

CITY OF FRANKLIN

FRANKLIN, VA

REQUEST FOR PROPOSAL (RFP) #2021-01 ADVANCED METERING INFRASTRUCTURE RF MESH SYSTEM

Issue Date: February 12, 2021 Due Date: March 8, 2021 at 3:00 PM EST

Bid Meeting link:

https://franklinva.webex.com/franklinva/j.php?MTID=mfccbc72b4351863569c4c7ebc0d5e74f

Alternate meeting dial in: 1-408-418-9388 Meeting number: 179 206 5151 Password: 0000

Pre-Bid Meeting link:

https://franklinva.webex.com/franklinva/j.php?MTID=m97d43e4ee6e8099b8820c554816037f0

Alternate meeting dial in: 1-408-418-9388 Meeting number: 179 588 1281 Password: 0000

Procurement Contact: Tracy Spence, Purchasing Agent 207 West 2nd Avenue Franklin, VA 23851 Ph: (757) 562-8535 Email: <u>tspence@franklinva.com</u>

All sealed proposals shall be turned in no later than the due date and time noted above.

- All Proposals that are delivered via mail or are hand delivered must be addressed to the "Purchasing Agent" listed above.
- Any Proposals sent in via facsimile, telephone, or email shall not be considered.
- Any Proposals that are turned in late **will be rejected and returned unopened**.

Proposal documents may be accessed on the following link: <u>https://www.franklinva.com/business/bidsrfps/</u> and on eVa.

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1 Introduction

The City of Franklin is located in Franklin, VA. The electrical department provides electric utility services to ~5600 customers. The electrical department provides service to City of Franklin and parts of the City of Suffolk, Southampton and Isle of Wight Counties. Established in 1892, Franklin Municipal Power and Light provides reliable, low-cost energy and energy-related services for Franklin and the surrounding area.

The City of Franklin intends to initiate the implementation of an RF Mesh AMI System to facilitate two-way communications with its electric utility services. The edges of the coverage area cover approximately 8.3 square miles.

The selected supplier will provide equipment, meters, and installation services associated with the proposed solution. The City of Franklin desires a single supplier to manage the entire project and provide all services and equipment associated with this RFP in Phases 1 & 2 of the project.

1.1 **Proposal Due Date**

The Deadline for submission of proposals in response to this RFP is **3 pm EST**, **March 8**, **2021**. See Sections 3.1 & 8 for complete schedule details.

1.2 Contact

Questions relating to this RFP should be addressed in writing (email) to:

Contact Name

Purchasing Agent Tracy Spence City of Franklin 207 2nd Avenue Franklin, Virginia 23851 City, State Zip Phone: (757) 562-8535 Email: <u>tspence@franklinva.com</u>

Questions are to be received no later than seven (7) days prior to the proposal deadline with the title of "Questions on RFP #2021-04 AMI RF Mesh System" in the email subject line and will be answered as soon as possible.

1.3 **Proposal Submission**

Five (5) hard copies and one (1) electronic copy on USB flash drive of the entire proposal are to be submitted to:

Contact Name Purchasing Agent

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Tracy Spence City of Franklin 207 2nd Avenue Franklin, Virginia 23851

The City of Franklin must receive the entire response no later than **3pm EST**, **March 8**, **2021.** at the address above. The response will be incomplete if the response documents are not received by the submission deadline above. All subject lines of proposals are to be marked "Sealed Bid— RFP #2021-04 AMI RF Mesh System".

Proposals become part of the City of Franklin's official file without obligation on the requestor's behalf.

1.4 Clarification of Proposal

The City of Franklin reserves the right to obtain clarification of any point in the Vendor's proposal to obtain additional information or clarification to properly evaluate their proposal. Clarification questions do not obligate the City of Franklin to choose said Vendor's proposal. Failure of a Vendor to respond to the City of Franklin's request for clarification may result in rejection of the Vendor's proposal.

1.5 **Responsiveness**

Vendors shall respond to all requirements of this RFP to the maximum extent possible. Any responses that are not currently available in the marketplace, but part of the Vendor's current product development must be noted as such.

1.6 False or Misleading Statements

If, in the City of Franklin's opinion, a proposal contains false or misleading statements that do not support a feature, function, or capability stated by the Vendor, the entire proposal will be rejected.

1.7 Contract Award

The selection of a Vendor and the execution of a contract, while anticipated, are not guaranteed by the City of Franklin. The City of Franklin reserves the right to determine which proposal is in the City of Franklin's best interest and to award the contract on that basis, to reject any and all proposals, waive any irregularities of any proposal, negotiate with any potential Vendor (after proposals are opened) if such is deemed in the best interest of the City of Franklin.

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2 Business Goals and Desired Project Outcomes

Having completed due diligence, the City of Franklin has elected to only consider full two-way AMI technology solutions in order to meet the utility's internal requirements concerning bandwidth, resiliency, reliability, redundancy, and cost. In addition, the system must support unsolicited alarms to provide timely notifications to the commission's personnel. Any proposed RF solution must operate at a power level and frequency sufficient to ensure the system provides signal propagation and penetration capabilities necessary to communicate with electric endpoints located not only outdoors but also indoors in basements and meter rooms. All network communications, between collectors, endpoints, and any other network device must be encrypted utilizing AES-128 or higher. Solutions that do not meet these criteria will not be considered by City of Franklin at this time.

This RF Mesh AMI project is closely aligned to specific business goals for the City of Franklin that are intended to be achieved during full scale implementation and beyond. Phase 1 of the AMI Implementation Project will be approximately six (6) months, expected to be executed between April and October. The City of Franklin is interested in proceeding with additional equipment and services for full-scale deployment based upon the successful outcome of Phase 1.

The current operations of the City of Franklin are supported by the following:

- Customer Information System/Billing System which is Edmonds CIS;
- SCADA System which is being changed out
- Load Control via QEI Power Line Carrier
- Substations include fiber connectivity for backhaul; GPS coordinates for each substation are:

1.	36 39'36.04" N	76 56'36.60"W
2.	36 40'49.16" N	76 55'20.81"W
3.	36 41'38.97" N	76 57'56.45"W

It should also be noted that the City of Franklin has fiber assets at substation delivery points. These assets are expected to be used in the AMI deployment and may be further expanded at an appropriate time to support future project phases.

Phase 1 should demonstrate that upon full-scale (Phase 2) deployment, the following outcomes will be achievable:

- Provide the City of Franklin with up-to-date, reliable, and accurate consumption meter reading data; which is easily accessed and interpreted for billing and customer service processes.
- Provide the City of Franklin with up-to-date, reliable and accurate meter reading data so that the City of Franklin can make informed decisions about various utility operational factors.
- Provide real-time unsolicited alerts to immediately identify abnormal conditions of the distribution system including outages, high or low voltage, or other significant

distribution system issue to the City of Franklin staff for timely notification and resolution.

- Provide Customer Service department with up-to-date, reliable and accurate meter reading data, which is easily accessed and interpreted for billing and customer service purposes.
- The City of Franklin must achieve Operating Cost reductions related to meter reading and customer service including but not limited to:
 - a. Reduced Read-to-Pay Time
 - b. Significant reduction in Estimated Bills and Billing Disputes—high bill inquiries
 - c. Elimination of drive-by routes to provide regular reads and re-reads
 - d. Reduction in site visits due to move-in move-out as a result of new electric meters with integral disconnects
 - e. Reduction in Meter Reader Vehicle Expense
 - f. Outage/Restoration events/alarms
- The City of Franklin must achieve revenue enhancement through:
 - a. Improved Meter Accuracy
 - b. Tamper and Theft Detection
- Position the City of Franklin to for future power contracts as well as preparations to participate in Demand Response programs.
- Enable the City of Franklin to fully utilize the information available via the AMI system through the operational management of data in a comprehensive relational database. Provide the future ability to interface the City of Franklin owned street lighting assets with remote intelligence for control and maintenance purposes.
- Further position the City of Franklin for the long term challenging management of our distribution system with the flexibility to manage components of the system remotely by providing integrated communications;
 - a. To direct load control switches
 - *b.* To monitor and control distribution assets such as capacitor bank controllers, recloser controls, regulator controls, and sewer lift stations
- Offer strategies to reduce overall demand and energy consumption while maintaining customer voltage power quality per established standards through the automation of voltage control and VAR flow to minimize system technical losses.

3 Summary of Work

3.1 Phase 1

Upon the successful completion of Phase 1, a complete AMI System will be installed. Phase 1 will include the following items: Coverage for the Southhampton portion of the City of Franklin's service territory.

- Approximately 150 single phase residential electric meters (Form 2S CL200) with integrated AMI modules and under glass disconnect switches;
- Approximately 2 polyphase electric meters with integrated AMI modules;
- Approximately 50 Load Control Devices (LCD's) including
- All required software and computer hardware;
- All required AMI Collector and/or AMI Repeater devices;
- Any and all necessary configuration and maintenance tools and software;
- All professional services for Commissioning Phase including: project management, system training, start-up and system commissioning, development and implementation of the billing interface with the Edmonds CIS, periodic site visits following installation through the Acceptance Test Approval;
- OMS System with integration into Edmonds CIS

Project Milestones

Time Frame	Milestone
Phase 1	
By April 1, 2021	Contract Award
By April 15, 2021	Project Kickoff/Deployment Prep
July 15, 2021	Phase 1—System Installation and Commissioning Begins
August 15, 2021	Phase 1—Begin Acceptance Period
September 30, 2021	Phase 1—Acceptance Complete

Phase 2	
October 2021	Phase 2 (Full-Scale)—Deployment Start
January 2022	Anticipated Phase 2—Deployment completion

3.2 Phase 2—Full Deployment

Upon the successful installation and commissioning under the Commissioning Phase, a complete AMI System will be installed. Phase 2—Full Deployment will include the following items:

- 5,150 residential electric meters (Form 2S CL200) with integrated AMI modules;
- 448 polyphase electric meters with integrated AMI modules;
 - Forms for polyphase meters are not fully documented, but likely evenly split between 9S and 16S
 - Suppliers should price a total of 225 9S and 225 16S polyphase meters as well as an adder for 320amp services per the price sheets.
- ✤ 1,950 LCD's (optional if Franklin decides on full-scale changeout)
- All required software and computer hardware;
- All required AMI Collector and/or AMI Repeater devices;
- All professional services for Full Deployment including: project management, system training, and system commissioning, development and implementation of required interfaces to OMS and EA applications, periodic site visits following installation through the Final Acceptance Testing and Approval;

3.3 **Overall System Requirements**

This section provides an overview of the AMI Network and the system level performance requirements. Additional performance requirements are listed in Section 4.

3.3.1 AMI Network Description

The IPv6 AMI Network must consist of the following items:

- AMI modules with two-way communications capable of receiving the information from the meter registers, transmitting meter reads and other specified information to the AMI Collectors, and receiving commands from the AMI Systems.
- AMI Collectors mounted in fixed locations capable of capturing and storing the data from the AMI modules, storing, forwarding information to and receiving commands from the AMI Server.
- Utilization of the existing fiber assets to transfer data from the AMI Collectors to the AMI server located on the City of Franklin's premises.
- The AMI Server and Software necessary to operate the System, store meter data and transfer to/from the CIS System.
- Backward-compatible with IPv4 hardware on Franklin's system.

3.4 AMI System Requirements

3.4.1 Technology Platform

Having completed due diligence, the City of Franklin has elected to only consider unlicensed radio frequency (RF) IPv6-based mesh technology solutions in order to meet the utility's internal requirements concerning bandwidth, resiliency, reliability, redundancy, and cost.

3.4.2 Communication

City of Franklin prefers the IPv6 AMI solution operate as single-tier network to provide flexibility and diminish complexity to maximize performance and to minimize the impact on City of Franklin's resources to deploy, operate and maintain the system.

The electric meters and AMI modules must have full, 2-way communication. Hourly interval data is required. Collection of data in sub hour intervals (ie 15 minutes) for certain applications is desirable.

The AMI modules should have capability to record hourly consumption and transfer the data at a minimum of 2-4 times per day but should have the ability to provide 15, 5, or 1 minute data for some portion of the system. Alarms should trigger instantaneous transmission. Two-way communication is desired for all data.

Daily data retrieval of all electric meter data with at least 99% of all meters successfully read each day without estimation.

All data must be time-stamped by the AMI modules. Time should be synchronized with time servers, such as local time servers or from organizations such as NIST across the entire network.

All alarms, including power failure, shall be programmable by event type and be reportable via an unsolicited event message.

The AMI System must support time-of-use (TOU).

Proposed system must detect an outage or power loss on all system meters.

The AMI system shall support Demand Response activities by communicating to LCDs via the same radio and communications technology that is used to communicate with the AMI modules. All LCDs must be two-way devices that support tamper detection and retrieval of event logs.

The AMI System should support future capability to:

- Monitor distribution line voltage on key circuits and provide meter data inputs and alarms to drive a solution for Volt/VAR management
- Provide for automated controls at substations and/or capacitor banks and display abnormal conditions via a monitoring screen

The AMI Software functionality must include:

- Logging of key alerts, alarms and exceptions
- Display of key customer data fields such as: Customer account number, Meter Number, Meter serial number, AMI modules serial number
- User-defined grouping functions to gather and deliver data in pre-established groups for data aggregation purposes.
- Abnormal consumption identification
- High and low consumption status for individual accounts or groups of accounts

The following information should be supported within Reports:

- Meters and AMI devices—Individual account history with profiling data, status, configuration including firmware version, installation (current and total), high/low/zero consumption
- Communications—Missed or No Reads, alarms by type, AMI Network Communication, WAN Communication
- Outage Events and Duration
- Power aspects (where applicable)—Voltage threshold, momentary outages, etc.

User/Operator Interface: The following should be supported:

- On requests read must be supported based on name, address, and service type and account number. It must return all meter table data
- All system, network, data collector and meter configuration must be viewable
- The system must be able to execute remote disconnects

3.4.3 Meter and Operational Data Management:

The system must be able to validate the incoming reads as appropriate for the customer history and backfill reads as needed.

All billing and interval data must be held within the database for a minimum of 2 years.

Data backups should occur daily with no effect to the system operation.

3.4.4 Future Requirements

The AMI System will allow for future use of conservation voltage reduction (CVR) and IVVC solutions.

