exposed portion of these aluminum items.
- E. All bolts, nuts, washers, and screws used for assembly or mounting of aluminum-fabricated items shall be *stainless steel Type 304 or 316*. Do not use plated or galvanized assembly hardware with aluminum-fabricated items.

**2.04 STEEL ANGLES, BRACKETS, HANGERS, FRAMES, CHANNELS, ASSEMBLIES AND MISCELLANEOUS STEEL FABRICATED ITEMS**

- A. General: Work consists of providing all steel fabricated items shown on the Drawings in the numbers, sizes, dimensions, and configuration as indicated on the Drawings.
- B. Structural steel shapes and plates shall be fabricated from *A36 steel* unless otherwise noted or approved by the Engineer.

**2.05 ANCHOR BOLTS, EXPANSION ANCHORS & ADHESIVE ANCHORS**

- A. Anchor bolts, nuts, expansion anchors, bolts and washers shall be hot-dip galvanized coated except where noted on the Drawings or when the application results in the bolts being continuously, or intermittently submerged in water or in contact with aluminum fabricated items. In such cases, the anchor assembly shall be stainless steel.
- B. Structural steel shapes and plates shall be fabricated from *A36 steel* unless otherwise noted or approved by the Engineer.

**2.06 BOLTS, NUTS, WASHERS, AND SHEET METAL SCREWS**

All bolts and nuts that will be continuously or intermittently in contact with water during hatchery operations shall be stainless steel conforming to *ASTM A193* and *ASTM A194* for the type approved. Type shall be *304-316*. All other bolts, nuts and washers shall be hot-dip galvanized unless specifically identified as other materials, with the exception that all assembly hardware for aluminum fabrication shall be stainless steel. No galvanized, plated or anodized material shall be used with aluminum as specified in Paragraph 2.03.

**2.07 LADDERS AND STEPS**

Ladders and steps may be fabricated from properly designed structural pieces to the dimensions and elevations shown on the Drawings, or they may be furnished by an industrial ladder/step manufacturer. Ladders and steps shall be designed and installed to meet or exceed all applicable *OSHA* and/or *ANSI* standards for industrial ladders.

**2.08 HANDRAIL AND GUARDRAIL**

Handrails and railings shall be fabricated as shown on the Drawings and shall be welded construction or other approved system. All welds shall be ground smooth after completion and the assembly galvanized as specified in *DIVISION 9* (see Sections of *DIVISION 5*).

**2.09 METAL TRASH RACK**

- A. Metal trash racks shall be fabricated as shown on the Drawings.
- B. All trash racks members shall be fabricated from structural grade steel conforming to one of the following *ASTM* specifications: *A570 GR 33, A 446 GR A*.
- C. All fittings shall be fabricated from steel conforming to one of the following *ASTM* specifications: *A575, A 576, A 36, or A 635*.
- D. Steel rack members channel shall be hot-dip galvanized finish.

**PART 3 – EXECUTION****3.01 CONSTRUCTION – GENERAL REQUIREMENTS**

- A. Metalwork shall be carefully installed as shown on the Drawings or as directed by the Engineer. Metalwork that is bent, broken, or otherwise damaged shall be repaired or replaced by the Contractor, to the satisfaction of the Engineer, at no additional cost to the State.
- B. Metalwork to be embedded in concrete is to be placed accurately and held in the correct position while the concrete is placed, or if shown or accepted, recesses or blockouts shall be formed in the concrete and the metalwork shall be grouted in place. The surfaces of all metalwork in contact with or embedded in concrete shall be thoroughly cleaned of all rust, dirt, grease, loose scale, grout, mortar and other foreign matter and coated with a coal tar epoxy coat. All metalwork shall have proper fit-up and shall be a job-measured where necessary.

**3.02 SURFACE TREATMENT, SHOP APPLIED**

- A. Steel Galvanized Surfaces: Unless otherwise specified, all elements shall be hot-dip galvanized conforming to the applicable requirements of *ASTM A123, A153, A385 and A525*. Provide minimum of 2.3 ounces per square foot galvanizing on all surfaces (reference *DIVISION 9*).
- B. Aluminum: Unless otherwise specified, aluminum shall have a smooth, polished finish and be cleaned of oils, chemical or other foreign matter using acid wash after fabrication. No rough grinding marks or welding splatters shall be permitted on aluminum items. In all cases, edges shall be radiused to remove sharp edges.
- C. Stainless Steel: Stainless steel shall have the standard mill finished and be cleaned of all foreign matter before delivery to the job. Stainless steel shall have smooth polished surfaces and edges.

