CITY OF PENDLETON Water Filtration Plant Clearwell Baffling System





Expires: <u>12/31/24</u> Stamped: <u>3/30/23</u>

April 2023

Public Works Department 500 SW Dorion Avenue Pendleton, OR 97801 <u>www.pendleton.or.us</u> Office (541) 966-0202 Fax (541) 966-0251

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INVITATION TO BID

Sealed bids for the **Water Filtration Plant (WFP) Clearwell Baffling System Project** will be received by the City of Pendleton, c/o Bob Patterson, Public Works Director, City of Pendleton, 500 SW Dorion Avenue, Pendleton, OR 97801 until **2:00 pm local time on the 4th day of May, 2023**, plainly marked **"WFP-Clearwell Baffling System."**

Public bid opening will be available via Zoom or at the Community Development Department Conference Room located at the same address as above at 2:00 pm local time, Thursday, May 4, 2023. **Contact the Public Works Director's office at 541 966-0202 or Jutta Haliewicz**, <u>jutta.haliewicz@ci.pendleton.or.us</u>, **541 966-0240**, for the Zoom link.

A paper copy of the bid documents may be obtained for a **non-refundable fee of \$50.00** from the Public Works Director's office located at the same address as above or by calling (541) 966-0202. A copy is also available online on the **City of Pendleton's website:** <u>www.pendleton.or.us/rfps</u> or the **OregonBuys website:** <u>https://oregonbuys.gov/bso/view/login/login.xhtml</u>. For the nearest location of a review copy, also contact the Public Works Director's office. **Bid documents will be available until May 1, 2023.**

For additional information regarding the project, contact Tim Smith, Control Systems Manager, at <u>tim.smith@ci.pendleton.or.us</u> or (541) 379-1195.

The Oregon Standard Specifications for Construction (ODOT/APWA) latest revision, excluding Sections 00100 and 00745.95, and the City of Pendleton Standard Specifications will apply to all construction work not noted in the Special Specifications. It is the Contractor's responsibility to obtain the latest revisions made to these specifications (latest revisions to City Standard Specifications, January 2001 with minor revisions 2001, 2004, 2005, 2006, 2012 and 2019).

All bidders must be prequalified for the class of work included in this bid document in accordance with the laws of the State of Oregon, and all prequalification applications must be submitted to the City by 1:00 pm. May 3, 2023, the day before the bid opening. (See Section 2.00)

The City of Pendleton will not mail notice of Addenda, but will post notice of any Addenda on the OregonBuys website and the City's website (<u>www.pendleton.or.us/rfps</u>). Addenda may be downloaded off these websites and will be faxed or emailed to all bidders who have requested to be on the City's Planholders List. Contact <u>jutta.haliewicz@ci.pendleton.or.us</u> to be added to the list. Bidders should frequently check the websites until bid closing.

Each Bid Proposal must be submitted on the prescribed form (Section 3.00) and must be accompanied by a certified or cashier check drawn from an Oregon Bank in good standing, or banks doing business in Oregon in good standing, or a Bid Bond issued by a surety company authorized to issue such bonds in the State of Oregon, payable to the City of Pendleton, Oregon, in an amount not less than five percent (5%) of the total amount of the Bid submitted.

All bidders must comply with ORS Chapter 279C and pay applicable prevailing wage rates in effect on January 5, 2023, including any amendments, as stated in the <u>Prevailing Wage Rates for Public Works Contracts</u> published by the Oregon Bureau of Labor and Industries. **(see <u>https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx</u>).**

The successful bidder will be required to furnish a bond for faithful performance of the contract in the full amount of the contract price. In addition to required performance bonds which may be used for unpaid wages, all contractors, subcontractors and non-construction companies working on public works projects, with a contract price that exceeds \$100,000, subject to the Prevailing Wage Rate law, must file a \$30,000 Public Works Bond with the Construction Contractor's Board before starting work on the project, unless exempt, to be used exclusively for unpaid wages determined to be due by BOLI .{ORS 279C.830 and ORS 279C.836} **(See forms included in Section 5.00)**

Each bidder must identify whether they are a resident bidder as defined in ORS 279A.120. (Preference for Oregon goods and services)

Nonresident Bidders: ORS 279A.120(3) states: "When a public contract is awarded to a nonresident bidder and the contract price exceeds \$10,000, the bidder shall promptly report to the Department of Revenue (DOR) on forms to be provided by the department the total contract price, terms of payment, length of contract and such other information as the department may require before the bidder may receive final payment on the public contract. The contracting agency shall satisfy itself that the requirement of this subsection has been complied with before the contracting agency issues a final payment on a public contract." See form attached to the end of Special Conditions (Section 11.00). For information about DOR requirements, contact: https://www.oregon.gov/DOR/Pages/index.aspx

The Contractor shall, within two (2) working hours of the advertised bid opening, submit the first-tier subcontractor disclosure form. This form is to notify the Public Works Director in writing the names of the first-tier subcontractors. The disclosure form is attached to the end of the Special Conditions (Section 11.00). If no subcontractors need to be disclosed, enter "NONE" on the form and submit it.

The Contractor, its subcontractors, if any, and all employers working under this Contract are subject employers under the Oregon Workers' Compensation law and shall comply with ORS Chapter 656, which requires them to provide workers' compensation coverage for all their subject workers.

The City reserves the right to accept that proposal which is in the best interest of the City of Pendleton, Oregon and to postpone the award of the Contract for a period not to exceed thirty (30) calendar days.

The deadline for filing a protest by the second responsible bidder is seven (7) calendar days after the Notice of Intent to Award has been issued. Protest must be in written form and received by 5:00 pm on the 7th day from the date of the letter of intent to award issued by the Public Works Director. Once the Notice of Intent to Award has been issued, bid submittal information will be available for public review.

Dated this 30th day of March, 2023.

Bob Patterson , 2023 15:04 PDT)

Bob Patterson, Public Works Director

INFORMATION FOR BIDDERS

City of Pendleton, hereby referred to as OWNER, will be completing work under one contract for the **Water Filtration Plant Clearwell Baffling System**. Bids are expected to be opened **2:00 pm, local time, Thursday, May 4, 2023.** Bid award, with seven (7) calendar day notice of intent declaration, will likely take place Tuesday, May 16, 2023, at the regularly scheduled City Council meeting.

The work to be performed under these new contract documents consists of furnishing all labor, materials and equipment necessary for the construction of the following:

Baffle curtain to be installed within an existing 1.8 million gallon Clearwell located at the Water Filtration Plant, 1001 Goad Road, Pendleton, Oregon. **Work must be performed on-site and completed within a three-week window between October 2, 2023, to November 17, 2023.** To complete this work, City will have the Water Filtration Plant off-line and rely on its well supply to meet customer needs. There is no flexibility to perform work outside this seven-week construction window.

As-Built drawings for the existing facility are available for the Contractor to use and reference for use in laying out baffles and attachment systems to the existing 118-foot diameter Clearwell. Baffle curtain will be 22' 3" in height and consist of 6 baffles to create serpentine flow of water through the Clearwell. Access to the interior is provided by (2) 30-inch diameter shell manways and (1) 36-inch square roof hatch.

General sequence of construction will have City's Water Division staff drain and open shell manways in preparation of the contractor's arrival. Contractor will prepare surfaces and weld baffle attachment clips to the Clearwell, then proceed with coating of interior Clearwell to include metal clips, areas of coating damage from clip installation, and other areas identified by owner for tank coating repair. Contractor will then proceed with baffle system installation, repair any additional areas of damaged coating, and finally, proceed with disinfection of the entire Clearwell interior. Exterior coating will also be required for areas of coating damage from clip installation and about 10 areas of metal exposure.

If additional or larger access points are required for Contractor to complete work, access can be cut into tank. Contractor will need to coordinate location and size with Owner. These details are spelled out in the Technical Specifications.

Contractor shall provide record documents for project documenting actual installed location of improvements.

Upon completion of disinfection, Contractor will coordinate dechlorination with City Water Division staff for drainage of water. City staff will verify no chlorine residual is present, drain the remaining water, and close the shell manways for refilling the Clearwell.

For a site visit, contact Tim Smith, Control Systems Manager, at 541 379-1195. Site visits can be coordinated during the month of April 2023.

The above information is a general outline of principal features of the work. It does not in any way limit the responsibility of the CONTRACTOR(s) to perform all work and furnish all equipment, labor and materials required by the specifications and drawings. The drawings and specifications shall be considered and used together. Anything appearing as a requirement of either shall be accepted as applicable to both even though not so stated therein or shown.

No attempt has been made in the specifications or drawings to segregate work covered by any trade or subcontract under one specification. Such segregation and establishment of subcontract limits will be solely a matter of specific agreement between the CONTRACTOR and its subcontractors and shall not be based upon any inclusion, segregation or arrangement in or of these specifications.

Engineer's estimate: \$350,000.00

Bidders must submit the following completed documents with their bids by the bid due date (Thursday, May 4, 2023) and time (2:00 pm) indicated on the <u>Invitation to Bid</u> (Section 1.00) or as stated on any addendum(s) stating otherwise. Bids not containing the following items may be considered non-responsive:

- Bid Proposal form signed by company representative having authority to submit bids see Section 3.00
- Bid Bond/Security (5%) in form of certified or cashier's check drawn from an Oregon Bank see Section 4.00
- Acknowledgement of ALL Addenda
- Non-Collusion Affidavit (signed by company representative and notarized) see Section 8.00

Document to be submitted by Disclosure Deadline Date and Time:

• First-Tier Subcontractor Disclosure Form – see end of Section 11.00 (Special Conditions)

Upon award of contract the SUCCESSFUL BIDDER must be prepared to submit the following completed documents within ten (10) business days of contract award:

Contract Forms and Submittals:

- Three original signed contracts (to be provided by City)
- Copy of Statutory Public Works Bond
- Performance and Payment Bond
- Certificate of Liability Insurance
- Oregon Nonresident Bidder Form (if applicable)
- IRS Form W-9
- Application and payment for City Business License (Contractor and all subcontractors)
- Signed copy of Special Conditions (Section 11.00)
- BOLI Wage Rate Worksheet indicating BOLI Wage Rates used for the project (Contractor and all subcontractors)
 - Example worksheet attached
- Construction Schedule

BOLI WAGE RATE WORKSHEET

		BOLI RATE		BOLI RATE WITH ZONE PAY			
CLASSIFICATION	BASIC HOURLY	HOURLY FRINGE	TOTAL	BASIC HOURLY W/ZONE	HOURLY FRINGE	TOTAL	

PREQUALIFICATION

PUBLIC WORKS DEPARTMENT CITY OF PENDLETON PENDLETON, OREGON

Oregon Law requires a statement as to financial ability, equipment and experience to be completed and submitted by prospective contractors bidding on contracts for public improvements, the estimated cost of which is \$10,000 or over. No contractor is eligible to bid until this statement has been submitted.

Bidders must be prequalified for the class of work included in the bid documents. The City of Pendleton no longer accepts a copy of a bidder's approved Oregon Department of Transportation's prequalification application or approval letter. The City requires their own application to be completed and filed with the City Engineering Department. All prequalification applications must be submitted to the City by **1:00 pm the day before the bid opening.**

Upon request, this application is available to you through this office at 541 966-0203 or online <u>https://pendleton.or.us/cdev/page/prequalification-application-2023</u> for your use in prequalification for this work.

PROPOSAL

Honorable Mayor and City Council City Hall Pendleton, Oregon 97801

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that the Proposal is in all respects fair and without fraud, but it is made without collusion with any official or employee of the City of Pendleton, Oregon, and that the Proposal is made without any connection or collusion with any person making another Proposal on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the proposed improvements, and he has personally inspected the site, and he has satisfied himself as to the quantities of the materials, items of equipment, and conditions of work involved, including the fact that the description of the work and materials, as included herein, is brief and is intended only to indicate the general nature of such items and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereto attached and are hereby made a part of this Proposal.

The Bidder agrees that if this Proposal is accepted, he will, within ten (10) calendar days after notification of acceptance, execute the Contract with the City of Pendleton, Oregon, in the form of Contract annexed thereto, and will, at the time of execution of the Contract, deliver to the City of Pendleton, the Performance Bond required herein, and will to the extent of his Proposal, furnish all machinery, tools, and apparatus and other means of construction and do all the work and furnish all the materials necessary to complete the work in the manner and in the time and according to the methods as specified in the Contract Documents and required by the Engineer there under.

The Bidder agrees to complete the work identified for each schedule of work at the option of the City of Pendleton. The City, at its sole discretion, will identify and select the schedules of work that best fit the City's budget for this work.

This project must be completed within a three-week window between October 2, 2023, and November 17, 2023. In the event the Bidder is awarded the Contract and shall fail to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the City of Pendleton, Oregon, at the rate of one percent (1%) per calendar day of the price of contract work not yet completed, or \$500.00 per calendar day, whichever is greater, for work not completed by November 17, 2023. (See Special Specifications, Section 13.00). Sundays and legal holidays shall be excluded in determining days of default.

The Bidder further proposes to accept as full payment for the work proposed herein the amount computed under the provisions of the Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved, that they represent a true measure of the labor and material required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

The Contract will be awarded based on bids. City reserves the right to award or reject the bids that are in the best interest of the City.

Bidders must submit the following completed documents with their bids by the bid due date <u>(May 4, 2023)</u> and time **(2:00 pm)** indicated on the <u>Invitation to Bid</u> (Section 1.00) or as stated in any addendum(s) stating otherwise. **Bids not containing the following items may be considered non-responsive:**

- Proposal (dated and signed by company representative having authority to submit bids) Section 3.00
- Bid Security Section 4.00
- Acknowledgement of all Addenda
- Non-Collusion Affidavit (signed by company representative and notarized) Section 8.00

Document to be submitted by Disclosure Deadline Date and Time:

• First-Tier Subcontractor Disclosure Form - see end of Section 11.00 (Special Conditions)

The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in this Contract Document:

- Prequalification must be submitted by 1:00 pm the day before the bid opening (bid opening May 4, 2023)
- Bid will be awarded based on total bid amount. Separate schedules will not be awarded to more than one general contractor.
- Bidders shall use only the Bid Proposal form provided in this Contract Document. All blank spaces in the Bid
 Proposal form must be filled in completely where required. No changes shall be made in the phraseology of
 the forms.
- The Bid Proposal form may be submitted separately from the remainder of these Contract Documents. It must be submitted in a sealed envelope and marked clearly to indicate its contents without being opened.
- The Bidder shall acknowledge receipt of all Addenda to the Bid. Bids received without acknowledgement or without the Addenda enclosed may be considered nonconforming. Notice of Addenda will not be mailed but will be posted on City's website (www.pendleton.or.us/rfps) and the ORPIN website (<u>https://www.oregon.gov/das/Procurement/Pages/ORPIN.aspx</u>). Addenda may be downloaded off website and will be faxed or emailed to all bidders who have notified City to request their firm be placed on the Planholders list. Bidders should frequently check the websites until bid closing.
- Any taxes required by the laws and statutes of the State of Oregon and its political subdivisions shall be paid by the Contractor.
- Owner will pay all permit expenses with the exception of temporary permits related to construction work. The successful Bidder must pay all temporary permit expenses.
- All Bids must be submitted no later than the prescribed time, place, and manner set forth in the Contract Documents.
- Bids without sufficient data to provide a complete evaluation may not be considered.
- Any Bidder may modify its Bid by telegraphic or written communication at any time prior to the scheduled closing time for receipt of the Bids, provided the Owner receives such communication prior to the closing time. The telegraphic or written communication should not reveal the Bid Amount; however, it should state the addition, subtraction, or other modification so that the final amount or terms will not be known to the Owner until the sealed Bid is opened.
- Bids cannot be modified at any time following the deadline for receipt of the Bids.
- Bids must be accompanied by a certified or cashier check drawn from an Oregon Bank in good standing, or banks doing business in Oregon in good standing, or a Bid Bond issued by a surety company authorized to issue such bonds in the State of Oregon, in an amount not less than five percent (5%) of the total amount of the Bid submitted. (See Section 4.00) This check or Bid Bond shall be given as guarantee that if awarded the Contract, the successful Bidder will execute the Contract within the time specified. See Standard Specifications for the City of Pendleton Section 1:06 Bid Security for more information.
- Non-Collusion Affidavit must be submitted with the Bid; otherwise, the Bid may be considered non-responsive. (See Section 8.00)
- First-Tier Subcontractor Disclosure Form must be submitted by the date and time designated in the Invitation to Bid. This Form must be submitted separately for each Schedule, even if there are no Subcontractors that need to be disclosed; otherwise, the Bid will be considered non-responsive. See <u>Special Conditions</u> (Section 11.00) for more information and a copy of the Disclosure Form.

The Owner will make the award of work based on the best interests of the City of Pendleton. The Owner also reserves the right to reject any or all bids and to postpone the award of the work for a period not to exceed thirty (30) calendar days with time extensions for completion date. The Owner, at its sole discretion, reserves the right to select the bid(s) most beneficial to the City of Pendleton.

Water Filtration Plant Clearwell Baffling System

Item Approx. Extended No. <u>Ouantity</u> **Item with Unit Price Bid** Unit Price Total 1. LS Mobilization/Demobilization (not to exceed 5% of Total Bid Amount) 2. LS Purchase and installation of Baffle Curtain System LS 3. Water storage tank painting LS Disinfection of water storage tank 4. 5. 10 EA Paint repairs on exterior

Time of Completion: No later than November 17, 2023

TOTAL BID AMOUNT:

It is agreed that if the Bidder is awarded the Contract for the work proposed herein, and shall fail or refuse to execute the Contract and furnish the specified Performance and Payment Bond within ten (10) days after the receipt of the Notification of Acceptance of their Bid Proposal, then, in that case, the Bid Security deposited herewith by the said Bidder, according to the conditions of the Invitation to Bid and Information for Bidders, shall be retained by the City of Pendleton, Oregon, in accordance with the terms of the Bond as specified in the Information for Bidders.

The Bidder has examined and carefully studied the Contract Documents, the other related data identified in the Contract Documents, and the following Addenda, receipt of all which is hereby acknowledged:

Addendum Number:	Addendum Date:	
The name of the Bidder who is submitting this Proposa	l is	
doing husiness at		
(Street) which is the address to which all communication conce sent. The name of the principal officers of the corpora persons interested in this Proposal as principals are as	(City) (State) erned with this Proposal and with the tion submitting this Proposal, of the follows:	(Zip) ne Contract shall be partnership, or of all
Print Name of Principal Officer	Print Name of Principal Office	er
Signature	Signature	
Dated this day of, 2023.	Signature of Bidder	

BID BOND

KNOW ALL MEN BY ESE PRESENTS, that we, the undersigned,								
bound untoas OWNER in the								
_for the payment of which, well and truly to be made, we hereby jointly and								
nd assigns.								
a								

Signed, this ______ day of ______, 2023.

The condition of the above obligation is such that whereas the Principal has submitted to the City of Pendleton a certain BID, attached hereto and hereby made a part hereof to enter into a Contract in writing for the

Water Filtration Plant Clearwell Baffling System Project.

NOW THEREFORE,

(A) If said BID shall be rejected, or

(B) If said BID is accepted and the Principal executes and delivers contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and furnishes a BOND for the faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and in all other respects perform the agreement created by the Acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the Owner may accept such BID; and said Surety does hereby waive notice of any such extension. IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____L.S.