4 Component Requirements

4.1 Electric Meters and AMI Modules

Only electric meters from proven entities shall be considered, these manufacturers include Itron, Landis+Gyr, and Elster. All quoted meters must be of a non-proprietary design that would accommodate AMI modules from other vendors.

4.1.1 ANSI Reference Standards

In terms of safety, performance, the meter's design, the construction, and operation, where applicable, must conform to requirements established in the ANSI standards or the latest revision thereof.

4.1.2 Quality

The electric meter must be designed and constructed, excluding any replaceable battery, to have a life expectancy of at least fifteen (15) years and a failure rate of less than 0.5 % per year. The failure rate is the ratio of the number of failed meters to the number of installed meters.

4.1.3 Measured Parameters

As a minimum, the meter must be capable of measuring the parameters listed in the Table 4.1 in Section 4.1.4. If a parameter designation is not included, it is assumed that it is not applicable to this project.

The following are general requirements for AMI Electric Meters.

- a. R—Commissioning Phase or Full Deployment Requirement
- b. **FR**—Future Requirement
- c. NTH—Nice to Have
- d. Blank-not required

4.1.4 Programming

Measured Parameter	System-Wide Electric Meter Requirements (Phases 1 & 2)				
Measureu Farameter	Residential	C&I			
Energy measurement (kWh)					
Forward	R	R			
Reverse	R	R			
Demand Metering					
Last Interval Demand (kW)	R	R			
Peak kW Demand	R	R			
Periodic Data					
Usage (kWh)	R	R			
Reactive power (kVAR/kVARh and/or kVA/kVAh)	NTH	R			
Voltage	R	R			
Min/Max Voltage	R	NTH			
Current		R			
Frequency	NTH	R			
тои	R	R			
Data interval, Maximum	1 hour	15 min.			
Monitoring					
Unsolicited Voltage out of limit (high, low)	R	R			
Unsolicited Outage Alarm	R	R			
Unsolicited Outage Restoration Notification	R	R			
Load side voltage present w/disconnect	R				
Tamper	R	R			
Blink count	R	R			
Remote Disconnect	R as option				
Firmware over the air (OTA) upgradable	R	R			

programming must be provided per meter shipment.

Firmware upgrades for the AMI module should be accomplished remotely over the AMI network without field visits.

The capability of changing configuration settings should be available without removing units, or visiting the location. It is strongly desired that these changes will occur over the Network.

4.1.5 Data Retention

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The system must utilize a centralized database as a repository for integration, and access by all business and analytical systems, and users of the meter data throughout City of Franklin.

All meter billing data should persist in the meter for a minimum 45 days for 2 channels of 15 minute data.

4.1.6 Accuracy

The Meter must meet or exceed the accuracy specifications contained in ANSI specifications over its entire service life without the need for adjustment.

4.1.7 Meter Forms, Voltages, and Classes.

Please See the Pricing Table for appropriate quantities.

4.1.8 Power Quality

It is desired that the meters should be able to measure line voltage.

The meter should be able to profile the average RMS voltage.

4.1.9 Remote Disconnect Switch

There must be option for an electric meter remote disconnect under the glass for residential customers.

The disconnect device should be capable of disconnection and connecting the metering load and be capable of operating safely at 200 amps.

The system must provide verification of the device's status after operation.

4.2 AMI Collector

Layout: The AMI Collectors must be permanently mounted and strategically located throughout the Service Area to form a complete network. The specific quantities must be determined by the AMI Network Vendor.

Redundancy: 100% Redundancy should be incorporated into AMI Collector placement process to ensure the reliability of the meter reading process and the network reliability. Additional AMI Collectors may be added for future system coverage at any time without need for system reconfiguration.

Functionality: AMI Collector behavior must be capable of being modified from the AMI Server/Software without any field programming.

Power Supply: It is preferred that the AMI Collectors will be powered using AC line power provided by the City of Franklin. In the event of a power outage, the AMI Network shall

allow for reconfiguration automatically to provide for continued operation whenever possible. Vendor shall provide the option of a UPS unit for backup power to provide for at least 8 hours of operation, including backhaul equipment.

Transmission Security: The design architecture should minimize deciphering by outside sources.

4.3 AMI Server/Software General Requirements

The AMI System vendor will provide and commission a dedicated AMI Server to be hosted onsite or offsite.

• Please price both options for 2 years of data storage

Server Hardware: The City of Franklin has standardized on Cisco Server Hardware. AMI suppliers are expected to make best recommendations on Server Hadware.

Database: The City of Franklin has standardized on use of Microsoft SQL Server. The master station shall make use of this database server, storing all meter readings and device information within SQL Server tables.

Multiple Users: The AMI system must operate as an intranet server to provide meter readings to client workstations throughout the owner's office network.

Data Archiving: The AMI System must allow for archiving of all necessary data and easy retrieval of those records at any time.

Security: The System must support significant security measures. Any degree of security must be implemented based on user identification, user location, or mixtures. Data must be protected at all levels and during all steps and transmissions to the database.

Back-up: System must fit within existing IT environment and be capable of utilizing the utility's existing back-up capabilities and procedures to ensure that system and consumption data is not corrupted or lost.

5 Implementation Requirements

5.1 Vendor General Requirements

The Vendor should have significant experience in combined electric AMI projects at public power utilities of similar or greater size and complexity. Demonstrated experience in the installation and implementation of small, intermediate, and large AMI projects is preferred.

5.1.1 Vendor Deliverables:

Provide documentation that adequately describes the operation and maintenance of the AMI System and all components.

Provide Professional Services for commissioning the system and training sufficient to enable utility personnel to adequately operate and maintain the system.

Support replacement components and parts throughout the useful life of the system.

Support of the System over its expected life, including on-site and telephone support, patches and upgrades to system software and firmware to ensure that the System continues to perform to design criteria

5.2 Documentation

The Vendor must develop, submit, and receive approval on a Project Management Plan that includes: meter installation sequence and timing, customer notification methodology, AMI System installation, billing system interface development, system training, and Acceptance Testing.

AMI System Manuals: The AMI System Supplier must provide manuals and written procedures sufficient for complete operation and maintenance—including installation, configuration, diagnostics, and repair—of the system, its software, and its components. Electronic documentation is preferred.

Updates and revisions: Proposer must promptly provide updated documentation whenever there are any revisions or additions to the manuals. This can be in the form of replacement pages and electronic versions or online access to the latest documentation is preferred.

Metering Products Manuals: Provide all electric metering product documentation including instructional leaflets or manuals.

Electric Meter Programming records: Provide all programming records for any factory programming of electric meters.

5.3 Training

The Proposer must provide all training on the AMI system equipment (including the Server computer and software) after it is installed, tested and accepted by the City of Franklin.

Training should be provided for up to 25 various City of Franklin employees and project team personnel and it must include: field installation, field diagnostics, AMI System software, hardware configuration and maintenance, and meter reading database management as applicable by employee groups. All training must take place at City of Franklin on City of Franklin's actual deployed system.

6 Proposal Instructions

6.1 Submission of Proposal

Five (5) hard copies and one (1) electronic copy of entire proposal on USB flash drive, including responses to the technology assessment matrix (Appendix A) and Proof of Authority to Transact Business in Virginia (Appendix B) the in a single PDF file. Additionally, the required cost tables should be supplied in the native Microsoft Excel format. Please check formulas in all cells for accuracy. Vendors are responsible to verify all calculations and correct any errors found in the Excel Price Sheet.

6.2 Proposal Format and Content

This section describes the required proposal response format and content. Proposers are instructed to follow this format exactly. Additional information that may not cleanly fall within the given outline may be submitted in the appendices. However, the Proposal should be as short as possible while adequately explaining the key aspects of the solution and the vendor's organization. The following describes the response format:

6.2.1 Table of Contents

Include a Master Table of Contents for your response.

6.2.2 Section 1—Executive Summary (12 pages or fewer preferred)

Highlight the key aspects of your response, as well as the unique advantages the Proposer's offer to the City of Franklin. This section should contain a brief description of the following items.

- Scope of your proposed solution including a summary of the third party software or components required to execute this solution.
- Project Approach and Organizational Structure: Additionally, provide information on any sub-contractors included in your proposal.
- Technology overview or briefing.
- **6.2.3** Section 2—Technical Proposal (No maximum number of pages, though we prefer Vendors to be as concise as possible while still appropriately describing your offering)

Describe the technical aspects of your product and service offering. Pay particular attention to describing clearly and concisely the functional and performance benefits of your offering. Include:

• Describe the proposed system architecture and hardware infrastructure components (collectors, etc.) as well as the operation of the system and its components. Provide any necessary diagrams to help explain the system.

- Information on the proposed electric meters and associated AMI Modules and end points.
- A discussion of the data that is available from the meters, frequency of transmission, protocol, diagnostic information, data retention (at the AMI modules and the AMI Collectors), time stamps, etc.
- Provide an overview of how the system is commissioned—basic steps, programming/configuration of elements, necessary or optional tools such as handheld devices, and all software recommended or required.
- Describe any tools available in the proposed AMI system to aid in network analysis and troubleshooting.
- Describe the proposed system's ability to upgrade firmware of AMI Modules and Communication Nodes. State whether the firmware for these units be upgraded over the air.
- Confirm that the proposed system does not require any frequency licenses.
- Discuss the expected network system performance and the variables or configuration options that affect the system in terms of reducing or improving performance.
- Discuss the effect of adding the complete meter population to the proposed system design.
- Describe how data integrity/security measures built into the system to protect data during transmission and storage.

6.2.4 Section 3—Response to System Requirements Matrix

Provide a point-by-point response to the AMI Network's functional specification using the Technical Assessment tool found in the Appendix in Section 9. Response should include one of the following statements of conformance as well as any necessary explanation or description:

- ✓ Fully Complies
- ✓ Does Not Comply
- ✓ Complies partially or in a differing method than described; (respondents are encouraged to provide a response.)

6.2.5 Section 4—Cost Proposal

Complete the provided Price Sheet (provided in Excel spreadsheet format) that it is broken into two entries, Phase 1 Pricing, and Full System Pricing. The Full System Pricing should include those costs that are broken out for Phase 1.

The undersigned being familiar with all the details, conditions, and requirements hereby proposes to furnish HARDWARE AND SOFTWARE as specified herein to the Utility in

strict conformance with the Specifications included in the Request for Proposal documents. Add rows as needed.

Supplemental Information:

- Provide any supplemental information necessary to explain the Total Cost of Phase 1.
- Provide any supplemental information necessary to explain the Total Cost of the Full System Pricing.

6.2.6 Section 5—Bill of Materials

In support of this pricing, a detailed bill of material in the vendor's chosen format shall also be provided. Non-compliance with this requirement may result in disqualification of entire bid and proposal. Note any hardware items that are not provided by Vendor and are intended to be supplied by the City of Franklin shall be noted.

6.2.7 Section 6—Agreements

Provide copies of all software license agreements as well as a copy of any ongoing service contracts for support of AMI Hardware and AMI software.

6.2.8 Appendices (Optional)

Include relevant material needed to aid understanding of the proposal content. This may include additional detail which will enhance your response or which you believe will aid the City of Franklin's evaluation of proposals but was not specifically solicited.

7 Evaluation and Contract Process

7.1 Contract Preferences

The City of Franklin recognizes that this project requires multi-disciplined skills to execute. In addition, there are multiple components that must be purchased, configured and installed to form a complete system that will meet the requested performance success criteria. Wherever possible, the City of Franklin prefers consolidation of the material and services into a single contract structure. However, at its sole discretion the City of Franklin will consider multiple contract structures if it is deemed to be in its best interest.

The City of Franklin may conduct oral interviews with a short-list of vendors whose proposals are ranked the highest after the initial evaluation. In preparation for such interviews, additional information may be requested from the vendor.

7.2 Evaluation Criteria

The proposals submitted in response to this request will be evaluated by a team of individuals within the City of Franklin. This committee will evaluate the proposals based on but not limited to the following criteria:

	Criteria	Weighting
1	The ability to meet or exceed technical requirements	35%
2	Proposer's Experience, References, and Financial Strength	35%
3	The ability to meet future system requirements (Demand Response) with little impact to the Proposed Solution	15%
4	Total system costs including installation, support and on-going maintenance	15%

The City of Franklin reserves the right to consider other factors in addition to the Proposal in making its final decision.

7.3 Ranking

All proposals will be reviewed and ranked according to the Evaluation Criteria above and any or all Proposers may be selected for interviews or oral presentations. The City of Franklin makes no commitment to any respondent to this RFP beyond consideration of the written response to this RFP. Firms not selected will be notified in writing of the selection outcome.

7.4 Contract Award

The selection of a Proposer and the execution of a contract, while anticipated, are not guaranteed by the City of Franklin. The City of Franklin reserves the right to determine which proposal is in the City of Franklin's best interest and to award the contract on that basis, to reject any and all proposals, waive any irregularities of any proposal, negotiate with any potential Proposer (after proposals are opened) if such is deemed in the best interest of the City of Franklin.