**3.03 INSTALLATION**

- A. Bearing Plates, Guides, and Angles: Units shall be set so that edges are flush and square with the floor and/or wall. Use extreme care to ensure the embedded items are set at correct spacing and are perpendicular as shown. All metal shall be cut and/or ground to match chamfer of concrete.
- B. Anchor bolts:
  - 1. Unless noted on the Drawings, expansion anchors set in holes drilled in the concrete after the concrete is placed will not be permitted in substitution for anchor bolts except with the prior written acceptance of the Engineer.
  - 2. After anchor bolts have been embedded, their threads shall be protected by having the nuts screwed on or by other accepted means until the time of installation of the equipment or metal work.
- C. After fabrication, each screen, baffle and other miscellaneous metal items that are removable shall be tested in their intended location. Operation shall be verified fit by approval of the Engineer.

END OF SECTION 05990

**SECTION 06000  
GENERAL WOOD & PLASTICS PROVISIONS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

This section specifies general requirements for all sections of *DIVISION 6 - WOOD & PLASTICS*.

**1.02 RELATED WORK**

Provisions of the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, and *DIVISION 1* of the Contract are by this reference a part of this division and shall govern work under this division where applicable.

**1.03 REFERENCES**

References listed in *DIVISION 6* are from the following organizations:

- |    |                  |   |
|----|------------------|---|
| A. | <i>IBC</i>       | <i>International Building Code, latest approved edition</i>   |
| B. | <i>AF&amp;PA</i> | <i>American Forest &amp; Paper Association, American Wood Council, National Design Specifications for Wood Construction</i> |
| C. | <i>AITC</i>      | <i>American Institute Of Timber Construction, Timber Construction Manual, latest edition</i>                                |
| D. | <i>AASHTO</i>    | <i>American Association of State Highway and Transportation Officials</i>   |
| E. | <i>ANSI</i>      | <i>American National Standards Institute</i>  |
| F. | <i>ASTM</i>      | <i>American Society of Testing and Materials</i>  |
| G. | <i>AWS</i>       | <i>American Welding Society (Standard Specifications For Welding Highway Bridges as Amended)</i>                            |
| H. | <i>RCW</i>       | <i>Revised Code of Washington</i>   |
| I. | <i>NER</i>       | <i>National Evaluation Service Committee</i>  |
| J. | <i>DOC</i>       | <i>US Department of Commerce [National Institute of Standards and Technology (NIST)]</i>                                    |

**1.04 SUBMITTALS**

Submit shop drawings for wood and plastic items in all sections of *DIVISION 6* in accordance with the *GENERAL CONDITIONS*, unless modified by a section of *DIVISION 6*.



**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. All materials shall be stored and handled in a manner that will ensure that the material is undamaged. Any damaged materials shall be repaired or replaced by the Contractor as directed by the Engineer, at no additional expense to the State.
- B. All materials shall be stored off the ground to ensure proper drainage, ventilation, and weather protection. Materials shall not be delivered to the site until approximate time of use. Finish lumber shall not be delivered until material can be stored inside the heated space.

**1.06 QUALITY AND IDENTIFICATION**

- A. All lumber, wood structural panels, particle board, structural glued-laminated timber, end jointed lumber, piles, and poles shall conform to applicable standards and grading rules specified in the *IBC, latest approved edition*, and shall be so identified by the grade mark or certificate of inspection issued by an approved agency.
- B. All preservative treated wood required to be treated shall be identified by the quality mark of an inspection agency that has been accredited by an accreditation body that complies with the American Lumber Standard Committee Treated Wood Program.

**1.07 ENVIRONMENTAL REQUIREMENTS**

- A. The use of creosote as a preservative shall not be allowed.
- B. Follow manufacturer's recommendations and instructions for the care, use, storage, and handling of wood preservative products.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

Not Used.

