PROPOSAL

PROPOSAL ID:

REFERENCE:

LOCATION:

BID DATE:

Phone 608.222.8622 Fax 608.222.9414

Visit us on the Web at http://www.lwallen.com

Altronex Control Systems

A Division of L. W. Allen, Inc.

Excellence, By Design

4633 Tompkins Drive Madison, WI 53716

Mike Anderson La Crosse Wastewater Treatment Facility 905 Houska Park Drive La Crosse, WI 54601 andersonmi@cityoflacrosse.org

TERMS: NET-30 DAYS PER ATTACHED TERMS AND CONDITIONS

ADDENDUM __ ACKNOWLEDGED

FREIGHT IS F.O.B. ORIGIN – ALLOWED

La Crosse, WI - WWTP

PRICES DO NOT INCLUDE SALES OR USE TAXES

15030218LMK-R2

SCADA Upgrades

March 2, 2014

ITEM	QUAN	DESCRIPTION	TOTAL PRICE
		L.W. Allen and its Altronex Control Systems division are pleased to provide a quotation for the following equipment and services. The existing SCADA PLC, operator interface and fiber optic hardware was installed 17 years ago and is in need of replacement to continue trouble free operation. The SCADA server and software were upgraded in recent years so no upgrades are required at this time. Altronex recommends replacing the SCADA PLC, operator interface, fiber optic	
		Altronex will partner with the City's existing SCADA servers/Ignition SCADA software. Altronex will partner with the City's existing HMI integrator, Industrial Automation for complete integration. The following control panels are part of this hardware and software upgrade: 1. Master Telemetry Unit	
		 RTU-1 Gravity Belt Thickener & Fiber Optic Switch Panel RTU-2 Sludge Storage RTU-3 Dewatering RTU-4 Belt Filter Press 	
		 RTU-5 Raw Sewage RTU-6 Digester RTU-7 Settled Sewage RTU-8/9 UV 	
		 10. Software modifications only: a. RTU-12 PSSI Generator 1 b. RTU-13 PSSI Generator 2 c. RTU-14 Plant 2 d. RTU-15,16,17,18,19 Blowers 	
A	1	 MASTER TELEMETRY UNIT – MTU MODIFICATIONS 1. Remove existing PLC and Ethernet switch hardware 2. Install SCADA PLC Hardware – Allen Bradley CompactLogix a. L36-ERM Processor with memory module and power supply b. DFCM communication module for DF1 remote telemetry functions. c. MCM communication module for Modbus remote telemetry functions. d. IA16 digital input modules per detail. e. OW16 relay output modules per detail. 	
		 f. IF4 analog input modules per detail. 3. Install 708FX2-ST N-Tron/Red Lion switch and interface to existing 	



SCADA Upgrades

ITEM	QUAN	DESCRIPTION	TOTAL PRICE
		 connections. a. 6 copper and 2 fiber managed switch 4. Remove existing touchscreen computer and provide cover plate. 5. Remove existing backup PLC and dialer PLC. 6. Interface to existing relays, terminal blocks, Catalyst dialer and SCADA HMI to maintain existing functionality with new hardware platform. 7. PLC programming. Database interface for Ignition. 8. Updated control panel drawings in CAD. 	
	1	 RTU-1 GRAVITY BELT THICKENER MODIFICATIONS Remove existing PLC and Ethernet switch hardware Install SCADA PLC Hardware – Allen Bradley CompactLogix L36-ERM Processor with memory module and power supply IA16 digital input modules per detail. OW16 relay output modules per detail. IF8 analog input modules per detail. OF4 analog output modules per detail. Interface to existing relays, terminal blocks and SCADA HMI to maintain existing functionality with new hardware PLC programming. Database interface for Ignition. Updated control panel drawings in CAD. 	
	1	 FIBER OPTIC INTERFACE CONTROL PANEL MODIFICATIONS (GBT) 1. Remove existing media converters. 2. Install 714FX6-ST N-Tron/Red Lion switch and interface to the following connections. a. 8 copper and 6 fiber managed switch i. MTU – Admin Building ii. RTU-2 – Sludge Storage Building iii. RTU-3/4 Filter Building iv. RTU-6 Digester Building v. RTU-7 Settled Sewage Building vi. RTU-8/9 UV Building 3. Updated control panel drawings in CAD. 	
	1	 RTU-2 SLUDGE STORAGE BUILDING CONTROL PANEL MODIFICATIONS Remove existing PLC and Ethernet switch hardware Install new MCC bucket for PLC extension rack Install SCADA PLC Hardware – Allen Bradley CompactLogix a. L36-ERM Processor with memory module and power supply b. IA16 digital input modules per detail. c. OW16 relay output modules per detail. d. OW8I relay output modules per detail. e. IF8 analog input modules per detail. f. OF4 analog output modules per detail. 4. Install 708FX2-ST N-Tron/Red Lion switch and interface to existing connections. a. 6 copper and 2 fiber managed switch 5. Remove existing 5" touchscreen and install Allen-Bradley 7" 2711P-T7C4D8 touchscreen and power supply. 6. Relocate existing UPS to separate area to provide future space in control panel. 7. Interface to existing relays, terminal blocks and SCADA HMI to maintain existing functionality with new hardware 8. PLC, switch and operator interface programming. Database interface for Ignition. 9. Updated control panel drawings in CAD. 	

