

# **EXHIBIT A**

17950 Preston Road, Suite 300, Dallas, TX 75252 Phone: 469-619-1241 | Fax: 469-619-1242

April 5, 2024

Cody Collier Town of Little Elm Public Works Department 1600 Mark Tree Lane Little Elm, TX 75068

Subject: Town of Little Elm – Phase I – SCADA Improvements Construction and Programming Scope of Services

Dear Cody:

Signature Automation, LLC is pleased to provide our scope of work to The Town of Little Elm (Town) to provide SCADA Improvements construction and programming services for the Water and Wastewater systems in the Town, as described below.

The scope of work included herein details our approach to executing this project.

# **Scope of Work - Engineering Services**

# Task 1.0 - Project Setup and Workshops

This work is included within the Construction and SCADA Programming Services and consists of clerical, accounting, coordination and supervision of the internal project team, and overall quality management so that the project milestones and deliverables meet schedule and budgetary constraints. To keep Town apprised of our work on the project, all invoices shall include a progress report detailing work completed during the previous reporting period; anticipated work during the next reporting period; and a list of any outstanding items that are awaiting resolution. The initial invoice will include the costs for mobilization to cover the preparatory planning, coordination, scheduling, and accounting required to initiate the work. The anticipated construction duration for the project is 12 months.

Signature Automation will support ENGINEER's efforts during the construction phase by overseeing execution of the Division 40 Process Control System Integrator's general work. This includes attendance at the following:

#### **DELIVERABLES**

- Progress reports and invoicing.
- Preconstruction Meeting (1 person, One 1-hour meeting, in-person)
- Construction Progress Meetings (2 person, Eight 1-hour meetings, virtual)
- Meeting agendas and meeting minutes for progress meetings.



#### Task 2.0 - Construction Services

Signature Automation will provide the Construction Services to support the Electrical and I&C construction for the Phase I – SCADA Improvements Construction Phase. This proposal does not include Contractor I&C Change Order Preparation for Owner requested changes or the review of Contractor Pay applications. Preparation of Owner requested changes can be provided at an additional cost. Signature Automation is not including onsite resident inspection services for this project beyond the walkthrough site visits included in this proposal. Additional inspection services can be provided at an additional cost.

# **DELIVERABLES**

- Substantial Completion Site Walkthroughs (2 person, Ten 2-hour site visits)
- Inspection punchlist of deficiency items
- Final Completion Site Walkthroughs (2 person, Ten 2-hour site visits)
- Review Contractor Submittals and submit review forms
- Review Contractor RFI's and submit review forms

#### Task 3.0 - As-Built Drawings

Signature Automation will provide the Electrical and I&C related as-built plans to support the modification made in the field as indicated by Contractor redline markups provided to the Engineer.

# **DELIVERABLES**

As-built Drawings

# **Scope of Work - Programming Services**

### Task 1.0 - Project Management

This task consists of clerical, accounting, coordination and supervision of the project team, and overall quality management so that the project milestones and deliverables meet schedule and budgetary constraints. To keep you apprised of our work on the project, all invoices shall include a progress report detailing work completed during the previous reporting period; anticipated work during the next reporting period; and a list of any outstanding items that are awaiting resolution. The initial invoice will include the costs for mobilization to cover the preparatory planning, coordination, scheduling, and accounting required to initiate the work.

#### **DELIVERABLES**

Progress Reports and Invoicing

# Task 2.0 - Meetings/Workshops

Signature Automation will attend one Project kickoff meeting and one PCSI Coordination meeting in person. The other two PCSI coordination meetings will be attended remotely. Signature automation will also hold 2 workshops at the facility to review modified graphics and the new control narratives. After the initial project kickoff meeting Signature automation will go to the different sites to retrieve information necessary to complete narratives and PLC programming.



- Graphic Displays Workshop This 4-hour workshop will be conducted to discuss final display layouts and answer questions pertaining to graphic display changes. During the workshop, Signature Automation shall lead discussions to finalize displays. This shall allow Owner an opportunity to confirm the information can be displayed as requested and to make adjustments. Signature Automation will furnish draft process graphics to workshop attendees at least one week prior to scheduled workshop date.
- Control Narrative Workshops This 4-hour workshop will be conducted to discuss and review PLC control narratives and the findings from review and development of PLC programming migration to the new hardware platforms. During these workshops, Signature Automation shall lead discussions to finalize control narrative modifications. This shall allow Owner an opportunity to confirm information and make adjustments. Signature Automation will furnish draft control narratives to workshop attendees at least one week prior to scheduled workshop date.
- Historical Data and Reports Workshop –During this 4-hour workshop, Signature
   Automation shall lead discussions to review existing historical databases and custom
   reports and gather information towards any additional reports needed. This meeting shall
   allow Owner/Engineer an opportunity to confirm the approach to migration of the existing
   historian systems and provide details for additional reports.

# **DELIVERABLES**

- Meeting Minutes
- Latest copies of all programs

# Task 3.0 - Submittals

Signature Automation will provide submittals throughout the duration of the project for review and concurrence that the work is proceeding as intended. The submittals listed below will be provided.

- I/O List Submittal Signature Automation will work the PCSI to generate a detailed I/O list using the I/O list template. The submittal will include database tag name, description, PLC and HMI address for each PLC being modified.
- Detailed Control Narratives Submittal Signature Automation will provide the detailed control narratives submittal which will include all control strategies to be migrated and modified with brief description of the scope, listing of inputs, narrative of strategy, assumptions, and failure contingencies.
- Process Graphics Submittal Signature Automation will provide the process graphics submittal which will include all proposed graphic displays, examples of each type of popup, and examples of trends.
- Testing Plan Submittal Signature Automation will develop a testing plan providing test strategies for PLC, HMI and communications for the new hardware and software changes.



