ADDENDUM NO. 4

<u>CITY OF PENDLETON</u> Airport Reservoir and Booster Pump Station Project Issued: December 9, 2021

Original Bid Opening Date: DECEMBER 9, 2021 @ 2:00 pm

Revised Bid Opening Date: DECEMBER 16, 2021 @ 2:00 pm

TO ALL PLANHOLDERS:

This Addendum provides the following clarifications/revisions, corrections and changes to the Bid Documents. All bidders shall acknowledge receipt and acceptance of this Addendum by completing the spaces and signing where indicated below and submitting it with the Proposal. Bids submitted without signing for the Addendum may be considered informal.

CITY OF PENDLETON

Bob Patterson, PE Public Works Director City of Pendleton 500 SW Dorion Avenue Pendleton, OR 97801

BIDDER'S ACKNOWLEDGMENT:

Company Name (please print)

Bidder's Name (please print)

Signature

Title

Address

City, State

ADDENDUM NO. 4

TO THE

CONTRACT DOCUMENTS

FOR

NEW AIRPORT RESERVOIR AND BOOSTER STATION

FOR

THE CITY OF PENDLETON, OREGON

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS TO THE SAME EXTENT AS THOUGH IT WERE ORIGINALLY INCLUDED THEREIN.

BIDDERS MUST ACKNOWLEDGE RECEIPT OF ALL ADDENDA ON THE BID PROPOSAL FORM. BID PROPOSALS THAT FAIL TO ACKNOWLEDGE ALL ADDENDA MAY BE CONSIDERED IRREGULAR AND MAY BE REJECTED.

ISSUED THIS 9TH DAY OF DECEMBER 2021.



MURRAYSMITH

888 SW 5th, Suite 1170 Portland, OR 97204 (503) 225-9010

ITEM NO. 1 - INFORMATION FOR BIDDERS, SECTION 2, SDWRLF CONTRACT REQUIREMENTS

A. On SDWRLF Contract Requirements, page 3 of 11, Article 13. American Iron Steel, for clarification:

Items manufactured in the United States from foreign steel alloy meet the project's American Iron and Steel (AIS) Requirement. This is covered under the EPA waiver found here: <u>https://www.epa.gov/sites/default/files/2015-09/documents/ais-final-guidance-3-20-14.pdf</u>.

For clarification, the AIS waiver states there is an exemption to AIS requirements for instances in which foreign steel alloy is substantial manufactured in the US.

ITEM NO. 2 - INFORMATION FOR BIDDERS, SECTION 5, PROPOSAL

A. **DELETE** Section 5, PROPOSAL, in its entirety and **REPLACE** with the attached copy of Section 5, PROPOSAL.

For clarification, modifications from the original Section 5, Proposal, include the following:

- 1. Page 1 of 14: Sixth paragraph, modify contract completion date to April 14, 2023, from March 31, 2023.
- 2. Page 1 of 14: Ninth paragraph, modify bid due date to December 16, 2021, from December 9, 2021.
- 3. Page 4 of 14: Providing additional lines for acknowledgement of addenda.
- 4. Page 7 of 14: Bid Item A-11, Updates to locations for hauling and disposal of excavated utility trench rock.
- 5. Page 10 of 14: Bid Item B-2, Updates to locations for hauling and disposal of rock material blasted and excavated from New Airport Reservoir and Booster Station site.
- 6. Page 12 of 14: Bid Item B-19, Modified units barbed and woven wire fencing from 5,775 LF to 2,650 LF.

ITEM NO. 3 - INFORMATION FOR BIDDERS, SECTION 9, CONTRACT FOR CONSTRUCTION

A. **REPLACE** Section 9, Contract for Construction, in its entirety with the attached Section 9, Contract for Construction -- ADDENDUM NO. 4, 12/9/2021.

For clarification, modifications from the original Section 9, Contract for Construction, include the following:

1. Page 1 of 2: Paragraph 6, Modification of time limit for the completion of the Contract to no later than April 14, 2023, from original date of March 31, 2023.

ITEM NO. 4 - INFORMATION FOR BIDDERS, SECTION 16, U.S. DEPARTMENT OF LABOR - DAVIS-BACON WAGE RATES

A. **REPLACE** pages 3-9 of 9 of Section 16 with the attached pages 3-9 of 9, USDOL - Davis-Bacon Wage Rates - ADDENDUM NO. 4, 12/9/2021.

For clarification, the attached Davis-Bacon Wage Rates sheets are provided with rate updates completed by the State of Oregon on November 26, 2021.

ITEM NO. 5 - SPECIFICATION SECTION 33 11 10 - WATER UTILITY DISTRIBUTION & TRANSMISSION PIPING

- A. On page 33 11 10-12, Subsubsection 2.1.C, PVC, Paragraph 8, Restrained Joints, **DELETE** Item a(4), Manufacturers, in its entirety and **REPLACE** with the following:
 - "4) Manufacturers:
 - a) 4-inch through 12-inch diameter:
 - 1. EBAA Iron, Inc. Series 1900 Bell Restraint Harness
 - 2. Star Pipe Products Series 1000G2 / 1100G2
 - b) 14-inch through 48-inch diameter:
 - 1. EBAA Iron, Inc. Series 2800 Bell Restraint Harness
 - 2. Star Pipe Products Series 1000 / 1100"
- B. On page 33 11 10-12, Subsubsection 2.1.C, PVC, Paragraph 8, Restrained Joints, Item b(5), Manufacturers, ADD the following:
 - "c) Star Pipe Products StarGrip, Series 4000"

ITEM NO. 6 – SPECIFICATION SECTION 40 05 23, COMMON WORK RESULTS FOR PROCESS VALVES

- A. On page 40 05 23-7, Subsubsection 2.5. J, Electric Motor Actuators, **DELETE** Subparagraph 1.f, which begins with "During loss of electric power supply...", in its entirety.
- B. On page 40 05 23-8, Subsubsection 2.5.J, Electric Motor Actuators, Paragraph 6, Gearing and Gearbox, **DELETE** Subparagraph (b), which begins with "Gearbox shall house and operate...", in its entirety.
- C. On page 40 05 23-13, Subsubsection 2.5.J, Electric Motor Actuators, **DELETE** Paragraph 15, Actuator Networking, in its entirety.
- D. Bidder question:

The specification describes an explosion-proof environment, if necessary. Will this actuator be in an explosion-proof rated area?