ITEM	QUAN	DESCRIPTION	TOTAL PRICE
	1	RTU-3 DEWATERING BUILDING CONTROL PANEL MODIFICATIONS	
		1. Remove existing PLC and Ethernet switch hardware	
		2. Install SCADA PLC Hardware – Allen Bradley CompactLogix	
		 LSO-ERM Flocessor with memory module and power supply IA16 digital input modules per detail 	
		c. OW8/OW8I relay output modules per detail.	
		d. IF8 analog input modules per detail.	
		e. OF4 analog output modules per detail.	
		Install 708FX2-ST N-Tron/Red Lion switch and interface to existing	
		connections.	
		4. Remove existing 10" touchscreen and install Allen-Bradley 10" 2711P-	
		T10C4D8 touchscreen and power supply.	
		5. Relocate existing UPS to adjacent panel to provide future space in control	
		panel.	
		 Interface to existing relays, terminal blocks and SCADA HMI to maintain existing functionality with new bardware. 	
		7 PLC switch and operator interface programming. Database interface for	
		Ignition.	
		8. Updated control panel drawings in CAD.	
	1	RTU-4 BELT FILTER PRESS CONTROL PANEL MODIFICATIONS	
		1. Remove existing PLC hardware	
		2. Install SCADA PLC Hardware – Allen Bradley CompactLogix	
		 a. L36-ERM Processor with memory module and power supply b. L416 digital input modules per detail 	
		c. OW16 relay output modules per detail.	
		d. OW8I relay output modules per detail.	
		e. IF4 analog input modules per detail.	
		3. Interface to existing relays, terminal blocks and SCADA HMI to maintain	
		existing functionality with new hardware	
		5. Updated control panel drawings in CAD.	
	1	RTILS RAW SEWAGE PLIMP CONTROL PANEL MODIFICATIONS	
		1. Remove existing PLC and Ethernet switch hardware	
		2. Install SCADA PLC Hardware – Allen Bradley CompactLogix	
		a. L36-ERM Processor with memory module and power supply	
		b. IA16 digital input modules per detail.	
		 OW16 relay output modules per detail. IE8 analog input modules per detail. 	
		e. OF4 analog output modules per detail.	
		3. Install 708FX2-ST N-Tron/Red Lion switch and interface to existing	
		connections.	
		a. 6 copper and 2 fiber managed switch	
		 Remove existing Panelview 300 operator terminal and install Allen-Bradley 10" 2711P-T10C4D8 touchscreep and power supply 	
		5. Interface to existing relays, terminal blocks and SCADA HMI to maintain	
		existing functionality with new hardware	
		6. PLC, switch and operator interface programming. Database interface for	
		Ignition.	
		7. Updated control panel drawings in CAD.	
	1	RTU-6 DIGESTER BUILDING CONTROL PANEL MODIFICATIONS	
		 Remove existing PLC and Ethernet SWICh hardware Install SCADA PLC Hardware – Allen Bradley Compact Logix 	
		a. L36-ERM Processor with memory module and power supply	

