

INTRODUCED: December 9, 2019

AN ORDINANCE No. 2019-339

To authorize the Chief Administrative Officer, for and on behalf of the City of Richmond, to accept in-kind goods and services in the form of a facility upgrade, supplies, installation services, and additional equipment valued at \$142,803.35 from the Commonwealth of Virginia 9-1-1 Services Board, for the purpose of funding costs for improvements to the 9-1-1 call handling equipment within the City’s emergency communications network.

\_\_\_\_\_  
Patron – Mayor Stoney

\_\_\_\_\_  
Approved as to form and legality  
by the City Attorney  
\_\_\_\_\_

PUBLIC HEARING: JAN 13 2020 AT 6 P.M.

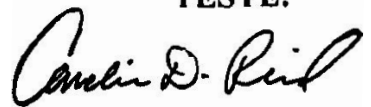
THE CITY OF RICHMOND HEREBY ORDAINS:

§ 1. That the Chief Administrative Officer is authorized to accept in-kind goods and services in the form of a facility upgrade, supplies, installation services, and additional equipment valued at \$142,803.35 from the Commonwealth of Virginia 9-1-1 Services Board for the purpose of funding costs for improvements to the 9-1-1 call handling equipment within the City’s emergency communications network.

§ 2. This ordinance shall be in force and effect upon adoption.

**A TRUE COPY:**

**TESTE:**



**City Clerk**

AYES: 9 NOES: 0 ABSTAIN: \_\_\_\_\_

ADOPTED: JAN 27 2020 REJECTED: \_\_\_\_\_ STRICKEN: \_\_\_\_\_



CITY OF RICHMOND
INTRACITY CORRESPONDENCE

O & R REQUEST

4-9358
OCT 30 2019

Office of the
Chief Administrative Officer

O&R REQUEST

DATE: September 18, 2019

EDITION: 1

TO: The Honorable Members of City Council

THROUGH: The Honorable Levar M. Stoney, Mayor

THROUGH: Lenora Reid, Acting Chief Administrative Officer

THROUGH: Jay Brown, Director of Budget & Strategic Planning

THROUGH: Stephen M. Willoughby, Director of Department of Emergency Communications

FROM: Jackie Crotts, Deputy Director, Technology Division of Emergency Communications

RE: Department of Emergency Communications Budget Amendments Submitted to Council

Handwritten signatures and stamps: 12/2/19 RECEIVED, DEC 07 2019, OFFICE OF THE CITY ATTORNEY

ORD. OR RES. No. \_\_\_\_\_

PURPOSE: To authorize the Chief Administrative Officer (CAO) to accept and appropriate the \$165,000 grant funding from the Commonwealth of Virginia 9-1-1 Services Board to the Department of Emergency Communications (DEC) for the purpose of covering the costs needed for the Next Generation 9-1-1 (NG9-1-1) implementation.

We are also asking the CAO to accept in-kind services up to \$142,803.35 paid by the state for AT&T to install the Next Generation Core Services for the City of Richmond on the City's behalf.

REASON: Per council ordinance #2017-120: form of budget amendments submitted to Council, this amendment seeks to accept the awarded \$307,803.35 grant from the state both in the form of funding reimbursements of \$165,000 and in-kind services \$142,803.35 paid by the state on the City's behalf.

RECOMMENDATION: The city administration recommends adoption of this ordinance.

**BACKGROUND:** The commonwealth is implementing Next Generation 9-1-1 (NG9-1-1) because the current analog network that provides 9-1-1 call delivery to Virginia Public Safety Answering Points (PSAPs) is going away. Over the next few years, 9-1-1 service providers will be decommissioning the selective router pairs that comprise the foundation of this legacy analog network. To address this issue, the 9-1-1 Services Board (the "Board") conducted an NG9-1-1 Feasibility Study in 2015 and made the decision to transition to a statewide IP-based infrastructure, known as an Emergency Service IP Network (ESInet). With planning efforts completed, the Board is now focused on implementing NG9-1-1 throughout the commonwealth.

**SOURCE:** (must select all that apply)

**New/increased revenue** (complete the general fund new budget item detail chart)(you must identify the amount of the new revenue or increase in revenue and the reason the new revenue or increase in revenue is available – do this in the Background section above)

**Existing general fund** (complete general fund transfer budget item detail)(you must identify the budget item to be reduced, the amount of the reduction, the reason for the reduction, and an analysis of the impact on each program or subprogram funded by that budget item – do this in the Background and Reason sections above)

**Fund Balance/Reserve/Contingency/Other Funding Source** (you must identify the specific source to be used (e.g. Fund balance, reserve, contingency, or other), the amount of that funding source proposed to be used, and the reason for the use of that funding source – do this in the Background section above)

**FISCAL IMPACT/COST** (current FY):

- **If Adopted:** This will amend the special fund budget ordinance 2019-042. DEC will establish a new NG9-1-1 special fund called the Next Generation 9-1-1 Implementation Special Fund account for the \$165,000 to cover the upfront cost for the call handling equipment (CHE) replacement and upgrade.
- **If Not Adopted:**

**FISCAL IMPLICATIONS** Fiscal implications will be determined as part of the performance-based budgeting approach during the upcoming budget process.

**BUDGET AMENDMENT NECESSARY:** Yes

**REVENUE TO CITY:** Yes

**DESIRED EFFECTIVE DATE:** Upon adoption

**REQUESTED INTRODUCTION DATE:** November 12, 2019

**CITY COUNCIL PUBLIC HEARING DATE:** December 9, 2019

**REQUESTED AGENDA:** Consent.

**RECOMMENDED COUNCIL COMMITTEE:** No committee pursuant to Rule VI(B)(3)(c) for an ordinance appropriating the \$165,000 grant; (2) Finance and Economic Development, November 21, 2019, meeting for any additional ordinance accepting the grant of in-kind services valued at \$142,803,35.



