

A G R E E M E N T

THIS AGREEMENT (“Agreement”) is made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the “City”) and **ISC, Inc.**, a Wyoming Corporation, D/B/A Venture Technologies, registered to do business in Colorado, whose address is 401 East E. Street, Casper, WY 82601 (“Contractor”), jointly “the parties.”

RECITALS

WHEREAS, the Contractor is an authorized reseller of products and services provided by West Safety Services, Inc and West Safety Solutions, Inc; and

WHEREAS the Contractor has agreed to provide the City with a replacement emergency 911 phone system, described below, at existing and new locations and as part of that effort shall provide the City with fully functional equipment and software, services, training and support as set out in the attached exhibits and within the timeframe agreed to by the parties.

IT IS HEREBY AGREED BETWEEN THE PARTIES AS FOLLOWS:

The recitals set forth above are incorporated herein as set forth in their entirety.

1. SOFTWARE LICENSE, SUPPORT, HARDWARE AND MAINTENANCE TO BE PROVIDED AND SERVICES TO BE PERFORMED:

A. Contractor, under the general direction of, and in coordination with, the City’s Chief Information Officer or other designated supervisory personnel (the “Manager”) agrees to perform the technology related services (the “Statement of Work” or “SOW”), provide the software (the “Software”), network support and deliver and install the hardware, as shown on **Exhibit A**, and provide the software support and maintenance services described on attached **Exhibit B**, at the unit pricing shown on **Exhibit C**.

B. As the Manager directs, the Contractor shall diligently undertake, perform, and complete all of the services and produce all the deliverables set forth on to the City’s satisfaction.

C. The Contractor is ready, willing, and able to provide the services required by this Agreement.

D. The Contractor shall faithfully perform the services in accordance with the standards of care, skill, training, diligence, and judgment provided by highly competent individuals performing services of a similar nature to those described in the Agreement and in accordance with the terms of the Agreement.

2. GRANT OF LICENSE AND SOFTWARE.

A. License Grant. Subject to these Terms, Contractor grants to City a personal, nonexclusive, nontransferable, non-sublicensable, license to use the Software at the location (“Site”) and on the number of servers, workstations and users or other applicable metric set forth in the Order, solely for City’s internal purposes, to copy the Software onto a storage device and to make one copy solely for backup and disaster recovery purposes.

B. Restrictions. City will not itself, or through any Affiliate, agent or other third party: (a) sell, lease or sublicense or otherwise transfer the Software; (b) decompile, disassemble, reverse engineer or otherwise attempt to derive source code from the Software; (c) modify or enhance the Software or write or develop any derivative software or any other functionally compatible, substantially similar or competitive products; (d) network the Software or use the Software to provide processing services to third parties, commercial timesharing, rental or sharing arrangements or otherwise use the Software on a service bureau basis; (f) provide, disclose, divulge or make available to, or permit use of the Software by any third party without Contractor’s prior written consent; or (g) use or copy the Software except as permitted hereunder.

C. Service Guides. Attached as **Exhibit E** are two Services Guides, “TXT29-1-1 Power Channel Service Guide” and “TXT29-1-1 Power Service Guide” both of which describe, in part, the functionality of the Software, hardware and services provided by Contractor hereunder. Exhibit E is incorporated herein.

3. DELIVERY AND ACCEPTANCE:

A. Contractor shall deliver the software and hardware and perform the services in accordance with the SOW.

B. Upon installation and configuration of the Software and hardware, the City will test and evaluate same to ensure that it conforms, in the City’s reasonable judgment, to the specifications outlined in the Agreement and any available documentation. If the Software or hardware does not conform, the City will so notify Contractor in writing within sixty (60) days. Contractor will, at its expense, repair or replace the nonconforming product within fifteen (15) days after receipt of the City’s notice of deficiency. The foregoing procedure will be repeated until the City accepts or finally rejects the product, in whole or part, in its sole discretion. In the event that the Software or hardware contains a defect or nonconformity not apparent on examination, the City reserves the right to repudiate acceptance. In the event that the City finally rejects the Software, or repudiates acceptance of it, Contractor will refund to the City all fees paid, if any, by the City with respect to the rejected product.

C. If the City is not satisfied with the Contractor’s performance of the services described in the SOW, the City will so notify Contractor within thirty (30) days after Contractor’s performance thereof. Contractor will, at its own expense, re-perform the service within fifteen (15) days after receipt of City’s notice of deficiency. The foregoing procedure will be repeated until City accepts or finally rejects the service in its sole discretion. In the event that

City finally rejects any service, Contractor will refund to City all fees paid by City with respect to such service.

E. The Contractor shall warrant the hardware for a period of one year from the date of delivery to the City, unless a longer period is provided by the Contractor. In the event that a product in Exhibit C to be replaced is no longer available, Contractor shall provide an equivalent or better at the same pricing.

4. TERM: The term of the Agreement is from October 15, 2018 through October 15, 2023. The term shall extend past the end date to account for a full year of annual services that are paid for in advance.

5. COMPENSATION AND PAYMENT:

A. Fee: The fee for the deliverables described in Exhibits A, B and C, is \$4,763,980.00 (the “Fee”). The Fee shall be paid pursuant to the City’s Prompt Payment Ordinance and in accordance with any payment milestones in the SOW.

B. Reimbursement Expenses: The fees specified above include all expenses, and no other expenses shall be separately reimbursed hereunder.

C. Invoicing: Contractor must submit an invoice which shall include the City contract number, clear identification of the deliverable that has been completed, and other information reasonably requested by the City. Payment on all uncontested amounts shall be made in accordance with the City’s Prompt Payment Ordinance.

D. Maximum Contract Liability:

(i) Notwithstanding any other provision of the Agreement, the City’s maximum payment obligation will not exceed **FOUR MILLION SEVEN-HUNDRED SIXTY-THREE THOUSAND NINE-HUNDRED EIGHTY DOLLARS** (\$4,763,980.00) (the “Maximum Contract Amount”). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Contractor beyond that specifically described in Exhibits A, B and C. Any services performed beyond those in Exhibits A, B and C are performed at Contractor’s risk and without authorization under the Agreement.

(ii) The City’s payment obligation, whether direct or contingent, extends only to funds appropriated annually by the Denver City Council, paid into the Treasury of the City, and encumbered for the purpose of the Agreement. The City does not by the Agreement irrevocably pledge present cash reserves for payment or performance in future fiscal years. The Agreement does not and is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of the City.

6. STATUS OF CONTRACTOR: The Contractor is an independent contractor retained to perform professional or technical services for limited periods of time. Neither the

Contractor nor any of its employees are employees or officers of the City under Chapter 18 of the Denver Revised Municipal Code, or for any purpose whatsoever.

7. TERMINATION:

A. The City has the right to terminate the Agreement with cause upon written notice effective immediately, and without cause upon twenty (20) days prior written notice to the Contractor. However, nothing gives the Contractor the right to perform services under the Agreement beyond the time when its services become unsatisfactory to the Manager.

B. Notwithstanding the preceding paragraph, the City may terminate the Agreement if the Contractor or any of its officers or employees are convicted, plead *nolo contendere*, enter into a formal agreement in which they admit guilt, enter a plea of guilty or otherwise admit culpability to criminal offenses of bribery, kick backs, collusive bidding, bid-rigging, antitrust, fraud, undue influence, theft, racketeering, extortion or any offense of a similar nature in connection with Contractor's business. Termination for the reasons stated in this paragraph is effective upon receipt of notice.

C. Upon termination of the Agreement, with or without cause, the Contractor shall have no claim against the City by reason of, or arising out of, incidental or relating to termination, except for compensation for work duly requested and satisfactorily performed as described in the Agreement and shall refund to the City any prepaid cost or expenses.

8. EXAMINATION OF RECORDS: Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access and the right to examine any pertinent books, documents, papers and records of the Contractor, involving transactions related to the Agreement until the latter of three (3) years after the final payment under the Agreement or expiration of the applicable statute of limitations.

9. WHEN RIGHTS AND REMEDIES NOT WAIVED: In no event shall any action by either Party hereunder constitute or be construed to be a waiver by the other Party of any breach of covenant or default which may then exist on the part of the Party alleged to be in breach, and the non-breaching Party's action or inaction when any such breach or default shall exist shall not impair or prejudice any right or remedy available to that Party with respect to such breach or default; and no assent, expressed or implied, to any breach of any one or more covenants, provisions or conditions of the Agreement shall be deemed or taken to be a waiver of any other breach.

10. INSURANCE:

A. **General Conditions:** Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for three (3) years after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado

and rated by A.M. Best Company as “A-”VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies is canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City’s contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

B. Proof of Insurance: Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor may not commence services or work relating to the Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as Exhibit D, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City’s contract number be referenced on the Certificate. The City’s acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor’s breach of this Agreement or of any of the City’s rights or remedies under this Agreement. The City’s Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.

C. Additional Insureds: For Commercial General Liability, Auto Liability and Excess Liability/Umbrella (if required), Contractor and subcontractor’s insurer(s) shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.

D. Waiver of Subrogation: For all coverages required under this Agreement, Contractor’s insurer shall waive subrogation rights against the City.

E. Subcontractors and Subconsultants: All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such subcontractors as additional insured under its policies (with the exception of Workers’ Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.

F. Workers' Compensation/Employer's Liability Insurance: Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.

G. Commercial General Liability: Contractor shall maintain a Commercial General Liability insurance policy with limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim, \$2,000,000 products and completed operations aggregate, and \$2,000,000 policy aggregate.

H. Business Automobile Liability: Contractor shall maintain Business Automobile Liability with limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement

I. Technology Errors & Omissions with Cyber-Liability: Contractor shall maintain Technology Errors and Omissions insurance including cyber liability, network security, privacy liability and product failure coverage with limits of \$1,000,000 per occurrence and \$1,000,000 policy aggregate.

J. Additional Provisions:

- (a) For Commercial General Liability, the policy must provide the following:
 - (i) That this Agreement is an Insured Contract under the policy;
 - (ii) Defense costs are outside the limits of liability;
 - (iii) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and
 - (iv) A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.
- (b) For claims-made coverage:
 - (i) The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier.
 - (ii) Contractor shall advise the City in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per

occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

11. **REPRESENTATION AND WARRANTY:** Contractor represents and warrants that:

A. the Software will conform to applicable specifications, operate in substantial compliance with applicable documentation, and will be free from deficiencies and defects in materials, workmanship, design and/or performance;

B. all services will be performed by qualified personnel in a professional and workmanlike manner, consistent with industry standards;

C. all services will conform to applicable specifications and the Exhibits attached hereto;

D. it has the requisite ownership, rights and licenses to perform its obligations under this Agreement fully as contemplated hereby and to grant to the City all rights with respect to the software and services free and clear from any and all liens, adverse claims, encumbrances and interests of any third party;

E. there are no pending or threatened lawsuits, claims, disputes or actions: (i) alleging that any software or service infringes, violates or misappropriates any third party rights; or (ii) adversely affecting any software, service or supplier's ability to perform its obligations hereunder;

F. the Software will not violate, infringe, or misappropriate any patent, copyright, trademark, trade secret, or other intellectual property or proprietary right of any third party;

G. the Software will contain no malicious or disabling code that is intended to damage, destroy or destructively alter software, hardware, systems or data; and

H. the media on which all Software is furnished are and will be, under normal use, free from defects in materials and workmanship.

12. **DEFENSE AND INDEMNIFICATION:**

A. Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or relating to the work performed under this Agreement ("Claims"), unless such Claims have been specifically determined by the trier of fact to be the sole negligence or willful misconduct of the City. This indemnity shall be interpreted in the broadest possible manner to indemnify City for any acts or omissions of Contractor or its subcontractors either passive or active, irrespective of fault, including City's concurrent negligence whether active or passive, except for the sole negligence or willful misconduct of City.

B. Contractor's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether Claimant has filed suit on the Claim. Contractor's duty to defend and indemnify City shall arise even if City is the only party sued by claimant and/or claimant alleges that City's negligence or willful misconduct was the sole cause of claimant's damages.

C. Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

D. Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.

E. This defense and indemnification obligation shall survive the expiration or termination of this Agreement.

F. Contractor will, at Contractor's expense, indemnify, defend and hold harmless the City, its officers, agents and employees from and against any loss, cost, expense or liability (including but not limited to attorney's fees and awarded damages) arising out of a claim that the Software, services, or their use by the City, infringe, violate or misappropriate a patent, copyright, trademark, trade secret or other intellectual property or proprietary right of any third party. The City will promptly notify Contractor in writing of any claim and cooperate with Contractor and its legal counsel in the defense thereof. Contractor may in its discretion (i) contest, (ii) settle, (iii) procure for the City the right to continue using the Software, or (iv) modify or replace the infringing Software so that it no longer infringes (as long as the functionality and performance are not degraded as reasonably determined by the City). The City may participate in the defense of such action at its own expense. If Contractor concludes in its reasonable judgment that none of the foregoing options are commercially reasonable, then Contractor will refund a pro rata portion (based on a 5 year straight line depreciation running from City's final acceptance of the Software) of the Software license fee(s) paid by the City under this Agreement and reimburse the City for all reasonable expenses for removal and replacement of the Software.

13. COLORADO GOVERNMENTAL IMMUNITY ACT: The parties hereto understand and agree that the City is relying upon, and has not waived, the monetary limitations and all other rights, immunities and protection provided by the Colorado Governmental Act, § 24-10-101, et seq., C.R.S. (2003).

14. TAXES, CHARGES AND PENALTIES: The City shall not be liable for the payment of taxes, late charges or penalties of any nature other than the compensation stated

herein, except for any additional amounts which the City may be required to pay under D.R.M.C. § 20-107 to § 20-115.

15. ASSIGNMENT; SUBCONTRACTING: The Contractor shall not voluntarily or involuntarily assign any of its rights or obligations, or subcontract performance obligations, under this Agreement without obtaining the Manager's prior written consent. Any assignment or subcontracting without such consent will be ineffective and void, and shall be cause for termination of this Agreement by the City. The Manager has sole and absolute discretion whether to consent to any assignment or subcontracting, or to terminate the Agreement because of unauthorized assignment or subcontracting. In the event of any subcontracting or unauthorized assignment: (i) the Contractor shall remain responsible to the City; and (ii) no contractual relationship shall be created between the City and any sub-consultant, subcontractor or assign.

16. NO THIRD PARTY BENEFICIARY: Enforcement of the terms of the Agreement and all rights of action relating to enforcement are strictly reserved to the parties. Nothing contained in the Agreement gives or allows any claim or right of action to any third person or entity. Any person or entity other than the City or the Contractor receiving services or benefits pursuant to the Agreement is an incidental beneficiary only.

17. NO AUTHORITY TO BIND CITY TO CONTRACTS: The Contractor lacks any authority to bind the City on any contractual matters. Final approval of all contractual matters that purport to obligate the City must be executed by the City in accordance with the City's Charter and the Denver Revised Municipal Code.

18. AGREEMENT AS COMPLETE INTEGRATION-AMENDMENTS: The Agreement is the complete integration of all understandings between the parties as to the subject matter of the Agreement. No prior, contemporaneous or subsequent addition, deletion, or other modification has any force or effect, unless embodied in the Agreement in writing. No oral representation by any officer or employee of the City at variance with the terms of the Agreement or any written amendment to the Agreement will have any force or effect or bind the City.

19. SEVERABILITY: Except for the provisions of the Agreement requiring appropriation of funds and limiting the total amount payable by the City, if a court of competent jurisdiction finds any provision of the Agreement or any portion of it to be invalid, illegal, or unenforceable, the validity of the remaining portions or provisions will not be affected, if the intent of the parties can be fulfilled.

20. CONFLICT OF INTEREST:

A. No employee of the City shall have any personal or beneficial interest in the services or property described in the Agreement. The Contractor shall not hire, or contract for services with, any employee or officer of the City that would be in violation of the City's Code of Ethics, D.R.M.C. §2-51, et seq. or the Charter §§ 1.2.8, 1.2.9, and 1.2.12.

B. The Contractor shall not engage in any transaction, activity or conduct that would result in a conflict of interest under the Agreement. The Contractor represents that it has disclosed any and all current or potential conflicts of interest. A conflict of interest shall include transactions, activities or conduct that would affect the judgment, actions or work of the Contractor by placing the Contractor's own interests, or the interests of any party with whom the Contractor has a contractual arrangement, in conflict with those of the City. The City, in its sole discretion, will determine the existence of a conflict of interest and may terminate the Agreement in the event it determines a conflict exists, after it has given the Contractor written notice describing the conflict.

21. NOTICES: All notices required by the terms of the Agreement must be hand delivered, sent by overnight courier service, mailed by certified mail, return receipt requested, or mailed via United States mail, postage prepaid, if to Contractor at the address first above written, and if to the City at:

Chief Information Officer or Designee
201 West Colfax Avenue, Dept. 301
Denver, Colorado 80202

With a copy of any such notice to:

Denver City Attorney's Office
1437 Bannock St., Room 353
Denver, Colorado 80202

Notices hand delivered or sent by overnight courier are effective upon delivery. Notices sent by certified mail are effective upon receipt. Notices sent by mail are effective upon deposit with the U.S. Postal Service. The parties may designate substitute addresses where or persons to whom notices are to be mailed or delivered. However, these substitutions will not become effective until actual receipt of written notification.

22. DISPUTES: All disputes between the City and Contractor arising out of or regarding the Agreement will be resolved by administrative hearing pursuant to the procedure established by D.R.M.C. § 56-106(b)-(f). For the purposes of that administrative procedure, the City official rendering a final determination shall be the Manager as defined in this Agreement.

23. GOVERNING LAW; VENUE: The Agreement will be construed and enforced in accordance with applicable federal law, the laws of the State of Colorado, and the Charter, Revised Municipal Code, ordinances, regulations and Executive Orders of the City and County of Denver, which are expressly incorporated into the Agreement. Unless otherwise specified, any reference to statutes, laws, regulations, charter or code provisions, ordinances, executive orders, or related memoranda, includes amendments or supplements to same. Venue for any legal action relating to the Agreement will be in the District Court of the State of Colorado, Second Judicial District.

24. NO DISCRIMINATION IN EMPLOYMENT: In connection with the performance of work under this contract, the Contractor may not refuse to hire, discharge,

promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. The Contractor shall insert the foregoing provision in all subcontracts.

25. USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS: Contractor shall cooperate and comply with the provisions of Executive Order 94 and Attachment A thereto concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City barring Contractor from City facilities or participating in City operations.

26. CONFIDENTIAL INFORMATION; OPEN RECORDS:

A. City Information: “Proprietary Data” shall mean any materials or information which may be designated or marked “Proprietary” or “Confidential”, or which would not be documents subject to disclosure pursuant to the Colorado Open Records Act or City ordinance, and provided or made available to Contractor by the City. Such Proprietary Data may be in hardcopy, printed, digital or electronic format. Contractor acknowledges and accepts that, in performance of all work under the terms of this Agreement, Contractor may have access to Proprietary data or Confidential Information that may be owned or controlled by the City, and that the disclosure of such Proprietary Data or Confidential Information may be damaging to the City or third parties. Contractor agrees that all Proprietary Data, Confidential Information or any other data or information provided or otherwise disclosed by the City to Contractor shall be held in confidence and used only in the performance of its obligations under this Agreement. Contractor shall exercise the same standard of care to protect such Proprietary Data and Confidential Information as a reasonably prudent contractor would to protect its own proprietary or confidential data. During the course of this Agreement, should Contractor come into possession of any Protected Information Contractor may not disclose this information to any Third Party under any circumstances, unless required by the Agreement and shall take all commercially necessary steps to protect the information from release. Protected Information includes but is not limited to personally-identifiable information, student records, protected health information, criminal justice information or individual financial information (collectively, “Protected Information”) that is subject to local, state or federal statute, regulatory oversight or industry standard restricting the use and disclosure of such information and that the loss of such Protected Information would constitute a direct damage. These include, but are not limited to: the Colorado Constitution, the Colorado Consumer Protection Act, the Children’s Online Privacy Protection Act (COPPA), Health Insurance Portability and Accountability Act (HIPAA), the Family Education Rights and Privacy Act (FERPA), the Payment Card Industry Data Security Standard (PCI DSS), and the Federal Bureau of Information Criminal Justice Information Services (CJIS) Security Policy.

B. Use and Protection of Proprietary Data or Confidential Information:

(a) Except as expressly provided by the terms of this Agreement, Contractor agrees that it shall not disseminate, transmit, license, sublicense, assign, lease, release, publish, post on the internet, transfer, sell, permit access to, distribute, allow interactive

rights to, or otherwise make available any data, including Proprietary Data or Confidential Information or any part thereof to any other person, party or entity in any form of media for any purpose other than performing its obligations under this Agreement. Contractor further acknowledges that by providing data, Proprietary Data or Confidential Information, the City is not granting to Contractor any right or license to use such data except as provided in this Agreement. Contractor further agrees not to disclose or distribute to any other party, in whole or in part, the data, Proprietary Data or Confidential Information without written authorization from the Manager and will immediately notify the City if any information of the City is requested from the Contractor from a third party.

(b) Contractor agrees, with respect to the Proprietary Data and Confidential Information, that: (1) Contractor shall not copy, recreate, reverse engineer or decompile such data, in whole or in part, unless authorized in writing by the Manager; (2) Contractor shall retain no copies, recreations, compilations, or decompilations, in whole or in part, of such data; and (3) Contractor shall, upon the expiration or earlier termination of the Agreement, destroy (and, in writing, certify destruction) or return all such data or work products incorporating such data or information to the City.

(c) Contractor shall develop, implement, maintain and use appropriate administrative, technical and physical security measures to preserve the confidentiality, integrity and availability of all electronically maintained or transmitted data received from, or on behalf of City. It is the responsibility of the Contractor to ensure that all possible measures have been taken to secure the computers or any other storage devices used for City data. This includes industry accepted firewalls, up-to-date anti-virus software, controlled access to the physical location of the hardware itself.

C. Employees and Sub-Contractor: Contractor will inform its employees and officers of the obligations under this Agreement, and all requirements and obligations of Contractor under this Agreement shall survive the expiration or earlier termination of this Agreement. Contractor shall not disclose Proprietary Data or Confidential Information to subcontractors unless such subcontractors are bound by non-disclosure and confidentiality provisions at least as strict as those contained in this Agreement.

D. Disclaimer: Notwithstanding any other provision of this Agreement, the City is furnishing Proprietary Data and Confidential Information on an “as is” basis, without any support whatsoever, and without representation, warranty or guarantee, including but not in any manner limited to, fitness, merchantability or the accuracy and completeness of the Proprietary Data or Confidential Information. Contractor is hereby advised to verify its work. The City assumes no liability for any errors or omissions herein. Specifically, the City is not responsible for any costs including, but not limited to, those incurred as a result of lost revenues, loss of use of data, the costs of recovering such programs or data, the cost of any substitute program, claims by third parties, or for similar costs. If discrepancies are found, Contractor agrees to contact the City immediately.

E. Contractor’s Information: To the extent applicable in this Agreement, the City understands and agrees that the Contractor’s software and documentation including, but not

limited to, source code, object code, the interface requirements document(s), acceptance test procedures, the Statement of Work, the software design, structure and organization, software screens, the user interface and the engineering know-how implemented in the software, specific pricing and schedules (collectively “Contractor Confidential Information”) may constitute the valuable properties and trade secrets of Contractor, embodying substantial creative efforts which are secret, confidential, and not generally known by the public, and which secure to Contractor a competitive advantage. The City agrees during the term of this Agreement and any license granted hereunder, and thereafter, to hold the Contractor Confidential Information including any copies thereof and any documentation related thereto, in strict confidence and to not permit any person or entity to obtain access to it except as required for the City’s exercise of the license rights granted hereunder, and except as required by the parties understand that all the material provided or produced under this Agreement may be subject to the Colorado Open Records Act., § 24-72-201, et seq., C.R.S. In the event of a request to the City for disclosure of such information, the City shall advise Contractor of such request in order to give Contractor the opportunity to object to the disclosure of any of its Contractor Confidential Information and take necessary legal recourse. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and Contractor agrees to intervene in such lawsuit to protect and assert its claims of privilege against disclosure of such material or waive the same. Contractor further agrees to defend, indemnify and save and hold harmless the City, its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of Contractor’s intervention to protect and assert its claim of privilege against disclosure under this Article including but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

27. LEGAL AUTHORITY: Contractor represents and warrants that it possesses the legal authority, pursuant to any proper, appropriate and official motion, resolution or action passed or taken, to enter into the Agreement. Each person signing and executing the Agreement on behalf of Contractor represents and warrants that he has been fully authorized by Contractor to execute the Agreement on behalf of Contractor and to validly and legally bind Contractor to all the terms, performances and provisions of the Agreement. The City shall have the right, in its sole discretion, to either temporarily suspend or permanently terminate the Agreement if there is a dispute as to the legal authority of either Contractor or the person signing the Agreement to enter into the Agreement.

28. NO CONSTRUCTION AGAINST DRAFTING PARTY: The parties and their respective counsel have had the opportunity to review the Agreement, and the Agreement will not be construed against any party merely because any provisions of the Agreement were prepared by a particular party.

29. ORDER OF PRECEDENCE: In the event of any conflicts between the language of the Agreement and the exhibits, the language of the Agreement controls.