END OF SECTION 06000

**SECTION 06100  
ROUGH CARPENTRY**

**PART 1 - GENERAL**

## 1.01 DESCRIPTION OF WORK

- A. Lumber
- B. Wood Structural Panels
- C. Wood Decking
- D. Timber Trusses
- E. Wood Treatment
- F. Prefabricated Structural Timber
- G. Hardware, Fasteners, Accessories, and Anchors
- H. Stop Logs
- I. Fiberglass Products

**PART 2 - PRODUCTS**

## 2.01 MATERIALS

- A. Lumber:
  - 1. The moisture content of all lumber shall be 19 percent or less at the time of manufacture.
  - 2. Unless specifically shown on the Drawings or specified elsewhere, the minimum standards for lumber shall be:

TABLE 06100 - 2.01A		
ITEM	SPECIES	GRADE
Framing	Hem-Fir	#2 and Better
Structural Members (Beams, Posts)	Doug-Fir	#1 and Better
Blocking and Backing	Hem-Fir	#2 and Better
Sills	Hem-Fir	#2 and Better, Pressure Treated
Decking	Hem-Fir	#2 and Better
Exterior Trim & Fascia	Doug-Fir	#1 and Better
Stop Logs	Doug-Fir	#2 and Better
Post for Pole-Type Construction	Doug-Fir	#1 and Better

B. Wood Structural Panels: Wood structural panels, unless noted otherwise on the Drawings, shall be plywood and meet the requirements of *DOC VPS PSI-95*, Construction and Industrial Plywood. There specified or as shown on the Drawings, all other wood based structural use panels shall meet the requirements of *DOC VPS PS2-04*.

C. Wood Decking: See Drawings.

D. Timber Roof Trusses (Metal Plate Connected):

.Not Used.

E. Wood Treatment:

1. All preservatively treated wood required to be treated shall be identified by the quality mark of an inspection agency that has been accredited by an accreditation body that complies with the American Lumber Standard Committee Treated Wood Program.
2. Unless noted on the Drawings or specified elsewhere in these Specifications, for the use indicated and type of preservative, the retention shall be at a minimum as follows:

<b>TABLE 06100 – 2.01E</b>			
	ACQ (PCF)	CBA-A (PCF)	CA-B (PCF)
Above Ground – not in contact with soil	.25	.20	.10
Ground Contact – contact with soil	.40	.41	.21
<i>For actual retention levels greater than those listed for ground contact, use stainless steel fasteners and connectors.</i>			
ACQ= Alkaline Copper Quat CBA-A, CA-B= Copper Azole			

F. Prefabricated Structural Timber:

1. Glued Laminated Components: Not Used.
2. Plywood Web Joists: Not Used.

## 2.02 HARDWARE, FASTENERS, ACCESSORIES, AND ANCHORS

- A. Unless noted otherwise on the Drawings or specified elsewhere, all fasteners, connectors, and miscellaneous hardware shall be hot-dipped, zinc coated galvanized.
- B. Staples will not be allowed unless approved by the Engineer.

## 2.03 STOP LOGS

Stop logs shall be tongue and groove dimensional lumber as indicated on the Drawings, with grade and pressure treatment as specified in *TABLE 06100 - 2.01A*, unless shown otherwise on the Drawings.

**PART 3 - EXECUTION**

## 3.01 GENERAL

A. Installation:

1. Materials shall be installed as shown on the Drawings, as shown on the approved shop drawings, or as required by the *IBC, latest approved edition*, or as required by local authority and/or as directed by the Engineer. In the case of conflicts, the more stringent requirements shall be met.
2. Preparation, fabrication, and installation of wood members and their fastenings shall conform to accepted engineering practices and to the requirements of the *IBC, latest approved edition*, and state or local jurisdiction codes. All members shall be framed, anchored, tied, and braced to develop the strength and rigidity necessary for the purposes for which they are used.

B. Fasteners:

1. Unless noted on the Drawings or specified elsewhere in these Specifications, the number and size of nails connecting wood members shall not be less than that set forth in the *IBC, latest edition, Table 2304.9.1 "Fastening Schedule," and Table 2306.3.1 "Recommended Shear (Pounds Per Foot) For Wood Structural Panel Diaphragms With Framing of Douglas Fir-Larch, or Southern Pine For Wind or Seismic Loading."*
2. Unless noted on the Drawings or specified elsewhere in these Specifications, all pneumatically or mechanically driven nails connecting wood members shall not be less than that set forth in *NER-272, latest edition*.

END OF SECTION 06100

**SECTION 09000  
GENERAL FINISHES PROVISIONS**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

This section specifies general requirements for all sections of *DIVISION 9 - FINISHES*.

**1.02 RELATED SECTIONS**

See other sections of DIVISION 9.