Existing Item – You must show the total appropriation for each modified budget item to receive funds, for your agency

**OR**

New Item – You must show the total appropriation for each modified budget item to receive funds, for your agency

\*for a new item you must reference the next corresponding item # with a (.) decimal point, see ordinance #2017-036, FY2018 Program Level Budget)

<u>TO</u>					
<u>Item #</u>	<u>Title</u>	<u>Program</u> (cost center #)	<u>Subprogram</u> (service code #)	<u>Transfer</u> <u>Amount/New</u> <u>Amount</u>	<u>New Appropriation</u> <u>Amount</u>
<b><u>Grand Total</u></b>					

**\*\*\*Grand total for the New Appropriation Amount MUST match the TOTAL AGENCY budget requested as a result of this ordinance\*\*\***



# COMMONWEALTH of VIRGINIA

## Virginia 9-1-1 Services Board

Jeffrey D. Stern  
Chairman  
VDEM

Hon Kevin W. Hall  
Sheriff  
Vice Chairman  
City of Covington

David A. Von Moll  
Treasurer  
Comptroller

Mary M. Blowe  
Chief Financial Officer  
City of Winchester

Gary Critzer  
Emergency Mgmt/ EMS Dir  
City of Waynesboro

Bruce Edwards  
City of Franklin

Terry Ellis  
Comcast

R. Scott Garber  
Fire Chief  
City of Staunton

Danny Garrison  
Richmond Ambulance  
Authority

Pete Hatcher  
AT&T

Jeffrey T. Merriman  
Verizon Communications

Lee W. Miller III  
Major  
Virginia State Police

Nelson P. Moe  
CIO - VITA

Seth Weise  
Sprint

Kelvin Wright  
Chief of Police  
City of Chesapeake

Jolena Young  
Twin County

Shawn Talmadge  
Office of the Governor  
Advisor

Dorothy Spears-Dean  
PSC Coordinator  
(804) 416-6201

Terry D. Mayo  
Board Administrative  
Assistant  
(804) 416-6197

July 11, 2019

### Richmond City PSAP:

This letter serves as confirmation of the Virginia 9-1-1 Services Board (the "Board") approval of the City of Richmond PSAP's NG9-1-1 funding request for costs needed for NG9-1-1 implementation. The amount awarded is listed below and is based on estimated costs and related information contained in the version of your NG9-1-1 Migration Proposal (also listed below) referenced in your funding request:

<b>PSAP Name and Funding ID</b>	<b>Richmond NG911-056</b>
<b>Date of Award by the 9-1-1 Services Board</b>	<b>July 11, 2019</b>
<b>End of funding period for your grant award (36 months from date of award unless granted an extension by the Board)</b>	<b>July 11, 2022</b>
<b>NG9-1-1 Deployment – Amount Awarded</b>	<b>\$307,803.35</b>
<b>PSAP preference for Board payment on behalf of PSAP for incurred eligible NG9-1-1 expenses: Yes – Direct payment where possible No – Full reimbursement basis</b>	<b>Yes</b>

<b>Migration Proposal Date</b>	<b>November 1, 2018</b>
<b>Migration Proposal NG9-1-1 Service Provider</b>	<b>AT&amp;T</b>
<b>Contract Vehicle upon which the Migration Proposal is based</b>	<b>Fairfax County contract w/ AT&amp;T</b>
<b>Deadline for executing a contract vehicle with the NG9-1-1 Service Provider listed above (3 months after date of award)</b>	<b>October 11, 2019</b>
<b>Scheduled NG9-1-1 Deployment Window</b>	<b>January 2020 – June 2020</b>

Richmond City PSAP  
July 11, 2019  
Page Two

Funding awards are non-binding until a locality selects an NG9-1-1 solutions provider by executing a contract. The Board recognizes this is a local decision. If you wish to accept this funding request using the NG9-1-1 solutions provider listed above, the Board expects your locality to execute a contract vehicle with the identified NG9-1-1 solutions provider within three months of the date of your award, unless the Board grants an extension. However, if requested by the PSAP, ISP staff can prepare a migration proposal for a different NG9-1-1 solution provider and the locality can also submit a funding request using this new migration proposal.

The Board is committed to a statewide deployment of NG9-1-1 that is consistent with NENA's i3 standard and reserves the right to add subsequent conditions to your migration proposal and revise the funding award for this purpose. Funding for any additional non-recurring costs related to these conditions will be considered by the Board and you will receive a revised award letter, if approved.

Since NG9-1-1 deployments will be occurring by selective router regions over a multi-year period, portions of your funding may not be immediately available and may be distributed over different fiscal years. The spending plan below is based on your scheduled NG9-1-1 deployment window listed above and in your migration proposal. This plan lays out when approved funding for each category will be available. The goal is to complete all identified NG9-1-1 ready implementation items (CHE equipment and GIS data) at least three months in advance of your PSAP's scheduled deployment time period.

**NOTE: Before contracting for a service or committing any local funding, you should consult this spending plan and coordinate expenditures with your Regional Coordinator. This action will ensure that you will be reimbursed for any local funds spent for items identified in your migration proposal.**

Depending on the preference you selected in your Proposal Acceptance Letter, the Board may pay some of your NG9-1-1 deployment costs on your behalf. If applicable, the specific costs will be identified in your spending plan included in this letter. Payment for the remaining NG9-1-1 deployment costs will be made on a reimbursement basis.

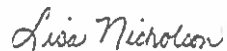
Richmond City PSAP  
July 11, 2019  
Page Three

Fiscal Year	Category	Amount	Payer
FY20	NG9-1-1 NRC	\$4,000.00	Board
FY20	CHE i3 Services	\$15,000.00	Locality
FY21	CHE Replacement	\$150,000.00	Locality
FY20	Text to 9-1-1	\$0.00	Locality
FY20	Voice Logging	\$0.00	Locality
FY20	ECaTS NRC	\$1,000.00	Board
FY20	Rack	\$2,000.00	Locality
FY20	Diversity	\$55,450.81	Board
FY20	GIS Data	\$0.00	Locality
FY20	Legacy 9-1-1	\$77,900.70	Board
FY20	Monthly Delta	\$612.96	Locality
FY21	Monthly Delta	\$1,225.92	Locality
FY22	Monthly Delta	\$612.96	Locality

Finally, funding for approved equipment and services may not be immediately available to the PSAP. ISP staff will provide a spending plan, specific to the PSAP's deployment schedule, that details in which year of the deployment period funding will be available to the PSAP.