Engineer response: Actuator will not be in an explosion-proof rated area.

ITEM NO. 7 - SPECIFICATION SECTION 43 40 01, POLYETHYLENE STORAGE TANK

A. **DELETE** Section 43 40 01, POLYETHYLENE STORAGE TANK, in its entirety and **REPLACE** with attached copy Section 43 40 01, POLYETHYLENE STORAGE TANK.

ITEM NO. 8 - DRAWINGS, SHEET RES-C-11, RESERVOIR MISCELLANEOUS DETAILS - 1

B. In Detail 5, WASHDOWN LINE DETAIL, **DELETE** the callout which reads:

" 6" EDUCTOR BY JACOBY TARBOX OR APPVD EQUAL"

and **REPLACE** with:

" 6" EDUCTOR, CARBON STEEL CONSTRUCTION WITH NSF 61 LINING AND COATING, BY JACOBY TARBOX OR APPVD EQUAL"

ITEM NO. 9 - DRAWINGS, SHEET RES-M-2, RESERVOIR PIPING ENTRANCE/EXIT PLAN AND DETAILS

A. In Section B, 24" OUTLET SECTION, **DELETE** callout on left side of detail showing a field weld of the STL CONE, REMOVABLE SILT STOP to the SPLIT STL REINF COLLAR PLATE.

ITEM NO. 10 - DRAWINGS, SHEET RES-S-4, RESERVOIR FOUNDATION, SHELL AND ROOF DETAILS

A. In Section D, DOME ROOF EDGE CONNECTION DETAIL, **ADD** a Drip Edge to the underside of the Tension Ring as shown in Drawing Sheet RES-C-11, RESERVOIR MISCELLANEOUS DETAILS - 1, Detail 4, PAINTERS NIPPLE.

ITEM NO. 11 - DRAWINGS, SHEET BPS-M-1, BOOSTER PUMP STATION DESIGN CRITERIA AND MECHANICAL SCHEDULES

A. In the BOOSTER PUMP STATION VALVE SCHEDULE, **DELETE** the row detailing Valve No. V-1001, GLOBE PRESSURE REDUCING.

ITEM NO. 12 - DRAWINGS, SHEET BPS-M-2, BOOSTER PUMP STATION MECHANICAL FLOOR PLAN

A. In Notes, **ADD** the following:

"4. ALL BOOSTER PUMP STATION DISCHARGE PIPING, FLANGES, GASKETS, AND RELATED CONNECTION HARDWARE SHALL BE RATED FOR SERVICE PRESSURES IN EXCESS OF 150 PSI."

B. **DELETE** callout in upper right corner of PLAN which reads:

" 4" DRAIN SEE CIVIL FOR COORDINATION"

and **REPLACE** with:

" 6" PVC DRAIN ENCASE IN CONC UNDER BLDG SEE SHT RES-C-6 FOR COORDINATION"

ITEM NO. 13 – ELECTRICAL DRAWING, BPS-E-6, ELECTRICAL, ONE LINE DIAGRAM

A. **ADD** Note 8 to read as follows:

"PROVIDE HARDWIRED INTERLOCKING OF THE THREE 250 HP PUMPS TO ENSURE NO MORE THAN TWO PUMPS OPERATE AT ONE TIME."

ITEM NO. 14 - ELECTRICAL DRAWING BPS-E-13, ELECTRICAL, TYPICAL WIRING DIAGRAMS

A. **ADD** Note 4 to read as follows:

"PROVIDE HARDWIRED INTERLOCKING OF THE THREE 250 HP PUMPS TO ENSURE NO MORE THAN TWO PUMPS OPERATE AT ONE TIME."

ITEM NO. 15 - ELECTRICAL DRAWING BPS-E-14, CABLE SCHEDULE - 1

A. Neutral conductors are to be reduced in size. **DELETE** the following rows from the Circuit Schedule:

P-MAIN-2	UTILITY SERVICE METER	MCC MAIN INCOMING 1200A BREAKER	(12) #500 KCMIL, P (4) #500 KCMIL, N	(4) 3-1/2" (RGS)	TYPE XHHW CONDUCTORS
P-MAIN -3	MCC MAIN INCOMING 1200 BREAKER	ATS SECTION	(12) #500 KCMIL, P (4) #500 KCMIL, N	(4) 3-1/2" (RGS)	TYPE XHHW CONDUCTORS
P-MAIN-4	ATS SECTION	MCC - 1	(9) #600 KCMIL, P (3) #600 KCMIL, N (3) #3/0 GND	(3) 3-1/2" (PVC 80)	TYPE XHHW CONDUCTORS
P-GEN-1	750KW GENERATOR MAIN BREAKER	MCC ATS SECTION	(9) #600 KCMIL, P (3) #600 KCMIL, N (3) #3/0 GND	(3) 3-1/2" (PVC 80)	TYPE XHHW CONDUCTORS

and **REPLACE** with:

P-MAIN-2	UTILITY SERVICE METER	MCC MAIN INCOMING 1200A BREAKER	(12) #500 KCMIL, P (4) #4/0, N	(4) 3-1/2" (RGS)	TYPE XHHW CONDUCTORS
P-MAIN -3	MCC MAIN INCOMING 1200 BREAKER	ATS SECTION	(12) #500 KCMIL, P (4) #4/0, N	(4) 3-1/2" (RGS)	TYPE XHHW CONDUCTORS
P-MAIN-4	ATS SECTION	MCC - 1	(9) #600 KCMIL, P (3) #250 KCMIL, N (3) #3/0 GND	(3) 3-1/2" (PVC 80)	TYPE XHHW CONDUCTORS
P-GEN-1	750KW GENERATOR MAIN BREAKER	MCC ATS SECTION	(9) #600 KCMIL, P (3) #250 KCMIL, N (3) #3/0 GND	(3) 3-1/2" (PVC 80)	TYPE XHHW CONDUCTORS

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 the proposal pricing listed is FIRM for a minimum of forty-five (45) days after bids are opened prior to bid award.