ITEM	QUAN	DESCRIPTION	TOTAL PRICE
		b. IA16 digital input modules per detail.	
		c. OW16 relay output modules per detail.	
		d. IF8 analog input modules per detail.	
		e. OF4 analog output modules per detail.	
		Install 708FX2-ST N-Tron/Red Lion switch and interface to existing	
		connections.	
		a. 6 copper and 2 fiber managed switch	
		4. Remove existing Panelview 300 operator terminal and install Allen-Bradley	
		7 ^{°°} 2711P-17C4D8 touchscreen and power supply.	
		5. Interface to existing felays, terminal blocks and SCADA HMI to maintain existing functionality with new bardware	
		6 PLC switch and operator interface programming. Database interface for	
		Ignition	
		7. Updated control panel drawings in CAD.	
	1		
	I	1 Permove existing PLC and Ethernet switch hardware	
		2 Install SCADA PLC Hardware – Allen Bradley Compact Logix	
		a 136-FRM Processor with memory module and power supply	
		b. IA16 digital input modules per detail.	
		c. OW16 relay output modules per detail.	
		d. IF8 analog input modules per detail.	
		e. OF8C analog output modules per detail.	
		Install 708FX2-ST N-Tron/Red Lion switch and interface to existing	
		connections.	
		a. 6 copper and 2 fiber managed switch	
		4. Remove existing Panelview 300 operator terminal and install Allen-Bradley	
		10 ²⁷ 2711P-110C4D8 touchscreen and power supply.	
		5. Interface to existing felays, terminal blocks and SCADA HMI to maintain existing functionality with new bardware	
		6 PLC switch and operator interface programming. Database interface for	
		Ignition	
		7. Updated control panel drawings in CAD.	
	1		
		1 Remove existing PLC and Ethernet switch hardware from RTU-8	
		2. Install SCADA PLC Hardware – Allen Bradley Flex I/O	
		a. 1794-AENT adapter and power supply	
		b. IA16 digital input modules per detail.	
		c. OW8 relay output modules per detail.	
		d. IF4I analog input modules per detail.	
		e. OF4I analog output modules per detail.	
		3. Install 708FX2-ST N-Tron/Red Lion switch and interface to existing	
		connections.	
		a. 6 copper and 2 fiber managed switch	
		b. 51 to 5C liber optic patch cords to interface to existing SC libers	
		with namenlate material to mask opening TRD	
		5 Remove existing 12" touchscreen on RTI I-9 and install Allen-Bradlev 12"	
		2711P-T12C4D8 touchscreen and power supply.	
		6. Interface to existing relays, terminal blocks and SCADA HMI to maintain	
		existing functionality with new hardware	
		7. PLC, switch and operator interface programming. Database interface for	
		Ignition.	
		8. RTU-8 will be connected via Ethernet RIO so RTU-8 will be removed from	
		the network. All programming functions will be in RTU-9.	

ITEM	QUAN	DESCRIPTION	TOTAL PRICE
		9. Updated control panel drawings in CAD.	
	1	 SPARE PARTS – ONE OF EACH TYPE OF CARD, SWITCH, PROCESSOR 1. 1769-L36ERM processor 2. 1769-IA16 AC digital input module 3. 1769-OW16 Relay output module 4. 1768-OW8I Relay isolated output module 5. 1769-IF4 Analog input module (4 point) 6. 1769-IF8 Analog output module (8 point) 7. 1769-OF4 Analog output module (4 point) 8. 1769-OF8C Analog output module (8 point) 9. 1769-PA4 PLC power supply 10. 714FX6-ST Ethernet switch 11. 708FX2-ST Ethernet switch 	
		SERVICES	
	1	 ALTRONEX PROFESSIONAL SERVICES Engineering services Coordination meetings Submittal data PLC/Switch/OIT configuration services and coordination with Industrial Automation for HMI integration Configure OIT terminals for VNC remote access. Factory testing System installation and cutover to minimize downtime. We plan to include a backup controller for crucial locations to keep operations running during installation of new equipment. RTU-5 and RTU-7 Startup and training O&M manuals Warranty – 1 year 	
		TOTAL PRICE SCADA HARDWARE UPGRADES PER ABOVE	\$417,560

ACCEPTED THIS _____ DAY OF _____, 20_____

SUBMITTED THIS:

PRICE FIRM FOR 30 DAYS

March 02, 2015

NAME OF PURCHASER

L.W. ALLEN, INC.-BY:

BY: _____

NAME & TITLE

Mark Kane

ALTRONEX PROPOSAL (Cont.) Page:

6 of 6 Reference:

SCADA Upgrades

Terms and Conditions

Controlling Provisions: These terms and conditions shall supersede any provisions, terms, and conditions contained on any purchase order or other written form Buyer may use or provide (whether received by Seller prior or subsequent to date hereof), and the rights of the parties shall be governed exclusively by the provisions, terms, and conditions hereof.

Quotations and Acceptance: Acceptance of a quotation, whether by a separate purchase order or by other means, shall constitute an acknowledgment and approval of the quotation as written and an acceptance of the Terms and Conditions hereof. Written quotations shall expire on the date specified in the quotation or, in the absence of such specification, thirty calendar days from the date issued. Seller may, by written notice, terminate a quotation at any time prior to acceptance. Any purchase order received after expiration of a quotation, which Seller honors, shall be subject to all of the Terms and Conditions hereof.

Submittal Drawings: Submittal of drawings for approval, if required, will be made after receipt of complete information from buyer. The quantity of the submittal drawings will be as specified in the contract documents. Additional sets will be supplied at \$150.00 per set. Return to Seller of one (I), final approved drawing constitutes notice to Seller to proceed with manufacturer. If this order is conditioned upon "engineer approval" Seller requires written notification from buyer in the form of approved submittal data.

Force Majeure: Seller shall not be liable for failure to deliver or perform, for any delay in the performance of orders or contracts, or in the delivery of shipment of goods, or for any damages suffered by the buyer due to such delay or failure, when the delay or failure is, directly or indirectly, caused by or arises from delays of suppliers or carriers or any other cause beyond Seller's control.