Surety

By:____

Attorney-in-Fact

IMPORTANT -- Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.



STATE OF OREGON

STATUTORY PUBLIC WORKS BOND

 Surety bond #:

 CCB # (if applicable): ______

We,

, as principal, and

_____, a corporation qualified and authorized to do business in the State of Oregon, as surety, are held and firmly bound unto the State of Oregon for the use and benefit of the Oregon Bureau of Labor and Industries (BOLI) in the sum of thirty thousand dollars (\$30,000) lawful money of the United States of America to be paid as provided in ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, for which payment well and truly to be made, we bind ourselves, our heirs, personal representatives, successors and assigns, jointly and severally, firmly by this agreement.

WHEREAS, the above-named principal wishes to be eligible to work on public works project(s) subject to the provisions of ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, and is, therefore, required to obtain and file a statutory public works bond in the penal sum of \$30,000 with good and sufficient surety as required pursuant to the provisions of section 2, chapter 360, Oregon Laws 2005, conditioned as herein set forth.

NOW, THEREFORE, the conditions of the foregoing obligations are that if said principal with regard to all work done by the principal as a contractor or subcontractor on public works project(s), shall pay all claims ordered by BOLI against the principal to workers performing labor upon public works projects for unpaid wages determined to be due, in accordance with ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, and OAR Chapter 839, then this obligation shall be void; otherwise to remain in full force and effect.

This bond is for the exclusive purpose of payment of wage claims ordered by BOLI to workers performing labor upon public works projects in accordance with ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360.

This bond shall be one continuing obligation, and the liability of the surety for the aggregate of any and all claims which may arise hereunder shall in no event exceed the amount of the penalty of this bond.

This bond shall become effective on the date it is executed by both the principal and surety and shall continuously remain in effect until depleted by claims paid under ORS chapter 279C, as amended by Oregon Laws 2005, chapter 360, unless the surety sooner cancels the bond. This bond may be cancelled by the surety and the surety be relieved of further liability for work performed on contracts entered after cancellation by giving 30 days' written notice to the principal, the Construction Contractors Board, and BOLL Cancellation shall not limit the responsibility of the surety for the payment of claims ordered by BOLI relating to work performed during the work period of a contract entered into before cancellation of this bond.

IN WITNESS WHEREOF, the principal and surety execute this agreement. The surety fully authorizes its representatives in the State of Oregon to enter into this obligation.

SIGNED, SEALED AND DAT	ED this	day of		, 20	
Surety by:			Principal by:		
		(Seal)			
Company Name			Name		
Signature			Signature		
Title (e.g. Attorney-in-Fact)			Title		
Address			Address		
City	State	Zip	City	State	Zip
	SEND B	IOND TO: Con PO I Sale Tele	struction Contractors Board Box 14140 m, OR 97309-5052 phone: (503) 378-4621		



Construction Contractors Board

PO Box 14140 Salem OR 97309-5052 Telephone: 503-378-4621 Fax: 503-373-2007 Web Address: <u>www.oregon.gov/ccb</u> For CCB Use Only:

File No.____

Non-Construction Company Filing STATUTORY PUBLIC WORKS BOND with CCB

ORS 279C.836 requires that all public works contractors working on qualifying public works projects, with a contract price that exceeds \$100,000, file a \$30,000 public works bond with the Construction Contractors Board (CCB). This includes construction companies that are licensed and non-construction companies that are not required to be licensed with the CCB.

<u>If you are already licensed with the CCB</u>, you do not need to complete this form. Please send your \$30,000 public works bond directly to the CCB with your license number on it.

<u>If you are a non-construction company that is NOT required to be licensed with the CCB</u>, please complete this information below and submit it with your \$30,000 public works bond. This will be used to help the CCB properly store and display your information on-line.

Type of Business Entity:			
Sole Proprietor	☐ Joint Venture	Partnership	Corporation
			🗌 Trust
Oregon Corporation Divisi	ion Registry No. (if applicable	2)	
Name of Business Entity:			
Business Address:			
Telephone No: ()	F	Email:	
Type of Work This Compa	any Performs:		
I certify that the aforement 701 and is NOT required t	ioned independent contrac o be licensed with CCB.	ting business does not perfo	orm work subject to ORS
Name of Individual Filling Ou	ut This Form (Please Print)	Title/Position (P	Please Print)
	· (······· · · · · · · · · · · · · · ·		
Signature		Date	

Contract No. _____

CONTRACT FOR CONSTRUCTION

THIS CON	ITRA	CT, m	ade	e and entere	d into thi	s _	day	of				2023, by	and
between	the	City	of	Pendleton,	Oregon,	a	municipal	corporation	hereinafter	called	the	"Owner"	and
		-			-		her	einafter called	d the "Contra	ctor".			

WITNESSETH:

Contract Documents shall be referred to as Invitation to Bid, Prequalification, Bid Proposal, Bid Bond, Statutory Public Works Bond, Contract, Assignment of Antitrust Rights, Non-Collusion Affidavit, Performance/Payment Bond, Certificate of Insurance, Special Conditions, IRS Form W-9, Special Specifications, Technical Specifications, Drawings and the contents of the latest revision of the Oregon Standards Specifications for Construction (ODOT/APWA), excluding Sections 00100 and 00745.95 and the City of Pendleton Standard Specifications, and are all hereby made a part of this Contract by specific reference as fully and completely as if the same were fully set forth herein.

In the consideration of the faithful performance of the work herein embraced, as set forth in these Contract Documents, and in accordance with the direction of the Public Works Director (PWD) and to his satisfaction to the extent provided in the Contract Documents, the Owner agrees to pay to the Contractor the amount bid as adjusted in accordance with the proposals as determined by the Contract Documents, or as otherwise herein provided, and based on the said Proposal made by the Contractor, and to make such payments in the manner and at the times provided in the Contract Documents.

The Contractor agrees to indemnify and save harmless the Owner from any and all defects appearing or developing in the workmanship or materials performed or furnished under this Contract for a period of one (1) year after the acceptance by the Owner.

Contractor agrees to complete the project within a three-week window between October 2, 2023, and November 17, 2023. It is agreed that the time limit for the <u>completion</u> of the Contract, based upon the Proposal, is no later than <u>November 17, 2023</u>.

In the event that the Contractor shall fail to complete the work within the time limit or the extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be computed at the rate of one percent (1%) per calendar day of the total price of contract work not yet completed, or \$500.00 per calendar day, whichever is greater. Sundays and legal holidays excluded in determining days of default.

The Contractor shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, or national origin.

CITY OF PENDLETON

By_____ John H. Turner, Mayor

By_____

A.F. Denton, City Recorder

(Contractor)

By_____

(Signature)

Title:_____

Approved as to Form:______ Nancy Kerns, City Attorney

Contractor's Registration #_____

Contractor's Tax Identification #_____

ASSIGNMENT OF ANTITRUST RIGHTS

By entering into a contract, the Contractor, for consideration paid to the Contractor under the contract, does irrevocably assign to the City of Pendleton any claim for relief or cause of action which the Contractor now has or which may accrue to the Contractor in the future, including, at the City's option, the right to further assign any claim for relief or consideration and to control any such litigation on such claim for relief or counsel action, by reason of any violation of 15 USC 1-15 or ORS 646.725 or ORS 646.730, in connection with any goods or services provided to the Contractor by any person, which goods or services are used, in whole or in part, for the purpose of carrying out the Contractor's obligations under this contract.

In the event the Contractor hires subcontractors to perform any of the Contractor's duties under the contract, the Contractor shall require the subcontractor to irrevocably assign to the City of Pendleton, as a third party beneficiary any right, title or interest that has accrued or may accrue to the subcontractor by reason of any violation of 15 USC 1-15, ORS 646.725 or ORS 646.730, including, at the City's option, the rights to further assess any claim for relief or Counsel action and to control any litigation arising there under, in connection with any goods or services provided to the subcontractor's obligations as agreed to by the Contractor in pursuance of the completion of the contract.

In connection with this assignment, it is an express obligation of the Contractor that it will take no action which will in any way diminish the value of the rights conveyed or assigned hereunder to the City of Pendleton. It is an express obligation of the Contractor to advise the City of Pendleton of Oregon:

- 1. In advance, of its intention to commence any action on its own behalf regarding such claims for relief or causes of action;
- 2. Immediately upon becoming aware of the fact that an action has been commenced on its own behalf by some other person or persons, of the pendency of such action; and
- 3. The date on which it notified the obligator(s) of any such claims for relief or cause of action of the fact of its assignment to the City of Pendleton.

Furthermore, it is understood or agreed that in the event that any payment under any such claim is made to the Contractor, it shall promptly pay to the City of Pendleton its proportionate share thereof, if any, assigned to the State hereunder.

NON-COLLUSION AFFIDAVIT

- 1) This Non-Collusion Affidavit is material to any Contract awarded pursuant to the bid. According to the Oregon Public Contracts and Purchasing Laws, a public contracting agency may reject any or all bids upon the finding by the agency that it is in the public interest to do so (ORS 279.035). This public contracting agency finds that it is in the public interest to require the completion of this Affidavit by potential Contractors.
- 2) This Non-Collusion Affidavit must be executed by the member, officer, or employee of the Bidder who makes the final decision for price(s) and the amount(s) quoted in the bid.
- 3) Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure themselves that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval, or submission of the bid.
- 4) In the case of a bid submitted by joint venture, each party to the venture must be identified in the bid documents, and an Affidavit must be submitted separately on behalf of each party.
- 5) The term "complementary bid" as used in the Affidavit has the meaning commonly associated with that term in the bid process and includes the knowing submission of bids higher than the bid of another firm, any intentionally high or non-competitive bid, and any other form of bid submitted for the purpose of giving a false appearance of competition.
- 6) Failure to file an Affidavit in compliance with these instructions may result in disqualification of the bid.

)	
County of)	
I state that I am,,	Print/Type – Position Title with Firm/Company
representing Print/Type – Name	of Firm/Company

and that I am authorized to make this Affidavit on behalf of my Firm/Company, and its owners, directors, and/or officers. I am the person responsible in my Firm/Company for the price(s) and the amount(s) provided in this Proposal.

I state that:

- 1) The price(s) and the amount(s) provided in this bid have been arrived at independently and without consultation, communication, or agreement with any other Contractor, Bidder, or potential Bidder, except as disclosed on the attached appendix to this Non-Collusion Affidavit.
- 2) Neither the price(s) nor the amount(s) provided in this bid, and neither the approximate price(s) nor approximate amount(s) provided in this bid, have been disclosed to any other Firm/Company or person who is a Bidder or potential Bidder, and they will not be disclosed before the bid opening.
- 3) No attempt has been made or will be made to induce any Firm/Company or person to refrain from Bidding on this contract, or to submit a bid with price(s) and/or amount(s) higher than this bid, or submit any intentionally high or noncompetitive price(s) and/or amount(s) in a bid or other form of complementary bid.
- 4) The price(s) and/or amount(s) provided in this bid on behalf of my Firm/Company is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any Firm/Company or person to submit a complementary or other non-competitive bid.
- 5) My Firm/Company, its affiliates, subsidiaries, officers, directors, and/or employees are not currently under investigation by a governmental agency. They have not in the last four years been convicted of or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to Bidding on any public contract, except as described on the attached appendix to this Non-Collusion Affidavit.

I state that my Firm/Company understands and acknowledges that the representations are material and important and will be relied on by the City of Pendleton in awarding the Contract(s) for which this Bid is submitted.

I understand, and my Firm/Company understands, that any misstatement in this Affidavit is and shall be treated as fraudulent concealment from the City of Pendleton of the true facts relating to the submission of the Bid for this Contract(s).

Signature – Name

This instrument was acknowledged before me this _____ day of _____, 2023.

Notary Public for _____

My Commission Expires: _____

PERFORMANCE/PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____

(The official name, form of organization, and address of the Contractor, and, if partnership, name of partners.)

as Principal, and _____

(Name and Address of the Surety)

_____, a corporation, duly authorized to do a general surety business in the State of Oregon as Surety, are jointly and severally held and bound unto City of Pendleton in the sum of ______

(the basic contract price, in words and figures)

for the payment of which we jointly and severally bind ourselves, our heirs, executors, successors, and assigns, firmly by these presents.

THE CONDITIONS OF THIS BOND ARE SUCH THAT

WHEREAS,_________ the Principal herein on the _____ day of ______, 2023, entered into a Contract with the City of Pendleton, the obligee herein, which Contract consists of:

Invitation to Bid, Prequalification,

Bid Proposal, Bid Bond, Statutory Public Works Bond, Contract, Assignment of Antitrust Rights, Non-Collusion Affidavit, Performance/Payment Bond, Certificate of Insurance, Special Conditions, IRS Form W-9, Special Specifications, Technical Specifications, Drawings, Oregon Standard Specifications for Construction (ODOT/APWA) latest revision, excluding Sections 00100 and 00745.95, and the City of Pendleton Standard Specifications

All as hereto attached and made a part hereof, whereby said Principal undertakes to do all labor, furnish all plant and equipment, and furnish all material in accordance with all the terms and conditions set forth in said Contract Documents; and promptly to make payment for all labor, services, and material and pay sums due the City of Pendleton and the United States required to be paid by employers and to save harmless the obligee from any claims for damages or injury to property or persons arising by reason of said work, as set out more fully in said Contract Documents; and to do and perform all things in said Contract Documents required, in the time and manner and under the terms and conditions therein set forth; and in conformity with all laws, state and national.

NOW, THEREFORE, if said Principal herein shall promptly pay all persons, furnishing labor, services, material or insurance to said Principal, or to his subcontractors, or to their assigns, on or about said work; and shall save harmless the Obligee, its officers and agents, from all claims therefore, or from any claim for damages of injury to property or persons arising by reason of said work; and shall in the time and manner, and under the terms and conditions prescribed, will and faithfully do, perform and furnish all material and things as by them in said contract undertaken, and as by law, state, and federal prescribed, then this obligation shall be void, but otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER, that this bond is subject to the following further conditions:

- (a) All material, workmen, and all persons who shall supply such laborers, mechanics or subcontractors with material, supplies, or provisions for carrying on such work shall have a direct right of action against the Principal and Surety on this bond, second only to the right of the Obligee under this bond, which right of action shall be asserted in proceedings instituted in the appropriate court of the State of Oregon, and insofar as permitted by the laws of Oregon, such right of action shall be asserted in a proceeding instituted in the name of the Obligee to the use and benefit of the person, firm or corporation instituting such action and of all persons, firms, or corporations having claims hereunder shall have the right to be made a party to such proceeding (but not later than six months after the complete performance of said contract and final settlement and judgment rendered thereon).
- (b) In no event shall the Surety be liable for a greater sum than the amount of this bond, or subject to any suit, action, or proceeding thereon that is instituted later than twelve (12) months after the complete performance of said contract and final settlement thereof.
- (c) Said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications and accompanying the same shall in any way affect its obligations on this bond. It does hereby waive notice of such change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications.

this da	ay of, 202	3.	ond to be exec		
					(SEAL)
					(SEAL)
				(Principal)	(SEAL)
WITNESSES:				(i incipal)	
		-			
		-			(SEAL)
			By:		(SEAL)
COUNTERSIGNED:					

BY:__

(Resident Agent)

ISSUE DATE

CERTIFICATE OF INSURANCE

This is to certify to the CITY OF PENDLETON that a CERTIFICATE OF INSURANCE is issued co-insuring the City of Pendleton as described below and that the insurer agrees that it shall notify the City in writing, of material change, or any expiration or of any cancellation of the below described policies not less than thirty (30) days prior to such change, expiration, or cancellation may become effective and that such notice shall be made by certified mail, return receipt requested, to the City of Pendleton at the following address: 500 S. W. Dorion Avenue, Pendleton, Oregon 97801.

COMPANIES AFFORDING COVERAGE

Company Letter A	
Company Letter B	
Company Letter C	
Company Letter D	
Company Letter E	

COVERAGES

Insured

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, THE INSURANCE AFFORDED BY THE POLICY DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES EXCEPT WHERE, A CONTRACT BETWEEN THE INSURED AND THE CITY OF PENDLETON REQUIRES OTHERWISE.

Occurrence	DATE	EXPIRATION DATE	oc		AGGREGATE
GENERAL LIABILITY COMPREHENSIVE FORM PREMISES/OPERATIONS			BODILY INJURY	\$	\$
UNDERGROUND EXPLOSION & COLLAPSE PRODUCTS/COMPLETED OPERATIONS			PROPERTY DAMAGE	\$	\$
CONTRACTUAL INDEPENDENT CONTRACTORS BROAD FORM PROPERTY DAMAGE			BI & PD COMBINED	\$	\$
PERSONAL INJURY			PERSONAL INJ	. \$	\$
AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS (PRIV. PASS.) ALL OWNED AUTOS (OTHER THAN			BODILY INJURY (PER PERSON)	(\$	
PRIV. PASS)			BODILY INJURY (PER ACCIDEN	ґ Т)\$	
HIRED AUTOS NON-OWNED AUTOS GARAGE LIABILITY			PROPERTY DAMAGE	\$	
			BI & PD COMBINED	\$	
UMBRELLA FORM OTHER THAN UMBRELLA FORM			BI & PD COMBINED	\$	
WORKER'S COMPENSATION			STATUTORY		(each accident)
EMPLOYERS' LIABILITY			ծ \$	(dis diseas)	e-each employee)

OTHER

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

SPECIAL INSTRUCTIONS INDICATE WITH RESPECT TO EACH OF THE GENERAL CATEGORIES OF INSURANCE, IE. GENERAL LIABILITY, AUTO LIABILITY, EXCESS LIABILITY AND THE LIKE, WHETHER OR NOT THEY COVER THE BOXES ABOVE. SPECIFICALLY, THE CITY WANTS TO KNOW WHETHER BY CHECKING ONE OF THE BROAD COVERAGES ALL THE COVERAGES LISTED ARE ALSO INCLUDED. IN ADDITION, WITH RESPECT TO AGGREGATE LIMITS PLEASE INDICATE WHETHER THE AGGREGATES ARE FOR ONE OCCURRENCE OR AGGREGATE DURING THE LIFE OF THE POLICY WITH RESPECT TO EACH.

CERTIFICATE HOLDER

CANCELLATION

This is to certify to the CITY OF PENDLETON that a CERTIFICATE OF INSURANCE is issued co-insuring the City of Pendleton as described below and that the insurer agrees that it shall notify the City in writing, of material change, of any expiration, of any cancellation of the below described policies not less than thirty (30) days prior to such change, expiration, or cancellation may become effective and that such notice shall be made by certified mail, return receipt requested, to the City of Pendleton at the following address: 500 SW Dorion Avenue, Pendleton, OR 97801.

SPECIAL CONDITIONS

1. In the case of a difference or conflict in specifications and/or drawings, the Technical Specifications, followed by the Special Conditions, followed by the Special Specifications, followed by the City's Standard Specifications, and then followed by ODOT/APWA Specifications shall govern or prevail.

2. The Contractor shall make payment promptly, as due, to all persons supplying to such Contractor labor or materials for the prosecution of the work provided in the Contract.