30. SURVIVAL OF CERTAIN PROVISIONS: The terms of the Agreement and any exhibits and attachments that by reasonable implication contemplate continued performance, rights, or compliance beyond expiration or termination of the Agreement survive the Agreement

and will continue to be enforceable. Without limiting the generality of this provision, the Contractor's obligations to provide insurance and to indemnify the City will survive for a period equal to any and all relevant statutes of limitation, plus the time necessary to fully resolve any claims, matters, or actions begun within that period.

31. INUREMENT: The rights and obligations of the parties herein set forth shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns permitted under this Agreement.

32. TIME IS OF THE ESSENCE: The parties agree that in the performance of the terms, conditions, and requirements of this Agreement, time is of the essence.

33. FORCE MAJEURE: Neither party shall be responsible for failure to fulfill its obligations hereunder or liable for damages resulting from delay in performance as a result of war, fire, strike, riot or insurrection, natural disaster, unreasonable delay of carriers, governmental order or regulation, complete or partial shutdown of plant, unreasonable unavailability of equipment or software from suppliers, default of a subcontractor or vendor (if such default arises out of causes beyond their reasonable control), the actions or omissions of the other party or its officers, directors, employees, agents, vendors or elected officials and/or other substantially similar occurrences beyond the party's reasonable control ("Excusable Delay") herein. In the event of any such Excusable Delay, time for performance shall be extended for a period of time as may be reasonably necessary to compensate for such delay.

34. PARAGRAPH HEADINGS: The captions and headings set forth herein are for convenience of reference only, and shall not be construed so as to define or limit the terms and provisions hereof.

35. CITY EXECUTION OF AGREEMENT: This Agreement is expressly subject to and shall not be or become effective or binding on the City until it has been fully executed by all signatories of the City and County of Denver.

36. COUNTERPARTS OF THIS AGREEMENT: This Agreement may be executed in counterparts, each of which shall be deemed to be an original of this Agreement.

37. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS: Contractor consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

38. ADVERTISING AND PUBLIC DISCLOSURE: The Contractor shall not include any reference to the Agreement or to services performed pursuant to the Agreement in any of the Contractor's advertising or public relations materials without first obtaining the

written approval of the Manager. Any oral presentation or written materials related to services performed under the Agreement will be limited to services that have been accepted by the City. The Contractor shall notify the Manager in advance of the date and time of any presentation. Nothing in this provision precludes the transmittal of any information to City officials.

EXHIBIT LIST:

EXHIBIT A-STATEMENT OF WORK

- **ATTACHMENT A-TIMELINE**
- **ATTACHMENT B-RCA 1**
- **ATTACHMENT C-RCA2**
- **ATTACHMENT D-SERVICE LEVEL AGREEMENT**
- **ATTACHMENT E-ARCHITECTURAL DIAGRAM**
- **ATTACHMENT F-WAN PRICE ADJUSTMENT**
-

EXHIBIT B- SUPPORT AND MAINTENANCE

EXHIBIT C- UNIT PRICING

EXHIBIT D-CERTIFICATE OF INSURANCE

EXHIBIT E-PRODUCT SERVICES GUIDES

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Contract Control Number:

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of

SEAL

CITY AND COUNTY OF DENVER

ATTEST:

By _____

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

By _____

By _____

By _____



Contract Control Number: TECHS-201844499-00

Contractor Name: ISC INC dba Venture Technologies

By: RS

Name: R.J. Smith
(please print)

Title: VP Finance
(please print)

ATTEST: [if required]

By: Mary Flickner

Name: Mary Flickner
(please print)

Title: Sr. Project Manager
(please print)





**Venture Technologies
Statement of Work
For
CCD**

October, 2018

Venture Technologies
8680 Concord Center Drive
Englewood, CO 80112
303-799-1194

Venture Technologies PROPRIETARY

This information is not to be shared with any party outside CCD Authority without prior written approval from Venture Technologies.

Document History

Version	Release Date	Description of Change
1.0	7/1/18	Initial Document
2.0	7/3/18	Incorporate Technical Comments
3.0	7/5/18	Incorporate PM Comments
4.0	7/11/18	Format updates
5.0	7/26/18	VT Updates in response to CCD Input
6.0	8/1/18	VT Updates in response to CCD Input
7.0	9/14/18	VT Updates in response to CCD Input
8.0	9/21/18	VT Updates in response to CCD Input, added Attachments
8.1	9/28/18	CCD Clarification Updates, added Attachment's D & E
8.2	10/3/18	VT acceptance of CCD clarification updates and Attachments D & E
9.0	10/16/18	CCD revisions to 1.3, 2.1, 4.3. & 4.3.2. Removal of 4.4 Project Contacts & Attachment A.

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STATEMENT OF WORK

1. Executive Summary

1.1. Customer Objectives

City and County of Denver requires a VIPER based Incident Management Solution. City and County of Denver has contracted Venture Technologies to perform the solution Installation, Testing, Cutover, and Maintenance. Venture Technologies will implement an extensive implementation plan to support above objectives. Venture Technologies will stage, install, test, and cut the above solution in accordance with West Corp best practices guidelines. All work performed will be by factory certified technicians.

These are the major functions that will be performed by Venture Technologies:

- Install Backroom Servers and Telephony Integration
- Install Power 911

PSAP Planning:

- Venture Technologies will prepare Technical Plans and MoPs (Method of Procedures) to be utilized internally for the migration
- PSAP must plan for Total outage as a precaution. Rollovers and Kill Switches must be identified and ready for possible utilization.

City and County of Denver will provide support for third party applications such as CAD, Radio, and Digital Voice Recorders.

1.2. Solution Summary

CCD, hereafter referred to as **the customer**, has requested Venture Technologies install a VIPER based Incident Management System.

The Venture Technologies Implementation plan is a two-phased approach.

- Phase 1:
 - Primary location, 950 N Josephine, installed with positions and supporting backroom equipment
 - Secondary Survivable Remote configuration at 303 W Colfax with Positions and no backroom equipment, and
 - Node B residing at the Venture Technologies Data Center in Englewood, CO. Venture Technologies will co-locate VIPER Multi-Node B in its datacenter in Englewood, CO.
- Phase 2:
 - Decommission the Colfax site,
 - Relocate 303 W Colfax site positions to 45th Ave location,
 - Commission positions at the 45th Ave site.

As the decommission of the Colfax site presents several challenges to CCD, the Venture Technology approach has all Node B backroom equipment monitored and maintained directly on-site, with factory certified technicians, in order to maximize PSAP operational

effectiveness during this transition. This configuration further enhances solution integrity by offering geo-diversity within the Venture Technologies CJIS compliant Data Center.

The Colfax backroom will be hosted in Venture's datacenter so that the core of the system, the backroom components (four VIPER servers, ALI modems, the duplicate Power 911 server, the second Power MIS server, and the Power Metrics server) will not be moved. As the TXT29-1-1 and ITS router or service, is connected to the hosted Node, it will not need to be relocated.

The Colfax Front room (1 Mediant Gateway with 2 T-1 cards, 2 Gateway shelves with 4 CAMA Interface Modules, 1 PowerOps workstation and large display, and two PoE switches, as well as the 20 Power Stations and IP-ALI sets) will all be physically moved and reused at 45th Ave. Only the single VIPER VoIP server that is used for resiliency will not be reused, but may be put into Customer's spare inventory. Routers will also be moved and reused.

Phase-1 Implementation details.

✓ **Base Installation**

- Phase 1: Install Node A, with 45 Positions, at the Josephine Primary PSAP
- Phase 1: Install Node B, with no Positions, at the Venture Technologies Data Center
- Phase 1: Install the Colfax Secondary PSAP with 16 Positions (Survivable Remote)
- Phase 1: Implement Layer 2 and Layer 3 networks
- Phase 1: Perform System Verification / System Acceptance / Operational Readiness Tests
- Phase 1: Cut system
- Phase 1: Complete Denver City and County 911 VIPER Next Gen 9-1-1 Documentation for this phase of project (Venture Technologies task).

Phase-2 Implementation details.

✓ **Phase 2: Decommission Colfax**

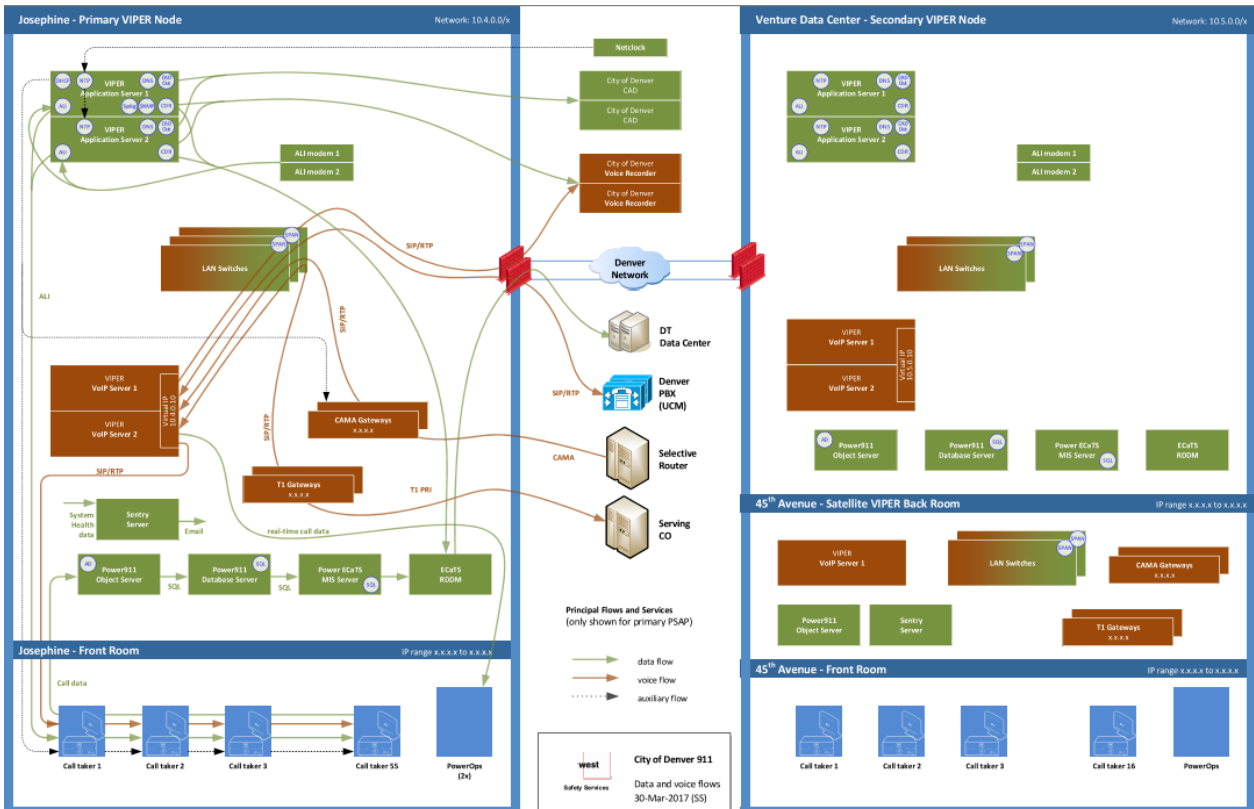
- Phase 2: Temporary Operations Plan Node A (Josephine)
- Phase 2: Temporary Configuration Method of Procedure (MOP) and implementation Node B (VT Data Center)
- Phase 2: Temporary Configuration Method of Procedure implementation
- Phase 2: CPE uninstallation and transport

✓ **Phase 2: Commission 45th AVE**

- Phase 2: Perform approved Method of Procedures (MOPs) for installing, configuring, and testing of positions (14 from Josephine and 16 from Colfax) and applicable servers from Colfax location
- Phase 2: Implement Layer 2 and Layer 3 networks
- Phase 2: Perform System Verification / System Acceptance / Operational Readiness Tests
- Phase 2: Cut system
- Phase 2: Complete Denver City and County 911 VIPER Next Gen 9-1-1 Documentation for this phase of project (Venture Technologies task).

Phase 2 Notes: Venture Technologies Co-Located solution provides the least amount of risk:

- Both Nodes A and B are operational at all times VIPER Servers do not need to be decommissioned and recommissioned.
- Pre-testing can be performed at our Data Center minimizing risk associated with the relocation.



For a more a more detailed Architectural Diagram please refer to Attachment E.

For details and additional information on project scope and deliverables, please see the appropriate sections in this Statement of Work.

Location(s) Details:

PSAP Name	PSAP Address
City & County of Denver	950 Josephine St. Denver, CO 80206
City & County of Denver	12025 E. 45 th Ave. Denver, CO 80239
City & County of Denver	303 West Colfax Denver, CO 80204
Venture Technologies	8680 Concord Center Drive Englewood, CO 80112

Per CCD's request, Venture is investigating the impacts of establishing 45th Ave as the Primary Site. Venture will provide findings to CCD for consideration and determination of approach. CCD

and Venture will work jointly to establish change orders, if necessary, to accommodate CCD's decision.

1.3 VENTURE TECHNOLOGIES Services Pricing & Payment Terms

The pricing and payment terms for this project are outlined below.

Payment Milestones: Phase 1

Venture Technologies (VT) will invoice CCD a total of \$1,476,557 according to the following project milestones.

- Venture Technologies (VT) will invoice CCD for the West Hardware, and Software specific to Phase 1 upon physical inventory and confirmation from CCD that all items have been received.
- VT will begin monthly invoicing to CCD for the Wide Area Network (WAN) circuits (Non-Recurring & Recurring Charges) once the circuits are available and in production from the network carriers (The WAN circuits are a prerequisite for Phase 1 VIPER System Acceptance & Testing (SAT).
- VT will invoice CCD for the VT & West Professional Services specific to Phase 1 upon completion and receipt of signed Customer Acceptance Form from CCD.
Summary of Phase 1 activities below.
 - Installation, Testing, Cut-over & CCD Customer System Acceptance of VIPER Node A, with 45 Positions, at the Josephine Primary PSAP
 - Installation, Testing, Cut-over & CCD Customer System Acceptance of VIPER Node B, with no Positions, at the Venture Technologies Data Center
 - Installation, Testing, Cut-over & CCD Customer System Acceptance of VIPER at the Colfax Secondary PSAP with 16 Positions (Survivable Remote)
 - Completion of the Venture Technologies & West Professional Services
 - Delivery and review of CCD-VIPER System Documentation supporting Phase 1 Deployment as summarized above.
- VT will begin monthly invoicing to CCD for the VT-911 Managed Services required to support Phase 1 for;
 - 24/7 Monitoring of VIPER System
 - 24/7 Customer Service Center Support & Ticketing System Access
 - 24/7 Onsite Support for Remedy & Repair
 - 24/7 Onsite Support for 7 days Post System Cut-over
 - Monthly VIPER Reporting
 - Monthly Preventative Maintenance

Payment Milestones - Phase 2

Venture Technologies (VT) will invoice CCD a total of \$694,894 according to the following project milestones.

- Venture Technologies (VT) will invoice CCD for the West Hardware, and Software specific to Phase 2 upon physical inventory and confirmation from CCD that all items have been received.

- VT will begin monthly invoicing to CCD for the Wide Area Network (WAN) circuits (Non-Recurring & Recurring Charges) once the circuits are available and in production from the network carriers (CenturyLink and Comcast. The WAN circuits are a prerequisite for Phase 2 VIPER System Acceptance & Testing (SAT).
- VT will invoice CCD for the VT & West Professional Services specific to Phase 2 upon completion and receipt of signed Customer Acceptance Form from CCD.
Summary of Phase 2 activities below.
 - Decommission Colfax
 - West CPE uninstallation and transport of 16 Positions to 45th Ave.
 - Installation, Testing, Cut-over & CCD Customer System Acceptance of 45th Ave with 25 new Positions, 16 Positions from Colfax and 14 Positions from Josephine
 - Completion of the Venture Technologies & West Professional Services
 - Delivery and review of CCD-VIPER System Documentation supporting Phase 2 Deployment as summarized above.
- VT will begin invoicing to CCD for the VT-911 Managed Services required to support Phase 2 for;
 - 24/7 Monitoring of VIPER System
 - 24/7 Customer Service Center Support & Ticketing System Access
 - 24/7 Onsite Support for Remedy & Repair
 - Monthly VIPER Reporting
 - Monthly Preventative Maintenance

RMA Terms: Clients may be assessed a 15% restocking fee for returned components. Hardware and Software that has been opened cannot be returned.

For City & County of Denver:

Signature:

Date:

2. Project Scope

2.1 Overview

The project scope section below describes the roles that VENTURE TECHNOLOGIES will provide in implementing the solution as outlined in requirements and solution description sections above. This scope will outline the tasks that will be included in the project for both VENTURE TECHNOLOGIES and the customer's staff. Any changes to these tasks or scope will need to be submitted as outlined in the change process section (Section 4.4) and additional resources/fees/timelines may be incurred depending on the change.

Once the Contract is completed and a PO is issued to Venture Technologies the following major activities will take place. Estimated durations have been included but are subject to change as the project progresses.

Project Activity	Estimated Duration
Project Setup and Initiation	2 weeks
Circuit, Hardware and Software Procurement	30 weeks
System Design and Planning	5 weeks
Phase 1 Installation and Testing	8 weeks
Training	2 weeks
Phase 1 Cutover and Support	1 week
Phase 2 Installation and Testing	4 weeks
Phase 2 Cutover and Support	1 week
Overall Estimated Duration (includes concurrent activities)	36 weeks

2.1. Assumptions, Risks and Scope Exclusions

Assumptions for this project are detailed below:

1. The customer is responsible for providing the VENTURE TECHNOLOGIES Technical team with the necessary information to complete the configuration of the hardware/software specified in the Customer deliverables section prior to the VENTURE TECHNOLOGIES Technicians arrival at the customer's site.
2. At any time during the VENTURE TECHNOLOGIES conducted installation and configuration process, the VENTURE TECHNOLOGIES 9-1-1 Technician may determine that an infrastructure component or design parameter should be completely re-designed to function properly as part of the network. Upon making such a determination, the VENTURE TECHNOLOGIES 9-1-1 Technician will completely document the reasoning behind this determination, and the VENTURE TECHNOLOGIES 9-1-1 Technician will present this determination to the customer for its review. Upon the customer's acceptance of the VENTURE TECHNOLOGIES 9-1-1 Technician's determination, the VENTURE TECHNOLOGIES 9-1-1 Technician will coordinate the re-configuration of said network infrastructure component. If the customer accepted, re-configuration is within the technical requirements of the CCD NG-911 RFP, than there will be no charge to the customer. If the customer accepted re-configuration is a complete re-design of the Venture Technologies RFP response to the CCD NG-911 RFP, than applicable charges

- for Venture Technologies/West Professional Services will apply. These additional Professional Charges will be clearly outlined and presented to CCD for approval and prior to any Professional Services being delivered by Venture Technologies/West in support of the VIPER re-design configuration.
3. If the project is delayed while VENTURE TECHNOLOGIES is onsite due to delays caused by parties other than VENTURE TECHNOLOGIES or partners not brought in by VENTURE TECHNOLOGIES, additional charges of \$145 hour rate may be charged. These charges will be incurred if the customer requests that VENTURE TECHNOLOGIES remain onsite when no work pertaining to this project can be accomplished.
 4. All group policy and Active Directory changes/additions are the responsibility of the client with assistance from VENTURE TECHNOLOGIES.
 5. All customer side software configurations and patches are the responsibility of the client unless specifically called out in section 2.4.

Risks from the Scope of this project that have been identified are detailed below:

1. Risk is limited as this is a new installation and operationally the new system will not impact the current call handling. CCD will continue utilizing the current VESTA Solution until such time as the system “cuts”.

Exclusions from the Scope of this project that have been identified are detailed below:

1. VENTURE TECHNOLOGIES will not be responsible for any Technical changes on any component of the customer’s entire infrastructure, including any installation or configuration changes, made by the customer’s staff or other vendors after project completion. VENTURE TECHNOLOGIES can be contracted to provide any installation and configuration services not covered in this Statement of Work on a time and materials basis.

2.2. Implementation

During the implementation phase of the installation the VENTURE TECHNOLOGIES Technician will be working with the customer’s staff to physically install and configure, as per the SOW, all components of the system. This implementation will be for all equipment listed associated with the positions and also may include changes to the existing network components (where applicable) and will be identified and documented in the SOW.

2.2.1. Description of work

CCD has requested VENTURE TECHNOLOGIES to Install, Test, Maintain, and Fault Isolate a new VIPER / Power 9-1-1 Call Handling Solution. This will include Installation, Test, Maintenance, and Cut-over after the Install is completed. VENTURE TECHNOLOGIES will complete the following list of tasks to accomplish this project. (Reference Section 1.1.2)

1. Venture Technologies will:
 - a. Install all Backroom Equipment
 - i. Install Applications Servers
 - ii. Install VoIP Servers
 - iii. Install Database 1 / Object Server
 - iv. Install Network Matrix

- v. Test Backroom
 - b. Install all Front Room Equipment
 - i. Install Positions
 - ii. Install Cables, Jack-boxes, and Headsets
 - iii. Install Network Matrix
 - iv. Test Front Room
 - c. Integrate Functions
 - d. Post Install verification
 - e. Test and verify all Installed Application functionality
 - f. Cut solution upon customer approval
2. Venture Technologies will perform extensive System Acceptance Testing (SAT) including but not limited to:
- a. System Acceptance Tests
 - i. Log On / Log Off
 - ii. Answering a 911 Call
 - iii. Answering a Non-Emergency Call
 - iv. Place a Call on Hold and Retrieve
 - v. Abandoned Call
 - vi. 10 Digit Dialing
 - vii. 5 Digit Dialing
 - viii. Auto Dials
 - ix. Last Number Dialed
 - x. Intercom
 - xi. No Hold Conference
 - xii. Regular Conference
 - xiii. 911 Transfers
 - xiv. Non-Emergency Transfer
 - xv. ALI Query
 - xvi. ALI Rebid Query
 - xvii. ALI Spill to CAD
 - xviii. Instant replay recorder
 - xix. Long Term recorder
 - xx. TTY Baudot and ASCII
 - xxi. Automatic Call Distribution (ACD) with call type prioritization
 - xxii. Auto Attendant functionality for all functions and features as defined in our RFP Response. VT will test all AA Call Tree Functions as well as Caller Timeouts and Caller non-response auto-routing.
 - xxiii. DTMF tones functionality will be implemented in accordance with our RFP response. This will be implemented approximately 6 months after initial installation.
 - xxiv. Text to 911
 - xxv. Abandoned call handling new procedure
 - xxvi. User administration vs telephony administration
 - xxvii. Recorded announcements for queues (you have reached CCD do not hang up ...)
 - xxviii. Personalized Greeting will be tested based on customer stored greetings. Both Queue Greetings and individual recorded greetings for 911 will be tested. Test Criteria will be based on what CCD implements.
 - xxix. Three-way conference for interpreter service
 - xxx. Reader boards / Activity display data provided
 - xxxi. ECATS Reports based on data derived from system
 - xxxii. System Failover Testing in Active/Active & Active/Passive site scenarios

- a. Test from primary Traffic Fiber connections to commercial carrier (Could be Century Link, Comcast, or Level 3)
- b. Test On Premise Viper at 950 Josephine to Hosted Solution at Venture Datacenter
- c. Test Hosted Solution VIPER at Venture Technologies Data Center and Viper at 950 Josephine
- d. Test Cama Trunks at 950 Josephine
- e. Test Cama Trunks at backup/Secondary 911 Center
- f. Note: Please reference Network Testing Document for methodologies

3. VENTURE TECHNOLOGIES will follow methodologies and Best Practices as recommended by West Corp. West Corp will review and sign off the implementations at completion of Phase 1 and Phase 2. This will be part of the Venture Technologies SAT.

4. VENTURE TECHNOLOGIES will develop, and submit for approval, specialized MOPs, specific to CCD County before any major efforts are undertaken. Upon customer review and approval, the MOP will be performed.

5. VENTURE TECHNOLOGIES will perform a SAT (System Acceptance Test) with CCD to verify operational.

6. VENTURE TECHNOLOGIES will document the changes to the current solution

2.3. Post-Implementation (Testing & Tuning)

Upon completion of the Install, VENTURE TECHNOLOGIES will work with the customer's staff to continue to test and ensure full operation of the solution.

2.4. Training

Venture Technologies will provide the following Training Courses utilizing West Corporation Instructors:

- Power 911 User Training (up to 4 sessions)
- Power 911 Administrator Training (up to 2 sessions)
- ACD CCS Training

2.5.1 Power 911 User Training

Purpose:

This course introduces the use of the Power 911 call taking system and all the features required to perform the functions of call receiver. This class is a hands-on course, where the learner will soon become confident with its use.

Objectives:

By the end of this course, participants will know how to:

- Answer a 911, emergency and administrative call, transfer a call to another agency or telephone number, and identify caller's location
- Answer and place a TTY call
- Manage calls
- Compose and receive messages
- Playback previously recorded calls
- Recognize SOP and Premise information (Optional – Requires Database Access Module)

Note: Optional components will only be trained if the site has purchased and enabled the required components.

Prerequisites:

Students must be accredited call-takers per the requirements of their place of employment.

Target Audience:

This course is designed for call receivers and PSAP administrators who will be using Power 911 to perform their jobs. Individuals taking this course must already have a good understanding of the 911 call taking functions.

Duration:

Up to four hours (depending on options used)

Handouts:

User Workbook

Recommended Class Size:

The maximum class size is eight and requires one Power 911 workstation for every two participants.

