

ADDENDUM NO. 1
SEWER SYSTEM IMPROVEMENTS
CONTRACT 18-01
WATER TREATMENT PLANT IMPROVEMENTS
LIVINGSTON, TENNESSEE
WAUFORD PROJECT NUMBER 2068

Date of Addendum: Friday, June 8, 2018
Bid Opening: Thursday, June 14, 2018, 2:00 P.M. Central Time

1. Detailed Specifications, Section 4. Site Preparation and Development, Piping and Valves, Paragraph 16. Sump Pumps, Page DS 4-16:

Add the following Paragraph 16. Sump Pumps to the end of this Section.

“16. Sump Pumps

Duplex submersible motor-driven sump pumps equal to Zoeller Model 137 shall be installed as shown on the Plans. Sump pump motors shall be single phase, 208V, 3,450 RPM. The unit shall be equipped with automatic float control, alternator, starters, and high water level alarm; all controls shall be equal to Zoeller Order No. 10-1045 and shall be in a NEMA 4X wall-mounted panel. The adjustable float control shall start the second pump if the level continues to rise and shall actuate the alarm at a point to be set in the field. Audible bell is not required; contacts shall be furnished for transmission of high level alarm. The capacity and head of each vertical motor-driven sump pump shall be in accordance with the following:

25 GPM at 22.5 ft. TDH, 0.5 HP

Electrical work for installation of sump pumps shall be as indicated on the Plans and as specified herein.”

2. Detailed Specifications, Sub-Section 5A. Mechanically Cleaned Bar Screen, Paragraph 5.f. Controls and Instrumentation, Items (1) and (2), Page DS 5A-7:

Revise Items (1) and (2) as shown below.

“(1) General

The automatic bar screen shall be provided with a complete control package including a weather resistant NEMA 4X stainless steel enclosure complete with all required components including a run-time meter, H/O/A switch, **forward/off/reverse** switch for the screen, a run-time meter, H/O/A switch, **and forward/off/reverse** switch for the screw conveyor. **Torque limiting devices and overcurrent protection shall be provided for all electric motors and driven devices. Where possible, resettable breakers shall be used in lieu of fuses.**

(2) Operational Requirements

When “Automatic” is selected on the H/O/A switch, the screen shall operate at an adjustable time interval for an adjustable period of time. Initially, the screen shall be set to operate on a 30 minutes interval for a time period of 5 minutes. Additionally, the screen shall operate when it receives a discrete signal from the upstream high water float switch for an adjustable period of time.

When “Hand” is selected on the H/O/A switch, the screen shall operate continuously until another position is selected.

A mushroom head emergency STOP push button shall be provided which stops all automatic or manual operation of the equipment when depressed.”

3. Detailed Specifications, Sub-Section 5A. Mechanically Cleaned Bar Screen, Paragraph 9. Freeze Protection Package, Page DS 5A-10:

Add the following Paragraph 9. Freeze Protection Package to the end of this Sub-Section.

“9. Freeze Protection Package

The manufacturer shall provide a complete freeze protection package for each piece of equipment furnished. The freeze protection devices may be either installed by the manufacturer or the Contractor. Heat tracing shall be installed in accordance with the manufacturer's recommendations. Electrical power provided for heat tracing shall come from the bar screen control panel provided by the manufacturer.”

4. Detailed Specifications, Sub-Section 5B. Coarse Bubble Diffused Aeration System, Paragraph 1. Scope, Page DS 5B-1:

Modify the second paragraph as shown:

The Contractor shall furnish all stainless steel coarse bubble diffuser assemblies; stainless steel distribution headers with fittings, an expansion/contraction system, supports and anchors; stainless steel air distribution manifolds with fittings, an expansion/contraction system, supports and anchors; stainless steel air drop legs with joints, supports and anchors; installation and start-up assistance by a factory representative; and spare parts for two coarse bubble fixed header stainless steel aeration systems. Each of the two aeration systems shall be to provide mixing energy and process oxygen to a basin with an inside length of **68** feet, inside width of 17 feet, and a side wall depth of 15 feet. The basins will have variable liquid depth. Maximum liquid depth at which aeration will occur will be 14.11 feet above the basin floor. The aeration systems will operate in a cyclical fashion with air flow being interrupted at 24 hour intervals for durations of 2 to 4 hours.