Historical Data Submittal – Signature Automation will provide the historical data submittal
which will include listing of all signals to be collected and stored and copies of the reports
which may require modification.

#### **DELIVERABLES**

- I/O List Submittal (1 electronic copy)
- Detailed Control Narratives (1 electronic copy)
- Process Graphics Submittal (1 electronic copy)
- Testing Plan Submittal (1 electronic copy)
- Historical Data Submittal (1 electronic copy)

# Task 4.0 - Graphics Development

Signature Automation will use existing graphics and Facility standards and conventions as the basis for merging and developing and updating the process graphics on the control system for menus, navigation links, alarm banners and summaries, trends, and overview screens. The event logger and historical archive will also be updated as necessary to show the new inputs, alarms, and calculated values.

Signature Automation will modify the existing Central SCADA HMI to poll the new PLCs for the new and existing monitored and controlled inputs. Communication status between the HMI and remote lift station will be determined with a watch dog timer to generate and alarm on the SCADA if communication fails.

#### **DELIVERABLES**

Source files of original and modified HMI system

# Task 5.0 - SCADA Programming and Historian

Signature Automation will program the new lift station SCADA PLCs to provide for the remote monitoring of the station status signals and new controls in some locations. All monitoring inputs to the PLC will be hardwired between the vendor local control panels and the SCADA PLC.

Signature Automation will configure the new Historian database, alarm/event software, and modify existing reports based on information gathered during the historical data workshop.

# **DELIVERABLES**

Electronic source file of completed SCADA PLC programs.

#### Task 6.0 - System Testing and Startup

Signature Automation will test the programming and equipment being supplied for this project throughout the development of the SCADA PLCs. The tests described below will be supported or performed by Signature Automation. Unless otherwise specified, one Signature Automation design or programming resource will be provided for these activities.



- Unwitnessed Factory Test (UFT) Unwitnessed Factory test at Signature Automations offices.
- System Integration Test (SIT) (1/2 day per site) One programming and one technician resource on site at PCSI to confirm correct operation of SCADA system before installation with PCSI.
- Witnessed Factory Testing (WFT) (2-3 hr. per site) Witnessed testing. One programming and one technician resource on site at PCSI to confirm correct operation of SCADA system before installation with PCSI and Facility.
- Operational Readiness Test (ORT) (1/2 day per site) One programming and one technician resource for onsite loop checks after final terminations and calibrations made before start-up.
- Functional Demonstration Test (FDT) (1/2 day per site) to verify system is tuned and performing as designed.
- 30-day Acceptance Test (on call for 30 days)

# **DELIVERABLES**

- Copies of System Integration Test Sign Off Sheets
- Copies of Witnessed Site Acceptance Test Sign Off Sheets
- Copies of Operational Readiness Test Sign Off Sheets
- Copies of Functional Demonstration Test Sign Off Sheets

### Task 7 - Documentation

Signature Automation will create a new operations and maintenance manual (0&M Manual) for the SCADA controls for the new lift station.

#### **DELIVERABLES**

# Task 8 - Training

Signature Automation will provide control system operator and maintenance training for the HMI, and PLC changes provided within this project. Training Assumes a 1-hour course at the facility to review modifications and new pump controls available to the facility.

# **DELIVERABLES**

Training Outline.

#### Clarifications

For the purposes of developing the costs associated with this effort, Signature Automation has assumed the following:

- 1. Signature Automation is not procuring any bonding for this project.
- 2. Signature Automation will not be responsible for liquidated damages.
- 3. Purchase, build and site installation of the PLC panel and instruments will be by others.
- 4. Signature Automation is not responsible for delays due to negligence, non-performance, unanticipated slippage of delivery dates caused by others.



- 5. Signature Automation is not responsible for problems associated with any third-party software (HMI, OIT, PLC, drivers, operating system, etc.)
- 6. Signature Automation is not responsible for communication equipment or radio configuration with the Central SCADA system.
- 7. Signature Automation will use our licenses of development software to program the PLC and modify the HMI. All files developed by Signature Automation required for runtime of these applications will be the property of the Owner. No further licenses will be provided to the Owner by Signature Automation.

# **Costs and Terms**

Signature Automation proposes to complete this assignment on a lump sum basis for the total fee of \$322,186.25 as itemized below. Signature Automation will perform the above scope of work in accordance with mutually acceptable terms and conditions. The following table is a cost breakdown of all tasks included in this proposal:

Overall Schedule of Values - Construction Services			
Task	Description	Amount	
1.0	Project Setup and Workshops	\$13,240.00	
2.0	Construction Services	\$61,685.00	
3.0	As-Built Drawings	\$3,320.00	
<b>Total Professional Construction Services</b>		\$78,245.00	

Overall Schedule of Values - Programming Services		
Task	Description	Amount
1.0	Project Management	\$20,970.00
2.0	Meetings/Workshops	\$17,400.00
3.0	Submittals	\$31,460.00
4.0	Graphics Development	\$39,633.75
5.0	SCADA Programming	\$57,750.00
6.0	System Testing and Startup	\$68,917.50
7.0	Final Documentation	\$6,610.00
8.0	Training	\$1,200.00
Total Professional Programming Services \$243,942		



Thank you for considering Signature Automation for this critical assignment. Please feel free to call me at your convenience should you have any questions regarding this proposal.

Sincerely,

Rick Hidalgo P.E.

President

Signature Automation, LLC

cc: Andy Paulson, P.E. – Signature Automation

Cristina Cava – Signature Automation

Anthony Scudieri, P.E. – Signature Automation