Course Content:

Introduction to Power 911

- How Power 911 works
- Logging on to Power 911

Using the Telephony Module

- Answering a call
- Identifying the ANI information
- Releasing a call
- Placing, Conferencing and Transferring calls manually
- Using Hold and Mute

Using the Location Identification Module

- Identifying the ALI information
- Tagging erroneous ALI
- Answering a TTY call

Using the Status Bar

- Identify the functions of the status bar

Using the Lists Module

- Using available lists to manage calls

Transferring a call

- Opening a Transfer panel

- Using a transfer button to make a call

Playing Back a Recorded Call

- Play back a call
- Save a conversation
- Un-save the call

Composing a message

- Opening the message board
- Choosing a message recipient
- Answering a message

Using the Integrated Telephone and Radio Recorder (optional)

- Search and identify previously recorded phone and radio calls
- Save recordings to a file

Hands on Practice with Simulated calls for service

2.5.2 Power 911 Administrator Training

Purpose:

This course will teach the fundamentals for modifying, updating and maintaining data for the Power 911 system.

Objectives:

By the end of this course, participants will know how to:

- Navigate the Configurator
- Use Database Control Functions
- Modify Agent Data
- Update and Add Agency Data and accesses
- Update and Add TTY Questions
- Write SOP and Premise Information Files (optional)

Note: Optional components will only be trained if the site has purchased and enabled the required components.

Target Audience:

This course is designed for PSAP Administrators and delegated personnel responsible for maintaining the system. The participants will benefit from having attended the Power 911 User training course prior to this training.

Duration:

Six hours (depending on options and data modifications)

Handouts:

Administrator Workbook

Recommended Class Size: 6

This application can only be manipulated from one terminal for training. Class size should be limited, unless other means of training can accommodate. (i.e. Wall projection in classroom, etc.)

Content:

Navigating the Configurator

- Logging On to Configurator
- Using the File Menu
- Use database control functions
 - Expanding and Collapsing Data Views
 - Managing Table Content
- Configuring Agency Data
 - Introduction to Agency Data
 - Adding Agencies
 - Modifying and existing Agency telephone accesses
- Configuring Agent Data
 - Introduction to Agent Data
 - Modifying button layouts
 - Adding and deleting buttons
 - Adding and removing Agents
- Configuring Incident Data
 - Providing Generic TTY Questions
- Writing Standard Operating Procedures (SOP) and Premise Information
 - Introduction to SOP's and Premise Information files
 - Writing an SOP and Premise Information files
 - Modifying a pre-written file
 - Preparing the SOP and Premise Information for use in Power 911
- Hands-on Exercises
- Practice with data configuration exercises

3. Maintenance and Monitoring

3.1 Failover Testing

- Failover testing will be performed every 6 months.
- Notification will be provided to CCD 2 weeks prior to test.
- VT Technician will provide a MoP when notification with CCD takes place. The MoP will address:
 - The failover procedure / methodology
 - Back-out procedure should problems develop
- Once the MoP is approved, testing will take place with CCD verifying the results
- Should the test fail, immediate resolution will take place

3.2 Included support

VENTURE TECHNOLOGIES Customer Service Center

VENTURE TECHNOLOGIES Customer Service Center (866.622.6722 / support@ventech.com) is available 24-hours every day for maintenance and monitoring of customer networks. VENTURE TECHNOLOGIES has experienced technicians staffing this center who are able to assist with all customer issues. When needed, VENTURE TECHNOLOGIES's Customer Service Center has escalation procedures that allow them to utilize the full potential of VENTURE TECHNOLOGIES's Technical staff for problem resolution whether that be from a remote Venture Technologies location or on site at a City and County of Denver building.

VENTURE TECHNOLOGIES's Customer Service Center also has the tools necessary to provide remote assistance as well as guided assistance. VENTURE TECHNOLOGIES's Customer Service Center Technicians can, where permitted, VPN into the customer's network and fix problems or can involve the on-site staff via a shared WEB Meeting Place so that the customer's staff are involved and aware of the problem and changes necessary to resolve it.

1. The City must remain in full operation at 950 N Josephine, and 303 W Colfax, on the current 911 system during the install/upgrade of the systems. In an effort to mitigate down time the upgrade must be installed in parallel to allow call taking activity to continue in a normal manner.
2. Due to the criticality of the 911 Emergency Telephony System, the vendor after successful implementation, will provide 24/7 physical onsite support for a minimum of 7 days with optional weekly rates provided thereafter.
3. The Vendor will provide 24/7/365 days of support with the response times detailed below:

Definitions

Critical	Major	Minor
<p>High level of impact on service delivery where a PSAP is down and not processing calls.</p> <p>Event could be resolved by temporary approved “work around”</p> <p>May involve a trend of Major events for a given system or process.</p>	<p>Service is suffering an unacceptable level of degradation in multiple workstations, but is not completely unavailable.</p> <p>Service degradation is apparent to external stakeholders.</p> <p>May involve a trend of Minor events for a given system or process.</p>	<p>Low level of impact on service delivery.</p> <p>Service degradation may be apparent to some external stakeholders (for example, one workstation).</p>
<p>Critical examples:</p> <p>PSAP is completely down.</p>	<p>Major examples:</p> <ol style="list-style-type: none"> 1. <= 50 % calls are unable to be answered at all call taker stations for 15 or more minutes 2. <= 50 % transfers to external entities are failing for all call-taker stations for 15 or more minutes 3. <= 50 % calls missing ALI - (Automated Location Information) for 15 or more minutes to all call-taker stations 4. <= 50 % calls are being delivered but are inaudible to all call-taker stations for 15 or more minutes 	<p>Minor examples:</p> <ol style="list-style-type: none"> 1. Non-service-affecting conditions under which the product is usable. The condition is not critical to overall operations, and does not severely restrict such operations. Generally, minor problems affect administrative functions, routine maintenance and diagnostics, but do not significantly affect service to customers 2. Provisioning issue 3. Loss of reporting functionality

Incident Response Time Frames		
Critical	Major	Minor
<p>Response to the PSAP, occurs as soon as possible but no longer than 30 minutes after incident identification.</p> <p>Subsequent updates occur every 30 minutes.</p> <p>A root cause analysis report within 24 hours after the outage</p>	<p>Response occurs as soon as possible but no longer than two (2) hours after incident identification.</p> <p>Subsequent updates occur every hour.</p> <p>A root cause analysis report within 48 hours after the outage</p>	<p>Response occurs as soon as possible but no longer than twenty-four (24) hours after incident identification.</p> <p>Subsequent updates occur every 24 hours.</p> <p>A root cause analysis report within 48 hours after the outage</p>

3.3 PM Schedule

The Planned Maintenance (PM) is a simplified, yet thorough means of accomplishing preventive maintenance for the West Corp VIPER Solution. It identifies maintenance requirements and schedules maintenance actions verifying system performance. PM procedures and the frequency with which to perform the actions are developed for each piece of equipment based on good engineering practices, practical experience and technical standard.

These step-by-step Method of Procedures (MoPs) follow “Best Practices” as defined by West Corp. The MoPs contain information on each maintenance requirement, such as who will perform the maintenance, when, how, and with what resources.

Venture Technologies will perform the following PM activities in addition to normal support functions:

- Annual CPE Cleaning with functionality testing / maintenance
- Semi-Annual Failover testing / maintenance
- Monthly Network Functionality testing / maintenance
- Monthly Application Functionality testing / maintenance

When possible, we incorporate our preventive maintenance into existing Customer Change Management processes when properly reviewed by VT Staff members and agreed upon by CCD.

3.4 Root Cause Analysis

3.4.1 Priority 1 RCA

CCD agrees to the SLA Case priority classifications and escalation process outlined in Attachment D. After a Priority 1 outage VT will provide an initial Root Cause Analysis (RCA) report based on VT's standard format, see attachment B of this SOW. VT and CCD representatives (911 & TS representatives) will meet to review the RCA. The VT representatives will collaborate as applicable on CCD's standard RCA format, see attachment C of this SOW. CCD's RCA format will be the document of record between the parties for the incident. Based on outcomes, VT and/or CCD representatives agree to acceptable process changes to avoid the reoccurrence of like P1 outages.

3.4.2 Priority 2 RCA

CCD agrees to the SLA Case priority classifications and escalation process. In the event of a significantly impactful Priority 2 outage, VT agrees to follow the Priority 1 process, including collaborating as applicable on CCD's standard RCA format in attachment B of this SOW. VT may choose whether or not to complete their standard Root Cause Analysis (RCA) report in attachment C of this SOW.

3.5 Additional Options

VENTURE TECHNOLOGIES's Customer Service Center has many options available to both monitor and maintain our customer's networks with various Service Level Agreements and support solutions. Please contact your Account Manager for details on what VENTURE TECHNOLOGIES can provide for ongoing support for your organization.

4. Project Management

4.1 Overview

VENTURE TECHNOLOGIES will assign a Project Manager (PM) responsible for overseeing the entire project, and will work with customer's project owner / stakeholder, as defined below as a strategic partner.

The VENTURE TECHNOLOGIES PM will be the focal point for contact for the duration of the project. The VENTURE TECHNOLOGIES PM will discuss any issues needing resolution, manage change control, and will work with the client to verify milestone dates essential to meet required in-service date. Through a documented strategy, the PM will work with the customer to verify that the account manager & pre-sales Technician have clearly defined the project requirements and documented these requirements in the Statement of Work, schedule and plan the project's successful completion, and then work with the customer and VENTURE TECHNOLOGIES resources to implement the project.

To facilitate the management of this project, the customer must designate a person to serve as the primary point-of-contact (*Project Owner / Stakeholder*) for the project, having the authority to make decisions about project and system operations, and will be accountable for reporting task status both internally and to the VENTURE TECHNOLOGIES PM. The VENTURE TECHNOLOGIES PM will conduct a formal project kick-off/Statement of Work Review meeting inviting all major project stakeholders. During this meeting, the PM will confirm the customer's business goals and acceptance criteria for this integration project.

4.2 Project Kick-off / Statement of Work Review

The project kick-off or Statement of Work Review will be organized by a VENTURE TECHNOLOGIES project manager. The PM will schedule this meeting with the customer to review the Statement of Work and answer any questions or concerns. In attendance will be a minimum of the VENTURE TECHNOLOGIES project manager, the VENTURE TECHNOLOGIES Technician currently assigned to the project and the customer. Other optional attendees will be the VENTURE TECHNOLOGIES Account Manager and VENTURE TECHNOLOGIES pre-sales Technician and other customer resources / technical staff.

The purpose of this meeting is to for VENTURE TECHNOLOGIES and the customer to agree that the project and the associated Statement of Work meet the requirements for the project.

The outcome of this meeting will be to have the Statement of Work Acceptance form (found at the end of this SOW) signed and sent back to VENTURE TECHNOLOGIES for acceptance of the terms enclosed in this Statement of Work.

4.2.1 Deliverables

Upon successful kick-off of the project the following will be completed:

- a. The Statement of Work will have been sent to the customer prior to the Kick-off meeting.
- b. The Statement of Work will be reviewed by the customer and VENTURE TECHNOLOGIES and any changes/corrections completed.
- c. Venture Technologies will develop and deliver:
 - i. System Overview
 - ii. System Diagrams
 - iii. As Built Documentation (Delivered 10 Days after "Cut")
 - iv. Detailed Project Plan

v. Weekly Status Meeting

4.2.2 Customer Statement of Work Sign Off

Once the customer is satisfied with VENTURE TECHNOLOGIES's Statement of Work the Statement of Work Acceptance form shall be signed and sent back to VENTURE TECHNOLOGIES. VENTURE TECHNOLOGIES will deem the project to be started and will schedule resources accordingly with the customer

4.3 Roles, Responsibilities, and Resources

The table below lists the Roles and Responsibilities for the implementation.

Item	Table 1: Administrative Tasks	VT / West	CCD
1	Receive, inventory, unpack and dispose of all packaging material.	X	X
2	Provide adequate Power Facilities, Environmental Conditions, and appropriate Grounding, for the proper operation of the solution.		X
3	Provide supporting information to aid in the solution of any problems discovered during installation, implementation or post installation phases of this project.	X	X
4	Assume sole responsibility for the accuracy and completeness of the data supplied to Venture Technologies for backroom/application database preparation. As applicable and provide the Venture Technologies configuration information prior to system staging.		X
5	Designate a person to whom all Venture Technologies communications may be addressed and who has the authority to act on all aspects of the services.		X
6	Personnel Assignment. <ul style="list-style-type: none"> - Installation - System Configuration - Training - Maintenance - Project Management/Support 	X	
7	Assign personnel to aid in the following activities: <ul style="list-style-type: none"> - Installation - System Configuration - Maintenance - Project Management 		X
8	Provide Installation and Cutover requirements.	X	
9	Provide Installation and Cutover plans for the Solution.	X	X
10	Gather the required configuration data from end-user.	X	X
11	Conduct and Generate Meeting Minutes and Project Documents.	X	X
12	Provide Project Management Services: <ul style="list-style-type: none"> - Serve as Venture Technologies single point of contact during project implementation. - Conduct a Line-by-Line order review with sales and technical staff to ensure solution correctness and follow up change order process as required and to provide feedback to the channel partner PM - Validate the order against the price quote. 	X	

	<ul style="list-style-type: none"> - Develop a project plan and schedule jointly with the West Project coordinator. - Complete a Scope of Work (SOW) for inclusion in the partner's comprehensive SOW. - Assess project risk jointly with the Customer. - Ensure that equipment is shipped per a mutually agreed upon schedule - Develop and communicate Communication and Escalation plans. - Ensure that Services are provided per a mutually agreed upon schedule. - Schedule and coordinate site survey, installation and training resources as purchased. - Participate in all customer calls - Participate in weekly or bi-weekly customer status meetings by phone. - Coordinate all Venture Technologies on-site resource activities including customer communication, checklists, resource release, etc. - Maintain Venture Technologies issue list during implementation and provide follow up resolution. - Maintain Venture Technologies post-cut punch list and provide follow up on resolution. - Complete project acceptance documentation and handover to service. 		
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13	Perform Site Survey to include: <ul style="list-style-type: none"> - Environmental survey - Electrical survey - Telephony requirements - Application requirements - Call flow requirements 	X	X
14	Provide Solution Documentation / Software. <ul style="list-style-type: none"> - User Guides - Administrator Guides - Equipment Hardware Reference Guides - Equipment Software Reference Guides - Application CD's / DVD's 	X	
15	Provide Solution User and Administrator training.	X	
16	Provide Cut-Over Support at site.	X	X
17	Provide Cut-Over Technical Support at site – Per PO.	X	X
18	Perform FAT (Final Acceptance Testing) at site with client.	X	X
19	Provide a Vendor support list for non-solution equipment for integration.		X
20	Coordinate Vendor support for non-solution equipment such as: Radio, CAD, NetClock, and Voice Recorder.		X
21	Removal of all Third-party Equipment / Cables.		X
22	Provide Third-Party data required for non-solution interfaces.		X
23	Provide NENA standard ALI format.		X
24	Ensure that every third-party vendor is on-site during the installation and cutover period		X
25	Install Solution – (Per PO)	X	
26	Stage all required software – (Per PO). <ul style="list-style-type: none"> - Solution Computing Element Operating Systems - Applications 	X	
27	Provide and install network cabling with SOLUTION specified connectors for Venture Technologies equipment.		X
28	Technical Pre-Test, by VT Certified Technician, of the functionality of the Telephony Interface, Call Handling Solution, and all applications requiring	X	X

	CAD dumps to third party applications. This testing is in advance of System Acceptance Testing allowing the Technician time to Debug and Fault Isolate any technical issues before formal testing takes place.		
29	Verify and Test, on site, the functionality of the Telephony Interface, Call Handling Solution, Location Determination Solution, Resource Management Solution (Per PO).	X	X
30	Coordinate / Define Wireless Carrier's Call Routing to PSAP.	X	X
31	Provide 1 Emergency 911-test trunk, 1 Admin test line, and run temporary cables to each position for training purposes.	X	X
Item	Table 2: Technical Tasks – VIPER 9-1-1 Configuration	VT / West	CCD
1	Define VIPER Environment. Number of Remote Sites and Functionality / Attributes Number of: - ESINet / i3 / CAMA Trunk Interface - 7-Digit Emergency Lines - Administrative Lines - Automatic Ring Down Circuits - Station Ring Down Circuits		X
2	Define Redundancy / Fault-tolerance Requirements.	X	X
3	Provide Redundancy / Fault-tolerance Schema.	X	
4	Define Bandwidth Requirements.	X	
5	Define Telephony Functionality requirements.		X
6	Provide Telephony Functionality configuration.		X
7	Verify the VOIP Phone type: - (12 Buttons / Lines or less) - (More than 12 buttons / Lines)	N/A	N/A
8	Define Alarm Notification requirements.		X
9	Define Alarm Notification.		X
10	Define Caller ID Requirements – (PBX restrictions)		X
11	<input type="checkbox"/> Define CAD outputs to Third-Party CAD Systems.		X
12	Define CAD Outputs to CAD system (Tri-Tech, IQ/CAD, etc.).	X	
13	Provide UPS requirements for Backroom Equipment.	X	X
14	Provide UPS equipment per PO.	X	
15	Provide Cabling. - Provide and install wall mounted patch panel and label all cables for Venture Technologies Solution - Provide and install Amphenol cables or Punch blocks for 911 Trunks and Admin lines from Demark to Telephony Interface - Provide and Install Network Cables from the VIPER 9-1-1 cabinet to the Positions - Provide and install a network cable from VIPER 9-1-1 cabinet to NetClock port (disclaimer required) - Provide and install required cabling for the Voice Recorder - Provide and install network cable from VIPER 9-1-1 cabinet to Voice Recorder for ANI/ALI spill		X
16	Provide Network Timing Source / port such as NetClock for connecting to the solution.	X	X
17	Define Demark Interface. - Telephony Demarc - Network Demarc		X

Item	Table 3: Technical Tasks - Network	VT / West	CCD
1	Provide CPE LAN per Venture Technologies specifications	X	
2	Provide Product WAN requirements	X	
3	Define the WAN environment	X	X
4	Design / Architect network	X	X
5	Provide WAN Connectivity	X	
5	Provide Network Router Connectivity		X
6	Provision Routers	X	
7	Provide Demarc to WAN	X	X
8	CPE to Demarc connectivity	X	X
9	Position to CPE Cabling	X	X
10	Network Resilience & QoS Testing	X	
11	Work with CCD team on connecting the Viper to Denver's network in accordance with CCD security requirements	X	
12	Work with CCD team on IP Schema for the Viper systems integration into Denver's existing Cisco network	X	
13	Provide firewalls as shown in the connectivity diagram in the SOW.	X	
14	Work with CCD team on Viper integration into the City's Cisco Call Manager infrastructure.	X	
15	Century Link CAMA trunks will be located at the following locations: 950 Josephine Street, Denver, 12025 E, 45 th Ave., Denver, 303 West Colfax, Denver	X	
16	Multicasting requirements.	X	X

Item	Table 4: West Corp Training prerequisite 1	VT / West	CCD
1	Define PSAP Call Flow.	X	X
2	Define GUI Mode:		X
3	Define Telephony: - Queue buttons appearance order - Line buttons appearance order Feature buttons appearance order and functionality		X
4	Define Location functions: - ALI screen layout and formatting - DBR allowed or not allowed - Premise Info used? - Configuration required? - TTY questions configuration - Wireless ALI Re-Bid Timer configuration		X
5	Define Pro Q/A or SOPs: - Incident Type configuration - Incident Type questions configuration - SOP configuration	N/A	N/A
6	Define Message Board Functionality: - One-to-One messaging enabled - Pre-defined message button configuration		X
7	- Define VIPER Activity View Functionality:		X
8	Venture Technologies will implement and maintain the above configurations after West Corp Configuration Training	X	

Item	Table 5: Power Metrix Training Prerequisite	VT / West	CCD
1	Standalone and Networked MIS Deployment: <i>Define the following:</i> <ul style="list-style-type: none"> - Set up technical meeting with Field Technicians to discuss: <ul style="list-style-type: none"> o Network: <ul style="list-style-type: none"> ▪ Establish network connection (VPN, Nat translation, VPN Client, etc.) ▪ Establish outgoing port to send telemetry ▪ Establish incoming port for SSH access ▪ Cabling ▪ Physical location of RDDM units ▪ IP address strategy and assignment - CDR licenses activation? - Historical importing required from existing MIS data? <ul style="list-style-type: none"> o Current format of data? o CPE vendor of old data? o How many years? o How many trunk changes within years required? o How many records? o Method of providing historical data to ECaTS? 	X	X
3	Provide Sample Reports for evaluation: <ul style="list-style-type: none"> - Call Volume Reports - Call Taker Performance Reports 		X
4	Coordinate MIS Implementation activities <ul style="list-style-type: none"> - Complete PSAP profile documentation - Schedule meeting with West to discuss: <ul style="list-style-type: none"> o Who will have access to the system? o Is logo required in the report? o What are the shifts you require? o What are the shift names? o Are you interested in monitoring certain Time ranges for Call activity? o Weekends / Weekdays o Rush hours o Any positions with access to MIS? Which position? Who will have access to this position? o How many 9-1-1 databases will MIS be reporting on? o Per PSAP: user account to access/global/local information o Email capabilities - Schedule implementation meetings with Field Intelligence Team - Establish training dates and times 	X	X
5	Venture Technologies will implement and maintain the above configurations. The On-Site Technician will support report development based on customer input.	X	X

4.3.1 Customer Resources / Deliverables

The following resource from CCD will be involved in this project implementation:

Project Owner / Stakeholder / Project Manager

The 911 Operations Project Owner will support the business aspects of the project. Responsibilities include, but are not limited to:

- Providing business context, expertise and guidance for the project.
- Acts as an escalation point for decisions and issues that are beyond the authority of the project manager
- Authorizing changes in scope, phase-end reviews, and go/no-go decisions.

The Technology Services Project Owner will support the technology aspects of the project. Responsibilities include, but are not limited to:

- Providing technical context, expertise and guidance for the project.
- Acts as an escalation point for decisions and issues that are beyond the authority of the project manager
- Authorizing changes in scope, phase-end reviews, and go/no-go decisions.

The Project Manager will be the main point-of-contact for the project. Responsibilities for the project manager include:

- Verifying prior to VENTURE TECHNOLOGIES's arrival that all of the resources external to VENTURE TECHNOLOGIES have been coordinated. i.e. Radio installers, furniture installers, carpet installers, etc.
- Ensuring the necessary cabling, circuits and power is installed and tested prior to the arrival of VENTURE TECHNOLOGIES's Technician(s) for the re-install.
- Providing the proper access to facilities at the requested times to allow the VENTURE TECHNOLOGIES Technical teams to successfully perform the installation as described in this Statement of Work.
- Have staff available for VENTURE TECHNOLOGIES at the designated time(s).
- Arrange for any necessary third party resources to be available.
- Request in writing any Changes. See Section 4.4 – Project Change Process for more detail.
- Reporting any known risks or issues as they become apparent to all Project Team members. At this time, it will be decided if a meeting needs to be scheduled to further discuss.
- Providing the information in the deliverables section prior to the Project Technician arriving on-site.

The 911 Operations Business Lead responsibilities include, but are not limited to:

- Providing functional requirements of the phone system & how it will be implemented and administered within the center.
- Acts as primary 911 Operations subject matter expert and center liaison, working closely with Project Team to guide the project to a successful outcome.

The Technical Services Lead responsibilities include, but are not limited to:

- Providing technical requirements of the phone system & how it will be implemented.
- Acts as primary Technical subject matter expert working closely with Project Team to guide the project to a successful outcome.

4.3.2 VENTURE TECHNOLOGIES Resources / Deliverables

The following resources from VENTURE TECHNOLOGIES will be involved in this project implementation:

Account Manager

Responsibilities for the account manager include:

- Working with the Project Owner for any order placements and/or Change Orders.
- Working with the Project Owner and VENTURE TECHNOLOGIES Project Manager to help resolve any issues that may arise.
- Reporting any known risks or issues as they become apparent to all Project Team members. At this time, it will be decided if a meeting needs to be scheduled to further discuss.

Project Manager

Responsibilities for the project manager include:

- Conducting project meetings including; Project Kick-off/SOW review, recurring status calls during the Project Implementation phase and Project Close-out Meeting.
- Scheduling VENTURE TECHNOLOGIES Technical resources for project implementation.
- Reporting any known risks or issues as they become apparent to all Project Team members. At this time, it will be decided if a meeting needs to be scheduled to further discuss.
- Working with the City and County of Denver and VENTURE TECHNOLOGIES resources to help resolve any issues that may arise.

Technical Architect

Responsibilities for the Technical Architect include:

- Creating the Statement of Work and reviewing it with the Project Team.
- Assisting the Account Manager with any additional order placements and/or Change Orders.
- Reporting any known risks or issues as they become apparent to all Project Team members. At this time, it will be decided if a meeting needs to be scheduled to further discuss.
- Working with the Project Owner and VENTURE TECHNOLOGIES Project Manager to help resolve any issues that may arise.
- Providing the Project Owner with printed project documentation after project closure.

9-1-1 Technician

Responsibilities for the 9-1-1 Technician's include:

- Planning & Implementing the Project to the specifications as outlined in section 2 of this Statement of Work.
- Reporting any known risks or issues as they become apparent to all Project Team members. At this time, it will be decided if a meeting needs to be scheduled to further discuss.
- Working with the Project Owner and VENTURE TECHNOLOGIES resources to help resolve any issues that may arise.
- Create and submit solution focused documentation (i.e., As-Built diagrams, Method of Procedures (MOPS), etc.)