8 Proposal Timeline

Event	Date
RFP Release	February 12, 2021
RFP Pre-bid Meeting – 3:00 WebEx	February 23, 2021
Vendor Questions	February 26, 2021
Responses to Vendor Questions	March 3, 2021

Response due date – 3:00 WebEx	March 8, 2021
Evaluation, including Short list presentations (if any)	March 19 through March 26 2021
Vendor Selection	By April 1 , 2020
Contract Negotiation Desired Conclusion	By Completion of Pilot
Council Approval/Contract Award	By April 15, 2021
Project Start (Kick-off Meeting)	By April 11, 2020

9 Appendix A – Systems Requirements Matrix

9.1 Terms and Definitions

Glossary	Definitions						
Technical Terms							
AMI modules	Transmitter that sends data from the meter to a collection point						
AMI Network	Advanced Meter Infrastructure System (Fixed Network meter reading and utility communication system)						
AMI Repeater	Relays RF signals from the AMI modules to the AMI Collector						
AMI Server	Accepts data from AMI Collectors via Backhaul						
Backhaul Communications	Facilitates transfer of data from AMI Collector to AMI Server (Cellular, Fiber, Wi-Fi, etc.)						
CIS	Customer Information System (Utility Billing System), also referred to as Edmonds CIS						
Collector	Receives data via RF from AMI modules and AMI Repeaters						
Head-end system	The entirety of the AMI Server and software that may also be referred to as HES, the Master Station, ODMS, or the MDM						
Node	A singular device attached to a telecommunications network for utility use						
Vendor	Proposer of the system to the Utility						
Utility	City of Franklin						
Compliance Terms							
Must	Requirement must be met						
Should	It is preferred that requirement is met						
Мау	Aspect is permitted						
Must Not	Aspect is not permitted						

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9.2 System Requirements Matrix

The City of Franklin is interested in deploying a fixed mesh network for the City of Franklin's service areas to provide a comprehensive AMI and Smart Grid solution to meet the utility's long-term advanced metering requirements including reliability, resiliency, redundancy, bandwidth, and cost. In addition, the selected AMI network should have the flexibility to support technologies that may be developed and commercialized in the future. Below is a Matrix identifying the City of Franklin's AMI network requirements, please indicate whether your technology meets the particular requirement and provide any necessary clarifying response. The Matrix is broken into the following Sections:

- General Vendor Requirements
- AMI Network and Infrastructure
- Electric Metering
- Unsolicited Alarms
- AMI Server
- AMI Headend System
- Demand Response (DR)
- Project Management (PM,) Customer Support, and Installation
- Outage Management System
- Bid Requirements

	General Vendor Requirements				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	Vendor must have been in the AMI and Smart Grid business for more than eight years. Vendor will not have stranded or discontinued an AMI network in the previous 20 years.				
2	Vendor required to have delivered a minimum of 500,000 AMI modules deployed and in excess of 75 two-way RF AMI systems using the same technology being proposed to City of Franklin in service at electric cooperatives.				
3	Vendor required to have minimum of two references within close proximity to UtilityName (defined as ability to travel to reference account within 8 hours travel time one- way).				
4	The City of Franklin desires the AMI System to serve multiple utility functions beyond Smart Metering. Please describe what if any other products or services are available.				
5	To understand the scope of its potential partner, City of Franklin requires that the Vendor state the total number of employees it has including how many professionals are specifically devoted to providing technical support for Smart Grid solutions. How many individuals are dedicated to developing the vendor's Smart Grid solutions?				
6	Vendor to provide information as to its ownership structure and				

	state the financial stability of its organization. If any Venture Capital is used to support vendor's organization Vendor must disclose the amount of investment, headquarters location of each equity firm, and ownership percentage of each entity.			
7	Vendor to provide access to audited financial statements for previous five years, including revenue, cost of sales, profit and loss, etc. Failure to provide this access at the time of initial proposal submission will result in disqualification of vendor.			
8	One head end application must be capable of supporting AMI, DA, and DR. If additional costs are required for any function, costs must be stated in pricing document.			

	AMI Network and Infrastructure				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	Vendor must be able to support Advanced Electric Metering, Demand Response, and Distribution Automation on the same network.				
2	The City of Franklin desires an RF Mesh Network to support AMI modules because of resiliency and bandwidth. Tower- based solutions and PLC technologies will not be considered as they cannot meet City of Franklin's long term needs, particularly in the areas of self-healing, self-managing, unlimited repeating, unsolicited alarming and available communications bandwidth.				
3	Infrastructure shall support multiple core functions beyond meter reading including but not limited to Demand Response, distribution operations, engineering analysis, outage management, energy efficiency, usage monitoring, customer service, leak detection, etc.				
4	State the bandwidth that your proposed solution (AMI Module) is capable operating at (bps or kbps). Vendor must also state the highest bandwidth the solution is currently operating at in the field.				
5	Vendor's solution shall support two-way communications for ALL types of Smart Grid devices on the AMI network, including electric metering endpoints, DR devices, and DA interface devices.				

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6	AMI network must utilize the entire ISM band for frequency hopping over a minimum of 50 channels.				
7	All devices (AMI, DR, and DA) must utilize the entire license- free 902-928MHz ISM frequency band for maximum propagation and to mitigate the possibility of interference. Solutions that require partitioning or segmenting this spectrum, such as for a 2 nd tier network or WAN will not be considered.				
8	System must not require the WAN and LAN to operate within the same frequency spectrum.				
9	If any frequency licenses are required for the solution proposed to City of Franklin, how many channels is your organization proposing for use at City of Franklin?				
	For what reasons did you select that number of channels?				
	Please ensure that all costs for this frequency spectrum are included in your cost proposal to City of Franklin.				
10	If there are on-going costs for towers or RF licenses, are these costs guaranteed for 15 years? If not, why not? If yes, what are these costs?				
11	If licensed frequencies are required or proposed, what is the bandwidth of each of these channels?				
12	City of Franklin prefers all routing to be managed and facilitated by the AMI endpoints and communication devices to ensure numerous communication paths are available to handle numerous condition changes such as feeder sectionalizing, growth/attrition, territory changes, AMI infrastructure outages/failures, etc.				

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13	AMI network must:			
	Provide for authentication of endpoints and communication devices as part of "self- discovery."			
	Employ adaptive routing for fault tolerance and reliability.			
	Provide for intelligent routing for detection of changes in network topology.			
14	AMI system will operate such that it will automatically register new network devices without manual intervention at either the collector or the endpoint device.			
15	Solution must allow use of hopping or repeating technology to ensure connectivity.			
16	The AMI network shall manage an unlimited number of node to node hops.			
	If your solution does not comply with this requirement, how many hops can the AMI network perform before it hits this limit? Do you design your networks to this limit?			
17	Also, is there a limit to the number of meters that can be communicated with from a meter/parent device? If so, how many children can a parent device have?			
18	Re-routing decisions must be made at the network module and not require operator intervention.			
19	Is every AMI module capable of communicating to any collector it could be installed near without preprogramming or reprogramming in either the field or meter shop? This could occur when City of Franklin retires a meter from one service and reinstalls it at another.			
20	AMI network must update time of all devices across the entire network at least once per day. Accuracy must be maintained to			

	National Institute of Standards and Technology guidelines.				
21	AMI network must dynamically adjust data rates to maximize system performance for all types of densities in City of Franklin's service territory, rural, suburban, and urban.				
22	AMI network must dynamically adjust the transmit power level of the infrastructure and endpoint devices to optimize system performance for all types of densities in City of Franklin's service territory, rural, suburban, and urban.				
23	Security must be designed into the RF AMI network at the foundation, versus add-on/bolt- on design.				
	Please describe how performed. Include the costs and complexity necessary for security to be added to result in a secure network.				
24	All data between collectors and the AMI network head-end must support Advanced Encryption Standard (AES)-256 encryption.				
25	All data from all proposed communication technologies must be AES-128 encrypted or greater at all levels including the communications to the network nodes including electric metering, DR, and DA devices.				
26	AMI network must generate random security keys for each transmission.				
27	All communications delivered over the network must be fully encrypted. This includes communications from any collector, repeating device, as well as all electric endpoints. Systems communicating "in the clear" to devices such as Itron ERTs or similar devices for electric reading collection will not be considered due to security				

and customer privacy considerations. 28 The AMI network design proposed to City of Franklin must have sufficient AMI network capacity to support Demand Response / Load Management, Integrated Volt/VAR control, Feeder Balancing, Distribution Automation, and Net Metering. 29 The network design proposed to City of Franklin shall be constructed such that no more than 35% of the network capacity is utilized to deliver the data outlined in the requirements of this specification in order to allow for appropriate redundancy as well as future growth. 30 State network utilization to collect the following payload of data from every meter (2 channels of 15-minute data along with outage logs, along with daily peak demand, along with min and max voltage). State as both a percentage of the available bandwidth and how many seconds per day each module would transmit to supply this particular data. 31 (For typical Municipal Service area) To minimize latency, City of Franklin requires that all proposed networks be designed such that 75% of endpoints are set to be within 5 hops of a collector and 95% of all endpoints are designed to be within 8 hops of a collector device. 32 AMI network design proposed must provide capacity for failover and redundancy in the event that a single collector is no longer available. 33 Vendor must provide a detailed propagation study within their proposal that is based upon the requirements stated within this RFP along with the supplied location data for meters, poles

and transformers taking terrain and clutter of the whole of our service territory into account. 34 What is the maximum number of endpoints (electric AMI modules, DR devices, and DA devices) per Collector? How many endpoints per collector do you plan for in your AMI network design for the City of Franklin? 35 All AMI infrastructure and hardware devices must be designed for a useful life of 15-20 years. 36 AMI infrastructure shall be flexible, supporting installation on poles with mounting heights ranging from as low as 20 ft to as high as 90 ft AGL. Please state your compatibility to this requirement. 37 All network infrastructure must accommodate installation on City of Franklin's existing poles and not require City of Franklin to construct, rent, or lease any special towers or poles. 38 Does your solution require us to own or rent/lease space on towers or water tanks, etc.? 39 To avoid inconvenience to our customers, AMI collectors shall be capable of being installed and replaced without causing outages to consumer services or substations. 40 Collectors must include standard Ethernet ports in support of a multitude of open WAN backhaul communication technologies (such as fiber, digital cellular, private Ethernet radio). Please list compliant communication media types. 42 Collectors must not require than 128 kbps connectivity for WAN backhaul to ensure City of

Franklin has technology options

that are available to accommodate our service territory. 43 Collectors must be able to ride through a power interruption of less than 5 minutes without disruption. 44 Vendor must provide the option of a backup power supply for collectors, with a minimum of 8 hours of backup time. Additionally, supplier shall provide 4 minute ultra capacitor in all meter/modules. Pricing must include modules with ultracapacitors. 45 Collector must support operation at -40°C to +85 °C and humidity of 5-95% non-condensing. 46 Collector must be able to accommodate monitoring and delivering door alarms for any proposed communication cabinets to the automation software for distribution to system operators, administrators, or users. 47 What is the typical number of man-hours involved in commissioning 1 collector? (If proposing multiple tiers and/or technologies, state number of hours for each.) 48 What is the programming process in the field to assign an AMI Module to a Collector or group of Collectors? Does your solution require the GPS coordinates of the meter or collector be programmed into the AMI module? 49 Two-way Repeaters/range extenders must be available to bridge any significant distances between devices. These repeaters/range

extenders must also be allowed to be daisy-chained together if needed to provide connectivity to

devices separated by vast distances. This repeater/range extender device shall be designed for operation for 15-20 years without requiring a maintenance visit to each unit. Explain. 50 Use of repeating/range extending communications technology shall not limit the functionality of upstream or downstream devices, including full two-way connectivity to all endpoints. 51 Repeaters/Range extenders shall be available to support installation at any of City of Franklin's transformer locations, as such, options must include support for 120 - 480VAC operation. Also note if options exist to power these devices from street lights and/or yard lights City of Franklin maintains and operates. 52 Vendor shall be able to provide solar power supplies that can accommodate repeaters/range extenders to allow infrastructure to be deployed in locations where City of Franklin does not have appropriate pole or transformer assets. 53 Vendor must be able to provide repeaters/range extenders that are able to accommodate external antennas to provide flexibility for mounting or siting. 54 If Vendor does not offer repeaters or range extenders, explain how the City of Franklin can be sure it can reach all AMI modules with your solution. 55 AMI network must be able to store 45 days of data at the meter nodes and collectors in the event the backhaul is lost for an extended period of time.

56	AMI network must be able of capturing, storing and retrieving 15 minute residential intervals and five minute Commercial & Industrial interval data. All data must come across the same AMI network.				
57	Collectors must automatically request any gaps in missing data from devices on the network.				
58	AMI network must support over- the-air (OTA) updates of firmware in AMI Modules. All OTA Firmware upgrades must include backup image fail over and must use RSA cryptographically signed images.				
59	AMI network must support over the air firmware updates of Demand Response (DR) and HAN devices.				
60	AMI network must support over the air configuration changes such as time-of-use (TOU) collection periods and changes in recording interval(s).				
61	AMI Network must provide scheduled and on-demand reads (getting real-time readings from the field).				
62	Standard AMI network operation must support service disconnect and reconnect with no additional software, modules, or applications required.				
63	AMI network must transmit the two-way communication of outage and restoration notifications.				
64	AMI network must provide tamper detection via standard messaging packet.				
65	AMI network must support demand response via two-way load control receivers. Please describe.				

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AMI network must support IPv6 routing. The AMI/Smart Grid Network must not rely solely on ZigBee technology to provide core functionality such as providing connectivity between the network and electric endpoints, or Demand Response/Load Control devices, due to the limited propagation and penetration capabilities concerning 2.4 GHz, 100mW radio technologies and the considerable market uncertainty surrounding ZigBee technology. Vendor must be a member of the Essential Wireless Mesh patent portfolio AND Vendor shall also provide indemnification concerning patent infringement to ensure the City of Franklin's interests are protected. Please Describe. Has your organization ever be part of or enjoined in a lawsuit over wireless communication patents involving AMI or HAN. Please Describe. The AMI system can be expanded in the future if the City of Franklin desires to include controlling other downline devices such as reclosers, cap

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devices.

bank controllers and regulators with a single device addition

All network devices must utilize lithium batteris with 15 year life expectancy. Devices shall not utilize lead acid batteries.

Supplier shall provide minimum time before failure for network

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	Electric Metering				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	Vendor must support electric meters from a minimum of three different manufacturers and these meters must be commercially available with Bidder's RF module today. Respectfully, City of Franklin does not wish to consider electric meters manufactured by Sensus at this time. State manufacturers and meters supported. Note: having multiple meter models from the same manufacturer is not considered compliant with this requirement.				
2	All electric meters proposed and provided to City of Franklin must be capable of being retrofit with another vendor's AMI module at a later time. Meters that cannot accommodate a commercially available AMI module of another AMI vendor will not be considered.				
3	Residential electric meters must provide an option for integrated disconnect/reconnect switches with a minimum rating of 200 amps for Form 1S, 2S CL200, and 12S Network meters.				
4	All disconnect meters must support the option of a push button to re-energize the service.				
5	Meters supplied must be designed for a useful life 15-20 years.				
6	Meters and communications modules must meet ANSI requirements.				
7	AMI modules must be "under the glass" of the AMI meter and				

transmit at 1W or less to provide City of Franklin with a low operating cost. State transmit level and if the module is capable of adjusting its power output level to optimize power usage. 8 AMI modules must have the ability to transmit at 1W output power to ensure effective twoway communication with meters located in meter rooms, meter vaults, or inside buildings as well meters in City of Franklin's rural areas. 9 Vendor shall be capable of providing electric meter options that support external antennas to optimize connectivity as needed. 10 Meters must automatically find the AMI network and selfregister without the use of a field tool. AMI endpoints shall support 11 independent reporting and recording intervals thereby allowing City of Franklin granular data collection without requiring an increase in network traffic. 12 All AMI modules must support load profile storage for 5, 10, 15, 30 and 60 minute intervals. AMI modules must have a storage capacity of at least 45 days for 2-channels of 15-minute data. 13 All C&I AMI Modules must support a minimum of 12 data channels. State how many channels your module can bring back. 14 Any AMI endpoint must be capable of being programmed to deliver information outside of its normal reporting and recording intervals such as pushing load data or voltage information in near real-time to support Demand Response or Conservation Voltage Reduction

programs.

