Scope of Work

10.8.1 Upgrade

Prepared for:

City of Columbus

Proposal Date: 8/20/2020

Schneider Electric

2620 E. Prospect Rd., Suite 130
Fort Collins, CO 80525
Contact: Joe Linzmeyer
Phone: (970) 214-2671
www.se.com
joseph.linzmeyer@se.com

Telvent USA, LLC is a wholly owned subsidiary of Schneider Electric Grid Automation, Inc., operating under the Schneider Electric brand, while maintaining the legal name of Telvent USA, LLC.

Telvent USA, LLC maintains its headquarters at 2620 E. Prospect Rd., Suite 130; Fort Collins, CO 80525

Introduction

Schneider Electric is submitting this Statement of Work (SOW) in response to a Request for Proposal by City of Columbus (City) seeking an upgrade of ArcFM to 10.8.1.

The following applications will be upgraded under this scope of work:

- ArcFM 10.2.1
- Responder/RxIF 10.2.1
- Fiber and Conduit Manager 10.2.1
- Wavepoint
- Viewer for Engine
- Session Manager

The following applications will be implemented as new under this scope of work:

- ArcFM Mobile
- ArcFM Web

Project Assumptions

- The services defined in this SOW will be provided through a combination of remote and on-site tasks.

- The City will provide a VPN with test environment system login credentials and test database credentials for the duration of the project.

- An environment for the upgrade will be established in the Fort Collins office of Schneider Electric, using an export of the City's current ArcSDE and Fiber Manager databases. This will require an updated version of the geodatabase be acquired from City.

- The City's custom code list has been provided in this scope of work and will be upgrade by Schneider Electric as-is.

- No new functionality will be incorporated into the existing components, expect for the Responder Customizations defined in Appendix A . Should the City wish to add custom tools to provide additional functionality, beyond that already listed, a separate scope of work and costs would be developed for the City.

- The City should be prepared to provide, for the duration on-site tasks, a connection to City's network for Schneider Electric and an active internet connection port for the Schneider Electric laptop computer in the same area as the electric GIS client workstations.

- The City will provide the Imagery/Basemaps as ArcGIS Tile Packages (offline) or ArcGIS Server Tiled Cache Service/ArcGIS Online basemaps.

- All operational asset data and other GIS datasets that need to be available offline in field, should be published as an ESRI read-only sync-enabled feature service by The City.

- The City's datasets to be used with ArcFM Mobile have Global IDs and relationship classes have Global ID for as the primary key.

- The City's datasets to be used with ArcFM Mobile use ST_GEOMETRY or SDO_GEOMETRY (Oracle) or GEOMETRY (SQL) database storage types

- The City field (ArcFM Mobile) users will use client VPN technology on their field devices to connect to the Enterprise GIS.

- The City has implemented a public facing ADFS/SAML or Azure Active Directory (AD) for ArcFM Mobile SSO Authentication.

- The City allows internet traffic from its servers over both HTTP(80) and HTTPS(443).

- The City allows a firewall rule permitting outbound traffic through TCP ports 9350-9354 from ArcFM Mobile services on its servers

- The City has implemented ArcGIS Server and sync-enabled feature services in the City Production (PROD) Environment.

- The City will provide CA trusted SSL certificates for configuring ArcFM Mobile on-premise services.

- The City will onboard users / admins on an ongoing basis. Schneider Electric will support initial rollout of application to a finite set of users in this SOW.

- The City will deploy & configure GPS / iOS Location Services and the iOS applications on the field devices.

- This SOW does not consider a Highly Available (HA) deployment for ArcFM Web or ArcFM Mobile. A change order will be required should The City wish Schneider Electric to implement these applications with an HA solution.

- The City has published ArcGIS Portal-federated feature services for consumption by ArcFM Mobile.

- ArcFM Mobile can get GPS position from an onboard signal through Windows Location Services or from an external NMEA-compatible receiver over a configured serial port.

