AGENDA ITEM REQUEST FORM
CITY OF JOHNSON CITY, TEXAS
CITY COUNCIL

MEETING DATE: April 6, 2021

AGENDA PLACEMENT:

☐ Ceremonial
☐ Consent
☒ Individual
☐ Closed Session

CAPTION:

Discussion of and action on upgrading the City of Johnson City's water and wastewater supervisory control and data acquisition (SCADA) system and awarding a contract for the same to TraC-n-trol in the amount of Thirty-seven Thousand Nine Hundred Thirty-seven Dollars ($37,937.00); and authorizing the Chief Administrative Officer to execute a Sales Quotation with TraC-n-trol for said improvements on behalf of the City. (Staff)

EXECUTIVE SUMMARY:

City Staff solicited quotes from the following three (3) VTScada Advanced Certified SCADA technicians:

- Express Electric - No response
- TraC-n-trol - $37,937.00
- NELtronics - $21,030.00

for upgrading the City's current Lookout HMI SCADA system to VTScada because Lookout HMI is legacy software that cannot operate on a Windows 10 platform. The City requested quotes on the following:

1.   VTScada 1000 tag Single Server Basic w/ 3 months of SupportPlus;
2.   3 Thin Clients w/ 3 months of Support Plus;
3.   1 Additional 9 months of SupportPlus;
4.   1 USB Voice Modem for alarm dial out; and
5.   Labor to setup VTScada, configure graphics, setup database, autodialer and thin client, on-site startup and training.

The City's SCADA system currently has approximately 150 "tags," or equipment components. The upgrade increases the number of equipment components to 1,000 to allow for future expansion of the system. Moreover, the upgrade allows for monitoring of the SCADA system in the field

through phones and/or Ipads ("thin clients"). Lastly, the upgrade allows for emergency alerts to mobile phones and/or emails should a problem with the City's water and/or wastewater system occur.

The City's current SCADA provider is NELtronics; however, the Public Works Department has noted several concerns with continuing with the same vendor, despite the difference in price between NELtronics and TraC-n-trol:

1. Timely and comprehensive service. NELtronics has few, if any, employees other than Stan Nelke. TraC-n-trol has 20+ employees, and the nearest technician is less than one (1) hour away.
2. Data. It is difficult to retrieve the City's current SCADA dataset and calculations from NELtronics. TraC-n-trol guarantees the City's access to its own SCADA datasets and calculations.

Once implemented, VTScada will sit on its own server and be backed up daily to the cloud. Currently, the SCADA system sits on L. Bible's desktop and is not backed up.

FINANCIAL:

- $37,937.00 paid from Water and Wastewater Utility Fund No. 03-600-6210 *Operational Expenses*.
- City Staff have identified no Historically Underutilized Businesses (HUBs) for this project in Blanco County.

ATTACHMENTS:

- Express Electric emailed bid solicitation.
- TraC-n-trol bid and background documents.
- NELtronics bid and background documents.
- HUB search.

SUGGESTED ACTION:

Motion to approve upgrading the City of Johnson City's water and wastewater supervisory control and data acquisition (SCADA) system and awarding a contract for the same to TraC-n-trol in the amount of Thirty-seven Thousand Nine Hundred Thirty-seven Dollars ($37,937.00); and authorizing the Chief Administrative Officer to execute a Sales Quotation with TraC-n-trol for said improvements on behalf of the City.

PREPARED BY: CAO/City Secretary Rick Schroder

DATE SUBMITTED: 3/29/21

Rick Schroder

The City of Johnson City is accepting quotes on upgrading our current Lookout HMI SCADA system with VTScada because we understand that Lookout HMI is not Windows 10 friendly.

We are looking at the following:

1. VTScada 1000 tag Single Server Basic w/ 3 months of SupportPlus
2. 3 Thin Clients w/ 3 months of Support Plus
3. 1 Additional 9 months of SupportPlus
4. 1 USB Voice Modem for alarm dial out
5. Labor to setup VTScada, configure graphics, setup database, autodialer and thin client, on-site startup and training
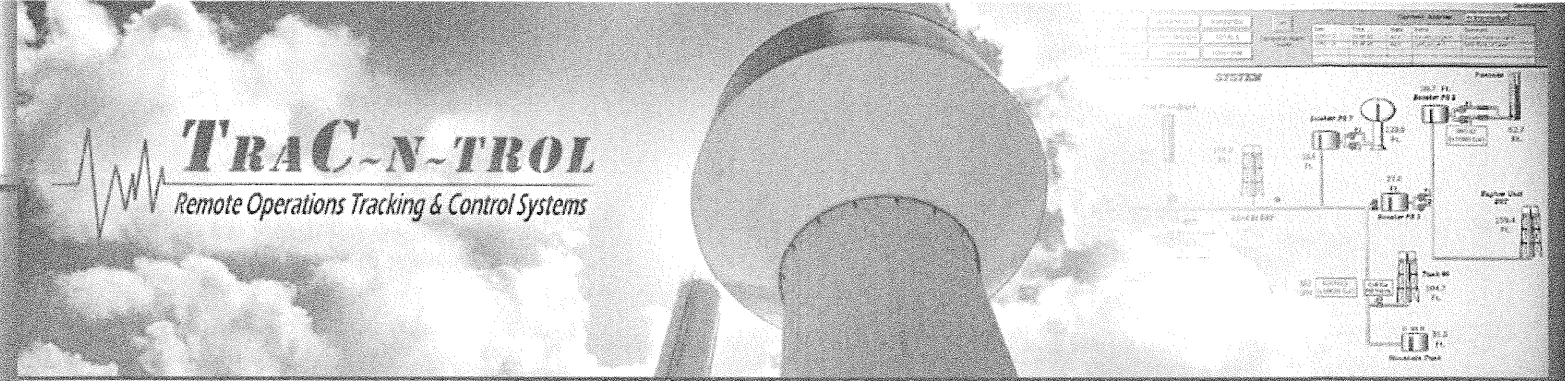
Please advise.

Thanks,

Rick A. Schroder
Chief Administrative Officer / City Secretary
303 E. Pecan Dr., Johnson City, TX 78636
(830) 868-7111, Ext. 8 / (830) 868-7718 (Fax)
Email: rschroder@johnsoncitytx.org / Website: www.johnsoncitytx.org

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TraC-N-TROL

Remote Operations Tracking & Control Systems

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TraC-N-TROL

Physical Address:
40200 Industrial Park Circle
Georgetown, TX 78626

Mailing Address:
P.O. Box 5056
Georgetown, TX 78627

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

*Making SCADA simple for the
Water and Waste Water
Industry since 1995.*

COVID-19 Response

TraC-n-trol will be available to its customers during the coronavirus crisis. While personal health and wellbeing is our highest priority, we recognize our responsibility to support our customers during the pandemic, especially during possible area shutdowns. We plan to honor the Center for Disease Control's (CDC) recommendations to minimize the spread of the virus, including minimizing personal contact, personal hygiene, and monitoring personal symptoms. As well, we recognize the responsibilities set forth by the Department of Homeland Security Document for response as a part of the Critical Infrastructure Workforce. Feel free to contact us, as usual, for service and emergency response:

Contact:
Ryan Wood
O: 512-930-5721 x16
C: 512-887-0464
contactus@tracntrol.com

Please contact Ryan before contacting your normal service technician as he can better assist you in getting you an appropriate response.

Hopefully, and prayerfully, we will endure this crisis together. God bless our country during these trying times!

TraC-n-trol

The Challenge

Today's water and wastewater utilities face greater challenges than any time in history. Imposing regulations, consumer expectations, growth and development, and aging infrastructures are forcing managers and decision-makers to seek efficient, effective means of resource management. The TraC-n-trol theme, *"You cannot manage what you cannot measure"* is a fundamental truth that brings technology and information management to the forefront of practical solutions. Supervisory Control and Data Acquisition (SCADA) Systems are the modern technology backbone of utility resource management. Effective utility management cannot be achieved without it.

TraC-n-trol is a leader in the development and deployment of instrumentation, controls and SCADA technology in the State of Texas. Let us show you how technology can put money back in your budget and time back in your day!

TraC-n-trol Customers

TraC-n-trol has deployed, serviced, or upgraded over 200 SCADA systems throughout Texas over the last 20 years. From Texarkana to west of the Pecos, to the Panhandle Plains to the Rio Grande Valley, TraC-n-trol covers the state.

We form a lasting relationship with most of our customers and continue to maintain their SCADA systems to this day. Many relationships date back to date of inception.