If you have any questions, please do not hesitate to contact your Regional Coordinator or me via email.

Sincerely,



Lisa Nicholson  
Public Safety Program Manager



**PARTICIPATION AGREEMENT**

WHEREAS, AT&T Corp. ("AT&T") and Fairfax County are parties to that Contract Number 4400007825 for Next Generation Core Services Solution (NGCS), between the County of Fairfax and AT&T Corp., dated August 8, 2017, including the Acceptance Agreement, the Memorandum of Negotiations, and all attachments and documents incorporated therein (the "Fairfax Agreement"); and

WHEREAS, City of Richmond ("Participant") wishes to purchase certain AT&T ESInet™ services from AT&T under the same terms and conditions provided for in the Fairfax Agreement;

NOW, THEREFORE, PREMISES CONSIDERED, PARTICIPANT AND AT&T AGREE AS FOLLOWS:

1. This Participation Agreement is made between Participant and AT&T (collectively, the "Parties"), and is effective on the date when first signed by both parties. Fairfax County is not a party to this Participation Agreement and takes on no obligations and receives no entitlements as a result of this Participation Agreement.
2. Participant agrees to purchase AT&T ESInet services in accordance with the terms, conditions, and pricing contained in the Fairfax Agreement, as specified in more detail in the "Scope of Work for AT&T ESInet City of Richmond" dated August 20, 2019, and attached hereto as Exhibit A, all of which are incorporated herein by reference.
3. Subject to the availability of funds appropriated therefore, Participant agrees to be bound by and pay for all services ordered and obtained pursuant to this Participation Agreement and agrees that all terms, conditions, rights and remedies under the Fairfax Agreement applicable to Fairfax County are fully enforceable against and exercisable by Participant as if Participant were the "County" or "Fairfax County" under the Fairfax Agreement. AT&T agrees to provide the AT&T ESInet™ services to Participant pursuant to the terms and conditions of the Fairfax Agreement and this Participation Agreement. The payments to be made by the Participant to AT&T for all goods, services and other deliverables under this Participation Agreement shall not exceed \$2,683,296.84, representing all costs the Participant expects to incur through August 7, 2027. Notwithstanding Section 26 ("Principal Billing Agent for a Transition Project") of the Memorandum of Negotiations of the Fairfax Agreement, the Participant will pay some costs and the Commonwealth of Virginia will pay the remainder of the costs owed under this Participation Agreement. The Participant will promptly notify AT&T of the spending plan upon receipt of a final spending plan from the Commonwealth of Virginia.
4. Under this Participation Agreement, all orders for services must be entered no later than August 7, 2025. Services obtained under this Participation Agreement will terminate on or before August 7, 2027, or such earlier date as may be set forth in an individual purchase order.
5. This Participation Agreement may not be assigned by Participant. Any such assignment shall be null and void.
6. AT&T may disclose the fact of Participant's participation to Fairfax County. Such disclosures may include Participant's name, services purchased, monthly or annual usage, total billings and payment status.
7. In the event of a conflict between the terms contained in this Participation Agreement and the Fairfax Agreement, the terms of this Participation Agreement shall control.

8. Any required notices under this Participation Agreement shall be in writing and shall be sent to the office of the recipient set forth below or to such other office or recipient as designated in writing from time to time:

To Participant:

Name: Betty J Burrell  
Title: Director of Procurement Services  
Address: 900 E. Broad Street  
Room 1104  
Richmond, VA 23219

To AT&T:

Name: Pete Hatcher  
Title: Client Solutions Executive  
Address: 4801 Cox Rd  
Glen Allen, VA  
23060

With a copy to:

Jackie Crofts  
Deputy 911 Director  
3516 N. Hopkins Rd  
Richmond, VA 23224

- 9. This Participation Agreement constitutes the entire agreement between the parties. This agreement supersedes all prior agreements, proposals, representations, statements or understandings, whether written or oral concerning the services. This agreement shall not be modified or supplemented by any written or oral statements, proposals, representations, advertisements, or service descriptions not expressly set forth or incorporated by this Agreement.
- 10. Each signatory below represents that he or she is authorized to sign this Participation Agreement on behalf of the party designated.
- 11. This Agreement shall be void if not executed by Customer and received by AT&T within 30 days of the date AT&T executed the Agreement, or if Customer alters, adds or deletes any of the provisions in the version executed by AT&T.

IN WITNESS WHEREOF, AT&T and Participant have caused this Participation Agreement to be executed by their duly authorized representatives as of the date written below.

City of Richmond

AT&T Corp

By: Betty J. Burrell  
(by its authorized representative)

By: Veronica Danao  
(by its authorized representative)

Betty J. Burrell  
(Typed or Printed Name)

Veronica Danao  
(Typed or Printed Name)

Director of Procurement Services  
(Title)

Contract Specialist CGI  
(Title)

10/3/2019  
(Date)

