



**Market Street Pump Station Disinfection System Upgrades RFCSP**  
**Solicitation Number: CO-00463**  
**Job No.: 21-6008**

**ADDENDUM 4**  
**December 8, 2021**

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the Respondent Questionnaire.

<b>RESPONSES TO QUESTIONS</b>
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1. **Question:** Regarding the Temporary Utilities (Section 01 51 05), please indicate the desired location of the temporary electrical service.

**Response:** It is the responsibility of the Contractor to determine the best location for the temporary electrical hardware at the temporary disinfection unit. Specification 01 51 05 – 1.12.G outlines and details the temporary electrical power service and where to obtain the power.

2. **Question:** Regarding the Temporary Utilities (Section 01 51 05), please indicate via a site plan of anticipated areas for temporary work lighting.

**Response:** It is the responsibility of the Contractor to supply temporary work lighting at locations determined by the Contractor. The Contractor shall meet the requirements as specified in Specification Section 01 51 05 Temporary Utilities – 1.2.B and 1.8.B.

3. **Question:** Please provide information regarding the connection of the temporary disinfection system to the GST feed line from the wells. Is there a tap that can be tied into or does one need to be made? If one exists what size is it? Is the connection above grade?

**Response:** There is an existing sodium hypochlorite injection point on the aboveground piping assembly, located after the flow meter chamber and prior to the GST. A chemical pull box is located underground, adjacent to the injection location. The Contractor may tie into the existing feed line at the pull box location to re-use existing injection quill. The Contractor shall confirm material compatibility with 12.5% sodium hypochlorite. Otherwise, the Contractor may install new injection quill at existing corporation cock on aboveground piping. Insulate any aboveground piping as required to provide continuous service. Any new piping and connections must be disinfected prior to use per TCEQ.

4. **Question:** How will the TCEQ review of the temp system affect the project schedule?

**Response:** The construction duration of the project was increased from 365 days to 420 days to account for the temporary disinfection system design and review time.

5. **Question:** The temp system states that it is needed from 10/22-3/23. Can it be in use for a different and/or longer period?

**Response:** SAWS anticipates having the Market Street Pump Station in service from October 2022 until March 2023.

6. **Question:** Is the system to be flow-paced automatically or adjusted manually? Addendum references both. If automatic where do the signals need to come from and go to?

**Response:** The system is flow-paced automatically. Per Specification 01 51 05, Paragraph 1.12.H.3, the PLC-Market Street is located in the Control Room.

7. **Question:** Are VFDs required or is it a simple turn-down on the peristaltic pumps?

**Response:** Paragraph 1.12.E.6. requires the use of VFDs.

8. **Question:** Is injection point existing and can we tie into existing injector?

**Response:** There is an existing sodium hypochlorite injection point on the aboveground piping assembly, located after the flow meter chamber and prior to the GST. A chemical pull box is located underground, adjacent to the injection location. The Contractor may tie into the existing feed line at the pull box location to re-use existing injection quill. The Contractor shall confirm material compatibility with 12.5% sodium hypochlorite. Otherwise, the Contractor may install new injection quill at existing corporation cock on aboveground piping. Insulate any aboveground piping as required to provide continuous service. Any new piping and connections must be disinfected prior to use per TCEQ.

9. **Question:** Is automatic flow-pacing required or can the system be manually turned up and down by an operator? Paragraph E.5. seems to conflict with paragraphs B.3. and H. of Section 1.12.

**Response:** The system is flow-paced automatically.

10. **Question:** Per Section E.6. is an externally mounted VFD required if the peristaltic pump provided has internal speed control capabilities?

**Response:** Paragraph 1.12.E.6. requires the use of VFDs.

11. **Question:** Can temporary pump skid be installed in the containment area if elevated above floor of containment area?

**Response:** The pump skid installation must comply with the TCEQ requirements.

12. **Question:** Are signed and sealed drawings and specifications required for the temporary chlorine system since it will be field assembled or can seals be limited to the design calculations?