Project Management

During the project, the Schneider Electric Project Manager will report to the City Project Manager. Schneider Electric project management includes:

- Manage the Schneider Electric portion of the project on a day-to-day basis
- Define and manage a project constraints and schedule with the City's project manager
- Identify and manage the resolution of project issues, including the communication of Schneider Electric-identified issues to the City 's project manager
- Identify and manage all change management related issues or items with the City's project manager

- Conduct bi-weekly project conference calls or on-site meetings with the City to identify, assign responsibility, and resolve issues that may arise during the project. The conference call will also provide a mechanism for reviewing the overall status of the project. Meeting minutes will be distributed by Schneider Electric.
- Weekly summary report detailing the week's activities and upcoming tasks.
- Preparing monthly-weekly project reports that include:
  - A summary of the overall status of the project, percent complete, milestone list, etc.
  - A schedule update, and Schneider Electric's expectations for on-time project completion
  - A summary of completed tasks, percent completed per the schedule
  - A summary of tasks currently underway and a description of their status
  - Upcoming near-term tasks that need to "hit the radar screen"
  - Issues requiring attention
  - Open items not resolved from previous meeting
  - Potential risks to the project and recommendations for resolution

Proposed Services

1 Project Initiation

Schneider Electric and the City will initiate the project with an on-site Project Kickoff meeting. During the meeting, the teams will review the drivers & goals of the project to confirm the objectives and ensure that both teams are working toward them together. Schneider Electric will review the scope of work and the project plan and discuss the requirements, tasks, deliverables, timeline, and responsibilities. The team will then cover the administrative framework for managing the project. Project controls such as communication protocols, business processes, and change control processes will also be defined during this task.

The City will assign key personnel to support the project as described in the assumptions and will ensure each is available and can provide necessary support at the required times over the course of the project. The City will ensure the individuals assigned possess the appropriate skills and are authorized to participate in decisions made over the course of the project.

The agenda for this meeting shall be as follows:

- Introduce Schneider Electric and City team members
- Review the Scope of Work, project plan, and project activities
- Review deliverables
- Confirm the work schedule and project delivery approach (parallel tasks vs. serialized execution)
- Discuss and define all responsibilities required to complete the project
- Review change control, communication, and escalation protocols
- Identify project status reporting procedures and frequency
- Identify project risks and issues, and plan mitigation where appropriate.

Schneider Electric Deliverable(s):
- Lead on-site Project Kickoff Meeting

City Responsibilities:
- Ensure attendees are invited in advance and are present during the meeting
- Be prepared to assign project roles as noted above

2 Analysis & Design

2.1 System Architecture Review

The City is implementing SQL Server 2017 and creating new Staging and Production Environments. This task is to review the system architecture for the new environments and implementation needs of the Schneider Electric solutions being upgraded during this project.

Schneider Electric will travel to the City offices for up to three (3)-business days to validate requirements, lead discussions, and evaluate design alternatives for the System Upgrade to 10.8.1 and the implementation of the new staging and production environments. The purpose of the engagement is to determine a system architecture specific to the City's needs and business drivers identified during this activity.

Schneider Electric will lead the on-site sessions with active participation by appropriate the City GIS, IT, operations, and business representatives. To help prepare for and facilitate the activity, the Schneider Electric team will provide preparatory materials prior to arriving on-site.

The Schneider Electric team envisions that the following topics will be covered during the on-site engagement:

- Architecture Vision
- Review of current ArcFM System Architecture
- ArcGIS and ArcFM Upgrade Needs
- Client and server platforms
- Data Storage & Capacity
- Network capacity, and constituent domains
- System Integration Considerations
- Deployment Strategies
- Deployment Environment Details
- Anticipated user and system load

Discussions will assist Schneider Electric in identifying system architecture and configuration opportunities, while considering technical inputs including non-functional requirements, constraints, standards, and policies. Upon completion of the System Architecture Review Session, Schneider Electric will prepare a draft system architecture design report and deliver it to the City for review. This task will be conducted remotely from Schneider Electric offices. The City will review and approve the document with five (5)-business days.

Schneider Electric Deliverable(s):
- System Architecture Design Workshop Agenda
- Conduct the on-site System Architecture Review Workshop at City facilities
- Draft and Final System Architecture Design Document
- Final System Architecture Design Document

City Responsibilities:
- Identify and schedule the appropriate City staff to attend the workshop
- Have appropriate City staff review the System Architecture Design wiki available at the following URL in preparation for the design review: http://www.esri.com/systemdesign
- Provide a conference room equipped with a projector. This conference room should be large enough to host the meeting activities
- Review and approve the System Architecture Design

2.2   Responder Requirements Finalization

Schneider Electric will travel on-site for up to four (4)-business days to review and finalize the Responder Customization Requirements defined in APPENDIX A – City Responder Customization List . Workshop discussions will review the requirements, assumptions, and implementation needs for the listed customizations and finalize what is required for development.

Following the workshop, Schneider Electric will draft a functional requirements document. A draft of this document will be provided to the City for review. The City will have up to five (5)-business days to review and approve the document. This document will be used to develop the required components and configurations in Task 3.2.