3. The Contractor shall provide workers' compensation insurance coverage for all individuals, others than those exempt under ORS 656.027, who perform labor under the Contract before labor under the Contract commences. Contractor shall pay all contributions or amounts due for Workers' Compensation coverage from the Contractor incurred in the performance of the Contract.

A copy of each insurance policy, or certificate thereof, issued by a responsible and solvent insurance corporation or association authorized to issue such policy or policies under the laws of the State of Oregon shall be delivered to the City within a reasonable period of time after the same is issued by the company or companies or associations issuing such policy or policies. All said policies or certificates shall provide for a minimum of thirty (30) days notice to the City in the event of cancellation or material change in the terms.

4. The Contractor will not permit any lien or claim to be filed or prosecuted against the City on account of any material or labor furnished to the Contractor.

5. The Contractor will pay to the Oregon Department of Revenue all sums withheld from employees pursuant to Oregon Statutes.

6. The Contractor shall demonstrate that an employee drug testing program is in place.

7. If the Contractor fails, neglects, or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a subcontractor by any person in connection with this Contract as such claim shall become due, the proper officer or officers representing the City may pay such claim to the person furnishing the labor or service and charge the amount of the payment against funds due or to become due to the Contractor by reason of this Contract. The payment of a claim in this manner authorized by this paragraph shall not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claim. (ORS 279C.515)

8. The Contractor shall, within two (2) working hours after the advertised bid closing date and time, notify the Public Works Director in writing of the names of the first-tier sub-contractors on the disclosure form attached to the end of these Special Conditions. Submission of the first-tier sub-contractors disclosure form only applies to public contracts for public improvements with a contract value of more than \$100,000 (ORS 279C.370). Contractors are required to disclose information about certain first-tier subcontractors. Specifically, when the contract amount of a first-tier subcontractor furnishing labor or labor and materials would be greater than or equal to: (i) 5% of the total project bid, but at least \$15,000; whichever is greater; or (ii) \$350,000 regardless of the percentage of the total project bid. If no subcontractors need to be disclosed, enter "NONE" on the form and submit it.

9. In addition to required payment and performance bonds which may be used for unpaid wages, all contractors, subcontractors and non-construction companies who work on public works projects, with a contract price that exceeds \$100,000, subject to the Prevailing Wage Rate law shall file a \$30,000 Statutory Public Works Bond with the Construction Contractor's Board (CCB) before starting work on the project, unless exempt, to be used exclusively for unpaid wages determined to be due by BOLI {ORS 279C.830 and ORS 279C.836}. (**See forms included in Section 5.00)** This bond applies to ALL CCB licensed and non-CCB licensed subcontractors. Contractors must include in every subcontract a provision requiring the subcontractor to have a Public Works Bond filed with the CCB and must verify that subcontractors have filed a Public Works Bond before permitting subcontractor to start work on a project, unless exempt. For more information regarding this requirement, contact the Construction Contractor's Board at (503) 378-4621.

10. If the Contractor fails, neglects or refuses to pay promptly a person's claim for labor or services that the person provides to the Contractor or a Subcontractor in connection with the public improvement contract as the claim becomes due, the proper officer that represents the municipality (Owner) may pay the amount of the claim to the person that provides the labor or services and charge the amount of the payment against funds due or to become due the Contractor by reason of the contract.

If the Contractor or a first-tier subcontractor fails, neglects or refuses to pay a person that provides labor or materials in connection with the public improvement contract within thirty (30) days after receiving payment from the contracting agency or a contractor, the contractor or first-tier subcontractor owes the person the amount due plus interest charges that begin at the end of the 10-day period within which payment is due under <u>ORS</u> <u>279C.580 (Contractor's relations with subcontractors</u>) (4) and that end upon final payment, unless payment is subject to a good faith dispute as defined in <u>ORS 279C.580 (Contractor's relations with subcontractors</u>). The rate of interest on the amount due is nine (9) percent per annum as defined under ORS 279C.515(2). The amount of interest may not be waived.

11. If the Contractor or a subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the public improvement contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580. **Every contract related to this Contract shall contain a clause setting forth this requirement.**

12. If requested in writing by a first-tier subcontractor, the Contractor, within ten (10) calendar days after receiving the request, shall send to the first-tier subcontractor a copy of that portion of any invoice, request for payment submitted to the public contracting agency or pay document provided by the public contracting agency to the Contractor specifically related to any labor or materials supplied by the first-tier subcontractor.

13. Except where the Contractor is a party to a collective bargaining agreement in effect with a labor organization, no person shall be employed for more than ten (10) hours in any one day, or forty (40) hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases, the employee shall be paid at least time and a half pay:

- A) For all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work week is five (5) consecutive days, Monday through Friday except for individuals under this Contract who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. sections 201 to 209 from receiving overtime; or
- B) For all overtime in excess of ten (10) hours a day or forty (40) hours in any one week when the work week is four (4) consecutive days, Monday through Friday; except for individuals under this Contract who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. sections 201 to 209 from receiving overtime; and
- C) For all work performed on Saturday or Sunday and on the following legal holidays:
 - 1) New Year's Day on January 1
 - 2) Memorial Day on the last Monday in May
 - 3) Independence Day on July 4
 - 4) Labor Day on the first Monday in September
 - 5) Thanksgiving Day on the fourth Thursday in November
 - 6) Christmas Day on December 25
- D) Each time a holiday listed above falls on Sunday, the succeeding Monday shall be recognized as a legal holiday. Each time a holiday listed above falls on Saturday, the preceding Friday shall be recognized as a legal holiday. (ORS 279C.540)
- E) The Contractor must give notice to employees who work on a public contract in writing, either at the time of hire or before commencement of work on the Contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work. (ORS 279C.520)

14. Contractor may not work on the following City recognized holidays without explicit written permission from the City of Pendleton. City reserves the right to disallow work on these days due to available inspection staff and/or traffic safety and congestion.

- A) The afternoons of Wednesday and Thursday of the second full week in September (Round-up Week)
- B) The Friday and Saturday of the second full week of September (Round-up Week)
- C) Christmas Eve on December 24
- D) New Year's Eve on December 31

Each time a holiday listed above falls on Sunday, the succeeding Monday shall be recognized as the holiday, or each time a holiday listed above falls on Saturday, the preceding Friday shall be recognized as the holiday.

15. Contractor must promptly pay for all medical services for which the contractor has agreed to pay and for all amounts for which the Contractor collects or deducts from the worker's wages. (ORS 279C.530)

16. Each worker in each trade or occupation employed in the performance of the Contract either by the Contractor, subcontractor or other person doing or contracting to do the work in whole or any part on the Contract, shall be paid not less than the applicable prevailing rate of wage as required by ORS Chapter 279C.838 and 279C.840. All bidders must comply and agree that the requirements and conditions of employment be observed and prevailing wage rates, as established by the Oregon Bureau of Labor and Industries be paid under this Contract.

The existing prevailing wage rates in effect on January 5, 2023, including any amendments, are as published by the Oregon Bureau of Labor and Industries. Copies of the existing prevailing wages are available online at https://www.oregon.gov/boli/employers/pages/prevailing-wage.aspx

17. Any and all employees of Contractor or his contractors while engaged or performing any work or services required by him under this agreement shall be considered his employees only and not employees of the City and any claims that may arise under the Workers' Compensation Act on behalf of the said employees while so engaged in any and all claims made by third parties as a consequence of any act or omission on the part of him or his employees while so engaged on any of the work or services provided to be rendered herein shall be the sole obligation responsibility of Contractor and/or his contractors. The parties to this agreement recognize that Contractor and his employees, officers, agents and subcontractors are providing professional services as independent contractors and are not providing services as employees of the City and are therefore not entitled to the benefits provided by the City to his employees, including but not limited to Workers' Compensation benefits, group health insurance, social security, pension plans, or any other benefit accruing to City's employees. Contractor hereby agrees to hold the City harmless from, and shall process and defend at his own expense, all claims, demands, or suits of whatever nature, brought against him arising from his performance under this agreement. Contractor shall advise his officers, agents, employees and subcontractors of this provision.

18. The Contractor shall keep himself informed and at all times comply with any ordinance, laws, and regulations dealing with the preservation of environmental pollution and the preservation of natural resources that may be affected in the performance of the Contract. The following are a list of agencies that may have enacted ordinances or regulations dealing with the preservation and environmental pollution and the preservation of natural resources:

Federal Agencies:

Agriculture, Department of Forest Service Soil Conservation Service Defense, Department of Army Corps of Engineers Energy, Department of Federal Energy Regulatory Commission Environmental Protection Agency Health and Human Services, Department of Housing and Urban Development, Department of Solar Energy and Energy Conservation Bank Interior, Department of Bureau of Land Management Bureau of Indian Affairs Bureau of Mines Bureau of Reclamation Geological Survey Mineral Management Service U.S. Fish and Wildlife Service Labor, Department of Occupational Safety and Health Administration Mine Safety and Health Administration Transportation, Department of Coast Guard Water Resources Council

State Agencies:

Administrative Services, Department of Dept of Agriculture Department of Consumer & Business Services, State of Oregon **Occupational Safety & Health Division** Environmental Quality, Department of Fish and Wildlife, Department of Forestry, Department of Geology and Mineral Industries, Department of Health Division **Historic Preservation Office** Human Resources, Department of Land Conservation and Development Commission Parks and Recreation, Department of Soil and Water Conservation Commission **State Engineer** State Land Board (Lands, Division of State) Transportation, Department of Water Resources Department

Local Agencies:

City of Pendleton City Council Umatilla County Commissioners Board of Port of Umatilla Fire Protection Districts City of Pendleton Planning Commission Umatilla County Planning Commission Confederated Tribes of the Umatilla Indian Reservation

19. Liability and Indemnity:

- A) <u>Indemnification</u>. Contractor shall indemnify, hold harmless and defend City and its officers, agents and employees from, and reimburse City for, any cost, claim, loss, or liability suffered directly or from a third-party claim arising out of or related to any negligent activity of Contractor in the execution of this Contract. City shall have no liability to Contractor for any injury, loss, or damage caused by Contractor or third parties.
- B) <u>Public Liability and Property Damage Insurance</u>. Before beginning execution of the Contract, Contractor shall maintain public liability insurance against death or injury to person, or damage to property, during the life of this Contract at Contractor's cost; said insurance shall be in such form so as to protect both Contractor and City from all claims expressed or implied as above provided, and in the following amounts:
 - 1) Public Liability Insurance not less than \$1,000,000 for injuries to any one person, including accidental death and not less than \$1,000,000 for any one accident.
 - 2) Property Damage Insurance not less than \$1,000,000 for any one accident.

The Contractor's Public Liability and Property Damage Insurance shall adequately provide the <u>primary</u> <u>coverage</u> on all claims arising out of the performance of the Contract. Such insurance shall cover all risks arising directly or indirectly out of Contractor's activities. Such insurance shall protect Contractor against the claims on account of the obligations assumed by Contractor under this Contract and shall name City and its officers, agents and employees as additional insured.

The above-mentioned proof shall be in the form of a copy of the policy and all appropriate riders with the City being named as a co-insured on all policies and provide for thirty (30) days written notice of any change or cancellation to City before Contractor begins execution of the Contract.

20. No bid for construction will be received or considered by the City unless the bidder is registered with the Construction Contractors Board as required by ORS Chapter 701 or the State Landscape Contractors Board as required by ORS 672.530. **In addition, the Contractor and subcontractors must obtain a City of Pendleton Business License as follows:**

- A) Any contractor or subcontractor engaged in any activity for which registration with the Oregon Construction Contractors Board is required pursuant to Oregon Revised Statutes, Chapter 701, must obtain a City of Pendleton Business License or comply with the alternative in paragraph 20.C) below.
- B) The Contractor or any subcontractor engaged in any activity for which registration with the Oregon Construction Contractors Board is required pursuant to Oregon Revised Statutes, Chapter 701, must include, as part of the application for a City of Pendleton business license, a copy of a current certificate of registration issued by the Oregon Construction Contractors Board.

C) A prime contractor engaged in a Construction Project may obtain a Construction Project License as an alternative to obtaining a City of Pendleton Business License for each subcontractor engaged in the Construction Project. The Construction Project License is in lieu of a Business License for subcontractors only and is in addition to the Business License of the prime contractor. The application for a Construction Project License must contain, among other items, a signed statement by the prime contractor and each subcontractor engaged in the Construction Project that each signatory is registered under the provisions of this Oregon Revised Statutes, Chapter 701, and stating that the registration is in full force and effect. For the prime contractor and each subcontractor and each subcontractor and each subcontractor and each subcontractor.

21. The Oregon Government Standards and Practices laws may apply to Contractor. ORS 244.040(1)(a) prohibits any government officer, employee, or agent from using the governmental relationship to obtain a financial gain or avoid a financial detriment that would not otherwise be available but for the governmental relationship. For further information on this matter contact the Oregon Government Standards and Practices Commission; 100 High Street SE, Suite 220; Salem, Oregon 97310; phone 503 378-5105.

22. Contractor certifies that:

- A) Contractor is free from direction and control over the means and manner of providing the labor or services, subject only to the right of City to specify the desired results;
- B) Contractor is responsible for obtaining all assumed business registrations or professional occupational licenses required by state law or local governmental ordinances;
- C) Contractor furnishes the tools or equipment necessary for performance of the contracted labor or services;
- D) Contractor has the authority to hire and fire employees to perform the labor or services;
- E) Payment for the labor or services is made upon completion of the performance of specific portions of the project or is made on the basis of a periodic retainer;
- F) Contractor is registered under ORS chapter 701 (Construction Contractors), if Contractor provides labor or services for which such registration is required;
- G) Federal and state income tax returns in the name of the business or a business Schedule C or farm Schedule F as part of the personal income tax return were filed for the previous year if the contractor performed labor or services as an independent contractor in the previous year; and
- H) Contractor represents to the public that the Contractor is an independently established business. Except where Contractor files a Schedule F as part of the personal income tax return and the Contractor performs farm labor or services that are reportable on Schedule C, Contractor is considered to be engaged in an independently established business when four or more of the following circumstances exist:

[Initial those that apply]

- 1) _____ The labor or services are primarily carried out at a location that is separate from the residence of Contractor or are primarily carried out in a specific portion of the residence, which portion is set aside as the location of the business;
- 2) _____ Commercial advertising or business cards as is customary in operating similar businesses are purchased for the business, or the Contractor has a trade association membership;
- 3) _____ Telephone listing and service are used for the business that is separate from the personal residence listing and service used by Contractor;
- 4) _____ Labor or services are performed only pursuant to written Contracts;
- 5) _____ Labor or services are performed for two or more different persons within a period of one year; or
- 6) _____ Contractor assumes financial responsibility for defective workmanship or for service not provided as evidenced by the ownership of performance bonds, warranties, errors and omission insurance or liability insurance relating to the labor or services provided.

23. If any action is instituted in connection with any claim or controversy arising out of this agreement, attorney fees may not be awarded by the court of competent jurisdiction and each party shall bear its own expenses of such action.

24. This agreement and the party's rights under it shall be construed and regulated by the laws of the State of Oregon and venue for any dispute hereunder shall lie in Pendleton, Umatilla County, Oregon.

25. Work Hours

Normal working hours are Monday through Friday, 7:00 am to 6:00 pm. Work may extend beyond this time period with prior written permission from the City. The Contractor shall notify the City forty-eight (48) hours in advance of time work will be performed on Saturdays, Sundays or Holidays or other than normal working hours.

Per City Ordinance No. 2287, no work that produces dust or flying debris shall be performed or equipment utilized that produces noise of sufficient volume to disturb the sleep or repose of occupants of neighboring property between the hours of 6:00 pm and 7:00 am without express written permission from the City.

26. The Contractor shall plan, coordinate and be responsible for all construction work and proceed with minimum interference to the operation of the existing facility or other construction work. Prior to starting the construction, confer with the City to develop an approved construction schedule, which will permit the facility to function as normal as practical during the construction. If it becomes necessary to do certain parts of the construction outside normal working hours, or change/modify sequence of activities in order to avoid undesirable conditions, it shall be the obligation of the Contractor to do this work at such a time at no additional cost to the City.

27. The Contractor shall maintain proper and required construction related impact controls, including controls for such impact as noise, dust, erosion and hours of operation.

28. The Contractor shall provide and receive written approval from the City of Pendleton a payment schedule prior to construction.

29. All existing features including, but not limited to, roadways, driveways/easements, structures, lots, curbs, sidewalks, fences, walls, plantings, ditches, mailboxes, signs, irrigation, piping and utilities disturbed during construction shall be restored to "AS GOOD or BETTER" than original condition unless otherwise specified in the plans/specifications. If a utility is damaged during construction, the Contractor shall contact owner of the utility for inspection of damage prior to repairs. Contractor shall repair all utility services damaged during construction, and such repair shall be considered incidental.

30. <u>Recovery of Costs</u>

As work on the Contract progresses, the City shall upon request, inform the Contractor of all accrued costs. If punch list items are not completed after the 12-month period following substantial completion, the City will retain the remaining retainage and consider the Contract closed. The City will complete the punch list items and any cost above the remaining retainage withheld will be sought by placing a lien against the Contractor's bond.

31. Final Payment

Upon completion of the work, Contractor shall notify City in writing that they have completed their part of the Contract and shall request Final Payment. Final Payment or any part of the retained percentage will be withheld upon the option of the City until the Contractor submits to the City an Affidavit Certifying Contractor Payment for Labor, Services and Materials, Compliance With Labor Provisions and Contractor's Acceptance of Final Payment. **(see Affidavit attached to end of this Section)**.

32. Oregon's Reciprocal Preference Law

ORS 279A.120 requires public contracting agencies, in determining the lowest responsible bidder, to add a percent increase to each out-of-state bidder's bid price which is equal to the percent of preference given to local bidders in the bidder's home state. That is, if the low bidder is from a state that grants a 10 percent preference to its own instate bidders, the Oregon agency must add 10 percent to that bidder's price when evaluating the bid.

ORS 279A.120(2) states: For the purposes of awarding a public contract, a contracting agency shall:

- (a) Give preference to goods or services that have been manufactured or produced in this state if price, fitness, availability and quality are otherwise equal; and
- (b) Add a percent increase to the bid of a nonresident bidder equal to the percent, if any, of the preference given to the bidder in the state in which the bidder resides.

The Department of Administrative Services (DAS), State Procurement Office has gathered information on preference laws of all states. For more information please visit: https://www.oregon.gov/DAS/Procurement/Pages/Index.aspx **33.** Each bid must identify whether the bidder is a resident bidder and each bidder must be qualified in accordance with ORS 279 and other applicable sections of the Oregon Revised Statutes in order to enter into a Contract with the Owner for public work in Oregon.

34. In-State Tie-Bid Awards

All state and local contracting agencies shall give preference to in-state offerors if their offers are the same as nonresident offerors.