15 Must support TOU functionality with use of non-TOU enabled single-phase meters. 16 Solution must also support remote reprogramming of TOU periods via the software platform and network. Must support TOU, Demand, 17 and Power Quality metering. Describe if these capabilities require the Utility to purchase high-end residential meters with TOU and Demand capabilities. 18 Must support net metering with revenue accurate measurement, providing Delivered, Received, Delivered-Received, and Delivered+Received values. Each of these values shall also be supported for each TOU rate. 19 Must support retrieval of the meter vendor's available event logs. 20 Must provide support for tamper detection. Describe. 21 AMI network must log outage events, including duration of outages. 22 The AMI Network and AMI Module must support voltage profile capabilities in all meters. 23 Under-voltage sag recording must be supported by the proposed AMI Network and all residential AMI Modules and include the date and time of event. 24 Over-voltage surge recording must be supported by the proposed AMI Network and all residential AMI Modules and include the date and time of event.

	Unsolicited Alarms				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	All electric AMI Modules must provide unsolicited and immediate outage notification messages during outages without the use of batteries or polling. AMI Modules and AMI Network must support outage detection and restoration. Outage and blink definitions must be configurable.				
2	Unsolicited restoration notifications must be provided by the AMI Module and Network upon conclusion of all sustained outages without the use of polling.				
3	Under-voltage sag detection must be supported by the AMI Network and AMI Module. Support must include immediate and unsolicited (non-polled) notification any time a module's configurable voltage threshold is violated in the field.				
4	Over-voltage swell detection must be supported by the AMI Network and AMI Module. Support must include immediate and unsolicited (non-polled) notification any time a module's configurable voltage threshold is violated in the field.				
5	The AMI Modules and Network shall support temperature alarms to assist the utility in the identification of hot sockets, please state the details of how your solution meets this requirement.				
6	Low priority messages such as momentary outages (blinks) and tamper conditions must be sent				

	via unsolicited message no less				
	than daily.				
7	Load Control devices must support real-time interrogation as well as provide unsolicited logs containing daily run time and shed time of each connected appliance.				
8	Load Control devices must support unsolicited notification of tamper events.				
9	DA Communications devices and AMI Network must support unsolicited DNP alarms and events triggered and generated by DNP-enabled Intelligent Electronic Devices that are interfaced via the AMI Network. This initiation by the IEDs shall utilize Unsolicited Report By Exception (URBE) functionality of the DNP3 specification.				
10	AMI Modules must support changes to the alarm parameters and set points via the network to allow remote adjustment of these key criteria.				
11	AMI Modules must support firmware upgrades via the network to add additional alarms to the endpoints as needed.				

	AMI Server				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response

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1	Provide the server hardware specifications sized adequately to allow the Utility to successfully operate the proposed AMI Network and store 2 years' worth of data. Note that the utility requires Vendors to provide Rackmount Dell server hardware for this project. Does it come pre-loaded with all necessary software?			
2	State the manufacturer's hardware warranty for proposed server hardware.			
3	State the details of any included manufacturer's service plan (service level, response time, length of service agreement).			
4	City of Franklin has standardized on the Microsoft Windows Operating System. State the versions of Microsoft Windows Server supported by the AMI software. State the OS that will be installed on the provided server hardware.			
5	State whether the software platform can operate in a virtual environment, such as VMware.			
6	Please provide details on the relational database management system (RDBMS). The City of Franklin has standardized on Microsoft SQL Server and requires its use for all databases utilized by the AMI system. Please also state which version of software is required. Include any necessary database licenses with your system pricing.			

AMI Headend SystemImage: Compute systemNot Compute systemResponseRequirementCompute systemNot Compute systemResponseExplain any role-based login/permission features implemented in the head-end software.Image: Compute systemNot Compute systemProvide security details of the head-end software, specifically including user authentication.Image: Compute systemImage: Compute systemAll user activities, system events and changes to thresholds must be logged and tracked by user.Image: Compute systemImage: Compute systemProvide a list of all the 3rd-party software programs that are currently interfaced to your AMI network in production environments.Image: Compute system software system events and changes to three sholds out and the system system software system system software system events and changes to three system software systemImage: Compute system software systemProvide a list of all the 3rd-party software provide real-time intermets.Image: Compute system software system events and software to provide real-time integrations to CIS/Billing, OMS, EA, SCADA, or ther AMI networks?Image: Compute system software, and interface licenses in their bid.					
Explain any role-based login/permission features implemented in the head-end software. Image: Comparison of the search of the head-end software, specifically including user authentication. All user activities, system events and changes to thresholds must be logged and tracked by user. Image: Comparison of the search of the se	AMI Headend System				
login/permission features implemented in the head-end software. Image: Software in the head-end software in the head-end including user authentication. All user activities, system events and changes to thresholds must be logged and tracked by user. Image: Software in the integration with the head-end be logged and tracked by user. Where are these logged/tracked? Image: Software in the integration information Image: Software in the integration environments. Provide a list of all the 3rd-party software programs that are currently interfaced to your AMI network in production environments. Image: Software in the integration in the integration in the integration in the integration is to CIS/Billing, OMS, EA, SCADA, or other AMI network? If so, please describe. Vendor must include these costs, including server hardware, software, and interface licenses Image: Software in the integration in the induced in the integratic in the integration in the integrati	Requirement	Comply	Comply with clarification	Not Comply	Response
head-end software, specifically including user authentication. All user activities, system events and changes to thresholds must be logged and tracked by user. Where are these logged/tracked? Describe the accessibility of this information Provide a list of all the 3rd-party software programs that are currently interfaced to your AMI network in production environments. Does your AMI software require any middleware servers and software to provide real-time integrations to CIS/Billing, OMS, EA, SCADA, or other AMI networks? If so, please describe. Vendor must include these costs, including server hardware, software, and interface licenses	login/permission features implemented in the head-end				
and changes to thresholds must be logged and tracked by user. Where are these logged/tracked? Describe the accessibility of this information Provide a list of all the 3rd-party software programs that are currently interfaced to your AMI network in production environments. Does your AMI software require any middleware servers and software to provide real-time integrations to CIS/Billing, OMS, EA, SCADA, or other AMI networks? If so, please describe. Vendor must include these costs, including server hardware, software, and interface licenses	head-end software, specifically				
software programs that are currently interfaced to your AMI network in production environments. Does your AMI software require any middleware servers and software to provide real-time integrations to CIS/Billing, OMS, EA, SCADA, or other AMI networks? If so, please describe. Vendor must include these costs, including server hardware, software, and interface licenses	and changes to thresholds must be logged and tracked by user. Where are these logged/tracked? Describe the accessibility of this				
any middleware servers and software to provide real-time integrations to CIS/Billing, OMS, EA, SCADA, or other AMI networks? If so, please describe. Vendor must include these costs, including server hardware, software, and interface licenses	software programs that are currently interfaced to your AMI network in production				
	any middleware servers and software to provide real-time integrations to CIS/Billing, OMS, EA, SCADA, or other AMI networks? If so, please describe. Vendor must include these costs, including server hardware, software, and interface licenses				

Requirement No.

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	EA, SCADA, or other AMI networks? If so, please describe.		
	Vendor must include these costs, including server hardware, software, and interface licenses in their bid.		
13	Identify and describe any middle-ware or third-party software used with or required to utilize the AMI network. If applicable, provide licensing		
	details/requirements and cost.		

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14	Vendor must offer a Vendor- hosted software platform as an option.				
15	While the City of Franklin plans to utilize and expand its existing fiber network for backhaul, the software platform shall be able to communicate to the Collectors via multiple bulk communications media.				
16	Software platform must have built-in easy-to-use reporting tools; The City of Franklin should not have to rely on outside tools such as Crystal Reports.				
17	In addition to built-in reporting tools, the City of Franklin must have the option to be able to utilize third party software such as Microsoft Access or Crystal Reports to query the database and create custom reports, if it so chooses.				
19	Describe additional reports not previously specified that your AMI network can generate.			 	
20	Software platform shall provide a dashboard view to present data such as the health of network components, completeness of data received, and other Utility centric operational data.				
21	Can meters be assigned to user defined groups such as circuit or neighborhood? Are their limits to the number of				
	user defined groups? Can a module, node, or radio be reported on as part of multiple groups?				
22	Operators of the AMI network must be able to easily acknowledge alarms and have visual indication of an alarm condition if audible alarms are disabled.				
	Alarms must also be able to be routed to individuals and user defined groups via email.				

24 Software platform must support audible alarms/events via a browser. 25 **Do Customer Service** Representatives (CSRs) require vendor-specific software to be loaded and maintained on their work stations? Why/Why not? Software should have built-in 28 Customer Service tools for repetitive processes such as Move-Ins, Move-Outs, High-Bill Complaints, or voltage inquiries. Please describe. 30 An optional Consumer Web Portal should be available. Please describe. 31 AMI system must support applications such as pre-paid metering. Which Prepay Services do you partner with or do you perform this function within your software? If so, how? 33 AMI software shall support web calls or MultiSpeak methods used by third parties to post AMI data to third party web portals. 34 AMI software platform must have capability to interface to third party MDMS solutions. Does your software have the ability to manage/validate meter data, run reports, schedule report generation, and facilitate analysis without relying on a separate MDMS application? If so, please describe. 35 Software platform at minimum must include validation and data analysis of billing reads with the use of configurable parameters. 36 Explain your process for

software updates, upgrades, and software support in general.

Are upgrades performed annually?		
Will vendor perform upgrades upon request?		

	Demand Response (DR)				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	AMI Vendor must directly have a minimum of 75,000 two-way load control receivers deployed and operating on the RF network proposed to City of Franklin. Please list number of units your organization has sold and are in use.				
2	Vendor must demonstrate historical flexibility of supporting at least three different communication methods for DR.				
3	Vendor must have a proven DR software platform in use by at least 50 electric utility customers.				
4	DR and AMI must run on a single software platform.				
5	DR Software must be an integrated module on your software platform. If not, who is supplying this software and does it run on the same server hardware? Have you included the annual software maintenance and technical support fees for DR software/server hardware in the pricing above? If not please include it here.				

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6	DR system must support two threshold-based triggers to allow for automated initiation of control of City of Franklin's DR assets based on price, coincident load, or status from an outside entity, such as a power supplier. Automatic increase of these thresholds shall also be supported.				
7	DR system must include integration of temperature and humidity information.				
8	All DR switches must support control directly from the AMI Network to avoid additional costs for hardware/software to interface to the AMI network.				
9	Can your AMI network broadcast DR/Load Control events? Upon initiation of a DR event, how long would it take for the message to reach 95% of the DR/Load Control devices?				
10	DR system must be capable of initiating an emergency system wide control event to drop load within 60 seconds.				
11	DR System must support firmware upgrades of DR devices without site visits. Describe the methodology.				
12	DR devices and AMI network shall support pushing information such as control status to the software platform on a configurable basis. System shall support intervals of down to 1 minute for up to 5% of DR device/switch population.				
13	DR device must have the ability to transmit at 1W output power to ensure effective two-way communication with DR devices located indoors.				
14	Is your company providing the DR devices or are you relying on third parties for these products?				

	City of Franklin notes that there are on-going patent infringement lawsuits going on in the industry. If the vendor utilizes DR devices that are provided by a third party, is that entity currently involved in any legal activities or proceedings concerning patents or intellectual property of these types of devices?			
15	Demand response switches must have an option to enable automatic load shedding during cold load pickup.			
16	Does your DR switch have built- in grid automation capabilities to quickly respond (less than a second) due to frequency or voltage conditions? If so, how long does it take to detect these situations? How soon would the DR switch take action?			
17	Group addressing must be used to create multiple groups for different demand reduction needs.			
18	Demand response switches must be available with up to 3 relays of 5A and 30A styles. Vendors that cannot offer switches with multiple relays will not be considered.			
19	Bidder must offer a version of the LCD that can operate at full 480V to support City of Franklin's need to control irrigation pumps/pivots and other key agricultural loads.			
20	Vendor shall specify all of the commercially available the input voltage options of the proposed two-way DR/Load Control switches.			
21	All DR devices must include advanced control algorithms to optimize demand reduction based on the duty cycle and run time of an individual appliance.			

22	All DR devices must support timed and cycling demand reduction.		
23	Can the proposed DR switches operate based upon a supplied TOU schedule?		
24	Does your proposed Load Control Receiver support a Blink Count that would monitor the number of power interruptions to the device?		
25	DR System shall support leveraging member/consumer Wi-Fi/cloud connections to smart thermostats to allow advanced consumers to participate in utility Demand Response programs. Describe your capabilities and which smart thermostat brands and models supported by your solution.		
26	How many smart thermostats has your organization supplied to date?		
27	Does your DR solution require the City of Franklin to pay any monthly (or annual) fees per device? If so, please provide details.		

	Project Management (PM) Customer Support & Installation Services				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	Describe your project management (PM) implementation methodology.				
2	How many Project Management professionals does your organization employ?				