Want to learn more about becoming a TraC-n-Trol Customer? Click here!

Is your SCADA Computer up to date?

Are you still running an outdated version of Windows on your SCADA computer? Is it time to think about upgrading? When you are ready, we are here to help. Call or e-mail us and we will provide a quote to upgrade all the software on your SCADA computer.

TraC~N~TROL
Remote Operations Tracking & Control Systems

From: Larry Brown
PO Box 5056
Georgetown, TX 78627
Phone: 512-930-5721
Fax: 512-869-7621
Email: lbrown@tracntrol.com

Quotation

Date: March 10, 2021
To: Rick A. Schroder, Chief Administrative Officer/City Secretary
Johnson City, City of
303 E Pecan Dr
Johnson City, TX 78636
Sent via: Email - rschroder@johnsoncitytx.org

Project: City of Johnson City SCADA HMI Upgrade

SCOPE OF WORK:

1. Labor, travel, materials, and programming development of Human Machine Interface (HMI) Software and SCADA Application.
2. Warranty – One-year parts and labor
3. On and off-site Technical support – 24/7 for the life of the system.
4. Training (4 hours during or immediately following installation, 4 hours follow-up within 90 days, if required); Off-site training support, as needed.

DELIVERABLES:

Ancillary SCADA Software & Services
1. Furnish XLReporter reporting software license, compatible with Windows 10 with report development
2. Burn-in and set-up of the new computer to include download of required Microsoft updates – PC to be shipped to TraC-n-trol, Inc. facility in Georgetown, Texas.
3. Installation of software on new SCADA computer.

HMI Software – VTSCADA
1. Furnish VTSCADA software (licensed to the City) to include:
   a. VTSCADA - 1K Tag Development Runtime License – New – with Three Months SupportPlus
   b. VTSCADA – 1K - New - Alarm Notification Module
   c. VTSCADA – 1K – Thin Client – Three – New with Three Months SupportPlus
   d. SupportPlus – Additional Nine Months
2. Development and configuration of VTSCADA HMI application for graphical display, control, monitoring, and trending of site functionality.
3. Set-up and configuration of alarm software for notification of issues related to system functionality.
4. Configuration of Thin Client applications
5. Optional – Additional Unlimited Thin Clients, as quoted (Note: Cost difference of Unlimited Thin Clients vs. Three (3) Thin Clients shown as adder.
6. Optional – Dell Computer provided by TraC-n-trol, Inc.:

a. Dell Precision 5820 Workstation
b. Operating System: Windows 10 Pro
c. Processor: Intel Xeon W-2223 Processor
d. Memory (RAM): 16GB (2x8GB) 2666MHz RDIMM ECC Memory
e. Video Card: AMD Radeon Pro WX 3200, 4GB Video Card
f. Hard Drive: 512GB SATA Class 20 Solid State Drive
g. Optical Drives: 16x and 8x DVD+/- Optical Drives
h. Network Card: 1GB NIC add-in Network Card (Secondary Ethernet Port)
i. Office Software: Microsoft Office Home and Business 2019
j. Warranty: 3-Year ProSupport Plus with Next Business Day Onsite Service Warranty
k. Monitor: Dell 22" Monitor w/stand and soundbar
l. UPS Back-up: APC 1500VA UPS Battery Back-up
m. Antivirus Software: ESET NOD32 Antivirus (2-Year Subscription)

Reverse Engineering – Labor and Materials

1. Set-up of Automation Direct PLC – DL05 with DL05/06 Communication Module for remote set-up and programming to minimize on-site development. Items to remain with City as spare parts after project completion.
2. Access and review of existing PLC programs and extraction of relevant data for integration of new HMI platform. Some work already completed.

HMI Development – Labor

1. Consult with City personnel on layout of HMI platform in comparison with existing Lookout system. The HMI Graphical User Interface (GUI) shall meet the following specifications:
   a. The graphical user interface (GUI) screens shall be customized to the needs of the Owner.
   b. Licensing – All SCADA software shall be licensed in the name of the Owner and shall be full development packages.
   c. All programs and applications shall remain the property of the City.
   d. All GUI screens, sub screens, and respective representations shall be pre-approved by the Owner.
   e. All GUI screens, sub screens, and respective representations shall be similar in structure and development, as much as practicable.
   f. The GUI screens shall be high-performance graphics consistent with ISA-101 HMI Design Standard.
   g. GUI Software shall be provided and installed as specified.
   h. All monitored parameters shall be represented both graphically and/or digitally (numerically), as specified.
   i. Graphics shall be pictorially illustrative of the actual device or component.
   j. All screen layouts shall be logical and consistent with the general system layout.
   k. Appropriate devices should be represented with motion and color changes when operating.
   l. All graphics shall be represented by industry conventional color schemes.
   m. A main overview screen shall schematically represent the overall system at a single glance.

