# SUDBURY WATER DISTRICT SUDBURY, MASSACHUSETTS

# SCADA SYSTEM UPGRADES CONTRACT IFB #22-18

## ADDENDUM NO. 3

# February 25, 2022

# **NOTICE TO ALL BIDDERS:**

Sealed Bids from Contractors will be received until <u>2:00 PM prevailing time on March 2, 2022</u>. All bids shall be submitted online at <u>www.Projectdog.com</u> and entitled "SCADA System Upgrades, Sudbury Water District, Sudbury, Massachusetts". All electronic bids are compiled in real time upon bid close and published forthwith on ProjectDog. Official bid tabulations shall be posted on ProjectDog.

Bid forms and contract documents are available online at www.Projectdog.com. Enter Project Code 847482 in the project locator box and select "Acquire Documents" to download documents or to purchase hard copies. New users to Projectdog.com must first select Sign Up to create an online account. Contract documents may also be viewed, but not removed, from the offices of Projectdog, Inc., 18 Graf Road - Unit 8, Newburyport, MA 01950, Monday – Friday, 8:30 a.m. to 5:00 p.m.

A non-mandatory pre-bid meeting was held at the Water District Office, 199 Raymond Road, Sudbury, MA 01776 on **February 23, 2022 at 10:00 a.m**.

The attention of all eligible bidders submitting bids for the above referenced project is called to the following Addendum to the drawings and specifications (Contract Documents). The items set forth herein, whether of omission, addition, substitution, or clarification, are all to be included in and form a part of the proposed work.

Any and all addenda shall be posted online at Projectdog.com. Each individual or firm recorded as having received the contract documents will be notified by email if and when addenda are issued. Hard copies of addenda will not be mailed or faxed to plan holders. It is the sole responsibility of the Bidder to review any and all addenda prior to the bid opening either online or at the offices of Projectdog, Inc.

If a bid is submitted prior to an Addendum being issued, the Bidder will receive an e-mail notification for informational purposes only. The Bidder must review the addendum, retract the bid, acknowledge all addenda, and re-submit the bid. If a Bidder fails to acknowledge all addenda their bid may be rejected by the Awarding Authority.

This Addendum addresses the following:

- Specifications and Drawings
- Questions from Contractors and Answers
- Supplemental Information

# **SPECIFICATIONS AND DRAWINGS**

Make the following changes, revisions, additions, and/or deletions to the Contract Documents:

# **Drawing E-5**

• Add the following line to the "Antenna, Coaxial Cable, and Ground Cable Table":

Location	Antenna Type	Approximate Coax Cable Distance	Approximate Ground Cable Distance	Notes
Well 9	Yagi	20 feet	Existing to Remain	

# **QUESTIONS AND ANSWERS**

Question 1: According to Drawings G-1 and I-3, Well Station #9 is receiving a new Yagi antenna. However, Drawing E-5 does not list Well Station #9 as receiving a new Yagi antenna or provide an approximate coax cable distance. Please advise.

Answer 1: Refer to Addendum No. 3.

# **SUPPLEMENTAL INFORMATION**

Attachment 1 – Pre-Bid Meeting Minutes and Sign-In Sheet

# **END OF ADDENDUM NO. 3**

# SUDBURY WATER DISTRICT SUDBURY, MASSACHUSETTS

# SCADA SYSTEM UPGRADES CONTRACT IFB #22-18

ADDENDUM NO. 3

**ATTACHMENT 1** 



# **MEETING MINUTES**

**Date:** February 23, 2022 at 10:00 AM

**Location:** 199 Raymond Road, Sudbury, MA, 01776

Meeting Title: Pre-Bid Meeting

**Topic:** SCADA System Upgrades

Sudbury Water District, Sudbury, MA

Contract IFB #22-18

Prepared By: Grace Ronca

**Attendants:** Alston Potts, PE – Environmental Partners

Grace Ronca – Environmental Partners Vincent Roy – Sudbury Water District Ted McAuliffe – Sudbury Water District Curt Grabowski – LaFleur Electric

A pre-bid meeting was held at the above indicated date and time at the Water District Office. A meeting agenda was passed out to all attendees. After making introductions, Alston Potts began the meeting. To date, two addenda have been issued for this project.

# I. General Project Overview

- 1. The Work under this Contract includes, but is not necessarily limited to, the replacement of the Sudbury Water District's radio telemetry systems at four well stations, two water treatment plants (WTPs), and two storage tank sites; replacement of two existing SCADA PCs with two SCADA servers; furnishing new SCADA software; providing chemical day tank high level float switches at three facilities; providing a SCADA PC Workstation in the District Office; and coordination with the Application Engineer.
- 2. The SCADA System Upgrades Project shall include:
  - a. Electrical
  - b. Instrumentation and controls
- 3. Work to be performed by Others includes:
  - a. Programming and integration of PLCs, OITs, and HMIs by the Application Engineer.

