

**INVITATION TO BID
AND
SPECIAL PROVISIONS
FOR
PROPOSED PROJECT**

HOPKINS CANAL PIPING PROJECT

Important Dates:

AdvertiseFriday, October 26, 2018
Pre-bid Meeting.....Thursday November 1, 2018 1:00 p.m. PST
Bidder Questions Accepted UntilWednesday, November 7, 2018 4:00 p.m. PST
Responses to Questions Issue ByFriday, November 9, 2018 4:00 p.m. PST
Bid Closing.....Tuesday, November 13 , 2018 11:00 a.m. PST
Award of Contract (anticipated)Monday, November 26, 2018
Notice to ProceedWednesday, November 28, 2018
Completion Datessee 00180.50(h)

Pre-bid Meeting - A mandatory pre-bid meeting will be held at the project site on Thursday, November 1, at 1:00 p.m. Pacific Daylight Time (PDT). Meet at the entrance to the rock pit located at 6540 Highway 140, Eagle Point, Oregon. Bids will not be accepted from firms that are not represented at the pre-bid meeting. Statements made at the pre-bid meeting are not binding on the Owner unless published in an addendum to the Bid Documents.

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GRADING, DRAINAGE, STRUCTURES, ROADSIDE DEVELOPMENT**

PREFACE

General:

These Addenda and Special Provisions are issued for the information of Bidders submitting Bids for the Project or Work described herein at the time and place specifically indicated herein. They are the Addenda and Special Provisions which, subject to such revision as may be made in accordance with provisions stated below, will be incorporated in and made a part of the Contract for said Project or Work that may be awarded on the basis of a Bid received at said specifically indicated time and place.

Should the Project or Work described be re-advertised for Bids, these specifications and provisions will cease to be applicable and new ones will be issued. Bidders submitting Bids at the later time should obtain the new specifications and provisions and base their Bids on them, as they will be bound by them in the event they are awarded a Contract.

Revisions Prior to Time of Opening of Bids:

All data herein are subject to revision by the Agency at any time prior to the time specified herein for the receiving of Bids. Prospective Bidders for the Work will be notified of any such revision by letter or telegram sent to the Bidders at the addresses available to the Agency at the time.

Revisions Prior to Execution of Contract:

Between the time Bids are received and the time the Contract is executed, revision of the data herein may be made only by mutual agreement between the successful Bidder and the Agency.

Pamphlet May be Retained by Bidder:

This booklet need not be returned to the Agency, either with the Bid or otherwise.

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DESCRIPTION OF WORK

Grading, Drainage, Structures, Roadside Development
Hopkins Canal Piping Project
Jackson County

TIME AND PLACE OF RECEIVING BIDS

Bids for the work described above will be accepted at the Rogue River Valley Irrigation District office, 3139 Merriman Road, Medford, Oregon, 97501, in person or by mail, until 11:00 a.m. Pacific Standard Time (PST) **Tuesday, November 13, 2018**. Bids will be opened and read publicly at that time.

COMPLETION TIME LIMIT

See Subsection 00180.50(h).

COST RANGE

The Contract value is anticipated to be in the range of \$600,000 - \$750,000. This information is provided solely to allow potential Bidders to determine their ability to undertake the project. The District assumes no responsibility for its accuracy or for any effect such information may have on any Bidder's Bid.

CLASS OF WORK

The Class of Work for this Project is either A) Earthwork and Drainage or B) Bridges and Structures.

PROJECT INFORMATION

For construction related questions, please contact:

Brian Hampson, Manager, Rogue River Valley Irrigation District, 3139 Merriman Road, Medford, OR 97501; Email rvid@rvid.org, or Fax (541) 773-5420 All requests for information must be in writing with reference to the Project name.

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NOTICE TO CONTRACTORS

Rogue River Valley Irrigation District

HOPKINS CANAL PIPING PROJECT

**BIDDING INSTRUCTIONS for CONSTRUCTION
SERVICES**

1. **BID SUBMITTAL**

One copy of your Bid is required and shall be delivered in person or by mail to:

Brian Hampson, Manager, Rogue River Valley Irrigation District, 3139 Merriman Road, Medford, OR 97501

Bids are due on: Tuesday November 13, 2018, by 11:00 a.m. PST

Bids shall be submitted at the above location in an envelope marked "Bid for Hopkins Canal Piping Project – Contractor Work".

It is the sole responsibility of the respondent to see that its Bid is received by the date and time stated above. Any Bid received after the stated due date may be rejected.

All Bids shall be prepared and submitted in accordance with these instructions and all Bids submitted shall become the property of the District.

2. **COMPLIANCE WITH INVITATION TO BID**

The respondent shall carefully examine the Bid Documents, visit the site of the work and fully inform itself as to all conditions and matters that can in any way affect the work or the cost thereof. Should the respondent find discrepancies in, or omissions from, the Bid Documents, or should the respondent be in doubt as to their meaning, the respondent should at once notify the District's representative, designated in Section 7, and obtain clarification prior to submitting its Bid.

3. **SUBCONTRACTOR DISCLOSURE**

Disclosure of Subcontractors are required on this Project. See subsection 00120.40(f) of the Special Provisions.

4. **PREQUALIFICATION OF BIDDERS**

Bidders must be prequalified in the Class of Work "Earthwork and Drainage" or "Bridges and Structures". See subsection 00120.00 of the Special Provisions.

5. **PRE-BID MEETING**

A mandatory pre-bid meeting will be held at the project site on Thursday, November 1, 2018 at 1:00 p.m. Bids will not be accepted from firms that are not

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represented at the pre-bid meeting. Statements made at the pre-bid meeting are not binding on the Owner unless published in an addendum to the Bid Documents.

6. RIGHT TO MODIFY REQUEST FOR BID

The District reserves the right to revise the Bid Documents prior to the date set for receipt of Bids. Such revisions will be announced by addendum. Copies of such addenda as may be issued will be furnished to all respondents. If the revisions require material changes in quantities, the date set for opening Bids may be extended by such number of days as, in the opinion of District, will enable the respondents to revise their Bids. In such cases, the addendum will include an announcement of the new date for receipt of Bids. Oral instructions and/or information regarding the Bid Documents which may be provided to respondents by employees or agents of the District other than those designated shall not bind the District.

7. COMMUNICATION

Inquiries regarding all aspects of this Invitation to Bid (ITB) should be submitted in writing to:

Brian Hampson
Rogue River Valley Irrigation District
3139 Merriman Road
Medford, OR 97501
rrvid@rrvid.org
Fax: (541) 773-5420

8. BID SUBMITTALS

a. Bid Form and Pricing

Any Bid which, as determined by the District, is so unbalanced among the items in the Pricing Schedule as to be detrimental to the interests of District may be rejected. The District retains the right to determine at its sole discretion the manner of any award offers to be made, or if any element of work shall not be performed.

b. Pricing to be submitted shall be established in accordance with the following provisions:

- 1.) Quantities listed are for information only, and are an approximation to give the general magnitude of the scope of work. Quantities generally reflect measurements shown on the plan and do not include waste, nor do they represent ordering quantities.
- 2.) Contractor is solely responsible for determining the price and quantities required for construction activity.
- 3.) Items not listed are incidental to the other line items listed therein.
- 4.) The work will be awarded to the Contractor who submits the lowest responsive Bid.

9. BID BOND

Bid bond is not required for this project.

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10. WITHDRAWAL OR MODIFICATION OF BID

The respondent may, without prejudice to itself, modify or withdraw a Bid by written request, provided that the Bid and any request is received by District prior to the closing time for receiving Bids at the place where Bids are to be received. Following withdrawal of its Bid, the respondent may submit a new Bid, provided that it is received by the District prior to the closing time.