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.

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 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 <u>by April 14, 2023</u>. 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 (December 16, 2021) and time (2:00 pm) indicated on the Invitation to Bid (Section 1.00) or as stated on any addendum(s) stating otherwise. Bids not containing the following items may be considered non-responsive:

Safe Drinking Water Revolving Loan Fund (SDWRLF) form – see Section 2.00
Certification Regarding Lobbying

- Bid Proposal form signed by company representative having authority to submit bids see Section 5.00
- Bidder's Qualifications including acknowledgement for the following see Section 6.00
 - Reservoir Contractor
 - Tank Painting Contractor
 - Transmission Main Contractor
 - Controlled Blasting Contractor
- Bid Bond/Security (5%) in form of certified or cashier's check drawn from an Oregon Bank see Section 7.00
- Acknowledgement of ALL Addenda
- Non-Collusion Affidavit (signed by company representative and notarized) see Section 11.00
- First-Tier Subcontractor Disclosure Form (must be submitted by Disclosure Deadline Date and Time) see end of Section 14.00

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, December 8, 2021
- A bid amount shall be submitted in the appropriate place for each Item for which a Bid is being submitted.
- 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: https://pendleton.or.us/rfps and the OregonBuys website: https://pendleton.or.us/rfps and the OregonBuys website: https://oregonbuys.gov/bso/view/login/login.xhtml. Addenda may be downloaded off these websites and will be faxed or emailed to all bidders who have notified City to request their firm be placed on the Planholders list. Contact jutta.haliewicz@ci.pendleton.or.us to be added to the List. Bidders should frequently check City's website 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's 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. 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 nonresponsive. (See Section 11.00)
- 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 14.00) 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.

Bidder intends to provide the services of the following (enter the names of the proposed prequalified Reservoir Contractor, Tank Painting Contractor, Transmission Main Contractor, and Controlled Blasting Contractor):

If there is no pre-approved specialty contractor noted in Addendum issuance (see Section 6.00), write in "SOQ" and provide a copy of the Statement of Qualifications for the specialty contractor consideration.

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 Num	ber:		Addendum Date:	
		<u> </u>		
				_
The name of the	Bidder who is submitting	this Proposal is_		
doing business a	at(Street)			
which is the addi			vith this Proposal and with t	ine contract shall be sent.
	e principal officers of the sted in this Proposal as p		mitting this Proposal, of t follows:	the partnership, or of all
Print Name			Print Name	
Signature			Signature	
Dated this	day of	, 2021.		
			Signature of Bidder	
		:	Title	

Airport Reservoir and Booster Pump Station BID PROPOSAL

Item Est. Description Unit **Unit Price Total Price Ouantity** No. Common Items Mobilization, bonds, insurance, and 1 LS \$ 1 \$ demobilization Traffic control 1 \$ \$ 2 LS \$ \$ 3 Erosion control 1 LS 4 1 LS \$ \$ Construction survey and staking \$ \$ 5 Extra work as authorized 1 LS 200,000.00 200,000.00 SUBTOTAL FOR COMMON ITEMS Schedule A - Transmission Main Improvements Item Est. Unit Description **Unit Price Total Price** Quantity No. A-1 Furnish and install Class 52 ductile iron pipe with Class A (compacted native material) trench backfill: a. 24-inch diameter, restrained 660 LF \$ \$ A-2 Furnish and install Class 52 ductile iron pipe with Class B (imported granular material) trench backfill: \$ \$ a. 24-inch diameter, restrained 366 LF A-3 Furnish and install PVC pipe with Class A (compacted native material) trench backfill: a. 6-inch diameter, AWWA C900, \$ \$ 70 LF restrained b. 12-inch diameter, AWWA C900, \$ 525 LF \$ restrained c. 12-inch diameter, AWWA C900, non-\$ 915 LF \$ restrained d. 18-inch diameter AWWA C905, non-\$ \$ 680 LF restrained A-4 Furnish and install PVC pipe with Class B (imported granular material) trench backfill:

Time of Completion: No later than April 14, 2023

	a. 6-inch diameter, AWWA C900,	80	LF	¢	\$
	restrained	80	LF	\$	\$
	b. 12-inch diameter, AWWA C900, restrained	332	LF	\$	\$
	c. 18-inch diameter AWWA C905, restrained	1,141	LF	\$	\$
	d. 18-inch diameter AWWA C905, non- restrained	1,645	LF	\$	\$
	e. 24-inch diameter, AWWA C905, restrained	400	LF	\$	\$
	f. 24-inch diameter, AWWA C905, non-restrained	425	LF	\$	\$
A-5	Furnish and install ductile iron fittings:				
	a. 6-inch diameter long sleeve, MJ	3	EA	\$	\$
	b. 6-inch diameter cap, MJ	1	EA	\$	\$
	c. 8-inch diameter cap, MJ	2	EA	\$	\$
	d. 12-inch diameter 45° bend, MJ	4	EA	\$	\$
	e. 12-inch diameter 22.5° bend, MJ	3	EA	\$	\$
	f. 12-inch diameter 11.25° bend, MJ	6	EA	\$	\$
	g. 12-inch by 6-inch diameter tee, MJxFLG	2	EA	\$	\$
	h. 12-inch by 6-inch diameter reducer, MJ	1	EA	\$	\$
	i. 18-inch diameter 11.25° bend, MJ	5	EA	\$	\$
	j. 18-inch diameter long sleeve, MJ	1	EA	\$	\$
	k. 18-inch by 12-inch diameter tee, MJ	1	EA	\$	\$
	1. 24-inch diameter 45° bend, MJ	1	EA	\$	\$
	m. 24-inch diameter 22.5° bend, MJ	2	EA	\$	\$
	n. 24-inch diameter 11.25° bend, MJ	2	EA	\$	\$
	o. 24-inch diameter long sleeve, MJ	1	EA	\$	\$
	p. 24-inch by 6-inch diameter tee, MJ	2	EA	\$	\$
A-6	Furnish and install buried valves:				
	a. 6-inch diameter GV, MJ	2	EA	\$	\$