5. BID FORM, Pages BF-4, BF-5 and BF-6:

Replace Pages BF-4, BF-5 and BF-6 with the attached Pages BF-4*, BF-5* and BF-6*.

6. Plans, Sheet 4:

Modify as shown on the three attached 8 ½" x 11" sheets.

J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.



J. Gregory Davenport, P.E.
Tennessee License No. 104881

9. CONTRACT 18-01 – WASTEWATER TREATMENT PLANT IMPROVEMENTS (cont'd)

ITEM NUMBER	APPROXIMATE QUANTITY	DESCRIPTION WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL PRICE
4.	Lump Sum	New Motive Sump Pumps complete in place including removal of existing equipment, installation, and accessories For _____ _____ Dollars _____ Cents, lump sum		\$ _____
5.	Lump Sum	New Blower Building and Headworks lighting complete in place including removal of existing lighting, wiring as required, mounts, light fixtures, installation, and accessories For _____ _____ Dollars _____ Cents, lump sum		\$ _____
TOTAL BASE BID CONTRACT 18-01 ITEMS 1 – 5, INCLUSIVE				\$ _____

The Contractor shall be aware that the bid cost for this contract shall be the sum of bid items 1 through 5 and no additional payment will be made for work shown on the Plans or specified that is not described in a bid item.

9. CONTRACT 18-01 – WASTEWATER TREATMENT PLANT IMPROVEMENTS (cont'd)

9.b. Equipment to be Furnished

The prices for equipment listed below for work to be constructed under Sub-Sections 5A through 5C are included in the lump sum price shown previously as Item 9. 1 through 3. Lump Sum Price. The BIDDER shall use the lowest priced item listed as an acceptable Base Bid item as the basis for arriving at his overall price. The BIDDER is required to fill in the items below in order to indicate the relative prices of the equipment of various manufacturers which may be considered by the Owner for various reasons. The prices shown below shall include the cost of furnishing the various equipment items.

The prices listed hereinafter are not to be in addition to the Lump Sum Price in Paragraph 9.a., but are to be included in it.

Sub-Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
5A	<u>Mechanically Cleaned Bar Screen and Screw Conveyor</u>	Vulcan Industries, Inc.	\$ _____
		Hydro-Dyne Engineering, Inc.	\$ _____
		Headworks, Inc.	\$ _____
		Pre-Approved Equal	\$ _____
5B	<u>Coarse Bubble Aeration System</u>	Sanitaire Corporation	\$ _____
		Stanford Scientific International	\$ _____
		Aquarius Technologies, LLC	\$ _____
		Pre-Approved Equal	\$ _____


Sub-Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
5C	<u>Vertical Turbine Flushing Water Pumps and Accessories</u>		
	Fairbanks Nijhuis Pumps	\$ _____	\$ _____
	Patterson Pump Company	\$ _____	\$ _____
	<i>Ruhrpumpen, Inc.</i>	\$ _____	\$ _____
	Pre-Approved Equal	\$ _____	\$ _____