- 4. The project shall include furnishing all labor, services, equipment, materials, devices, plant, facilities, and appurtenances for the demolition, removal, and disposal of select existing structures, materials, equipment, and facilities; and the installation of new materials, equipment, and facilities required to provide complete and operational water treatment plant and well stations in compliance with the MassDEP Drinking Water Standards.
  - a. Obtain new FCC for radio telemetry system. Coordinate licensing with TCS Communications Corp. as included in the contract (refer to Appendix E).
    - i. Note: This will need to be completed/coordinated in the early stages of the project, as it may take a long time to get FCC approval.
  - b. Well Station #4 Improvements
    - i. Replace existing radio modem, yagi antenna, and coaxial cabling;
    - ii. Provide new sodium hydroxide day tank high level switch (one total);
    - iii. Reprogram existing PLC and OIT application (by Application Engineer);
    - iv. Configure new radio system;
    - v. Complete electrical work; and
    - vi. Complete all work shown on the Drawings and as specified.
  - c. Well Station #6 Improvements
    - i. Demolish existing radio modem, yagi antenna, and coaxial cabling;
    - ii. Provide new radio modem, yagi antenna, and coaxial cabling;
    - iii. Reprogram existing PLC and OIT application (by Application Engineer);
    - iv. Configure new radio system;
    - v. Complete electrical work; and
    - vi. Complete all work shown on the Drawings and as specified.
  - d. Raymond Road WTP (MWTP) Improvements
    - i. Demolish existing radio modem, omnidirectional antenna, and coaxial cabling;
    - ii. Provide new radio modem, omnidirectional antenna, and coaxial cabling;
    - iii. Provide new Communications Programmable Logic Controller (PLC);
    - iv. Demolish existing Communications PLC;
    - v. Demolish existing SCADA Computers (two total);
    - vi. Provide new SCADA Servers, software, uninterruptible power supplies, and appurtenances;
    - vii. Configure and program SCADA servers and software (by Application Engineer);
    - viii. Modify existing MWTP PLC program (by Application Engineer);
    - ix. Update existing MWTP HMI graphics (by Application Engineer);
    - x. Configure new radio system;
    - xi. Provide new sodium hydroxide and sodium hypochlorite day tank high level switches (four total);
    - xii. Complete electrical work; and
    - xiii. Complete all work shown on the Drawings and as specified.
    - xiv. Note: The Contractor should follow the sequence of work as shown in the Drawings to allow the new and existing radio systems to operate in parallel until the completion of the radio systems at each facility, at which time the existing

radio system can be shut down. The Contractor shall submit sequence of construction and sequence of work to Engineer for approval prior to the start of work.

# e. Well Station #7 Improvements

- i. Demolish existing radio modem, yagi antenna, and coaxial cabling;
- ii. Provide new radio modem, yagi antenna, and coaxial cabling;
- iii. Reprogram existing PLC and OIT application (by Application Engineer);
- iv. Configure new radio system;
- v. Complete electrical work; and
- vi. Complete all work shown on the Drawings and as specified.

# f. Well Station #9 Improvements

- i. Demolish existing radio modem, yagi antenna, and coaxial cabling;
- ii. Provide new radio modem, yagi antenna, and coaxial cabling;
- iii. Reprogram existing PLC (by Application Engineer);
- iv. Configure new radio system;
- v. Complete electrical work; and
- vi. Complete all work shown on the Drawings and as specified.

# g. East Street WTP (ESWTP) Improvements

- i. Demolish existing radio modem, omnidirectional antenna, and coaxial cabling;
- ii. Provide new radio modem, omnidirectional antenna, and coaxial cabling;
- iii. Reprogram existing PLC and OIT application (by Application Engineer);
- iv. Configure new radio system;
- v. Provide new sodium hydroxide day tank high level switches (two total);
- vi. Complete electrical work; and
- vii. Complete all work shown on the Drawings and as specified.

### h. Well Station #3A Improvements

- i. Reprogram existing PLC and OIT application (by Application Engineer).
- i. Well Station #10 Improvements
  - i. Reprogram existing PLC and OIT application (by Application Engineer).
- j. Willis Tanks Improvements
  - i. Demolish existing radio modem, omnidirectional antenna, and coaxial cabling;
  - ii. Provide new radio modem, omnidirectional antenna, and coaxial cabling;
  - iii. Configure new radio system;
  - iv. Complete electrical work; and
  - v. Complete all work shown on the Drawings and as specified.