11. BID OPENING

Bids will be opened and read publicly at the location stated above for submittal of bids, immediately after the time of Bid Closing.

The right is reserved, as the interests of the District may require, to reject any or all Bids and to waive any informality in Bids received. Unsuccessful respondents will be so notified in writing within a reasonable time after contract award or rejection of all Bids. The successful respondent will be required to sign and return the contract within two (2) working days of its receipt, along with the following documents, properly executed:

1. Surety Bonds, as applicable

12. AWARD OF CONTRACT

The District will announce its intention to award a contract no later than one (1) business day after the bid closing date. Award of contract will not be final until the later of: 1) seven (7) business days after Notice of Intent to Award is announced by the District, or 2) the District provides a written response to each timely protest, denying the protest and affirming the award.

13. BID DOCUMENTS

The ITB documents and other data appended or related to it are the property of the District and are delivered only for the purpose of enabling each respondent to prepare and submit a Bid in response thereto. The information contained or referred to in the ITB documents or appended to them are not to be disclosed or released for any other use or purpose and must be returned to District when requested.

14. TAX IDENTIFICATION NUMBER

The successful respondent, if not a corporation, will be required to submit to District its Federal Income Tax Identification Number or Social Security number. In the event of a failure to do so, District is required by Federal Law to withhold 20% of the face amount of each invoice submitted for payment.

15. COSTS RELATED TO BID COMPLETION, CLARIFICATIONS, MEETINGS AND NEGOTIATIONS

All costs related to the compilation, preparation completion, submittal, phone calls, meetings, negotiations and all other cost related to this Bid are the sole responsibility of the respondent. All Bids are submitted at the respondent's own free will. The respondent will not be reimbursed for any cost associated with this ITB.

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16. BID RETENTION

District retains the right to hold all Bids received for a period of sixty (60) days after the date of opening. District reserves the right to waive irregularities and reject any and all Bids.

17. BUSINESS ETHICS

District's Business Ethics Policy requires that the conduct of its business be in accordance with all applicable regulations, laws and be consistent with the highest standards of ethical behavior.

Vendor conduct is expected to be of the same standard. There will be no exceptions to this policy. Should you become aware of any illegal or unethical behavior by a District employee, you are expected to bring such misconduct to the immediate attention of The Network, 1-800-261-8651, a confidential and anonymous 24/7 external reporting service.

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GENERAL SPECIFICATIONS

1. GENERAL PROVISIONS:

AGENCY – Means Rogue River Valley Irrigation District.

CONSULTANT - Means OBEC Consulting Engineers.

DISTRICT – Means Rogue River Valley Irrigation District.

STANDARD SPECIFICATION - Means the Oregon Department of Transportation, *Oregon Standard Specifications for Construction*, 2018 edition, produced by the Oregon Department of Transportation and the Oregon Chapter of the American Public Works Association. The *Oregon Standard Specifications For Construction* are hereby incorporated by reference as if fully set forth herein. The Standard Specifications are available on line from the Oregon Department of Transportation Web site:

https://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx

2. CONTRACT PROVISIONS:

A. ATTORNEY FEES AND COSTS

Should any action or suit be instituted by any party to enforce any provision of this contract, the prevailing party shall be entitled to an award of reasonable attorney fees in addition to costs and disbursements.

B. SEVERABILITY

The determination that any provision of this contract is in conflict with any federal, state, or local constitution, charter, law, ordinance, regulation or order shall not nullify any other provision of this contract. The conflicting provision shall continue in effect to the extent that it remains valid.

C. CHOICE OF LAW

The provisions of this contract shall be governed by Oregon law.

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OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Hopkins Canal Piping Project
Jackson County

PROFESSIONAL OF RECORD CERTIFICATION:

 <p>EXPIRES: 06/30/20</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for temporary features and appurtenances, roadwork, drainage, and irrigation systems. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00220, 00225, 00253, 00280, 00310, 00320, 00350, 00390, 00405, 00410, 00412, 00440, 00445, 00470, 00501, 00641, 01030, 01150, and 02690</p>
<p>Date Signed: <u>10/19/18</u></p>	

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OREGON DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

FOR

Hopkins Canal Piping Project
Jackson County

PROFESSIONAL OF RECORD CERTIFICATION:

 <p>REGISTERED PROFESSIONAL ENGINEER 16588 OREGON JULY 20, 1993 ERIC EDWARD BONN EXPIRES: 12/31/19</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the subject project for intake and outfall concrete structures. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections 00510, 00530, 00540, and 02001</p>
<p>Date Signed: <u>10/19/18</u></p>	

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SPECIAL PROVISIONS

WORK TO BE DONE

The Work to be done under this Contract consists of the following:

1. Install and remove temporary traffic control and erosion control measures.
2. Remove existing structures and obstructions.
3. Perform clearing and grubbing.
4. Install cured-in-place pipe lining.
5. Install irrigation pipe, valves, vaults, and assemblies.
6. Remove existing irrigation flume structures.
7. Construct cast-in-place reinforced concrete irrigation intake and outfall structures.
8. Furnish and install debris removal water screen.
9. Perform additional and incidental Work as called for by the Specifications and Plans.

AUTHORITY OF CONSULTANT

The Consultant will be directly in charge of the Project. However, the Consultant's authority on this Project is as designated in the official "Consultant Agreement" for this Project, and as designated by the Engineer. This does not include authority to approve contract changes or semifinal and final inspection of the Project.

APPLICABLE SPECIFICATIONS

The Specification that is applicable to the Work on this Project is the 2018 edition of the "Oregon Standard Specifications for Construction".

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

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**SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND
DEFINITIONS**

Comply with Section 00110 of the Standard Specifications modified as follows:

00110.05(e) Reference to Websites - Add the following bullet list to the end of this subsection:

- American Traffic Safety Services Association (ATSSA)
www.atssa.com
- BidExpress
www.bidx.com
- ODOT Construction Section
www.oregon.gov/odot/construction/pages/index.aspx
- ODOT Construction Section - Qualified Products List (QPL)
www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx
- ODOT Electronic Bidding Information Distribution System (eBids)
(Also referred to as ODOT eBids website)
ecm.odot.state.or.us/cf/EBIDS/
- ODOT Estimating
www.oregon.gov/ODOT/Business/Pages/Steel.aspx
- Oregon Legislative Counsel
www.oregonlegislature.gov/lc
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms
www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx
- ODOT Procurement Office - Construction Contracts Unit Notice of Intent
www.oregon.gov/ODOT/Business/Procurement/Pages/NOI.aspx
- ODOT Procurement Office - Construction Contracts Unit prequalification forms
www.oregon.gov/odot/business/procurement/pages/bid_award.aspx
- Oregon Secretary of State: State Archives
sos.oregon.gov/archives/Pages/default.aspx
- ODOT Traffic Control Plans Unit
www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx

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- ODOT Traffic Standards
www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx

00110.20 Definitions – Replace the "Agency" definition with the following definition:

Agency – The Rogue River Valley Irrigation District (RRVID).

Replace the "Bid Booklet" definition with the following definition:

Bid Booklet – The version that can be accessed and printed from the Agency's website (www.rrvid.org), which contains the information identified in 00120.10.

SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES

Comply with Section 00120 of the Standard Specifications modified as follows:

00120.01 General Bidding Requirements - In the paragraph that begins "Bidders may submit..." replace the first sentence with the following sentence:

Bidders may submit Bids by paper only.