30 September 2019  
(Date)

as623f

**Exhibit A**

**City of Richmond  
Department of Emergency Communications**

**Scope of Work**

**for**

**AT&T ESInet™**

**City of Richmond**

**August 20, 2019**

**Jimmy Lichtenstein  
Application Sales Executive  
AT&T Public Safety Solutions  
615 521-6971  
J17336@att.com**



# Table of Contents

Scope of Work .....	3
Introduction .....	3
Project Overview .....	3
Scope of Services .....	4
Project Time Frame .....	7
AT&T Responsibilities .....	8
Program Management .....	8
Project Management .....	8
Solution Design .....	9
Installation .....	9
Site Survey:.....	10
Test and Turn-up.....	10
AT&T 9-1-1 Resolution Center Support .....	10
Customer Responsibilities.....	12
Site Preparation Delays.....	15
Customer Site Not Ready.....	15
What to Expect During the Site Visit.....	15
Project Governance .....	17
Change Control Process .....	17
Approval and Acceptance .....	17
Acceptance Criteria .....	17
APPENDIX A: SITE ACCEPTANCE FORM.....	19
APPENDIX B: CHANGE REQUEST FORM .....	20
APPENDIX C: EQUIPMENT ORDER LIST .....	21
APPENDIX D: NETWORK DIAGRAM.....	22
APPENDIX E: SITE LIST .....	23
APPENDIX F: AT&T DESIGNATED HOLIDAYS .....	24

# Scope of Work

## Introduction

This Scope of Work ("SOW") is attached to the Participation Agreement and made a part thereof upon execution. The Parties to this Scope of Work ("SOW") are AT&T Corp. ("AT&T") and City of Richmond ("Customer"). The City of Richmond is making a cooperative purchase of Fairfax County Contract No. 4400007825 through the Participation Agreement, to which the Scope of Work will be attached. Services and/or Equipment not specifically provided for hereunder are outside the scope of this SOW. Change Control will be processed by the Parties pursuant to Change Control Process described in this SOW.

## Project Overview

### Solution Summary

AT&T issues this Scope of work (SOW) to implement managed services of an Emergency Services IP network (ESInet). The service will provide managed 9-1-1 call routing, call delivery services, support of SMS to 9-1-1 text messages, call management features, protocol conversion, Automatic Location Identification (ALI) and Automatic Number Identification (ANI) over a managed IP network (the "Service").

The AT&T ESInet Service will provide geographically diverse and redundant IP enabled 9-1-1 routing services over a privately managed, highly secure MPLS network. Each of the MPLS network connections will terminate in separate managed IP routers. As a turn-key solution, AT&T shall closely manage and maintain the end-to-end network.

The AT&T ESInet shall be compliant with the version of NENA i3 standard in effect at the time of system implementation and maintain the NENA i3 standard as it evolves. The Service supports call delivery to both IP enabled NENA i3 PSAP CPE hosts as well as legacy PSAP CPE hosts that are not yet IP capable. The Service also includes management of incoming 9-1-1 calls from Originating Service Provider (OSP) networks.

NENA 71-501 v1 is an informational document that describes a recommended method to synchronize the MSAG and GIS data. Ongoing synchronization between the two or more databases requires periodic MSAG to GIS comparisons to identify discrepancies between the databases, which then need to be manually researched and corrected in either the MSAG, GIS data, or both. The Service supports this method of initial synchronization as well as alternate mechanisms for initial synchronization designed to save Customer time and expense.

Once the legacy MSAG has been replaced with the GIS-based MSAG, the authoritative GIS source data will be used to drive changes to the GIS-based MSAG, replacing the need to manually enter individual MSAG CRs. AT&T refers to the GIS-based MSAG as a "geoMSAG".

## Scope of Services

The following products and/or services ("Services") that are checked "Yes" under the In-Scope column are included in this SOW. Items not checked or are checked "No" under the In-Scope column are not included in this SOW.

Selecting Normal Business Hours ("NBH") refers to Services quoted 8am to 5pm Monday through Friday local time, excluding AT&T Designated Holidays. Selecting after Normal Business Hours ("aNBH") refers to Services quoted after 5pm Monday through Friday local time and all-day Saturday and Sunday, excluding AT&T Designated Holidays. Services may be quoted with both NBH and aNBH in order to meet the project requirements. AT&T Designated Holidays are referenced in Appendix F.

Service Type	In-Scope		Hours Quoted	
	Yes	No	NBH	aNBH
AT&T ESInet™	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ingress Trunk connection(s)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary Managed AVPN Connection(s)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Secondary Managed AVPN Connection(s)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PSAP Abandonment Device (PAD)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Web Portal Access	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard Reports	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transitional Data Management Services (TDMS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EGDMS Training by West (2 sessions)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Text-to-9-1-1 MSRP Service	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dedicated Program Management (VA, MD, DC)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Project Management	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Test and Turn-Up	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## AT&T ESInet™

AT&T ESInet™ will be installed for City of Richmond to provide Next Generation Core Services as follows:

- Core A at the Henrico County PSAP will not be connected until such time as Henrico contracts with AT&T for ESInet Core Services. Core B is at the Richmond PSAP and will have diverse connections to this PSAP.
  - Circuits are being designed with Ethernet POP and access diversity into The City of Richmond.
  - AT&T ESInet routers will be installed by AT&T Technicians.
- This AT&T ESInet™ deployment for The City of Richmond will support the i3 standards.
- Text to 9-1-1 will be provided direct thru the ESInet from the TCC.
- PSAP Abandonment Devices (PAD) will be installed at each PSAP to allow for make-busy operation in lieu of utilization of the Customer Management Portal (CMP).
- During ESInet transition, customer will move from the Verizon provided ALI to the AT&T ALI service.
- Access to the Customer Management Portal will be provided.
- Access and training on the Spatial Interface(SI) for GIS will be provided.

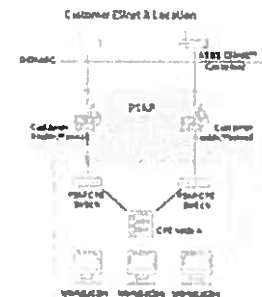
### AT&T ESInet™ Call Handling Demarcation Router/Firewall CPE

The AT&T ESInet™ demarc is the Ethernet port of the AT&T ESInet™ router at each call handling host location. AT&T requires a Layer 3 default gateway device as depicted in following drawing.

- Customer must provide and maintain routers/firewalls to interconnect with AT&T routers.
- Customer CPE must be completely isolated from other IP networks
- Customer router/firewalls must support the BGP routing protocol.
- Uplinks to AT&T routers must be Ethernet patch cables.
- Uplinks to AT&T routers must be set to 100Mbps/full-duplex.