Schneider Electric Deliverable(s):
- Conduct the on-site workshop as defined
- Draft and Final Functional Requirements Document

City Responsibilities:
- Identify and schedule the appropriate City staff to attend the workshop
- Provide a conference room equipped with a projector. This conference room should be large enough to host the meeting activities
- Review and approve the Functional Requirements Document

2.3   ArcFM Mobile & Web Configuration Review

Schneider Electric will travel on-site to the City for up to three (3)-business days to conduct an ArcFM Mobile and Web Configuration Requirements Workshop. The goal of this workshop is to define the OOTB configuration requirements of the mobile and web solutions for implementation to the City Staging Environment.

The following items will be review and defined during this session:

- ArcFM Mobile and Web Architecture
- Validate ArcFM Mobile and Web Prerequisites
- ArcFM Mobile and Web Configuration (Map, Data, Redline, Sync/offline, Search) Requirements Review
- Review & Report GIS Data, Map Service readiness for an offline solution

Following the workshop, Schneider Electric will draft a Configuration Requirements Document. This document will be used by Schneider Electric to configure the ArcFM Mobile and Web Solutions in the City Staging Environment, Task Installation & Configuration of the City Staging Environment.

A draft of the document will be provided to the City for review and approval. the City will have up to five (5)-business days to review and approve the document.

Schneider Electric Deliverable(s):
- Lead the on-site workshop as defined
- Draft and final Configuration Requirements Document

The City Responsibilities:
- Identify and schedule the appropriate City staff to attend the workshop
- Provide a conference room equipped with a projector. This conference room should be large enough to host the meeting activities
- Review and approve the Configuration Requirements Document

3 Build

3.1 ArcFM Solution Upgrade

Following the establishment of an upgrade environment at the Schneider Electric office in Ft. Collins, CO, Schneider Electric will migrate and upgrade City's GIS environment electric and fiber databases to ArcFM Solution 10.8.1 and ArcGIS 10.8.1.

During this process, Schneider Electric will recompile and perform unit testing on any changes made to ArcFM Solution. Schneider Electric will apply the ArcFM upgrade process to migrate City's existing ArcFM solutions and custom code to the new 10.8.1 environment.

Schneider Electric Deliverables:
- Upgrade ArcFM Solutions to 10.8.1
- Provide installation and configuration guides

City Responsibilities:
- None

Task Assumptions:
- The City does not have custom code.
- Minor data model and schema changes are required for the upgrade of Responder from 10.2.1 to 10.8.1 and the modification of feature classes to include Global IDs to support implementation of ArcFM Mobile.
- The City will be responsible for the updates required to include Global IDs.

3.2 Build – Responder Custom Components

Following the completion of Task 2.2, Schneider Electric will document a Component Specification for the Responder Customization Requirements. The Component Specifications is a detailed technical requirements document used by the Schneider Electric development resource to build the required components and solutions. A copy of this document will be provided to the City for review and approval. The City will have

up to five (5)-business days to review and approve the document. Development build will begin when this document is approved.

After initial development, Schneider Electric will host an up to four (4)-hour remote meeting to demonstrate the development prototypes to the City. Schneider Electric assumes no major changes will be made to the approved design during this session.

Schneider Electric will then finalize development, unit test, and build the test cases and installation and configuration documentation.

Schneider Electric Deliverable(s):
- Develop approved Responder customizations and configurations
- Draft and final component specification
- Installation and configuration guides
- Test scripts

The City Responsibilities:
- Review and comment on the draft document within five (5)-business days
- Formal approval/sign-off of the document
- Participate in the prototype review

4 Test and Acceptance Planning

Schneider Electric will develop a Test and Acceptance Plan (T&AP) with City that incorporates the OOTB functionality of the upgraded ArcFM solutions (ArcFM, Fiber, and Responder. The T&AP will provide an overall framework for unit, system, integration, performance, and user acceptance testing tasks defined in this scope of work. The T&AP will detail the testing environments, the testing process, the required support for each phase of the testing, test scenarios, and definition of how the acceptance criteria to move the system to the next step in the testing process. The T&AP will be used to define acceptance of the system.

Schneider Electric will Develop the out-of-the-box initial draft of T&AP based on the requirements & acceptance criteria specified in the solution design documentation completed in this scope of work. The draft plan will be provided to City for review and comment.