	b. 6-inch diameter GV, FLGxMJ	2	EA	\$ \$
	c. 12-inch diameter GV, MJ	3	EA	\$ \$
	d. 18-inch diameter BFV, MJ	2	EA	\$ \$
A-7	Furnish and install 3/4-inch diameter combination air valve (CAV) assemblies	1	EA	\$ \$
A-8	\ /	4	EA	\$ \$
A-9	Excavation and backfill for water laterals and meter boxes	4	EA	\$ \$
A-10	Connections to existing water system piping:			
	a. Alignment A: Connection to existing 18-inch diameter water main at Westgate	1	EA	\$ \$
	b. Alignment B: Connection to existing 18-inch diameter water main at NW A Ave	1	EA	\$ \$
	c. Alignment C: Connection to existing 6- inch diameter water main, including removal of existing PRV station	1	EA	\$ \$
A-11	Additional costs for utility trench rock excavation, hauling, and disposal:			
	a. To north end of Old Airport Road	2,700	CY	\$ \$
	b. To 1118 Airport Road (FedEx/Kube property)	1,720	CY	\$ \$
A-12	Additional cost for overexcavation and select backfill material for unsuitable trench conditions	50	СҮ	\$ \$
A-13	Hydrostatic testing, flushing, and disinfection of water mains:			
	a. Alignment A, 18-inch diameter	1	LS	\$ \$
	b. Alignment B, 24-inch diameter	1	LS	\$ \$
	c. Alignment C, 12-inch diameter	1	LS	\$ \$
A-14	Saw-cutting existing asphalt concrete (AC) pavement and concrete surfacing, STA A36+80 to STA A38+76, STA B9+80 to STA B10+20:			
	a. First 4-inch depth	500	LF	\$ \$
	b. Additional cutting per 1-inch depth beyond initial 4-inch thickness	1,000	LF	\$ \$

A-15	Hot mix asphaltic concrete (HMAC) trench resurfacing, STA A36+80 to STA A38+76, STA B9+80 to STA B10+20	50	TON	\$	\$
A-16	Restoration of Old Airport Road, STA A13+20 to STA A36+80:		_		
	a. General surface restoration of roadway and right-of-way, including roadside drainage	1	LS	\$	\$
	b. Compacted roadway base aggregate,3/4-inch - 0-inch, 2-inch depth, 15-ftwidth	220	СҮ	\$	\$
	c. General surface restoration, outside of roadway	1	LS	\$	\$
A-17	Abandon-in-place existing 8-inch diameter waterline in Old Airport Road and Airport Road from Westgate to existing Airport Reservoirs 1 & 2	1	LS	\$	\$
		\$			

Sched	hedule B - New Airport Reservoir							
ltem No.	Description	Est. Quantity	Unit	Unit Price	Total Price			
B-1	All work required to construct 2.0 MG welded steel New Airport Reservoir, complete, other than as provided for under separate unit prices. General work categories are described in the price breakdown below, with the sum of items a k. below being equal to the total lump sum for Item B-1:							
	a. Shop drawings and approvals	1	LS	\$	\$			
	b. Site preparation, controlled blasting and rock excavation, general excavation, backfill, and grading	1	LS	\$	\$			
	c. Dewatering	1	LS	\$	\$			
	d. Installation of permanent 2-inch depth of 3/4" - 0" crushed rock surfacing over site, extending 2 feet beyond site perimeter fencing, as shown in the Drawings	1	LS	\$	\$			
	e. Reservoir construction, including reservoir foundation, access hatches, roof vent, interior piping and pipe blocks, interior and exterior ladders with cabled fall prevention system, roof catwalk, and all other accessories as noted and shown in the Drawings	1	LS	\$	\$			
	f. Reservoir testing, disinfection, and start-up	1	LS	\$	\$			
	g. Site access driveway and reservoir access road with surfacing, sidewalks, and features as noted and shown in the Drawings	1	LS	\$	\$			
	h. Site stormwater facilities, including drainage ditches and stormwater detention facility	1	LS	\$	\$			
	i. Sanitary improvements, including process water soakage trench	1	LS	\$	\$			
	j. Concrete reservoir site access stairway, complete	1	LS	\$	\$			
	k. Final site grading, surface restoration, and site clean-up	1	LS	\$	\$			