00120.05 Request for Plans, Special Provisions, and Bid Booklets - Replace this entire subsection, except for the subsection number and title, with the following:

Project Plans, Special Provisions, and Bid Booklets will be available to download, free of charge, at the Agency's website:

www.rrvid.org

The Plans, which are applicable to the Work to be performed under the Contract, bear title and date as follows:

"Grading, Drainage, Structures, Roadside Development
Hopkins Canal Piping Project
Phase 1 and Elements of Phase 2
Jackson County
November 2018"

00120.10 Bid Booklet - In the paragraph that begins "The Bid Section includes all pages after...", add the following bullet to the bullet list:

- Certificate of nondiscrimination regarding ORS 279A.110 and certificate regarding policy and practice against sexual harassment, sexual assault and discrimination against employees who are members of a protected class as required by Chapter 212, Oregon Laws 2017 (House Bill 3060)

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00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered - Add the following to the end of this subsection:

The Agency will hold a prebid meeting for all holders of Solicitation Documents at the Project site in Jackson County, Oregon at 1:00 p.m. on November 1, 2018. The meeting will convene at the entrance to the rock pit located at 6540 Highway 140, Eagle Point, Oregon.

All prospective Bidders must attend this meeting. Those not attending will have their Bids declared non-responsive.

Prospective Bidders will be given the opportunity to ask questions relating to any details involved in the performance of the work under the Contract.

Information distributed, statements made or responses given to questions, by the Agency's representatives at the prebid meeting will not in any way alter or affect any of the provisions contained in the Solicitation Documents or Contract requirements and will not be binding upon the Agency unless confirmed by Addenda.

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids – In the first paragraph, replace the sentence that begins “The Agency will provide Addenda...” with the following sentence:

The Agency will provide Addenda only by publishing them on the Agency’s website (www.ravid.org).

In the second paragraph, replace the sentence that begins “Addenda may be downloaded...” with the following sentence:

Addenda may be downloaded from the Agency’s website (www.ravid.org).

In the third paragraph, replace the sentence that begins “Bids may be rejected...” with the following sentence:

Bids may be rejected if opened and found by the Agency to not be based on all Addenda published on the Agency’s website (www.ravid.org) before Bid Closing.

00120.40(a)(1) Paper Bids - Replace this subsection, except for the subsection number and title, with the following:

Bidders shall not alter, in any manner, the (paper) documents. Bidders shall complete the certifications and statements included in the Bid Section of the Bid Booklet according to the instructions. Signature of the Bidder's authorized representative thereon constitutes the Bidder's confirmation of an agreement to all certifications and statements contained in the Bid Booklet. Entries on paper documents in the Bid Section shall be in ink or typed. Signatures and initials shall be in ink.

The Bidder shall properly complete and bind all the paper documents in the Bid Section, as specified in 00120.10, together with all other required documents that are part of the Bid Booklet, between the front and back covers of the Bid Booklet.

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00120.40(a)(2) Electronic Bids – Delete this subsection. All Bids must be submitted on paper.

00120.40(c)(2) Electronic Bid Schedule Entries – Delete this subsection. All Bids must be submitted on paper.

00120.40(d) Bidder’s Address and Signature Pages – Delete the sentence that begins “In addition, the electronic bid...”.

00120.40(e) Bid Guaranty – Delete this subsection.

00120.40(f) Disclosure of First-Tier Subcontractors - Replace this subsection, except for the subsection number and title, with the following:

Without regard to the amount of a Bidder’s Bid, if the Agency’s cost range for a public improvement Project in the “Notice to Contractors”, or in other advertisement or solicitation documents, exceeds \$100,000, the Bidder shall, within 2 working hours of the time Bids are due to be submitted, submit to the Agency, on a form provided by the Agency, a disclosure identifying any first-tier Subcontractors that will furnish labor or labor and Materials, and whose contract value is equal to or greater than:

- 5% of the total Project Bid, but at least \$15,000; or
- \$350,000, regardless of the percentage of the total Project Bid.

For each Subcontractor listed, Bidders shall state:

- The name of the Subcontractor;
- The dollar amount of the subcontract; and
- The category of Work that the Subcontractor would be performing.

If no subcontracts subject to the above disclosure requirements are anticipated, a Bidder shall so indicate by entering "NONE" or by filling in the appropriate check box. For each Subcontractor listed, Bidders shall provide all requested information. An incomplete form will be cause for rejection of the Bid.

The Subcontractor Disclosure Form may be submitted:

- By filling out the Subcontractor Disclosure Form printed from the Bid Booklet and submitting it together with the Bid at the time and place designated for receipt of Bids;

Subcontractor Disclosure Forms will be considered late if not received by the Agency within 2 working hours of the time designated for receiving Bids.

The Agency is not responsible for partial, failed, illegible or partially legible facsimile (FAX) transmissions or submittals, and such forms may be rejected as incomplete.

In the event that multiple Subcontractor Disclosure Forms are submitted, the last version received prior to the deadline will be considered to be the intended version.

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Bids not in compliance with the requirements of this Subsection will be considered non-responsive

00120.45 Submittal of Bids – Delete this subsection. The submittal procedure is described above under "Bid Submittal" on page i of the Notice to Contractors.

00120.60 Revisions or Withdrawals of Bids - Replace this entire subsection, except for the subsection number and title, with the following subsection:

00120.60 Revision or Withdrawal of Bids: Information entered into the paper Bid Booklet by the Bidder may be changed after the paper Bid has been delivered to the Agency, provided that:

- Changes are prepared according to the instructions identified in the Bid Booklet; and
- Changes are received at the same offices, addresses, and times identified in the paper Bid Booklet for submitting Bids; and
- The changes are submitted in writing and signed by an individual authorized to sign the Bid.

A Bidder may withdraw its paper Bid after it has been delivered to the Agency, provided that:

- The written withdrawal request is submitted on the Bidder's letterhead, by hand delivery; and
- The request is signed by an individual who is authorized to sign the Bid, and proof of authorization to sign the Bid accompanies the withdrawal request; and
- The request is received at the same offices, addresses, and times identified in the paper Bid Booklet for submitting Bids.

00120.70 Rejection of Nonresponsive Bids – Replace the bullet that begins “The Bid is submitted on documents...” with the following bullet:

- The Bid is submitted on documents not obtained directly from the Agency website (www.ravid.org).

Add the following bullet to the end of the bullet list:

- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

00120.95 Opportunity for Cooperative Arrangement – Delete this subsection.

SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the Standard Specifications modified as follows:

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00130.00 Consideration of Bids – In the paragraph that begins “Bids will be considered...”, replace "within 30 Calendar Days" with "within eleven (11) Calendar Days".

00130.10 Award of Contract – Delete the last sentence in the bullet that begins "A satisfactory record of performance..."

In the paragraph that begins “Notice of Award and Contract booklets...”, replace "within 30 Calendar Days" with "within eleven (11) Calendar Days".

Replace the paragraph that begins “The Agency will provide Notice of Intent to Award...” with the following paragraph:

The Agency will provide Notice of Intent to Award on the Agency’s website (www.ravid.org).

00130.15 Right to Protest Award – Replace this subsection, except for the subsection number and title, with the following:

Adversely affected or aggrieved Bidders, limited to the three apparent lowest Bidders and any other Bidder directly in line for Contract Award, may submit to the Agency a written protest of the Agency’s intent to Award within 3 working days of the posting of the Notice of Intent to Award on the Agency’s website (www.ravid.org). The protest shall specify the grounds upon which it is based.

The Agency is not obligated to consider late protests.

00130.50(a) By the Bidder – Replace the sentence that begins “The successful Bidder shall deliver...” with the following sentence:

The successful Bidder shall deliver the required number of Contract booklets with the properly executed Contract, Performance Bond, Payment Bond, certificate of workers’ compensation coverage, and the required certificates of insurance, to the Agency within two Calendar Days after the date on which the Contract booklets are sent or otherwise conveyed to the Bidder under 00130.10.