35. Nonresident Bidders

ORS 279A.120(3) states: "When a public contract is awarded to a nonresident bidder and the contract price exceeds \$10,000, the bidder shall promptly report to the Department of Revenue (DOR) on forms to be provided by the department the total contract price, terms of payment, length of contract and such other information as the department may require before the bidder may receive final payment on the public contract. The contracting agency shall satisfy itself that the requirement of this subsection has been complied with before the contracting agency issues a final payment on a public contract." (See form attached to the end of these Special Conditions)

To view ORS 279A.120, visit: <u>www.oregonlegislature.gov</u>

For information about DOR requirements, contact: <u>www.oregon.gov/DOR</u>

36. Damage of existing structure - when the existing structure or facility, which is intended to remain, is damaged by the Contractor during demolition or construction, the Contractor shall promptly repair and replace the damaged portion of the facility at no cost to the City.

DATED:_____, 2023.

Contractor:_____

By:_____

CITY OF PENDLETON FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Bids which are submitted by Bid Closing, but for which a required disclosure submittal has not been made by the specified Disclosure Deadline, are not responsive and shall not be considered for Contract award.

AGENCY SUPPLIED INFORMATION:

Project Name:	Water Filtration	<u> Plant Clearwell Baf</u>	fling S	ystem
Bid Closing Dat	e: M	ay 4, 2023	Time:	2:00 pm
Disclosure Dead	line Date: <u>M</u>	ay 4, 2023	Time:	4:00 pm

THIS DISCLOSURE FORM MUST BE SUBMITTED to the City of Pendleton at the location specified and in accordance with the date and time in the Advertisement for Bids. A separate form must be submitted for each Schedule. If necessary, use additional forms to satisfy the Disclosure requirements.

The contracting agency will insert "N/A" if the contract value is not anticipated to exceed \$100,000, otherwise, this form must be submitted either with the bid or within two (2) working hours after the advertised bid closing date and time; but no later than the Disclosure Deadline stated above.

List below the NAME, ADDRESS, DOLLAR VALUE, CONSTRUCTION CONTRACTOR BOARD (CCB) NUMBER, CONTACT NAME and TELEPHONE NUMBER of each Subcontractor that will be furnishing labor and/or materials that are required to be disclosed in accordance with ORS 279C.370.

ENTER "NONE" IF THERE ARE NO SUBCONTRACTORS THAT NEED TO BE DISCLOSED. (Attach additional sheets if needed)

NAME/ADDRESS OF SUBCONTRACTORS	\$ VALUE/CCB #	CONTACT NAME/PHONE #
1)	<u>\$</u> <u>CCB#</u>	
2)	<u>\$</u> CCB#	
3)	<u>\$</u> <u>CCB</u> #	

The above listed first-tier subcontractor(s) are providing labor and/or materials with a Contract value equal to or greater than:

- a) 5% of the total project amount proposed or \$15,000, whichever is greater; or
- b) \$350,000, regardless of the percentage of the total project amount proposed.

Phone Number

Unless otherwise stated in the original solicitation, this document shall not be faxed. It is the responsibility of the Bidder to separately submit this Disclosure Form and any additional sheets with the Project Schedule and Name clearly marked in accordance with the date and time in the Advertisement for Bids.

CITY OF PENDLETON AFFIDAVIT CERTIFYING CONTRACTOR PAYMENT FOR LABOR, SERVICES AND MATERIALS, COMPLIANCE WITH LABOR PROVISIONS AND CONTRACTOR'S ACCEPTANCE OF FINAL PAYMENT

(READ THIS DOCUMENT CAREFULLY. IT IS A LEGAL DOCUMENT)

PROJECT NAME:		CONTRACT NO	
l,		the	
	(Name)		(Officer/Title)
of		acknow	wledge:
	(Company)		-

- 1. That all labor, services, materials furnished for the above Contract have been paid in full.
- 2. That I and my subcontractors, employees, agents and officials have complied with all labor provisions of the above Contract, and all final Certified Payroll Reports have been submitted to the City of Pendleton.
- 3. That there are no claim(s), potential claim(s) or pending claim(s) for any labor, services or materials related to this Contract.
- 4. That there are no liens, potential liens or pending liens existing related to this Project and/or to the above Contract.
- 5. That I have reviewed the attached final pay statement and it is a true and accurate statement for final payment for all labor, services and materials of the above Contract.
- 6. That all work (labor and/or services) has been performed and/or material supplied in full accordance with the requirements of the above Contract, except for those modifications approved by the City in writing including: duly authorized written deviations, written substitutions, written alterations and/or written additions.
- 7. That I accept final payment for all labor, services and materials furnished pertinent to the above Contract and that I release the City of Pendleton, an Oregon municipal corporation and its officers, agents and employees from any and all claims and any and all liabilities to me as the Contractor for all things done or furnished in connection with the Contract and agree to defend and indemnify the City of Pendleton against any and all claims, loss, damage or liability made against the City by Contractor, his employees, agents, subcontractors or those acting within his authority and every act of the City related to or rising out of the Contract.
- 8. That I have provided a performance bond for the Contract, which shall remain in full force and effect for one (1) year after the date of final written acceptance by the City of the work, and this performance bond guarantees any and all workmanship and materials from any defect whatsoever.
- 9. That I have read this Affidavit and agree with it.

as	of		, Contractor,
On the	day of	, 20, personally appeared	
County of)		
State of)		
		-	
		Signature	
		Print Name and Title	
		Contractor's Name	
DATED this	day or	, 20	

(SEAL)

Notary Public for ______ My Commission Expires:_____

My Commission Expires:_____

Form OR-NRB

Page 1 of 1, 150-800-020 (Rev. 03-17) Oregon Department of Revenue

Oregon Nonresident Bidder Form

Submit original form—do not submit photocopy.

Oregon Revised Statute (ORS) 279A.120 states that when a public contract is awarded to a nonresident bidder and the contract price is more than \$10,000, the bidder must report certain information to the Oregon Department of Revenue before the bidder can receive final payment on the contract. To view ORS 279A.120, visit www.oregonlegislature.gov.

Using one of the options below, you must submit this completed form before we can make your final payment.

A. Bidder information

Company name		Federal ID number
		_
Company contact name		Oregon business ID number
Street/mailing address		Telephone
		() –
City, state, ZIP	Email	

B. Contract information

Contracting against name			
Terms of payment			Total contract price
			\$
Brief description of services provided			
Will the work or services provided, at any time, require	e a physical presence in Oregon?		
	Yes	No	
Contract number	Start date of contract	Contract expirati	on date
	/ /	/ /	
Agency contact			

C. Submitting this form

Please submit this form one of these ways:

Mail	Fax	Email
Oregon Department of Revenue Financial Services Unit 955 Center Street NE, Room 461 Salem OR 97301	503-945-8382	dor.procurement@state.or.us (You must have Acrobat Standard or Professional to use this option)

Name of person signing for business	Title
	/ /



Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give	Form	to	the
requ	ester.	Do	not
send	to the	e IR	S.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Print or type. See Specific Instructions on page	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. □ Individual/sole proprietor or single-member LLC □ C Corporation □ S Corporation □ Partnership □ Trust/estate □ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner. □ Other (see instructions) ▶ 5 Address (number, street, and apt. or suite no.) See instructions. Requester's name ar 6 City, state, and ZIP code 7 List account number(s) here (optional)	Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) Exemption from FATCA reporting code (if any) (Applies to accounts maintained outside the U.S.) ind address (optional)
Par	Taxpaver Identification Number (TIN)	

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ►	Date ►	

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

Form 1099-DIV (dividends, including those from stocks or mutual funds)

 Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)

Employer identification number

- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

SPECIAL SPECIFICATIONS

DESCRIPTION OF WORK

This Project consists of the following work for the Water Filtration Plant (WFP) Clearwell Baffling System in Pendleton, Oregon:

- 1. Supply all equipment and materials for a baffling system. (see attached drawings)
- 2. Install all floor, wall, and roof brackets per manufacturer's engineered drawings.
- 3. Repaint with NSF approved paint system all brackets and welded areas where paint was removed.
- 4. Repaint outside of tank where discolored from welding and where metal is visible.
- 5. Install all baffle curtains using cabling system for support.
- 6. Clean and disinfect entire inside of Clearwell.
- 7. Perform additional and incidental work as called for in the Technical Specifications and Drawings.

Completion deadline for all work:

Three-week window between October 2, 2023, and November 17, 2023.

PROJECT OVERVIEW

The disinfection requirements for the City of Pendleton's Water Filtration Plant (WFP) are calculated by chlorination and contact time (CT). The time is provided by the Clearwell and approximately 3,300 feet (ft) of 24-inch transmission line before the first customer. To meet the contact time requirements utilizing just the Clearwell, we need to install a baffling system to increase our CT value by creating plug flow through the reservoir. The welded steel reservoir was constructed in 2003 and is 118 ft in diameter and 24 ft tall.

The WFP will shut down for three weeks late this summer. During this time, City will be contracting to have some tank painting inside the WFP and installing the baffling system in the Clearwell. The installation will include welding brackets on the floor, walls, and roof inside the Clearwell. There is access through two (2) 30" diameter manways and a 36" square roof hatch. The City will empty the Clearwell and cap the 24" inlet and 36" outlet. One additional cut-out is permitted, if needed.

More details can be found in the Information for Bidders and Technical Specifications.

1. ALL CONSTRUCTION

All construction shall be in compliance with the attached Technical Specifications, the latest revision of the City of Pendleton Standard Specifications, and the "Oregon Standard Specifications for Construction" (ODOT/APWA) latest revision, excluding Sections 00100 and 00745.95, unless otherwise noted in these Specifications.

2. STANDARDS APPLICABLE TO CONSTRUCTION

The following specifications shall be included by this reference as they may apply to this project. The most current versions of these specifications, which were in effect at the time of the first publication of the Invitation to Bid, are applicable.

- A.1 AASHTO -American Association of State Highway & Transportation Officials.
- A.2 ACI -American Concrete Institute
- A.3 AISI -American Iron and Steel Institute
- A.4 ANSI -American National Standards Institute
- A.5 APWA -American Public Works Association
- A.6 ASME -American Society of Mechanical Engineers
- A.7 ASTM -American Society for Testing and Materials
- A.8 AWWA -American Water Works Association
- A.9 AWA -American Welding Society
- A.10 AWPA -American Wood Preservers Institute
- A.11 CSAA -Coating Standards Association
- A.12 CRSI -Concrete Reinforcing Steel Institute

Special Specifications - Page 1 of 3
A.13	FWHA	-Federal Highway Administration
A.14	HI	-Hydraulic Institute
A.15	IEEE	-Institute of Electrical & Electronic Engineers
A.16	ICEA	-Insulated Cable Engineers Association
A.17	MUTCD	-Manual on Uniform Traffic Control Devices (FHA)
A.18	NBS	-National Bureau of Standards
A.19	NACE	-National Association of Corrosion Engineers
A.20	NEC	-National Electric Code
A.21	NEMA	-National Electric Manufacturer's Association
A.22	NLMA	-National Lumber Manufacturer's Association
A.23	OSHD	-Oregon State Highway Department
A.24	PCA	-Portland Cement Association
A.25	SPFA	-Steel Plate Fabricators Association
A.26	SSPC	-Steel Structures Painting Council

- A.27UL-Underwriters Laboratories, Inc.A.28UBC-Uniform Building Code
- A.29 WWPA -Western Wood Products Association
- A.30 All applicable governmental building codes, and construction specifications in effect at the time of the first Advertisement for Bids. Where conflicts occur between the different specifications, these special specifications shall prevail over the above-cited specifications, followed by the City's Standard Specifications as a general rule, the most stringent specification for any conflicting specifications shall prevail. In any interpretation required of the specifications shall be referred to the City Engineer. Response shall be in writing and final.

3. SATURDAY, SUNDAY OR HOLIDAY WORK

The Contractor shall notify the City forty-eight (48) hours in advance of the time work will be performed on Saturday, Sunday or Holidays or other than normal working hours. Normal working hours are 7:00 am to 6:00 pm, per City Ordinance No. 2287.

4. PERMITS AND LICENSES

The Contractor shall keep himself informed of all local ordinances, state, and federal laws in any manner affecting the work. All permits and licenses necessary for the prosecution of this work shall be secured and paid for by the Contractor.

5. <u>SCHEDULE</u>

The Contractor shall submit a work schedule to the City for approval, five (5) days prior to commencing work. The Contractor shall submit weekly updates of the work schedule to the City's Project Manager.

6. TECHNICAL SPECIFICATIONS

See Technical Specifications for a description of items listed in the Bid Proposal Form.

7. INCIDENTAL ITEMS

All materials and work shown on the plans or necessary to complete the job and receive approval of the project, which are not identified as a separate pay item on the proposal, shall not be measured for payment separately but shall be considered as subsidiary obligations of the Contractor.

8. CONTRACT COMPLETION TIME AND LIQUIDATED DAMAGES

Contractor shall furnish in writing a work schedule for the Project. **This Project must be completed within a three-week window between October 2, 2023, and November 17, 2023.** Liquidated damages will be assessed at one percent (1%) of the total contract price for all work not yet completed by November 17, 2023, or \$500 per calendar day, whichever is greater. Sundays and legal Holidays excluded in determining days of default.

9. <u>RECOVERY OF COSTS</u>

As work on the Contract progresses the City shall, upon request, inform the Contractor of all accrued costs. If punch list items are not completed after the 12-month period following substantial completion, the City will retain the remaining retainage and consider the contract closed. The City will complete the punch list items and any cost above the remaining retainage withheld will be sought by placing a lien against the Contractor's bond.

10. WORKING HOURS, RESTRICTIONS

Normal working hours are Monday through Friday - 7:00 am to 6:00 pm. Work may extend beyond this time period with prior written permission from the City. The Contractor shall notify the City forty-eight (48) hours in advance if work will be performed on Saturday, Sunday or Holidays or other than normal working hours.

Per Ordinance No. 2287, no work that produces dust or flying debris shall be performed or equipment utilized that produces noise of sufficient volume to disturb the sleep or repose of occupants of neighboring property between the hours of 6:00 pm and 7:00 am without expressed written permission from the City.

14.00



TECHNICAL SPECIFICATION

FOR

WATER PLANT CLEARWELL BAFFLING SYSTEM

March 2023



TECHNICAL SPECIFICATION

FOR

CONSTRUCTION OF

WATER PLANT CLEARWELL BAFFLING SYSTEM FOR

CITY OF PENDLETON

March 2023

CONSOR 345 BOBWHITE COURT, SUITE 230 BOISE, ID 83706 208-947-9033

SECTION 00 01 07 - SEALS PAGE FOR WATER PLANT CLEARWELL BAFFLING SYSTEM FOR CITY OF PENDLETON

KRISTOFOR R. SNIDER = KRS



KRS STAMP

Seals Page 00 01 07 - 1

SECTION 00 01 10 – TABLE OF CONTENTS FOR WATER PLANT CLEARWELL BAFFLING SYSTEM FOR CITY OF PENDLETON

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TECHNICAL SPEC Division 01 - Gen 01 33 00	CIFICATIONS neral Requiremei KRS	n ts Submittal Procedures	1-7
Division 02 thro NOT USED	ugh Division 08		
Division 09 - Fin 09 97 14	ishes KRS	Steel Water Storage Tank Painting	1-34
Division 10 NOT USED			
Division 11 - Eq u 11 97 14	u ipment KRS	Baffle Curtain System	1-7
Division 12 thro NOT USED	ugh Division 32		
Division 33 - Uti 33 13 13	lities KRS	Disinfection of Water Utility Storage Tanks	1-3
Division 34 thro NOT USED	ugh Division 43		
DRAWINGS See Sheet G-1 fo	or Drawing Index		
SUPPLEMENTAR	RY INFORMATION		

END OF SECTION

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. This Section contains administrative and procedural requirements for submittals for review, information, and for Project closeout.
- B. Section includes:

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action.
- B. Informational Submittals: Written and graphic information and physical Samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SHOP DRAWING AND SAMPLE SUBMITTAL REQUIREMENTS

- A. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - 1. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - 2. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - 3. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 4. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- B. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- C. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate

from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review of each such variation.

1.4 SUBMITTAL PROCEDURES

- A. Contractor shall submit Shop Drawings and Samples to Engineer for review in accordance with the accepted Schedule of Submittals.
- B. Transmit each submittal with Engineer-accepted transmittal form certifying compliance with requirements of Contract Documents.
- C. Sequentially number transmittal forms. Mark transmittal forms for resubmittals with original number and sequential alphabetic suffix.
- D. Show each Submittal with the following numbering and tracking system:
 - 1. Submittals shall be numbered according to specification section. For example, the first product submittal for Section 05 50 00 would be "05 50 00-1". Resubmittals of that submittal would be "05 50 00-1.1", followed by "05 50 00-1.2", and so on. The second product submittal for that Section would be "05 50 00-2".
 - 2. Submittals containing product information from multiple sections of the specifications will not be reviewed. Contractor and/or their supplier shall divide submittals in a manner that meets the numbering and tracking system requirements stated herein.
 - 3. Alternative method of numbering may be used if acceptable to Engineer.
- E. Identify: Project, Contractor, subcontractor and supplier, pertinent drawing and detail number, and specification Section number appropriate to submittal.
- F. Apply Contractor's stamp, signed or initialed, certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of the Work and Contract Documents.
- G. Coordinate submission of related items.
 - 1. All shop drawings for interrelated items shall be scheduled for submission at the same time.
 - 2. The Engineer may hold shop drawings in cases where partial submission cannot be reviewed until the complete submission has been received or where shop drawings cannot be reviewed until correlated items affected by them have been received. When such shop drawings are held, the Engineer will advise the Contractor in

writing that the shop drawing submitted will not be reviewed until shop drawings for all related items have been received.

- H. When electronic transmittals of submittals are provided by the Contractor under established protocols described elsewhere in the Contract Documents or as jointly developed by the Owner, Engineer and Contractor, provide electronic submittals in portable document format (PDF) in addition to the source document format (Word, Excel, AutoCAD, etc.). Reviewed submittals will be returned to the Contractor as PDF electronic files.
- I. For each submittal for review, allow not less than 14 days for Engineer review, excluding delivery time to and from Contractor.
- J. Identify variations in Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.
- K. Allow space on submittals for Contractor and Engineer review stamps or comments.
- L. When revised for resubmission, the Contractor shall identify changes made since previous submission. A narrative of changes shall be provided, and shop drawings or calculations shall indicate that a revision was made.
- M. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with review comments.
- N. Submittals not requested will not be recognized nor processed.
- O. Incomplete Submittals: Engineer will not review. Complete submittals for each item are required. Delays resulting from incomplete submittals are not the responsibility of Engineer.

1.5 ENGINEER REVIEW

- A. Informational submittals and other similar data are for Engineer's information, do not require Engineer's responsive action, and will not be reviewed or returned with comment.
- B. The Engineer's review of submittals and shop drawings is not a check of any dimension or quantity and will not relieve the Contractor from responsibility for errors of any sort in the submittals and shop drawings.
- C. Submittals made by Contractor that are not required by Contract Documents may be returned without action.

