

From: Larry Brown Address: PO Box 5056

Georgetown, TX 78627

Phone: 512-930-5721 Fax: 512-869-7621

Email: lbrown@tracntrol.com

Engineering Services Proposal

Date: Contact: December 15, 2017

Adrian Montemayor

Webb County Utility Department

513 Martha Drive
Rio Bravo, TX 78046
Ph: 956-523-5590
Fax: 956-724-7906

Email: agmontemayor@webbcountytx.gov

CC:

Steve Brown, Kirk Jones, Ryan Wood, Jacob Jennings

Subject:

Engineering Services for Webb County Utility Services

Water System Supervisory Control & Data Acquisition

Overview:

We appreciate the opportunity to present the following proposal for your consideration of our services to conduct an engineering assessment on behalf of Webb County Water Utility Services. The proposed assessment is designed to complete the following scope of work for the County. We acknowledge the County's need to make a transition for SCADA service to gain economy, responsive support, and continuity of service, as well as upgrade its system. For our firm to assume the role of service provider for the County, engineering services are necessary to establish a basis for this support. This proposal is presented for engaging our company for completion of the engineering study with the expectation of all concerned that a long-term service and support relationship will exist for the benefit of Webb County Utility Services.

Scope of Work:

The project shall consist of a complete engineering analysis of the system to develop a thorough knowledge of the facilities, provide engineering documentation, make recommended changes, develop budgets, and provide operation manuals in preparation to assume service of the system.

Deliverables:

- 1. Completion of a thorough on-site analysis to catalog all sites, equipment, photographs, coordinates, input/output devices, instruments, RTU schematic, antenna types and heights; assessment of equipment conditions, and development of site functionality (theory of operation).
- 2. Off-site review and analysis of information gathered during on-site assessment.

- 3. Completion of a radio propagation study based on data gathered during onsite analysis. Additionally, existing radio equipment configuration and set-up will be analyzed for performance. This will ensure that the existing system has been constructed consistent with optimal design standards.
- 4. Cataloging of data to establish a basis for documentation.
- 5. Development of an engineering plan and recommendations for any modifications to the system to implement best practices and to meet minimum performance standards.
- 6. Development of a budget for all recommended changes.
- 7. Meet with City personnel and engineer to discuss recommendations and budget.
- 8. Develop O&M Manuals for the SCADA system, including:
 - a. Radio path surveys and propagation study results
 - b. Telemetry Communication Scheme
 - c. Site assessment data (photos, equipment inventory)
 - d. I/O lists
 - e. PLC Programs
 - f. HMI Application Data
 - g. One-line wiring diagrams
 - h. RTU panel layouts and inventory
 - i. Instrument listing

Note: O&M manuals will be prepared electronically and archived on our cloud server as documentation becomes finalized. The information will be made available to the Owner. The Owner should note that the documentation may be delayed if changes are required and approved for upgrades, for which the documentation will be completed when the upgrades are completed.

Exclusions and Assumptions:

This proposal and scope of work is presented with the understanding that completion of the engineering phase will lead to a continuous service and support relationship. Completion of the study will also provide documentation necessary for the County to maintain control of its SCADA information and design elements. It does not include any upgrades, improvements, or repairs as a part of this scope of work. However, this agreement does not preclude service support of the system, if during the engineering phase the County determines that it needs technical services, or in conducting the study the parties agree that a repair or technical support service is required, then TraC-n-trol, Inc. will be available to provide such service. Services or technical support not included in the scope of work shall be provided on a cost-plus basis in accordance with the terms of the attached Warranty and Technical Support Schedule.

Terms:

- 1. Invoices are due Net 30 days from date of invoice. Balances paid after due date are subject to a 1.5% charge.
- 2. A retainer will be invoiced at 15% of contract amount upon acceptance of quotation.
- 3. Balance of contract will be paid monthly based on percentage of project completed each 30 days.

- 4. Pricing is valid for 60 days from date of quotation.
- 5. System is quoted for completion within 120 days of approval.
- 6. Upon completion of the engineering phase, TraC-n-trol, Inc. will assign necessary personnel and dedicate resources to meet the service needs of the City.

Engineering Study Quotation:

Item	Quoted Pricing
On-site Assessment and Analysis	\$9,000.00
Off-site Review and Analysis	\$8,000.00
Radio Propagation Study	\$2,000.00
Data organization and cataloging	\$6,000.00
Engineering	\$5,000.00
Engineering Report & Recommendations	\$4,000.00
Budget Preparation	\$2,000.00
Presentation of Report & Budget	\$2,000.00
O&M Manuals	\$2,000.00
Tota	il: \$40,000.00

Webb County Utility Services
Date

Agreed this ______, 2017.

Attachment - Warrant & Technical Support Schedule