4.4 Project Change Process

Upon completion and sign-off of the Statement of Work document, any changes to project scope will follow the Change Control Plan, which is as follows:

- Anything required outside of the scope of Statement of Work document must be requested in writing on the Project Change Form. A determination will then be made as to the impact of the change on the project's budget and schedule.
- As needed, additional charges will apply for items not specifically provided for in the original proposal. An additional PO may be required.
- All changes, even those that do not alter the original price, will be documented before being implemented.
- Fees and timeline adjustments, if any, will be assessed in writing by VENTURE TECHNOLOGIES and the project scope will be modified accordingly by VENTURE TECHNOLOGIES.

4.4 Project Closure

Once the project has been completed VENTURE TECHNOLOGIES will organize a meeting with the customer to recap the project.

The purpose of this meeting is to for VENTURE TECHNOLOGIES and the customer to agree that the project and the associated Statement of Work have been completed satisfactorily. This meeting is also to provide VENTURE TECHNOLOGIES with any feedback on the processes used by VENTURE TECHNOLOGIES and to determine if anything could be enhanced. Furthermore, it is to determine how VENTURE TECHNOLOGIES can assist the customer with the new system or any other future projects.

This outcome of this meeting will be to have the Project Completion & Acceptance form (found at the end of this SOW) signed and sent back to VENTURE TECHNOLOGIES for closeout of the project. The completion of this form signifies that the customer has reviewed VENTURE TECHNOLOGIES's implementation, is satisfied with the completed project and that all of the agreed upon deliverables have been met.

4.4.1 Deliverables

Upon successful closeout of the project VENTURE TECHNOLOGIES will provide the following documentation in electronic formats:

1. The Statement of work.
2. The Solution Overview
3. The System Diagrams.
4. West post implementation sign off for Phase 1 and Phase 2
5. The "As-Built" Document (10 Days after "Cut").

The VENTURE TECHNOLOGIES provided documentation may include vendor system guides and customized system documents as appropriate for the customer's configuration.

All documentation, whether from the vendor or customized by VENTURE TECHNOLOGIES, will be distributed to the customer in electronic format usually within ten (10) business days of completion of the project.

The electronic format is typically a .PDF file in the Adobe format (a free PDF viewer can be obtained at <http://www.adobe.com/>). Other formats such as Microsoft Word or Excel may be used as appropriate.

4.4.2 Customer Satisfaction & Sign Off

Once the customer is satisfied with VENTURE TECHNOLOGIES's implementation of the project, the project closeout meeting has been completed and the Project Completion & Acceptance form has been signed and sent back to VENTURE TECHNOLOGIES, VENTURE TECHNOLOGIES will deem the project to be completed and the first year of annual maintenance support will begin. If the customer has any issues with the VENTURE TECHNOLOGIES installed system, they can obtain assistance by contacting VENTURE TECHNOLOGIES's 24-hour Customer Service Center toll free at 866.622.6722. See section 4 for details on provided support and other support options.

5 Statement of Work Acceptance Sign-off Form

CCD

Signature

The undersigned agrees that VENTURE TECHNOLOGIES will provide the items and services in this Statement of Work and agrees to the terms and conditions set forth in the City and County of Denver Contract, Section 3-Delivery & Acceptance.

Any changes or items not specifically agreed to in this Statement of Work, or which are not part of the Venture Technologies RFP response, will be agreed to in writing and accepted by both parties (Additional charges may apply).

All signed copies of this Statement of Work shall be deemed originals.

For Customer

Signature

Printed Name

Title

Date

6 Project Completion & Acceptance Form

CCD

Project Completion and Customer Acceptance

An authorized signature below indicates that VENTURE TECHNOLOGIES has satisfactorily completed all items in the Statement of Work. The VENTURE TECHNOLOGIES provided 30-day maintenance window is effective starting on the date below. VENTURE TECHNOLOGIES will perform any necessary maintenance on the items included in this Statement of Work, where applicable, free of charge for that 30-day period. After 30 days, maintenance will be charged at normal VENTURE TECHNOLOGIES rates. This maintenance does not apply to any item that was not installed or configured as part of this Statement of Work, however VENTURE TECHNOLOGIES is willing to provide those services at normal VENTURE TECHNOLOGIES rates.

All signed copies of this Statement of Work shall be deemed originals.

For Customer:

Signature

Printed Name

Title

Date

7 PROJECT CHANGE FORM

Project Change Form

Date: _____

Requester: _____

PCF Number: _____

Nature of the proposed change:

Reason for the Change:

Impact of the Change:

Project schedule:

Project pricing:

Other impact:

P.O. to which changes will apply:

Signatures:

VENTURE TECHNOLOGIES's
Project Manager:

Date:

Approved

Rejected

Customer's Project Owner:

Date:

Approved

Rejected

Please send to the VENTURE TECHNOLOGIES Project Manager

8.0 Bill of Materials (BOM)

Josephine

Quantity	Item #	Description
Josephine-VIPER Node A		
1	912802/2	VIPER Primary Application Server
1	912803/2	VIPER Primary VoIP Soft Switch
1	912822/2	VIPER Secondary Application Server
1	912823/2	VIPER Secondary VoIP Soft Switch
2	912871/BB	Mediant 1000B Prebuilt Building Block
1	912890/BB	Media Kit Prebuilt Building Block
5	912870/1T1	Mediant 1000 Spare Part Digital Voice Module Single Span
2	912870/LIC	Mediant 1000 Access License (per Chassis)
45	912920	ECCP Workstation License
45	912850	VIPER Integrated ACD (Per Position)
4	912800	VIPER Gateway Shelf
12	912801	CAMA Interface Module (CIM)
47	912811	Application Server License
45	912812	PBX Access License
2	912813	48V Power Supply and Shelf - VIPER System
1	912827	VIPER Backroom Mounting Kit
1	P10008	License to Connect Non-Intrado Recording Device
8	E10642	PowerOps Client Access License
1	P10035	PowerOps Software Media
45	912845	IP Phone w/ALI
1	SHIPPING	SHIPPING

Quantity	Item #	Description
Josephine-Power 911 A9C-G3 & Software Clients		
45	914121/1	IWS Workstation - Software and Configuration
45	911801	A9C G3, Desk Mounting Kit
45	911809	A9C G3, Call Handling Accessories
45	911810-1	A9C G3 Bundle
1	911785	Position Image - Power Station Gen3
45	913100	Power 911 Client Access License (CAL)
45	913152	Power 911 Add-On Recorder for Radio (ITRR)
45	913202	Power 911 Server Access License
1	913152/CD	ITRR Media Kit

Josephine- con't

Quantity	Item #	Description
Josephine-VIPER Hardware-Power Ops-Peripherals		
1	914961	Power 911 Database-IWS Server RACK Bundle - Type B
1	914962	Object Server-IWS Server RACK - Type A
1	914121/3	Object Server - Underlying Software
1	914956	Common Hardware-1U Keyboard/LCD/Trackball/8-Port KVM
1	P10114/R	Common Hardware-Backup Disk Solution for Windows Server (Rack-Mount)
8	914102/BB	Power Ops Hardware-IWS Workstation Prebuilt Building Block
1	914840/1	Common Hardware-Modem DSU/CSU (Digital)- 2 units
8	V552	NEC 55IN LED LCD MON 19X10 8MS DP HDMI
8	PF660	FLAT WM FOR 32-60IN LCD AND PLASMA

Quantity	Item #	Description
Josephine-Power Metrics Hardware-Software-Implementation		
1	920100/CD	Power MIS
1	920004	Power MIS Advanced Reporting Tool
1	P10195	Power Metrics Advanced - Service set-up: single RDDM-Server Class
1	P10301	Power Metrics Suite - Agent Statistics Module
1	P10302	Power Metrics Suite - Ad-Hoc and Raw Data Activity Audit Module
1	P10303	Power Metrics Suite - Friendly Trunk Line Name Manager Module
1	P10304	Power Metrics Suite - Abandoned Call Workstation Summary Report
1	P10305	Power Metrics Suite - Called Back Summary Report
1	P10306	Power Metrics Suite - Class of Service ALI Change Summary Report
1	P10307	Power Metrics Suite - Daily Invalid ALI Report
1	P10308	Power Metrics Suite - Dynamic Class of Service Report
1	P10309	Power Metrics Suite - Top 20 Busiest Hours Graphing Breakdown Enhancement Report
1	P10310	Power Metrics Suite - Snapshot Report
1	914961	IWS Server RACK Bundle - Type B
1	914422	Additional Backup Executive SQL Agent

Quantity	Item #	Description
Josephine-VIPER TXT29-1-1 Hardware & Implementation		
1	ITXTOTF6	TXT29-1-1 P911 Integrated One-time-fee per PSAP (11+ seats)
1	P10063	ITS Equipment

Josephine- con't

Quantity	Item #	Description
Josephine-West Self-Maintenance Training		
2	960840	Self Maintenance Training (on Site)
12	960575	Living Expense per Day per Person
1	960580	Travel Fee per Person

Quantity	Item #	Description
Josephine-West Training Services		
2	960780	Power 911 Administrator Training
1	960801	Power 911 User Training
5	960575	Living Expense per Day per Person
1	960580	Travel Fee per Person
4	P10088	ACD CCS Training
6	960575	Living Expense per Day per Person
1	960580	Travel Fee per Person

Quantity	Item #	Description
Josephine-TXT2-911-Year 1 MRC		
1	P10062	ITS Service (Annual) Year 1
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 1

Quantity	Item #	Description
Josephine-Power Metric-Year 1 MRC		
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 1
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 1

Quantity	Item #	Description
Josephine-West Software Support & Anti-Virus-Year 1 MRC		
11	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 1
34	950999/SUB1	Software Subscription Service - 1 Year/Position Year 1
60	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 1

Josephine- con't

Quantity	Item #	Description
Venture Technologies-VIPER Node B		
1	912802/2	VIPER Primary Application Server
1	912803/2	VIPER Primary VoIP Soft Switch
1	912822/2	VIPER Secondary Application Server
1	912823/2	VIPER Secondary VoIP Soft Switch
2	912811	Application Server License
1	912827	VIPER Backroom Mounting Kit

Quantity	Item #	Description
Venture-VIPER Hardware-Peripherals		
1	914961	Power 911 Database-IWS Server RACK Bundle - Type B
1	914961	Reporting Hardware-IWS Server RACK Bundle - Type B
1	914422	Reporting Hardware-Additional Backup Executive SQL Agent
1	914962	Object Server-IWS Server RACK - Type A
1	914121/3	Object Server - Underlying Software
1	914956	Common Hardware-1U Keyboard/LCD/Trackball/8-Port KVM
1	914840/1	Common Hardware-Modem DSU/CSU (Digital)- 2 units

Quantity	Item #	Description
Venture-Power Metric Implementation & TXT Hardware		
1	P10195	Power Metrics Advanced - Service set-up: single RDDM-Server Class
1	P10063	ITS Equipment

Quantity	Item #	Description
Venture-TXT2-911 & Anti-Virus-Year 1		
1	P10062	ITS SERVICE (ANNUAL)
7	914143	Symantec Endpoint Protection Manager

Quantity	Item #	Description
West ECaTS/Power Metrics Report Development		
612	950105	Professional Services for ECaTS Report Development

Josephine- con't

Quantity	Item #	Description
Josephine-Venture-Cisco WAN Hardware		
4	FL-CUBEE-5=	Unified Border Element Enterprise Paper RTU - 5 sessions
5	WS-C3650-48PS-S	Cisco Catalyst 3650 48 Port PoE 4x1G Uplink IP Base
5	CON-SSSNP-WSC36PSS	SOLN SUPP 24X7X4 Catalyst 3560E 24 10/100/1000 + 2*10GE(X2),
5	S3650UK9-163	UNIVERSAL
5	PWR-C2-640WAC	640W AC Config 2 Power Supply
5	CAB-TA-NA	North America AC Type A Power Cable
5	STACK-T2-BLANK	Type 2 Stacking Blank
5	PWR-C2-BLANK	Config 2 Power Supply Blank
4	ISR4321-V/K9	Cisco ISR 4321 Bundle, w/UC License, CUBE-10
4	CON-SSSNP-ISR4321V	Cisco ISR 4321 Bundle w UC License CUBE-10
4	SL-4320-IPB-K9	IP Base License for Cisco ISR 4320 Series
4	SL-4320-UC-K9	Unified Communication License for Cisco ISR 4320 Series
4	PWR-4320-AC	AC Power Supply for Cisco ISR 4320
4	CAB-AC-C5	AC Power Cord, Type C5, US, Canada
4	MEM-FLSH-4G	4G Flash Memory for Cisco ISR 4300 (Soldered on motherboard)
4	MEM-4320-4G	4G DRAM for Cisco ISR 4320 (Soldered on motherboard)
8	NIM-BLANK	Blank faceplate for NIM slot on Cisco ISR 4400
8	FL-CUBEE-5	Unified Border Element Enterprise License - 5 sessions
4	SISR4300UK9-316S	Cisco ISR 4300 Series IOS XE Universal
2	WS-C2960X-48FPS-L	Catalyst 2960-X 48 GigE PoE 740W, 4 x 1G SFP, LAN Base
2	CON-SSSNP-WSC294SL	SOLN SUPP 24X7X4 Cat 2960S 48 GigE, 2 x 10G SFP+ LAN Base RE
2	PWR-CLP	Power Retainer Clip For 3560-C, 2960-C and 2960-L Switches
2	CAB-16AWG-AC	AC Power cord, 16AWG

Quantity	Item #	Description
Josephine-Venture Technologies VIPER WAN-Year 1		
12	WAN	CL & L3 WAN: 950 Josphine to Venture Technologies
1	WAN NRC	One-Time Implementation Charges

Josephine- con't

Quantity	Item #	Description
Venture Node B-Venture Technologies & West Professional Sevices		
1	950858	Backroom Staging - Additional work when no Cabinet
1	950510	Project Management Services
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training

Quantity	Item #	Description
Josephine Node A-Venture Technologies & West Professional Services		
1	950858	Backroom Staging - Additional work when no Cabinet
53	950852	Front Room Equipment Staging - Per Position
50	950104	Professional Services (per Day)
62	960575	Living Expense per Day per Person
6	960580	Travel Fee per Person
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training
1	950510	Project Management Services
1	ISC-MANAGEDSERVICEPREBI LL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance
1	ISC-MANAGEDSERVICEPREBI LL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance 24/7 Onsite Support for 7 days Post System Cut-over

45th Ave: Survivable VIPER Node

Quantity	Item #	Description
45th Ave-Survivable VIPER Node (SVN) Hardware & Software		
1	912871/BB	Mediant 1000B Prebuilt Building Block
1	912890/BB	Media Kit Prebuilt Building Block
3	912870/1T1	Mediant 1000 Spare Part Digital Voice Module Single Span
1	912870/LIC	Mediant 1000 Access License (per Chassis)
25	912920	ECCP Workstation License
25	912850	VIPER Integrated ACD (Per Position)
2	912800	VIPER Gateway Shelf
8	912801	CAMA Interface Module (CIM)
26	912811	Application Server License
64	912812	PBX Access License
2	912813	48V Power Supply and Shelf - VIPER System
1	912827	VIPER Backroom Mounting Kit
11	E10642	PowerOps Client Access License
1	P10035	PowerOps Software Media
25	912845	IP Phone w/ALI
3	Q12940	Cisco Catalyst 3650 Series Switches

Quantity	Item #	Description
45th Ave-Power 911 A9C-G3 & Software Clients		
25	914121/1	IWS Workstation - Software and Configuration
25	911801	A9C G3, Desk Mounting Kit
25	911809	A9C G3, Call Handling Accessories
25	911810-1	A9C G3 Bundle
1	911785	Position Image - Power Station Gen3
25	913100	Power 911 Client Access License (CAL)
25	913152	Power 911 Add-On Recorder for Radio (ITRR)
25	913202	Power 911 Server Access License
1	913152/CD	ITRR Media Kit

Quantity	Item #	Description
45th Ave-VIPER Hardware-Contact Closures		
1	914962	Object Server RACK - Type A
1	914121/3	Object Server - Underlying Software
55	914940	Contact Closures-I/O Control - Per Position
55	915107	Contact Closures-16 Port Digital I/O Controller

45th Ave: Survivable VIPER Node – con’t

Quantity	Item #	Description
45th-Power Ops-Power Metrics Hardware-Software-Implementation		
11	914102/BB	Power Ops-IWS Workstation Prebuilt Building Block
1	P10192	Power Metrics Advanced - Service set-up: No RDDM
1	P10301	Power Metrics Suite - Agent Statistics Module
1	P10302	Power Metrics Suite - Ad-Hoc and Raw Data Activity Audit Module
1	P10303	Power Metrics Suite - Friendly Trunk Line Name Manager Module
1	P10304	Power Metrics Suite - Abandoned Call Workstation Summary Report
1	P10305	Power Metrics Suite - Called Back Summary Report
1	P10306	Power Metrics Suite - Class of Service ALI Change Summary Report
1	P10307	Power Metrics Suite - Daily Invalid ALI Report
1	P10308	Power Metrics Suite - Dynamic Class of Service Report
1	P10309	Power Metrics Suite - Top 20 Busiest Hours Graphing Breakdown Enhancement Report
1	P10310	Power Metrics Suite - Snapshot Report
11	V552	NEC 55IN LED LCD MON 19X10 8MS DP HDMI
11	PF660	FLAT WM FOR 32-60IN LCD AND PLASMA

Quantity	Item #	Description
45th Ave-TXT2-911 Implementation		
1	ITXTOTF6	TXT29-1-1 Integrated with Power 911 One-time-fee per PSAP-Target Price (11+ seats)

Quantity	Item #	Description
45th Ave-West TXT2-911-Year 1		
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 1

Quantity	Item #	Description
45th Ave-Power Metrics-Year 1		
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 1
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 1

Quantity	Item #	Description
45th Ave-West Software Support & Anti-Virus-Year 1		
4	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 1
51	950999/SUB1	Software Subscription Service - 1 Year/Position Year 1
68	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 1

45th Ave: Survivable VIPER Node – con’t

Quantity	Item #	Description
45th Ave-Cisco WAN Hardware		
4	WS-C3650-48PS-5	Cisco Catalyst 3650 48 Port PoE 4x1G Uplink IP Base
4	CON-SSSNP-WSC36PSS	SOLN SUPP 24X7X4 Catalyst 3560E 24 10/100/1000 + 2*10GE(X2),
4	S3650UK9-163	UNIVERSAL
4	PWR-C2-640WAC	640W AC Config 2 Power Supply
4	CAB-TA-NA	North America AC Type A Power Cable
4	STACK-T2-BLANK	Type 2 Stacking Blank
4	PWR-C2-BLANK	Config 2 Power Supply Blank
2	ISR4321-V/K9	Cisco ISR 4321 Bundle, w/UC License, CUBE-10
2	CON-SSSNP-ISR4321V	Cisco ISR 4321 Bundle w UC License CUBE-10
2	SL-4320-IPB-K9	IP Base License for Cisco ISR 4320 Series
2	SL-4320-UC-K9	Unified Communication License for Cisco ISR 4320 Series
2	PWR-4320-AC	AC Power Supply for Cisco ISR 4320
2	CAB-AC-C5	AC Power Cord, Type C5, US, Canada
2	MEM-FLSH-4G	4G Flash Memory for Cisco ISR 4300 (Soldered on motherboard)
2	MEM-4320-4G	4G DRAM for Cisco ISR 4320 (Soldered on motherboard)
4	NIM-BLANK	Blank faceplate for NIM slot on Cisco ISR 4400
4	FL-CUBEE-5	Unified Border Element Enterprise License - 5 sessions
2	SISR4300UK9-316S	Cisco ISR 4300 Series IOS XE Universal

Quantity	Item #	Description
45th Ave-Venture Technoloiges-VIPER WAN-Year 1		
12	WAN	CL & L3 WAN: 45th Ave to Venture Technologies
1	WAN-NRC	One-Time Implementation Charges

Quantity	Item #	Description
45th-Venture Technologies & West Professional Services		
1	950858	Backroom Staging - Additional work when no Cabinet
36	950852	Front Room Equipment Staging - Per Position
1	950510	Project Management Services
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance

Colfax Satellite VIPER

Quantity	Item #	Description
Colfax Satellite VIPER- Hardware & Software		
1	912803/2	VIPER Primary VoIP Soft Switch
1	912871/BB	Mediant 1000B Prebuilt Building Block
1	912890/BB	Media Kit Prebuilt Building Block
2	912870/1T1	Mediant 1000 Spare Part Digital Voice Module Single Span
1	912870/LIC	Mediant 1000 Access License (per Chassis)
16	912920	ECCP Workstation License
16	912850	VIPER Integrated ACD (Per Position)
2	912800	VIPER Gateway Shelf
4	912801	CAMA Interface Module (CIM)
17	912811	Application Server License
32	912812	PBX Access License
2	912813	48V Power Supply and Shelf - VIPER System
1	912827	VIPER Backroom Mounting Kit
1	P10008	License to Connect Non-Intrado Recording Device
1	E10642	PowerOps Client Access License
1	P10035	PowerOps Software Media
16	912845	IP Phone w/ALI

Quantity	Item #	Description
Colfax-Power 911 A9C-G3 & Software Clients		
16	914121/1	IWS Workstation - Software and Configuration
16	911801	A9C G3, Desk Mounting Kit
16	911809	A9C G3, Call Handling Accessories
16	911810-1	A9C G3 Bundle
1	911785	Position Image - Power Station Gen3
16	913100	Power 911 Client Access License (CAL)
16	913152	Power 911 Add-On Recorder for Radio (ITRR)
16	913202	Power 911 Server Access License
1	913152/CD	ITRR Media Kit

Colfax Satellite VIPER – con’t

Quantity	Item #	Description
Colfax-VIPER Hardware-Power Ops-Peripherals		
1	914962	Object Server-IWS Server RACK - Type A
1	914121/3	Object Server - Underlying Software
1	914957	Object Server-Rocket Port Express Quadcable DB9, PCIe Card
1	914956	Common Hardware-1U Keyboard/LCD/Trackball/8-Port KVM
1	914102/BB	Power Ops-IWS Workstation Prebuilt Building Block
1	V552	NEC 55IN LED LCD MON 19X10 8MS DP HDMI
1	PF660	FLAT WM FOR 32-60IN LCD AND PLASMA

Quantity	Item #	Description
Colfax-Power Metrics & TXT2-911 Implementation		
1	P10192	Power Metrics Advanced - Service set-up: No RDDM
1	ITXTOTF6	TXT29-1-1 P911 Integrated One-time-fee per PSAP (11+ seats)

Quantity	Item #	Description
Colfax-Power Metrics-Year 1		
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 1

Quantity	Item #	Description
Colfax-Software Support-Year 1		
16	950999/SUB1-BU	Software Sub Service - 1 Year/Position – Back Up Position Year 1

Quantity	Item #	Description
Colfax-West Anti-Virus-Year 1		
19	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 1

Quantity	Item #	Description
Colfax-Cisco Hardware		
2	WS-C3650-48PS-S	Cisco Catalyst 3650 48 Port PoE 4x1G Uplink IP Base
2	CON-SSSNP-WSC36PSS	SOLN SUPP 24X7X4 Catalyst 3560E 24 10/100/1000 + 2*10GE(X2),
2	S3650UK9-163	UNIVERSAL
2	PWR-C2-640WAC	640W AC Config 2 Power Supply
2	CAB-TA-NA	North America AC Type A Power Cable
2	STACK-T2-BLANK	Type 2 Stacking Blank
2	PWR-C2-BLANK	Config 2 Power Supply Blank

Colfax Satellite VIPER – con’t

Quantity	Item #	Description
Colfax-Venture Technologies & West Professional Services		
1	950858	Backroom Staging - Additional work when no Cabinet
17	950852	Front Room Equipment Staging - Per Position
1	950510	Project Management Services
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training
1	ISC-MANAGEDSERVICEPREBI LL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance

ATTACHMENT B

Venture Technologies Statement of Work for CCD



Root Cause Analysis

Date: #/#/#

Customer	#
Impairment Date	#/#/#
City	#
State	#
Impairment Duration	#

Event Summary

Root Cause Summary

Preventative Measures and Follow-Up items

ATTACHMENT C
Venture Technologies Statement of Work for CCD

Root Cause Analysis

The City and County of Denver would like to see a root cause analysis provided for all outages that meet the criteria of **priority one**.

Priority Level	Definition
1 - Product Failure or Loss of Service	Client's production environment is down, causing critical impact to client's business operations if service is not restored quickly. Venture and the Client are willing to commit full-time resources "around-the-clock" in order to either resolve the situation or until the incident is de-escalated.

Root Cause Analysis Process

WHAT IS A ROOT CAUSE?

- Root causes are underlying causes.
- Root causes are those that can reasonably be identified.
- Root causes are those management has control to fix.
- Root causes are those for which effective recommendations for preventing recurrences can be generated.

Root causes are underlying causes. The goal should be to identify specific underlying causes. The more specific the team can be about why an event occurred, the easier it will be to arrive at recommendations that will prevent recurrence.