В-2	Hauling and off-site disposal of rock material blasted and excavated from New Airport Reservoir and Booster Station site.	1	LS	\$	\$
B-3	Furnish and install Class 52 ductile iron pipe with Class B (imported granular material) trench backfill:			-	
	a. 6-inch diameter, restrained	114	LF	\$	\$
	b. 8-inch diameter, restrained	59	LF	\$	\$
	c. 18-inch diameter, restrained	495	LF	\$	\$
	d. 24-inch diameter, restrained	366	LF	\$	\$
B-4	Furnish and install ductile iron fittings:				
	a. 6-inch diameter 90° bend, MJ	3	EA	\$	\$
	b. 6-inch diameter 45° bend, MJ	5	EA	\$	\$
	c. 6-inch diameter 11.25° bend, MJ	2	EA	\$	\$
	d. 8-inch diameter 90° bend, FLG	1	EA	\$	\$
	e. 8-inch diameter 45° bend, MJ	1	EA	\$	\$
	f. 8-inch diameter 22.5° bend, MJ	5	EA	\$	\$
	g. 8-inch diameter long sleeve, MJ	2	EA	\$	\$
	h. 18-inch diameter 90° bend, MJ	3	EA	\$	\$
	i. 18-inch diameter 45° bend, MJ	2	EA	\$	\$
	j. 18-inch diameter 22.5° bend, MJ	2	EA	\$	\$
	k. 18-inch diameter tee, MJ	3	EA	\$	\$
	l. 18-inch by 8-inch diameter tee, FLG	1	EA	\$	\$
	m. 24-inch diameter 90° bend, MJ	2	EA	\$	\$
	n. 24-inch diameter 45° bend, MJ	1	EA	\$	\$
	o. 24-inch diameter 22.5° bend, MJ	1	EA	\$	\$
	p. 24-inch diameter 11.25° bend, MJ	1	EA	\$	\$

	q. 24-inch by 6-inch diameter tee, MJxFLG	1	EA	\$ \$
	r. 24-inch by 18-inch diameter tee, MJ	1	EA	\$ \$
B-5	Furnish and install buried gate valves:			
	a. 6-inch diameter GV, FLG	1	EA	\$ \$
	b. 6-inch diameter GV, FLGxMJ	1	EA	\$ \$
	c. 8-inch diameter GV, FLG	1	EA	\$ \$
	d. 18-inch diameter BFV, FLG	1	EA	\$ \$
	e. 18-inch diameter BFV, MJ	4	EA	\$ \$
	f. 24-inch diameter BFV, FLG	1	EA	\$ \$
	g. 24-inch diameter BFV, MJ	1	EA	\$ \$
B-6	Furnish and install flexible expansion joints:			
	a. 6-inch diameter, FLGxMJ	1	EA	\$ \$
	b. 18-inch diameter, FLGxMJ	2	EA	\$ \$
	c. 24-inch diameter FLGxMJ	1	EA	\$ \$
B-7	Furnish and install Reservoir Check Valve Vault, complete	1	LS	\$ \$
B-8	Furnish and install chlorine injection line	150	LF	\$ \$
B-9	Furnish and install 3/4-inch diameter water quality sampling service laterals	2	EA	\$ \$
B-10	Furnish and install fire hydrant assemblies	1	EA	\$ \$
	Connections to existing water system piping:			
	a. Alignment X: Connection to existing 8- inch diameter main in Old Airport Road	1	EA	\$ \$
	Hydrostatic testing, flushing, and disinfection of water mains	1	LS	\$ \$
B-13	Furnish and install PVC drain pipe with Class B (imported granular material) trench backfill:			
	a. 4-inch diameter, AWWA C900, non- restrained	40	LF	\$ \$
	b. 6-inch diameter, AWWA C900, non- restrained	524	LF	\$ \$

	c. 12-inch diameter, AWWA C900, non- restrained	262	LF	\$ \$
	d. 18-inch diameter AWWA C905, non- restrained	222	LF	\$ \$
B-14	Furnish and install ditch inlets	6	EA	\$ \$
B-15	Furnish and install 48-inch diameter reservoir monitoring manhole	1	EA	\$ \$
B-16	Furnish and install 48-inch diameter site drainage manhole	4	EA	\$ \$
	a. Adder for beehive top	2	EA	\$ \$
B-17	Site drainage system testing and start-up	1	LS	\$ \$
B-18	Furnish and install site perimeter chain link fencing	870	LF	\$ \$
B-19	Furnish and install barbed and woven wire fencing	2,650	LF	\$ \$
B-20	Furnish and install motorized site access gate with personnel gate, complete, at Booster Station	1	LS	\$ \$
B-21	Furnish and install 20-ft wide gate (per ODOT Dwg RD820) with bollards and pedestrian access at Old Airport Road	2	EA	\$ \$

Old Airport Road roadway improvements, STA RA1+00 to STA RA22+00:				
a. General excavation	2,500	CY	\$	\$
b. Embankment in place, STA RA11+70 to STA RA14+20	1,440	CY	\$	\$
c. Compacted roadway aggregate base, 3/4-inch - 0-inch, 8-inch depth, 25-foot width	1,300	CY	\$	\$
d. HMAC roadway surfacing, STA RA1+00 to STA RA1+60	35	TON	\$	\$
e. Cobble-lined roadside drainage ditch	2,100	LF	\$	\$
	\$			

Sched	Schedule C - New Airport Booster Station							
Item No.	Description	Est. Quantity	Unit	Unit Price	Total Price			
C-1	All work required to construct 4,500 gpm New Airport Booster Station, complete. General work categories are described in the price breakdown below, with the sum of items a e. below being equal to the total lump sum for Item C-1:							
	a. CMU building, complete	1	LS	\$	\$			
	b. Mechanical piping, vavles, fittings, and equipment	1	LS	\$	\$			
	c. HVAC	1	LS	\$	\$			
	d. Electrical and controls	1	LS	\$	\$			
	e. Generator with reinforced concrete pad	1	LS	\$	\$			
		SUBT	TOTAI	L FOR SCHEDULE C	\$			
Sched	lule D - Demolition and Removal of I	Existing S	tructu	ires				
Item No.	Description	Est. Quantity	Unit	Unit Price	Total Price			
	Demolition and removal of Gilliam Canyon Pump Station	1	LS	\$	\$			
	Demolition and removal of Airport Reservoirs 1 & 2 and Airport Pump Station	1	LS	\$	\$			
		\$						
	GR	BID AMOUNT:	\$					