	How many of these professionals would be assigned to this project?		
3	What services/benefits does being on your maintenance/support program provide to the Utility?		
	Does maintaining a support contract provide discounts to the City of Franklin for future on-site service or training?		
4	Provide a copy of the proposed maintenance/support agreement.		
5	What are the hours of operation of your support center?		
	If it is not staffed on-site 24/7 please describe how an afterhours support call is handled.		
6	The vendor must provide training instruction for the Utility's personnel in operation and use of the AMI network. Training must be conducted by experienced personnel and supported by training aids.		
7	Training must occur within the Utility's facilities on the actual AMI network and automation software our personnel will operate.		
8	The vendor must provide instructional materials, including manuals and user guides with the system.		
9	Single supplier to provide meter installation services. City of Franklin will hang communications infrastructure		
10	A cloud-based work management system to provide real-time updates on installation progress is required.		
11	The City of Franklin requires the ability to review pictures and customize the work management system and search		

	functionality for this specific project. The installation supplier is required to have in-house IT support for the work management system and the ability to respond to IT issues with internal personnel.				
12	Meter installer will have installed at least 2,000,000 electric meters in the past. Meter Installer to have vast experience within Electric Utility installing AMI/Smart Grid technologies of multiple suppliers within the market.				
13	Installer is required to provide detailed standard operating procedures for meter exchange process as well as screenshots of the work management system.				
14	The City of Franklin requires the ability to sort through installation progress by meter type, address, route, service type, or other parameter determined by utility on cloud-based work management system provided by the installer				

	Outage Management System Requirements				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	Automated means to take and record trouble calls.				
2	Functionality to allow customers to report trouble calls from an online portal and social media.				
3	Ability to organize and pass trouble call information to a designated line worker.				

	1		1			
4	A clear means for the designated line worker to update the status of each trouble call.					
5	Graphic mapping to display general outage locations and number of customer impacted. This will include integration with City of Franklin's GIS system with one public-facing map and another intended for line workers.					
6	Capability to access outage maps through the Town's web site and through social media.					
7	Interactive Voice Response (IVR) system to receive outage reports and communicate restoral information to the Bedford customers.					
8	Integration with Edmonds billing system					

	Bid Requirements				
Requirement No.	Requirement	Comply	Comply with clarification	Not Comply	Response
1	Bid must describe all costs associated with installation and clearly state which materials and labor are included in the bid and which are not. Bids which do not clearly and explicitly list all costs will be eliminated from consideration.				
2	Vendor's bid must include firm pricing for all meters and forms requested by the City of Franklin within the attached spreadsheet.				

		r	r	1		
3	Vendor's bid must include TOU and Interval Data functionality for all polyphase meters quoted.					
4	The vendor shall include it its bid a recommended set of spare parts for the AMI Infrastructure equipment as well as the approximate cost.					
5	The vendor shall include in its bid all recommended test equipment and specialized tools for the AMI network.					
6	The vendor shall include pricing for start-up services including project management, on-site AMI network setup, training, etc.					
7	The vendor shall include a full service one-year maintenance contract covering all licensed software.					
8	A full set of AMI network manuals shall be provided with the AMI network hardware & software.					
9	All materials shall be warranted for a period of 18 months from the date of delivery against material defects and workmanship.					
10	All equipment and materials quoted and supplied by vendor shall be new.					
11	The City of Franklin requires bidders to submit a single turnkey solution including installation of endpoints. The City of Franklin will be responsible for installing the network infrastructure.					
12	Vendor shall include a bid bond in the amount of 10% of the amount bid for the full system project.					

10 Appendix B

PROOF OF AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

THIS FORM MUST BE SUBMITTED WITH YOUR PROPOSAL/BID. FAILURE TO INCLUDE THIS FORM MAY RESULT IN REJECTION OF YOUR PROPOSAL/BID

Pursuant to Virginia Code §2.2-4311.2, an Offeror/Bidder organized or authorized to transact business in The Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its proposal/bid the identification number issued to it by the State Corporation Commission ("SCC"). Any Offeror/Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its proposal/bid a statement describing why the Offeror/Bidder is not required to be so authorized. Any Offeror/Bidder described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the City Administrator, as applicable. If this quote for goods or services is accepted by the City of Franklin, Virginia, the undersigned agrees that the requirements of the Code of Virginia Section 2.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applies and providing the requested information.

PLEASE NOTE: The SCC number is NOT your federal ID number or business license number.

A._____ Offeror/Bidder is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is___.

B.____Offeror/Bidder is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such vendor's Identification Number issued to it by the SCC is_____.

C. Offeror/Bidder does not have an Identification Number issued to it by the SCC and such vendor is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

Please attach additional sheets if you need to explain why such Offeror/Bidder is not required to be authorized to transact business in Virginia.

Legal Name of Company (as listed on W-9)

Legal Name of Offeror/Bidder _____

Date _____

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Authorized Signature _____

Print or Type Name and Title _____

PLEASE RETURN THIS PAGE WITH BID SUBMISSION – *[REQUIRED]*

11 Appendix C

GENERAL TERMS, CONDITIONS AND INSTRUCTIONS TO BIDDERS AND CONTRACTORS

These General Terms, Conditions and Instructions to Bidders and Contractor (hereinafter referred to as the "General Conditions") shall apply to all purchases and be incorporated into and be a part of each Solicitation (as defined below) and every Contract (as defined below) awarded by the City of Franklin, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the "the City") unless otherwise specified by the City in writing. Bidders, Offerors and Contractors or their authorized representatives are expected to inform themselves fully as to these General Conditions before submitting Bids or Proposals to and/or entering into any Contract with the City: failure to do so will be at the Bidder's/Contractor's own risk and except as provided by law, relief cannot be secured on the plea of error.

Subject to all Federal, State and local laws, policies, resolutions, regulations, rules, limitations and legislation, including the City's Procurement Policies and Procedures, Bids or Proposals on all Solicitations issued by City will bind Bidders or Offerors, as applicable, and Contracts will bind Contractors, to all applicable terms, conditions, instructions, rules and requirements herein set forth unless otherwise SPECIFICALLY set forth by the City in writing in the Solicitation or Contract. All provisions of these General Conditions are material to any contract between the City and a Contractor.

INTRODUCTION

- 1. VIRGINIA PUBLIC PROCUREMENT ACT AND ETHICS IN PUBLIC CONTRACTING: The Virginia Public Procurement Act of Virginia Code §§ 2.2-4300 *et seq.* (hereinafter the "VPPA") is incorporated herein by reference. Nothing in these General Conditions is intended to conflict with the VPPA and in case of any conflict, the VPPA controls. Specifically, the provisions of Article 6 of the VPPA (Virginia Code §§ 2.2-4367 through 2.2-4377) relating to ethics in contracting, shall be applicable to all Solicitations and Contracts solicited or entered into by the City. By submitting their Bids or signing any Contract, all Bidders and Contractors certify that they have not violated any of the provisions of Article 6 of the VPPA, including, but not limited to, that their Bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements.
- 2. DEFINITIONS: The definitions of Virginia Code §§ 2.2-4301, 2.2-4302.1 and 2.2-4302.2 are specifically incorporated herein by reference and as used in these General Conditions, whether capitalized or not, any of such defined terms have the same meaning as such terms have under the VPPA: such defined terms include: "Affiliate", "Best Value", "Business", "Competitive Negotiation", "Competitive Sealed Bidding", "Construction", "Construction Management Contract", "Design-Build Contract", "Employment Services Organization", "Goods", "Informality", "Job Order Contracting", "Multiphase Professional Services", "Public Body", "Public Contract", "Responsible Bidder or Offeror", "Responsive Bidder", "Reverse Auctioning" and "Services". Additionally, as used in these General Conditions, the following terms, whether capitalized or not, have the following meanings:
 - a. <u>Bid/Proposal:</u> The offer of a Bidder or Offeror to provide specific Goods or Services at specified prices and/or other conditions specified in the Solicitation. The term "Bid" is used throughout

these General Conditions and where appropriate includes the term "Proposal" or any modifications or amendments to any Bid or Proposal.

- b. <u>Bidder/Offeror/Vendor:</u> Any individual(s), company, firm, corporation, partnership, or other organization bidding or offering on any Solicitation issued by the City and/or offering to enter into Contracts with the City. The term "Bidder" is used throughout these General Conditions and where appropriate includes the term "Offeror" and/or "Vendor".
- c. <u>Contract:</u> Any contract to which the City will be a party.
- d. <u>Contractor</u>: Any individual(s), company, firm, corporation, partnership, or other organization to whom an award is made by the City or who enters into any contract to which the City is a party.
- e. <u>City:</u> The City of Franklin, a political subdivision of the Commonwealth of Virginia, including where applicable all agencies and departments of the City.
- f. <u>City Administrator</u>: The City Manager of the City of Franklin and has signatory authority to bind the City to all contracts.
- g. <u>City Attorney:</u> The City Attorney of the City of Franklin.
- h. <u>Purchasing Agent:</u> The Director of Finance is the City's Purchasing Agent and is responsible for the purchasing activity of the City of Finance.
- i. <u>General Terms, Conditions and Instructions to Bidders and Contractors (also referred to herein as the "General Conditions")</u>: These General Terms, Conditions and Instructions to Bidders and Contractors shall be attached to and made a part of all Solicitations by the City and all Contracts to which the City is party.
- j. <u>His:</u> Any references to "his" shall include his, her, their, or its as appropriate.
- k. <u>Invitation to Bid (also referred to herein as an "IFB")</u>: A request which is made to prospective Bidders for their quotation on Goods or Services desired by the City. The issuance of an IFB will contain or incorporate by reference the General Conditions and the other specifications and contractual terms and conditions applicable to the procurement.
- 1. <u>Purchasing Agent:</u> The Purchasing Agent employed by the City and to whom Bidders/Contractors can submit questions relating to any Bid or Contract.
- m. <u>Request for Proposal (also referred to herein as a "RFP"):</u> A request for an offer from prospective Offerors which shall indicate the general terms which are sought to be procured from Offerors. The RFP will specify the evaluation factors to be used and will contain or incorporate by reference the General Conditions and other applicable contractual terms and conditions, including any unique capabilities or qualifications that will be required of the Contractor.

n. <u>Solicitation</u>: The process of notifying prospective Bidders or Offerors that the City wishes to receive Bids or Proposals on a set of requirements to provide Goods or Services. "Solicitation" includes any notification of the City requirements may consist of public advertising (newspaper, City's website, or other electronic notification), the mailing of notices of Solicitation, any Invitation for Quotes ("IFQ"), Initiations to Bid ("IFB"), or Requests for Proposal ("RFP"), the public posting of notices, issuance of an Open Market Procurement

("OMP"), or telephone calls to prospective Bidders or Offerors.

- o. <u>State:</u> The Commonwealth of Virginia.
- **3. AUTHORITY:** The Purchasing Agent shall serve as the principal public purchasing official for the City, and shall be responsible for the procurement of goods, services, insurance, and construction in accordance with the City's Procurement Policies and Procedures. The Purchasing Agent has responsibility and authority for negotiating, placing and when necessary modifying every Solicitation and purchase order issued by the City. The City Administrator has signatory authority to bind the City to all contracts made lawfully.

No other City officer or employee is authorized to order supplies or Services, enter into purchase negotiations or Contracts, or in any way obligate the City for any indebtedness. Any purchase or contract made which is contrary to such authority shall be of no effect and void and the City shall not be bound thereby.

- 4. COMPETITION INTENDED: It is the City's intent to encourage and permit open and competitive bidding in all Solicitations. It shall be the Bidder's responsibility to advise the City in writing if any language, requirement, specification, etc., or any combination thereof, stifles competition or inadvertently restricts or limits the requirements stated in a Solicitation to a single source. The City must receive such notification not later than seven (7) business days prior to the deadline set for acceptance of the Bids. In submitting a Bid, the Bidder guarantees that he or she has not been a party with other Bidders to an agreement to bid a fixed or uniform price. Violation of this implied guarantee shall render the Bid of any Bidder involved void.
- 5. DISCRIMINATION PROHIBITED: Pursuant to Virginia Code § 2.2-4310, the City does not discriminate against Bidders, Offerors or Contractors because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment. Whenever solicitations are made, the City shall include businesses selected from a list made available by the Department of Small Business and Supplier Diversity. Pursuant to Virginia Code § 2.2-4343.1, the City does not discriminate against "faith- based organizations", being a religious organization that is or applies to be a contractor to provide goods or services for programs funded by the block grant provided pursuant to the Personal Responsibility and Work Reconciliation Act of 1996, P.L. 104-193.
- 6. CLARIFICATION OF TERMS: Pursuant to Virginia Code § 2.2-4316, if any Bidder has questions or comments about the specifications or other Solicitation documents, the prospective Bidder should contact the City no later than seven (7) business days prior to the date set for the opening of Bids or receipt of Proposals. Any revisions to the Solicitation will be made only by written addendum issued by the City. Notifications regarding specifications may not be considered if received in less than seven

(7) business days of the date set for opening of Bids/receipt of Proposals.

- 7. MANDATORY USE OF CITY FORM AND TERMS AND CONDITIONS: Unless otherwise specified in the Solicitation, all Bids must be submitted on the forms provided by the City, including but not limited to, a Cover Sheet or Pricing Schedule, if applicable, properly signed in ink in the proper spaces and submitted in a sealed envelope or package. Unauthorized modification of or additions to any portion of the Solicitation may be cause for rejection of the Bid. However, the City reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject any Bid or Proposal which has been modified. These General Conditions are mandatory provisions of all Solicitations and all Contracts of the City.
- 8. LATE BIDS & MODIFICATION OF BIDS: Any Bid or modification thereto received at the office designated in the Solicitation after the exact time specified for receipt of the Bid is considered a late Bid or modification thereof. The City is not responsible for delays in the delivery of the mail by the U.S. Postal Service, private carriers, or the inter-office mail system. It is the sole responsibility of the Bidder to ensure their Bid reaches City by the designated date and hour. The following rules apply to all Bids submitted to the City:
 - a. The official time used in the receipt of Bids/Proposals is that time on the automatic time stamp machine in the Finance Department;
 - b. Late Bids or modifications thereof will be returned to the Bidder UNOPENED, if Solicitation number, due date and Bidder's return address is shown on the container;
 - c. If a Bid is submitted on time, however a modification thereto is submitted after the due date and time, then the City in its sole discretion may choose to consider the original Bid except that the City may not consider such original Bid if the Bid is withdrawn by the Bidder pursuant to Section 9 below; and
 - d. If an emergency or unanticipated event or closing interrupts or suspends the City's normal business operations so that Bids cannot be received by the exact time specified in the Solicitation, then the due date/time specified for receipt of Bids will be deemed to be extended to the same time of day specified in the Solicitation on the first workday on which normal City business operations resume.