Prices and Taxes: All prices are F.O.B. factory unless expressly stated otherwise. Prices do not include sales, excise, municipal, state or other governmental taxes. Buyer shall be responsible for all taxes.

Credit Approval: The credit terms specified on the face hereof are subject to Seller's continuing approval of Buyer's credit. Seller may withdraw the extension of credit and require modified payment terms if, in Seller's sole judgment, Buyer's credit or financial standing is impaired to the point where Seller in good faith deems itself insecure.

Delivery: Unless otherwise specified in this quotation, delivery will be F.O.B. Seller's point of shipment. Buyer will accept delivery within twenty (20) days after Seller notifies Buyer that the equipment is ready for shipment. If Buyer does not furnish exact shipping instructions within ten (10) days after acceptance of this proposal, Seller will select, at its discretion, the means and terms of shipment. Seller will not be liable for any loss resulting from such selection. The time of delivery is an estimate only, and Seller may change such time if it does not receive the information and approvals necessary to proceed with the manufacture of equipment.

Title, Risk of Loss, Inspection of Equipment: Title and risk of loss to the equipment shall pass to Buyer upon delivery of the equipment to the carrier. Buyer shall immediately inspect equipment upon receipt and any damage must be noted on the carrier's bill of lading at time of receipt. Seller is not liable for any shortages or nonconformance unless notified by Buyer within 10 days of Buyer's receipt of the equipment. Buyer will make all claims for loss or damage in transit against the carrier.

Changes, Cancellations, Returns: All changes, cancellations, or returns must have Seller's prior written approval and are conditional on compliance with manufacturer's cancellation/return policies and subject to restocking fees and service charges. Authorized returned equipment must be packaged and shipped prepaid to manufacturer.

Payment: Unless the Seller extends alternative credit terms, 90% of the total purchase price is due net 30 days after delivery of equipment (but in all cases prior to field service start-up, if earlier) and the remaining 10% is due upon start-up of equipment by Seller's field technician, but in no event more than 90 days after shipment of equipment. Any balance owed by Buyer after the due date is subject to a 1.5% per month delinquency charge until paid. FIELD START-UP SERVICE CANNOT BE AUTHORIZED WITHOUT RECEIPT OF PAYMENT IN THE AMOUNT OF 90% OF THE TOTAL PURCHASE PRICE. If no start-up is required, 100% payment is due net 30 days from invoice date. BUYER'S PAYMENT OBLIGATION IS IN NO WAY CONTINGENT UPON BUYER'S RECEIPT OF PAYMENT FROM ANY OTHER PARTY.

Indemnification and Default: In addition to all other amounts due hereunder, buyer shall reimburse Seller in full for all collection costs or changes, including reasonable attorney fees, which Seller may incur in the collection of past due amounts from buyer, including interest on overdue accounts. If buyer is in default under this or any other agreement with Seller, Seller may defer performance hereunder until such default is cured. Seller shall have no obligation to provide factory startup assistance and/or factory training until all invoices (including retentions) for equipment have been paid in full.

Security Interest: Seller shall retain a security interest in the equipment until the full purchase price has been paid. Buyer's failure to pay any amounts due shall give Seller the right to possession and removal of the equipment after providing ten (10) days written notice. Seller's taking of such possession shall be without prejudice to any other remedies Seller may have.

Warranty and Liability: Buyer shall have such warranty rights, and only such warranty rights, as may be extended by the manufacturer of the product. The terms and conditions of any such warranty rights are set forth in the Manufacturer's Operation/Maintenance Manual which accompanies each product. Seller does not otherwise offer any guaranty or warranty for the product. Seller disclaims any and all warranties; express or implied, including the warranties of merchantability and fitness, except as may be set forth in the terms and conditions of sale in this Agreement or in any express written warranty which seller may have otherwise extended to Buyer for the product.

Seller shall not be liable for any damages, charges for labor, or expense in making repairs or adjustments to the product without prior written approval of Seller. Seller shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data or service by Buyer or any third party. Seller shall not be liable for startup or any other field work performed by personnel other than authorized representatives of Seller unless expressly approved in writing in advance by Seller. Seller shall in no event be liable for any consequential, incidental or liquidated damages or penalties. Seller's liability under this Agreement shall in no event exceed the lesser of: (i) the cost of remediating any defect or deficiency in the performance of Seller hereunder; or (ii) the purchase price of the product in respect of which the claim is made.

Operation/Maintenance Manuals: Buyer's installation, maintenance and operation manuals will be furnished in the number of copies specified at the time of quotation in contract documents. If none specified, one will be provided at no added cost, with additional copies at \$150.00 each.