### k. Goodman Hill Tank Improvements

- i. Demolish existing radio modem, yagi antenna, and coaxial cabling;
- ii. Provide new radio modem, yagi antenna, and coaxial cabling;
- iii. Configure new radio system;
- iv. Complete electrical work; and
- v. Complete all work shown on the Drawings and as specified.
- I. Water District Office Improvements

- Provide new SCADA Workstation PC software, uninterruptible power supply, and appurtenances; and
- ii. Provide Fiber to Ethernet media converter and appurtenant cabling for communication with the MWTP SCADA PCs.
- m. Provide all temporary SCADA and telemetry systems required to complete work while maintaining operations of the existing SCADA system.
- n. Coordination of all construction activities with the appropriate Local and State Authorities, utilities, trades, and subcontractors.
- o. Attending the Pre-construction conference and the required job progress meetings.
- p. Submission of a construction schedule, sequence of construction (as described herein), and list of subcontractors.
- q. Submission of all required shop, working, interference, and record drawings, in a timely manner, to the Engineer, for review.
- r. Mobilization to the Site and Demobilization from the Site.
- s. Select demolition.
- t. Protection of existing on-site structures and coordination with on-going Owner operations.
- u. Coordination with radio, PLC, and SCADA programming; PC setup; and telemetry and SCADA system testing completed by the Application Engineer.
- v. Owner will occupy premises during performance of the work for the conduct of his/her normal operations. Coordinate all construction operations with Owner to minimize conflict and to facilitate Owner usage.
- w. Work Sequence
  - i. The Contractor shall submit a sequence of construction for the overall project for the Engineer's review and approval.
  - ii. The Contractor shall submit a sequence of work for the Engineer's review and approval for any proposed water system shut-downs. Proposed shut-downs shall be limited to a maximum of 8 continuous hours. A minimum 24-hour period is required between shut-downs. Requests by the Contractor for any and every proposed shut-down shall be provided a minimum of seven (7) days in advance of the requested date. The Engineer/Owner shall have the final authority for granting a proposed shut-down.
  - iii. The Contractor shall notify the Owner a minimum of seven (7) days in advance of any work which may affect or disrupt the operations of the existing facilities. The Engineer/Owner shall have the final authority for granting a proposed shut-down.
- x. Contractor shall be certified by the Division of Capital Asset Management and Maintenance (DCAMM) in *Sewage and Water Treatment Plants* or in *Prime Electrical*.

# II. Bidding and Project Schedule

Bid forms and contract documents are available online at www.Projectdog.com. Enter
 Project Code 847482 in the project locator box and select "Acquire Documents" to download documents or to purchase hard copies. New users to Projectdog.com must first select Sign

- Up to create an online account. Contract documents may also be viewed, but not removed, from the offices of Projectdog, Inc., 18 Graf Road Unit 8, Newburyport, MA 01950, Monday Friday, 8:30 a.m. to 5:00 p.m.
- Sealed Bids from Contractors will be received until 2:00 PM prevailing time on March 2, 2022. All bids shall be submitted online at <a href="www.Projectdog.com">www.Projectdog.com</a> and entitled "SCADA System Upgrades, Sudbury Water District, Sudbury, Massachusetts". All electronic bids are compiled in real time upon bid close and published forthwith on Projectdog. Official bid tabulations shall be posted on Projectdog.
- Construction must be complete within 200 calendar days from and including issuance of a
  notice to proceed, and/or receipt of a fully executed contract. All proposed work at the well
  stations shall be sequenced as described in the Contract Drawings.

# III. Questions

- Submit questions in writing to Alston Potts, PE, Environmental Partners at <a href="mailto:awp@envpartners.com">awp@envpartners.com</a>. No interpretation of the meaning of the Drawings, Specifications, or other pre-bid documents will be made to any Bidder orally.
  - Questions must be received by the close of business (4 PM) at least seven (7)
     calendar days prior to the date fixed for the opening of filed sub-bids.

# IV. Site Walk

Following the discussion, the meeting attendees walked the sites including Raymond Road Water Treatment Plant, Well Station 4, Well Station 6, East Street Water Treatment Plant, Well Station 3A, and Willis Hill Tanks.



# PRE-BID MEETING SIGN-IN SHEET

Sudbury Water District, Sudbury, MA Water System SCAD Upgrades

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Email		Kalevies O lathur elederica	110 70 Sudbury water con		
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Company	E.S.	is Lablace The	SWY	EP	
Name	Austen Potts	Cutt Geatlowski.	2 5	Grace Rona	