City is responsible for Developing the associated test cases/scripts that will be executed as part of the Test and Acceptance Plan. City will create Workflow-based test scenarios to perform acceptance testing that will be inserted into the test scenario placeholders. A draft of the City test scripts will be provided to Schneider Electric for review. Schneider Electric will have five (5)-business days to review the test scripts and provide feedback to City.

City will perform a review and suggest changes to the Draft T&AP. The Schneider Electric Team then will update the Draft T&AP based upon mutually agreed upon comments and suggestions provided by City. Both groups then approve the final T&AP.

City is responsible for providing written acceptance of the final Test and Acceptance Plan document within three (3)-business days or less of receipt. Test and Acceptance Plan approval must occur ten (10) days prior to the start of the testing phase. Testing cannot commence unless both Schneider Electric and City have approved the plan

Schneider Electric Deliverable(s):
- Create a draft version of the Test and Acceptance Plan
- Lead a review of City comments on the document
- Review City test cases/scripts as defined
- Apply mutually agreed upon changes to the final version of the document

City Responsibilities:
- Review and comment on the draft Test and Acceptance Plan document with five (5)-business days.
- Ensure that the appropriate City personnel are invited and attend the Test and Acceptance Plan comment review conference call
- City development of test scenarios/scripts as defined above
- City approval/sign-off of the Test and Acceptance Plan

5   Installation & Configuration of the City Staging Environment

Schneider Electric will provide the City support in setting up an the upgraded ArcFM and ArcGIS Staging environment at City. This task includes the following:

- Installation and configuration of the upgraded Schneider Electric solutions defined in this scope of work. This task will be completed on-site for up to 10-business days.

The following will be completed remotely through a City provided VPN connection:
- Implementation of the Responder customizations developed in Task 3.2
- Installation and configuration of Core ArcFM Mobile, to include:
  - Build Redline Map Service
  - Setup City of Columbus Mobile Tenant (non-Prod Azure tenant)
  - Setup Authentication, Users and Roles
  - Setup on-premise Mobile/Solution Center, Redline Service, Sync Service and Desktop Tools
  - Configure Mobile Solution (Offline, Sync, Redline, Search, Basemaps)
- Installation and Configuration of Core ArcFM Web

City is responsible for providing a VPN connection to the Staging environment, the availability of the Staging environment, resolution of any hardware and third-party applications outside of the Schneider Electric solution software suite.

Schneider Electric Deliverable(s):
- Provide onsite support to the City for the implementation and upgrade of the City Staging Environment as defined
- Provide remote installation and configuration support for the Responder customizations, ArcFM Mobile, and ArcFM Web
- Install and configure the Schneider Electric solution listed above

City Responsibilities:
- Install and configure the Staging environment
- Install and configure SQL Server 2017
- Provide remote DBA level access for Schneider Electric to perform database specific tasks

Task Assumptions:
- Hardware and operating system software are in place to support the Staging environment implementation.
- The City will provide Schneider Electric VPN access.

6 Testing

6.1 Factory Acceptance Testing (FAT)

Schneider Electric will conduct a remote unit testing in the City Staging environment. Testing will include the ArcGIS/ArcFM Solution upgrade, developed components, ArcFM Mobile, and ArcFM Wed using the approved Test and Acceptance Plan.

The Schneider Electric team will resolve all Severity 1 (S-1) and Severity 2 (S-2) defects (as defined in Task 6.2), as required, and update the solutions. If no issues are identified based on compliance with the test plan, FAT will be considered complete.

Schneider Electric Deliverable(s):
- Remote Factory Acceptance Testing
- FAT Defect report
- Defect resolution report

City Responsibilities:
- Staging environment support as required (IT and/or business)
- Remote availability for regression testing of resolved FAT defects

6.2 System Acceptance Testing (SAT)

Following the completion of Task , City shall perform System Acceptance Testing for the Schneider Electric solutions implemented in Task 5 using the approved Test and Acceptance Plan.

The City team members shall record any issues discovered during testing in the issue tracking system. Schneider Electric will provide a resolution for all discrepancies and will resolve all Critical or High issues before completion of user acceptance testing and provide installers should the resolution require a new installer to be created.

When the City finds a discrepancy, they will first attempt to validate the discrepancy by reproducing the discrepancy before reporting it to Schneider Electric. Schneider Electric will work to validate the discrepancy. If Schneider Electric can validate the discrepancy, it will be recorded as a defect and classified as one of four defect priority levels (reference the descriptions in the table below).