**Response:** TCEQ requires drawings and specifications on the temporary disinfection system be submitted for plan review under the seal of an engineer registered in Texas prior to installation.

13. **Question:** Per Section 01 51 05 1.2, H.6. Is a temporary shower/eyewash to be provided by the Contractor or just the potable water supply? If so, does this include design of footing/slab for mounting shower/eyewash? As this work will take place over winter is heat tracing or self-draining shower required?

**Response:** A temporary emergency shower/eyewash station is required to be installed by the Contractor with the temporary disinfection system in compliance with OSHA regulations.

14. **Question:** Are any specific instruments or alarms required as part of the temporary disinfection system such as tank high/low levels, containment area spill alarm, pump failure, etc? Can on-site monitoring take place of this? Are there existing chlorine residual analyzers that can be used for residual monitoring?

**Response:** All local alarms will be coordinated with the Owner and provided. On-site monitoring will not take place of the alarms. The pump stations existing chlorine analyzers should be used for residual monitoring.

<b>CHANGES TO THE SPECIFICATIONS</b>
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1. Section 01 22 13 – Measurement and Payment (Addendum No. 3)

Paragraph 1.6.A.2. – **Delete** in its entirety and **replace** with the following:

1.6.A.2. Form: Applications for Payment shall be in accordance with SAWS standards utilizing the CPMS system.

2. Section 01 51 05 – Temporary Utilities (Addendum No. 3)

Paragraph 1.12.E.5. – **Delete** in its entirety and **replace** with the following:

1.12.E.5. Temporary pumps shall be capable of 24-hour, variable flow paced operation with automatic controls. The use of cycled pumping (i.e., on/off) is not acceptable.

3. Section 01 51 05 – Temporary Utilities (Addendum No. 3)

Paragraph 1.12.E.6. – **Delete** in its entirety and **replace** with the following:

1.12.E.6. Each pump shall be supplied with a pump mounted VFD to allow adjustment of pump feed rate.

- a. The VFD shall be rated for outdoor installation with ambient temperatures up to 110°F.
- b. The VFD shall be provided with a NEMA 4X Outdoor use enclosure.
- c. The VFD shall have an integral keypad and display.

4. Section 01 51 05 – Temporary Utilities (Addendum No. 3)

Paragraph 1.12.H.1. – **Delete** in its entirety and **replace** with the following:

1.12.H.1. The CONTRACTOR shall furnish and install a complete instrumentation and control system that provides automatic operation for the Disinfection Unit.

5. Section 01 51 05 – Temporary Utilities (Addendum No. 3)

Paragraph 1.12.H.7. – **Add** the following paragraph:

1.12.H.7. Contractor shall provide necessary alarms to the PLC-Market Street in the Pump Station Control Room. Type of alarms, wire, and conduit to be determined by the Contractor to notify the Contractor of a system failure. Coordinate with the Owner to provide the required alarms.

- a. Install wire and conduit as required.
- b. Utilize rigid aluminum conduit for all above grade and indoor routing.
- c. Utilize Schedule 40 PVC conduit for all below grade, direct buried routing.
- d. Install rigid aluminum conduit above grade to cross driveway. Protect conduit the entire length of the driveway crossing with 2"x4" wood studs in parallel with the conduit on both sides.
- e. This conduit and signal wiring are to be separated from any other wiring and not comingled.
- f. PCSI shall field determine spare points in the PLC in which to connect the temporary alarm points.
- g. All programming of the PLC, HMI and SCADA system shall be provided and supplied by the ASP.
- h. All testing of the temporary disinfection system shall be done prior to demolition of the existing OSHG system.

6. Section 01 51 05 – Temporary Utilities (Addendum No. 3)

Paragraph 1.12.J. – **Delete** in its entirety and **replace** with the following:

1.12.J. CONTRACTOR shall be responsible for the operation and maintenance of the temporary sodium hypochlorite system.

**END OF ADDENDUM 4**

This Addendum is four (4) pages in its entirety, with no attachments.



December 8, 2021

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