Contract No. _____

CONTRACT FOR CONSTRUCTION

THIS CONTRACT, made and er	itered into this	day of	,	2022, by	and
between the City of Pendleton,	, Oregon, a municipa	I corporation hereinafter	called the	owner"	and
	-	hereinafter ca	alled the "C	Contractor"	

WITNESSETH:

Contract Documents shall be referred to as Invitation to Bid, Information for Bidders, Safe Drinking Water Revolving Loan Fund Contract Requirements, Forms and Documents, Prequalification, Bid Proposal, Bidder's Qualifications, Bid Bond, Statutory Public Works Bond, Contract, Assignment of Anti-Trust Rights, Non-Collusion Affidavit, Performance and Payment Bond, Certificate of Insurance, Special Conditions, IRS Form W-9, U.S. Department of Labor–Davis-Bacon Wage Rates, Prevailing Wage Rates for Public Works Contracts in Oregon, Inadvertent Discovery Plan For Cultural Resources, Technical Specifications, Drawings, 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.

It is agreed that the time limit for the completion of the Contract, based upon the Proposal, is **no later than** April 14, 2023.

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.

IN WITNESS WHEREOF, we the parties hereto, each herewith subscribe the same this _____ day of _____, 2022.

CITY OF PENDLETON

By_____ J.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 #_____

Superseded General Decision Number: OR20200077

State: Oregon

Construction Type: Heavy

County: Umatilla County in Oregon.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Number	Publication	Date
	01/01/2021	
	04/02/2021	
	06/18/2021	
	11/26/2021	
	Number	01/01/2021 04/02/2021 06/18/2021

CARP0001-038 06/01/2020

POWER EQUIPMENT OPERATOR

GROUP 1....\$ 45.90

	Rates	Fringes
CARPENTER (Excluding Form Work) MILLWRIGHT		18.30 18.75
ELEC0112-004 06/01/2021		
	Rates	Fringes
ELECTRICIAN		Fringes 22.93
ELECTRICIAN ENGI0701-040 01/01/2020		5

15.35

GROUP	1A\$	48.06	15.35
GROUP	1B\$	50.22	15.35
GROUP	2\$	43.99	15.35
GROUP	3\$	42.84	15.35
GROUP	4\$	41.01	15.35
GROUP	5\$	39.77	15.35
GROUP	6\$	36.55	15.35

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CRANE: Helicopter Operator, when used in erecting work; Whirley Operator, 90 ton and over; LATTICE BOOM CRANE: Operator 200 tons through 299 tons, and/or over 200 feet boom; HYDRAULIC CRANE: Hydraulic Crane Operator 90 tons_through_199_tons_with_luffing_or_tower_attachments;____

GROUP 1A: HYDRAULIC CRANE: Hydraulic Operator, 200 tons and over (with luffing or tower attachment); LATTICE BOOM CRANE: Operator, 200 tons through 299 tons, with over 200 feet boom;

GROUP 1B: LATTICE BOOM CRANE: Operator, 300 tons through 399 tons with over 200 feet boom; Operator 400 tons and over

GROUP 2: CRANE: Cableway Operator, 25 tons and over; HYDRAULIC CRANE: Hydraulic crane operator 90 tons through 199 tons (without luffing or tower attachment); TOWER/WHIRLEY OPERATOR: Tower Crane Operator; Whirley Operator, under 90 tons; LATTICE BOOM CRANE: 90 through 199 tons and/or 150 to 200 feet boom; HYDRAULIC CRANE: Hydraulic crane operator, 50 tons through 89 tons (with luffing or tower attachment); Rubber tired scraper with tandom scrapers; Loader 120,000 lbs and above; BLADE: Auto Grader; Blade Operator-Robotic; Bulldozer over 120,000 lbs and above;

GROUP 3: HYDRAULIC CRANE: Hydraulic crane operator, 50 tons through 89 tons (without luffing or tower attachment); LATTICE BOOM CRANES: Lattice Boom Crane-50 through 89 tons (and less than 150 feet boom); Rubber Tired Scraper: with tandom scrapers; self loading, paddle wheel, auger type, finish and/or 2 or more units; Loader 60,000 lbs and less than 120,000 lbs; Bulldozer over 70,000 lbs up to and including 120,000 lbs;

GROUP 4: CRANE: Hydraulic Crane Operator, under 50 tons; LATTICE BOOM CRANE OPERATOR: Lattice Boom Crane Operator, under 50 tons; TRACKHOE/BACKHOE-ROBOTIC: track and wheel type, up to and including 20,0000 lbs. with any or all attachments; BLADE: Blade Operator; Tractor operator with boom attachment; DRILLING: Churm Drill and Earth Boring Machine Operator; Directional Drill Operator over 20,000 lbs pullback; CRANE: Chicago boom and similar types; Boom type lifting device, 5 ton capacity or less; Rubber-Tired Scraper, single engine, single scraper; Compactor-Self Propelled; Loaders 25,000 lbs and less than 60,000 lbs; Bulldozer over 20,000 lbs and more than 100 horse up to 70,000 lbs; Screed; Compactor with blade; Mechanic

GROUP 5: TRACKHOE/BACKHOE HYDRAULIC: Track type up to and including 20,000 lbs, Wheel type (Ford, John Deer, Case Type); Boom truck operator; DRILLING: Churm Drill and Earth Boring Machine Operator; Directional Drill Operator less than 20,000 lbs pullback; Loaders, rubber tired type , less than 25,00 lbs; Forklift over 5 ton, Bulldozer 20,000 lbs or 100 horses or less; Roller; Compactor without blade

GROUP 6: LOADERS: (less than 1 cu yd.); Oiler; Grade Checker; Crane oiler; Forklift; Roller (non-asphalt)

Zone Differential (add to Zone 1 rates): Zone 2 - \$3.00 Zone 3 - \$6.00

For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or porjects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens ""Blast Zone"" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

