



ST. CHARLES
SINCE 1834

AGENDA ITEM EXECUTIVE SUMMARY

Title: Recommendation to Waive the Formal Bid Procedure and Approve the Purchase of Disinfection System Control Panel

Presenter: John Lamb

Please check appropriate box:

<input checked="" type="checkbox"/>	Government Operations	X	Government Services 09.22.14
<input type="checkbox"/>	Planning & Development		City Council
<input type="checkbox"/>	Public Hearing		

Estimated Cost:	\$54,632.00	Budgeted:	YES	X	NO
-----------------	-------------	-----------	-----	---	----

If NO, please explain how item will be funded:

Executive Summary:

The Wastewater Division has funds in the budget to replace the current Disinfection System Controller unit which is twelve years old and now only operates in one mode. This unit is critical to operating the disinfection system and meeting EPA permit limits.

Due to its age and upgrades in electronics, parts are no longer available for this unit; therefore, a new unit has to be purchased. This item is a sole source since it is one part of the entire disinfection system, so waiving of bids is required.

Attachments: *(please list)*

Bid Waiver Form
Proposal

Recommendation / Suggested Action *(briefly explain):*

Recommendation to Waive the Formal Bid Procedure and approve purchase of Disinfection System Controller from Trojan UV in the amount of \$54,632.00 and a Resolution Authorizing the Mayor and Clerk to execute the same.

For office use only:

Agenda Item Number: 5.g

UV4000™ DISINFECTION SYSTEM TYPE M TO PLC SCC UPGRADE

For

**ST. CHARLES MAIN PLANT WWTP
2 E. MAIN STREET , ST. CHARLES, IL 60174-1984
ATTENTION: MIKE BURNETT**

**Date: August 14, 2014
Report No: RO_Project No_410970**

NOTICE

**This report is proprietary and may not be reproduced or
distributed to parties not directly associated with the
ST Charles IL WWTP
without the express written permission of Trojan Technologies.**

Panel Upgrade Recommendations

Attached is a revised proposal for a PLC upgrade using DH+ communications. This requires the use of an ABL61 plc in the panel upgrade. The recommended scope of work, equipment and services are described on the enclosed pages and should you require any clarification or if you have any questions then please call or email.

Yours truly,

Original Signed By

Mark Eyre
Municipal Service
Refurbishment & Optimization

System Control Center (SCC) Scope of Supply: Parts

The System Control Center (SCC) panel shall be supplied to monitor & control the UV System. The UV SCC shall consist of the main components as detailed in the table below. The price does not allow for site installation services. Site service is described separately.

QTY	DESCRIPTION	UNIT MODEL NUMBER / COMMENT
1	Processor: Allen Bradley Control Logix L61	Includes PLC power supply, necessary control cables
1	Operator Interface: PanelView Plus 700	Touchscreen; color
1	SCADA Communications:	DH+ interface provided; Ethernet/IP built in to PLC
1	Panel (new additional cabinet required; estimated size 30" x 30" x 12")	Wall Mounting, 304 SS; outdoor location NEMA 4X; 120VAC; 60 Hz; sunshade; panel heater; modem; lifting lugs; dwg approval process confirms site fit/location.
1	Digital Outputs	
1	Digital Inputs	
1	Analog Inputs	
1	Analog Outputs	
1	PLC Programming & testing	Downloaded and configured to site control philosophy
	Total US\$	46,132.00

Notes:

- 1) Any analog or communications wiring that is too short for direct connection to the new SCC panel will have to be replaced as "splicing" is not allowed. Conduit, conduit connections/glands, and required wiring are site supply and are not included in parts listed above.

2) **System Control Center (SCC) Scope of Supply: Service**

The following site service will be required to complete the inspection, commissioning and startup of the new SCC.