9. WITHDRAWAL OF BIDS:

a. Pursuant to Virginia Code § 2.2-4330, a Bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his Bid from consideration if the price bid was substantially lower than the other Bids due solely to a mistake in the Bid, provided the Bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the Bid sought to be withdrawn.

If a Bid contains both clerical and judgment mistakes, a Bidder may withdraw his Bid from consideration if the price bid would have been substantially lower than the other Bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a Bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents

and materials used in the preparation of the Bid sought to be withdrawn. The Bidder shall give notice in writing to the City of his or her claim of right to withdraw his or her Bid within two

(2) business days after the conclusion of the Bid opening procedure and shall submit original work papers with such notice.

- b. A Bidder for a Contract other than for public construction may request withdrawal of his or her Bid under the following circumstances:
 - i. Bids may be withdrawn on written request from the Bidder received at the address shown in the Solicitation prior to the time of opening.
 - ii. Requests for withdrawal of Bids after opening of such Bids but prior to award shall be transmitted to the City, in writing, accompanied by full documentation supporting the request. If the request is based on a claim of error, documentation must show the basis of the error. Such documentation may take the form of supplier quotations, Bidder work sheets, etc. If Bid bonds were tendered with the Bid, the City may exercise its right of collection.
- c. No Bid may be withdrawn under this Section 9 when the result would be the awarding of the Contract on another Bid of the same Bidder or of another Bidder in which the ownership of the withdrawing Bidder is more than five percent (5%).
- d. If a Bid is withdrawn under the authority of this Section 9 the lowest remaining Bid shall be deemed to be the low Bid.
- e. No Bidder who, is permitted to withdraw a Bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn Bid was submitted.
- f. The City shall notify the Bidder in writing within five (5) business days of its decision regarding the Bidder's request to withdraw its Bid. If the City denies the withdrawal of a Bid under the provisions of this Section 9, it shall State in such notice the reasons for its decision and award the Contract to such Bidder at the Bid price, provided such Bidder is a responsible and responsive Bidder. At the same time that the notice is provided, the City shall return all work papers and copies thereof that have been submitted by the Bidder.
- g. Under these procedures, a mistake shall be proved only from the original work papers, documents and materials delivered as required herein. The work papers, documents and materials submitted by the bidder shall, at the bidder's request, be considered trade secrets or proprietary information subject to the conditions of subsection F of Virginia Code § 2.2-4342.
- 10. ERRORS IN BIDS: When an error is made in extending total prices, the unit Bid price will govern. Erasures in Bids must be initialed by the Bidder. Carelessness in quoting prices, or otherwise in preparation of the Bid, will not relieve the Bidder. Bidders/Offerors are cautioned to recheck their Bids for possible error. Errors discovered after public opening cannot be corrected and the Bidder will be required to perform if his or her Bid is accepted.

11. IDENTIFICATION ON BID ENVELOPE: All Bids, Proposals and requested copies thereof submitted to the City shall be in a separate envelope or package, sealed and identified with the following information clearly marked on the outside of the envelope or package:

- a. Addressed as indicated on page 1 of the solicitation;
- b. Solicitation number;
- c. Title;
- d. Bidder's name and complete mailing address (return address); and
- e. Pursuant to Virginia Code § 2.2-4311.2, the Bidder's identification number issued by the State Corporation Commission, or if the bidder is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bids or proposal a statement describing why the bidder or offeror is not required to be so authorized.

If a Bid is not addressed with the information as shown above, the Bidder takes the risk that the envelope may be inadvertently opened and the information compromised, which may cause the Bid to be disqualified. Bids may be hand delivered to the designated location in the City's offices. No other correspondence or other Proposals/Bids should be placed in the envelope. Any Bidder or Offeror that fails to provide the information required in (f) above shall not receive an award unless a waiver is specifically granted by the City Administrator.

- 12. ACCEPTANCE OF BIDS: Unless otherwise specified, all formal Bids or Proposals submitted shall be valid for a minimum period of one hundred twenty (120) calendar days following the date established for opening or receipt, respectively, unless extend by mutual agreement of the parties. At the end of the one hundred twenty (120) calendar days the Bid/Proposal may be withdrawn at the written request of the Bidder. Thereafter, unless and until the Proposal is withdrawn, it remains in effect until an award is made or the Solicitation is canceled by the City. The City may cancel any Solicitation at any time by notice of such cancelation to the Bidders.
- **13. COMPLETENESS:** To be responsive, a Bid must include all information required by the Solicitation.
- 14. CONDITIONAL BIDS: Conditional Bids are subject to rejection in whole or in part.
- **15. RESPONSE TO SOLICITATIONS**: In the event a Bidder cannot submit a Bid on a Solicitation, the Bidder is requested to return the Solicitation cover sheet with an explanation as to why the Bidder is unable to Bid on these requirements, or if there be no cover sheet for the Solicitation a letter to the City explaining the same.
- 16. BIDDER INTERESTED IN MORE THAN ONE BID AND COLLUSION: More than one bid from an individual, firm, partnership, corporation, or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for the work contemplated will cause rejection of all bids in which the bidder is interested. Any or all bids may be rejected if there is any reason for believing that collusion exists among the bidders. Participants in such collusion may not be considered in future bids for the same work. Each bidder, as a condition of submitting a bid, shall certify that he is not a party to any collusive action as herein defined. However, a party who has quoted prices on work, materials, or supplies to a Bidder is not thereby disqualified from

quoting prices to other Bidders or firms submitting a Bid directly for the work, materials, or supplies.

- 17. BID OPENING: Pursuant to Virginia Code § 2.2-4301, all Bids received in response to an IFB will be opened at the date, time and place specified, and announced publicly, and made available for inspection as provided in Section 21 of these General Conditions. Proposals received in response to an RFP will be made available for inspection as provided in Section 21 of these General Conditions.
- **18. TAX EXEMPTION:** The City is exempt from the payment of any federal excise or any Virginia sales tax. The price bid must be net, exclusive of taxes. Tax exemption certificates will be furnished if requested by the Bidder.
- 19. DEBARMENT STATUS: By submitting their Bids, Bidders certify that they are not currently debarred from submitting Bids on Contracts by the City, nor are they an agent of any person or entity that is currently debarred from submitting Bids or Proposals on Contracts by the City or any agency, public entity/locality or authority of the State.
- **20. NO CONTACT POLICY:** No Bidder shall initiate or otherwise have contact related to the Solicitation with any City representative or employee, other than the Purchasing Agent, after the date and time established for receipt of Bids. Any contact initiated by a Bidder with any City representative, other than the Purchasing Agent, concerning this Solicitation is prohibited and may cause the disqualification of the Bidder.
- **21. VIRGINIA FREEDOM OF INFORMATION ACT**: As provided under Virginia Code § 2.2-4342, all proceedings, records, Contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act of Virginia Code §§ 2.2-3700 *et seq.*, except:
 - a. Cost estimates relating to a proposed procurement transaction prepared by or for the City shall not be open to public inspection;
 - b. Any competitive sealed bidding Bidder, upon request, shall be afforded the opportunity to inspect Bid records within a reasonable time after the opening of Bids but prior to award, except in the event that the City decides not to accept any of the Bids and to reopen the Contract. Otherwise, Bid records shall be open to public inspection only after award of the Contract;
 - c. Any competitive negotiation Offeror, upon request, shall be afforded the opportunity to inspect Proposal records within a reasonable time after the evaluation and negotiations of Proposals are completed but prior to award except in the event that the City decides not to accept any of the Proposals and to reopen the Contract. Otherwise, Proposal records shall be open to the public inspection only after award of the Contract;
 - d. Any inspection of procurement transaction records under this Section 21 shall be subject to reasonable restrictions to ensure the security and integrity of the records;
 - e. Trade secrets or proprietary information submitted by a Bidder, Offeror or Contractor in connection with a procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the Bidder, Offeror or Contractor must invoke the protections of this Section 21 prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and State the reasons why protection is necessary; and
 - f. Nothing contained in this Section 21 shall be construed to require the City, when procuring by "competitive negotiation" (RFP), to furnish a Statement of reasons why a particular Proposal

was not deemed to be the most advantageous to the City.

22. CONFLICT OF INTEREST: Bidder/Contractor certifies by signing any Bid/Contract to/with the City that no conflict of interest exists between Bidder/Contractor and City that interferes with fair competition and no conflict of interest exists between Bidder/Contractor and any other person or organization that constitutes a conflict of interest with respect to the Bid/Contract with the City.

SPECIFICATIONS

- 23. OMISSIONS OR DISCREPANCIES: Any items or parts of any equipment listed in a Solicitation which are not fully described or are omitted from such specification, and which are clearly necessary for the completion of such equipment and its appurtenances, shall be considered a part of such equipment although not directly specified or called for in the specifications. Should a Bidder find a discrepancy or ambiguity in, or an omission from, the Solicitation, including the drawings and/or specifications, he or she shall so notify the City within twenty-four (24) hours of noting the discrepancy, ambiguity or omission and in any event no less than five (5) days prior to the date set for the opening of Bids. If necessary, the City will send a written addendum for clarification to all Bidders no later than three (3) days before the date set for opening of Bids. Any notification regarding specifications received less than five (5) days prior to the date set for the opening of Bids may or may not be considered by the City in its sole discretion. The Bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission but shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever the mention is made of any articles, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed as to the minimum requirements of these specifications.
- 24. BRAND NAME OR EQUAL ITEMS: Pursuant to Virginia Code § 2.2-4315, unless otherwise provided in the Solicitation, the name of a certain brand, make or manufacturer does not restrict Bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the City in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The Bidder is responsible to indicate the product clearly and specifically being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the City to determine if the product offered meets the requirements of the Solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding, only the information furnished with the Bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a Bid non-responsive. Unless the Bidder clearly indicates in its Bid that the product offered is "equal" product, such Bid will be considered to offer the brand name product referenced in the Solicitation.
- **25. FORMAL SPECIFICATIONS:** When a Solicitation contains a specification which states no substitutes, no deviation therefrom will be permitted, and the Bidder will be required to furnish articles in conformity with that specification.
- **26.** CONDITION OF ITEMS: Unless otherwise specified in the Solicitation, all items shall be new, in first class condition.

AWARD

- 27. **RESPONSIBLE BIDDERS:** In determining whether a Bidder is a responsible Bidder as defined herein, at minimum, the following criteria will be considered:
 - a. The ability, capacity, and skill of the Bidder to perform the Contract or provide the service required under the Solicitation;
 - b. Whether the Bidder can perform the Contract or provide the service promptly, or within the time specified, without delay or interference;
 - c. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder;
 - d. The quality of performance of previous Contracts or Services;
 - e. The previous and existing compliance by the Bidder with laws and ordinances relating to the Contract or Services;
 - f. The sufficiency of the financial resources and ability of the Bidder to perform the Contract or provide the service;
 - g. The quality, availability and adaptability of the Goods or Services to the particular use required;
 - h. The ability of the Bidder to provide future maintenance and service for the use of the subject of the Contract;
 - i. The number and scope of the conditions attached to the Bid;
 - j. Whether the Bidder is in arrears to the City on debt or Contract or is a defaulter on surety to the City or whether the Bidder's City taxes, or assessments are delinquent; and
 - k. Such other information as may be secured by the City, the Purchasing Agent having a bearing on the decision to award the Contract. If an apparent low Bidder is not awarded a Contract for reasons of nonresponsibility, the City shall so notify that Bidder and shall have recorded the reasons in the Solicitation or Contract file.
- 28. AWARD OR REJECTION OF BIDS; WAIVER OF INFORMALITIES: The City shall award the Contract to the lowest responsive and responsible Bidder complying with all provisions of the IFB, provided the Bid price is reasonable and it is in the best interest of the City to accept it. Awards made in response to a RFP will be made to the highest qualified Offeror whose Proposal is determined, in writing, to be the most advantageous to the City taking into consideration the evaluation factors set forth in the RFP. The City reserves the right to award a Contract by individual items, in the aggregate, or in combination thereof, or to reject any or all Bids and to waive any informality in Bids received whenever such rejection or waiver is in the best interest of the City. Award may be made to as many Bidders/Offerors as deemed necessary to fulfill the anticipated requirements of the City. The City also reserves the right to reject the Bid if a Bidder is deemed to be a non-responsible Bidder. Pursuant to Virginia Code § 2.2-4319, an IFB, a RFP, any other solicitation, or any and all bids or proposals, may be canceled or rejected by the City at any time. The reasons for cancellation or rejection shall be made part of the contract file. The City shall not cancel or reject an IFB, a RFP, any other solicitation, bid or proposal solely to avoid awarding a contract to a particular responsive and responsible bidder or offeror.
- **29. EXCLUSION OF INSURANCE BIDS PROHIBITED:** Pursuant to Virginia Code § 2.2-4320, notwithstanding any other provision of law or these General Conditions, no insurer licensed to transact the business of insurance in the State or approved to issue surplus lines insurance in the State shall be excluded from presenting an insurance bid proposal to the City in response to a RFP or an IFB; excepting that the City may debar a prospective insurer pursuant to its Debarment Policy, see Chapter 2 of the City's Procurement Policies and Procedures.
- **30. ANNOUNCEMENT OF AWARD:** Upon the award or announcement of the decision to award a Contract as a result of this Solicitation, the City will publicly post such notice on eVa: <u>https://eva.virginia.gov/index.html</u>.

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31. QUALIFICATIONS OF BIDDERS OR OFFERORS: The City may make such reasonable investigations as deemed proper and necessary to determine the ability of the Bidder to perform the work/furnish the item(s) and the Bidder shall furnish to the City all such information and data for this purpose as may be requested. The City reserves the right to inspect Bidder's physical facilities prior to award to satisfy questions regarding the Bidder's capabilities. The City further reserves the right to reject any Bid or Proposal if the evidence submitted by or investigations of, such Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work/furnish the item(s) contemplated therein.