If Schneider Electric cannot validate the discrepancy, Schneider Electric will ask the City testing team to either provide more information or to demonstrate how and where the discrepancy occurs. Based on this information, Schneider Electric will work further to identify the source of the discrepancy. Schneider Electric may determine that the discrepancy is not a custom component or application problem but instead a problem with non-application software, the network, an operator's use of the system, or a misunderstanding about how the system's business rules work.

If Schneider Electric cannot replicate a reported discrepancy, or if the City testing team cannot demonstrate it, or if it is determined by Schneider Electric that the discrepancy has another cause not related to the Schneider Electric scope of work, then Schneider Electric will notify The City testing team that the problem is not a software defect and identify the cause of the defect. If appropriate, Schneider Electric will recommend an action to take, or an acceptable workaround.

Severity	Description
S1 Critical	A Severity 1 defect means that the application or process does not work as defined in the approved Design Document and the application or process is stopped with no work around. The defect(s) may affect multiple users on frequently used functions.
S2 High	A Severity 2 defect is less severe than a Severity 1 defect, but is the result of a significant problem(s). The defect severely impairs the process and reduces user productivity. No work around has been identified by Schneider Electric. It could be a major problem, which affects a limited number of users or affects functionality not needed daily.
S3 Medium	A Severity 3 defects means that the process has been impaired but has a Schneider Electric recommended work around. The user can function near the expected productivity level. Internal geodatabase structures are accurate and maintain their integrity.
S4 Low	A Severity 4 defect does not have a significant impact on the process and reflects a minor problem(s).

During SAT, Schneider Electric will fix all severity 1 and 2 defects as required and issue new releases to the City. If no issues are identified based on compliance with the approved design documentation, SAT will be considered complete and the City will be responsible for providing written acceptance of the delivered applications. System Acceptance Testing must be approved prior to Cut-Over and Go-Live activities.

Schneider Electric will provide the following support during SAT:

- Up to four (4)-business days of onsite SAT support for the upgrade.
- Up to four (4)-business days of onsite SAT support for the Responder customizations.
- Up to two (2)-business days of onsite SAT support for ArcFM Mobile and Web.
- Remote issue resolution and regression testing support.

Schneider Electric Deliverable(s):
- Provide SAT support as defined above

- Resolve Severity 1 and Severity 2 defects

City Responsibilities:
- Perform Acceptance Testing
- If required, provide remote access to the testing environment for Schneider Electric technical personnel
- Provide final acceptance of the solution prior to Cut-Over or Go-Live activities

7 Training

The following training courses will be provided by Schneider Electric to the City during the project. Schneider Electric and the City will mutually agree on a schedule for the training courses that will consider resource availability and not create substantial delays in project completion.

7.1 Advanced Working with ArcFM

This intensive two (2)-day course builds on the skills gained from the Working with ArcFM training. This class provides attendees with advanced exploration of ArcFM functionality inside ArcMap. Content will be delivered in the form of process-oriented lectures accompanied by real-world exercise scenarios. Hands-on, experiential learning is the focus as attendees examine the entire range of advanced analysis, advanced editing, and advanced output of utility data.

Included in this course:

- ArcFM Favorites
- Quality Assurance/Quality Check tools, including ArcFM QA/QC
- ArcFM Utility specific traces
- Symbol formatting and labeling, including ArcFM Stored Displays
- Map Printing and exporting, including ArcFM Insets and ArcFM Map Books
- Efficiency enhancing techniques, including toolbar and keyboard shortcut creation

Schneider Electric Deliverable(s):
- Two (2) Advanced Working with ArcFM courses

The City Responsibilities:
- Ensure the appropriate participation from City resources
- Provide the hardware and meeting space required for the workshop including training machines and overhead projector
- Have appropriate software installed on training computers

Task Assumptions:
- Schneider Electric will provide two (2) sessions of the Advanced Working with ArcFM course
- The City will host all training activities and provide all system administration to prepare the training facilities.
- Each class enrollment will be limited to a maximum of 10 attendees.

7.2 What's New in 10.8.1

Schneider Electric will create a "What's New in ArcFM and Responder 10.8.1" presentation. The document will include descriptions of changed functionality with supporting screenshots for core ArcFM and Responder 10.8.1 solutions.

Schneider Electric will travel to the City offices to lead an on-site functionality review workshop based on the document. The workshop will focus on demonstrations and discussions outlining the additional and changed functionality in ArcFM and Responder 10.8.1. The workshop activity will be completed during the "Working with Responder" course defined below.

