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August 24, 2016



RESOURCE
CONSULTING
ENGINEERS LLC

Kenny Schmitz

Director of Building Services

Woodbury County

620 Douglas Street

Sioux City, IA 51101

Re: Woodbury County Courthouse and Law Enforcement Center – Control System Upgrades

Dear Kenny,

I am pleased to present you with this proposal for services related to a Control System Upgrades Project for the Woodbury County Courthouse and Law Enforcement Center. This proposal includes Engineering Design and Construction Administration Services for the project. I appreciate the opportunity to provide this proposal, and look forward to helping Woodbury County in significantly improving operational reliability and efficiency for these two important facilities.

Based on the decision made by the County Board of Supervisors at their meeting on August 23, 2016, we understand that the scope of this project will be to replace the existing Building Automation Systems (BAS) throughout the Woodbury County Courthouse and the Woodbury County Law Enforcement Center (LEC). Existing systems are a combination of digital, electric, and pneumatic controls, and do not allow for effective monitoring of systems and spaces, or diagnosing of system issues. The current systems also limit opportunities to improve both occupant comfort and building energy efficiency. Additionally, numerous existing actuators do not function properly and require replacement. Providing new Building Automation Systems for these facilities will help to improve occupant comfort, building energy performance, and building operation and monitoring capabilities.

Scope of services:

Services to be provided:

- Mechanical and Electrical Engineering Design Phase Services, including:
 - Site Surveys to document locations of existing control components and to determine requirements for new control systems, e.g., what sensors will be required to control a system and where they will be located
 - Development of sequence of operations for each system located in the Courthouse and LEC
 - Development of required points list for each system located in the Courthouse and LEC
 - Development of electronic background drawings for first floor of Law Enforcement Center (to be based on existing hard copy or scanned drawings provided by Woodbury County – field verification will not be completed in spaces other than those housing mechanical equipment)
 - Development of Drawings showing:
 - Locations of equipment to be controlled
 - Locations of control components not mounted at equipment, including temperature sensors, differential pressure sensors, static pressure sensors, etc.
 - Flow diagrams where necessary to communicate system configuration and control component locations
 - Details related to installation of new control components (valves, flow measurement devices, etc.)
 - Sequences of Operations
 - Point Lists
 - Information for required electrical power system modifications to serve new control components
 - Development of Project Manual, including:
 - Procurement and Contracting Requirements (Division 00 Specification Sections) – specific forms and requirements to be reviewed with County Personnel prior to development
 - General Requirements (Division 01 Specification Sections)
 - Technical Specifications (expected to include Division 23 and Division 26 Specification Sections)
 - Review meeting(s) with County Personnel to review proposed sequences of operations and point lists for new control systems