The following are outside the scope of this Scope of work and project scope, to include, but not limited to:

- Call handling hardware upgrades
- Call handling software upgrades
- Call handling SIP or other ESInet termination license



- Call handling Legacy to ESInet transitional professional services
- Call handling Text to 9-1-1 service
- Call Handling training for enhancements provided by ESInet service
- Call handling call taker GUI changes or conversion to new GUI
- Call handling demarcation routers and firewall(s)
- Internet Service for AT&T remote monitoring
- CAD professional services or other cost
- Logging Recorder professional services or other cost
- Dual entrance facility cost



## Project Time Frame

**Estimated Start Date:** 10/2019

**Estimate End Date:** 10/2020

Start and End dates may vary without any responsibility of AT&T caused by certain circumstances which may include, but are not limited to the following:

- Customer has circuits that must be installed prior to or in conjunction with Equipment.
- Delays caused by AT&T's suppliers and/or subcontractors or Customer suppliers and/or subcontractors.
- Customer not fulfilling their obligations as outlined in the Customer Responsibilities section of this SOW.

A project timeline will be created in coordination with the City of Richmond. The agreed upon timeline will be delivered within 45 days of the customer kick-off meeting, as noted in the Service Level Agreements listed in the Fairfax County Contract No. 4400007825. The specific dates, timelines and tasks will be mutually agreed upon, based on the sample project timeline referenced in the Fairfax County Contract No. 4400007825. Final confirmation of the Project schedule will occur once all lead times for Equipment and resources are secured.

## AT&T Responsibilities

AT&T will be responsible for executing the following activities. Activities not expressly included in this SOW are outside the scope of this project and will be addressed as a Change Order to this SOW or as a new project.

### Program Management

In support of the Services for this Project, AT&T shall assign a dedicated AT&T Program Manager ("AT&T Project Manager") to interface directly with the Customer Project Manager or other Single Point of Contact ("SPOC") as well as other AT&T Project Managers.

The Project Management Team (collectively "PM Team", "PM" or if plural "PMs") as applicable, shall provide project management oversight of the organization, direction and control of all efforts needed to successfully complete the contracted Project requirements.

To successfully manage data networking implementation projects, the AT&T Program Manager may require access to telephone or circuit records pertaining to the Customer's account. If an AT&T Project Management team member needs this access, a Customer Letter of Agency ("LOA") may be required and is expected to be necessary for this Project.

### Project Management

In support of the Services for this Project, AT&T shall assign a designated AT&T Project Manager from the AT&T Global Project Management organization. The AT&T Project Manager will be responsible for AT&T Customer PSAP integration project planning. Throughout the process of implementing the service, AT&T Project Management will collaborate with West Safety Services to participate in on-going Customer PSAP implementations.

The AT&T Project Manager's responsibilities are as follows:

1. Oversees the integration of a PSAP or PSAPs onto AT&T ESInet solution.
2. Hosts customer project meetings (Project kickoff, ongoing, etc.)
3. Creates the Project Plan for PSAP integration
4. Track and verify network between the AT&T ESInet platform to the PSAP
5. Schedule AT&T Technical Field Services installation of network edge equipment at PSAPs
6. Track and verify that the call routing workbook has been completed and provided to appropriate AT&T teams for provisioning
7. Coordinates and schedules pre-cutover testing with all stakeholders

8. Coordinates, schedules and manages PSAP cutover(s)
9. Ensures GeoLink data has been updated after each PSAP has been cutover to ESInet
10. Work Post cut-over issues

## **Solution Design**

A Pre-planning and/or Call Flow Session will be convened with the Customer to discover and share relative information concerning the Project before the work is started. Information discovered during this session will be used during the configuration and testing portions of the Project.

During the Pre-planning and/or Call Flow Session, AT&T and the Customer SPOC will review the following items in preparation for the Project:

- **Site Review** - The Customer Sites will be reviewed, emphasizing equipment location and power requirements, potential data backup facilities, and cut-over requirements set forth by the Customer.
- **Current Network Design** - The current network infrastructure and IP addressing scheme will be reviewed for compatibility with the planned system implementation and adjusted or changed if deemed necessary.

## **Installation**

AT&T will manage the following installation activities:

1. Provide Customer all power and environmental requirements for all Equipment in advance of installation.
2. Confirm with Customer that any site readiness tasks have been completed and the required circuits are provisioned and operational.
3. Verify network and system configuration with Customer SPOC prior to on-site installation.
4. Unpack, inventory and inspect AT&T provided Equipment at the Customer installation Site.
5. Install/rack mount and connect the Equipment into AT&T provided racks or the Customer's existing racks and/or wallboards. Customer must ensure appropriate Equipment racks are located at the agreed upon demarcation points.
6. Provide remote technical support for the AT&T on-site engineer and/or technician during the installation, migration, cutover and implementation testing.

7. Configure and install all Equipment listed in Appendix C at Customer Site(s) as described in the Project Overview section of this SOW.
8. Troubleshoot and replace hardware failures of new Equipment relating to the installation / upgrade of the AT&T provided product.
9. Gather final equipment configurations, serial numbers, drawing mark-ups, and other "as-built" records to forward to on-going support teams (9-1-1 Resolution Center, Global Network Operations center, etc.).

### **Site Survey:**

AT&T Technicians will conduct an on-site site survey of the PSAP and/or Host location. The AT&T Technician will collaborate with the Project Manager, to confirm that site criteria are met and note those which are not and will therefore require remediation. Items to be confirmed during this site survey include but not limited to:

- Backroom & Dispatch: space and climate control requirements
- Power and Environmental requirements
- Structured cable runs (LAN connections from backroom to 911 Operator positions)
- Proper grounding available
- Proper backboard space available as applicable
- Adequate dedicated power sources for the backroom and workstations

### **Test and Turn-up**

AT&T in concert with Customer will manage all aspects of the testing and cutover (Test and Turn-Up) functions applicable to the PSAP.

