



AUTOMATIC SYSTEMS CO.

Tuesday, July 13, 2021

Mr. Terry Randall
City of Spring Lake Park
1301 Eighty First Avenue Northeast
Spring Lake Park, MN 55432

Reference: Control Panel SCADA Computer Replacement
Water Treatment Plant **(Updated July 13, 2021)**

Dear Terry:

We are pleased to update/refresh our proposal as of today from the original proposal date of 11/24/20. In doing so, with some labor changes/savings/methods, we are able to provide the new proposal with a savings of \$2,862.00 over the original proposal.

In accordance with our recent conversations and discussions with Ryan Willis, we reviewed and discussed the failing and obsolescence of components utilized in the existing control system for the City’s Water System with the exception of the Arthur Street Water Treatment Plant which is currently under a separate contract to be upgraded to the latest technology.

Due to obsolescence and non-support of existing components within the control system, including the Programmable Logic Controllers (PLCs), Operator Interface Module (OIMs), SCADA Computers hardware/software and Radios, the system is in dire need of an upgrade.

The existing control systems PLC network consists of Allen-Bradley SLC family of PLCs, power supplies, processors, and input/output modules which are no longer supported, nor available, since they are considered obsolete from the factory. The existing MDS Radios are a mix of serial and Ethernet Radios, all of which need to be upgraded to MDS Orbit Ethernet Wide Band Radios. The new PLCs and new Radios will provide all PLCs & SCADA Computers to be on the same Ethernet communications platform and provide a much needed, better, and faster transfer of data between all sites.

A summary of proposed upgrades includes the following:

- **City Hall:** Upgrade SCADA Computer Hardware/Software, PLC and Ethernet Radio
- **Terrace Park Water Treatment Plant:** Upgrade SCADA Computer hardware/software, PLC and Ethernet Radio
- **Well 4:** Upgrade PLC, Ethernet Radio and Antenna
- **Well 5:** Upgrade PLC, Ethernet Radio and Antenna

MANUFACTURERS REPRESENTATIVES	•	CONTROLS	•	MECHANICAL EQUIPMENT
<input checked="" type="checkbox"/> MAIN OFFICE:	P.O. BOX 120359	ST. PAUL, MINNESOTA 55112	PHONE 651-631-9005	(FAX) 651-631-0027
<input type="checkbox"/> BRANCH OFFICE:	P.O. BOX 787	AMES, IOWA 50010	PHONE 515-232-4770	(FAX) 515-232-0795
<input type="checkbox"/> BRANCH OFFICE:		CHICAGO, ILLINOIS	PHONE 815-927-3386	(FAX) 651-631-0027

- **Abel Elevated Tank:** Upgrade PLC, Ethernet Radio and Antenna
- **Lift Station No. 1:** Upgrade Radio to Ethernet Radio and Antenna
- **Lift Station No. 2:** Upgrade Radio to Ethernet Radio and Antenna

We are pleased to offer the following for phasing in the system upgrade:

PHASE I - CITY HALL COMPUTER HARDWARE/SOFTWARE UPGRADE

SCADA Computer Workstation, DELL, Intel Core i9-9900 3.1 GHz processor, 32GB memory, one (1) 512GB Solid-State hard drive, keyboard, mouse, speakers, 22" Flat Panel Monitor, Windows 10 Professional, Microsoft Office Professional & AVG Antivirus for installation in place of the existing SCADA Computer Workstation. Proposed computer shall be complete including:

- **Rockwell FactoryTalk Industrial Software License Upgrade**, compatible with Windows 10 installed in place of the existing license on the computer, including all configuration services.
- **WIN911 Alarm Dialing Software License Upgrade** to the latest Version compatible with Windows 10 including new Grand Stream Ethernet/phone modem, configuration, and setup including all configuration services.

PHASE I - TERRACE PARK WTP – COMPUTER HARDWARE/SOFTWARE UPGRADE

SCADA Computer Workstation, DELL, Intel Core i9-9900 3.1 GHz processor, 32GB memory, one (1) 512GB Solid-State hard drive, keyboard, mouse, speakers, 22" Flat Panel Monitor, Windows 10 Professional, Microsoft Office Professional & AVG Antivirus for installation in place of the existing SCADA Computer Workstation. Proposed computer shall be complete including:

- **Rockwell FactoryTalk Industrial Software License Upgrade**, compatible with Windows 10 installed in place of the existing license on the computer, including all configuration services.

PHASE II - TERRACE PARK – WTP PLC & RADIO UPGRADE

Supervisory Control Panel PLC & Radio Upgrade including labor and materials as required to include removal of the existing SLC PLC processor, power supplies, input/output modules and existing MDS UHF and 900MHz Radios.

Proposed upgrade includes installation and wiring of a Rockwell Allen-Bradley CompactLogic Programmable Logic Controller with memory module & input/output modules as required, Ethernet Switch, power supplies and accessories as required in place of the existing PLC to accommodate all existing inputs and outputs of the existing control system including new a MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna system will be abandoned in place. The existing 900MHZ Antenna will remain in place and reused for the new Ethernet Radio.