SECTION 00140 - SCOPE OF WORK

Comply with Section 00140 of the Standard Specifications modified as follows:

00140.70 Cost Reduction Proposals – Delete this subsection. Cost reduction proposals will not be accepted.

SECTION 00150 - CONTROL OF WORK

Comply with Section 00150 of the Standard Specifications modified as follows:

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Add the following subsection:

00150.50(f) Utility Information (No Anticipated Relocations) - Within the Project limits, there are no anticipated relocations with the Utilities listed below. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Utility	Contact Person's Name, Address, Email, and Phone Number
Pacific Power	Mike Curry 925 Grape Street Medford, OR 97501 Mike.Curry@pacificcorp.com (541) 776-5414
Avista Utilities	Dave McFadden 580 Business Park Drive Medford, OR 97504 David.McFadden@avistacorp.com (541) 858-4740

SECTION 00160 - SOURCE OF MATERIALS

Comply with Section 00160 of the Standard Specifications modified as follows:

00160.20(a) Buy America – Delete this subsection.

00160.30 Agency-Furnished Material - Add the following to the end of this subsection:

The Agency will furnish necessary quantities of the following listed items at the Project Site required for completion of the Work:

- 3/4" – 0 Aggregate
- 48" HDPE DR 32.5 Pipe (IPS) (4710 resin)
- Prefabricated flanged bypass piping assemblies, comprised of the following components:
 - 36" HDPE DR 32.5 Pipe (IPS) (4710 resin)
 - 36" HDPE DR 32.5 Flange (IPS) (4710 resin)
 - 36"x36" HDPE DR 26, Tee (IPS) (4710 resin)
 - 36" HDPE DR 26, 90° elbow (five piece) (IPS) (4710 resin)
 - 36" HDPE DR 26, 45° elbow (three piece) (IPS) (4710 resin)
 - 24" HDPE DR 32.5, Flange (IPS) (4710 resin)

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- 20" HDPE DR 32.5, Flange (IPS) (4710 resin)
- 36"x24" HDPE DR 17, Concentric Reducer (IPS) (4710 resin)
- 36"x20" HDPE DR 17, Concentric Reducer (IPS) (4710 resin)
- 20" Schedule 40 Steel Pipe
- 24" Butterfly Valve-worm gear operated w/ buried service w/ 48" Valve stem extension
- 20" Butterfly Valve-worm gear operated w/ buried service w/ 48" Valve stem extension
- 20" Flow Control Valve Assembly
- Stand Pipe Air Vent components:
 - 48" x 16" Steel Tapping Sleeve Clamshell
 - 16" Galvanized Steel Pipe (Sch. 40) with Flange
 - Powder Coated Steel Fabricated Cover

SECTION 00165 - QUALITY OF MATERIALS

Comply with Section 00165 of the Standard Specifications.

SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications modified as follows:

00170.04 Patents, Copyrights, and Trademarks - Replace the paragraph that begins "Prior to use of designs, devices, materials, or processes..." with the following paragraph:

Prior to use of designs, devices, materials, or processes protected by patent, copyright, or trademark, the Contractor shall obtain from the Entity entitled to enforce the patent, copyright, or trademark all necessary evidence of Contractor's legal right to use such design, device, material, or process.

00170.05 Assignment of Antitrust Rights - Replace the bullet that reads "ORS 646.725; and" with the following bullet:

- ORS 646.725; or

00170.07 Record Requirements - In the paragraph that begins "For purposes of this Subsection, the term...", replace the words "OAR 731-005-0780" with the words "OAR 734-010-0400".

00170.07(a) Records Required - In the paragraph that begins "These records shall include...", replace the bullet that begins "Contracts or documents of other...", with the following bullet:

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- Contracts or documents of other arrangements with any Related Entity as defined in OAR 734-010-0400.

In the paragraph that begins "The Contractor shall include...", replace the words "OAR 731-005-0780" with the words "OAR 734-010-0400".

00170.07(b) Access to Records - In the paragraph that begins "The Contractor shall provide...", replace the words "OAR 731-005-0780(9)" with the words "OAR 734-010-0400(9)".

00170.62 Labor Nondiscrimination - Add the following sentence to the end of this subsection:

It is a material term of this Contract that the Contractor certifies by entering into this Contract that the Contractor has a written policy and practice that meets the requirements described in Chapter 212, Oregon Laws 2017 (House Bill 3060) for preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class and that the Contractor shall maintain the policy and practice in force during the entire term of this Contract.

00170.70(a) Insurance Coverages - Add the following to the end of this subsection:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

Insurance Coverages	Combined Single Limit per Occurrence	Annual Aggregate Limit
Commercial General Liability	\$1,000,000	\$1,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)

00170.70(c) Additional Insured - Add the following paragraph and bullet to the end of this subsection:

Add the following as Additional Insureds under the Contract:

- OBEC Consulting Engineers

00170.71 Independent Contractor Status - Replace this subsection, except for the subsection number and title, with the following:

The service or services to be rendered and the Work to be completed under this Contract are those of an independent contractor. The Contractor is not an officer, employee, or agent of the Agency or the State as those terms are used in ORS 30.265.

00170.72 Indemnity/Hold Harmless - Add the following paragraph and bullet to the end of this subsection:

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Extend indemnity, defense and hold harmless to the Agency and the following:

- OBEC Consulting Engineers

SECTION 00180 - PROSECUTION AND PROGRESS

Comply with Section 00180 of the Standard Specifications modified as follows:

Add the following subsection:

00180.40(c) Specific Limitations - Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

Limitations	Subsection
Contract Time	00180.50(h)

The Contractor shall not begin removal of the existing flumes before June 1, 2019, unless approved by the Engineer.

During the irrigation season of March 1 through October 1, the Contractor shall not restrict the flow of water or contaminate the water of the Rogue River Valley Irrigation District.

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

00180.41 Project Work Schedules - After the paragraph that begins "One of the following Type..." add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type B schedule as detailed in the Standard Specifications is required on this Contract.

00180.50(c) Beginning of Contract Time - Replace this subsection, except for the subsection number and title, with the following:

When the Contract Time is stated in Calendar Days, counting of Contract Calendar Days will begin on the day the Contractor begins On-Site Work as defined in 00110.20.

Add the following subsection:

00180.50(h) Contract Time - There are three Contract Times on this Project as follows:

- (1) The Contractor shall complete all Work to be done under the Contract required for the reinforced concrete intake structure, except for the installation of the debris removal water screen, not later than January 15, 2019.

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(2) The Contractor shall complete all Work to be done under the Contract, except for removal of the existing flumes, not later than March 1, 2019.

(3) The Contractor shall complete all Work to be done under the Contract not later than July 15, 2019.

00180.85(b)(2) Multiple Contract Times - Add the following paragraph and bullet list to the end of this subsection:

The Agency determined percentages of the value of Work required to be complete by the Contract Times listed under 00180.50(h) are as follows:

- For Contract Time 00180.50(h)(1) the Agency determined percentage of Work is 8 percent.
- For Contract Time 00180.50(h)(2) the Agency determined percentage of Work is 88 percent.
- For Contract Time 00180.50(h)(3) the Agency determined percentage of Work is 100 percent.

SECTION 00190 - MEASUREMENT OF PAY QUANTITIES

Comply with Section 00190 of the Standard Specifications modified as follows:

00190.20(f)(2) Scale Without Automatic Printer - Add the following paragraph after the paragraph that begins " If the scales require manual entry...":

Pay costs for the weigh witness at \$35.00 per hour.

00190.20(g) Agency-Provided Weigh Technician - Add the following paragraph to the end of this subsection:

Pay costs for the weigh technician at \$35.00 per hour.

SECTION 00195 - PAYMENT

Comply with Section 00195 of the Standard Specifications modified as follows:

00195.12(d) Steel Materials Pay Item Selection - Add the following paragraph to the end of this subsection:

No Pay Items under this Contract qualify for the steel escalation/de-escalation program for this Project.