### **AT&T 9-1-1 Resolution Center Support**

The AT&T 9-1-1 Resolution Center is the single point of contact for the Customer and will manage 9-1-1 Solutions related troubles. This will be accomplished by working with AT&T partner centers as well as with solutions partners that maintain elements or equipment critical to the delivery of 9-1-1 calls or location information. The AT&T 911 Resolution Center can be reached 24 hours a day, 7 days a week, and 365 days a year at **800-553-2811**.

The AT&T 9-1-1 Resolution Center is responsible for coordinating resources to ensure the timely resolution and quick restoration of 9-1-1 services as specified in the Agreement. That includes equipment/software located at the PSAP. In those instances where 9-1-1 service cannot be restored in a timely fashion, the AT&T 9-1-1 Resolution Center will coordinate

contingency/reroute options with the Customer, to ensure 9-1-1 calls complete to a partner Public Safety Agency or backup facility.

Where required and appropriate, the AT&T 9-1-1 Resolution Center and the Customer will coordinate resource efforts and exchange necessary information, configurations and reports to expedite issue resolutions.

The AT&T 9-1-1 Resolution Center will investigate 9-1-1 impact associated with planned maintenance events initiated by AT&T as well as with solutions partners and coordinate contingency options with the Customer.

The AT&T 9-1-1 Resolution Center has pre-established relationships with other AT&T Vendor partners to create an end to end solution for proactively monitoring network elements and customer premises equipment critical to providing 9-1-1 service to the Customer.

## Customer Responsibilities

For AT&T to successfully implement the activities outlined within this SOW, the Customer is responsible for providing the following to ensure the Project is completed on time and within financial limitations:

1. Provide a Customer Project Manager and contact information. This is the Customer's Single Point of Contact ("SPOC") and shall act as the primary interface for the AT&T Project Manager. This individual shall have decision-making authority regarding day-to-day management of the project. This individual shall also be responsible for defining any additional Customer requirements, ensuring Site readiness and implementing any adds, changes or deletions in Equipment and/or facilities for each Site prior to installation of the proposed solution. Customer will promptly notify AT&T if it changes the designated SPOC.
2. Designate a technical point-of-contact that has detailed knowledge of the Customer's network as well as policies utilized.
3. Ensure that AT&T's request for information or documentation needed for this project is delivered within the agreed upon timeframe.
4. Provide input as necessary to AT&T for the development of AT&T ESInet™ solution specific forms, spreadsheets or templates. AT&T will provide forms, spreadsheets or templates for Customer to fill out with requirements so that solution may be properly configured.
  - Some examples of information that AT&T will work with the customer to gather would be items such as:
    - Customer contact information
    - PSAP locations, equipment installed, software releases, etc.
    - Listing of wireline/wireline ESNs, Admin #s, trunk counts, ALI Info, Star/Pound codes, route lists, etc.
    - Confirmation of serving offices & connectivity from other service providers.
5. Provide authorized personnel on-site during Equipment installation, Test and Turn-up.
6. Keep AT&T informed of any information or changes, which may affect AT&T's performance of Services or require a change request in the scope.
7. Provide AT&T with reasonable access to Customer premises (including wiring closets) during Normal Business Hours as needed and shall provide office space to include desks, chairs, as well as access to printers, copiers and phone lines while on-site at no charge. In addition, AT&T may conduct the research and other work from a remote location.
8. For each Site to be deployed, provide local site contact name, telephone number, address, and email for both a primary and backup local site contact. This is to facilitate local scheduling issues, Equipment delivery confirmation, and other Site-specific details.

These individuals are accountable to provide any special Site access clearance, escort, safety training or information required. The local site contact shall interface with other organizations as required. This information is to be provided to the AT&T Project Manager for each Site.

9. Provide the AT&T Project Manager a minimum of ten (10) business days' notice for scheduling Equipment Installations. Cancellation or rescheduling with less than five (5) business days' notice may be subject to AT&T's Reschedule/Cancellation Charges.
10. Provide a signature sign-off (see Site Acceptance Form, Appendix A) as concurrence of Site completion for each Site where AT&T has provided Services under this SOW.
11. Provide a list of users, security levels and access privileges. Define the system administration, security policies and any other special requirements to be implemented in the system.
12. As specified for each Site, ensure that proper environmental conditions specified by product manufacturer are in place. This includes but is not limited to adequate power and grounding. AT&T shall not proceed with the Equipment installation until Customer has made such modifications and changes as required.

○ **General Facility Requirements**

- Secured storage for AT&T-supplied equipment shipped to the Customer Facility for storage prior to installation.
- Safe, locked, and limited access to the equipment room, including adequate security to prevent theft of computer equipment.
- The necessary consent from the landlord, the building owner, the mortgager, and/or any other third parties having an interest in the installation site, to install the system and to assist in obtaining any other necessary approvals and permits for same.
- Working space, access to computers and other technology, telecommunications equipment, and any other services and materials that may be reasonably necessary for installation of the PSAP Network Edge Equipment.
- 24 x 7 access for problem isolation.
- Procure, install, maintain, and support all cabling to interconnect between the PSAP Network Edge Equipment and any components provided by third-party vendors or the Customer CPE.

○ **Equipment Room Requirements**

- Equipment room floor must be capable of supporting 104 pounds per square foot.
- Equipment room must be dry, clean, and well ventilated.
- Equipment room must be well lit, easily accessible, and free from excess vibrations.
- Identification of space where the equipment rack will be located so that it does not receive consistent building traffic.