n. All monitored parameters and respective values shall be represented on the main overview screen.

o. Each site shall be represented on a sub-screen accessed from a drill-down menu from main screen.

p. Each monitored device shall have operator intervention of its local control by point-and-click changes.

q. Alarm and value adjustment points shall be numeric keypads and value fields for level control, etc.

r. Control adjustments shall be graphical HOA switches to provide remote control of all motors/valves.

s. Trend charts shall be created for all specified parameters exhibiting its value over time.

t. All logged data shall be archived indefinitely to either local hard drives or back-up systems.

u. All GUI alarms shall be pop-up flashing devices with respective audible enunciation via speakers.

v. The Graphical User Interface shall be fully interactive as specified.

w. The graphical interface shall employ the full characteristics of graphical capabilities to provide for schematic layouts, as well as P&ID characterizations.

x. A minimum of three levels of security access to operational changes will be required

y. All HMI development will be completed by a VTSCADA certified programmer.

2. Consult with City about reporting and alarming requirements.
3. Develop pilot screens off-site.
4. Meet with City personnel for review and approval of preliminary screens.
5. Finalize HMI graphics, reports, and alarm functions.
6. Deliver PC and HMI, set-up and test system.
7. Commission system operation.
8. Finalize system.
9. Provide training.
10. Initiate warranty phase.

EXCLUSIONS AND ASSUMPTIONS:

1. Local and state sales taxes are excluded from quoted pricing.
2. Performance and payment bonds are excluded from quoted pricing.
3. Installation of equipment and field instrumentation other than equipment specified will be invoiced on a cost-plus basis (not anticipated).
4. All optional items not selected as a part of quoted price.
5. If City provides SCADA PC/Server, unit will be shipped to TraC-n-trol, Inc. in Georgetown, TX for off-site set-up and development, or provide reliable remote access via internet login.
6. Firewall security device or configuring an existing firewall security device for VPN access to the VTScada Thin Clients is excluded. VPN configuration will be provided by others/City IT.

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. Mobilization and equipment will be invoiced at 50% of contract amount upon acceptance of quotation. Freight is prepaid and included in quoted pricing.

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 60 days of approval.

QUOTATION:

Item	Quoted Pricing
VTSCADA - 1K Tag Development Runtime License – New – with Three Months SupportPlus:	$4,856.00
VTSCADA – 1K - New - Alarm Notification Module:	$1,166.00
VTSCADA – 1K – Thin Client – Three Pack – New with Three Months SupportPlus (Single: $2,100):	$6,200.00
SupportPlus – Additional Nine Months:	$1,375.00
Set-up and configuration of City provided SCADA PC/Server:	$1,200.00
HMI, Reports, Alarm System, and Configuration, as specified (includes XLReporter & configuration at $4,125.00)):	$18,565.00
Total	$33,362.00

Reverse Engineering Adder – Cost Information for Your Information

Set-up of Automation Direct PLC – DL05 with DL05/06 Communication Module for remote set-up and programming to minimize on-site development (City to retain items as spares following the completion of the project);	$450.00
Access and review of existing PLC programs and extraction of relevant data for integration of new HMI platform.	$4,125.00
Total	$4,575.00

Optional Items – shown as adders to quoted pricing above

VTSCADA – 1K – Thin Client – Unlimited – New with 12 Months SupportPlus (3 months + additional 9 months) – Add:	$1,395.00
TraC-n-trol provided PC, as specified:	$3,145.00

Note: VTSCADA Annual Support at renewal for all items: $2,036.25 for three thin clients; $2,142.75 for unlimited thin clients.