00195.50(d) Release of Retainage – Delete this subsection.

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SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications.

SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the Standard Specifications.

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SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

Comply with Section 00220 of the Standard Specifications modified as follows:

00220.02(a) General Requirements - Add the following bullets to the end of the bullet list:

- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.
- When pipe backfill cannot be achieved by the end of a work shift and temporary plating is not in place according to 00405.46(e), provide additional temporary traffic control measures, including flagging, as required by the Engineer and at no additional cost to the Agency.

SECTION 00225 - WORK ZONE TRAFFIC CONTROL

Comply with Section 00225 of the Standard Specifications modified as follows:

00225.02(a) Temporary Signs - Add the following to the end of this subsection:

Install a 54-inch "TRUCKS LEAVING ROADWAY" sign 100 feet in advance of each entrance point to the work area. Install a 54-inch "TRUCKS ENTERING ROADWAY" sign 100 feet in advance of each exit point from the work area.

00225.05 Traffic Control Plan – Replace this subsection with the following subsection:

00225.05 Contractor-Developed Traffic Control Plan – Submit unstamped Working Drawings according to 00150.35 that include the proposed TCP showing all TCM and quantities of TCD, and the following:

- Staging sequences and details for Work affecting vehicular traffic.
- Proposed order and duration of the TCM.

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SECTION 00253 - TEMPORARY WORK ACCESS AND CONTAINMENT

Comply with Section 00253 of the Standard Specifications.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications.

SECTION 00290 - ENVIRONMENTAL PROTECTION

Comply with Section 00290 of the Standard Specifications modified as follows:

00290.30(a) Pollution Control Measures - Add the following subsections and bullets:

(7) Water Quality:

- Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, or water contained within a work area isolation, directly into any waters of the State or U.S. until it has been satisfactorily treated (for example: bioswale, filter, settlement pond, pumping to vegetated upland location, bio-bags, dirt-bags). Treatment shall meet the turbidity requirements below.
- Do not cause turbidity in waters of the State or U.S. greater than 10% above background reading (up to 100 feet upstream of the Project), as measured 100 feet downstream of the Project.
- During construction, monitor in-stream turbidity and inspect all erosion controls daily during the rainy season and weekly during the dry season, or more often as necessary, to ensure the erosion controls are working adequately meeting treatment requirements.
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- If monitoring or inspection shows that the erosion and sediment controls are ineffective, mobilize work crews immediately to make repairs, install replacements, or install additional controls as necessary.
- Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cured less than 24 hours, concrete cure water, silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the state or U.S.
- Cease project operations under high flow conditions that may result in inundation of the project area, except for efforts to avoid or minimize resource damage.

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- The Project Manager retains the authority to temporarily halt or modify the Project in case of excessive turbidity or damage to natural resources.

00290.34 Protection of Fish and Fish Habitat - Add the following paragraph:

Meet with the Agency Biologist, Resource Representative, Project Manager, and inspector on site, before moving equipment on-site or beginning any work, to ensure that all parties understand the locations of sensitive biological sites and the measures that are required to be taken to protect them.

00290.34(b) Prohibited Operations - Replace this subsection, except for the subsection number and title, with the following:

Except where allowed by the Contract or by permit, do not:

- Cause silting or sedimentation of waters of the State or waters of the U.S.
- Allow entry within the No Work Areas shown on the Plans.
- Allow equipment to enter or work in the No Work Areas shown on the Plans.

Add the following subsection:

00290.34(c) Aquatic Species Protection Measures Required by Environmental Permits:

(1) General Requirements:

- Do not apply surface fertilizer within 50 feet of any stream channel.

Use heavy equipment as follows:

- Choice of equipment must have the least adverse effects on the environment (for example: minimally sized, low ground pressure).
- Secure absorbent material around all stationary power equipment (for example: generators, cranes, drilling equipment) operated within 150 feet of wetlands, waters of the State, waters of the U. S., drainage ditches, or water quality facilities to prevent leaks, unless suitable containment is provided to prevent spills from entering waters of the state or waters of the U.S.
- Do not cross directly through a stream for construction access, unless shown or approved. If shown or approved, cross perpendicular to the stream and do not block stream flow. When a crossing is no longer needed, completely remove the crossing and restore the soils and vegetation to the original condition.
- Store fuel and maintain all equipment in staging areas that are at least 150 feet away from any waters of the State, waters of the U.S., or storm inlet or on an impervious surface that is isolated from any waters of the State, waters of the U.S., or storm inlet.
- If temporary access roads are needed within 150 feet of any body of water, use existing routes unless new routes are shown or approved.

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- Before beginning work on temporary access routes that are not shown, submit a proposal to the Engineer for approval.

(5) Site Restoration - Restore damaged streambanks to a natural slope, pattern, and profile suitable for establishment of permanent woody vegetation unless precluded by pre-project conditions (for example: natural rock substrate):

- Replant all damaged streambanks before the first April 15 following construction.
- If use of large wood, native topsoil, or native channel material is required for the site restoration according to the roadside development plans, stockpile all large wood, native vegetation, weed-free topsoil, and native channel material displaced by construction. Cut trees or large wood and trees into pieces of no less than 20 feet in length, or as shown on the roadside development plans or as directed. Stockpiled native wood and vegetation remain the property of the Agency.
- Stabilize all disturbed soils, including obliteration of temporary access roads, following any break in work unless construction will resume in 4 Calendar Days.

Add the following subsection:

00290.36(c) Avoid Nesting - Comply with Migratory Bird Treaty Act (16 U.S.C. 703-712). Submit a migratory bird protection plan for review and approval at least 10 Calendar Days before the pre-construction conference. Include the following:

- Describe measures to avoid disturbance to migratory bird nesting habitat (vegetation, structures) from March 1 to September 1 of each year.
- Do not begin work until the migratory bird protection plan is approved.
- In the event the nesting birds or bats are encountered during construction, the Engineer may suspend the work according to 00180.70.

Add the following subsection:

00290.42 Work Containment Plan - A Work Containment Plan (WCP) is required on this Project for flume removal activities.

Develop and submit a WCP for approval at least 28 Calendar Days prior to mobilization for flume removal activities. Maintain a copy of the WCP on the Project Site at all times during construction, readily available to employees and inspectors. Ensure that all employees comply with the provisions of the WCP. Design the WCP to avoid or minimize disturbance to protected features (sensitive cultural or natural resources, No Work Areas, aquatic life or habitat in No Work Areas) related to Contractor operations.

Before developing the WCP, meet with Agency to review the Contractor's activities that require the WCP to ensure that all parties understand the locations of protected features to be avoided and the measures needed to avoid and protect them.

Notify the Project Manager at least 10 Calendar Days before beginning work access or containment construction activities.

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The Agency reserves the right to stop work and require the Contractor to change the WCP methods and equipment before any additional Contract work, at no additional cost to the Agency, if and when, in the opinion of the Agency, such methods jeopardize sensitive cultural or natural resources, No Work Areas, or aquatic life or habitat in No Work Areas.

The WCP shall identify how the Contractor's construction operations will protect regulated features during mobilization, construction, maintenance, and demolition. Include a narrative describing compliance with Section 00290 as related to construction, operation, and demolition activities specified in Section 00253.

Design, construct, maintain, and remove temporary work access and containment systems according to Section 00253.

00290.90 Payment - Add the following paragraph(s) to the end of this subsection:

The Work Containment Plan will be paid for at the Contract lump sum amount for the item "Work Containment Plan".

Payment will be payment in full for furnishing all materials, equipment, labor, and incidentals necessary to complete the work as specified. Payment includes providing and updating the Work Containment Plan.

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SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications modified as follows:

00310.44 Earthwork in Connection with Removal – Add the following to the end of this subsection:

Match existing road sections by backfilling with Aggregate Base and Rock Surfacing according to Section 00641.