Schneider Electric Deliverable(s):
- Draft the "What's New in ArcFM Solution 10.8.1" presentation
- Provide the on-site workshop

City Responsibilities:
- Ensure attendance of appropriate City personnel
- Provide the meeting space required for the workshop including overhead projector

Task Assumptions:
- The City will host all training activities and provide all system administration to prepare the training facilities.

7.3 Working with ArcFM Mobile

This one (1)-business day on-site course is geared towards enabling trainers of mobile end-users to provide the foundation needed to effectively use the utility-based mobile application. This course will familiarize participants with the mobile tools available to The City. The training course will include a series of progressive lectures, demonstrations, hands-on exercises, and processed-based work scenarios. By the end of the course, participants will understand the full functionality of the ArcFM Mobile application and how it can best be used within a utility-specific context.

Schneider Electric Deliverables:
- Working with ArcFM Mobile training

The City Responsibilities:
- Ensure the appropriate participation from City resources
- Provide the hardware and meeting space required for the workshop including training machines and overhead projector
- Have appropriate software installed on training computers

Task Assumptions:
- The City will host all training activities and provide all system administration to prepare the training facilities.
- The class enrollment will be limited to a maximum of 10 attendees.

7.4 Working with ArcFM Web

This one (1)-day on-site course is a modular course designed for first time users, administrators and trainers. The lectures and exercises in the course cover the following items: installation, post-installation configuration, creating and configuring a site,

creating viewers, configuration and working with utility traces and adding and working with map services and tools.

Schneider Electric Deliverables:
- One (1)-day ArcFM Web course

City Responsibilities:
- Ensure the appropriate participation from City resources
- Provide the hardware and meeting space required for the workshop including training machines and overhead projector
- Have appropriate software installed on training computers

Task Assumptions:
- The City will host all training activities and provide all system administration to prepare the training facilities.
- The class enrollment will be limited to a maximum of 10 attendees.

7.5   Working with Responder

This three (3)-business day course provides a detailed overview of the complete end-user functionality offered by our out-of-the-box Responder product; a GIS-hosted, distributed Outage Management System. Course content is structured around four main modules: Responder Web Browser, Responder Explorer, Responder in ArcMap, and Responder Archive, divided into a series of sub modules covering the complete range of Responder functionality from call entry, reporting, and customer callbacks to incident management, crew dispatch, and switching/restoration orders. Conceptual lecture presentations are coupled with real world exercise scenarios based on the fictitious town of Schneiderville to provide attendees with a truly hands-on, experiential approach to learning Responder in its entirety.

The modular structure of this course allows clients to select and arrange the sections of their choosing in a 'cafeteria style' training approach with the intent of offering targeted, job-specific instruction to various groups across their organization; customer service representatives, dispatchers, operators, etc. The Schneider Electric Education Team can offer suggestions regarding section selection and sequencing for maximizing training effectiveness based on the client's intended training audiences.

Included in this course:

- Getting to know Responder Web Browser, Responder Explorer, Responder in ArcMap and Responder
- Archive
- Call Entry
- Creating an incident
- Managing incidents
- Tracing
- Switching orders

The following is in addition to the core Working with Responder training course:

The City will identify 5-10 Responder job-specific (real-world) scenarios after the Working with Responder training by Schneider Electric. After completion of this course,

Schneider Electric will draft the scenarios in the form of a job-aid to be compiled in one document with no page breaks and will not be more than 20 pages total. A draft version of the Job-Aids will be provided to the City for review and approval. The City will have up to five (5)-business days to review and approve. Schneider Electric will update the document based on mutual agreed revisions.

Schneider Electric Deliverables:
- Working with Responder Training
- Draft and Final Job Aids

City Responsibilities:
- Provide the Responder Job Aid scenarios to Schneider Electric after training.
- Review and approve the Responder Scenario Job Aid drafted by Schneider Electric
- Ensure the appropriate participation from City resources
- Provide the hardware and meeting space required for the workshop including training machines and overhead projector
- Have appropriate software installed on training computers

Task Assumptions:
- The City will host all training activities and provide all system administration to prepare the training facilities.
- Schneider Electric will provide two (2) sessions of the Working with Responder Training. Two (2) classes will be provided as a split-shift during the three (3)-business day session and will be provided for up to five (5) attendees.

7.6   Configuring Responder

This three (3)-business day course focuses on the skills necessary to maintain a Responder OMS system. The course will include discussion and hands-on exercises that will concentrate on the Responder configuration tools: Models Names, Responder Server, Responder Clients, ArcMap, Responder Web, and Troublemaker.