- The Customer must provide 48 inches by 19 inches by 32 inches of floor space, where possible, for the PSAP Network Edge Equipment cabinet to be located, within 20 feet of the main telecommunications demarcation point.
  - A PSAP Network Edge Equipment cabinet measures 24 inches by 39 inches. However, 24 inches of space in front and behind the rack is required, and 36 inches between the end of the racks and the wall is recommended for proper airflow, installation, and maintenance.
  - If the Customer wants to place the PSAP Network Edge Equipment into a pre-existing rack, it will require 12 contiguous Rack Units of rack space in a single rack.
- **Power**
- The Customer is responsible for providing power, ground, and environmental controls for the PSAP Network Edge Equipment to be installed in the equipment room, as follows:
    - Two (2) dedicated 110 volt/20 amp power feeds are required with A & B feed (separate power source) and receptacle plug type NEMA L520R twist lock.
    - Any metallic component that is part of the Customer PSAP infrastructure (such as equipment, racks, ladder racks, enclosures, cable trays, etc.) must be bonded to the grounding system.
  - If a facility-based UPS is available, it can be used – provided that it is sized appropriately to account for additional amperage requirements to the Service.
- **HVAC**
- The facility will have adequate HVAC controls, monitoring, and redundancy.
  - Cooling for maximum heat output under full load is 4,000 BTU/hour.
  - HVAC systems must maintain constant dry bulb temperature between 68° - 77° Fahrenheit.
  - Relative humidity between 40% and 55%.
  - Surge/lightning protection
13. Facilitate the Interface with Customer's equipment vendors during the installation and testing to make network changes required to make the equipment & services operational. For example: engage Voice Recorder, CAD, Mapping or Radio vendor as needed.
14. Assume sole responsibility for the condition and/or readiness of Cable Plant or its ability to transport or sustain proper electrical and optical data signals as required by the operational specification requirements for the Equipment. Verify all distance and interference limitations of interface cables to be used and that all necessary cabling, power and grounding is delivered and installed prior to the installation date.
15. Update the configurations of those devices and sites that are not identified in this SOW that must communicate to the Equipment deployed as part of the Services provided in this SOW to ensure proper connectivity in addition to installing and verifying the operation of all equipment not provided by AT&T.



16. Interface with Customer's network vendors during the installation and testing to make network changes required to make the data/voice network operational. For example: order, install and test all non-AT&T data and voice circuits prior to the installation date.
17. Provide remote access to the Customer network via VPN.
18. Ensure all legacy equipment used for redeployment is operational and satisfies the requirements for this project. Customer assumes complete responsibility associated with troubleshooting and/or failure of any legacy equipment as it relates to this project.
19. Validate that legacy equipment related to Services provided in this SOW, has appropriate software levels, sufficient memory and hardware modules to support the new Customer network design requirements.
20. Provide all cabling required connecting downstream local area network devices to the Equipment.
21. Removal of Equipment packaging materials/trash.

The Customer is required to provide a safe work environment and ensure that all Customer Responsibilities have been met or will be completed by the agreed upon date. The Customer must be prepared and have appropriate staff designated to test and accept service on mutually agreeable due dates.

### **Site Preparation Delays**

AT&T will negotiate a Project schedule with all parties to enable service completion as close to the Customer's desired date as possible, however, any changes to plans or any delays associated with site preparation can have a corresponding impact to the service delivery date.

### **Customer Site Not Ready**

The Customer must have their site ready by the negotiated ready date to avoid any delays in providing the requested service. If delays are anticipated, the Customer should contact their AT&T Project Manager (PM) as soon as they are aware of the problem, to allow for work forces to be re-scheduled.

### **What to Expect During the Site Visit**

In order to facilitate a successful Site Survey, please review the following recommendations:

- On the date of the Site Survey, the SPOC must be on site to assist the AT&T representatives with the Site Survey.
- After the Site Survey is completed, it is critical that the SPOC addresses all site requirements in a timely manner; otherwise the order could be delayed.

- **After the Customer has remedied any and all needed site requirement issues identified during the site visit, the Customer must notify the AT&T Project Manager that the work is complete.**

## Project Governance

### Change Control Process

- AT&T and Customer will manage all changes to this SOW through a written change request process ("Change Control Process"). Either Party must submit change requests to the SOW document in writing via form at Appendix B.
- The City's Director of Procurement Services is the only authorized person to sign change order documents on behalf of the City
- The party requesting the change must submit a written request to the other party and the receiving party shall issue a written response within five (5) business days of the receipt of the request, including whether the receiving party accepts or rejects the request and/or any changes to the Terms and Conditions, pricing, performance schedule, or all. Once agreed, both parties must execute the document.

### Approval and Acceptance

AT&T shall present Site Acceptance Form (Appendix A) to Customer for signature upon completion of the Service(s), by site or by Project as the Parties may agree. Customer shall have five (5) business days from receipt of the Site Acceptance Form to execute it or notify AT&T in writing of its reasons for rejection ("Rejection"). In the event there is no response from Customer within the five (5) business days, the Services shall be deemed Accepted. In the event of a Rejection, AT&T shall address the issue(s) within ten (10) business days of receipt of the Rejection notice and will then resubmit the Site Acceptance Form per the above process. Time to address any quality of service or re-work issue(s) may be extended by mutual consent of the Parties; however minor discrepancies in Installation or Implementation shall not serve to delay Acceptance.

### Acceptance Criteria

The AT&T ESInet™ Test Plan, that will be provided by your AT&T Project Manager, provides an overview of testing and a list and description of test cases for the implementation of the AT&T ESInet™ services. The objective for this test plan is to demonstrate the network and call processing equipment readiness to receive 9-1-1 traffic using the AT&T ESInet™ service. Test participants include PSAPs and AT&T ESInet™ Service Delivery.

The AT&T ESInet™ Test Cases will demonstrate feature functionality of the AT&T ESInet™. The Test calls will deliver simulated "9-1-1" calls from the AT&T end office to the PSAPs over the AT&T ESInet™ to the call handling equipment installed at the PSAPs.

AT&T manages the testing process and coordinates all test calls documented. The testing is scheduled in accordance with the PSAP's availability. The PSAP may be asked to provide a resource to answer the test calls and to provide documentation (i.e. screen prints and recordings) for certain calls.

