



AUTOMATIC SYSTEMS CO.

Wednesday, January 23, 2019

Mr. Jon Haukaas
City of Blaine
1801 101 St. Avenue Northeast
Blaine, MN 55449

Reference: Blaine, MN – SCADA System Improvements – Phase I

Dear Jon:

As we close out Phase I Professional Services and begin the transition to Phase II we are pleased to provide the following update.

Estimated Versus Actual Hours

- Phase I was estimated at \$177,690.00. As of 12/31/18 we have invoiced \$156,357.51.
- We are still billing hours for January but anticipate being \$8000.00 to \$10,000.00 under budget at the end of January.
- 1138 hours were estimated for Phase I, to date 956 hours have been used.

Scope Changes

- Scope reduction. The original scope included time for SCADA software evaluation. As we examined the existing system it became apparent that a full evaluation would not be required. The existing Rockwell Automation software is commercially available, well supported, considered an industry standard, commonly specified by Barr Engineering and regularly implemented by Automatic Systems. The software may require version updates, but the City’s original investment can be preserved by reusing the SCADA software.
- Scope increases:
 - Server separation. The original system included 2 servers that were configured in a non-functioning hot standby configuration. The servers were separated to allow each to operate independent of the other.
 - Water Plant No. 1 server hard drive replacement. The server computer received a replacement hard drive as part of the server separation process.
 - Tower No. 1 polling master. The communication from Tower No. 1 to the wells, towers and lift stations was upgraded to an industry standard methodology to increase reliability, further diagnostics and ease troubleshooting efforts.
 - Duplicate status and alarms. Many duplicate status and alarms were deleted to eliminate operating staff frustration and extra hours required to respond to inaccurate or duplicate notifications.

MANUFACTURERS REPRESENTITIVES		•	SYSTEMS INTEGRATION		•	INSTRUMENTATION
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<input type="checkbox"/> BRANCH OFFICE			CHICAGO, ILLINOIS	PHONE 815-927-3386		FAX (651) 631-0027

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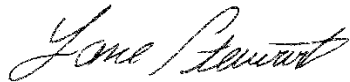
- General troubleshooting and repair for reclaim tank alarms, graphic displays, backup alarm dialer, lift station alarms, radio communication failures, etc.

Summary

The scope of services evolved as the state of the system and needs of City staff were identified. Scope increases were carefully examined, costs estimated in advance, and implemented with as little disruption to the system and staff as possible. Overall the scope increased yet the budget was maintained. In July of 2018, confidence in the system was very low due to hundreds of inaccurate or nuisance alarm notifications. Presently the nuisance alarm notifications have been greatly reduced or eliminated and confidence is being restored.

We thank you very much for the opportunity of working with the City of Blaine and look forward to the Phase II Professional Services that include the implementation of the new SCADA System.

Sincerely,



Lane Stewart
Automatic Systems Company