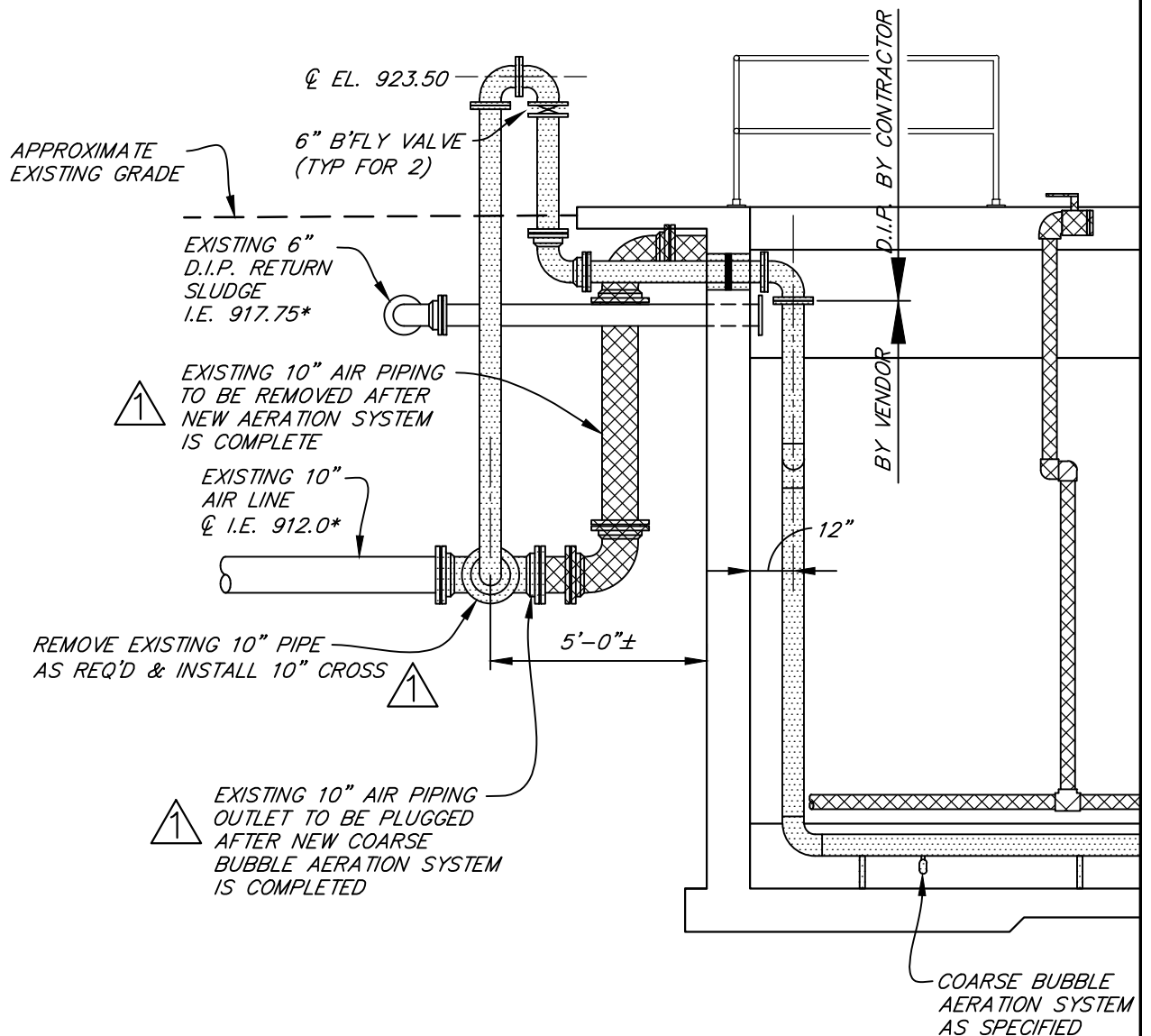
“Or Approved Equal”

It is not the intention of this document to limit equipment to only those manufacturers listed above. Desired substitutions may be submitted to the Engineer for consideration not less than 10 days before the Bid Date. Addenda will be issued notifying all bidders of equipment which is determined to be “approved equal” prior to the Bid Date.