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications.

SECTION 00330 - EARTHWORK

Comply with Section 00330 of the Standard Specifications modified as follows:

00330.03 Basis of Performance - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section on the excavation basis.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

Comply with Section 00350 of the Standard Specifications.

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications.

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SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications modified as follows:

00405.12 Bedding - Replace the bullet that begins "3/8" - 0 PCC Fine Aggregate..." with the following bullet:

- 3/8" - 0 PCC fine Aggregate conforming to 02690.30(g).

SECTION 00410 - COMMON PROVISIONS FOR PIPE LINING

Comply with Section 00410 of the Standard Specifications.

SECTION 00412 - CURED-IN-PLACE PIPE LINING

Comply with Section 00412 of the Standard Specifications modified as follows:

00412.02 Design Parameters - Add the following to the end of this subsection:

The following design parameters apply:

Condition	Parameter
Load Conditions:	
Soil.....	130 pcf
Traffic.....	HS-20
Groundwater Elevation	none encountered - seasonal
Pipe Ovality	10%
Modulus of Soil Reaction	1,000 psi

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications modified as follows:

Add the following subsection:

00440.02 Abbreviations and Definitions:

ASTV – Actual Strength Test Value – See 02001.02 for definition.

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00440.12 Proportions of Commercial Grade Concrete - Replace the bullet that begins "Compressive strength..." with the following bullet:

- **Compressive Strength** - ASTV minimum of 3,000 psi at 28 days

00440.14(d) Hardened CGC - Add the following to the end of this subsection:

The ASTV at 28 Days is the average compressive strength of the three cylinders tested. Discard all specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing. The average strength of the remaining cylinders shall then be considered the test result.

SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications modified as follows:

00445.11 Materials – Add the following to the end of this subsection:

The Agency will furnish the Materials listed in 00160.30.

00445.90 Payment – Add the following pay item:

(m) Installing ___ Inch Agency-Furnished Irrigation Pipe

Add the following paragraph after the paragraph that begins "Item (l) includes...":

In item (m), the nominal pipe diameter will be inserted in the blank.

SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications modified as follows:

Add the following subsections:

00470.18 Debris Removal Water Screen – Furnish an environmental debris removal water screen, provided by Intralox, LLC, telephone: (800) 535-8848, <http://www.intralox.com>, meeting the following requirements:

- Type: Environmental Debris Removal
- Screen Specifications: S1800 Mesh Top UV Resistant Acetal
- Frame Material: Coated Carbon Steel
- Screen Height: 26 FT Shaft to Shaft

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- Screen Width: 72 IN
- Belt Width: 60 IN
- Filtering Width: 57.5 IN
- Angle of Installation: 60 ° from Vertical
- Maximum Screen (Belt) Speed: 9 FTM
- Total Screen Weight: 4890 LBS
- Shafts: 2.5 IN
- Drive Motor: 2 HP
- Electronic Overload Protection: SEW Torque Sensing Electronic Overload
- Trace Heater Elements: No
- Takeup: Manual Take-up
- Flights: None
- Spray Bar: None
- Splash Hoods: None
- Scraper: UHMW Scraper with Carbon Steel Brackets
- Debris / Fish Sluice: None
- Control Panel: Basic Package

00470.48 Debris Removal Water Screen – Install the debris removal water screen and make electrical connections as shown and according to the manufacturer’s recommendations.

00470.80 Measurement – Replace this subsection, except for the subsection number and title, with the following:

Except for debris removal water screen, all quantities of Work performed under this Section will be measured on the unit basis.

No measurement of quantities will be made for debris removal water screen.

Add the following paragraph to the end of this subsection:

No measurement of quantities will be made for debris removal water screen.

00470.90 Payment – Add the following pay item:

- (l) Debris Removal Water Screen..... Lump Sum

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SECTION 00501 - BRIDGE REMOVAL

Comply with Section 00501 of the Standard Specifications modified as follows:

00501.00 Scope - Replace the paragraph that begins "This Work consists of..." with the following paragraph:

This Work consists of removing and disposing of existing Bridges and flumes or portions of existing Bridges and flumes as shown or specified.

Add the following paragraphs to the end of this subsection:

Remove the existing flume over Hawkins Creek .
Remove the existing flume over Yankee Creek.

Add the following subsection:

00501.03 Submittals - Provide unstamped flume removal plans according to 00150.35 21 calendar days before beginning removal work.

Include the following information in the submittal:

- Removal sequence, including contractor staging and traffic staging.
- Detailed schedule of flume removal work.
- Type of equipment that will be used, including size and capacity.
- Equipment location during removal operations.

Do not begin flume removal work until the flume removal plans have been approved.

00501.80 Measurement – Replace this subsection, except for the subsection number and title with the following:

No measurement of quantities will be made for Bridge and flume removal Work performed under this Section.

00501.90 Payment – Replace the paragraph that begins "The accepted quantities..." with the following:

The accepted quantities of Bridge and flume removal Work will be paid for at the Contract lump sum amount for the item "Bridge and Flume Removal Work".

SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL

Comply with Section 00510 of the Standard Specifications modified as follows:

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00510.80(b)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of structure excavation is:

Location	Structure Excavation (Cubic Yard)
Intake Structure	200
Outfall Structure	30

00510.80(d) Granular Wall/Structure Backfill - Replace this subsection, except for the subsection number and title, with the following:

No measurement of quantities will be made for granular wall backfill. The estimated quantity of granular wall is:

Location	Granular Structure Backfill (Cubic Yard)
Intake Structure	16
Outfall Structure	8

00510.90(d) Granular Wall/Structure Backfill - Replace this subsection, except for the subsection number and title, with the following:

Granular structure backfill will be paid for at the Contract unit price, per unit of measurement, for the following item:

Pay Item	Unit of Measurement
(a) Granular Structure Backfill	Lump Sum

SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE

Comply with Section 00530 of the Standard Specifications modified as follows:

00530.00 Scope - Add the following sentence o the end of this subsection:

This work also consists of furnishing and placing the travelling screen support angles and mechanical concrete anchors.

00530.80(a) Lump Sum - Add the following to the end of this subsection:

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The estimated quantity of reinforcement is:

Structure	Quantity Uncoated (Pound)
Intake Structure	4,300
Outfall Structure	750

The weight of miscellaneous metal, based on weights listed in 00530.80(b) and Project quantities, is included in the estimated quantity of uncoated reinforcement.

00530.90 Lump Sum - Add the following to the end of this subsection:

No separate or additional payment will be made for support angles and concrete anchors.

SECTION 00540 - STRUCTURAL CONCRETE

Comply with Section 00540 of the Standard Specifications modified as follows:

00540.17(a) Aggregate - Replace this entire subsection, including 00540.17(a)(1) and 00540.17(a)(2), with the following subsection:

00540.17(a) Aggregate - Acceptance of aggregate will be according to 02690.12.

00540.17(c)(2) Actual Strength Test Value - Replace this subsection, except for the subsection number and title, with the following:

The ASTV at 28 Days is the average compressive strength of the three cylinders tested. Discard all specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing. The average strength of the remaining cylinders shall then be considered the test result.

00540.49(a)(1) Hot Weather - Replace the paragraph that begins "Maintain the concrete temperature..." with the following paragraph:

Maintain the concrete temperature during hot weather as specified. When concrete temperatures approach the maximum allowable temperature according to 02001.20(d), take appropriate action to lower the concrete temperature.

00540.51(a) General Requirements - Replace the paragraph that begins "Cure cast-in-place concrete..." with the following paragraph:

Cure cast-in-place concrete surfaces with water, wet burlap, and a layer of 4 mil polyethylene film, except polypropylene fabric may be used in place of wet burlap on horizontal surfaces. Begin curing as soon after placement as possible without damaging the

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freshly placed concrete. Continue curing for 7 Calendar Days (14 Calendar Days for bridge decks) after placement.