Root causes are those that can reasonably be identified. Occurrence investigations must be cost beneficial. It is not practical to keep valuable staff members occupied indefinitely searching for the root causes of occurrences. Structured Root Cause Analysis (RCA) helps the team get the most out of the time they have invested in the investigation.

Root causes are those over which management has control. The team should avoid using general cause classifications such as operator error, equipment failure or external factor. Such causes are not specific enough to allow management to make effective changes. Management needs to know exactly why a failure occurred before action can be taken to prevent recurrence. We must also identify a root cause that management can influence. For example, identifying "severe weather" as the root cause of medications not being delivered on time to the consumer is not appropriate. Severe weather is not controlled by management.

Root causes are those for which effective recommendations can be generated. Recommendations should directly address the root causes identified during the investigation. If the team arrives at vague recommendations such as, "Improve adherence to written policies and procedures," then they probably

have not found a basic and specific enough cause and need to expend more effort in the analysis process.

INSTRUCTIONS:

The following template is designed to assist in determining the underlying cause(s) of an operational failure. Asking “why” something happened, or did not happen, is the best place to start. In many cases, the most obvious cause is the “direct cause”. To determine contributing factors, ask “why” the direct cause occurred. For example, the boat sank because it had a hole in the bottom. In this example, the hole in the boat is the direct cause. In a root cause analysis, asking “why” is the next step. In this example, the boat had a hole because the repairperson did not know the boat had a hole that needed to be fixed. This would be a contributing factor. Asking why the repairperson did not know the boat had a hole to be fixed, we learn the root cause of the problem. The boat repair company does not have a system to track required repairs and the need to repair the hole was forgotten. Fill in the blank sections below for each category. In some cases, an individual category may not be involved. If that occurs, leave the section blank and move to the next set of questions. When complete, review your work to identify the root cause(s) for the event. The root cause(s) will become the basis for your Quality Improvement Plan.

Date of incident:	
Outage description:	

Contributing Factor - Departments

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
What happened?	What departments were involved? Describe events(s)	
Why did it happen?	What was the missing or weak step in the process?	
Why did it happen?	What caused the missing or weak step in the process? Why did that happen?	
Why did it happen?	What is currently done to prevent failure at this step?	

Contributing Factor – Human Error

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
Why did it happen?	What was the human error?	
Why did that happen?	Was staff performance in the process addressed? Was staff properly qualified?	
Why did that happen?	Can orientation and training be improved?	

Contributing Factor – Staffing Levels

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
Why did it happen?	Was the staffing level appropriate? If no, did staffing issues contribute to the event?	
Why did that happen?	Did actual staffing deviate from planned staff levels at the time of the event or during times leading up to the event?	
Why did that happen?	Were there any unexpected issues or incidents that occurred at the time of the event or during key times that led up to the event? If yes, did the unexpected issue impact staffing or workload for staff? If yes, did staff believe this change in staffing or workload contribute to the event?	

Contributing Factor – Equipment

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
Why did it happen?	How did the equipment fail? What broke?	
Why did that happen?	What is currently being done to prevent an equipment failure?	
Why did that happen?	What is currently being done to protect against a bad outcome if an equipment failure does occur?	

Contributing Factor - Environmental

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
Why did it happen?	What environmental factors directly affected the outcome?	
Why did that happen?	Was the physical environment appropriate for the process to be carried out?	
Why did that happen?	Are systems in place to identify environmental risks? Are responses to environmental risks planned and tested?	

Contributing Factor – External Causes

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
Why did it happen?	Were there any uncontrollable external factors?	
Why did that happen?	Are they truly beyond the organization’s control?	
Why did that happen?	How can we protect against them?	

Contributing Factor - Uncategorized

Level of Analysis	Questions/Factors Involved	Findings and Opportunities to Improve
Why did it happen?	Were there any other factors that directly influenced the outcome?	

At the conclusion of the root cause analysis, the organization may start to develop a Quality Improvement Plan that addresses each identified root cause. Below, indicate the root causes that you have identified:

Root Cause
<ul style="list-style-type: none"> • • • • • • • •

Process improvement
<ul style="list-style-type: none"> • • • • • • • •

Signatures of agreement on RCA

	Date	Title	Signature
Venture Technology Representative:			
City and County of Denver 911 Representative:			
City and County of Denver Technology Services Representative:			

SLA service credit

CCD agrees to the SLA Case priority classifications and escalation process. After a Priority 1 or 2 outage VT and CCD representatives (911 & TS representatives) will meet to determine the Root Cause Analysis (RCA). The VT/CCD representatives will collaborate on the RCA, and based on outcomes, agree to acceptable process changes to improve the SLA. The above written report will be signed by VT & CCD to verify RCA outage and provide the process improvement to ensure it does not happen again

Venture Technologies-Service Level Agreements, Case Priority Classifications 7 Ticket Escalations Process

- ✓ All cases opened by our Customer Support Center (CSC) are classified under one of the following priorities.
- ✓ The customer has the ability to ask for priority to be escalated based on defined definitions.
- ✓ If the customer and the CSC are in agreement the case priority can be lowered.

Priority Level	Definition	Remote Callback Response Time Goal	911 Managed Contract On-Site Response Time Goal*	Other Managed Contract On-Site Response Time Goal *
1 - Product Failure or Loss of Service	Client's production environment is down causing critical impact to Client's business operations if service is not restored quickly. Venture and the Client are willing to commit full-time resources "around-the-clock" in order to either resolve the situation or until the incident is de-escalated.	15 Minutes	2 Hours	Based on customer request and Engineer Availability Standard Time and Materials rates apply
2 - Severely Impaired functionality (more than 50%)	Client's production environment is severely degraded impacting significant aspects of Client's business operations. Venture and Client are willing to commit full-time resources during Ventures normal business hours in order to either resolve the situation or until the incident is de-escalated.	1 Hour	4 Hours	Based on customer request and Engineer Availability Standard Time and Materials rates apply
3 - Non Critical System Failure (Less than 50%)	Client's performance is degraded. Functionality is impaired, but most business operations continue.	8 Business Hours	Next Business Day	Not Applicable
4 - Inquiry	Client requires information or assistance on vendor product capabilities, or configuration.	Next Business Day	Next Business Day	Not Applicable

* On-site response time goal is based on the time from which it is determined an on-site technician is necessary.

Technical Escalation Procedure

- ✓ **Priority 1**
 - Escalation to Tier II engineer within 30 minutes after start time
 - Case updates made at a minimum of 1 hour intervals or upon event change
 - Escalation to manufacturer partner if required
 - Escalation to Tier III engineer at 1 hours after start time
 - Escalation to CSC Director after 4 hours after start time
 - Escalation to Executive Management after 12 hours after start time

✓ **Priority 2**

- Escalation to Tier II engineer within 1 hours after start time
- Case updates made at a minimum of 1 hour intervals or upon event change
- Escalation to manufacturer partner if required
- Escalation to Tier III engineer at 2 hours after start time
- Escalation to CSC Director after 6 hours after start time
- Escalation to Executive Management after 24 hours after start time

✓ **Priority 3**

- Escalation to Tier II engineer within 2 hours after start time
- Case updates made at a minimum of 1 hour intervals or upon event change
- Escalation to manufacturer partner if required
- Escalation to Tier III engineer at 4 hours after start time
- Escalation to CSC Director by duty manager after 24 hours after start time
- Escalation to Executive Management after 72 hours after start time

✓ **Priority 4**

- Escalation to Tier II engineer within 4 hours after start time
- Case updates made at a minimum of 1 hour intervals or upon event change
- Escalation to Tier III engineer at 8 hours after start time
- Escalation to CSC Director at 48 hours after start time

On-Site Response Procedure

The CSC will deploy an engineer to go on-site if one of the following conditions is met.

911 Center Managed Contract

- ✓ Equipment needs to be replaced
- ✓ A determination that an onsite technician is necessary
- ✓ At the customer's request and understands that charges may apply
- ✓ Remote troubleshooting is not possible

Case Closure Procedure

The following criteria must be met before closing out a case.

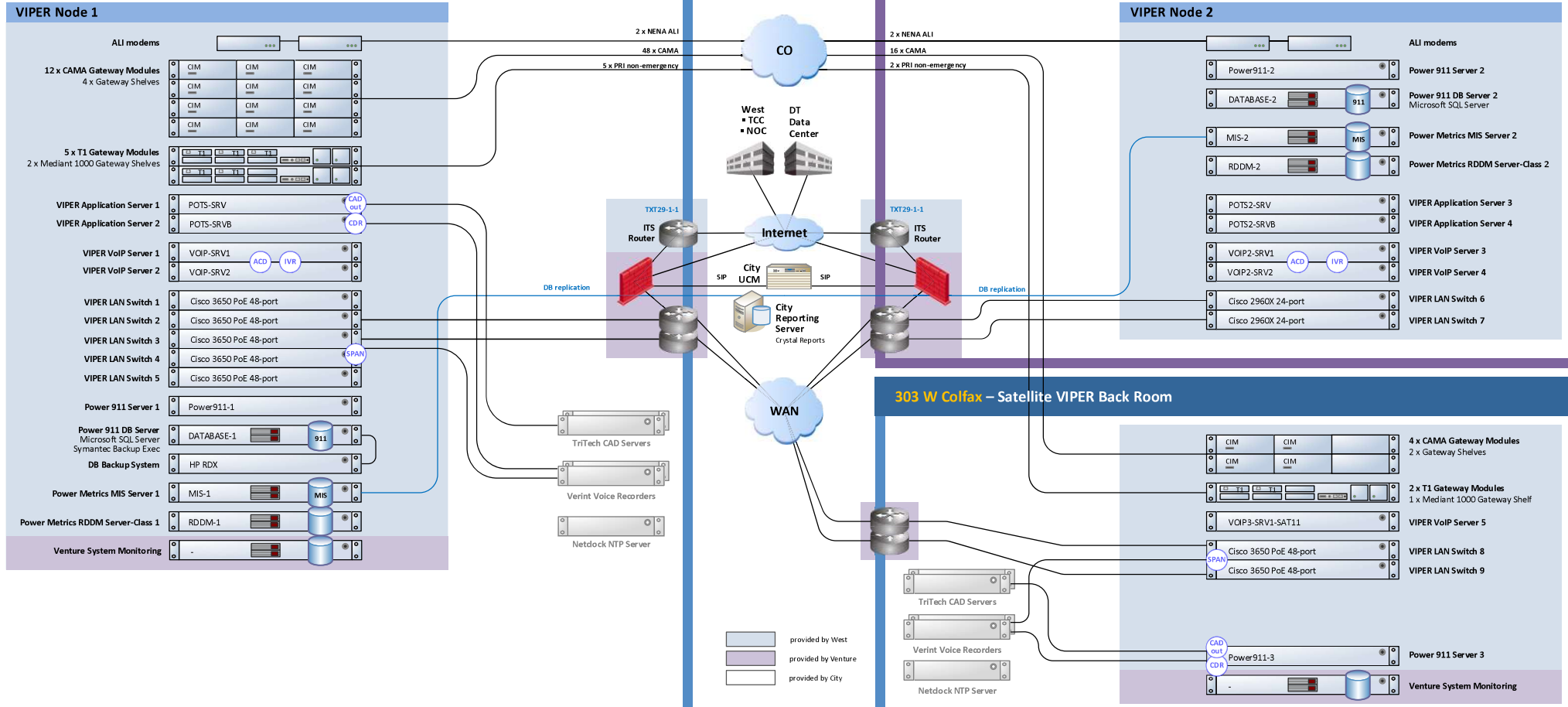
- ✓ Issue resolved
- ✓ Customer approval
- ✓ No customer response in 48 hours

Please see our RFP response to the remaining requirements of Section B.18 (below) for a complete response and detailed description of our public safety managed service offerings.

950 N Josephine – Primary VIPER Site

Attachment E

Venture Technologies Data Center – Secondary VIPER Site



Josephine Front Room

45 x Operators

- 20 Call Takers
- 2 Supervisor
- 2 Police Dispatch
- 4 Fire Dispatch
- 6 EMS Dispatch
- 11 Training

• Power 911
• ITRR

PowerStation, SCB, headset, sno m 760 backup phone

8 x Reader Boards

PowerOps HP rp5810

Denver NEXTGEN 9-1-1 Phase 1 System Overview Diagram 20-Feb-2018 (SS)

west Safety Services

Colfax Front Room

16 x Operators

16 x Call Takers

• Power 911
• ITRR

PowerStation, SCB, headset, sno m 760 backup phone

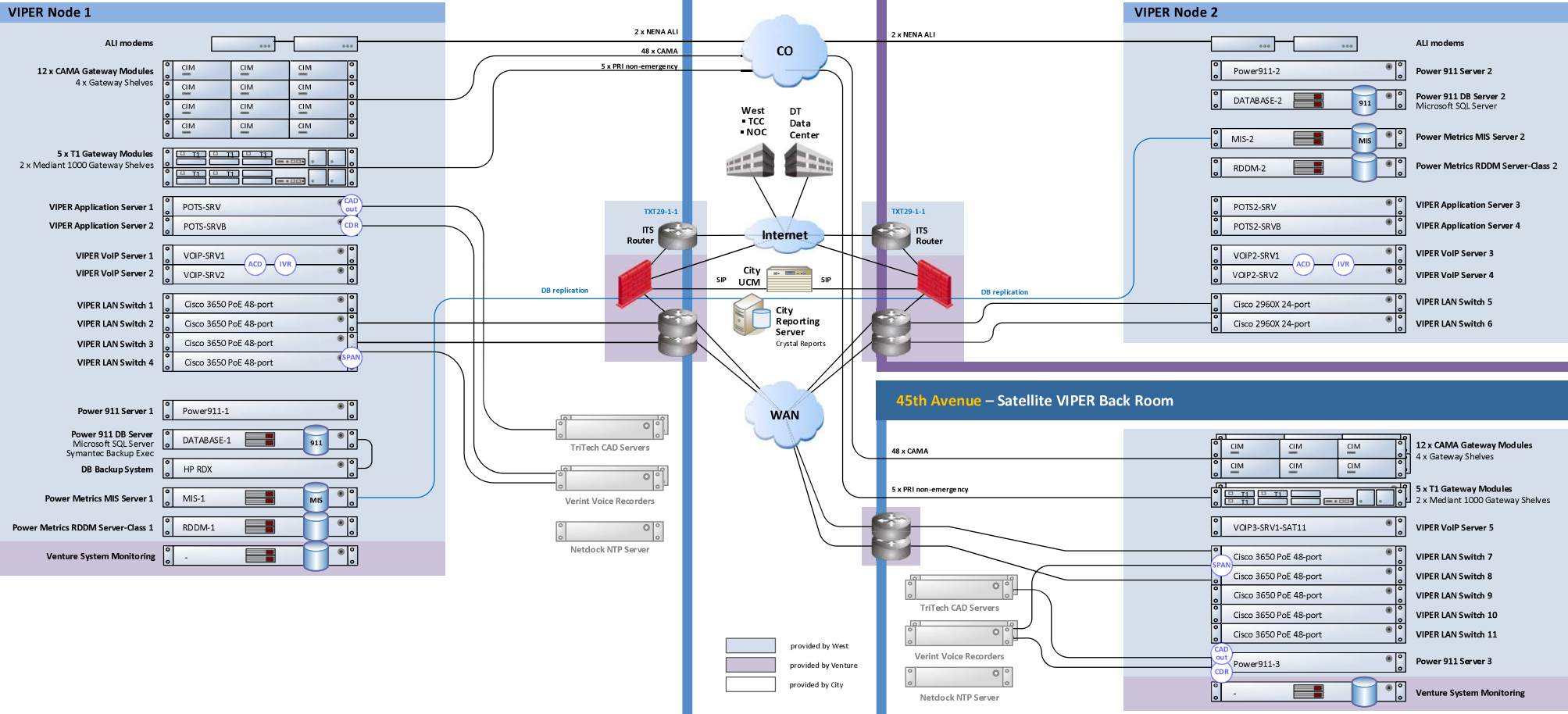
1 x Reader Board

PowerOps HP rp5800

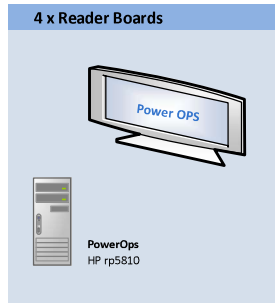
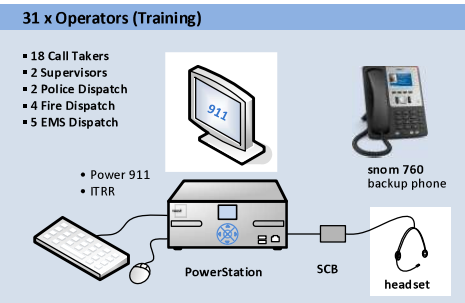
950 N Josephine – Primary VIPER Site

Attachment E

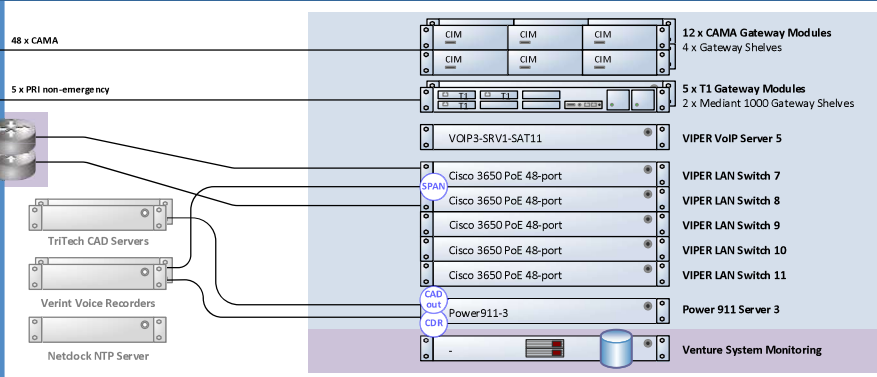
Venture Technologies Data Center – Secondary VIPER Site



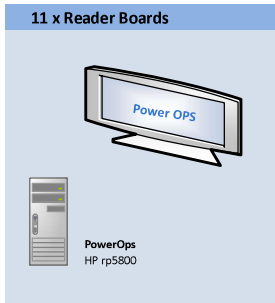
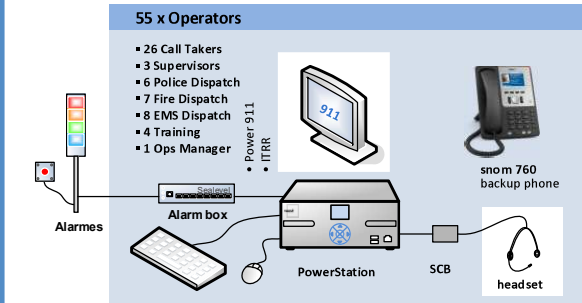
Josephine Front Room



45th Avenue – Satellite VIPER Back Room



45th Avenue Front Room



Denver/NEXTGEN 9-1-1 Phase II System Overview Diagram 2-Aug-2018 (S5)

west Safety Services

Venture Technologies Revised CenturyLink and Comcast Wide Area Network
(WAN) Charges.

Note: The pricing outlined on this document supersedes the "WAN" Item # pricing on VT Quote #'s Q-00033443, Q00033456, Q-00033463, Q-00033477 and Q-00033483.

Locations	MRC: CTL & Comcast	Price Increase Value for MRC	NRC: CTL & Comcast	Price Increase Value for NRC
950 Josephine to Venture Technologies	\$3,223.14 per month	\$519.63 per month	\$4,500 One-Time Fee	\$2,000 One-Time Fee
Totals	\$38,677.68 per year	\$6,235.44 per year	\$ 4,500.00	\$ 2,000.00
45th Ave to Venture Technologies	\$3,478.62 per month	\$775.11 per month	\$4,500 One-Time Fee	\$2,000 One-Time Fee
Total	\$41,743.44 per year	\$9,301.20 per year	\$ 4,500.00	\$ 2,000.00

Total Price Summary	Price Increase Value for MRC	Price Increase Value for NRC
Increase Per Month	\$1,294.74 (\$519.63 + \$775.11)	
Increase Per Year	\$15,536.88 (\$6,235.44 + \$9,301.20)	\$4,000.00 (\$2,000.00 + \$2,000.00)

West Call Handling CPE Standard Maintenance and Support Services

These Maintenance and Support Services terms ("MSS Terms") describe the current offerings for maintenance and support services for West Call Handling equipment and software sold to a customer ("System"). These MSS Terms apply to any of the services described below that appear on a West quote ("Quote"). These terms are in addition to, and do not modify the terms of the applicable agreement between the parties ("Agreement"). If any of these MSS Terms conflict with the Agreement or the Quote, the terms of the Quote will prevail as they relate to the MSS Terms only and the MSS Terms will prevail over the terms of the Agreement. All capitalized terms not defined in these MSS Terms will have the meanings set out for such terms in the Agreement.

West's standard limited warranty runs for twelve months from acceptance. This limited warranty includes Software Protection and Remote Technical Support during the warranty period.

The following are the current West service offerings:

- Software Protection and Remote Technical Support
- Software Subscription Service
- On-Site Support Services
- Hardware Protection Service
- Remote Monitoring of Sentry Alarms Services
- VIPER® Alarm Monitoring Service
- Remote Operating System Update Service
- Remote Anti-Virus Update Service

Also included in Table 1 in Section 9 below are Response Time Goals and Severity Levels

General Note: Please note that for all services described in these MSS Terms, West will not be obligated to repair or replace any software or equipment which (i) has been repaired by others; (ii) has been abused or improperly handled, stored, altered, or used with third party material or equipment; (iii) has been subject to power failures or surges, lightning, fire, flood or accident; or (iv) has not been installed by West, a West authorized technician, or by customer or its agent in an approved manner.

1. Software Protection and Remote Technical Support

1.1. Availability

This service is included in the standard warranty, and a mandatory requirement for the receipt of any technical support after the warranty period.

1.2. Offering Summary

Bundled offering which provides access to software maintenance releases as well as remote technical support that allow for 24x7x365 assistance from West's centralized Support Center for the West System. Customer may not purchase Software Protection and Remote Technical Support for a subset of the West System; all 911 call taking positions must be covered.

1.3. About Software Protection

This offering provides for the availability of software product updates. Installation and training (if needed) are not included. Any required hardware or operating system changes are also not included.

West will provide periodic software release bulletins to customers which announce and explain important product updates for West Software. Customers may then request the new release or version from West, based on applicability of the release to customer's System. Customer is responsible for installation of all these releases, unless the On-Site Maintenance Service is purchased. If On-Site Maintenance has not been purchased and the customer prefers to have West deploy a new release, West will dispatch

appropriate personnel to perform the upgrade on a mutually agreed upon date at West's then current prices for such services.

The customer is encouraged to periodically install new Software updates. Software releases are available for a limited time. If the System is not maintained to a currently supported equipment and software version, future software releases may not be compatible with customer's existing System.

1.4. Remote Technical Support

Support is provided by associates who specialize in the diagnosis and resolution of system performance issues. Remote Technical Support is available 24/7 through both a toll free hotline and a secure customer Internet portal. All service inquiries are tracked by a state-of-the-art CRM trouble ticket system that can be queried by customers through the online portal to obtain the most up-to-date status on their issues.

Response times for Remote Technical Support are based on system issue severity levels as defined in Table 1 in Section 9 below. Problems which are not resolved within predefined time limits are automatically escalated to management within Sales, Product Management and Engineering for action.

1.5. West Responsibilities

- Respond to service requests based on appropriate severity level response goals
- Assess the system issue(s)
- Apply technical expertise, knowledge and resources to restore system to functionality, or assist customer to apply the identified fix
- Escalate issues for review when required
- Communicate progress and resolution with the specific customer contact
- Provide to the customer bulletins announcing the availability of software releases, and deliver software in disc form to the customer as requested

1.6. Customer Responsibilities

- Log all requests for assistance directly with the Technical Support Center, either through the toll-free hotline or the online portal
- Provide the following information when initiating a service request:
 - Site Name/ID number/Agency Location
 - Contact Name and Number
 - Problem Description
- Ensure that the individual requesting support is appropriately trained and knowledgeable regarding the operation of the System
- Provide additional symptoms and information as they occur pertinent to resolving systems issues
- Respond to West communications regarding case status and resolution in a timely manner
- Allow West remote access to obtain system availability and performance data. If remote access capability is not available, the purchase of On-Site Support Services may be required.
- Notify West before performing any activity that may impact the System (including software installation, hardware upgrades, network upgrades or de-activation)
- Store and maintain all software needed to restore the system as well as all system back-ups
- Install software

1.7. Conditions not covered under this Service offering

- Assistance with third-party software or hardware not provided by West
- Assistance with user configuration, usage scenarios and items covered in standard end user training or operating manuals provided to the customer. This includes any moves, adds or deletes to the user configuration which has resulted in system performance issues. Support for these subjects is available through purchase of end-user training curriculum.
- Assistance with equipment configuration change requests not associated with problems on the installed West equipment

- West installation support. Installation services can be purchased separately from West.
- Assistance with Geographic Information Systems (“GIS”) data updates performed by the end user, or resulting problems
- Consultation for new software or equipment
- Software does not provide new features or functionality upgrades
- Corrections of problems, and assistance regarding problems, caused by third party software and operator errors, including the entry of incorrect data and the maintenance of inadequate back-up copies and improper procedures
- Upgrade of the customer’s operating system, hardware or third party software may be required from time to time to support Maintenance Releases. West will not be responsible for the cost of such upgrade.