 The course will also cover the Operational Drivers for OMS, ArcFM Enterprise, Responder Key Elements, the Responder System Architecture and how it works. This course is intended for Responder administrators and data managers, as well as developers and third-party implementers. Ample exercise time simulates a working situation through pre-designed exercises and scenarios. By the end of the course, participants will understand the basic functions of the application and how it can be configured.

Included in this course:

- Responder's Four Components
- Database Fundamentals
- Enabling MSMQ
- ArcFM System Tables
- Responder and Responder Archive Databases
- Adding Users
- Responder Roles and Permissions
- ArcFM and Responder Model Names
- Responder Server Configuration

- Responder Client Configuration
- Configuring Responder Line Display
- Configuring Responder Web
- Configuring Responder Map Service
- Configuring Switching Orders
- Optional Responder Configuration
- Configuring Troublemaker

Schneider Electric Deliverables:
- Three (3) day on-site Responder Configuration Training

City Responsibilities:
- Ensure the appropriate participation from City resources
- Provide the hardware and meeting space required for the workshop including training machines and overhead projector
- Have appropriate software installed on training computers

Task Assumptions:
- The City will host all training activities and provide all system administration to prepare the training facilities.
- The class enrollment will be limited to a maximum of five (5)-attendees.

8 Go-Live

This milestone task identifies when the City end-users begin performing edits within the upgraded ArcFM Solution 10.8.1 environment. All testing must be completed and approved prior to the start of this project phase.

8.1 Production Migration Support

Schneider Electric will provide up to five (5)-business days of on-site technical support to assist City in the migration of configured City Staging Environment to the Prod Environment. This task includes the installation and configuration of ArcGIS Enterprise, ArcGIS for Desktop 10.8.1, and the upgraded ArcFM Solutions, Responder Customizations, and ArcFM Mobile, and ArcFM Web.

This effort will ensure that the component, software installation, application configuration, and any IT issues are addressed, and the solution is ready for City production deployment.

Schneider Electric Deliverable(s):
- On-site support for the installation and configuration of the components and code listed above to the City Production Environment

City Responsibilities:
- Lead the effort to prepare the Production Environment.
- City is responsible for all hardware, operating system and any 3rd party vendor related issues.
- Provide VPN access to the Geodatabase for the remote technical resource to enable quick troubleshooting of any issues identified during this time.

- Provide remote access so the implementation team technical resource can work with City operators directly.

8.2   Remote Production Support

Schneider Electric will provide up to 40-hours of remote technical support over a four (4)-week period to the City.

This support is intended to provide the City end-users and IT staff with technical personnel who can assist with answering any questions related to use and configuration of the Schneider Electric ArcFM solution suite. Schneider Electric will fix all Severity 1 and Severity 2 defects as required and issue new releases to the City during this period.

Schneider Electric Deliverable(s):
- Provide remote support as defined

City Responsibilities:
- Provide remote access to the Geodatabase for technical resource to enable quick troubleshooting of any issues identified
- The City will be responsible for RDBMS issues (system access and network traffic)
- Provide access via VPN

Project Schedule

The following project schedule has been provided as tentative, and will be finalized with the City project manager upon approval of the project and signature of the scope of work.

WBS	Task Name	Duration	Start	Finish
1	Project Initiation	5.5 days	11/2/20	11/9/20
2	Analysis & Design	36 days	11/9/20	1/13/21
2.1	System Architecture Design	12 days	11/9/20	11/30/20
2.2	Responder Requirements Finalization	14 days	11/30/20	12/18/20
2.3	ArcFM Mobile & Web Configuration Requirements	10 days	12/18/20	1/13/21
3	Build	52 days	11/30/20	2/22/21
3.1	10.8.1 Upgrade - OOTB	14 days	11/30/20	12/18/20
3.2	Build Responder Components	38 days	12/18/20	2/22/21
4	Test & Acceptance Planning	17 days	1/13/21	2/5/21
5	Installation and Configuration of Columbus New Staging	22.5 days	2/22/21	3/24/21
6	Testing	37 days	3/25/21	5/14/21
6.1	Factory Acceptance Testing (FAT)	12 days	3/25/21	4/9/21
6.2	System Acceptance Testing	25 days	4/12/21	5/14/21
7	Training	29 days	5/17/21	6/25/21
7.1	Advanced Working with ArcFM	2 days	5/17/21	5/18/21
7.2	"What's New in 10.8.1"	3 days	5/19/21	5/21/21
7.3	Working with ArcFM Mobile	1 day	5/25/21	5/25/21
7.4	Working with ArcFM Web	1 day	5/26/21	5/26/21
7.5	Working with Responder	22 days	5/27/21	6/25/21
7.6	Configuring Responder	3 days	6/10/21	6/14/21
8	Go-Live	29 days	6/10/21	7/22/21
8.1	Migrate Columbus Staging to New PROD Env	5 days	6/10/21	6/16/21
8.2	Remote Production Support (40hrs over 4 Weeks)	4 wks	6/17/21	7/22/21