Add the following paragraph to the end of this subsection:

If the ambient temperature falls below 50 °F, or is forecasted to be below 50 °F, provide a 24-hour continuous recording thermometer and place it directly on the surface of the concrete. Once placed, the thermometer shall remain in place for the duration of the cure period. Use methods approved by the Engineer to maintain a concrete temperature of at least 50 °F during the cure period.

00540.80(a)(1) Lump Sum - Add the following to the end of this subsection:

The estimated quantity of concrete is:

Intake Structure

Type and Class	Quantity (Cu. Yd.)
General Structural Concrete, Class 3300	32

Outfall Structure

Type and Class	Quantity (Cu. Yd.)
General Structural Concrete, Class 3300	8

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SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

Comply with Section 00641 of the Standard Specifications modified as follows:

00641.10(a) Base and Shoulder Aggregate - In the paragraph that begins "Aggregate for bases...", add the following sentence after the first sentence:

Base aggregate shall be either 3/4" – 0 or 1" – 0 size.

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SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.13(f) Types of Seed Mixes - Add the following to the end of this subsection:

Provide the following seed mix formulas:

- Permanent Seeding:**

Botanical Name (Common Name)	PLS (lb/acre)	÷ (% Purity (minimum)	x % Germination) (minimum)	= Amount (lb/acre)
Bromus carinatus (California brome)	10	_____	_____	_____
Festuca idahoensis Spp. roemerii (Idaho fescue)	5	_____	_____	_____
Elymus glaucus (blue wild rye)	5	_____	_____	_____
Vulpia microstachys (small fescue)	5	_____	_____	_____
Lotus purshianus (Spanish clover)	2	_____	_____	_____
Achillea millefolium (Western Yarrow)	1	_____	_____	_____
Eschscholzia californica (California Poppy)	2	_____	_____	_____

* Oregon Certified Seed

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SECTION 01150 - POTABLE WATER VALVES

Comply with Section 01150 of the Standard Specifications modified as follows:

01150.00 Scope – Replace this subsection, except for the subsection number and title, with the following:

This Work consists of furnishing and installing valves and associated vaults in potable water and irrigation systems at the locations shown or at other locations as directed.

01150.03 Submittals – Submit manufacturer's data sheets according to 00150.37 at least 14 Calendar Days before ordering any of the following materials:

- flow control valve vault, ladders, valve boxes and covers
- pipe supports
- sump pump
- pressure gauge

The Engineer will respond to the submittals within 14 Calendar Days. Do not order the materials listed above until the associated submittals have been approved.

01150.10 Materials – Add the following to the end of this subsection:

The Agency will furnish the Materials listed in 00160.30.

Add the following subsections:

01150.13 Pressure Relief Valves and Riser Assemblies – Furnish pressure relief valves and riser assemblies as shown and specified.

01150.14 Continuous Acting Air/Vacuum Valve Assemblies – Furnish continuous acting air/vacuum valve assemblies as shown and specified.

01150.15 Flow Control Valve Vault – Furnish a flow control valve vault, as shown and specified. Include all appurtenances not shown as agency-furnished, including ladders, access doors, valve boxes and covers, pipe supports, sump basin, discharge piping, and sump pump. Furnish a sump pump with a minimum rated power of 3/4 HP.

01150.16 Pressure Gauge – Furnish a pressure gauge as shown and with a minimum working pressure of 63 psi.

01150.53 Pressure Relief Valves and Riser Assemblies – Install pressure relief valves and riser assemblies as shown and according to manufacturer's recommendations.

01150.54 Continuous Acting Air/Vacuum Valve Assemblies – Install continuous acting air/vacuum valve assemblies as shown and according to manufacturer's recommendations.

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01150.55 Flow Control Valve Vault – Install the flow control valve vault, appurtenances, and bypass piping assembly as shown and according to the manufacturer’s recommendations. Make electrical connections for the sump pump according to the manufacturer’s recommendations and all applicable local, state, and federal codes and laws. The Agency will supply electrical power to the vault location.

01150.56 Stand Pipe Air Vent Assembly – Install the stand pipe air vent assembly as shown and according to the manufacturer’s recommendations.

01150.57 Pressure Gauge – Install pressure gauge according to the manufacturer’s recommendations.

01150.90 Payment – Add the following pay items:

- (h) ____ Inch Pressure Relief Valve and Riser Assembly...Each
- (i) ____ Inch Continuous Acting Air Vent andEach
Vacuum Relief Valve and Riser Assembly
- (j) Flow Control Valve Vault and BypassEach
- (k) Installing Agency-Furnished Stand Pipe Air VentEach
Assembly
- (l) ____ Inch Continuous Acting Air/Vacuum.....Each
Valve Assembly
- (m) Pressure GaugeEach

Replace the paragraph that begins “In items (a) through...” with the following:

In items (a) through (f), (h), (i) and (l), the size of the valve or assembly will be inserted in the first blank.

Add the following paragraph after the paragraph that begins “In item (g)...”:

Item (j) includes the following:

- furnishing and installing the flow control valve vault, including the following components:
 - ladders
 - access doors
 - valve boxes and covers
 - pipe supports
 - sump pump, basin, and discharge piping
- installation of all Agency supplied components within the pay limits shown in the Plans

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SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications modified as follows:

02001.31(f) Aggregate - Replace this subsection, except for the subsection number and title with the following:

If the nominal maximum size of the coarse Aggregate is not included as a part of the class of concrete, or shown on the Plans, any size from 1 1/2 inch to 3/8 inch nominal maximum size Aggregate may be used according to ACI guidelines except:

- Use 1 1/2 inch nominal maximum size Aggregates in bridge deck concrete.
- Use 1 1/2 inch nominal maximum size Aggregates in paving concrete unless otherwise indicated.
- Use 3/8 inch nominal maximum size Aggregates in drilled shafts unless otherwise indicated.

Proportion all HPC for a minimum coarse Aggregate absolute solid volume according to Table 02001-4:

Table 02001-4

Absolute Solid Volume	
Maximum Nominal Aggregate Size	Cu. Yd. (Aggregate) / Cu. Yd. (Concrete)
3/8"	0.36
1/2"	0.38
3/4"	0.40
1"	0.42
1 1/2"	0.44

Two or more Aggregate products or sources meeting Specifications may be blended to improve concrete properties. Blending non-specification Aggregate materials, except for gradation, with specification materials is not allowed.

SECTION 02690 - PCC AGGREGATES

Replace Section 02690 of the Standard Specifications with the following Section 02690:

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SECTION 02690 - PCC AGGREGATES

Description

02690.00 Scope - This Section includes the requirements for coarse and fine aggregates for portland cement concrete.

02690.01 Definitions:

Coating - Foreign or deleterious substances found adhering to the aggregate particles.

Detrimental Materials - Materials that adversely affect concrete, including but not limited to clay, shale, mica, silt, bark, alkali, sticks, organic matter, soft and flaky particles.

Nominal Maximum Size Of Aggregate - One sieve larger than the first sieve that retains more than 10 percent of the material using an agency specified set of sieves based on cumulative percent retained. Where large gaps in specification sieves exist, intermediate sieves may be inserted to determine nominal maximum size.

Materials

02690.10 Materials - PCC Aggregates shall consist of natural or crushed rock that is hard, strong, durable and free from adherent coatings or other detrimental materials.

Produce, handle and store the aggregates in a way that will maintain passing material properties and avoid introducing deleterious materials or segregation prior to its use in portland cement concrete.