1.8. Reinstatement of West Software Protection and Remote Technical Support

If Software Protection and Remote Technical Support lapses, the customer’s access to the Support Center will be discontinued, and reinstatement fees will apply as follows if the customer desires to receive any technical support services:

- Payment for the lapsed period at the prevailing rate; plus
- Purchase of Software Protection and Remote Technical Support for the current period; plus
- System recertification fees in the form of a Class A inspection at \$1,500 per day plus related travel and expense charges.

2. Software Subscription Service

2.1. Availability

This service is not included in the standard warranty; available for separate purchase only if (i) customer’s System software is current, or (ii) the services are purchased for a new system deployment or for a specific system component purchase.

2.2. Service Description

Software Subscription Service provides the customer with access to software upgrades including new features. This offering only provides for the availability of the software. Installation and training (if needed) are not included. Any required hardware or operating system changes are also not included.

West will provide periodic software release bulletins to customers which announce and explain new feature releases for West Software. Customers may then request the new release or version from West, based on applicability of the release to customer’s System. The customer is responsible for installation of all these releases, unless the On-Site Maintenance Service is purchased. If On-Site Maintenance has not been purchased and the customer prefers to have West deploy a new release, West will dispatch appropriate personnel to perform the upgrade on a mutually agreed upon date at West’s then current prices for such services.

The customer is encouraged to periodically install new Software releases because to keep the System current. Software releases are available for a limited time; if the System is not maintained to a currently supported equipment and software version, future software releases may not be compatible with customer’s existing System.

2.3. West Responsibilities

- Provide to the customer bulletins announcing the availability of software releases, and deliver software in disc form to the customer as requested

2.4. Customer Responsibilities

- Contact a West Sales account representative to order an available software release
- Install the software

2.5. Conditions not covered under this Service offering

- Consultation for new software or equipment
- Corrections of problems, and assistance regarding problems, caused by third party software and operator errors, including the entry of incorrect data and the maintenance of inadequate back-up copies and improper procedures
- Upgrade of the customer's operating system, hardware or third party software may be required from time to time to support New Releases, Maintenance Releases or Upgrades of the Software. West will not be responsible for the cost of such upgrade

3. On-Site Support Services

3.1. Availability

This service is not included in the standard warranty; available for separate purchase.

3.2. Service Description

On-site Support Services are primarily designed to assist with issues that require System expertise in troubleshooting and restoration at the customer's location.

On-site Support Services include travel costs and time and labor related to the service incident. Also included in the service are quarterly on-site preventative and routine maintenance reviews (four per year) of the customer's System. These maintenance visits can include the installation of routine updates to software. Training, configuration changes, reprogramming and System upgrade labor are not included in this offering, but are available for purchase.

On-Site Support Services options include the designation of a technician dedicated specifically to the customer's deployment(s), or alternately a non-dedicated resource available for use with other customers. West may engage third-party vendors to provide the On-Site Support Services.

Regardless of designation, the response times of On-Site Support Service technicians are based on system issue severity levels as defined in Table 1 in Section 9 below.

3.3. West Responsibilities

- Dispatch a technician to customer's site when the issue cannot be resolved remotely
- When on-site, assist customer in performing System diagnostics
- Provide on-site technician visit on a quarterly basis to perform preventative and routine maintenance activities

3.4. Customer Responsibilities

- Perform responsibilities as detailed in the Remote Technical Support section (above)
- Brief on-site technician on issue(s) and actions taken
- Allow West both on-site and remote access to the System
- Validate issue resolution prior to close of the case.
- Cooperate with West and perform all acts that are reasonable or necessary to enable West to provide the On-Site Support Services. These include maintaining a suitable environment (heat, light, and power) and providing the technician with full, free, and safe access to the System. All sites must be accessible by standard service vehicles

3.5. Conditions not covered under this Service offering

- Assistance with third-party software or hardware not provided by West
- Assistance with user configuration, usage scenarios and items covered in standard end user training or operating manuals provided to the customer. This includes any moves, adds or deletes to the user configuration which has resulted in system performance issues. Support for these subjects is available through purchase of end-user training curriculum.
- West Hardware/Software System Upgrade support (other than associated with a Software Subscription Service). Upgrade services can be purchased separately from West.
- West installation support. Installation services can be purchased separately from West.
- Assistance with GIS data updates performed by the end user, or resulting problems.

4. Hardware Protection Service

4.1. Availability

This service is not included in the standard warranty. It is available for separate purchase.

4.2. Service Description

The Hardware Protection Service provides for the replacement of any non-operating West provided hardware component, with the exception of monitors. This offering only provides for the replacement of the hardware item. Installation services and training (if needed) are not included. This service does not cover items where warranty has been voided due to abuse, Force Majeure or other actions.

When the West Technical Support Center concludes that an item is non-operational, a fully functioning new or refurbished unit will be shipped to the customer. This unit will then become the property of the customer and will restore the functionality of the non-working item, but it may not be the exact same model as the original. The shipment of the replacement item will include a pre-printed shipping label used for the return of the non-working item from the customer.

4.3. West Responsibilities

- Once a hardware item has been determined to be non-operational, initiate the replacement of the item.
- Providing a pre-printed return label to the customer for use in their return of the original non-functioning unit back to West.

4.4. Customer Responsibilities

- If a replacement unit has been provided by West, the customer will return the non-functioning unit within 30 days of new item receipt.

4.5. Conditions not covered under this Service offering

- Replacement of non-operation hardware not provided by West
- Replacement of non-operational workstation monitors
- Hardware items deemed to be non-functional as a result of abuse, Force Majeure or other actions
- Installation of the replacement hardware

4.6. Suspension of West Hardware Protection Coverage

If the original non-functioning hardware is not returned within 30 days after receipt of a replacement item, the customer's ability to use service will be suspended. The service will be reinstated upon receipt of the non-functioning hardware.

Suspension of the service can also occur as a result of non-payment for the Hardware Protection maintenance contract.

5. Sentry® Alarm Monitoring Services

5.1. Availability

This service is not included in the standard warranty; available for separate purchase.

5.2. Service Description

West offers Remote Monitoring of the System through a remote centralized network systems management solution, also known as “West Sentry”. West Sentry monitors all West products as well as most third party equipment, and forwards alarms and alerts to a centralized West Network Operations Center for monitoring. This service requires the purchase of West Sentry hardware from West.

West’s Technical Support Center will receive the remote customer alarms and alerts 24x7x365 notifying West of any irregular behavior including faults and performance threshold crossings requiring attention. Minimum action includes contacting of either the customer directly or the assigned on-site service personnel to provide the appropriate technical response.

Automatic remote troubleshooting of the alarm is performed only if Remote Technical Support services are purchased.

The dispatching of West technician support after an alarm is received and troubleshooting has been performed is available only if On-Site Support Services are purchased.

5.3. West Responsibilities

- Remote Monitoring of customer based PSAP Equipment
- Contacting of either the PSAP directly or their assigned on-site service personnel upon receipt of the alarm, as appropriate
- Clearing of the alarm

5.4. Customer Responsibilities

- Establish business rules regarding alarm notifications and escalation conditions within the Sentry system
- Designation of Customer contact points or its assigned on-site service personnel

6. VIPER Alarm Monitoring Service

6.1. Availability

This service is not included in the standard warranty; available for separate purchase.

6.2. Service Description

The VIPER Alarm Monitoring service is a remote problem detection offering. This service monitors the integrated alarm messaging and notifications of the VIPER CPE for irregular behavior, including faults and performance threshold breaches. To enable the monitoring functionality, West will configure the VIPER CPE to transmit alarm messages through an installed firewall, across the Customer’s Internet connection, to the West Network Operating Center (“NOC”).

The NOC will receive the remote alarms and alerts 24x7x365 notifying West of the health and status of the VIPER CPE. Upon receipt of an alarm, West will contact either the Customer directly or the assigned on-site service personnel to provide the appropriate technical response. West will perform automatic remote troubleshooting of the alarm as part of the Customer’s Remote Technical Support service

coverage. The dispatching of a West technician for support after an alarm is received and initial troubleshooting has been performed is available for customers who have purchased On-Site Support Services.

6.3. West Responsibilities

- Remote Monitoring of Customer-based VIPER CPE
- Contacting either the PSAP directly or its assigned on-site service personnel upon receipt of the alarm, as appropriate
- Clearing the alarm

6.4. Customer Responsibilities

- Establish business rules regarding alarm notifications and escalation conditions within the VIPER CPE
- Designation of contact points or its assigned on-site service personnel
- High-speed network access

Summary of Monitoring Features		
	VIPER Alarm Monitoring	Sentry-based Monitoring
Alerting Environment	Integrated VIPER Alarm Messages and Notifications. <u>Primary Alarm Sources:</u> CAD Router CDR Manager Config Dist Service Domain Name Server Third-Party gateways ALI Server PMG Console Process Monitor Soft Switch Fault Manager Telephony Server CIM Server Zoo Replication Manager Alarm contact	Nearly all aspects of a 9-1-1 system - the West Call Handling Equipment and most 3rd party equipment utilized at a PSAP. Includes all integrated VIPER alarms, and health status detection of installed equipment. Monitoring of the hardware equipment for potential failure (full hard drive, workstation fan malfunction, etc.) is a primary driver for use of this service over that of VIPER Alarm Monitoring.
Alert Delivery Options	To the West Network Operations Center	To the Local PSAP To the West Network Operations Center
Local PSAP Alert Options	[none]	Audible and Visual Alarm Panel alerts, e-mail, pager & SMS messages
Hardware	Firewall Appliance (1)	Firewall Appliance (1) Sentry Server and Console Kit (1)
Software	Software Media Set (1) ELM Class 1 Application (1) ELM Class 2 Application (1)	Sentry Media Kit (1) ELM Class 1 App (1 per server) ELM Class 2 App (1 per Position & IP Agent)
Services	Viper Alarm Monitoring Service (per position workstation-each year)	Sentry Monitoring Service (per ELM App installed-each year)

Summary of Monitoring Features		
	VIPER Alarm Monitoring	Sentry-based Monitoring
Alarm Handling Process	Alarms from the VIPER are transmitted directly to the West Network Operations Center.	Alarms from the VIPER and all monitored hardware sources are collected at the Sentry server which then transmits the alerts to the local PSAP and/or to the West NOC.

7. Remote Operating System (“OS”) Update Service

7.1. Availability

This service is not included in the standard warranty; available for separate purchase.

7.2. Service Description

The OS Update Service provides system administrators who need to manage and distribute Microsoft OS updates the ability to do so directly through the VIPER Primary Domain Controller. When Microsoft issues security updates for its OS software, the OS Update Service makes them quickly available to CPE administrators.

Before delivering a Microsoft OS update to a Customer, West will review the OS patch content to understand its relevance to the VIPER product family. Once a patch is determined to be applicable, it is certified by West’s Validation Engineering team and packaged for deployment. The deployable OS update is then loaded to the West centralized server. The VIPER Primary Domain Controller is then ready, upon authorization from the Customer’s system administrator, to distribute the updates on the applicable Windows equipment, including all servers and position workstations.

The deployment process includes the ability for the Customer to track and report on the deployment of updates to the System via the VIPER Primary Domain Controller.

7.3. West Responsibilities

- Make available OS updates for deployment which are certified for applicability on VIPER CPE products.

7.4. Customer Responsibilities

- Provide high-speed, secure broadband (business grade DSL or T1 link) network access. (Note: West does not quote or provide high speed internet access as a product offering. For network access service, contact a local Internet Service Provider (“ISP”).)
- Manually synchronize the System with the West Care Access Server to download any available OS Update files. If desired, this function can be programmed to occur on a pre-determined schedule.
- Manually trigger the distribution of the OS Updates to the customer machines in the System (servers and workstations). If desired, this function can be programmed to occur on a pre-determined schedule.
- Restart the Customer machines on the System as required by the Microsoft update (per the West-defined restart process). Some Microsoft OS updates require a restart of the Customer machines for them to take effect.

7.5. Conditions not covered under this Service offering

- The distribution of the OS Update on disc, drive or other hardware media
- Replacement of non-operational workstation monitors
- Provision of updates to any West software products, or Anti-Virus offerings

8. Remote Anti-Virus (“AV”) Update Service

8.1. Availability

This service is not included in the standard warranty; available for separate purchase.

8.2. Service Description

This service provides system administrators who need to manage and distribute Symantec signature updates the ability to do so directly through the VIPER primary domain controller. When new signature updates are issued and certified by West, the AV Update service makes them quickly available to CPE administrators.

Before delivering an antivirus signature update to a Customer, West will review the content to understand its relevance to the VIPER product family. Once a signature update is determined to be applicable, it is certified by West’s Validation Engineering team and packaged for deployment. The deployable signature update is then loaded onto the West centralized server. The Symantec Endpoint Protection manager running on the premise VIPER primary domain controller receives the updates from the West server and is then able, upon authorization from the Customer’s system administrator, to distribute them on the applicable Windows equipment, including all servers and position workstations.

The deployment process includes the ability for the Customer to track and report on the deployment of signature updates to all of Customer’s System via the VIPER primary domain controller.

8.3. West Responsibilities

- Make available antivirus signature updates for deployment which are certified for applicability on VIPER CPE products.

8.4. Customer Responsibilities

- Provide high-speed, secure broadband (business grade DSL or T1 link) network access. (Note: West does not quote or provide high speed internet access as a product offering. For network access service, contact a local ISP.
- Manually synchronizing the VIPER system with the West Care Access Server to download any available antivirus signature updates. If desired, this function can be programmed to occur on a pre-determined schedule.
- Manually trigger the distribution of the antivirus signature updates to the customer machines in the System (servers and workstations). If desired, this function can be programmed to occur on a pre-determined schedule.
- Must have a valid Symantec Endpoint Protection Enterprise Edition software license (version 12.1.1 or above) on each customer machine in the System (servers and workstations) that receives the updates. This license can be purchased from West, please see ordering notes below.

8.5. Conditions not covered under this Service offering

- The distribution of the antivirus signature updates on disc, drive or other hardware.
- Provision of updates to any antivirus software products other than Symantec Endpoint Protection Enterprise edition (version 12.1.1 or above).
- Provision of updates to OS or any West software products.

9. Response Time Goals and Severity Levels

Table 1: Remote Technical and On-Site Support Services Response-Time Goals by Severity Levels.

Severity Level	Definition	Remote Response Time Goal	On-Site Response Time Goal*	Problem Correction
1 Product Failure or Loss of Service	Severity Level 1 problems involve a System failure and a major loss of functionality that renders the entire System inoperable.	15 minutes	4 hours	West will provide the customer with a program code correction, program code patch, or a procedure for the customer to bypass or work around the defect in order to continue operations. If a bypass procedure is used, West will continue defect resolution activity, on a high severity basis, until a program correction code or patch is provided to the customer.
2 Severely Impaired functionality (more than 50%)	Severity Level 2 problems involve the failure or loss of functionality of non-critical functional components or features, while the System itself remains operable. Severity Level 2 involves a major impact such as a loss of 50% of call taking capacity or a loss of all of dispatch or the loss of a major functionality (e.g. no delivery of either ANI or ALI).	1 hour	4 hours	West will provide the customer a program code correction, program code patch, or a procedure for the customer to bypass or work around the defect to continue operations. If a bypass procedure is used, West will continue problem or defect resolution activity, on a high severity basis, until a program correction code or patch is provided to the customer.
3 Non-Critical System Failure (Less than 50%)	This class of problem requires action from the Call Center within a short time. Severity Level 3 problems may cause performance degradation or system components to malfunction. Severity Level 3 may involve one position non-functioning.	8 Business hours	Next Business Day	West will provide the customer with a program code correction in a maintenance release.

Severity Level	Definition	Remote Response Time Goal	On-Site Response Time Goal*	Problem Correction
4 Minor Issue	This class of problem is non-service Affecting and includes problems such as incorrect operation of a minor functionality or System component that is infrequently used, and problems that have feasible work-around available (e.g. incorrect operation of a functionality of 911 without loss of all of dispatch). Core functionality is not affected.	Next Business Day	Next Business Day	Code correction may be provided in a future maintenance release or a commercially reasonable effort to provide a work around solution.
5 Inquiry	This is not a class of problem, but is an inquiry only.	2 Business Days	Does not apply	Does not apply.

*On-site response time goal is based on the time from which West determines an on-site technician is necessary. On-site response is only available if Customer has purchased On-Site Services.



Wyoming
401 E 'E' St
Casper, WY 82601

Colorado
8680 Concord Center Dr
Englewood, CO 80112

Bill To:
City & County of Denver 911 950 Josephine St. Denver CO, 80206
Ship To:
City & County of Denver 911 950 Josephine St. Denver, CO 80206

Quote #	Q-00033463		
Date:	03/16/2018	Expires:	06/15/2018
Sales Rep:	Brian Kelley brian.kelley@ventech.com (720) 279-5812		
Customer Contact:	Athena Butler athen.butler@denvergov.org (720) 913-2000		
Description:	Denver RFP No.28635-MASTER 45th Ave Power 911/Metrics/TXT2-911-Year 1		

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Survivable VIPER Node (SVN) Hardware & Software				
1	912871/BB	Mediant 1000B Prebuilt Building Block	\$2,061.22	\$2,061.22
1	912890/BB	Media Kit Prebuilt Building Block	\$63.27	\$63.27
3	912870/1T1	Mediant 1000 Spare Part Digital Voice Module Single Span	\$2,520.41	\$7,561.22
1	912870/LIC	Mediant 1000 Access License (per Chassis)	\$5,931.12	\$5,931.12
25	912920	ECCP Workstation License	\$629.49	\$15,737.25
25	912850	VIPER Integrated ACD (Per Position)	\$1,894.80	\$47,369.90
2	912800	VIPER Gateway Shelf	\$626.33	\$1,252.65
8	912801	CAMA Interface Module (CIM)	\$1,701.84	\$13,614.69
26	912811	Application Server License	\$629.49	\$16,366.73
64	912812	PBX Access License	\$408.06	\$26,115.92
2	912813	48V Power Supply and Shelf - VIPER System	\$1,015.31	\$2,030.61
1	912827	VIPER Backroom Mounting Kit	\$2,721.43	\$2,721.43
11	E10642	PowerOps Client Access License	\$4,744.90	\$52,193.88
1	P10035	PowerOps Software Media	\$63.27	\$63.27
25	912845	IP Phone w/ALI	\$765.31	\$19,132.65
3	Q12940	Cisco Catalyst 3650 Series Switches	\$5,704.08	\$17,112.24

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Power 911 A9C-G3 & Software Clients				
25	914121/1	IWS Workstation - Software and Configuration	\$278.57	\$6,964.29
25	911801	A9C G3, Desk Mounting Kit	\$123.37	\$3,084.18
25	911809	A9C G3, Call Handling Accessories	\$335.31	\$8,382.65
25	911810-1	A9C G3 Bundle	\$3,593.47	\$89,836.74
1	911785	Position Image - Power Station Gen3	\$63.27	\$63.27
25	913100	Power 911 Client Access License (CAL)	\$6,323.37	\$158,084.18
25	913152	Power 911 Add-On Recorder for Radio (ITRR)	\$379.59	\$9,489.80

25	913202	Power 911 Server Access License	\$1,262.14	\$31,553.57
1	913152/CD	ITRR Media Kit	\$63.27	\$63.27

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-VIPER Hardware-Contact Closures				
1	914962	Object Server RACK - Type A	\$2,727.55	\$2,727.55
1	914121/3	Object Server - Underlying Software	\$1,426.53	\$1,426.53
55	914940	Contact Closures-I/O Control - Per Position	\$140.31	\$7,716.84
55	915107	Contact Closures-16 Port Digital I/O Controller	\$561.22	\$30,867.35

Quantity	Item #	Description	Unit Price	Line Total
45th-Power Ops-Power Metrics Hardware-Software-Implementation				
11	914102/BB	Power Ops-IWS Workstation Prebuilt Building Block	\$1,702.04	\$18,722.45
1	P10192	Power Metrics Advanced - Service set-up: No RDDM	\$2,295.92	\$2,295.92
1	P10301	Power Metrics Suite - Agent Statistics Module	\$1,275.51	\$1,275.51
1	P10302	Power Metrics Suite - Ad-Hoc and Raw Data Activity Audit Module	\$1,275.51	\$1,275.51
1	P10303	Power Metrics Suite - Friendly Trunk Line Name Manager Module	\$1,275.51	\$1,275.51
1	P10304	Power Metrics Suite - Abandoned Call Workstation Summary Report	\$459.18	\$459.18
1	P10305	Power Metrics Suite - Called Back Summary Report	\$459.18	\$459.18
1	P10306	Power Metrics Suite - Class of Service ALI Change Summary Report	\$459.18	\$459.18
1	P10307	Power Metrics Suite - Daily Invalid ALI Report	\$459.18	\$459.18
1	P10308	Power Metrics Suite - Dynamic Class of Service Report	\$459.18	\$459.18
1	P10309	Power Metrics Suite - Top 20 Busiest Hours Graphing Breakdown Enhancement Report	\$459.18	\$459.18
1	P10310	Power Metrics Suite - Snapshot Report	\$459.18	\$459.18
11	V552	NEC 55IN LED LCD MON 19X10 8MS DP HDMI	\$1,874.96	\$20,624.56
11	PF660	FLAT WM FOR 32-60IN LCD AND PLASMA	\$63.83	\$702.09

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-TXT2-911 Implementation				
1	ITXTOTF6	TXT29-1-1 Integrated with Power 911 One-time-fee per PSAP-Target Price (11+ seats)	\$9,595.96	\$9,595.96

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-West TXT2-911-Year 1				
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 1	\$11,515.15	\$11,515.15

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Power Metrics-Year 1				
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 1	\$4,107.07	\$4,107.07
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 1	\$969.70	\$969.70

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-West Software Support & Anti-Virus-Year 1				

4	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 1	\$757.58	\$3,030.30
51	950999/SUB1	Software Subscription Service - 1 Year/Position Year 1	\$1,515.15	\$77,272.73
68	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 1	\$63.64	\$4,327.28

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Cisco WAN Hardware				
4	WS-C3650-48PS-S	Cisco Catalyst 3650 48 Port PoE 4x1G Uplink IP Base	\$4,411.40	\$17,645.60
4	CON-SSSNP-WSC36PSS	SOLN SUPP 24X7X4 Catalyst 3560E 24 10/100/1000 + 2*10GE(X2),	\$891.00	\$3,564.00
4	S3650UK9-163	UNIVERSAL	\$0.00	\$0.00
4	PWR-C2-640WAC	640W AC Config 2 Power Supply	\$0.00	\$0.00
4	CAB-TA-NA	North America AC Type A Power Cable	\$0.00	\$0.00
4	STACK-T2-BLANK	Type 2 Stacking Blank	\$0.00	\$0.00
4	PWR-C2-BLANK	Config 2 Power Supply Blank	\$0.00	\$0.00
2	ISR4321-V/K9	Cisco ISR 4321 Bundle, w/UC License, CUBE-10	\$1,423.70	\$2,847.40
2	CON-SSSNP-ISR4321V	Cisco ISR 4321 Bundle w UC License CUBE-10	\$572.25	\$1,144.50
2	SL-4320-IPB-K9	IP Base License for Cisco ISR 4320 Series	\$0.00	\$0.00
2	SL-4320-UC-K9	Unified Communication License for Cisco ISR 4320 Series	\$0.00	\$0.00
2	PWR-4320-AC	AC Power Supply for Cisco ISR 4320	\$0.00	\$0.00
2	CAB-AC-C5	AC Power Cord, Type C5, US, Canada	\$0.00	\$0.00
2	MEM-FLSH-4G	4G Flash Memory for Cisco ISR 4300 (Soldered on motherboard)	\$0.00	\$0.00
2	MEM-4320-4G	4G DRAM for Cisco ISR 4320 (Soldered on motherboard)	\$0.00	\$0.00
4	NIM-BLANK	Blank faceplate for NIM slot on Cisco ISR 4400	\$0.00	\$0.00
4	FL-CUBEE-5	Unified Border Element Enterprise License - 5 sessions	\$0.00	\$0.00
2	SISR4300UK9-316S	Cisco ISR 4300 Series IOS XE Universal	\$0.00	\$0.00

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Venture Technoloiges-VIPER WAN-Year 1				
12	WAN	CL & L3 WAN: 45th Ave to Venture Technologies	\$2,703.52	\$32,442.21
1	WAN-NRC	One-Time Implementation Charges	\$2,500.00	\$2,500.00

Quantity	Item #	Description	Unit Price	Line Total
45th-Venture Technologies & West Professional Services				
1	950858	Backroom Staging - Additional work when no Cabinet	\$1,262.63	\$1,262.63
36	950852	Front Room Equipment Staging - Per Position	\$252.53	\$9,090.91
1	950510	Project Management Services	\$12,496.86	\$12,496.86
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training	\$80,000.00	\$80,000.00
1	ISC-MANAGEDSERVICEPREBI LL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance	\$214,500.00	\$214,500.00

Quantity	Item #	Description	Unit Price	Line Total
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45th Ave-West Discounts				
1	ONETIMEDISCOUNT- OTHER	ONE TIME DISCOUNT	(\$422,392.46)	(\$422,392.46)

SubTotal	\$694,893.92
Discount	\$0.00
Estimated Tax	\$0.00
Total	\$694,893.92



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mRgV0
City & County of Denver 911 950 Josephine St. Denver CO, 80206
HhF gV0
City & County of Denver 911 950 Josephine St. Denver, CO 80206