The list of standard tests demonstrates feature functionality of the AT&T ESInet™ to include:

- **Operation of the AT&T ESInet™ PSAP Network Edge equipment**
- **Call handling and routing processes:**
  - Call transfer and bridging functions
  - Alternate and default routing
  - Independent i3 component availability
  - PSAP abandonment routing
  - PAD abandonment routing

# APPENDIX A: SITE ACCEPTANCE FORM

CUSTOMER NAME: \_\_\_\_\_

PROJECT NAME: \_\_\_\_\_

Quantity	Services Description or Location	Completion Date

Customer Acceptance:

(Authorized Representative) \_\_\_\_\_

(Typed or Printed Name) \_\_\_\_\_

(Title) \_\_\_\_\_

(Date) \_\_\_\_\_



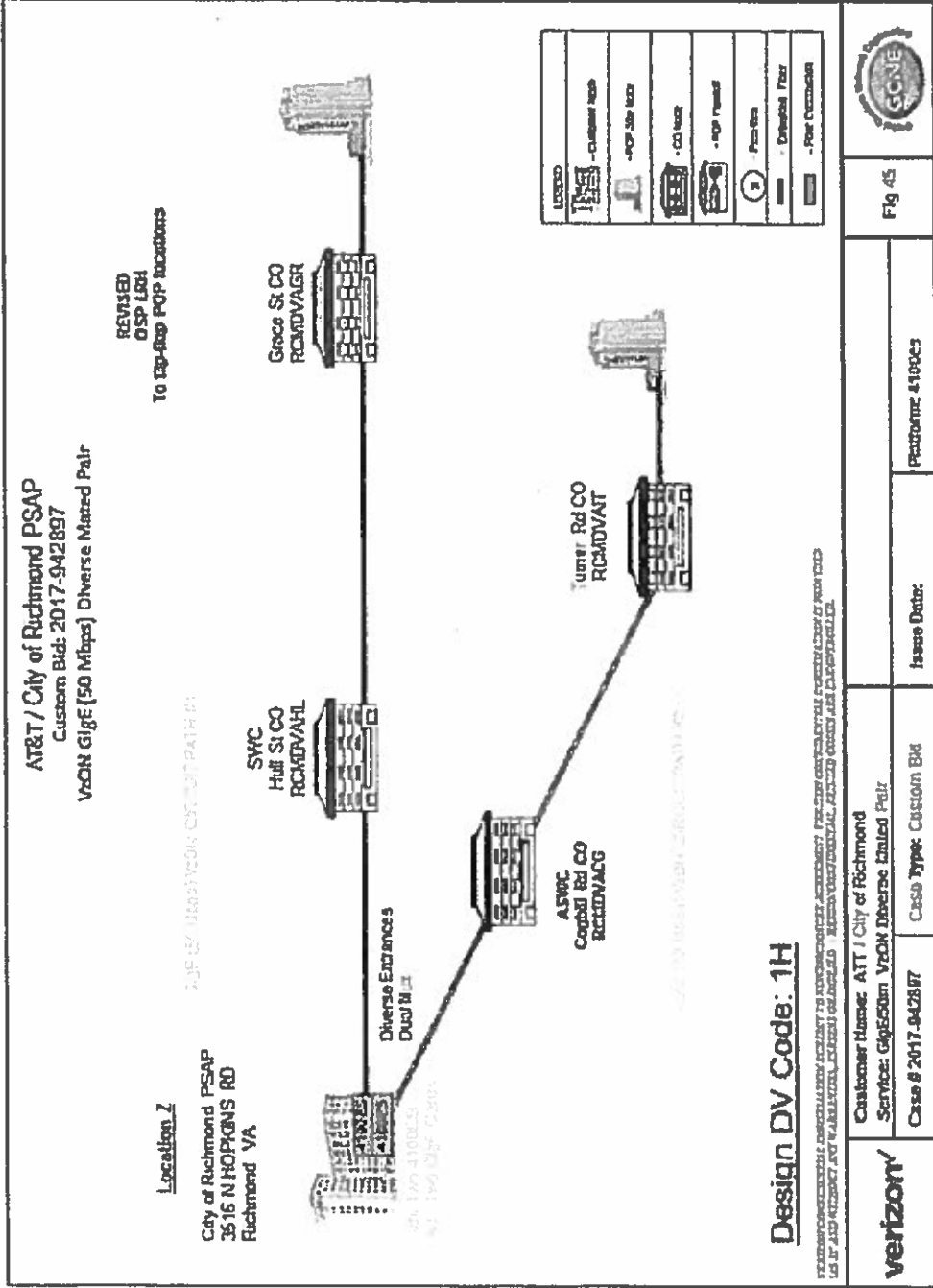
## APPENDIX B: CHANGE REQUEST FORM

<b>Change Request #:</b>		<b>Date of Request:</b>	
<b>AT&amp;T Requestor:</b>		<b>Project Tracking #:</b>	
<b>Title:</b>		<b>Change Priority:</b>	
<b>Nature of the Change Request:</b>			
(Please list specific details explaining the Change):			
<b>To be completed by the Project Manager:</b>			
Impact of Change on the Project (Project time, delivery date, pricing, work orders, etc.):			
[Provide a description of the impact of the change (increase in duration, delay in start, cut over date change, added dependency, additional resources required change to design, change to baseline solution, other)]			
<b>Notes or Additional Information:</b>			
Additional charges for changes requested (if applicable)			

CUSTOMER	AT&T
By: _____ (Authorized Agent or Representative)	By: _____ (Authorized Agent or Representative)
_____ (Typed or Printed Name)	_____ (Typed or Printed Name)
_____ (Title)	_____ (Title)
_____ (Date)	_____ (Date)



# APPENDIX D: NETWORK DIAGRAM







## APPENDIX F: AT&T DESIGNATED HOLIDAYS

<b>AT&amp;T Designated Holiday</b>	<b>Date Observed</b>
New Year's Day	January 1
Memorial Day	Last Monday in May
Independence Day	July 3
Labor Day	1st Monday in September
Thanksgiving Day	4th Thursday in November
Day After Thanksgiving	4th Friday in November
Christmas Day	December 25