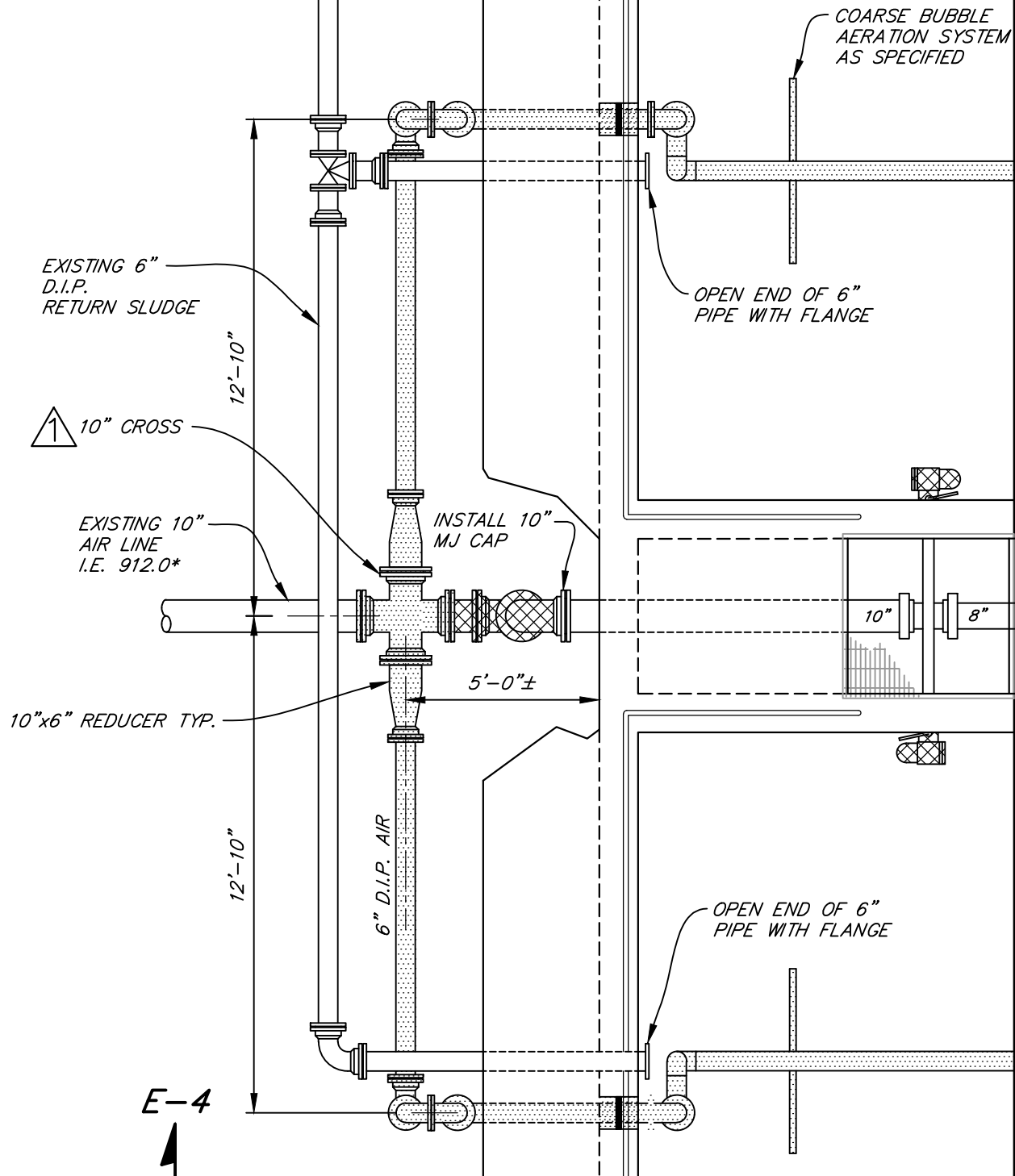
ENGINEER'S ENVISIONED ORDER OF WORK

1. INSTALL NEW 10" CROSS & 6" AIR PIPING UP TO BUTTERFLY VALVES. CLOSE BUTTERFLY VALVES.
2. CONNECT EXISTING 10" AIR PIPING TO NEW 10" CROSS AND AERATE.
3. VALVE OFF EXISTING COARSE BUBBLE AERATION EQUIPMENT IN FIRST TANK AND DIGESTER TO BE RENOVATED.
4. DRAIN TANK AND DIGESTER. REMOVE EXISTING AERATION EQUIPMENT AND INSTALL NEW AERATION EQUIPMENT AND PIPING. CONTINUE TO AERATE SECOND TANK AND DIGESTER.
5. TEST NEW AERATION EQUIPMENT AND PLACE INTO SERVICE.
6. DRAIN SECOND TANK AND DIGESTER INTO RENOVATED TANK AND VALVE OFF EXISTING AERATION EQUIPMENT.
7. REMOVE EXISTING AERATION EQUIPMENT AND INSTALL NEW AERATION EQUIPMENT AND PIPING IN SECOND TANK AND DIGESTER.
8. TEST AERATION EQUIPMENT AND PLACE INTO SERVICE.
9. REMOVE EXISTING 10" AIR PIPING AND DISCONNECT FROM 10" CROSS. PLUG CROSS.

SHEET 4 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 18-01	
REVISIONS		WASTEWATER TREATMENT PLANT IMPROVEMENTS	
 ADDENDUM NO. 1 6/07/2018 WCB		SLUDGE HOLDING FACILITIES MODIFICATIONS AND DETAILS	
		FOR LIVINGSTON, TENNESSEE	
		SCALE 1/4"=1'-0"	WAUFORD J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com
PROJECT NUMBER 2068	DATE MAR., 2018	DESIGNED DGT	
		DRAWN WCB	
		CHECKED JGD	



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