Quote #	Q-00033483		
Date:	03/16/2018	Expires:	06/15/2018
Sales Rep:	Brian Kelley brian.kelley@ventech.com (720) 279-5812		
Customer Contact:	Athena Butler athen.butler@denvergov.org (720) 913-2000		
Description:	Denver RFP No.28635-MASTER 45th Ave Power 911/Metrics/TXT2-911-Year 2-5		

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Seur i				
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 2	\$11,515.15	\$11,515.15
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 2	\$4,107.07	\$4,107.07
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 2	\$969.70	\$969.70
4	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 2	\$757.58	\$3,030.30
51	950999/SUB1	Software Subscription Service - 1 Year/Position Year 2	\$1,515.15	\$77,272.73
55	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 2	\$60.61	\$3,333.34
4	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 2	\$303.03	\$1,212.12
51	950999/PRO1	Software Protection and Remote Technical Support - 1 Year/Position Year 2	\$606.06	\$30,909.09
68	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 2	\$63.64	\$4,327.28
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 2	\$214,500.00	\$214,500.00
12	WAN	CL & L3 WAN: 45th Ave to Venture Technologies-Year 2	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321-Year 2	\$4,708.50	\$4,708.50

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Seur a				
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 3	\$11,515.15	\$11,515.15
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 3	\$4,107.07	\$4,107.07
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 3	\$969.70	\$969.70

4	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 3	\$757.58	\$3,030.30
51	950999/SUB1	Software Subscription Service - 1 Year/Position Year 3	\$1,515.15	\$77,272.73
55	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 3	\$60.61	\$3,333.34
4	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 3	\$303.03	\$1,212.12
51	950999/PRO1	Software Protection and Remote Technical Support - 1 Year/Position Year 3	\$606.06	\$30,909.09
68	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 3	\$63.64	\$4,327.28
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 3	\$214,500.00	\$214,500.00
12	WAN	CL & L3 WAN: 45th Ave to Venture Technologies-Year 3	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321-Year 3	\$4,708.50	\$4,708.50

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Seur 4				
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 4	\$11,515.15	\$11,515.15
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 4	\$4,107.07	\$4,107.07
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 4	\$969.70	\$969.70
4	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 4	\$757.58	\$3,030.30
51	950999/SUB1	Software Subscription Service - 1 Year/Position Year 4	\$1,515.15	\$77,272.73
55	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 4	\$60.61	\$3,333.34
4	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 4	\$303.03	\$1,212.12
51	950999/PRO1	Software Protection and Remote Technical Support - 1 Year/Position Year 4	\$606.06	\$30,909.09
68	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 4	\$63.64	\$4,327.28
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 4	\$214,500.00	\$214,500.00
12	WAN	CL & L3 WAN: 45th Ave to Venture Technologies-Year 4	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321-Year 4	\$4,708.50	\$4,708.50

Quantity	Item #	Description	Unit Price	Line Total
45th Ave-Seur 5				
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 5	\$11,515.15	\$11,515.15
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 5	\$4,107.07	\$4,107.07
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 5	\$969.70	\$969.70
4	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 5	\$757.58	\$3,030.30
51	950999/SUB1	Software Subscription Service - 1 Year/Position Year 5	\$1,515.15	\$77,272.73

55	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 5	\$60.61	\$3,333.34
4	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 5	\$303.03	\$1,212.12
51	950999/PRO1	Software Protection and Remote Technical Support - 1 Year/Position Year 5	\$606.06	\$30,909.09
68	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 5	\$63.64	\$4,327.28
1	ISC-MANAGEDSERVICEPREBI LL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 5	\$214,500.00	\$214,500.00
12	WAN	CL & L3 WAN: 45th Ave to Venture Technologies-Year 5	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321-Year 5	\$4,708.50	\$4,708.50

SubTotal	\$1,553,309.96
Discount	\$0.00
Estimated Tax	\$0.00
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City & County of Uenver 2I I 260 Josephine btK Uenver CH, 70801
- 6rW852
City & County of Uenver 2I I 260 Josephine btK Uenver, CH 70801

Quote D	Q-00033461		
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Custo# er Contactx	Athena Sutler athenK utlerF denvergovkorg W80R2I 3-8000		
Uescriptionx	Uenver MP OoK87136-5 AbTBM Colfa@batellite Pok er 2I I /5 etrics/TXT 8-2I I -Year I		

Quantity	rt# D	Uescription	L nit Price	9ine Total
45thve -vSuttsu i abl VI PvERNvEu o -5f6NvEu				
1	2I 8703/8	Vr#BMPr# ary Vor# boft bk itch	\$8,. 04I07	\$8,. 04I07
1	2I 87. I /SS	5 ediant I 000S Pre(uilt Suilding Sloc)	\$8,01I I88	\$8,01I I88
1	2I 8720/SS	5 edia Eit Pre(uilt Suilding Sloc)	\$13I8.	\$13I8.
8	2I 87. 0/I TI	5 ediant I 000 bpape Part Uigital Voice 5 odule bingle bpan	\$8,680K4I	\$6,040K78
1	2I 87. 0/9r6	5 ediant I 000 Access 9icense W#er ChassisR	\$6,23I K 8	\$6,23I K 8
1 1	2I 8280	BCCP G or) station 9icense	\$182K42	\$I 0,0. I K74
1 1	2I 8760	Vr#BMIntegrated ACU W#er PositionR	\$I ,724K70	\$30,3I 1K 3
8	2I 8700	Vr#BMwatek ay bhelf	\$181K33	\$I ,868K16
4	2I 870I	CA5 A mterface 5 odule W#er R	\$I ,. 0I K74	\$1,70. K36
1 .	2I 87I I	Application berver 9icense	\$182K42	\$I 0,. 0I K33
38	2I 87I 8	PSX Access 9icense	\$407K01	\$I 3,06. K21
8	2I 87I 3	47V Pok er buppy and bhelf - Vr#BMbyste#	\$I ,0I 6K3I	\$8,030K1I
1	2I 878.	Vr#BMSac) roo# 5 ounting Eit	\$8,. 8I K43	\$8,. 8I K43
1	PI 0007	9icense to Connect Oon-mtrado M#ording Uevice	\$I ,818K 4	\$I ,818K 4
1	BI 0148	Pok erHps Client Access 9icense	\$4,. 44K20	\$4,. 44K20
1	PI 0036	Pok erHps boftk are 5 edia	\$13I8.	\$13I8.
1 1	2I 8746	r# Phone k /A9m	\$. 16K3I	\$I 8,844K20

Quantity	rt# D	Uescription	L nit Price	9ine Total
45thvelb5NuEd((Ad4I) Ho -5f6NvEu 4truv58				
1 1	2I 4I 8I /I	r# b G or) station - boftk are and Configuration	\$8. 7I6.	\$4,46. K 4
1 1	2I I 70I	A2C w3, Ues) 5 ounting Eit	\$I 83K3.	\$I ,2. 3K77
1 1	2I I 702	A2C w3, Call : andling Accessories	\$336K3I	\$6,314K20
1 1	2I I 7I 0-I	A2C w3 Sundle	\$3,623K4.	\$6. ,426K6I
1	2I I . 76	Position r# age - Pok er btation wen3	\$13I8.	\$13I8.
1 1	2I 3I 00	Pok er 2I I Client Access 9icense W#A9R	\$1,383K3.	\$I 0I ,I . 3K77

1	21 31 68	Pok er 21 I Add-Hn Recorder for Radio WinMR	\$3,2162	\$1,0.3K4.
1	21 3808	Pok er 21 I berver Access 9icense	\$1,818K 4	\$80,124K2
1	21 31 68/CU	winM5 edia Eit	\$13K8.	\$13K8.

Quantity	rte# D	Description	Unit Price	Line Total
45thvel d l V PVERN vEulb5N uE, V&buErv6uEvt&				
1	21 4218	H(ject berver-r6 b berver MACE - Type A	\$8,. 8. K66	\$8,. 8. K66
1	21 41 81 /3	H(ject berver - L nderlying boftk are	\$1 ,481K63	\$1 ,481K63
1	21 426.	H(ject berver-M6c) et Port B@ress Quadca(le US2, PCra Card	\$3. 8K6	\$3. 8K6
1	21 4261	Co# # on : ardk are-l L Eey(oard/9CU/Trac) (all/7-Port EV5	\$1 ,731K 3	\$1 ,731K 3
1	21 41 08/SS	Pok er Hps-r6 b G or) station Pre(uilt Suilding Sloc)	\$1 ,. 08K04	\$1 ,. 08K04
1	V668	OBC 66r6 9BU 9CU 5 HO I 2XI 0 75 b UP : U5 m	\$1 ,7. 4K21	\$1 ,7. 4K21
1	PN110	N9AT G 5 NHM38-10r6 9CU AOU P9Ab5 A	\$13K73	\$13K73

Quantity	rte# D	Description	Unit Price	Line Total
45thvelb5NuEc uSE' &o 8D80ld((al Vlu1 uv6v95w				
1	PI 01 28	Pok er 5 etrics Advanced - bervice set-upxOo MUU5	\$8,8. 8K 3	\$8,8. 8K 3
1	winXHTNL	TXT82-l -l P2l l mtegrated Hne-ti# e-fee per PbAP WI + seatsR	\$2,626K21	\$2,626K21

Quantity	rte# D	Description	Unit Price	Line Total
45thvelb5NuEc uSE' &mvE (
1	PI 081 2	Pok er 5 etrics buite - Annual access contract per PbAP Year l	\$212K 0	\$212K 0

Quantity	rte# D	Description	Unit Price	Line Total
45thvel- 5h6NvEu - Ovw6ESl mvE (
1	260222/bl SI -SL	boftk are bu(bervice - l Year/Position – Sac) L p Position Year l	\$1 6l K68	\$8,484K84

Quantity	rte# D	Description	Unit Price	Line Total
45thvel f u& Aw6ti rEO&mvE (
1	21 41 43	by# antec BndPoint Protection 5 anager WBP5 R- l year Year l	\$13K14	\$1 ,802K02

Quantity	rte# D	Description	Unit Price	Line Total
45thvel4r& 5 PVERNvEu				
8	G b-C3160-47Pb-b	Cisco Catalyst 3160 47 Port PoB 4@wL plin) r6 Sase	\$4,41 l K0	\$7,788K70
8	CHO-bbbOP-G bC31Pbb	bH90 bL PP 84X. X4 Catalyst 3610B 84 l 0/l 00/l 000 + 8*1 0wBW8R	\$72l K00	\$1 ,. 78K00
8	b3160L E2-l 13	L OrwBMA9	\$0K00	\$0K00
8	PG MC8-140G AC	140G AC Config 8 Pok er buply	\$0K00	\$0K00
8	CAS-TA-OA	Oorth A# erica AC Type A Pok er Ca(le	\$0K00	\$0K00
8	bTACE-T8-S9AOE	Type 8 btac) ing Slan)	\$0K00	\$0K00
8	PG MC8-S9AOE	Config 8 Pok er buply Slan)	\$0K00	\$0K00

Quantity	rte# D	Description	Unit Price	Line Total
45thveli uv6OEu 8u' 6v5t5Cu&o f u&bE5hu&5wt- uEB' u&				
1	260767	Sac) roo# btaging - Additional k or) k hen no Ca(inet	\$1 ,818K13	\$1 ,818K13

I .	260768	Front Mo# Bquip# ent btaging - Per Position	\$868K63	\$4,828K23
I	260610	Project 5 anage# ent bervices	\$1,238K64	\$1,238K64
I	rbC-B-211 -PMHJBCT	Professional bervices for UePLOY# ent Project 5 anage# ent Project Uocu# entation 5 entor Training	\$1,400K00	\$1,400K00
I	rbC-5 AOAwbUBBM/r6BPMBSm99	VT-5 AOAwbUBBM/r6Bb-Josephine/VT Vrf6BM 84/. Vrf6BM5 onitoring 84/. Custo# er bervice Center bupport 84/. Hnsite Mresponse 5 onthly Mreporting 5 onthly Preventative 5 aintenance	\$7,000K00	\$7,000K00

Quantity	ite# D	Description	Unit Price	Line Total
45thelf u&pr&5Ow&mvE (
I	HOBTr6 BUrbCHLOT-HT: BM	Guest Uiscount	\$1,642,180R	\$1,642,180R

bu(Total	\$804,101K 4
Uiscount	\$0K00
Bsti# ated Ta@	\$0K00
85Svt	T03G/ 3' :MG



Wyoming
401 E 'E' St
Casper, WY 82601

Colorado
8680 Concord Center Dr
Englewood, CO 80112

Bill To:
City & County of Denver 911 950 Josephine St. Denver CO, 80206
Ship To:
City & County of Denver 911 950 Josephine St. Denver, CO 80206

Quote #	Q-00033443		
Date:	03/16/2018	Expires:	06/15/2018
Sales Rep:	Brian Kelley brian.kelley@ventech.com (720) 279-5812		
Customer Contact:	Athena Butler athen.butler@denvergov.org (720) 913-2000		
Description:	Denver RFP No.28635-MASTER Josephine-Venture Tech VIPER/Power 911/Metrics-Year 1		

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VIPER Node A				
1	912802/2	VIPER Primary Application Server	\$3,724.49	\$3,724.49
1	912803/2	VIPER Primary VoIP Soft Switch	\$2,704.08	\$2,704.08
1	912822/2	VIPER Secondary Application Server	\$3,316.33	\$3,316.33
1	912823/2	VIPER Secondary VoIP Soft Switch	\$2,704.08	\$2,704.08
2	912871/BB	Mediant 1000B Prebuilt Building Block	\$2,061.22	\$4,122.45
1	912890/BB	Media Kit Prebuilt Building Block	\$63.27	\$63.27
5	912870/1T1	Mediant 1000 Spare Part Digital Voice Module Single Span	\$2,520.41	\$12,602.04
2	912870/LIC	Mediant 1000 Access License (per Chassis)	\$5,931.12	\$11,862.24
45	912920	ECCP Workstation License	\$629.49	\$28,327.04
45	912850	VIPER Integrated ACD (Per Position)	\$1,894.80	\$85,265.82
4	912800	VIPER Gateway Shelf	\$626.33	\$2,505.31
12	912801	CAMA Interface Module (CIM)	\$1,701.84	\$20,422.04
47	912811	Application Server License	\$629.49	\$29,586.02
45	912812	PBX Access License	\$408.06	\$18,362.75
2	912813	48V Power Supply and Shelf - VIPER System	\$1,015.31	\$2,030.61
1	912827	VIPER Backroom Mounting Kit	\$2,721.43	\$2,721.43
1	P10008	License to Connect Non-Intrado Recording Device	\$1,262.14	\$1,262.14
8	E10642	PowerOps Client Access License	\$4,744.90	\$37,959.18
1	P10035	PowerOps Software Media	\$63.27	\$63.27
45	912845	IP Phone w/ALI	\$765.31	\$34,438.77
1	SHIPPING	SHIPPING	\$1,020.41	\$1,020.41

Quantity	Item #	Description	Unit Price	Line Total
Josephine-Power 911 A9C-G3 & Software Clients				
45	914121/1	IWS Workstation - Software and Configuration	\$278.57	\$12,535.71
45	911801	A9C G3, Desk Mounting Kit	\$123.37	\$5,551.53

45	911809	A9C G3, Call Handling Accessories	\$335.31	\$15,088.77
45	911810-1	A9C G3 Bundle	\$3,593.47	\$161,706.12
1	911785	Position Image - Power Station Gen3	\$63.27	\$63.27
45	913100	Power 911 Client Access License (CAL)	\$6,323.37	\$284,551.53
45	913152	Power 911 Add-On Recorder for Radio (ITRR)	\$379.59	\$17,081.63
45	913202	Power 911 Server Access License	\$1,262.14	\$56,796.43
1	913152/CD	ITRR Media Kit	\$63.27	\$63.27

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VIPER Hardware-Power Ops-Peripherals				
1	914961	Power 911 Database-IWS Server RACK Bundle - Type B	\$8,770.41	\$8,770.41
1	914962	Object Server-IWS Server RACK - Type A	\$2,727.55	\$2,727.55
1	914121/3	Object Server - Underlying Software	\$1,426.53	\$1,426.53
1	914956	Common Hardware-1U Keyboard/LCD/Trackball/8-Port KVM	\$1,836.73	\$1,836.73
1	P10114/R	Common Hardware-Backup Disk Solution for Windows Server (Rack-Mount)	\$3,469.39	\$3,469.39
8	914102/BB	Power Ops Hardware-IWS Workstation Prebuilt Building Block	\$1,702.04	\$13,616.33
1	914840/1	Common Hardware-Modem DSU/CSU (Digital)- 2 units	\$2,602.04	\$2,602.04
8	V552	NEC 55IN LED LCD MON 19X10 8MS DP HDMI	\$1,874.96	\$14,999.68
8	PF660	FLAT WM FOR 32-60IN LCD AND PLASMA	\$63.83	\$510.61

Quantity	Item #	Description	Unit Price	Line Total
Josephine-Power Metrics Hardware-Software-Implementation				
1	920100/CD	Power MIS	\$63.27	\$63.27
1	920004	Power MIS Advanced Reporting Tool	\$2,551.02	\$2,551.02
1	P10195	Power Metrics Advanced - Service set-up: single RDDM-Server Class	\$7,142.86	\$7,142.86
1	P10301	Power Metrics Suite - Agent Statistics Module	\$1,275.51	\$1,275.51
1	P10302	Power Metrics Suite - Ad-Hoc and Raw Data Activity Audit Module	\$1,275.51	\$1,275.51
1	P10303	Power Metrics Suite - Friendly Trunk Line Name Manager Module	\$1,275.51	\$1,275.51
1	P10304	Power Metrics Suite - Abandoned Call Workstation Summary Report	\$459.18	\$459.18
1	P10305	Power Metrics Suite - Called Back Summary Report	\$459.18	\$459.18
1	P10306	Power Metrics Suite - Class of Service ALI Change Summary Report	\$459.18	\$459.18
1	P10307	Power Metrics Suite - Daily Invalid ALI Report	\$459.18	\$459.18
1	P10308	Power Metrics Suite - Dynamic Class of Service Report	\$459.18	\$459.18
1	P10309	Power Metrics Suite - Top 20 Busiest Hours Graphing Breakdown Enhancement Report	\$459.18	\$459.18
1	P10310	Power Metrics Suite - Snapshot Report	\$459.18	\$459.18
1	914961	IWS Server RACK Bundle - Type B	\$8,770.41	\$8,770.41
1	914422	Additional Backup Executive SQL Agent	\$878.72	\$878.72

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VIPER TXT29-1-1 Hardware & Implementation				
1	ITXTOTF6	TXT29-1-1 P911 Integrated One-time-fee per PSAP (11+ seats)	\$9,595.96	\$9,595.96
1	P10063	ITS Equipment	\$1,893.94	\$1,893.94

Quantity	Item #	Description	Unit Price	Line Total
Josephine-West Self-Maintenance Training				
2	960840	Self Maintenance Training (on Site)	\$10,101.01	\$20,202.02
12	960575	Living Expense per Day per Person	\$202.02	\$2,424.24
1	960580	Travel Fee per Person	\$1,262.63	\$1,262.63

Quantity	Item #	Description	Unit Price	Line Total
Josephine-West Training Services				
2	960780	Power 911 Administrator Training	\$1,515.15	\$3,030.30
1	960801	Power 911 User Training	\$1,515.15	\$1,515.15
5	960575	Living Expense per Day per Person	\$202.02	\$1,010.10
1	960580	Travel Fee per Person	\$1,262.63	\$1,262.63
4	P10088	ACD CCS Training	\$1,515.15	\$6,060.61
6	960575	Living Expense per Day per Person	\$202.02	\$1,212.12
1	960580	Travel Fee per Person	\$1,262.63	\$1,262.63

Quantity	Item #	Description	Unit Price	Line Total
Josephine-TXT2-911-Year 1 MRC				
1	P10062	ITS Service (Annual) Year 1	\$1,818.18	\$1,818.18
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 1	\$11,515.15	\$11,515.15

Quantity	Item #	Description	Unit Price	Line Total
Josephine-Power Metric-Year 1 MRC				
1	P10210	Power Metrics Advanced - 40-75 pos. annual service per PSAP Year 1	\$4,107.07	\$4,107.07
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 1	\$969.70	\$969.70

Quantity	Item #	Description	Unit Price	Line Total
Josephine-West Software Support & Anti-Virus-Year 1 MRC				
11	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 1	\$757.58	\$8,333.33
34	950999/SUB1	Software Subscription Service - 1 Year/Position Year 1	\$1,515.15	\$51,515.15
60	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 1	\$63.64	\$3,818.18

Quantity	Item #	Description	Unit Price	Line Total
Venture Technologies-VIPER Node B				
1	912802/2	VIPER Primary Application Server	\$3,724.49	\$3,724.49
1	912803/2	VIPER Primary VoIP Soft Switch	\$2,704.08	\$2,704.08
1	912822/2	VIPER Secondary Application Server	\$3,316.33	\$3,316.33
1	912823/2	VIPER Secondary VoIP Soft Switch	\$2,704.08	\$2,704.08
2	912811	Application Server License	\$629.49	\$1,258.98
1	912827	VIPER Backroom Mounting Kit	\$2,721.43	\$2,721.43

Quantity	Item #	Description	Unit Price	Line Total
Venture-VIPER Hardware-Peripherals				

1	914961	Power 911 Database-IWS Server RACK Bundle - Type B	\$8,770.41	\$8,770.41
1	914961	Reporting Hardware-IWS Server RACK Bundle - Type B	\$8,770.41	\$8,770.41
1	914422	Reporting Hardware-Additional Backup Executive SQL Agent	\$878.72	\$878.72
1	914962	Object Server-IWS Server RACK - Type A	\$2,727.55	\$2,727.55
1	914121/3	Object Server - Underlying Software	\$1,426.53	\$1,426.53
1	914956	Common Hardware-1U Keyboard/LCD/Trackball/8-Port KVM	\$1,836.73	\$1,836.73
1	914840/1	Common Hardware-Modem DSU/CSU (Digital)- 2 units	\$2,602.04	\$2,602.04

Quantity	Item #	Description	Unit Price	Line Total
Venture-Power Metric Implemntation & TXT Hardware				
1	P10195	Power Metrics Advanced - Service set-up: single RDDM-Server Class	\$7,070.71	\$7,070.71
1	P10063	ITS Equipment	\$1,893.94	\$1,893.94

Quantity	Item #	Description	Unit Price	Line Total
Venture-TXT2-911 & Anti-Virus-Year 1				
1	P10062	ITS SERVICE (ANNUAL)	\$1,818.18	\$1,818.18
7	914143	Symantec Endpoint Protection Manager	\$63.64	\$445.45

Quantity	Item #	Description	Unit Price	Line Total
West ECaTS/Power Metrics Report Development				
612	950105	Professional Services for ECaTS Report Development	\$201.01	\$123,015.06

Quantity	Item #	Description	Unit Price	Line Total
Josephine-Venture-Cisco WAN Hardware				
4	FL-CUBEE-5=	Unified Border Element Enterprise Paper RTU - 5 sessions	\$345.00	\$1,380.00
5	WS-C3650-48PS-S	Cisco Catalyst 3650 48 Port PoE 4x1G Uplink IP Base	\$4,411.40	\$22,057.00
5	CON-SSSNP-WSC36PSS	SOLN SUPP 24X7X4 Catalyst 3560E 24 10/100/1000 + 2*10GE(X2),	\$891.00	\$4,455.00
5	S3650UK9-163	UNIVERSAL	\$0.00	\$0.00
5	PWR-C2-640WAC	640W AC Config 2 Power Supply	\$0.00	\$0.00
5	CAB-TA-NA	North America AC Type A Power Cable	\$0.00	\$0.00
5	STACK-T2-BLANK	Type 2 Stacking Blank	\$0.00	\$0.00
5	PWR-C2-BLANK	Config 2 Power Supply Blank	\$0.00	\$0.00
4	ISR4321-V/K9	Cisco ISR 4321 Bundle, w/UC License, CUBE-10	\$1,423.70	\$5,694.80
4	CON-SSSNP-ISR4321V	Cisco ISR 4321 Bundle w UC License CUBE-10	\$572.25	\$2,289.00
4	SL-4320-IPB-K9	IP Base License for Cisco ISR 4320 Series	\$0.00	\$0.00
4	SL-4320-UC-K9	Unified Communication License for Cisco ISR 4320 Series	\$0.00	\$0.00
4	PWR-4320-AC	AC Power Supply for Cisco ISR 4320	\$0.00	\$0.00
4	CAB-AC-C5	AC Power Cord, Type C5, US, Canada	\$0.00	\$0.00
4	MEM-FLSH-4G	4G Flash Memory for Cisco ISR 4300 (Soldered on motherboard)	\$0.00	\$0.00
4	MEM-4320-4G	4G DRAM for Cisco ISR 4320 (Soldered on motherboard)	\$0.00	\$0.00
8	NIM-BLANK	Blank faceplate for NIM slot on Cisco ISR 4400	\$0.00	\$0.00
8	FL-CUBEE-5	Unified Border Element Enterprise License - 5 sessions	\$0.00	\$0.00
4	SISR4300UK9-316S	Cisco ISR 4300 Series IOS XE Universal	\$0.00	\$0.00
2	WS-C2960X-48FPS-L	Catalyst 2960-X 48 GigE PoE 740W, 4 x 1G SFP, LAN Base	\$3,033.70	\$6,067.40
2	CON-SSSNP-WSC294SL	SOLN SUPP 24X7X4 Cat 2960S 48 GigE, 2 x 10G SFP+ LAN Base RE	\$612.75	\$1,225.50