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IRON0029-013 07/01/2020

	Rates	Fringes
IRONWORKER (Reinforcing and Structural)	\$ 39.10	29.75
LAB00737-005 06/01/2020		
	Rates	Fringes
Laborers: (Mason Tender-Cement/Concrete)	\$ 32.71	15.40

* LAB00737-031 06/01/2021

	Rates	Fringes
Laborers: GROUP 1 GROUP 2		16.23 16.23
LABORER CLASSIFICATIONS		
GROUP 1: Asphalt Spreader		
GROUP 2: Grade Checker		
PAIN0055-022 07/01/2020		
	Rates	Fringes
PAINTER BRUSH, ROLLER AND SPRAY		
PLUM0598-007 06/01/2019		
	Rates	Fringes
Plumbers and Pipefitters	.\$ 50.47	32.17
SUOR2009-075 11/23/2009		
	Rates	Fringes
CARPENTER (Form Work Only)	.\$ 23.50	9.27
CEMENT MASON/CONCRETE FINISHER	.\$ 21.13	8.90
LABORER: Common or General	.\$ 21.05	4.38
LABORER: Fence Erection	.\$ 23.88	7.45
LABORER: Flagger	.\$ 19.31	5.31
LABORER: Pipelayer	.\$ 20.52	4.51
LINE CONSTRUCTION: Groundman	.\$ 31.36	7.27
OPERATOR: Bobcat/Skid Steer/Skid Loader	.\$ 22.77	7.90
OPERATOR: Broom/Sweeper	.\$ 32.31	6.43
OPERATOR: Excavator	.\$ 30.12	6.23
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	.\$ 27.59	2.96
TRUCK DRIVER: Dump Truck	.\$ 23.79	5.95
TRUCK DRIVER: Off the Road Truck	.\$ 31.81	6.33
TRUCK DRIVER: Water Truck	.\$ 26.12	6.53

WELDERS - Receive rate prescribed for craft performing

operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210 2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"

SECTION 43 40 01

POLYETHYLENE STORAGE TANK

PART 1 GENERAL

1.1 WORK INCLUDED

A. This section covers the work necessary to furnish and install a chemical storage tank for Sodium Hypochlorite.

1.2 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
 - 1. ASTM (American Society for Testing and Materials) Standards:
 - a. D618 Conditioning Plastics and Electrical Insulating Materials for Testing
 - b. D638 Tensile Properties of Plastics
 - c. D790 Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
 - d. D883 Definitions of Terms Relating to Plastics
 - e. D1505 Density of Plastics by the Density-Gradient Technique
 - f. D1525 Test Method for Vicat Softening Temperature of Plastics
 - g. D1693 Test Method for Environmental Stress-Cracking of Ethylene Plastics
 - h. D1998 Standard Specification for Polyethylene Upright Storage Tanks
 - i. D2765 Degree of Crosslinking in Crosslinked Ethylene Plastics as Determined by Solvent Extraction
 - j. D2837 Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials
 - k. D3892 Practice for Packaging/Packing of Plastics
 - I. F412 Definitions of Terms Relating to Plastic Piping Systems
 - 2. ARM (Association of Rotational Molders) Standards: Low Temperature Impact Resistance (Falling Dart Test Procedure)

- 3. ANSI Standards: B-16.5 Pipe Flanges and Flanged Fittings
- 4. OSHA Standards: 29 CFR 1910.106 Occupational Safety and Health Administration, Flammable and Combustible Liquids
- 5. IBC CODE: International Building Code 2018 Edition
- 6. CBC Code: California Building Code 2019 Edition
- 7. NSF/ANSI Standard 61 Drinking Water System Components (Type II resin)ASTM International (ASTM):

1.3 SUBMITTALS

- A. Data and specifications for the equipment shall include, but shall not be limited to the following submittals.
- B. Contractor shall submit for review sufficient literature, detailed specifications, and drawings to show dimensions, materials used, design features..
- C. Shop drawings for the tanks shall include as a minimum the following:
 - 1. Service Conditions: Chemical environment and tempera-ture.
 - 2. Sizing and description of the fittings and accessories for each tank that are to be supplied by the tank manufacturer.
- D. Supporting information on fittings and accessories to be supplied; .
- E. Manufacturer's warranty

1.4 QUALITY ASSURANCE

A. The tanks of the same material furnished under this Section shall be supplied by a manufacturer who has been regularly engaged in the design and manufacturing of rotationally molded chemical storage tanks using cross-linked and high density linear polyethylene tanks for over ten years.

PART 2 PRODUCTS

- 2.1 GENERAL
 - A. All equipment specified herein shall be factory fabricated and assembled to the maximum extent possible requiring a minimum of field assembly. Field installation shall be limited to anchoring the tank and making external piping connections.

- B. All equipment specified herein shall be suitable for contact with the stored chemicals.
- C. Like items of materials and equipment shall be the end products of one manufacturer in order to provide standardization for appearance operation, maintenance spare parts, and manufacturer's service.