PHASE III - WELL 4 - PLC & RADIO UPGRADE

Supervisory Control Panel PLC & Radio Upgrade including labor and materials as required to include removal of the existing SLC PLC processor, power supplies, input/output modules and existing MDS UHF Radio.

Proposed upgrade includes installation and wiring of a Rockwell Allen-Bradley MicroLogic 1400 Programmable Logic Controller with memory module & input/output modules as required, Ethernet Switch, power supplies and accessories as required in place of the existing PLC to accommodate all existing inputs and outputs of the existing control system including new a MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna will be replaced with a new 900MHZ Antenna for the new Ethernet Radio.

PHASE IV - WELL 5 - PLC & RADIO UPGRADE

Supervisory Control Panel PLC & Radio Upgrade including labor and materials as required to include removal of the existing SLC PLC processor, power supplies, input/output modules and existing MDS UHF Radio.

Proposed upgrade includes installation and wiring of a Rockwell Allen-Bradley MicroLogic 1400 Programmable Logic Controller with memory module & input/output modules as required, Ethernet Switch, power supplies and accessories as required in place of the existing PLC to accommodate all existing inputs and outputs of the existing control system including new a MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna will be replaced with a new 900MHZ Antenna for the new Ethernet Radio.

PHASE V - ABEL ELEVATED TANK

Supervisory Control Panel PLC & Radio Upgrade including labor and materials as required to include removal of the existing SLC PLC processor, power supplies, input/output modules and existing MDS UHF and 900MHz Radios.

Proposed upgrade includes installation and wiring of a Rockwell Allen-Bradley MicroLogic 1400 Programmable Logic Controller with memory module & input/output modules as required, Ethernet Switch, power supplies and accessories as required in place of the existing PLC to accommodate all existing inputs and outputs of the existing control system including new a MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna system will be abandoned in place. The existing 900MHZ Antenna will remain in place and reused for the new Ethernet Radio.

PHASE VI - LIFT STATION NO. 1

Supervisory Control Panel Radio Upgrade including labor and materials as required to include removal of the existing MDS UHF Radio.

Proposed upgrade includes installation and wiring of a new MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna will be replaced with a new 900MHZ Antenna for the new Ethernet Radio.

PHASE VII - LIFT STATION NO. 2

Supervisory Control Panel Radio Upgrade including labor and materials as required to include removal of the existing MDS UHF Radio.

Proposed upgrade includes installation and wiring of a new MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna will be replaced with a new 900MHZ Antenna for the new Ethernet Radio.

PHASE VIII - CITY HALL – PLC & RADIO UPGRADE

Supervisory Control Panel PLC & Radio Upgrade including labor and materials as required to include removal of the existing SLC PLC processor, power supplies, input/output modules and existing MDS UHF and 900MHz Radios.

Proposed upgrade includes installation and wiring of an Rockwell Allen-Bradley CompactLogic Programmable Logic Controller with memory module & input/output modules as required, Ethernet Switch, power supplies and accessories as required in place of the existing PLC to accommodate all existing inputs and outputs of the existing control system including new a MDS Orbit Wide Band Ethernet Radio.

Please note, existing UHF Antenna system will be abandoned in place. The existing 900MHZ Antenna will remain in place and reused for the new Ethernet Radio.

Your net price for PHASE I through PHASE VIII, FOB factory with freight allowed to jobsite including one (1) year warranty and electronic set of updated drawings for insertion in your existing Operation and Maintenance Manuals is**\$163,305.00 Not taxable with ST3 Form on file.**

OPTIONAL ADDER – NEW REPORTING DATA BASE

to the above price for the addition of new daily/monthly/yearly reports in Excel format.

Your net price adder is.....\$13,200.00

Please note the following:

- Existing surge protection, power supplies, printers, Uninterruptible Power Supplies (UPS), & terminals are in good condition, are not obsolete & replacements are available within 24 hours, therefore, these components will remain and reused.
- Existing SCADA graphics and reports will be reused on Windows 10 operating system.
- Personal Laptop Computer is not included.
- Sales tax not included or required with ST3 Form on file.

If you wish to proceed with an order simply sign on the space(s) provided below and return a copy to this office, upon receipt we will immediately proceed with equipment release and scheduling installation.

Thank you for the opportunity of providing you with this proposal. Should you have any questions or wish to get together to discuss in greater detail please do not hesitate to give Ryan or me a call.

Best personal regards,



Bruce Wirth, President
Automatic Systems Company

PHASE I THROUGH PHASE VIII.....<u>\$163,305.00.</u>	
ACCEPTED BY: _____	DATE: _____

OPTIONAL ADDER – NEW REPORTING DATA BASE	
Please add... <u>\$13,200.00</u> to the above price for the addition of new daily/monthly/yearly reports in Excel format.	
Accepted by: _____	Date: _____

cc: Mr. Ryan Willis, ASC