**1.03 REFERENCES**

References listed in *DIVISION 9* are from the following organizations' latest editions of their publications and reference standards:

- A.     *ANSI*             *American National Standards Institute*
- B.     *ASTM*            *ASTM International (formerly American Society for Testing and Materials)*
- C.     *AWWA*            *American Waterworks Association*
- D.     *FS*                *Federal Specification*
- E.     *GA*                *Gypsum Association*
- F.     *NSF*             *National Sanitation Foundation*
- G.     *SSPC*            *Steel Structures Painting Council*
- H.     *TCA*             *Tile Council of America*
- I.     *IBC*              *International Building Code*

**1.04 QUALITY ASSURANCE**

- A.     Protect adjoining surfaces before work begins.
- B.     All installation shall be according to the manufacturer's written instructions.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A.     Deliver materials in unopened packages.
- B.     Store materials flat, on edge, or rolled, as recommended by the manufacturer.
- C.     Protect all materials from exposure to moisture, sunlight, and other excessive weather conditions.

**PART 2 - PRODUCTS**

See other sections of *DIVISION 9*.

**PART 3 - EXECUTION**

See other sections of *DIVISION 9*.

END OF SECTION 09000

**SECTION 09900  
PAINTING****PART 1 - GENERAL****1.01 DESCRIPTION OF WORK**

- A. Work under this section includes painting work as shown on the Drawings and schedules and as follows:
1. Painting and finishing of interior and exterior exposed items and surfaces designated in *Table 09900 - 3.07*, except as otherwise specified or as shown on Drawings.
  2. Painting of exposed bare and covered pipes and ducts, hangers, exposed steel and iron work, and primed metal surfaces of equipment installed under the mechanical and electrical work, except as otherwise indicated. All metal and piping that emerges from the ground shall be prepared and finished to 1 foot below grade.
  3. Painting of mechanical grilles, registers, louvers (except aluminum), and panel covers and frames for electrical work and systems.
  4. Painting roof and exterior wall-mounted equipment excluding aluminum and factory-finished items.
  5. "Paint" as used herein means all coating systems, materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate, or finish coats.
  6. Painting all exposed surfaces whether or not colors are designated in schedules, except where the natural finish of the material is specifically noted as a surface not to be painted.
  7. Where items or surfaces are not specifically mentioned, paint these the same as adjacent similar materials or areas. If finish is not designated, the Engineer will select the materials or system.
  8. Steel shall be hot-dip galvanized unless otherwise noted.
- B. The following categories of work are not included as part of the field-applied finish work, or are included in other sections of these Specifications:
1. Shop Priming: Unless otherwise specified, surface preparation and shop priming of ferrous metal items is included under the various sections for the work.
  2. Mechanical and Electrical Work:  
  
Not Used.

3. Prefinished Items: Unless otherwise indicated, do not include painting when factory finishing or installer finishing is specified for such items as (but not limited to) exterior concrete, metal toilet enclosures, acoustic materials, factory-finished casework, finished mechanical and electrical equipment including light fixtures, main switchgear, and distribution cabinets.
4. PVC Pipe shall not be painted.
5. Finished Metal Surfaces: Metal surfaces of anodized aluminum, factory-painted aluminum, stainless steel, chromium plate, copper, bronze, and similar finished materials will not require finish painting, unless otherwise indicated.
6. Operating Parts and Labels: Moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, linkages, sinkages, sensing devices, motor, and fan shafts will not require finish painting unless otherwise indicated.
7. Unfinished Areas: Do not paint floors, walls, or ceilings of rooms or spaces scheduled as unfinished.

#### 1.02 QUALITY ASSURANCE

- A. Standard: Where not otherwise specified, follow recommendations of *Painting Specifications by Painting & Decorating Contractors of America, "Type 1, Recommended Jobs."*
- B. Single-Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer and only within recommended limits.
- C. Coordination of Work: Review other sections of these Specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates. Upon request from other trades, furnish information or characteristics of finish materials provided for use to ensure compatible prime coats are used.
- D. Completed work shall be free from disfiguring marks, blemishes, or damages due to faulty work or handling of the completed work.
- E. Dry-film thickness of the applied coatings shall conform to manufacturer's minimum recommended total dry-film thickness. Film thickness may be determined when dry by Engineer with a magnetic thickness gauge. Deficiencies in film thickness may be corrected by application of additional coat(s) of paint.