2.2 MANUFACTURERS

- A. 5710104CFWS-CFS, 150 Gallon Chemical Feed Station. Snyder Industries, Inc
- B. Or equal.
- 2.3 SERVICE CONDITIONS

Tank #	Chemical Stored	Concentration / Specific Gravity	Tank Location Inside / Outside	Tank Resin	Fitting Material
1	Sodium Hypochlorite	<16.5% / 1.9	Inside	HDLPE	PVC

2.4 TANK CONSTRUCTION

- A. Tank shall be vertical, flat bottom, dome top construction with translucent materials to allow observation of liquid level.
- B. Tanks are classified according to type as follows and it is the responsibility of the purchaser to specify Type I or Type II.
 - 1. Type I Tanks molded from cross-linkable polyethylene resin.
 - 2. Type II Tanks molded from linear polyethylene resin (not cross-linkable resin).
- C. The material used shall be virgin polyethylene resin as compounded and certified by the manufacturer. Type I tanks shall be made from crosslinked polyethylene (XLPE) resin as manufactured by Ingenia Polymers Corp., or resin of equal physical and chemical properties. Type II tanks shall be made from high density linear polyethylene (HDLPE) resin as manufactured by ExxonMobil Chemical, or resin of equal physical and chemical properties.
- D. All polyethylene resin material shall contain a minimum of a U.V. 8 -15 stabilizer as compounded by the resin manufacturer. Pigments may be added at the purchaser's request, but shall not exceed 0.25% (dry blended) of the total weight.
- E. Mechanical Properties of Type I tank material: Cross-linked (XLPE)

PROPERTY	ASTM	VALUE
Density (Resin)	D1505	0.942 -0.946 g/cc
Tensile (Yield Stress 2"/min)	D638	2700 - 2900 PSI

Elongation at Break (2.0in/min (50 mm/min)	D638	300-800%
ESCR (100% Igepal, Cond. A, F50)	D1693	>1000 hours
ESCR (10% Igepal, Cond. A, F50)	D1693	>1000 hours
Flexural Modulus 1% Secant	D790	110,000 PSI

F. Mechanical Properties of Type II tank material: High density Linear (HDLPE)

PROPERTY	ASTM	VALUE
Density (Resin)	D1505	0.941-0.950 g/cc
Tensile (Yield Stress 2"/min)	D638	2800 - 3500 PSI
Elongation at Break (2"/min.)	D638	>1000%
ESCR (100% Igepal, Cond. A, F50)	D1693	>500 hours
ESCR (10% Igepal, Cond. A, F50)	D1693	40 - 48 hours
Flexural Modulus 1% Secant	D790B	130,000 – 145,000 PSI

- G. The minimum required wall thickness of the cylindrical shell at any fluid level shall be determined by the following equation, but shall not be less than 0.187 in. thick.
 - T = P x O.D./2 SD = 0.433 x S.G. x H x O.D./2 SD
 - T = wall thickness
 - SD = hydrostatic design stress, PSI
 - P = pressure (.433 x S.G. x H), PSI
 - H = fluid head, ft.
 - S.G. = specific gravity, g/cm3
 - O.D. = outside diameter, in.
 - 1. The hydrostatic design stress shall be determined by multiplying the hydrostatic design basis, determined by ASTM D2837 using rotationally molded samples, with a service factor selected for the application. The hydrostatic design stress would be \leq 660 PSI at 73 degrees Fahrenheit for Type I and Type II materials based the resin density. In accordance with the formula in 1.08 A., the tank shall have a stratiform (tapered wall thickness) wall. In no case shall the wall thickness be less than the minimum allowed per calculation of ASTM D1998.
 - 2. The hydrostatic design stress shall be derated for service above 100 degrees Fahrenheit and for mechanical loading of the tank.
 - 3. The standard design specific gravity shall be 1.35, 1.5 or 1.9.

- 4. The minimum required wall thickness for the cylinder straight shell must be sufficient to support its own weight in an upright position without any external support.
- 5. The top head must be integrally molded with the cylinder shell. The minimum thickness of the top head shall be equal to the top of the straight wall. The top head of tanks with 2000 or more gallons of capacity shall be designed to provide a minimum of 1300 square inches of flat area for fitting locations.
- 6. Tanks with 2000 or more gallons of capacity shall have a minimum of 3 lifting lugs integrally molded into the top head. The lifting lugs shall be designed to allow erection of an empty tank.
- 7. The tank shall be designed to provide a minimum of 4 tie-down lugs integrally molded into the top head. The tie-down lugs shall be designed to allow tank retention in wind and seismic loading. Refer to section 2.02 H. for tank tie-down accessories.

2.5 FITTINGS

- A. Tank fittings and openings shall be provided as listed on the drawings.
- B. Fittings shall be Schedule 80 or greater PVC, compressive type, with long shank, deep cut threaded with dual wide nut assembly. End type of fittings
- C. All flanged fittings shall be gasketed with materials compatible with the chemical service.
- D. All materials used in tank fitting assemblies shall be resistant to the stored chemicals. No wetted fittings or appurtenances shall be of metallic construction.

2.6 ACCESSORIES AND APPURTENANCES

- A. All tank accessories and appurtenances shall be chemically compatible with the stored materials and shall be designed to withstand the hydrostatic pressure resulting from a full tank.
- B. Calibration Tape: Calibration tape shall be self-adhesive, translucent tape calibrated in multiples of 50 gallons or less. Strips shall use black numerals and tick marks to denote number of gallons.

- C. Gaskets:
 - 1. Material compatible with chemical service, low torque, full face, ASME B16.1 dimensions, two concentric, convex, molded rings between center hole and bolt hole circle.
 - 2. Type: 1/4-inch thick, low torque, full face, ASME B16.1 dimensions.

PART 3 EXECUTION

3.1 INSTALLATION

- A. In accordance with the manufacturer's written instructions.
- B. CONTRACTOR shall provide all supervision, labor, tools, construction equipment, incidental materials, and the necessary services required to complete the installation and testing of the equipment.
- C. Tank shall be installed in such a manner that no stresses shall be applied to flanged outlet as per manufacturer's installation instructions.
- D. Bolt torques on gaskets shall be as recommended by the equipment manufacturer.

3.2 FIELD QUALITY CONTROL

- A. Field Tests:
 - 1. Hydrostatic Test: Storage tank shall be filled with clean water to the overflow level after all connections have been made. There shall be no leakage, no signs of weeping, and no signs of capillary action over a period of 48 hours.
 - 2. Quality control shall include a final inspection by CONTRACTOR and a written record of this final inspection.
 - 3. After testing, the tank shall be thoroughly cleaned and dried.

END OF SECTION