- D. The Engineer will review the submitted data and shop drawings and return to the Contractor with notations thereon indicating "No Exception Taken", "Make Corrections Noted", "Rejected", "Revise and Resubmit", or "Submit Specified Item".
- E. If more than two submissions of an item are required to meet the Project specifications, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.
- F. Engineer's review will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- G. Engineer's review will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
- H. Engineer's review of a separate item as such will not indicate approval of the assembly in which the item functions.
- I. Engineer's review of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- J. Neither Engineer's receipt, review, return of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

1.6 RESUBMITTAL PROCEDURES

- A. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- B. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required review of an item with no more than two submittals. Engineer will record Engineer's time for reviewing a third or subsequent submittal of a Shop Drawings, sample, or other item requiring review, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
- C. If Contractor requests a change of a previously reviewed submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

PART 2 PRODUCTS

2.1 CONSTRUCTION PROGRESS SCHEDULES

- A. Within 10 days after the Effective Date of the Contract, prepare and submit to the Engineer a practicable schedule showing the order in which the Contractor proposes to carry out the Work, the dates on which the important features of the work will start, and the contemplated dates for completing same. A time-scaled bar chart schedule shall include the following:
 - Construction activities
 - Submittal and review of critical material samples and shop drawings
 - Procurement and delivery of critical materials
 - Duration of work, including completion times of all stages and their sub-phases
- B. Attention is drawn to typical local climatic weather patterns and Work shall be coordinated accordingly.

2.2 PRODUCT DATA

- A. Product Data: Action Submittal: Submit to Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents. Submitted data shall be sufficient in detail for determination of compliance with the Contract Documents.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
 - 1. Note submittal will be returned to Contractor without review of submittal if products, models, options, and other data are not clearly marked or identified.
- C. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

2.3 SHOP DRAWINGS

- A. Shop Drawings: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional Engineer licensed in the state of Project responsible for designing components shown on Shop Drawings.

- 1. Include signed and sealed calculations to support design.
- 2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
- 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. All dimensioned shop drawings shall be scalable and provided as full-sized (22-inch x 34-inch) sheets. PDF electronic files shall print as scalable full-sized sheets.

2.4 SAMPLES

- A. Samples: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 - 1. Submit to Engineer for aesthetic, color, and finish selection.
 - 2. Submit Samples of finishes, textures, and patterns for Owner selection.
- C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.
- D. Include identification on each Sample, with full Project information.
- E. Submit number of Samples specified in individual Specification Sections; Engineer will retain one Sample.
- F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.

2.5 DESIGN DATA

- A. Informational Submittal: Submit data for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit information for assessing conformance with information given and design concept expressed in Contract Documents.

2.6 CERTIFICATES

A. Informational Submittal: Submit certification by manufacturer, installation/application Subcontractor, or Contractor to Engineer, in quantities specified for Product Data.

- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Engineer.
- 2.7 MANUFACTURER'S INSTRUCTIONS
 - A. Informational Submittal: Submit manufacturer's installation instructions for Engineer's knowledge as Contract administrator or for Owner.
 - B. Submit printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, to Engineer in quantities specified for Product Data.
 - C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 09 97 14 - STEEL WATER STORAGE TANK PAINTING

- PART 1 GENERAL
- 1.1 SUMMARY
 - A. This Section includes preparing, priming, and installing protective paint systems for welded steel potable water storage tanks and associated piping improvements.
 - B. Section Includes:
 - 1. Surface preparation.
 - 2. Painting tank interior and exterior.
 - C. The existing reservoir is described as follows:
 - 1. Owner: City of Pendleton, Oregon
 - 2. Location: Water Filtration Plant
 - 3. Function: Potable water reservoir
 - 4. Reservoir Name: Clearwell
 - 5. Nominal Volume: 2.0 million gallons
 - 6. Dimensions (approximate): 118 feet in diameter; 24 feet in height (shell height)
 - 7. Year of construction: Approximately 2002.
 - D. Extent of Work:
 - 1. Surface preparation and application of a protective paint system to the existing steel reservoir interior surfaces and baffle attachment clips.
 - 2. Humidity and temperature control for the interior coating work.
 - 3. Surface preparation and spot coating repairs to the existing exterior steel reservoir surfaces.
 - 4. Reservoir disinfection upon completion of construction.
 - E. Related Work Specified in Other Sections:
 - 1. Surface preparation and application of specified coatings systems in this Section are in addition to shop-priming and surface treatment that may be specified under other sections of the Work or furnished with manufactured equipment.
 - 2. Some items with factory finishes or corrosion-resistant finishes may be scheduled or directed to be painted by the ENGINEER to unify a finish or color scheme at the ENGINEER'S discretion.

- 3. Paint 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. Where items or surfaces are not specifically mentioned, paint these the same as adjacent similar materials or areas. If color or finish is not designated, the ENGINEER will select these from standard colors available for the materials systems specified.
- F. Exclusions:
 - 1. Do not paint the following surfaces unless specified or directed elsewhere: Stainless steel, aluminum, copper, brass, bronze and other corrosion-resistant materials (except for valve bodies and piping); multiple-coated factory-finished baked enamel or porcelain products; concealed areas such as ducts, piping, conduits and items specified elsewhere for special linings and coatings.
 - 2. Do not paint any surfaces scheduled for special coating or waterproofing systems in other sections of the specifications.

1.2 REFERENCE STANDARDS

- A. General:
 - 1. Without limiting the general aspects or other requirements of this Section, Work and equipment shall conform to any applicable requirements of municipal, state and federal codes, laws and ordinances governing the Work, standard specifications, and the paint manufacturer's printed instructions and guidance documentation.
 - 2. The decision of the ENGINEER shall be final as to the interpretation of any codes, laws, ordinances, instructions, guidance documentation, specifications and standards referenced or contained herein and the resolution of any conflicts between any documents.
- B. American Water Works Association:
 - 1. AWWA D102 Coating Steel Water Storage Tanks.
- C. NSF International:
 - 1. NSF 61 Drinking Water System Components Health Effects.
- D. SSPC: The Society for Protective Coatings:
 - 1. Good Painting Practice, SSPC Painting Manual, Volume 1.
 - 2. Specifications and Systems, SSPC Painting Manual, Volume 2.

- E. Published standards of National Association of Corrosion Engineers (NACE) pertaining to coating and coating inspections.
- F. Code of Federal Regulations (CFR)
 - 1. 29 CFR 1910 Occupational Safety and Health Standards (General Industry Standards)
 - 2. 29 CFR 1926.62, Lead in Construction

1.3 DEFINITIONS

- A. Coating Systems: Protective paint systems consisting of primer, intermediate coat(s) and finish-top coats.
- B. Exterior Surfaces: All outside surfaces of the reservoir. Exterior surfaces include the reservoir roof; the reservoir exterior shell; all exterior ladders and ladder cages; vents; piping; roof hatches; sidewall manway access hatches; and any other exterior appurtenances and surfaces not specifically excluded by this Section or elsewhere in these Specifications to receive the specified paint system.
- C. Interior Surfaces: All surfaces contained within the inside of the reservoir which have contact with the stored fluid or the humid atmosphere above the stored fluid. Interior surfaces include the reservoir ceiling and associated structural supports, including joists and columns; reservoir interior shell; reservoir floor; interior ladders; overflow and associated piping; the interior of the center roof support column and exterior of all pipes located within the center roof support column; and any other interior surfaces not specifically excluded by this Section or elsewhere in these Specifications to receive the specified paint system.
- D. Paints: All coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or topcoat.

1.4 PREINSTALLATION MEETINGS

- A. Convene minimum one week prior to commencing Work of this Section.
 - 1. To be held with the OWNER, CONTRACTOR, ENGINEER, and paint manufacturers' representative present.
 - 2. Review minimum acceptable atmospheric conditions under which the specified paint systems can be applied.
 - 3. Low and high temperature limits for application work shall be determined at the sole discretion of the ENGINEER at this time.

1.5 PAINT AND COATING SYSTEMS MANUFACTURER

- A. Provide the paints and coatings specified herein. Paint application shall be in strict accordance with the manufacturer's printed instructions.
- B. Paint Products:
 - 1. All paint products shall be from a single manufacturer.
 - 2. No request for substitution shall be approved which decreases the film thickness designated or the number of coats to be applied, or which offers a change from the generic type of coating specified.
 - 3. Painting shall be done at such times as the CONTRACTOR and ENGINEER may agree upon in order that dust-free and neat work is achieved.
 - 4. All painting shall be in strict accordance with the manufacturer's instructions and shall be performed in a manner satisfactory to the ENGINEER.
- C. Manufacturer's Representative:
 - 1. Provide a paint manufacturer's representative and require paint manufacturer's representative to be at job site for a pre-job conference, when surface preparation is underway, when the first day's painting is in progress and periodically during progress of the work.
- D. Paint Labels:
 - 1. Deliver paint to Site in the original sealed containers with manufacturer's name, product name, type of product, manufacturer's specification or catalog number or federal specification number, and instructions for reducing where applicable.
- E. Paint Colors:
 - 1. Colors will be selected from manufacturer's standard colors as reviewed by ENGINEER and approved by the OWNER.
 - 2. Colors for special coatings that are limited in their availability and color selection will be chosen on the basis of manufacturer's standard colors, provided that the manufacturer's product line represents a color range comparable to similar products of other manufacturers.

1.6 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

- B. Materials List: Submit a list of materials and manufacturer's standard color chart and manufacturer's technical information including analysis and application information for each material proposed for use, federal specification number, and cross references to the specifications. Clearly identify and label each paint system with designated specification number and, within each system, identify and label the product designated for first coat and each additional coat. Submit product data/information sheets for all products proposed for use.
- C. Manufacturer's Application Instructions and Surface Preparation Recommendations: Submit manufacturer's application instructions and surface preparation recommendations for use and reference at the project site.
- D. Safety Data Sheets (SDS): Submit SDS's for all products proposed for use, including paint systems, solvents, thinners and mineral spirits to be used for degreasing, surface preparation and thinning of paint systems for review by the ENGINEER and approval by the paint manufacturer's representative. Applicable SDS's shall be kept on the Site for the entire time such products are present on the Site.
- E. Certificate: Submit manufacturer's certificate of compliance with the specifications and standards signed by a representative in the manufacturer's employ who is authorized by the manufacturer to execute the certificate.
- F. Samples:
 - 1. Submit two paper chip samples, 2 inches square, illustrating range of colors available for each scheduled surface finishing product. The ENGINEER may request additional samples on 12-inch square section of substrate using the required finish system.
 - 2. Provide painted surface areas at the Site for approval of main color selections.
 - 3. Provide a representative sample of sand to be used for any required non-skid surfaces.
- G. Submittal Documents: Submit the above-specified materials in a single project submittal in electronic format.
- H. Field Quality-Control Submittals:
 - 1. Indicate results of Contractor-furnished tests and inspections including, but not limited to, ambient environmental conditions, surface profile measurements, DFT measurements, etc.
 - 2. Provide letters of coating application acceptance from paint and coating systems manufacturer representative.

3. Provide certification letters from NACE Certified Level 2 Coating Inspector and surface preparation conformance with Specifications for any shop-coating procedures performed as may be applicable to the project.

1.7 QUALITY ASSURANCE

- A. Comply with AWWA D102
- B. Materials in Contact with Potable Water: Certified to NSF 61.
- C. Obtain paint products from single source for Work specified in this Section.
- D. Provide all testing equipment and conduct Field Quality Control procedures as specified in Part 3 of this Section.

1.8 PAINT DELIVERY, HANDLING AND STORAGE

- A. Container Labeling: Include manufacturer's name, type of coating, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- B. Inspection:
 - 1. Accept materials on Site in manufacturer's sealed and labeled containers.
 - 2. Inspect for damage and to verify acceptability.
- C. Store materials in ventilated area and otherwise according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.9 SAFETY AND HEALTH REQUIREMENTS

- A. Comply with all applicable Oregon OSHA, EPA, and DEQ regulations relating to painting/coating preparation, application and all associated activities.
- B. Conform to all applicable safety requirements set forth by manufacturer's printed instructions and applicable technical bulletins and manuals.
- C. Provide and require the use of personal protective life-saving equipment for persons working within or about the Site.

- D. Ladders, Scaffolding and Rigging:
 - 1. All ladders, scaffolding and rigging shall be designed for their intended uses.
 - 2. Ladders and scaffolding shall be erected where requested by ENGINEER to facilitate inspection and be moved by the CONTRACTOR to locations requested by the ENGINEER.
- E. Ventilation:
 - 1. Where ventilation is used to control hazardous exposure, all equipment shall be explosion-proof.
 - 2. Ventilation accomplished by educting air, vapors, and other hazardous material from the confined space shall be conducted to reduce the concentration of air contaminants to the degree a hazard does not exist.
 - 3. Forced air eduction during blast cleaning and coating application operations is mandatory.
 - 4. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured.
- F. Protective Equipment:
 - 1. Provide for the duration of the coating/painting operations suitable personal breathing apparatus, protective clothing and safety gear for the use of the ENGINEER's on-site representative.
 - 2. All such equipment shall be provided and maintained in excellent working order and shall be available at all times during painting and coating operations.
- G. Grounding: Blasting, spray and air hoses shall be grounded to prevent accumulation of charges of static electricity.
- H. Illumination:
 - 1. Spark-proof artificial lighting shall be provided for all work in confined spaces. Light bulbs shall be guarded to prevent breakage.
 - 2. Lighting fixtures and flexible cords shall comply with the requirements of NFPA 70: National Electric Code for the atmosphere in which they will be used.
 - 3. Whenever required by the ENGINEER, the CONTRACTOR shall provide additional illumination and necessary supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the ENGINEER.

- I. Solvents:
 - 1. The solvents used with specified protective coatings may be explosive at low concentrations and may be highly toxic. Because of toxicity, the maximum allowable concentration of vapor shall be kept below the maximum safe concentration for eight-hour exposure and the lower explosive limit (LEL) must be strictly adhered to.
 - 2. If existing coatings or paints to be removed contain lead or other hazardous materials, all regulations related to safety of personnel and handling of such materials shall be strictly adhered to.
- J. Mixing and Application of Coatings and Paints:
 - 1. During mixing and application of coatings and paints, all flames, welding and smoking shall be prohibited in the vicinity.
 - 2. When handling and mixing coatings and paints, workers shall wear gloves and eye shields.
 - 3. Fire extinguishers of the appropriate type shall be provided by CONTRACTOR and kept at the project site during all operations.
- K. Noise: Whenever the occupational noise exposure exceeds the maximum allowable sound levels, the CONTRACTOR shall provide and require the use of approved ear protective devices.
- L. Notification to Public: Notify all adjoining property owners within twenty-four (24) hours of any and all on-site surface preparation and/or painting activities.
- M. Dust Prevention and Control: Applicable environmental regulations for dust prevention shall be strictly enforced. Emissions from reservoir construction activities including abrasive blasting and painting shall be controlled to be within applicable environmental regulations.
 - 1. Where a reservoir may be located in close proximity to existing residential, commercial, or industrial development, conduct all operations so as to confine abrasive blasting debris and paint overspray to within the bounds of the Site. Take all precautions necessary to prevent adverse off-site consequences of painting operations.
 - 2. Any complaints received by the OWNER or ENGINEER shall be delivered to the CONTRACTOR for resolution. The CONTRACTOR shall immediately halt the work and shall take whatever corrective action is required to mitigate any such problems.

3. All costs associated with protection of off-site properties and/or correction of damage to property as a result of painting operations shall be borne directly by the CONTRACTOR at no additional expense to the OWNER.

1.10 AMBIENT CONDITIONS

- A. Do not apply paint in rain, snow, fog or mist, or when steel surface temperature is below dew point as specified by coating manufacturer which will result in condensation.
- B. Do not apply materials when surface and ambient temperatures are outside temperature ranges indicated by paint product manufacturer.
- C. Prevent rapid changes in temperature during curing and thermal shock cracks in finish material.

1.11 WARRANTY

- A. A warranty inspection will be conducted between the tenth and twelfth months following completion and acceptance of all coating and painting work. The OWNER, the ENGINEER, the CONTRACTOR shall be present at this inspection.
- B. All defective work found in the warranty inspection shall be repaired at the sole cost of the CONTRACTOR in strict accordance with this Section and to the satisfaction of the ENGINEER.
- C. The warranty inspection shall consist of the following:
 - 1. The OWNER shall establish the date for the inspection and shall notify the CONTRACTOR at least 30 days in advance.
 - 2. Interior Coating Systems:
 - a. The entire interior coating systems, as installed under this Project, shall be visually inspected.
 - b. If additional inspection is deemed necessary by the ENGINEER, such inspection shall be accomplished as directed in accordance with the applicable provisions of this Section.
 - c. All defective coating, as well as damaged or rusting spots of the reservoir, shall be satisfactorily repaired by and at the sole expense of the CONTRACTOR.
 - d. All repaired areas shall then be electrically tested as specified in the Field Quality Control procedures within Part 3 of this Section.

- 3. Exterior Coating Systems:
 - a. The entire exterior paint system, as installed under this Project, shall be visually inspected.
 - b. If additional inspection if deemed necessary by the ENGINEER, such inspection shall be accomplished as directed in accordance with the application provisions of this Section.
 - c. All defective, damaged or rusting areas shall be satisfactorily repaired by and at the sole expense of the CONTRACTOR.
- 4. The ENGINEER will prepare and deliver to the CONTRACTOR an inspection report covering the first anniversary inspection, setting forth the number and type of failures observed, the percentage of the surface area where failure has occurred, and the names of the persons making the inspection.
- 5. Upon completion of inspection and receipt of the inspection report as noted herein, the OWNER shall establish a date for the CONTRACTOR to proceed with remedial work. Any delay on part of the CONTRACTOR to meet schedule established by the OWNER shall constitute breach of this Contract and OWNER may proceed to have defects remedied as outlined under the General Conditions.
- 6. Any location where the coating or paint has peeled, bubbled, or cracked and any location where rusting is evident shall be considered to be a failure of the system. The CONTRACTOR shall make repairs at all points where failures are observed by removing the deteriorated coating or paint, cleaning the surface, and recoating or repainting with the same system. If the area of failure exceeds 25 percent of the total coated or painted surface, the entire coating or paint system may be required to be removed and recoated or repainted in accordance with the original specification.
- 7. All costs for the warranty inspection and all costs for repair shall be borne by the CONTRACTOR. The CONTRACTOR shall reserve an appropriate amount for inspection, testing, repair and disinfection as no additional allowance will be paid by the OWNER for the warranty inspection and repair.

PART 2 PRODUCTS

- 2.1 MATERIALS, GENERAL
 - A. Schedules:
 - 1. Paint systems, surface treatments, and finishes are indicated in the "Schedules" of the contract documents or as described in this Section.

- 2. Prior to beginning work, the ENGINEER will furnish color schedule for surfaces to be painted.
- 3. Vary undercoats slightly from color of next coat.
- 4. The color schedule will consist of colors as selected by the OWNER and approved by the ENGINEER and from approved submittals, at the ENGINEER'S discretion.
- B. Quality:
 - 1. Provide the best quality grade of the various types of coatings as regularly manufactured by acceptable paint materials manufacturers.
 - 2. Materials not displaying the manufacturer's identification as a standard, best-grade product will not be acceptable.
- C. Paint Coordination:
 - 1. Provide topcoats which are compatible with prime coats used on the Project or which are compatible with existing topcoats on existing facilities.
 - 2. Review other sections of these Specifications in which prime coats are to be provided to ensure compatibility of total coatings system for various substrates.
 - 3. Upon requests from other trades, furnish information on the characteristics of finish materials proposed for use, to ensure compatible prime coats are used.
 - 4. Provide barrier coats over incompatible primers or remove the primer and re-prime as required.
 - 5. Notify the ENGINEER in writing of any anticipated problems using specified coating systems with substrates primed by others or on existing finishes.
- D. Proprietary names used to designate colors, materials, or equipment are not intended to imply that products of the named manufacturers are required to the exclusion of equivalent products, materials, equipment and equal color ranges of other manufacturers.
- E. Federal Specifications, where used, establish the minimum acceptable quality for paint materials. Provide a written certification from the paint manufacturer that materials provided meet or exceed these minimums.
- F. Color Pigments:
 - 1. Color pigments shall be pure, non-fading, and applicable and suitable to the substrates and services indicated.