#### 1.03 PROJECT CONDITIONS

- A. Do not apply paints and varnishes when surface temperature is below 50°F unless otherwise specified. Do not paint exterior surfaces during damp, frosty, or rainy weather, or until surface has thoroughly dried from such weather except by prior approval of the Engineer. Such approval, however, shall not relieve Contractor of the responsibility to conform with these Specifications and manufacturer's recommendations. Avoid painting surfaces exposed to hot sun.



- B. Provide adequate, continuous ventilation and sufficient heating in the facility to maintain temperatures above 50°F for 24 hours before, during, and 48 hours after application of finishes.
- C. Provide adequate lighting on surfaces while painting and after drying for inspection.

**1.04 EXTRA STOCK**

Furnish 1 gallon each of building interior and exterior finishes. Containers shall be tightly sealed and clearly labeled for identification.

**PART 2 - PRODUCTS**

**2.01 ACCEPTABLE MANUFACTURERS**

These Specifications are based on products of *Sherwin-Williams* and *Wasser High-Tech Coatings*.

**2.02 MATERIALS AND SYSTEMS**

- A. Paint Schedule: Refer to schedule at the end of this section. Proprietary names are listed to establish materials and quality required.
- B. Color Pigments: Pure, nonfading, applicable types to suit the substrates and services indicated. Limit lead content as required by law.
- C. Paint Coordination: Provide finish coats that are compatible with prime paint used. Provide barrier coats over incompatible primers or remove and reprime as required. Notify the Engineer in writing of any anticipated problems using specified coating systems with substrates primed by others.

**PART 3 - EXECUTION**

**3.01 EXAMINATION**

- A. Thoroughly examine surfaces scheduled to be painted prior to commencement of work. Report in writing to the Engineer any condition that may potentially affect proper application. Do not begin until such defects have been corrected.
- B. Correct defects and deficiencies in surfaces that may adversely affect the work of this section.

**3.02 PROTECTION**

- A. Adequately protect other surfaces from paint and damage. Repair damage as a result of inadequate or unsuitable protection.
- B. Place cloths and material that may constitute a fire hazard in closed metal containers and remove daily from site.

- C. Remove electrical plates, surface hardware, fittings, and fastenings prior to painting operations. These items are to be carefully stored, cleaned, and replaced on completion of work in each area. Do not use solvent to clean hardware that may remove permanent lacquer finish.

### 3.03 PREPARATION OF SURFACES

- A. Surfaces shall be prepared in strict accordance with the paint manufacturer's recommendations and these Specifications.
- B. General:
  - 1. Remove mildew by scrubbing with solution of trisodium phosphate and bleach. Rinse with clean water and allow surface to dry completely.
  - 2. Unpainted work (especially plywood) that has been allowed to water stain or weather, shall be sanded to a fresh surface before priming.
- C. Concrete/Masonry:
  - 1. Remove contamination, acid etch, and rinse new concrete floors with clear water. Ensure required acid-alkali balance is achieved. Allow to dry thoroughly.
  - 2. Remove dirt, loose mortar, scale, powder, and other foreign matter from concrete and concrete-block surfaces that are to be painted or to receive a clear seal. Remove oil and grease with a solution of trisodium phosphate, rinse well, and allow to thoroughly dry.
  - 3. Remove stains from concrete and concrete-block surfaces caused by weathering of corroding metals with a solution of sodium metasilicate after being thoroughly wetted with water. Allow to dry thoroughly per manufacturer's recommendations.
- D. Metals:
  - 1. Galvanized Surfaces: Unless otherwise specified, all elements shall be hot-dip galvanized conforming to the applicable requirements of *ASTM A123*, *A153*, *A385*, and *A525*. Provide minimum of 2.3 ounces per square foot galvanizing on all surfaces.
  - 2. Remove grease, rust, scale, dirt, and dust from steel surfaces. Where heavy coatings of scale are evident, remove by wire brushing, sandblasting or any other necessary method. Ensure steel surfaces are satisfactory before paint finishing. Provide *SSPC-SP* surface where specified.
  - 3. Clean unprimed steel surfaces by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime surfaces to indicate defects, if any. Paint after defects have been remedied.
  - 4. Sand and scrape shop-primed steel surfaces to remove loose primer and rust. Feather out edges to make touchup patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

5. Remove surface contamination and oils from galvanized surfaces to receive paint and wash with solvent. Apply coat of etching type primer.
6. Remove surface contamination from aluminum surfaces requiring a paint finish by steam, high-pressure water, or solvent washing. Apply etching primer or acid etch. Apply paint immediately if acid etching.