Services Quote

Date:	20-Aug-20	
Quote Number:	2020-2654	
Receiving Party:	City of Columbus	

We are pleased to submit the following Fixed Price Quote for:

ArcFM Upgrade

PROPOSED SERVICES		
TASK ID	**TASK DESCRIPTION**	**COST**
1	Project Initiation	$15,300
2	Analysis and Design	
2.1	System Architecture	$22,430
2.2	Responder Requirements Finalization	$30,865
2.3	ArcFM Mobile and ArcFM Web Requirements	$16,435
3	Build	$73,195
4	Test and Acceptance Planning	$19,900
5	Installation and Configuration Staging	$48,520
6	Testing	
6.1	FAT	$23,830
6.2	SAT	$57,280
7	Training	
7.1	Advanced ArcFM	$24,440
7.2	What's New in 10.8.1	$7,665
7.3	Working with ArcFM Mobile	$7,050
7.4	Working with ArcFM Web	$10,830
7.5	Working with Responder	$25,346
7.6	Configuring Responder	$10,375
8	Go-Live	$22,320
	Upgrade Fiber Manager and Conduit Manager	$10,425
	TOTAL SERVICES COSTS:	**$426,206**

Quote is valid for:	**90 days**

DISCLAIMER: The Customer acknowledges that the products or part thereof are produced in, or otherwise sourced from, or will be installed areas already affected by, or that may be affected in the future by, the prevailing COVID-19 epidemics/pandemic and that the situation may trigger stoppage, hindrance or delays in Vendor's (or its subcontractors) capacity to produce, deliver, install or service the products, irrespective of whether such stoppage, hindrance or delays are due to measures imposed by authorities or deliberately implemented by the Vendor (or its subcontractors) as preventive or curative measures to avoid harmful contamination exposure of Vendor's (or its subcontractors') employees. The Customer therefore recognizes that such circumstances shall be considered as a cause for **excusable delay** not exposing the Vendor to contractual sanctions including without limitation delay penalties, liquidated or other damages or termination for default.

Quote is inclusive of all travel and living expenses for on-site work.

This quotation is made in confidence for your review. It may not be disclosed to third parties, except as required by law.

Estimate does not include the cost of any third party software required to perform the services.

The pricing contained in this quotation is based upon Telvent USA LLC's standard terms and conditions and Telvent USA LLC's experience with similar projects. The schedule and price are subject to change based upon the terms and conditions in the final agreement.

Quote Provided by: Mike Coles

Purchase Orders should be directed to: **Telvent USA, LLC**
Attn: Teri Gross
teri.gross@se.com
2620 E. Prospect Rd., Suite 130
Fort Collins, CO 80525

APPENDIX A – City Responder Customization List

The following Responder system requirements will be developed during the project. Any new requirements identified during the requirements workshop defined Task 2.2 will require a change order.

Req #	Requirement Details	Schneider Electric Assumptions
1	**Add / Modify data categories**	
	Modify the Configuration XML to include new domains	None
	Database Changes to accommodate new fields	None
	UI to show the new data fields - Rx Explorer	None
	UI to show the new data fields - Rx Archive Explorer	None
2	**Web based report an outage – Widget needed**	The widget will prompt a user to input the data in the defined format for Phone Number and Address or Phone Number and Last Name. This information will be validated in the Responder system, and in scenario there are multiple accounts for a customer, will prompt the user to validate the Customer Account from the selected list of accounts and submit an outage.
	Widget UI Design	None
	Widget Workflow (Phone Number and Street Number)	None
	Webservice to identify the Customer by Phone Number and Street Number	None
	Widget using IVR Endpoint to submit the Customer Outage	None
3	**Search switch procedure by switch procedure number**	None
4	**Responder Archive – search by incident #**	None
5	**Responder Explorer – Add to call tab: Customer address, Feeder involved, and Call back phone number**	None
6	**Add table/view for Tableau to pull data for reporting**	The deliverable is to generate a view with the data that is required. No new data tables from Responder will be required for the customization except for the lookup values.
9	**Text Notification**	
	Submit Rule to Stew for defined duration	None