32. TIE BIDS AND PREFERENCE FOR VIRGINIA PRODUCTS WITH RECYCLED CONTENT AND FOR VIRGINIA FIRMS:

- a. Pursuant to Virginia Code § 2.2-4328, in the case of a tie bid on an IFB only, the City may give preference to Goods, Services and construction produced in the City of Franklin or provided by persons, firms or corporations having principal places of business in the City of Franklin. If such choice is not available, preference shall then be given to Goods produced in Virginia, or for goods, services or construction provided by Virginia persons, firms, corporations, pursuant Virginia Code § 2.2-4324. If no City or State choice is available, the tie shall be decided publicly by lot. The decision by the City to make award to one or more such Bidders shall be final.
- b. Whenever the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a percentage preference, a like preference shall be allowed to the lowest responsive and responsible bidder who is a resident of Virginia and is the next lowest bidder. If the lowest responsive and responsible bidder is a resident of any other state and such state under its laws allows a resident contractor of that state a price-matching preference, a like preference shall be allowed to responsive and responsible bidders who are residents of Virginia. If the lowest bidder is a resident contractor of a state with an absolute preference, the bid shall not be considered. The Department of General Services shall post and maintain an updated list on its website of all states with an absolute preference, including the respective percentage amounts. For purposes of compliance with this Section 32, the City may rely upon the accuracy of the information posted on this website.
- c. Notwithstanding the provisions of subsections a and b, in the case of a tie bid in instances where goods are being offered, and existing price preferences have already been taken into account, preference shall be given to the bidder whose goods contain the greatest amount of recycled content.
- d. For the purposes of this Section 32, a Virginia person, firm or corporation shall be deemed to be a resident of Virginia if such person, firm or corporation has been organized pursuant to Virginia law or maintains a principal place of business within Virginia.
- **33. NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER:** Pursuant to Virginia Code § 2.2- 4318, unless cancelled or rejected, a responsive Bid from the lowest responsible Bidder shall be accepted as submitted, except that if the Bid from the lowest responsible Bidder exceeds available funds, the City may negotiate with the apparent low Bidder to obtain a Contract price within available funds. However, the negotiation may be undertaken only under conditions and procedures described in writing and approved by the City prior to issuance of the IFB and summarized therein.

CONTRACT PROVISIONS

34. APPLICABLE LAW AND COURTS: Any Bid or Contract resulting from a Solicitation and its terms, including, but not limited to, the parties' obligations under it, and the remedies available to each party for breach of it, shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Virginia, and exclusive jurisdiction and venue of any dispute or matters involving litigation between the parties hereto shall be in the courts of City of Franklin, Virginia. Any jurisdiction's choice of law, conflict of laws, rules, or provisions, including those of the Commonwealth of Virginia, shall not apply. The Contractor shall comply with applicable federal, State, and local laws, ordinances, rules, and regulations in performance of the Contract.

- **35. PROVISION AND OWNERSHIP OF INFORMATION:** The City shall make a good faith effort to identify and make available to the Contractor all non-confidential technical and administrative data in the City's possession which the City may lawfully release including, but not limited to Contract specifications, drawings, correspondence, and other information specified and required by the Contractor and relating to its work under any Contract. The City reserves its rights of ownership to all material given to the Contractor by the City and to all background information documents, and computer software and documentation developed by the Contractor in performing any Contract.
- **36. DOCUMENTS:** All documents, including but not limited to data compilations, drawings, reports and other material, whether in hard copy or electronic format, prepared, developed or furnished by the Contractor pursuant to any Contract shall be the sole property of the City. At the direction of the City, the Contractor shall have the right to make copies of the documents produced available to other parties. The City shall be entitled to delivery of possession of all documents, upon payment in accordance with the terms of any Contract for the service incurred to produce such documents.
- **37. CONFIDENTIALITY:** Contractor shall not publish, copyright or otherwise disclose or permit to be disclosed or published, the results of any work performed pursuant to this contract, or any particulars thereof, including forms or other materials developed for the City in connection with the performance by Contractor of its services hereunder, without prior written approval of the City. Contractor, cognizant of the sensitive nature of much of the data supplied by the City, shall not disclose any information (other than information which is readily available from sources available to the general public) obtained by it in the course of providing services hereunder without the prior written approval of the City, unless disclosure of such information by it is required by law, rule or regulation or the valid order of a court or administrative agency.
- **38. INDEPENDENT CONTRACTOR:** The Contractor and any agents, or employees of the Contractor, in the performance of any Contract shall act as an independent contractor and not as officers, employees or agents of the City.
- **39. INSURANCE:** The Contractor agrees that, during the period of time it renders services to the City pursuant to any Contract, it shall carry (and provide the City with evidence of coverage) the following minimum amounts of insurance:

Automobile

\$500,000

Liability

Medical Payment Comprehensive Collision

Public Liability	\$1,000,000	
Professional Liability	\$1,000,000	
Excess Liability	\$2,000,000	Aggregate Over Above Policy Limits (Excluding Professional Liability)

Worker's Compensation Amount required by Virginia law

The Contract may specifically require the Contractor to carry higher minimum amounts of insurance.

In addition, the Contractor shall require, and shall include in every subcontract, that any subcontractor providing any goods or services related to such Contract obtain and continue to maintain for the duration of the work, workers' compensation coverage in the amount required by Virginia law.

40. KEY PERSONNEL: For the duration of any Contract, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment, or as expressly approved by the City. The Contractor shall notify the City within five (5) calendar days after the occurrence of any of these events and provide the information required by the paragraph below.

The Contractor shall provide a detailed explanation of the circumstances necessitating any proposed substitution, complete resumes for the proposed substitute, and any additional information requested by the City. The proposed substitute should have comparable qualifications to those of the person being replaced. The City will notify the Contractor within fifteen (15) calendar days after receipt of all required information of its approval or disapproval of the proposed substitution.

- **41. SEVERABILITY:** If any term, covenant or provision of these General Conditions or any Contract shall be held to be invalid, illegal or unenforceable in any respect, these General Conditions and any Contract shall remain in effect and be construed without regard to such provision.
- **42. TITLES:** The titles and section headings herein and in any Contract are inserted solely for convenience and are not to be construed as a limitation on the scope of the provisions to which they refer.
- **43. ATTORNEYS' FEES:** In the event of a dispute between the City and Contractor under any Contract which cannot be amicably resolved, in addition to all other remedies, the party substantially prevailing in any litigation shall be entitled to recover its reasonable expenses, including, but not limited to, reasonable attorneys' fees.
- 44. NO WAIVER: Neither any payment for, nor acceptance of, the whole or any part of the services by the City, nor any extension of time, shall operate as a waiver of any provision of any Contract, nor of any power herein reserved to the City, or any right to damages herein provided, nor shall any waiver of any breach of any Contract be held to be a waiver of any other or subsequent breach. Failure of the City to require compliance with any term or condition of any Contract shall not be deemed a waiver of such term or condition or a waiver of the subsequent enforcement thereof.

- **45. NO FINANCE CHARGES:** No finance charges shall be paid by the City.
- **46. ANTITRUST**: By entering into a Contract, the Contractor conveys, sells, assigns, and transfers to the City all rights, title and interest in and to all causes of the action it may now have or hereafter acquire under the antitrust law of the United States or the State, relating to the particular Goods or Services purchased or acquired by the City under said Contract. Consistent and continued tie bidding could cause rejection of Bids by the City and/or investigation for antitrust violations.
- **47. PAYMENT:** Pursuant to Virginia Code § 2.2-4352, unless more time is provided in the Solicitation or Contract, payment will be made forty-five (45) days after receipt by the City of a proper invoice, or forty-five (45) days after receipt of all Goods or acceptance of work, whichever is later. The City reserves the right to withhold any or all payments or portions thereof for Contractor's failure to perform in accordance with the provision of the Contract or any modifications thereto. Within twenty (20) days of receipt of proper invoice or of goods or services, the City shall notify the Contractor if any defect or impropriety that would prevent payment by the payment date. The following provisions apply to such payments:
 - a. Invoices for items/Services ordered, delivered/performed, and accepted shall be submitted by the Contractor in duplicate directly to the payment address shown on the purchase order, Solicitation or Contract, as applicable. All invoices shall show the Contract number, purchase order number, or Solicitation number, as applicable, and as required under Virginia Code § 2.2-4354, either the individual Contractor's social security number or the Contractor's federal employer identification number, whichever is applicable.
 - b. Any payment terms requiring payment in less than forty-five (45) days will be regarded as requiring payment forty-five (45) days after receipt of proper invoice or receipt of all Goods or acceptance of work, whichever occurs later. Notwithstanding the foregoing, offers of discounts for payment in less than forty-five (45) days are valid and enforceable.
 - c. Pursuant to Virginia Code § 2.2-4353, the date any payment shall be deemed the date of postmark in all cases where payment is made by mail.
 - d. The City's fiscal year is July 1 to June 30. Contractors are advised to submit invoices, especially for Goods and/or Services provided in the month of June, for the entire month (i.e. June 1 June 30), so that expenses are recognized in the appropriate fiscal year.
 - e. Any payment made by the Contractor to the City shall only be made in U.S. Dollars. If payment is received in foreign currency the City may, in its sole discretion, reject such payment and require immediate compensation in U.S. Dollars.
- **48. SUBCONTRACTORS:** Pursuant to Virginia Code § 2.2-4354, in the event that any subcontractors are used by Contractor in connection with the work, Contractor shall:
 - a. Within seven (7) days after receipt of amounts paid to the Contractor for work performed by a subcontractor, either:
 - i. Pay the subcontractor for the proportionate share of the total payment received

attributable to the work performed by the subcontractor under any Contract; or

- ii. Notify the City and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.
- b. Contractor shall require each subcontractor to provide either (i) for an individual, their social security numbers, or (ii) for proprietorships, partnerships, and corporations to provide their federal employer identification numbers.
- c. The Contractor shall pay interest to any subcontractor on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from the City for work performed by the subcontractor under any Contract, except for amounts withheld as allowed in subdivision (a)(II) above. Unless otherwise provided under the terms of any Contract, interest shall accrue at the rate of one percent (1%) per month.
- d. The Contractor shall include in each of its subcontracts under any Contract a provision requiring each subcontractor to include or otherwise be subject to the above payment and interest requirements (a), (b) and (c) with respect to each lower tier subcontractor.
- e. The Contractor's obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this Section 48 shall not be construed to be an obligation of the City. No Contract modification may be made for the purpose of providing reimbursement for such interest charge. No cost reimbursement claim may include any amount for reimbursement for such interest charge.
- **49. RETAINAGE ON CONSTRUCTION CONTRACTS:** Pursuant to Virginia Code 2§ 2.2-4333, if a Contract for construction provides for progress payments in installments based upon an estimated percentage of completion, then the contractor shall be paid at least ninety-five percent (95%) of the earned sum when payment is due, with no more than five percent (5%) being retained to ensure faithful performance of the contract. All amounts withheld may be included in the final payment. Any subcontract related to work on a Contract that provides for similar progress payments shall be subject to the provisions above and the Contractor agrees to include such provisions in every subcontract.
- **50. SUCCESSORS AND ASSIGNS:** The City and the Contractor bind themselves and their respective successors and assigns to any Contract. The foregoing notwithstanding, the Contractor shall not assign, sublet, or transfer its interest in any Contract without the prior written consent of the City, which may be granted or withheld in the City's sole discretion. Nothing hereinafter mentioned shall be construed as creating any personal liability on the part of any officer, agent or employee of the City, nor shall it be construed as giving any benefits hereunder to anyone other than the City and the Contractor.
- **51. DEFAULT**: Failure of a Contractor to deliver Goods or Services in accordance with Contract terms and conditions and/or within the time specified, or within reasonable time as interpreted by the City in its sole discretion, or failure to make replacements/corrections of rejected articles/services when so requested, immediately or as directed by the City, or failure of the Contractor to act in accordance with the Contract in any material respect, as reasonably determined by the City, shall constitute a "default" by the Contractor and shall further authority for the City to purchase in the open market articles/services of comparable grade/quality to replace the services, articles rejected, and/or not delivered. On all such purchases, the Contractor shall reimburse the City, within a reasonable time specified by the City, for any expense incurred in excess of Contract prices including, but not limited to, any purchase and

administrative costs. Such purchases shall be deducted from the Contract quantities, if applicable. Should public necessity demand it, the City reserves the right to use or consume articles delivered or services performed which are substandard in quality, subject to an adjustment in price to be determined by the City. In case of any default, the City, after due oral or written notice if required in accordance with the Contract, may terminate the Contract at its option in its sole discretion effective immediately. These remedies shall be in addition to any other remedies which the City may have, including but not limited to, any remedies at law, under the Contract or in equity.

Notwithstanding the foregoing, the Contractor shall not be liable for damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, act of God, act of Government, act of an alien enemy or by any other circumstances which, in the City's opinion, are beyond the control of the Contractor. Under such circumstances, however, the City may, at its sole discretion, terminate or cancel the Contract effective immediately.

- **52.** NON-DISCRIMINATION ASSURANCES: The Contractor shall conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Act of 1975, as amended, where applicable, and § 2.2-4311 of the Virginia Procurement Act:
 - a. During the performance of any Contract, the Contractor agrees as follows: the Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. The Contractor, in all Solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer. Notices, advertisements, and Solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this Section 52.
 - b. The Contractor shall include the provisions of paragraph (a) above in every subcontract or purchase over \$10,000.00 so that the provisions will be binding upon each subcontractor or Vendor.

53. MODIFICATION:

- a. Pursuant to Virginia Code § 2.2-4309, these General Conditions and any Contract entered into by the City and any Contractor shall not be subject to change, modification, or discharge except by written instrument signed by the City and Contractor. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of an offeror from the consequences of an error in its bid or offer.
- b. The City may, but is not obligated to, extend the term of an existing contract for services to allow completion of any work undertaken but not completed during the original term of the contract.
- c. Nothing in this Section 53 shall prevent the City from placing greater restrictions on contract modifications.

54. INDEMNIFICATION: Contractor agrees to indemnify, keep and save harmless the City, its officers, agents, officials, employees and volunteers against any and all claims, claims of injuries, death, damage to property, patent claims, suits, liabilities, judgments, losses, costs and expenses, including but not limited to costs of investigation, all reasonable attorneys' fees (whether or not litigation results), and the cost of any appeal, occurring or arising in connection with the Contractor's, its agents', subcontractors', employees', or volunteers' negligence or wrongful acts or omissions in connection with its performance of any Contract. The Contractor shall, at his or her own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and if any judgment shall be rendered against the City in any such action, the Contractor shall, at his or her own expenses, satisfy and discharge the same. Contractor expressly understands and agrees that any performance bond or insurance protection required by any Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City as herein provided. Nothing contained in this Solicitation or the Contract shall be deemed to be a waiver of the City's sovereign immunity.