Please designate selected items from options for approved amount:

$_____

Respectfully submitted: Accepted & Date

Larry Brown Digitally signed by Larry Brown
DN: cn=Larry Brown, o=TraC-n-trol, Inc.,
ou, email=lbrown@tracntrol.com, c=US
Date: 2021.03.10 09:36:49 -06'00'

Larry Brown, TraC-n-trol, Inc.   Johnson City, City of

Date

From:	Larry Bible
Sent:	Monday, February 22, 2021 11:42 AM
To:	Rick Schroder
Cc:	Brent J Sultemeier
Subject:	FW: HMI replacement scope
Attachments:	VTScada Quote.pdf

From: Stan Nelke <snelke@neltronics.net>
Sent: Monday, February 22, 2021 11:31 AM
To: Larry Bible <lbible@johnsoncitytx.org>
Subject: HMI replacement scope

Larry,
Please find attached Neltronics' quote to purchase, install, configure, test and startup VTScada software to replace your existing Lookout HMI.
I have quoted the 1000 Tag Single Server Basic package w/ 3 thin clients. VTScada offers the thin client in a single license purchase or 5 license purchase. I quoted 3 singles, however, the 5 license package is only about $110 more. Call me with any questions or if you would like to discuss. I think your current system would use about 120-150 tags so I looked at the 200 tag version but after adding the autodialer function and thin clients it was not much cheaper.

Thanks,

Stan Nelke

NELTRONICS

1308 Chisholm Trail
Suite 101
Round Rock, Texas 78681

NELtronics

QUOTATION

2003 North Mays
Suite 105
Round Rock, Texas 78664

City of Johnson City P.O. Box 369 Johnson City, Texas 78636 Attn: Mr. Rick Schroder	**Quote No:** 2021-001-1 **Quote Date:** 2/22/2021

Prepared By	TERMS	FOB	PROJECT	DELIVERY / VALIDITY
S. Nelke	Net 30		City of Johnson City HMI Upgrade	2 - 4 weeks ARO / 60 Days

Item No.	Qty	Description	Unit Price	TOTAL
1	1	VTScada 1000 tag Single Server Basic w/ 3 months of SupportPlus	$7,443.00	$7,443.00
2	3	Thin Clients w/ 3 months of Support Plus	$2,295.00	$6,885.00
3	1	Additional 9 months of SupportPlus	$1,612.00	$1,612.00
4	1	USB Voice Modem for alarm dial out	$90.00	$90.00
4	Lot	Labor to setup VTScada, configure graphics, setup database, autodialer and thin client, on-site startup and training	$5,000.00	$5,000.00

Thank you for this opportunity to quote your requirements.
Should you have any questions or concerns, please
contact Stan Nelke at Neltronics. 1-1/2% per monthe will
be added to overdue invoices.

TOTAL	$21,030.00

Search For Vendors

Vendor ID	Company Name	Contact Person	Mailing Address	City	State	Zip	Country	Email	Phone	HUB Eligibility	HUB Gender	Small Business	CMBL Status	HUB Status
1832538391900	5 STAR CANINE LLC	Brenda Clark	146 CARTER RANCH	BLANCO	TX	78606-5563	USA	Brenda@fivestar-k9.com	512-557-9393	WO	F	Yes	Inactive(F)	A-Active
1843660083900	PHYNIX FABRICATION CORP.	Robert J White	931 TAYLOR RANCH RD	WIMBERLEY	TX	78676-4133	USA	whiterobertj1964@outlook.com	512-529-0560	BL	M	Yes	Inactive(N)	A-Active
1474550727800	PLAN CHECK PROFESSIONALS, INC.	Nichole Plahy	802 LAS COLINAS DR	DRIPPING SPRINGS	TX	78620-4780	USA	nichole@pcassoc.com	744-673-8627	WO	F	Yes	Inactive(F)	A-Active
1811137174800	SOUND MASKING USA LLC	Debra Westmoreland	200 KUDU COVE	BLANCO	TX	78606-6005	USA	debraw@soundmaskingusa.com	210-383-1899	WO	F	Yes	Active	A-Active
1455056483600	THE KOPATHEAN COMPANY	Shannon Lackey	642 MONTERREY DR	BLANCO	TX	78606-4840	USA	kopathean@outlook.com	830-613-5923	WO	F	Yes	Active	A-Active
1454252016900	VSB HOUSING DEVELOPMENT RESOURCES, LLC	Valerie S. Boyd	194 LANDING LN	BLANCO	TX	78606-5007	USA	valboyd@moment.net	512-426-4991	WO	F	Yes	Inactive(N)	A-Active