02690.11 Alternate Grading - The Contractor may request approval to produce coarse and fine aggregates in sizes other than those stated in 02690.20 and 02690.30. The request shall be in writing, and shall state the proposed target value and specified tolerances for each of the individual sieve sizes of the materials the Contractor proposes to produce.

02690.12 Acceptance of Aggregate - Acceptance of aggregate will be according to Section 00165 and based on the Contractor's quality control testing, if verified, according to Section 00165.

(a) Aggregate Gradation - A stockpile contains specification aggregate gradation when the quality level for each sieve size calculated according to 00165.40 is equal to or greater than the quality level indicated in Table 00165-2 for a PF of 1.00. Each required sample represents a subplot. When the quality level indicated in Table 00165-2 yields a PF of less than 1.00 for any constituent, the material is non-specification.

(b) Non-specification Aggregate Gradation - Stockpiled aggregates that contain non-specification aggregate gradation will be rejected by the Engineer unless non-specification material is removed from the stockpile. Do not add additional material to the stockpile until enough non-specification material is removed so that the quality level for each constituent is equal to or greater than the quality level in Table 00165-2 for a 1.00 PF.

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Reprocessing of non-conforming material and the testing required for acceptance will be at no additional cost to the Agency. Acceptance of reprocessed material will be based on passing test results or accepted visually by the Engineer.

02690.20 Coarse Aggregate:

(a) Harmful Substances - Harmful substances shall not exceed the following limits:

Test	Test Method		Percent (by Weight)
	ODOT	AASHTO	
Lightweight Pieces	–	T 113	1.0
Material passing No. 200 sieve	–	T 11	1.0
Wood Particles	TM 225	–	0.05

(b) Soundness - Coarse aggregates for concrete shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 12 percent by weight.

(c) Durability - Coarse aggregates shall meet the following durability requirements:

Test	Test Method		Requirements
	ODOT	AASHTO	
Abrasion	–	T 96	30.0% Max.
Oregon Air Aggregate Degradation:			
Passing No. 20 sieve	TM 208	–	30.0% Max.
Sediment Height	TM 208	–	3.0" Max.

(d) PCC Paving Aggregate - In addition to requirements above, comply with the following:

(1) Fracture - Provide aggregate with at least two fractured faces on at least 50 percent of the particles retained on the 3/8 inch, 1/2 inch, 3/4 inch, 1 inch, and 1 1/2 inch sieves, as determined by AASHTO T 335.

(2) Elongated Pieces - Provide aggregate with elongated pieces not exceeding 10 percent by weight of the material retained on the No. 4 sieve when tested according to ODOT TM 229 with the proportional caliper device set at a ratio of 5:1.

(e) Grading and Separation by Sizes for Prestressed Concrete - Sampling shall be according to AASHTO T 2 and sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. PCC coarse aggregate shall conform to grading and separated sizes as follows:

(1) Where indicated in Table 02690-1, the coarse aggregate shall be separated into two sizes and each separated size shall be measured into the batch in the quantity determined by the mix design.

For each of the indicated maximum sizes of coarse aggregates, the separated sizes shall be as indicated in Table 02690-2:

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Table 02690-1

Maximum Nominal Size of Aggregates	Separated Sizes
1"	1" - No. 4
3/4"	3/4" - No. 4
3/4"	3/4" - 1/2" and 1/2" - No. 4
3/4"	3/4" - 3/8" and 3/8" - No. 4

(2) The grading of each of the specified separated sizes of coarse aggregate shall conform to the following:

Table 02690-2

		Separated Sizes					
Sieve Size		1" - No. 4	3/4" - No. 4	3/4" - 1/2"	3/4" - 3/8"	1/2" - No. 4	3/8" - No. 4
		Percent Passing (by Weight)					
1 1/2"	100	—	—	—	—	—	—
1"	90 - 100	100	100	100	100	—	—
3/4"	50 - 80	90 - 100	85 - 100	85 - 100	100	100	100
1/2"	—	—	0 - 15	—	85 - 100	—	—
3/8"	15 - 40	20 - 50	—	0 - 15	35 - 65	85 - 100	—
No. 4	0 - 10	0 - 10	—	—	0 - 15	0 - 15	—
No. 200	*	*	*	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No.200 sieve according to 00165.40.

(f) Grading and Separation by Sizes for Other Concrete - Sampling shall be according to AASHTO T 2. Sieve analysis shall be according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Tables 02690-3 and 02690-4 for structural concrete. Provide a CAgT to perform sampling and testing when required.

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Table 02690-3

Gradation of Coarse Aggregates

Sieve Size	Combined*	Separated	Separated	Separated
	Sizes 1 1/2" - No. 4	Sizes 1 1/2" - 3/4"	Sizes 1" - No. 4	Sizes 3/4" - 1/2"
Percent Passing (by Weight)				
2"	100	100	—	—
1 1/2"	90 - 100	90 - 100	100	—
1"	70 - 89	20 - 55	90 - 100	100
3/4"	35 - 70	0 - 15	—	85 - 100
1/2"	—	—	25 - 60	0 - 15
3/8"	10 - 30	0 - 5	—	—
No. 4	0 - 5	—	0 - 10	—
No. 8	—	—	0 - 5	—
No. 200	**	**	**	**

* For 1 1/2 inch coarse aggregate use two or more separated sizes which when combined shall meet the gradation limits for 1 1/2" - No. 4

** See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

Table 02690-4

Gradation of Coarse Aggregates

Sieve Size	Separated	Separated or Combined	Separated	Separated
	Sizes 3/4" - 3/8"	Sizes 3/4" - No. 4	Sizes 1/2" - No. 4	Sizes 3/8" - No. 8
Percent Passing (by Weight)				
1"	100	100	—	—
3/4"	90 - 100	90 - 100	100	—
1/2"	20 - 55	—	90 - 100	100
3/8"	0 - 15	20 - 55	40 - 70	85 - 100
No. 4	0 - 5	0 - 10	0 - 15	10 - 30
No. 8	—	0 - 5	0 - 5	0 - 10
No. 16	—	—	—	0 - 5
No. 200	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

02690.30 Fine Aggregates:

(a) Different Sources - Do not mix fine aggregates from different sources of supply, or store in the same pile. Do not use alternately in the same class of mix, without prior approval.

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(b) Harmful Substances - The amount of harmful substances shall not exceed the following limits:

Test	Test Method (AASHTO)	Percent (by Weight)
Lightweight Pieces	T 113	2.0%
Material passing No. 200 sieve	T 11	3.0%

(c) Soundness - Fine aggregate shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 10 percent by weight.

(d) Organic Impurities - All fine aggregate shall meet the requirements of AASHTO M 6 for organic impurities.

(e) Sand Equivalent - Fine aggregate shall be tested according to AASHTO T 176 and shall have a sand equivalent of not less than 75.

(f) Sand for Mortar - Sand for mortar shall conform to the requirements of this Section.

(g) Grading - Sampling shall be according to AASHTO T 2. Sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Table 02690-5 for structural concrete. Provide a CAgT to perform sampling and testing when required.

**Table 02690-5
Gradation of Fine Aggregate***

Sieve Size	Percent Passing (by Weight)
3/8"	100
No. 4	90 - 100
No. 8	70 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	5 - 30
No. 100	0 - 10
No. 200	**

* Determine the fineness modulus according to AASHTO T 27 and AASHTO T 11. Maintain the fine aggregate fineness modulus within plus or minus 0.20 from the fineness modulus used in the Contractor's mix design. Fine aggregates in which the fineness modulus varies by more than 0.20 from the mix design target shall not be incorporated until an assessment is done to determine whether an adjustment in the aggregate proportions is necessary. Proportion changes must be performed by a CCT according to the provisions of ACI 211. Submit analysis of FM and mix design adjustments to the Engineer for approval.

** See 02690.30(b). Do not evaluate material passing No. 200 sieve according to 0165.40.