55. DRUG-FREE WORKPLACE: Pursuant to Virginia Code § 2.2-4312, in every Contract over

\$10,000.00 the following provisions apply: During the performance of any Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a Statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all Solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over

\$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this Section, "drug-free workplace" means a site for the performance of work done in connection with a specific Contract awarded to a Contractor in accordance with this the VPPA and

the City's Procurement Procedures, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Contract.

- **56. TERMINATION:** Contracts will remain in force for full periods specified and/or until all articles ordered before date of termination shall have been satisfactorily delivered and accepted and thereafter until all requirements and conditions shall have been met, unless:
 - a. Terminated prior to expiration date by satisfactory deliveries of entire Contract requirements;
 - b. Terminated by the City upon thirty (30) days written notice to the Contractor at the City's convenience in the City's sole discretion ("termination for convenience"), unless a termination for convenience is specifically and expressly prohibited by the Contract. Any Contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of the termination;
 - c. Terminated by the City for cause, default, or negligence on the part of the Contractor. However, pursuant to Section 51 of these General Conditions, the City may hold the Contractor responsible for any resulting additional purchase and administrative costs. There is no advance notice requirement in the event of Termination for Cause and termination is effective immediately upon notice to Contractor of the termination for cause;
 - d. Extended upon written authorization of City and accepted by Contractor, to permit ordering of unordered balances or additional quantities at Contract prices and in accordance with Contract terms.
- **57. APPROPRIATIONS:** Notwithstanding any other provision of any Contract, the payment of the City's obligations under any Contract shall be subject to annual appropriations by the City Council in each fiscal year of monies sufficient to satisfy the same.
- **58. REFERENCES TO VIRGINIA LAW:** Any reference in these General Conditions to the Code of Virginia or other relevant Federal, State or local law is incorporated in whole herein by reference as in effect at the time of the Solicitation or Contract as such statutory provisions may be amended or replaced by any statute dealing with the same or similar subject matter.
- **59. COOPERATIVE PROCUREMENT**: Except as prohibited by the current Code of Virginia, all resultant Contracts will be extended to other Public Bodies of the Commonwealth of Virginia, to permit their ordering of Goods, supplies and/or Services at the prices and terms of the resulting Contract ("cooperative procurement"). By submitting any Bid or entering into any Contract with the City a Bidder/Contractor expressly authorizes cooperative procurement

under Virginia Code § 2.2-4304 to the full extent permitted by law. If any other public body decides to use any Contract, the Contractor must deal directly with that public body concerning all matters relating thereto, including but not limited to, the placement or orders, issuance of the purchase order, contractual disputes, invoicing and payment. The City acts only as the "Contracting Agent" for these public bodies. Any resulting contract with other public bodies shall be governed by the laws of that specific entity. It is the Contractor's responsibility to notify the public bodies of the availability of the Contract. The City of Franklin shall not be held liable for any direct or indirect costs, damages or other claim of any kind incurred by another public body or any Contractor as a result of any cooperative procurement.

60. AUDIT: The Contractor hereby agrees to retain all books, records, and other documents relative to any Contract for five (5) years after final payment, or until audited by the City, whichever is sooner. The

City, its authorized agents, and/or City auditors shall have full access to and right to examine any of said materials during said period.

- **61. GUARANTIES AND WARRANTIES:** All guarantees, representations and warranties required shall be furnished by the Contractor and shall be delivered to the Purchasing Agent before final payment on any Contract is made. In addition to any guarantees, representations and warranties required under the Contract, the Contractor agrees to:
 - a. Save the City, its agents and employees harmless from liability of any nature or kind for the use of any copyrighted or un-copyrighted composition; secret process, patented or unpatented; invention; article or appliance furnished or used in the performance of a Contract for which the Contractor is not the patentee, assignee, licensee or owner;
 - b. Protect the City against latent defective material or workmanship and to repair or replace any damages or marring occasioned in transit or delivery;
 - c. Furnish adequate protection against damage to all work and to repair damages of any kind to the building or equipment, to the Contractor's own work or to the work of other contractors, for which the Contractor's workers are responsible;
 - d. Pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules, and regulations of the City; and
 - e. Protect the City from loss or damage to City owned property while it is in the custody of the Contractor;
 - f. At minimum supply all Goods or Services with the manufacturer's standard warranty, if applicable; and

- g. For any Contract involving Services of any nature, the Contractor further agrees to:
 - i. Enter upon the performance of Services with all due diligence and dispatch, assiduously press to its complete performance, and exercise therein the highest degree of skill and competence;
 - ii. Allow Services to be inspected or reviewed by an employee of the City at any reasonable time and place selected by the City;
 - iii. Acknowledges that the City shall be under no obligation to compensate Contractor for any Services not rendered in strict conformity with the Contract; and
 - iv. Stipulates that the presence of a City Inspector shall not lessen the obligation of the Contractor for performance in accordance with the Contract requirements or be deemed a defense on the part of the Contractor for infraction thereof. The Inspector is not authorized to revoke, alter, enlarge, relax, or release any of the requirements of any Contract. Any omission or failure on the part of the Inspector to disapprove or reject any work or material shall not be construed to be an acceptance of any such defective work or material.
- **62. PRICE REDUCTIONS:** If at any time after the date of the Bid/Contract the Contractor makes a general price reduction in the comparable price of any material covered by the Contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to any Contract for the duration of the Contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. For purpose of this provision, a "general price reduction" shall mean any

horizontal reduction in the price of an article or service offered (1) to Contractor's customers generally, or (2) in the Contractor's price schedule for the class of customers, i.e., wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this Solicitation. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a "general price reduction" under this provision. The Contractor shall submit his or her invoice at such reduced prices indicating on the invoice that the reduction is pursuant to the "Price Reduction" provision of the Contract documents. The Contractor in addition will within ten (10) days of any general price reduction notify the City of such reduction by letter. FAILURE TO DO SO IS A DEFAULT UNDER THE CONTRACT AND MAY RESULT IN TERMINATION OF THE CONTRACT IN THE CITY'S DISCRETION. The

Contractor, if requested, shall furnish, within ten (10) days after the end of the Contract period, a statement certifying either (1) that no general price reduction, as defined above, was made after the date of the Bid or Contract, or (2) if any such general price reductions were made, that as provided above, they were reported to the City within ten (10) days and the City was billed at the reduced prices. Where one or more such general price reductions were made, the statement furnished by the Contractor shall include with respect to each price reduction (1) the date when notice of any such reduction was issued, (2) the effective date of the reduction, and (3) the date when the City was notified of any such reduction.

- **63. COMPLIANCE WITH IMMIGRATION LAW:** Pursuant to Virginia Code § 2.2-4311.1, in every Contract the following provision applies: the Contractor does not, and shall not during the performance of the Contract, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.
- **64. VIRGINIA STATE CORPORATION COMMISSION:** Pursuant to Virginia Code § 2.2-4311.2, Any Bidder or Contractor organized as a stock or non-stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia, or as otherwise required by law, at the time of the Bid, Proposal or any response to Solicitation and during the term of the Contract and any Contract renewal. The Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required, to be revoked or cancelled at any time during the term or any renewal of the Contract. If the Contractor fails to remain in compliance with the provisions of this Section 64, the Contract may become void at the option of the City.

65. CLAIMS PROCEDURE:

- a. The procedure for consideration by the City of contractual claims for any Contract shall be that set forth in Virginia Code § 15.2-1243, et seq.
- b. In addition, pursuant to Virginia Code § 2.2-4364, contractual claims, whether for money or other relief, shall be submitted in writing to the City Administrator no later than sixty (60) days after final payment; however, written notice of the Contractor's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. Nothing herein shall preclude a Contract from requiring submission of an invoice for final payment within a certain time after completion and acceptance of the work or acceptance of the Goods. Pendency of claims shall not delay payment of amount agreed due in the final payment.
- c. No written decision denying a claim or addressing issues related to the claim shall be considered a denial of the claim unless the written decision is signed by the City Administrator. The contractor may not institute legal action prior to receipt of the final written decision on the claim unless the City fails to render a decision within ninety (90) days of submission of the claim. Failure of the City to render a decision within ninety (90) days shall not result in the contractor being awarded the relief claimed or in any other relief or penalty. The sole remedy for the City's failure to render a decision within 90 days shall be the contractor's right to institute immediate legal action.
- d. A Contractor may not institute legal action, prior to receipt of the City's decision on

the claim, unless the City fails to render such decision within the time specified by law. A failure by the City to render a decision within the time provided by law shall be deemed a final decision denying the claim by the City.

- e. The decision of the City Administrator shall be final and conclusive unless the Contractor appeals within six (6) months of the date of the final written decision by instituting legal action as provided in Virginia Code § 2.2-4364.
- f. No administrative appeals procedure pursuant to Virginia Code § 2.2-4365 has been adopted for contractual claims by the City.
- g. Nothing herein shall be construed to prevent the City from instituting legal action against any Contractor or Bidder.
- **66. NOTICES:** All written notices required or permitted under any Solicitation, Bid or Contract shall be deemed sufficient if delivered in person to the City Purchasing Agent or Bidder/Contractor, as applicable, or sent by first class mail to the City or Bidder/Contractor at the addresses set forth in the Solicitation, Bid or Contract or at such other address as a party may designate from time to time by notice given in accordance with the terms of this Section 66; except that where a Solicitation, Bid or Contract expressly requires notice to a specific individual or at a specific location, such shall control. Such notices are deemed received when actually delivered to the party or its representative or agent if hand delivered, or one (1) business day after deposited into the United States mail, if mailed.

DELIVERY

- **67. SHIPPING INSTRUCTIONS-CONSIGNMENT:** Unless otherwise specified in the Solicitation or Contract, as applicable, each case, crate, barrel, package, etc., delivered under the Contract must be plainly stenciled or securely tagged, stating the Contractor's name, purchase order number, and delivery address as indicated in the order. Where shipping containers are to be used, each container must be marked with the purchase order number, name of the Contractor, the name of the item, the item number, and the quantity contained therein. Deliveries must be made within the hours of 8:00 a.m. 3:00 p.m. Deliveries at any other time will not be accepted unless specific arrangements have been previously made with the designated individual at the delivery point. No deliveries will be accepted on Saturdays, Sundays, and holidays unless previous arrangements have been made. It shall be the responsibility of the Contractor to ensure compliance with these instructions for items that are drop-shipped.
- **68. RESPONSIBILITY FOR SUPPLIES TENDERED:** The Contractor shall be responsible for the materials or supplies covered by the Contract until they are delivered at the designated point. The Contractor shall additionally bear all risk on rejected materials or supplies after notice of rejection is tendered by the City. Rejected materials or supplies must be removed by and at the expense of the Contractor promptly after notification of rejection unless public health

and safety require immediate destruction or other disposal of rejected delivery. If rejected materials are not removed by the Contractor within ten (10) days after date of notification, the City may return the rejected materials or supplies to the Contractor at the Contractor's risk and expense or dispose of them as abandoned property.

- **69. INSPECTIONS:** The City reserves the right to conduct any test/inspection it may deem advisable to assure supplies and Services conform to the specification in the Solicitation, Bid or Contract, as applicable. Inspection and acceptance of materials or supplies will be made after delivery at destinations herein specified unless otherwise stated. Unless otherwise specified in the Contract, if inspection is made after delivery at the destination specified, the City will bear the expense of inspection except for the value of samples used in case of rejection. Final inspection shall be conclusive except in regard to latent defects, fraud, or such gross mistakes as to amount to fraud. Final inspection and acceptance or rejection of the materials or supplies will be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the City for such materials or supplies as are not in accordance with the specifications.
- **70. COMPLIANCE**: Delivery must be made as ordered and in accordance with the Solicitation, Bid or Contract, as applicable, or as directed by the City when not in conflict with the Bid/Contract. The decision as to reasonable compliance with delivery terms shall be final. Burden of proof of delay in receipt of Goods by the purchaser shall rest with the Contractor. Any request for extension of time of delivery from that specified must be approved by the City, such extension applying only to the particular item or shipment affected. Unless otherwise specified in the Contract, should the Contractor be unreasonably delayed by the City, there shall be added to the time of completion a time equal to the period of such delay caused by the City. However, the Contractor shall not be entitled to claim damages or extra compensation for such delay or suspension. These conditions may vary for construction Contracts.
- 71. POINT OF DESTINATION: All materials shipped to the City must be shipped F.O.B. DESTINATION unless otherwise stated specifically in the Solicitation, Bid or Contract, as applicable. The materials must be delivered to the "Ship To" address indicated on the purchase order or Solicitation, as applicable.
- 72. **REPLACEMENT:** Materials or components that have been rejected by the City, in accordance with the terms of the Contract, shall be replaced by the Contractor at no cost to the City.
- **73. DAMAGES:** Any and all damages to property of the "City" that is the direct result of the Contractor, the employees of the Contractor and/or its subcontractors, agents, licensees, successors, or assigns, shall be the sole responsibility of the Contractor. The property shall be repaired to its last known condition prior to the damages and/or replaced at no cost to the City. The City shall approve any and all repairs/replacements prior to acceptance of the repairs/replacement.
- 74. PACKING SLIPS OR DELIVERY TICKETS: All shipments shall be accompanied by Packing Slips

- a. Purchase Order Number;
- b. Name of Article and Stock Number;
- c. Quantity Ordered;
- d. Quantity Shipped;
- e. Quantity Back Ordered; and
- f. The Name of the Contractor.

Contractors are cautioned that failure to comply with these conditions shall be considered sufficient reason for refusal to accept the Goods.

- **75. ADDITIONAL CHARGES:** No delivery charges of any kind shall be added to any invoice; except that (i) if Goods are expressly bought F.O.B. "shipping point" under the Contract and the Contractor prepays transportation, then delivery charges shall be added to invoices; and (ii) if express delivery is authorized and substituted by the City on orders for the method specified in the Contract, then the difference between freight or mail and express charges may be added to invoice.
- **76. METHOD AND CONTAINERS:** Unless otherwise specified, Goods shall be delivered in commercial packages in standard commercial containers, so constructed as to ensure acceptance by common or other carrier for safe transportation to the point of delivery. Containers become the property of the City unless otherwise specified by bidder.