- 2. Pigments shall be lead free.
- G. Use only thinners approved by the paint manufacturer and only within recommended limits.

2.2 SURFACE PREPARATION MATERIALS

- A. Abrasives
 - 1. Abrasives used in blast cleaning operations shall be clean, well graded, nonmetallic and free of contaminants which would interfere with adhesion of the coatings to the substrate material.
 - 2. Selection of abrasive size and type shall be based upon the type, grade and surface condition of the steel to be cleaned and on the finished surface to be produced for the subsequent paint system.
 - 3. Blast cleaning abrasives shall meet or exceed the following minimum criteria:

<u>Description</u>	<u>Criteria</u>	
Shape	Angular	
Hardness (Mohr Scale)	8	
Specific Gravity	3.3	
Bulk Density (1lbs/cu. ft.)	110	
Free Silica (% by wt.)	0	

- 4. Blast cleaning abrasive particle size shall be that which will produce a 2.0 mil (.002 inch) anchor profile on the substrate metal or in accordance with recommendations of the manufacturers of the specified coating system to be applied, subject to approval by the ENGINEER.
- 5. Blast cleaning abrasive manufacturer:
 - a. Blast cleaning abrasives shall be Kleen Blast Abrasive as manufactured by Kleen Blast, Green Diamond Abrasive as manufactured by Green Diamond Sand Products, or approved equal.
- 6. Lead Stabilizing Additives: For coatings containing lead removed by blast cleaning, a lead stabilizing abrasive additive shall be used in concentrations recommended by the additive manufacturer. Lead stabilizing additive shall be Blastox as manufactured by The TDJ Group, Fesi-Bond as manufactured by Green Diamond Sand Products, or approved equal.
- B. Waterjet Wash Solutions: Solutions shall consist of a 5% concentration of tri-sodium phosphate (TSP).

C. Tool Cleaning: Hand and power tools shall be used to adequately prepare surface areas per surface preparation specifications methods specified herein.

2.3 INTERIOR PAINT SYSTEMS

- A. General:
 - 1. Interior paint systems for wet surfaces of tanks must have been approved by the National Sanitation Foundation (NSF) under Standard 61 for indirect additives.
 - 2. The paint systems shall conform to regulations and applicable requirements of local, State and Federal air pollution regulatory agencies.
 - 3. Products containing perchloroethylene will not be permitted.
- B. Interior paint systems shall consist of a zinc/epoxy system.
 - 1. In accordance with AWWA Standard D102, Inside Coating System No. 5 for surfaces above the water line.
 - 2. In accordance with AWWA Standard D102, Inside Coating System No 2 for surfaces below the water line.
- C. Coatings and sequence of their application shall be as described below:
 - 1. Prime coat for ceiling and associated systems including overflow piping, and walls from the ceiling down to a level two (2) feet below the lowest normal reservoir operating level:
 - a. Material: Zinc-rich urethane or approved equal material.
 - 1) Tnemec Series 94-H₂O, Hydro Zinc, Zinc-rich urethane primer.
 - 2) Approved equal.
 - b. Dry Film Thickness: 2.5 to 3.5 mils.
 - c. The lowest normal reservoir operating level is 10 feet above the reservoir floor at the reservoir shell; therefore, this prime coat shall be carried from 10 feet above the reservoir floor at the reservoir shell to the top of the walls and the ceiling.
 - 2. Prime coat for remainder of interior surfaces including walls, floor, columns, pipes and ladders:
 - a. Material: Polyamide epoxy or approved equal material.
 - 1) Tnemec Series 20 Pota-Pox

- 2) Approved equal.
- b. Dry Film Thickness: 3.0-4.0 mils
- c. Color: White.
- 3. Intermediate coat for all primed surfaces except column base plate:
 - a. Material: Polyamide epoxy or approved equal material.
 - 1) Tnemec Series 20 Pota-Pox.
 - 2) Approved equal.
 - b. Dry Film Thickness: 4.0-5.0 mils.
 - c. Color: Light blue or Beige.
 - d. All weld seams and pitted areas shall be back-rolled or brushed with the intermediate coat.
- 4. Finish coat for all interior surfaces except column base plate:
 - a. Material: Polyamide epoxy or approved equal material.
 - 1) Tnemec Series 20 Pota-Pox
 - 2) Approved equal.
 - b. Dry Film Thickness: 4.0-5.0 mils.
 - c. Color: White.
- 5. Finish coat for column base plate:
 - a. Material: Modified Polyurethane or approved equal material.
 - 1) Tnemec Series 264 Elasto-Shield
 - 2) Approved equal
 - b. Dry Film Thickness: 50 mils.
- 6. The completed finished coating system on the ceiling and associated support system including columns, overflow and associated piping, and walls from the ceiling down to a level that is two (2) feet below the lowest normal reservoir operating level as defined in Paragraph 2.3.C.1 above shall be 10.5-13.5 mils DFT minimum. The completed finished coating system on all other interior surfaces shall be 11.0-14.0 mils DFT minimum.

- D. Fast-cure versions of the paint products specified above may be substituted upon approval from the ENGINEER.
- 2.4 EXTERIOR PAINT SYSTEMS
 - A. General:
 - 1. Conform to the regulations and applicable requirements of local, State and Federal air pollution regulatory agencies.
 - B. Exterior paint system for spot repairs (Inorganic WB Epoxy / HDP Acrylic Polymer Finish) and for new structural steel (Zinc-rich Urethane Shop Primer / Inorganic WB Epoxy Intermediate / HDP Acrylic Polymer Finish).
 - C. Coatings and general sequence of their application shall be as described below:
 - 1. Exterior Spot Repair Primer, including field repair as needed for shop primed steel:
 - a. Material: Polyamide epoxy or approved equal material.
 - 1) Tnemec Series 20 Pota-Pox
 - 2) Approved equal.
 - b. Dry Film Thickness: 3.0 to 5.0 mils.
 - 2. Exterior Intermediate Coat for Spot Repairs and New Structural Steel:
 - a. Material: Polyamide Epoxy or approved equal material.
 - 1) Tnemec Series 66 Epoxoline
 - 2) Approved equal.
 - b. Dry Film Thickness: 50 mils.
 - c. Color: Similar color as the finish top coat.
 - 3. Exterior Finish Top Coat for Spot Repairs and New Structural Steel:
 - a. Material: Aliphatic Acrylic Polyurethane or approved equal material.
 - 1) Tnemec Series 73 Endura-Shield.
 - 2) Approved equal.
 - b. Dry Film Thickness: 50 mils.
 - c. Color: As selected by the OWNER. Confirm color with OWNER and ENGINEER prior to ordering.

4. The completed finished coating system over new structural exterior surface and appurtenances shall be between 103 and 105 mils DFT and on spot repaired areas shall be between 103 and 105 mils DFT.

2.5 WATERJET CLEANING EQUIPMENT

- A. Performance Criteria:
 - 1. Deliver a flow rate of 3.5 gallons per minute (gpm) at a pressure of 3,000 pounds per square inch (psi).
 - 2. Nozzle manufacture and geometry shall provide a rotating nozzle which directs the high-pressure spray at a 90 degree angle to the axis of the pressure wand.

2.6 MOISTURE CONTROL EQUIPMENT

- A. Moisture control equipment shall be used on Project to complete the specified interior surface preparation and coating as specified herein.
- B. Dehumidifier:
 - 1. Design: Solid desiccant design having a single rotary desiccant bed capable of continuous operation with fully automatic operation. No liquid desiccant, granular or loose lithium chloride drying systems shall be accepted.
 - 2. Performance Criteria:
 - a. Continuously deliver air with a maximum relative humidity of 11%.
 - b. Supply the space with two complete air changes per hour.
 - c. Supply sufficient dry air to assure that the air adjacent to the surfaces to be abrasive blasted or coated shall not exceed 35% relative humidity at any time during the blasting, coating or curing cycle.
 - d. Capable of depressing the dew point in the space 10 degrees F below ambient air temperature within twenty minutes.

2.7 HEATING EQUIPMENT

- A. Auxiliary heaters or chillers may be necessary to maintain the surface temperature at a level acceptable to the coating manufacturer's application parameters.
- B. Coordination with Dehumidification Equipment:
 - 1. Heating equipment must be coordinated with and approved for use by the manufacturer of the dehumidification equipment.

- 2. If is necessary to filter the air escaping the space, the filtration system must be designed to match the air volume of the dehumidification equipment in such a way that it will not interfere with the dehumidification equipment's capacity to control the space as described herein.
- C. Heating Equipment:
 - 1. Design: Only electric or indirect gas fired auxiliary heaters shall be used. No direct fired space heaters will be allowed during the blasting, coating or curing phases.
 - 2. Performance Criteria:
 - a. Equipped with controls that automatically turn the heater off if the airflow is interrupted or the internal temperature of the heater exceeds its design temperature or that of the supply duct.
 - b. Air heaters or refrigeration equipment are not acceptable as a substitute for dehumidification.

PART 3 EXECUTION

3.1 INSPECTION

- A. The CONTRACTOR, ENGINEER and local painting manufacturer representative shall jointly inspect surfaces to receive finishes.
 - 1. Examine surfaces scheduled to be finished prior to commencement of Work, and report conditions capable of affecting proper application.
 - 2. At the ENGINEER's direction, correct defects prior to application of coatings systems specified herein.
 - 3. Painting over the work of other trades does not constitute acceptance of previous work and surfaces by ENGINEER.

3.2 PROTECTION

- A. Cover miscellaneous tank openings, except as required for ventilation, to avoid accumulation of cleaning residue and paint material in overflows, drains, inlet and outlet piping.
- B. Exterior Tank:
 - 1. Cover tank vents without sealing tight to prevent contamination of tank interior.
 - 2. Maintain ventilation of tank interior.

- C. Protect equipment from abrasion and paint damage.
- D. Cleaning and painting tank exterior after tank is filled is not permitted.

3.3 POST-FABRICATION AND ERECTION CUT-OUTS

- A. One cut-out of the reservoir shell will be allowed for the temporary purpose of moving equipment into, out of, or off of the steel tank structure.
 - 1. Cut-outs shall be accommodated by cutting out and re-welding an entire full-height fabricated steel shell panel section at the shell pattern layout seams.
 - 2. Special cut-outs within a fabricated steel panel will not be allowed.
 - 3. CONTRACTOR shall submit cut-out location and temporary reinforcement plan for review and approval prior to execution
- B. The intent of this specification is to preserve the aesthetic appearance of existing symmetrical and uniform fabricated panel layouts and weld seams. It is not the intent of this specification to restrict the CONTRACTOR installing or removing equipment into or from the structure.
- C. For this project, the cut-out shall be field located by the CONTRACTOR in the presence of the ENGINEER and OWNER.
- D. The quality of reservoir shell welded joints following re-installation of the door sheet (cut-out) shall be determined by visual inspection and the radiograph method as specified in AWWA D100- (latest edition) Sec. 11. The Contractor shall provide all necessary radiographic testing equipment and shall perform any and all tests as may be required by the ENGINEER, minimum one radiograph per each vertical or horizontal seam. All radiographic films shall become the property of the OWNER.

3.4 SURFACE PREPARATION

- A. General:
 - 1. Unless specified otherwise herein, all surface preparation, coating and paint application shall conform to applicable standards:
 - a. The Society for Protective Coatings (SSPC).
 - 1) All painting work shall be conducted in accordance with SSPC Painting Manual, Volume 1 Good Painting Practices.
 - b. American Water Works Association (AWWA).
 - c. Manufacturer's printed instruction.

- 2. Skilled Craftsmen:
 - a. All work shall be performed by skilled craftsmen qualified to perform the required work in a manner comparable with the best standards of practice.
 - b. Continuity of personnel shall be maintained and transfers of key personnel shall be coordinated with the ENGINEER.
- 3. Supervisor:
 - a. Provide a supervisor to be at the Site during surface preparation, paint coatings application and disinfection operations.
 - b. Supervisor shall have the authority to sign change orders, coordinate work and make other decisions pertaining to the fulfillment of the work requirements.
- 4. Rolling Scaffolds:
 - a. Blast cleaning from rolling scaffolds shall only be performed within the confines of the interior perimeter of scaffolds.
 - b. Reaching beyond the limits of the perimeter will be allowed only if the blast nozzle is maintained in a position which will produce a profile acceptable to ENGINEER.
- 5. Slag and weld metal accumulation and spatters not previously removed by others including the fabricator, erector or installer shall be removed by chipping and grinding. All sharp edges shall be peened, ground or otherwise blunted.
- 6. Evaluation:
 - a. Surface evaluated before and after preparation will be based upon comparison with:
 - 1) SSPC-VIS 1, Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning.
 - 2) SSPC-VIS 2, Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces.
 - 3) SSPC-VIS 3, Guide and Reference Photographs for Steel Surfaces Prepared by Power- and Hand-Tool Cleaning.
 - 4) SSPC-VIS 4, Guide and Reference Photographs for Steel Surfaces Prepared by Waterjetting.

- 5) SSPC-VIS 5, Guide and Reference Photographs for Steel Surfaces Prepared by Wet Abrasive Blast Cleaning.
- 6) ASTM D610, Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces.
- 7) ASTM D2200, Standard Practice for Use of Pictorial Surface Preparation Standards and Guides for Painting Steel Surfaces.
- b. Anchor Profile: Anchor profile for prepared surfaces shall be measured by using a non-destructive testing instrument such as a Keane-Tator Surface Profile Comparator or Testex Press-O-Film System to be provided by the CONTRACTOR.
- 7. The latest revision of the following surface preparation specifications of The Society for Protective Coatings (SSPC) shall form a part of this Specification:
 - a. Solvent Cleaning (SSPC-SP1): Removal of oil, grease, dirt, soil, salts and contaminants by cleaning with solvent, vapor, alkali, emulsion, or steam.
 - b. Hand Tool Cleaning (SSPC-SP2): Removal of loose rust, loose mill scale, and loose paint to degree specified, by hand chipping, scraping, sanding, and wire brushing.
 - c. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, loose mill scale, and loose paint to degree specified, by power tool chipping, descaling, sanding, wire brushing or wire impact tools, and grinding.
 - d. White Metal Blast Cleaning (SSPC-SP5): Removal of all visible rust, mill scale, paint and foreign matter by blast cleaning by wheel or nozzle (dry or wet) using sand, grit, or shot.
 - e. Commercial Blast Cleaning (SSPC-SP6): Removal of all visible rust, mill scale, paint and foreign matter by blast cleaning. Staining is permitted on no more than 33% of each 9 in² area of the cleaned surface.
 - f. Brush-off Blast Cleaning (SSPC-SP7): Blast cleaning of all except tightly adhering residues of mill scale, rust, and coatings, while uniformly roughening the surface.
 - g. Pickling (SSPC-SP8): Complete removal of rust and mill scale by acid pickling, duplex pickling, or electrolytic pickling.
 - h. Near-White Blast Cleaning (SSPC-SP10): Removal of all visible rust, mill scale, paint and foreign matter by blast cleaning. Staining is permitted on no more than 5% of each 9 in² area of the cleaned surface.

- i. Power Tool Cleaning to Bare Metal (SSPC-SP11): Complete removal of all rust, scale, and paint by power tools, with resultant minimum surface profile of 25 μ m (1 mil).
- j. Industrial Blast Cleaning (SSPC-SP14): Between SP 7 (brush-off blast cleaning) and SP 6 (commercial blast cleaning). The intent is to remove as much coating as possible, but tightly adherent rust, mill scale, and coating can remain on 10% of each 9 in² area of the cleaned surface.
- k. Commercial Grade Power Tool Cleaning (SSPC-SP15): Between SP 3 (power tool cleaning) and SP 11 (power tool cleaning to bare metal). Removes all rust and paint but allows for random staining on up to 33% of each 9 in² area of the cleaned surface; requires a minimum surface profile of 25 μ m (1 mil).
- I. Brush-off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-ferrous Metals (SSPC-SP16): Requirements for removing loose contaminants and coating from coated and uncoated galvanized steel, stainless steels, and non-ferrous metals. Requires a minimum 19 μ m (0.75 mil) surface profile on bare metal substrate.
- m. Waterjet Cleaning of Metals Clean to Bare Substrate (SP WJ-1): Cleanest waterjetting level, requires the cleaned metal to be free of all visible oil, grease, dirt, rust and other corrosion products, previous coatings, mill scale, and foreign matter.
- n. Waterjet Cleaning of Metals Very Thorough Cleaning (SP WJ-2): Requires the cleaned metal surface to be free of all visible oil, grease, dirt, rust and other corrosion products, except for randomly dispersed stains of rust and other corrosion products, tightly adherent thin coatings, and other tightly adherent foreign matter previous coatings, mill scale, and foreign matter over no more than 5% of each 9 in² area of the cleaned surface.
- o. Waterjet Cleaning of Metals Thorough Cleaning (SP WJ-3): Requires removal of all visible contaminants as in WJ-2 above. Randomly dispersed staining as described in WJ-2 is limited to no more than 33% of each 9 in² area of the cleaned surface.
- p. Waterjet Cleaning of Metals Light Cleaning (SP WJ-4): Requires removal of all visible oil, grease, dirt, dust, loose mill scale, loose rust and other corrosion products, and loose coating. Any residual material shall be tightly adhered to the metal substrate.
- 8. All welds, when required, shall be neutralized with a suitable chemical compatible with the specified coating or paint materials.

- 9. Keep the area of Work in a clean condition.
 - a. Do not permit blasting materials to accumulate so as to constitute a nuisance or hazard to the prosecution of Work or the operation of the existing facilities.
 - b. Spent abrasives and other debris shall be removed at the CONTRACTOR's expense as directed by the ENGINEER.
 - c. If waste is determined to be hazardous, disposal by the CONTRACTOR shall meet requirements of all regulatory agencies for handling and disposing of such wastes as noted elsewhere in this Section.
- 10. Remove residue from surface preparation before paint application is begun.
 - a. Blast-cleaned surfaces shall be cleaned prior to application of specified coatings or paints through a combination of blowing with clean dry air, brushing/brooming and/or vacuuming as directed by the ENGINEER.
 - b. Air hoses for blowing shall be at least ½-inch in diameter and shall be equipped with a shut-off device.
- 11. Any surfaces not coated/painted the same day they are prepared to receive the specified paint systems shall be re-prepared prior to coating/painting, unless the ENGINEER-approved moisture control equipment is used by the CONTRACTOR to maintain conditions that allow extended blasting schedules prior to application of prime coats.
- B. Surface Preparation, Interior Surfaces
 - 1. Prepare all interior surfaces of the reservoir and associated interior structures according to SSPC-SP 10, Near-White Metal Blast Cleaning.
 - 2. Anchor profile shall be measured as described elsewhere in this Section.
 - 3. Following blast cleaning and prior to painting, the following additional operations shall be performed:
 - a. Material Removal: Remove spent abrasives and existing coating waste material from all blasted surfaces. This shall be accomplished by blowing off all blasted surfaces with clean, dry air and vacuum cleaning or blooming/sweeping of all waste material.
 - b. Remove or cause to be removed all traces of rust bloom or deposits of oil, grease, or other contaminants which become visible prior to application of the prime coat.