E. Gypsum Wallboard:

Not Used.

- F. Wood: Wipe off dust and grit from miscellaneous wood items and millwork prior to priming. Spot coat knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried and sand between coats. Backprime interior and exterior woodwork.

3.04 APPLICATION

- A. Paints shall be applied in accordance with the manufacturer's recommendations. When applied by sprayer, as a minimum each coat of paint shall be backrolled.
- B. Where more than 1 coat of paint is to be applied, each undercoat shall be tinted so as to make a visible difference from succeeding coats. The finish coat shall be of the color chosen by the Engineer.
- C. All new painting adjacent to existing painting shall be distinctly cut or blended in to make a neat appearing cut-offline or transition. All damaged portions of existing paint due to this Contract shall be repainted in a matching color to existing surfaces.
- D. Allow each coat of finish to dry before following coat is applied, unless directed otherwise by manufacturer.
- E. Where clear finishes are required, ensure tint fillers match natural wood color. Work fillers well into the grain before set. Wipe excess from the surface.

3.05 MECHANICAL AND ELECTRICAL EQUIPMENT

Not Used.

3.06 CLEANING

- A. As work proceeds and upon completion, promptly remove paint where spilled, splashed, or spattered.
- B. Upon completion of work, leave premises neat and clean to the satisfaction of the Engineer.

## 3.07 PAINT SCHEDULE

Paint for surfaces shall follow *Table 09900-3.07* shown on the next page.

TABLE 09900 – 3.07 PAINT SCHEDULE						
		Coats/Paint				
Surface	Paint Type	# Coats, Primer	# Coats, Finish	Gloss	Preparation	Notes
Concrete floor	Epoxy	N/A	1/ArmorSeal 1000	N/A	Acid etch. Rinse	A, no cure agents
Galvanized metal, hot dip touchup	Zinc Polystyrene	N/A	1/Zinc Clad 5	N/A	Wire brush, no rust	B
Galvanized metal, painted	MC-Urethane	MC-Prep Bond	1/MC-Luster	Low	SSPC-SP1	C
Metal, ferrous (non shop-primed)	MC-Urethane	1/MC-Zinc 1/MC-Ferrox B	1/MC-Luster	Low	SSPC-SP6	Where noted in Drawings
Metal, ferrous (shop-primed)	MC-Urethane	1/MC-Ferrox B	2/MC-Luster	Low	SSPC-SP6	
Wood, exterior, paint	Acrylic Latex	1/A-100	2/A-100	Semi	Clean, dry	A
Wood, exterior, stain	Alkyd Stain	N/A	1/A-14	Semi	Clean, dry	

**NOTES**

- A = Apply with sprayer, brush, or roller  
 B = For damaged hot-dip galvanizing field repair  
 C = Paint galvanized metal only where expressly noted on Drawings  
 D = One prime coat prior to texture, second after texture application, if textured  
 E = Mix stain with wood filler for open grained wood and filling holes  
 F = Putty fill nail holes, dowel plug countersunk holes  
 G = Spot prime/shellac knots, pitch streaks  
 H = Verify original paint compatible with new paint  
 MC = Wasser brand designation

Other paints are Sherwin Williams designations

END OF SECTION 09900

**SECTION 10426  
SIGNS**

**PART 1 - GENERAL**

1.01 DESCRIPTION OF WORK

The work of this section shall include all labor, materials, and equipment required to complete the sign work as shown on the Drawings and as specified herein.

1.02 REFERENCES

Not Used.

1.03 SUBMITTALS

Submit 1 copy of manufacturer's literature for all items of this section for Engineer's approval.

**PART 2 - PRODUCTS**

2.01 MATERIALS

A. Restroom Signs

Not Used.

B. Load Limit Sign

Not Used.

C. Disabled Parking Sign shall be a sign centered at the head of the designated handicapped parking space, with the International Symbol of Access and the phrase "State Disabled Parking Permit Required."

D. Fire Extinguisher Sign shall be white lettering on red background, 2½ inches high by 8 inches wide, with 1 inch high Helvetica medium letters. Location to be selected by the Engineer.

E. Nonpotable Water

Not Used.

**PART 3 - EXECUTION**

3.01 INSTALLATION

Exact sign locations shall be approved by the Engineer before installation of any signage.

END OF SECTION 10426