Description	Certified Service Technician	Total Price (US\$)
Service Travel Days	2	2,920.00
Site Days required	3	4,380.00
Number of Technicians	1	n/a
Daily Rate (US\$)	1,460.00	n/a
Airfare, estimated, invoice @ actual (US\$)	1,200.00	1,200.00
Total Service Price US\$		8,500.00

Site Responsibility:

Site will be responsible for approval (or approval as noted) of the submittal drawing(s); for providing SCADA address list (or approving SCADA address list provided by Trojan); for providing SCADA ProSoft node/IP address for SCC communications card; confirm serial or Ethernet modbus communications required.

Site will be responsible for SCC panel mounting location selection, provision of suitable mounting structure and for mounting the new SCC panel. Site SCADA integrator is recommended to be onsite during service work in order to verify data registers between the SCC PLC and site SCADA system.

Site will be responsible for making operators available for training on the new SCC control panel.

Site will be responsible for the new supply or transfer of the following connections from the existing panel (or site source) to the new SCC panel:

1. One (1) 120 volt, 60 Hz, 1 phase, 2 wire (plus ground), new power supply – make power connections within new panel but do not apply power.
2. One (1) 4-20 mA analog input signal from the plant flow meter
3. One (1) 4-20 mA analog output signal from PLC
4. One (1) ground link, 14 gauge minimum type TWH stranded, daisy chained to the HSC and PDC's
5. One (1) serial communication link (RS485) consisting of one (1) twisted shielded pair, 18 gauge maximum from existing terminal blocks daisy chained to CCBs
6. One (1) DH+ communications cable from plant SCADA for remote monitoring.
7. Four (4) discrete output signals
8. Any new or existing power, analog or communications wiring that is too short for direct connection to new SCC will have to be replaced as “splicing” is not allowed

Note: Pull all wiring as required, label, and leave ends long for Certified Technician to terminate within panels (except power supply).

Trojan Responsibility:

Trojan will be responsible for providing submittal drawing(s) for site approval.

Certified service technician is responsible for:

1. Verifying correct installation (power, mounting, configuration, communications, etc) of the SCC panel;
2. Terminating wire & communication connections within new SCC.
3. Verify SCADA communications.
4. Providing operator training.

Documentation:

One electronic copy of the following documentation will be supplied by Trojan:

1. Submittal drawings for approval
2. SCADA address list (if provided by Trojan)
3. Final (as approved) submittal drawings if different from 1)
4. Appropriate corrected sections for the original O&M Manuals.

Terms & Conditions:

Trojan Technologies Terms and Conditions apply and are attached.

Shipment terms are ExWorks (ExW). Partial shipments are allowed.

Payment terms: Net 30 days

Quote validity is 30 days.

Delivery is 10 -12 weeks to be confirmed at order placement. One (1) week is allowed for drawing approval; longer drawing approval can impact final delivery date.

SCC Warranty is one (1) year materials and labour.

Daily Rate and Travel Daily Rate, if quoted, includes hourly rate, accommodations, and meals. It does not include airfare.

Airfare, if quoted, is an estimated cost and assumes the flight is booked at least 14 days in advance. The actual air fare receipt will be provided and the final invoice adjusted accordingly. Airfare within North America is booked on the basis of fully flexible refundable economy class tickets with airline of choice.

Trojan employee on-site work will be performed during the working hours of 0830 – 1700 Monday through Friday except for statutory holidays. If site access/working hours are different from this then please advise and we will work to accommodate site hours.

All replacement parts used in Trojan service must be high quality proven Trojan replacement parts designed specifically for use with the Trojan equipment. Using genuine Trojan parts ensures your system remains validated and operates at peak performance. It also maintains your safety certifications, regulatory compliance, and your Trojan Lifetime Performance Guarantee. Trojan Certified Service cannot provide service support to Customers with a system where unknown replacement parts or parts other than parts approved by Trojan have been used.

Purchase order must state that “Canadian labor, service and technical support on site from Trojan Technologies is required”. In addition, a “letter of invitation” on company letterhead will be requested after PO receipt. We will advise our requested wording (based on the PO received) to ensure it matches the PO, both of which will provide USA customs and passport control officers with the required supporting paperwork to allow our entry to complete work.