- c. Pitting Inspection and Repairs :
 - 1) The ENGINEER and CONTRACTOR will perform an inspection of the blasted substrate metal for identification of areas with significant pitting of the substrate metal and any surface deficiencies.
 - 2) Pitting of the substrate metal to a depth greater than 1/8-inch shall be ground out with a suitable grinding tool and filled with weld filler materials so that the deposited weld filler material forms a convex surface over the base metal. This convex surface shall then be ground flush to the base metal prior to any additional surface preparation and subsequent application of the prime coat.
 - 3) Surface deficiencies identified shall be repaired to the satisfaction of the ENGINEER.
- 4. Humidity and Temperature Control
 - a. General: Humidity and temperature control, when specified and required elsewhere in this Section for interior spaces, shall be provided using appropriate specialized equipment.
 - b. Dehumidification: Dehumidification equipment shall be used to control the environment in the space on a continuous basis 24 hours a day during blast cleaning, coating and coating curing unless otherwise approved by ENGINEER.
 - c. Heating Equipment: Auxiliary heaters or chillers may be necessary to maintain the surface temperature at a level acceptable to the coating manufacturer's application parameters.
 - 1) Heaters and coolers shall be installed in the process air supply duct between the dehumidifier and the space as close to the space as possible.
 - 2) The space to be controlled shall be sealed off as well as possible allowing air to escape at the bottom of the space away from the point where the dehumidified air is being introduced.
 - 3) Maintain a slight positive pressure in the space unless the dust from the blasting operation is hazardous.
 - 4) Do not recirculate the air from the space or from filtration equipment back through the dehumidifier when coating or solvent vapors are present.
- C. Surface Preparation, Exterior Surfaces
 - 1. For new structural steel and appurtenance construction:
 - a. Shop prepare all new exterior structures according to SSPC-SP 10, Near-White Metal Blast.
 - b. Field prepare all new exterior structures where coating was held back, or welding or other damage has occurred, according to SSPC-SP 11, Power Tool Cleaning to Bare Metal.
 - 2. For existing reservoir surfaces, follow the procedures outlined in items 3 through 6 below.
 - 3. All exterior surfaces of the reservoir and associated exterior structures shall be prepared with a 50% bleach solution to kill mildew or other biological growth prior to waterjet cleaning.
 - 4. Waterjet Cleaning:
 - a. After applying bleach solution, all exterior surfaces of the reservoir and associated exterior structures shall be waterjet cleaned with a 5% TSP solution.
 - b. Waterjet cleaning equipment shall comply with requirements specified elsewhere in this Section.
 - c. Prepare all exterior metal surfaces according to SP WJ-4, Waterjet Cleaning of Metals, Light Cleaning. Remove all but the most tightly adherent paint per SSPC surface preparation specification. Acceptable surface preparation by waterjet cleaning shall be determined by hand-tool cleaning of adhered topcoat paint. Topcoat paint which cannot be removed by hand-tool cleaning shall be considered acceptable to remain.
 - 5. Following waterjet cleaning and prior to spot surface preparation and painting, the following additional operations shall be performed, as required:
 - a. Pitting Inspection and Repairs:
 - 1) The ENGINEER and CONTRACTOR will perform an inspection of the substrate metal for identification of areas with significant pitting of the substrate metal and any surface deficiencies.
 - 2) Pitting of the substrate metal to a depth greater than 1/8-inch shall be ground out with a suitable grinding tool and filled with weld filler materials so that the deposited weld filler material forms a convex surface over the base metal. This convex surface shall then be ground flush to the base metal

prior to any additional surface preparation and subsequent application to application of the prime coat. Surface deficiencies identified shall be repaired to the satisfaction of the ENGINEER.

- 6. Following waterjet cleaning and prior to spot surface preparation and painting, the following surface preparation of all locations of compromised coating shall be performed:
 - a. Spot Surface Preparation: All locations where the existing coating system has failed and there is visible rust or other surface contamination shall be prepared according to SSPC-SP 11, Power Tool Cleaning to Bare Metal.
 - b. Care shall be taken to feather the surface preparation into the existing coating to remain in order to create a surface that will easily accept the new coating system primer.
 - c. Follow all manufacturer requirements regarding minimum surface profile of the steel to receive the new spot primer.

3.5 APPLICATION

- A. General:
 - 1. According to SSPC Paint Application Specification PA 1 Shop, Field and Maintenance Painting, latest revision.
 - 2. Printed literature of the manufacturer of the coating and paint materials.
 - 3. As further specified within this Section.
- B. Ventilation: Provide for adequately ventilated enclosed rooms and spaces during painting and curing periods.
- C. Thickness:
 - 1. Apply coatings in strict conformance with the manufacturer's application instructions.
 - 2. Apply each coat at the rate specified by the manufacturer to achieve the dry mil thickness specified.
 - 3. If material must be diluted for application by spray gun, build up more coating to achieve the same thickness as undiluted material.
 - 4. Correct any apparent deficiencies of film thickness by the application of an additional coat.

D. Thinning:

- 1. Do not thin pain unless approved by the ENGINEER.
- 2. Only use thinner recommended by paint manufacturer which has been determined to be compatible with specified coating system.
- 3. Thin paint in accordance with the manufacturer's directions.
- E. Application:
 - 1. Each application of coatings shall be applied evenly, free of brush marks, sags, runs and no evidence of poor workmanship.
 - 2. Care shall be exercised to avoid lapping on glass or hardware.
 - 3. Coatings shall be sharply cut to lines.
 - 4. Finished surfaces shall be free from defects or blemishes.
- F. Interior Coatings: By airless spray application, except where back rolling or striping is performed.
- G. Exterior Paint Application: By roller only.
 - 1. Brushing may be used to repair paint in areas of steel modifications.
 - 2. Spray application will not be allowed unless otherwise approved.
- H. Brush Coats:
 - 1. All welds, laps, edges, inside angles, and irregular surfaces shall receive a brush coat of the specified product prior to application of each complete coat.
 - 2. Paint may be applied as a spray stripe coat and back brushed by hand.
 - 3. Coatings shall be brushed in multiple directions to insure penetration and coverage, as directed by the ENGINEER.
- I. At conclusion of each day's cleaning and coating operations, a 6-inch wide strip of cleaned substrate shall remain uncoated to facilitate locating the point of origin for each successive day's cleaning operations.
- J. Curing Time:
 - 1. Do not apply the next coat of paint until each coat is dry.
 - 2. Test non-metallic surfaces with a moisture meter.

- 3. The manufacturer's recommended curing time shall mean an interval under normal conditions that is to be increased to allow for adverse weather or curing conditions.
- 4. Paint manufacturer's representative shall verify by cure testing the complete cure of coatings systems used for immersion service.
- K. Attachments, Accessories and Appurtenance: All attachments, accessories, and appurtenances shall be prepared and coated in the same manner as specified for adjacent structures, unless otherwise specified elsewhere in this Section or other sections of the Specifications.
- L. Protection of Coated Surfaces:
 - 1. Protective coverings or drop cloths shall be used to protect floors, fixtures, equipment, prepared surface and applied coatings.
 - 2. Personnel entering the reservoir or walking on the exterior roof of the reservoir shall take precautions to prevent damage or contamination of coated surfaces.
 - 3. Care shall be exercised to prevent coatings from being spattered onto surfaces which are not to be coated.
 - 4. Surfaces from which such material cannot be removed satisfactorily shall be repainted as required to produce a finish satisfactory to the ENGINEER.
- M. Atmospheric Conditions: No coatings shall be applied under the following limitations:
 - 1. Temperature: If temperatures are anticipated to be as noted below within eight hours after application of the coating.
 - a. Epoxy Coatings: Surface to be coated is below 55 degrees F. Exceptions may be approved by ENGINEER with concurrence from manufacturer if material is "low temperature" type.
 - b. Inorganic Zinc or Urethane Finishes: Surface to be coated is below 40 degrees F.
 - c. When the temperature is less than 5 degrees F above the dew point.
 - 1) The dew point shall be measured by use of an instrument such as a sling psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychometric Tables or other instrument acceptable to the ENGINEER.
 - d. When the temperature of the surface to be coated is above 125 degrees F for all coating types.

- 2. Surfaces: When the surfaces to be coated are wet or damp or there is the presence of rain, snow, fog or mist.
- 3. If any of the above adverse conditions are present, the coating or paint application shall be postponed until conditions are favorable. The day's coating or paint application shall be completed in time to permit the film sufficient drying time prior to the onset of adverse atmospheric conditions.

3.6 SHOP QUALITY CONTROL

- A. Quality assurance procedures and practices shall be used to monitor all phases of surface preparation, application and inspection of all shop coating performed as part of this project. A NACE Certified Level 2 Coating Inspector shall oversee all shop coating performed and provide the ENGINEER with written reports on a form approved by the ENGINEER prior to work being performed.
- B. The application of permanent shop-applied primers will be allowed for exterior surfaces of the reservoir provided that a NACE Certified Level 2 Coating Inspector observes the procedures and provides written reports certifying all work to be in conformance with these Specifications.
- C. Unless approved by the ENGINEER at the request of the CONTRACTOR, the application of permanent shop-applied primers will not be allowed for interior surfaces of the reservoir.
- D. Procedures or practices not specifically defined herein may be used provided they meet recognized and acceptable professional standards and are approved by the ENGINEER.
- E. All materials furnished and all work performed shall be subject to inspection by the ENGINEER. The CONTRACTOR shall be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship, and diligent execution of the work.
- F. The following procedures shall be followed by the CONTRACTOR in the handling of shop-primed steel:
 - 1. Curing: Upon completion of blasting and priming operations, primer on fabricated steel shall be cured sufficiently to minimize damage during handling.
 - 2. Separation of Steel: When fabricated steel is transported, spacers and other protection shall be used to separate members to eliminate primer from being pulled off during unloading operations. If wood spacers are used, no splinters or wood particles shall remain in primed surfaces after separation.

- 3. Cover of Steel during Transit: Shop-primed fabricated steel shall be covered 100% to prevent deposition of road salts, fuel residue and other contaminants which may be present along the route of shipment to jobsite.
- 4. Load Binders: Loaded steel must be bound with padded chains or ribbon binders to minimize damage to coatings during shipment.
- 5. Handling: Care shall be used during loading, unloading, storage and erection operations to minimize damage to primed steel. Sliding of steel across another member shall not be permitted, except for fitting members into position during assembly.
- 6. Storage: Primed fabricated steel at jobsite shall not be placed on ground or on top of other steel work unless ground or steel work is covered with an approved covering. Approved spacers shall be used to elevate steel above ground level or other steel members.

3.7 FIELD QUALITY CONTROL

- A. Quality assurance procedures and practices shall be used to monitor all phases of surface preparation, application and inspection throughout the duration of the Project. Procedures or practices not specifically defined herein may be used provided they meet recognized and acceptable professional standards and are approved by the ENGINEER.
- B. All materials furnished and all work performed shall be subject to inspection by the ENGINEER. The CONTRACTOR shall be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship, and diligent execution of the work.
- C. Field Inspection: CONTRACTOR shall notify ENGINEER when painting work is to be in progress in time for ENGINEER to check atmospheric conditions, surface preparation, mixing and thinning procedures, materials and thicknesses with wet film thickness gauge at frequent intervals and varied locations during the course of painting work.
- D. The ENGINEER will make, or arrange to have made by others, such tests as may be deemed necessary to assure the Work is being accomplished in accordance with the requirements of the specifications.
 - 1. Unless otherwise specified, the cost of such testing will be borne by the OWNER.
 - 2. In the event such tests reveal non-compliance, the CONTRACTOR shall bear the cost of such corrective measures deemed necessary by the ENGINEER, as well as the cost of retesting.

- 3. It is understood and agreed that the performance of tests by the ENGINEER shall not constitute an acceptance of any portion of the Work, nor relieve the CONTRACTOR from compliance with the project requirements.
- E. Testing Instruments:
 - 1. Provide all inspection devices in good working condition.
 - 2. Inspection devices shall be operated by, or in the presence of the ENGINEER with the location and the frequency basis of testing as determined by the ENGINEER.
 - 3. Provide all instruments required for testing atmospheric conditions and shall, during painting/coating operations, perform all measurements in the presence of the ENGINEER.
 - a. As a minimum, measure and record temperature, relative humidity and dew point daily prior to beginning any painting/coating operations and again at midday.
 - b. Measurement records shall be maintained by the CONTRACTOR on forms approved by the ENGINEER.
 - 4. Provide all instruments required for detection of holidays and measurement of dryfilm thickness of coatings and paints.
 - a. Holiday detectors and dry film thickness gauges shall be available at all times until final acceptance of painting/coating application.
 - b. Inspection devices shall be operated in accordance with the manufacturer's instructions.
 - c. Holiday Detectors: Acceptable devices for ferrous metal surfaces include, but are not limited to, Tinker & Rasor Models AP and AP/W holiday detectors or other units approved by the ENGINEER.
 - d. Dry Film Thickness Gauges: DeFelsko Positest (Type 1), DeFelsko Positector 6000 (Type 2), or other units approved by the ENGINEER.
 - 5. Provide U.S. Department of Commerce, National Bureau of Standards certified thickness calibration plates to test the accuracy of thickness gauges.
 - 6. The ENGINEER is not precluded from furnishing its own inspection devices and rendering decisions based solely upon its tests.

- F. Thickness of Coatings:
 - 1. Thickness of coatings and paint shall be checked with a non-destructive, magnetictype thickness gauge.
 - 2. Destructive Testing: An instrument such as a Tooke Gage shall be used if a destructive tester is deemed necessary.
 - 3. The coating integrity of all coated surfaces shall be tested with an approved inspection device.
 - 4. All pinholes shall be marked, repaired in accordance with the manufacturer's printed recommendations, and retested.
 - 5. No pinholes or other irregularities will be permitted in the final coating.
- G. Wet Film Thickness: Use wet film thickness gauges to ensure proper application rates to prevent over-thick coatings and curing difficulties.
- H. Additional Coats: Provide additional coats of paint at no additional cost to the OWNER when mil thicknesses specified have not been obtained as determined by either dry or wet film thickness testing specified herein.
- I. Painting Equipment:
 - 1. Coating and painting equipment shall be designed for the proper application of the materials specified and shall be maintained in first class working condition.
 - 2. Compressors shall have suitable traps and filters to remove water and oils from the air.
 - 3. Blotter tests shall be performed at each start-up period and as deemed necessary by the ENGINEER.
 - 4. Equipment shall be subject to approval of the ENGINEER.
- J. Moisture Control Equipment: Employ to maintain conditions within the reservoir interior which allow extended blasting and painting schedules.
- K. Painting/Coating Manufacturer's Representative:
 - 1. Services of the paint/coating manufacturer's representative shall be provided at no additional expense to the OWNER.
 - 2. Reporting from the paint manufacturer's representative shall not preclude the ENGINEER from making independent assessments of the quality of Work. The

ENGINEER will make the final decision as to the acceptability of the paint/coating systems.

- 3. Responsibilities:
 - a. Make periodic site visits throughout the course of the surface preparation and the painting/coating application.
 - b. Schedule all site visits with the ENGINEER.
 - c. Minimum Site Visits:
 - 1) Inspect typical shop and field steel preparation prior to primer applications.
 - 2) Inspect finished primer applications prior to application of intermediate coats.
 - 3) Inspect each intermediate coat prior to application of subsequent finish coats.
 - 4) Inspect final coats and report to the ENGINEER the representative's assessment of the paint system's suitability and acceptability for the intended service.
 - d. Prepare and submit written reports directly to the ENGINEER immediately following each site visit.
 - 1) Reports shall identify the representative's observations relative to the quality of the surface preparation and painting/coating work.
 - 2) Reports shall address any conditions observed which have the potential to adversely impact the finished painting/coating system's integrity and performance.
 - e. Any such findings shall be immediately remedied by the CONTRACTOR.
- L. Damaged Factory Finishes: If directed by the ENGINEER, refinish the entire exposed surfaces of factory-finished equipment that is chipped, scratched or otherwise damaged in shipment or installation

3.8 CLEANUP

- A. Remove all staging, scaffolding, ladders and containers shall be removed from the Site.
- B. Remove temporary heating and ventilating facilities.

- C. Coating or paint spots upon adjacent surfaces shall be removed and the entire Site cleaned.
- D. All damage to surfaces resulting from the work of this Section shall be cleaned, repaired or refinished to the complete satisfaction of the ENGINEER at no cost to the OWNER.
- E. Allow a minimum of seven days at 70°F curing after application of the final coat to the tank interior before flushing, sterilizing or filling with water.
 - 1. Utilize a recording or high/low-indicating thermometer and paint manufacturer's reference charts to determine actual cure time of products.
 - 2. Prior to disinfection, demonstrate complete curing to ENGINEER and paint manufacturer's representative. Use forced ventilation during approved work days and hours identified elsewhere in this Section to assist curing.
- F. Disinfect tank interior per Section 33 13 13, Disinfection of Water Utility Storage Tanks.
- 3.9 TESTING, COLLECTION, MONITORING, AND DISPOSAL OF REGULATED WASTES
 - A. Contractor shall perform laboratory tests prior to any surface preparation activities to confirm the presence or absence of any regulated materials above action levels in the coating system on paint samples removed from the reservoir interior and exterior to verify whether the existing paint system contains lead. Testing shall be performed in the presence of the ENGINEER, and documented test results shall be provided if the CONTRACTOR wishes to avoid performing surface preparation with the proper lead abatement protocols.
 - Β. If testing performed by the CONTRACTOR confirms the presence of lead-based materials in the existing coating system above the action levels identified in 29 CFR 1926.62 - Lead, or above any other action levels for regulated metals, the CONTRACTOR shall be solely responsible for implementing, monitoring, and maintaining such controls as may be necessary to ensure compliance with applicable Federal, State and local laws and regulations regarding worker protection, health, and safety where the CONTRACTOR's operations may cause exposure to lead or other materials above the noted action and exposure levels. The CONTRACTOR shall implement a safety program as approved by the ENGINEER during this project. Appropriate containment for materials removed from the reservoir exterior surface shall be erected and surface preparation abrasion materials shall be used which are designed specifically for work in and disposal of lead-based materials or other regulated materials, as approved by the ENGINEER. A project report shall be submitted to the OWNER which documents that all applicable provisions of the referenced regulation have been complied with. Costs to implement and maintain such controls for the term of the project for the CONTRACTOR's employees and those of the OWNER,

ENGINEER, or their agents, shall be included in the CONTRACTOR's bid and no separate payment will be made.

- C. If testing performed by the CONTRACTOR determines no lead-based or other regulated materials are present in the existing coating system, no payment will be provided to the CONTRACTOR for those costs to implement and maintain controls provided in Bid Item No. 11 and 13.
- D. It is the intent of these Specifications to only remove the existing exterior coating to bare metal where spot repairs are required or new items are to be field-welded. The CONTRACTOR shall be solely responsible for implementing, monitoring, and maintaining such controls as may be necessary to ensure compliance with applicable Federal, State and local laws and regulations regarding worker protection, health, and safety where the CONTRACTOR's operations may cause exposure to lead in concentrations above the levels identified in 29 CFR 1926.62 Lead.
- E. All interior and exterior waste generated from surface preparation work shall be tested by the CONTRACTOR for lead content. The CONTRACTOR shall, prior to project closeout and as a condition of final payment, furnish the ENGINEER with project records which document that the collection, testing, containment and disposal of any regulated wastes generated by the CONTRACTOR on this project were executed in compliance with all applicable Federal, State and local laws and regulations regarding worker protection, health, and safety. Any costs associated with these requirements shall be included in the CONTRACTORs bid and no separate payment will be made.
- F. Unless otherwise indicated on the Plans or in the Specifications, all abrasive blasting material and byproducts, paints, solvents and containers and any other discarded materials or equipment shall remain the property of the CONTRACTOR and shall be disposed of in a manner compliant with applicable Federal, State and local laws and regulations governing disposal of all wastes generated by the CONTRACTOR in the prosecution of this work.

END OF SECTION

SECTION 11 96 00 – BAFFLE CURTAIN SYSTEM

PART 1 GENERAL

1.1 SUMMARY

- A. This Section applies to the furnishing and installation of custom manufactured factory prefabricated hydraulic barrier curtains inside a finished water storage reservoir.
- B. The requirements of the Drawings and all other sections and provisions of the specifications are applicable to the work to be performed under this Section.

1.2 REQUIREMENTS

- A. Furnish and install Baffle Curtains with appurtenances necessary to complete work as specified in the Contract Documents.
- B. Each Baffle Curtain shall include factory-fabricated geomembrane panel(s) hardware required to complete the installation.

1.3 REFERENCE STANDARDS

- A. ASTM International (ASTM):
 - 1. ASTM D751 Standard Test Methods for Coated Fabrics
 - 2. ASTM D2136 Standard Test method for Coated Fabrics Low-Temperature Bend Test
 - 3. ASTM D1204 Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature
 - 4. ASTM D413 Standard Test Methods for Rubber Property—Adhesion to Flexible Substrate
 - 5. ASTM D3389 Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform Abrader)
 - 6. ASTM G153 Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials
 - 7. ASTM D471 Standard Test Method for Rubber Property—Effect of Liquids
 - 8. ASTM D4833 Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products

- 9. ASTM D696 Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between –30°C and 30°C with a Vitreous Silica Dilatometer
- B. Federal Test Method Standard (FTMS)
 - 1. FTMS 101C Method 2031
- C. NSF International (NSF):
 - 1. NSF Standard 54 Flexible Membrane Liners
 - 2. NSF Standard 61 Drinking Water System Components Health Effects

1.4 SUBMITTALS

- A. Shop drawings and certificates, test reports, affidavits of compliance, in accordance with the Contract Documents and as specified.
 - 1. Include all necessary dimensions and details on Baffle Curtains, supports, appurtenances, design calculations, and material lists.
- B. System Installation Drawings: Contractor shall be responsible for providing engineering installation drawings of the Baffle Curtains as supplied by the manufacturer.
 - 1. Include plan view of final Baffle Curtain arrangement, sections and elevations as required, support details, and all dimensions required for locating the system within the specified dimensions of the tank.
 - 2. Drawings shall be a minimum of 11 x 17 inches, provide electronically.
 - 3. Two sets of final fabrication and installation drawings shall be included with the shipment of the Baffle Curtains.
- C. Installation, Operation, and Maintenance Manuals: Within 30 days of final approval of the installation drawings by the Engineer, the Baffle Curtain manufacturer shall provide two sets of the installation portion of the Installation, Operation, and Maintenance (IOM) Manuals for the applicable system. Manuals shall be in the following format and include the listed required information as a minimum:
 - 1. Enclosed in a three-ring binder with project title and system designation shown on the front cover and side binder.
 - 2. Table of contents.
 - 3. Copy of complete set of the installation plans.
 - 4. Parts and equipment list with specification numbers for ordering of replacement parts.

- 5. Installation guidelines for the Baffle Curtain system.
- 6. Guidelines for repair of system components.
- 7. In addition to bound three-ring binder specified above, submit the operations and maintenance manual in electronic format. Electronic documents shall be clear and legible, developed from the original documents, and shall be in the latest version of Adobe Acrobat (.pdf) format.

1.5 MATERIAL DELIVERY, STORAGE, AND PROTECTION

- A. All baffle curtain materials, supports, and accessories shall be delivered in a clean and undamaged condition and stored off the ground, to provide protection against oxidation caused by ground contact.
- B. All equipment to be shipped on pallets shall be placed on pallets capable of fully supporting the equipment. Pallets should be accessible for forklift transport or strap and hoist means without causing any load to the equipment.
- C. All stainless steel components shall be stored separately away from any carbon steel components or other materials that could stain or deface the stainless steel finish from run-off of oxidized ferrous materials.
- D. All materials shall be stored in a location and manner which avoids any possible means of receiving exposure to direct ultraviolet and thermal radiation.
- E. Baffle Curtains shall be protected from contact with rigid objects during handling and storage. The contractor shall be responsible for replacing any curtain sections that are damaged after arrival on the site through installation and start-up of the system.
- F. All defective or damaged materials shall be replaced with new materials.

PART 2 PRODUCTS

- 2.1 ACCEPTABLE MANUFACTURES
- A. Director III series clearwell baffles manufactured by Environetics, Inc
- B. Or approved equal

2.2 BAFFLE CURTAINS

A. Baffles Curtains shall be fabricated from NSF 61-certified polyester reinforced geomembrane material. Curtain materials shall meet or exceed the following material specifications.

1. Material Properties

Physical Properties	Test Method	Value	
Base Fabric Type		Polyester	
Basic Fabric Weight	ASTIM D751	6.5 oz/yd² nominal	
Thickness	ASTM D751	30 mils min.	
Weight	ASTM D751	30±2 oz./sq.yd.	
Tear Strength	ASTM D751, Trap Tear	40/55 lbs. min.	
Breaking Yield Strength	ASTM D751, Grab Tensile	550/550 lbs. min.	
Low Temperature	ASTM D2136, 4 hrs. – 1/8"		
Resistance	Mandrel	Pass @ -30 F	
Dimensional Stability	ASTM D1204, 212°F – 1 hr.	0.5% max. (each direction)	
Hydrostatic resistance	ASTM D751, Method A	800 psi min.	
Blocking Resistance	ASTM D751, 180°F	#2 Rating Max.	
Adhesion – Ply	ASTM D413, Type A	15 lbs./in. min. or film tearing bond	
Adhesion – Heat Welded Seam	ASTM D751, Dielectric Weld	40 lbs./2in. min.	
Dead Load Seam Strength	ASTM D751, 4-hr. test	Pass 240 lbs./in. @70°F Pass 120 lbs./in. @ 160°F	
Bonded Seam Strength	ASTM D751, Procedure A, Grab Test Method	550 lbs. min.	
Abrasion Resistance	ASTM D3389, H-18 Wheel, 1 kg Load	2,000 cycles min. before fabric exposure, 50 mg/100 cycles max. weight loss	
Weathering Resistance (hours min.)	ASTM G153	8,000 min. with no appreciable change or stiffening or cracking of coating	
Water Absorption	ASTM D471, Section 12, 7 days	0.025 kg/m ² max. @ 70°F 0.14 kg/m ² max. @ 212°F	
Wicking	ASTM D751	1/8" max.	
Bursting Strength	ASTM D751, Ball Tip	750 lbs. min.	
Puncture Resistance	ASTM D4833	275 lbs. min.	
Coefficient of Thermal Expansion/Contraction	ASTM D696	8 x 10 ⁻⁶ in/in/°F max. (approx.)	
Puncture Resistance	FTMS 101C, Method 2031	350 lbs. (approx.)	

2. Nylon reinforced materials shall not be acceptable.

3. Baffle Anchoring Hems - The baffle manufacturer shall provide a 3" wide two ply hem on all edges of the baffle curtains for anchoring purposes.

4. Baffle Curtain color shall be white or blue or black.

2.3 ANCHORING HARDWARE

- A. Steel:
 - 1. Structural W Shapes: ASTM A992.
 - 2. Structural Shapes: ASTM A36.
 - 3. Channels and Angles: ASTM A36.
 - 4. Steel Plate: ASTM A36.
 - a. Steel Plate to be Bent or Cold Formed: ASTM A283, Grade C.
 - 5. Hollow Structural Sections: ASTM A500, Grade B.
 - 6. Structural Pipe: ASTM A53, Grade B, Schedule 40 unless shown otherwise in Drawings.
 - 7. Bar: ASTM A36.
 - a. Cold-Finished Steel Bar: ASTM A108, grade as selected by fabricator.
 - 8. Sheet Steel: ASTM A653, Grade 33 Structural Quality.
 - 9. Tubing: ASTM A513, Type 5, minimum 50 ksi yield strength.
 - 10. Standard Bolts: ASTM A307; Grade A.
 - a. Washers: ASTM F844.
 - 11. High Strength Bolts: ASTM A325.
 - a. Washers: ASTM F436; Type 1.
 - 12. Nuts: ASTM A563; heavy-hex type.
 - 13. Welding Materials: AWS D1.1; type required for materials being welded.
- B. Stainless Steel:
 - 1. Bars and Shapes: ASTM A276; Type 316.
 - 2. Tubing: ASTM A269; Type 316.
 - 3. Pipe: ASTM A312, seamless; Type 316.

- 4. Plate, Sheet, and Strip: ASTM A666; Type 316.
- 5. Bolts, Nuts, and Washers: ASTM A354; Type 316.
- 6. Welding Materials: AWS D1.6; type required for materials being welded.
- C. The top of the baffle shall be suspended in the clearwell structure by a horizontal vinyl coated stainless steel cable thermally welded in the top hem of the baffle panel. Vertical stainless steel cable support assemblies attached to the ceiling or overhead structural members and below the top horizontal support cable with 2 stainless steel plates bolted through the baffle curtain material with 2 stainless steel bolts, washers, lock washers and nuts. All cable assemblies shall be terminated at the tank structure with minimum stainless steel bolts and stainless steel eye nuts to carbon steel clips welded to the tank structure as required.
- D. The bottom and side hems of the baffle shall be attached to the clearwell structure by clamping the baffle material between stainless steel batten strips fastened with stainless steel bolts, washers, lock washers, and nuts. System to be anchored to the welded steel tank structure with stainless steel bolts, isolation gaskets, washers, lock washers, and nuts to carbon steel angle (clips) welded to the tank structure.
- E. All hardware shall be supplied in ready to install kits with angle and batten cut and predrilled to minimize field cutting and drilling of attachment hardware.
- F. Prefabricated hardware kits shall consist of precut predrilled angles with matching battens. Random stock shall not be allowed where matching patterns are required.
- G. All anchoring/support hardware and material shall be of the quantity and dimension as shown on the Plans.
- H. All elements requiring being attached to the structure by welding shall be completed in accordance with AWS D1.1.

PART 3 EXECUTION

3.1 INSPECTION

- A. Baffle Curtains and anchoring hardware shall be carefully examined for cracks, tears, and other defects immediately before installation.
- B. All defective materials shall be removed from the site of the work.

3.2 INSTALLATION

A. Owner to approve final layout in the field prior to installation

- B. The baffle curtain(s) shall be installed in accordance with the manufacturer's drawings, instructions and recommendations.
- C. The CONTRACTOR shall field verify all dimensions prior to releasing the baffle for fabrication.
- D. The Contractor and factory representative shall visually inspect the entire baffle curtain system for tears, rips or any other damage in the presence of the Owner.

3.3 WARRANTY

A. Clearwell baffles shall have a limited 2-year warranty from the date of shipment covering workmanship and materials.

END OF SECTION

SECTION 33 13 13 - DISINFECTION OF WATER UTILITY STORAGE TANKS

- PART 1 GENERAL
- 1.1 SUMMARY
 - A. This Section includes methods of disinfecting water storage tanks for potable water.
 - B. Section includes:
 - 1. Water storage tank disinfection.
 - 2. Bacteriological testing.

1.2 REFERENCE STANDARDS

- A. American Water Works Association (AWWA):
 - 1. AWWA C652 Disinfection of Water Storage Facilities

1.3 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Requirements for submittals.
- B. Disinfection Procedure:
 - 1. Submit description of procedure, including type of disinfectant and calculations indicating quantities of disinfectants required to produce specified chlorine concentration.
 - 2. Comply with Sections 3 and 4 of AWWA C652.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Certify that disinfectants meet or exceed AWWA C652 requirements.
- E. Test and Evaluation Reports: Indicate results of bacteriological and residual chlorine laboratory test reports.
- F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- 1.4 QUALITY ASSURANCE
 - A. Perform Work in compliance with AWWA C652.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- B. Store disinfectants according to manufacturer's recommendations and in a cool, dry place away from combustibles such as wood, rags, oils, and greases.
- C. Handle disinfectants according to manufacturer's safety precautions.

PART 2 PRODUCTS

2.1 DISINFECTANTS

- A. Chlorine Forms: According to AWWA C652, Section 4.
 - 1. Liquid chlorine
 - 2. Sodium hypochlorite
 - 3. Calcium hypochlorite

PART 3 EXECUTION

- 3.1 EXAMINATION
 - A. Inspection:
 - 1. Conduct inspection of tank interior before beginning disinfection.
 - 2. Verify tank is clean and free of polluting materials.
 - 3. Verify tank piping and vent connections are properly made and clear of obstructions.
 - 4. Verify all interior paint is thoroughly cured according to paint manufacturer's instructions.
- 3.2 PREPARATION
 - A. Furnish personnel working inside tank during disinfection with equipment to comply with Federal and State regulations for Work conducted in a hazardous atmosphere.
 - B. Coordinate with the Engineer and Owner for scheduling of disinfection activities.
 - 1. The Owner may require up to 1 weeks' time following notice to supply water for filling of reservoir.

3.3 APPLICATION

- A. Use Chlorination Method 2 for disinfecting tank in Section 4 of AWWA C652, generally detailed as followed:
 - 1. Spray or brush a solution of 200 milligrams per liter (mg/L) available chlorine directly on the surfaces of all parts of the storage facility that will be in contact with water when the storage facility is full to the overflow elevation.
 - 2. The solution shall thoroughly coat all surfaces to be treated, including the inlet and outlet piping and shall be applied to any separate drain piping such that it will have available chlorine of not less than 10 mg/L when filled with water.
 - 3. Disinfected surfaces shall remain in contact with the strong chlorine solution for at least 30 minutes.
 - 4. Following the completion of the chlorination procedure, potable water shall be admitted, the drain piping purged of the 10 mg/L chlorinated water, and the storage facility filled to its overflow level.
- B. A sample shall be taken by the Owner for microbiological analysis according to State Health Standards for potable water.
 - 1. Contact the Engineer and/or Owner to arrange for samples to be taken for microbiological analysis.
 - 2. Microbiological analysis must indicate that the water is free of coliform organisms before the facility can be put into service.
 - 3. It will not be necessary to flush the reservoir or tank after the chlorine solution is applied by spraying or brushing providing a passing microbiological test is achieved.
- C. When water samples fail to meet State Health Standards for potable water, perform corrective measures until water quality conforms to State Health Standards.
- D. Any super-chlorinated water shall be discharged through an approved connection to the public sanitary sewer system or shall be dechlorinated to limits acceptable by the Oregon State Department of Environmental Quality (DEQ) for discharge into the existing storm drainage system. If super-chlorinated water is to be discharged into the public sanitary sewer system, notify the sewage treatment plant notifying the planned time, location, and quantity of discharge. No super-chlorinated water shall be discharged into the storm drainage system or natural drainage way prior to approved dechlorination treatment.

END OF SECTION



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CITY OF PENDLETON WATER PLANT CLEARWELL **BAFFLING SYSTEM**

March 2023



SCALE: NTS



INDEX OF DRAWINGS

GENERAL

1 G-1 LOCATION MAP, VICINITY MAP AND INDEX OF DRAWINGS

MECHANICAL

- 2 M-1 GROUND LEVEL PLAN
- M-2 ROOF LEVEL PLAN 3
- M-3 DETAILS 4 5
 - M-4 DETAILS



PROJECT CONTACTS:

OWNER:

CITY OF PENDLETON, DEPT OF PUBLIC WORKS 500 SW DORIAN AVE, PENDLETON, OR 97801 CONTACT: BOB PATTERSON, P.E. E: BOB.PATTERSON@CI.PENDLETON.OR.US P: 541-966-0202 F: 541-966-0251

CIVIL ENGINEER:

CONSOR 345 BOBWHITE COURT, SUITE 230 BOISE, IDAHO 83706 CONTACT: TOFOR SNIDER, P.E. E: TOFOR.SNIDER@CONSORENG.COM P: 208-947-9033





NOTES:

1. BAFFLE'S WILL BE INSTALLED WITH IN AN EXISTING FACILITY AT THE CITY'S WATER FILTRATION PLANT.

2. AS BUILT DRAWINGS FOR THE EXISTING FACILITY ARE AVAILABLE FOR THE CONTRACTOR TO USE AND REFERENCE FOR USE IN LAYING OUT BAFFLES AND ATTACHMENT SYSTEM TO THE EXISTING STRUCTURE.

3. GENERAL SEQUENCE OF CONSTRUCTION. PREPARE SURFACES AND WELD BAFFLE ATTACHMENT CLIPS TO TANK, THEN PROCEED WITH COATING OF INTERIOR OF TANK (METAL CLIPS, AREAS OF COATING DAMAGE FROM CLIP INSTALL, AREAS IDENTIFIED BY OWNER FOR TANK COATING REPAIR), THEN PROCEED WITH BAFFLE SYSTEM INSTALLATION, REPAIR ANY ADDITION AREAS OF DAMAGED COATING, THEN PROCEED WITH DISINFECTION OF ENTIRE TANK SYSTEM.

4. IF ADDITIONAL OR LARGER ACCESS POINT INTO TANK ARE REQUIRED FOR CONTRACTOR TO COMPLETE WORK AN ACCESS CAN BE CUT INTO TANK. CONTRACTOR TO COORDINATE LOCATION AND SIZE WITH OWNER AND ENGINEER. SEE TECHNICAL SPECIFICATION 09 97 14 3.3 FOR ADDITIONAL REQUIREMENTS.

5. CONTRACTOR SHALL PROVIDE RECORD DOCUMENTS FOR PROJECT DOCUMENTING ACTUAL INSTALLED LOCATION OF IMPROVEMENTS.

BAFFLE ATTACHMENT AT TOP OF BAFFLE, SEE DET 3, SHT M-3 (TYP 6)

EXIST WELDED STEEL TANK BOTTOM WALL EL=1318' TOP WALL EL=1342'

BAFFLE ATTACHMENT AT WALK FLOOR INTERFACE, SEE DET 5, SHT M-3 (TYP 6)

		_				SHEET	
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	SHEET
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