2	PWR-CLP	Power Retainer Clip For 3560-C, 2960-C and 2960-L Switches	\$0.00	\$0.00
2	CAB-16AWG-AC	AC Power cord, 16AWG	\$0.00	\$0.00

Quantity	Item #	Description	Unit Price	Line Total
Josephine-Venture Technologies VIPER WAN-Year 1				
12	WAN	CL & L3 WAN: 950 Josphine to Venture Technologies	\$2,703.52	\$32,442.21
1	WAN NRC	One-Time Implementation Charges	\$2,500.00	\$2,500.00

Quantity	Item #	Description	Unit Price	Line Total
Venture Node B-Venture Technologies & West Professional Sevices				
1	950858	Backroom Staging - Additional work when no Cabinet	\$1,262.63	\$1,262.63
1	950510	Project Management Services	\$1,226.22	\$1,226.22
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training	\$10,000.00	\$10,000.00

Quantity	Item #	Description	Unit Price	Line Total
Josephine Node A-Venture Technologies & West Professional Services				
1	950858	Backroom Staging - Additional work when no Cabinet	\$1,262.63	\$1,262.63
53	950852	Front Room Equipment Staging - Per Position	\$252.53	\$13,383.84
50	950104	Professional Services (per Day)	\$1,515.15	\$75,757.58
62	960575	Living Expense per Day per Person	\$202.02	\$12,525.25
6	960580	Travel Fee per Person	\$1,262.63	\$7,575.76
1	ISC-E-911-PROJECT	Professional Services for Deployment Project Management Project Documentation Mentor Training	\$80,000.00	\$80,000.00
1	950510	Project Management Services	\$22,039.09	\$22,039.09
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance	\$134,550.00	\$134,550.00
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance 24/7 Onsite Support for 7 days Post System Cut-over	\$13,450.00	\$13,450.00

Quantity	Item #	Description	Unit Price	Line Total
Venture-West Discount-Year 1				
1	ONETIMEDISCOUNT-OTHER	West Discount-Year 1 for Venture Tech Location	(\$24,596.12)	(\$24,596.12)

Quantity	Item #	Description	Unit Price	Line Total
Josephine-West Discount-Year 1				
1	ONETIMEDISCOUNT-OTHER	West Discount-Year 1 for Josephine Location	(\$400,000.00)	(\$400,000.00)

SubTotal	\$1,271,950.37
Discount	\$0.00
Estimated Tax	\$0.00
Total	\$1,271,950.37



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Yig l o 8
City & County of Denver 911 950 Josephine St. Denver CO, 80206
t hip l o 8
City & County of Denver 911 950 Josephine St. Denver, CO 80206

Quote #	Q-00033477		
Date:	03/16/2018	Expires:	06/15/2018
Sales Rep:	Brian Kelley brian.kelley@ventech.com (720) 279-5812		
Customer Contact:	Athena Butler athen.butler@denvergov.org (720) 913-2000		
Description:	Denver RFP No.28635-MASTER Josephine-Venture Tech VIPER/Power 911/Metrics-Year 2-5		

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VI -PeERN				
1	P10062	ITS Service (Annual) Year 2	\$1,818.18	\$1,818.18
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 2	\$11,515.15	\$11,515.15
1	P10209	Power Metrics Advanced - 20-39 pos. annual service per PSAP Year 2	\$3,616.16	\$3,616.16
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 2	\$969.70	\$969.70
31	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 2	\$757.58	\$23,484.85
31	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 2	\$60.61	\$1,878.79
31	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 2	\$303.03	\$9,393.94
60	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 2	\$63.64	\$3,818.18
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 2	\$120,900.00	\$120,900.00
1	P10062	ITS Service (Annual) Year 2	\$1,818.18	\$1,818.18
7	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 2	\$63.64	\$445.45
12	WAN	CL & L3 WAN: 950 Josphine to Venture Technologies-Year 2	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321/2960 Units-Year 2	\$7,969.50	\$7,969.50
1	ONETIMEDISCOUNT-OTHER	ONE TIME DISCOUNT-Year 2	(\$12,183.36)	(\$12,183.36)

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VI -PeERd				
1	P10062	ITS Service (Annual) Year 3	\$1,818.18	\$1,818.18
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 3	\$11,515.15	\$11,515.15

1	P10209	Power Metrics Advanced - 20-39 pos. annual service per PSAP Year 3	\$3,616.16	\$3,616.16
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 3	\$969.70	\$969.70
31	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 3	\$757.58	\$23,484.85
31	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 3	\$60.61	\$1,878.79
31	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 3	\$303.03	\$9,393.94
60	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 3	\$63.64	\$3,818.18
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 3	\$120,900.00	\$120,900.00
1	P10062	ITS Service (Annual) Year 3	\$1,818.18	\$1,818.18
7	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 3	\$63.64	\$445.45
12	WAN	CL & L3 WAN: 950 Josphine to Venture Technologies-Year 3	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321/2960 Units-Year 3	\$7,969.50	\$7,969.50
1	ONETIMEDISCOUNT-OTHER	ONE TIME DISCOUNT-Year 3	(\$18,443.62)	(\$18,443.62)

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VI -PeERC				
1	P10062	ITS Service (Annual) Year 4	\$1,818.18	\$1,818.18
1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 4	\$11,515.15	\$11,515.15
1	P10209	Power Metrics Advanced - 20-39 pos. annual service per PSAP Year 4	\$3,616.16	\$3,616.16
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 4	\$969.70	\$969.70
31	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 4	\$757.58	\$23,484.85
31	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 4	\$60.61	\$1,878.79
31	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 4	\$303.03	\$9,393.94
60	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 4	\$63.64	\$3,818.18
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 4	\$120,900.00	\$120,900.00
1	P10062	ITS Service (Annual) Year 4	\$1,818.18	\$1,818.18
7	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 4	\$63.64	\$445.45
12	WAN	CL & L3 WAN: 950 Josphine to Venture Technologies-Year 4	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321/2960 Units-Year 4	\$7,969.50	\$7,969.50
1	ONETIMEDISCOUNT-OTHER	ONE TIME DISCOUNT-4	(\$18,443.62)	(\$18,443.62)

Quantity	Item #	Description	Unit Price	Line Total
Josephine-VI -PeER2				
1	P10062	ITS Service (Annual) Year 5	\$1,818.18	\$1,818.18

1	ITXTARF3	TXT29-1-1 P911 Integrated Annual Recurring Fee per PSAP (11+ Seats) Year 5	\$11,515.15	\$11,515.15
1	P10209	Power Metrics Advanced - 20-39 pos. annual service per PSAP Year 5	\$3,616.16	\$3,616.16
1	P10219	Power Metrics Suite - Annual access contract per PSAP Year 5	\$969.70	\$969.70
31	950999/SUB1-S	Software Sub Service - 1 Year/Position – Supplemental Position Year 5	\$757.58	\$23,484.85
31	950999/PRO1-BU	Soft Protect and Remote Tech Support - 1 Year/Pos – Back Up Pos Year 5	\$60.61	\$1,878.79
31	950999/PRO1-S	Soft Protect and Remote Tech Support - 1 Year/Pos – Supplemental Pos Year 5	\$303.03	\$9,393.94
60	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 5	\$63.64	\$3,818.18
1	ISC-MANAGEDSERVICEPREBILL	VT-MANAGED SERVICES-Josephine/VT VIPER 24/7 VIPER Monitoring 24/7 Customer Service Center Support 24/7 Onsite Response Monthly Reporting Monthly Preventative Maintenance-Year 5	\$120,900.00	\$120,900.00
1	P10062	ITS Service (Annual) Year 5	\$1,818.18	\$1,818.18
7	914143	Symantec EndPoint Protection Manager (EPM) - 1 year Year 5	\$63.64	\$445.45
12	WAN	CL & L3 WAN: 950 Josphine to Venture Technologies-Year 5	\$2,703.52	\$32,442.21
1	Cisco Smartnet	Cisco 3650/4321/2960 Units-Year 5	\$7,969.50	\$7,969.50
1	ONETIMEDISCOUNT-OTHER	ONE TIME DISCOUNT-Year 5	(\$18,443.62)	(\$18,443.62)

SubTotal	\$812,766.94
Discount	\$0.00
Estimated Tax	\$0.00
Total	\$812,766.94



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/02/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement.

Table with PRODUCER and INSURED information. PRODUCER: SouthGroup Jackson, 795 Woodlands Parkway, Suite 101, Ridgeland, MS 39157. INSURED: Venture Technologies, Inc., ISC, Inc., GKR Systems, Inc., Strategic Allied Technologies, Inc., Venture Consolidated, Inc., WhiteLight Group, LLC, WhiteLight Products Group, LLC, 860 Centre' Street, Ridgeland, MS 39157. CONTACT NAME, PHONE (601) 914-3220, FAX (601) 914-3188. INSURER(S): Zurich, Charter Oak Fire Insurance Company, Indian Harbor Insurance Company.

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Main table listing insurance coverages with columns for INSR LTR, TYPE OF INSURANCE, POLICY NUMBER, POLICY EFF, POLICY EXP, and LIMITS. Includes Commercial General Liability, Automobile Liability, Umbrella Liability, Workers Compensation and Employers' Liability, and Cyber Liability.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Contract# TECHS-20184499

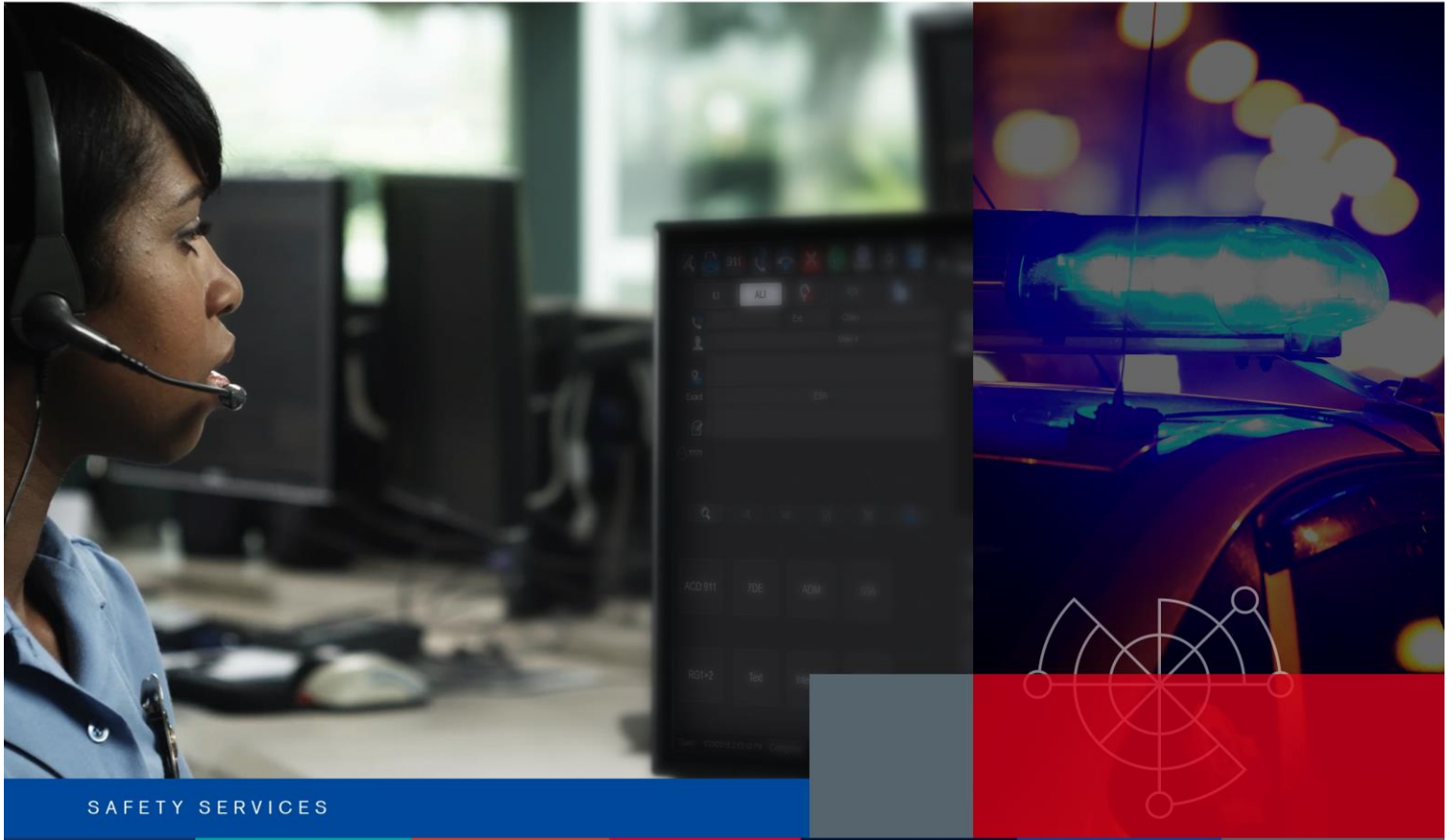
As required by written contract, the City and County of Denver, its Elected and Appointed Officials, Employees and Volunteers are included as Additionally Insured.

CERTIFICATE HOLDER

CANCELLATION

Table with two columns: CERTIFICATE HOLDER (City and County of Denver, Department of Technology Services) and CANCELLATION (SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.).

EXHIBIT E



TXT29-1-1[®] Power Service Guide

Version 2017.09.28

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1. Introduction

This service guide describes West's TXT29-1-1 Power service (the "Service"). Service is a solution offering emergency delivery of SMS to the short code 911 over an Internet Protocol ("IP") network. Emergency text messages, initiated from all Carriers requested by the PSAP within the PSAP jurisdiction, are routed to the public safety agency ("Customer") using text initiator cell sector location and displayed on the Power 911® screen at the call taker positions. Thereafter call takers may engage in a text dialogue with the caller to establish the nature of the emergency and dispatch accordingly.

Supporting Service is Internet Transport Services ("ITS") or West's A9-1-1® Routing service for Text delivery to Customer. ITS provides managed edge devices and a secure VPN over Customer provided Internet between the PSAP and the West Data Center to support Service. Similarly, the West A9-1-1 Routing service can be used to establish equivalent connectivity.

2. Service Overview

2.1. Description

Service enables Customer's call taker ("End-User") to receive and respond to an emergency service request using an SMS text message. Service provides a messaging gateway, routing services, and a communications interface for emergency service requests sent via SMS text message to 9-1-1.

West's Text Control Center ("TCC") is able to simultaneously process, route, and track emergency text dialogues for multiple Service customers. On receipt of a new SMS message a session is established between the TCC and Power 911 workstation with a visual indication on the workstation that there is a new text message. An available End-User selects the TEXT button to answer the request and to send and receive text messages with the text initiator ("TI"), referred to as a text dialogue.

2.2. Service Features

Service includes the following features:

- Visual alert to End-User that an emergency text message has arrived
- Ability to accept, complete, and place in queue any incoming text messages
- Pre-loaded and configurable messages to make responses quick and efficient
- End-User may respond to a text message while on a voice call, if they so choose
- Ability to display TI location as an in band message
- Ability to automatically failover to a back-up PSAP if connectivity to the primary PSAP is lost or text equipment at the PSAP fails
- Log retention of text dialogues
- Back-up/Failover
- External Transfer
- Location Update
- MMS Delivery
- Configurable Timeout Timer

2.2.1. Internal Transfer

TCC now supports a variety of "in-band" commands that can be sent by the PSAP to invoke certain feature-specific actions on the TCC. Transfer is initiated utilizing the #T command.

- Allows 2 PSAPs to correspond privately utilizing the #P command
- Conference in another PSAP
- Transfer text dialog to another PSAP
- Upon a PSAP transfer the LAST known location is forwarded, in the initial message.
- Airbus Vesta CPE PSAPs utilize their own transfer ability and not this in-band TCC command. Their internal transfer ability is developed within their own software.

2.2.2. External Transfer

External PSAP transfer extends the existing transfer function utilizing the same #T command to prompt a transfer.

- External PSAP transfer allows for transfer of TXT29-1-1 dialogs to PSAPs using a different TXT29-1-1 TCC provider, other than West.
- In order to utilize the external transfer function the PSAP must be West text enabled.
- The PSAP receiving the transfer does not need to be West text enabled.
- External transfer operates like the internal West PSAP transfer functionality.
- Upon text enablement with West, key words will be established for selected PSAPs to support transfer.
- Upon text enablement with West, settings can be configured to allow for multiple transfers of a text dialog, allowing for an unlimited amount. The default setting for multiple transfers is 10.

2.2.3. Back-up/Failover

Back-up/Failover allows for a PSAP to designate an alternate PSAP to receive its TXT29-1-1 messages if the PSAP does not answer a text within 30 seconds. This is an optional service.

- Designation of a primary and secondary PSAP
- Messages continue to try the primary
- Route to secondary after 30 seconds if no answer (this is a universal setting, non-configurable)

2.2.4. Location Update

TCC allows the special command, called the “locate command”, to obtain updated location information of an emergency texter. Specific keywords provide the PSAP call taker with the ability to request a location update for an active dialog.

- #L is the command used by the PSAP call taker.
- Upon a PSAP transfer, the LAST known location is forwarded in the initial message.

2.2.5. Media Delivery Configurable by Carrier & PSAP

Media and media notifications are available to PSAPs that opt-in for receipt. The PSAP will opt-in or out at the time of requesting service. A project is underway to address the PSAPs that are already text enabled that want to establish MMS delivery in the below outlined method.

How it works:

- PSAPs pre-configure three email addresses where TCC will auto-send media files. This removes the need for PSAPs to call West to retrieve their media files.
- PSAPs can have the ability to choose whether they would like to receive MMS files or not. The default, upon deployment, is set to not send MMS. If the PSAP chooses to shut MMS off after opting in, they need to put in a ticket with the help desk for Mobility Sys Admin.
- If the PSAP call taker does not have immediate access to the pre-configured mailbox(es) receiving the media files, an in-band command can be initiated to have the media sent immediately to an email of its designation ex. #email Janedoe@psap.com. The PSAP policy will dictate if the call takers utilize this command.
- A PSAP will be able to transfer media files to another PSAP. Example- If PSAP A initiates a transfer to PSAP B as long as PSAP B elects to receive media, the files are transferred. If PSAP B has opted out of receiving media files, they will remain logged at PSAP A.
- Group MMS messaging is not available. Example: The texting party is having a heart attack and text messages 9-1-1 and their spouse. The message will go through to 9-1-1. It is the responsibility of texting application provided by the carrier to manage this situation, NOT TCC.
- MMS size limitations are based on what the carrier can accept. The default is set to 5MB which is the largest carrier requirement encountered to date. If this increases in the future, we can scale to the increased limits required by the carrier.

- If a carrier does not deliver MMS to a PSAPs jurisdiction that PSAP cannot accept MMS from that carrier.
- MMS plain text is delivered to the PSAP in its original state uninterrupted. If non-text MMS media is received and the PSAP is not prepared or has not opted in to receive MMS, the non-text media is not sent to the PSAP and a message is sent to the texting party informing them that the image, video, audio, etc. was not delivered to the PSAP.

2.2.6. Configurable Timeout Timer

The TCC has a configurable timer that will terminate the text dialog after a period of inactivity. The default time value is 120 minutes. The timer can be applied on a per PSAP basis. When the activity timer triggers, the TCC sends a canned message to the texter informing them that the session has timed-out.

2.2.7. Customer Program Support

Customer designates operations contact to act as Customer's project lead for this agreement. Customer's project lead works with the West program manager to:

- Assist with the coordination of West and Customer technical resources
- Coordinate Customer's technical resources for planning and design and requirements definition
- Reporting and verify problems related to Service
- Facilitate ongoing communications with West
- Assign appropriate Information Technology ("IT") Personnel and experienced End-Users at each PSAP who understand the overall impact of the transition of the 9-1-1 systems
- Customer to provide ongoing resource for end-to-end testing of Service

Note: This activity may include West and Customer's appropriate technical and operational groups to assure a solid understanding of the network architecture, data exchange procedures, PSAP needs, standard operational procedures, and services as designed for Customer.

West will provide 24 hour per day operational support for Service. West will provide appropriate contact information to Customer. West is dependent on Customer to provide timely and accurate information to resolve problems.

Customer will identify personnel and work with West to schedule training.

2.2.8. Daily Operational Support and Escalation Procedures

West will provide daily operational support to the extent outlined in the service order for Customer. West will provide appropriate contact information to Customer. West is dependent on Customer or Customer's PSAP to provide timely and accurate information to resolve problems. Failure of providing timely and accurate information to West will impair the ability to resolve escalated incidents.

2.2.9. Subpoena Compliance

West will reasonably comply with requests made by Customer for specific subpoena-related audit record data. West can accommodate most requests within five business days, provided that the request contains the full call back number (Wireless Text call), PSAP name, and a specific date and time. Requests for data that are vague or require extensive research will not be processed until additional detail is provided by Customer.

Requests that require extensive research will be subject to additional charge.

2.2.10. System Audit Records

West will store system audit logs for the West systems involved in 9-1-1 text processing. For example:

- Text service transcripts

West stores system audit logs for minimum one year. West can provide pricing for data recovery past the service order term, on request.

2.3. Data Transport

2.3.1. A9-1-1 Routing Service for Text Delivery

Customers utilizing West's A9-1-1 Routing Service can leverage their existing transport to facilitate Service delivery to the PSAP. The point of demarcation for Customer A9-1-1 service connectivity is the same as described in the diagrams provided below.

2.4. ITS Overview

ITS monitors Service over managed edge devices and a secure VPN through a Customer provided Internet connection between Customer and the West Data Center.

ITS routers are deployed in either single-router or dual-router architecture. Each ITS router is dual-homed to geographically-redundant POPs within the West ESInet. All application connectivity will traverse a device with border-control functionality ("BCF") to reach elements within the West ESInet such as the TCC for delivery of West's Integrated Service as shown in Figure 1.

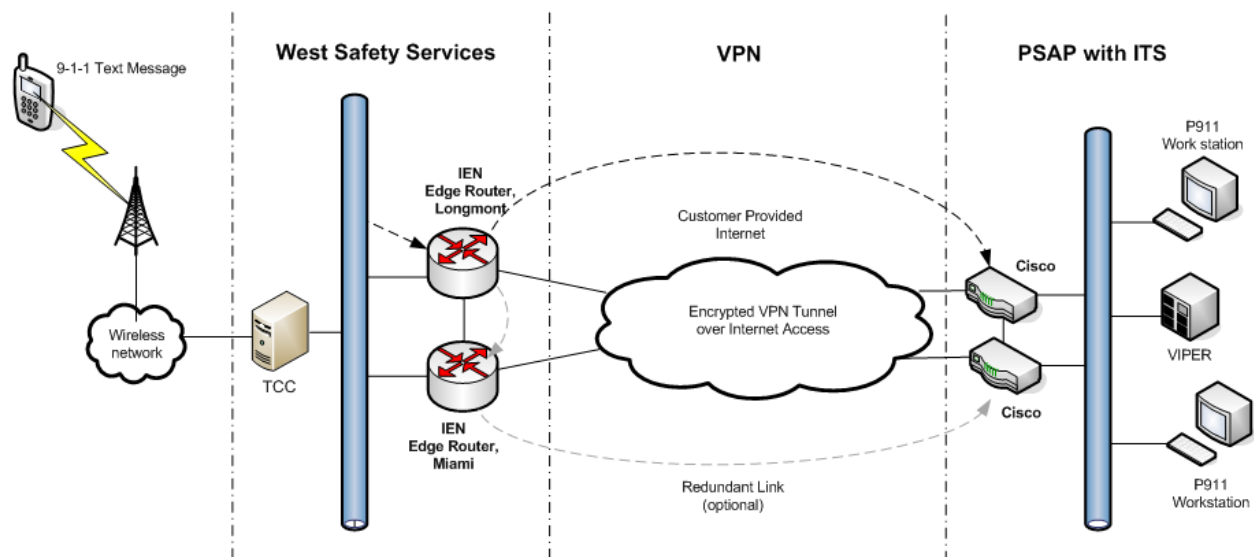


Figure 1: TXT29-1-1: High Level Diagram

ITS is deployed in one of three configurations:

- Host-Remote/Multi-node/ESInet
- Standalone PSAP with shared use public IP connection (non-Isolated)
- Standalone PSAP with dedicated public IP connection (Isolated)

2.4.1. Service Use Cases

The only supported use case for ITS is the West Service.

2.4.2. Host-Remote/Multi-node/ESInet Requirements

The Host-Remote/Multi-node/ESInet architecture is suited for PSAPs or host sites which are part of larger deployments (host/remote, multi-node, etc.). Use this option when ITS routers will be deployed at multiple sites within Customer's PSAP network/ESInet and dynamic cross-site failover is required. This design requires Customer to purchase routers/firewalls if they do not have them already (they should have them if they are running a host/remote or multi-node setup). This option also meets i3 best practices (assuming Customer-managed router/firewall serves as a BCF device).

In this design, routing between ITS routers and Customer-managed routers/firewalls is dynamic (to support cross-site failover).

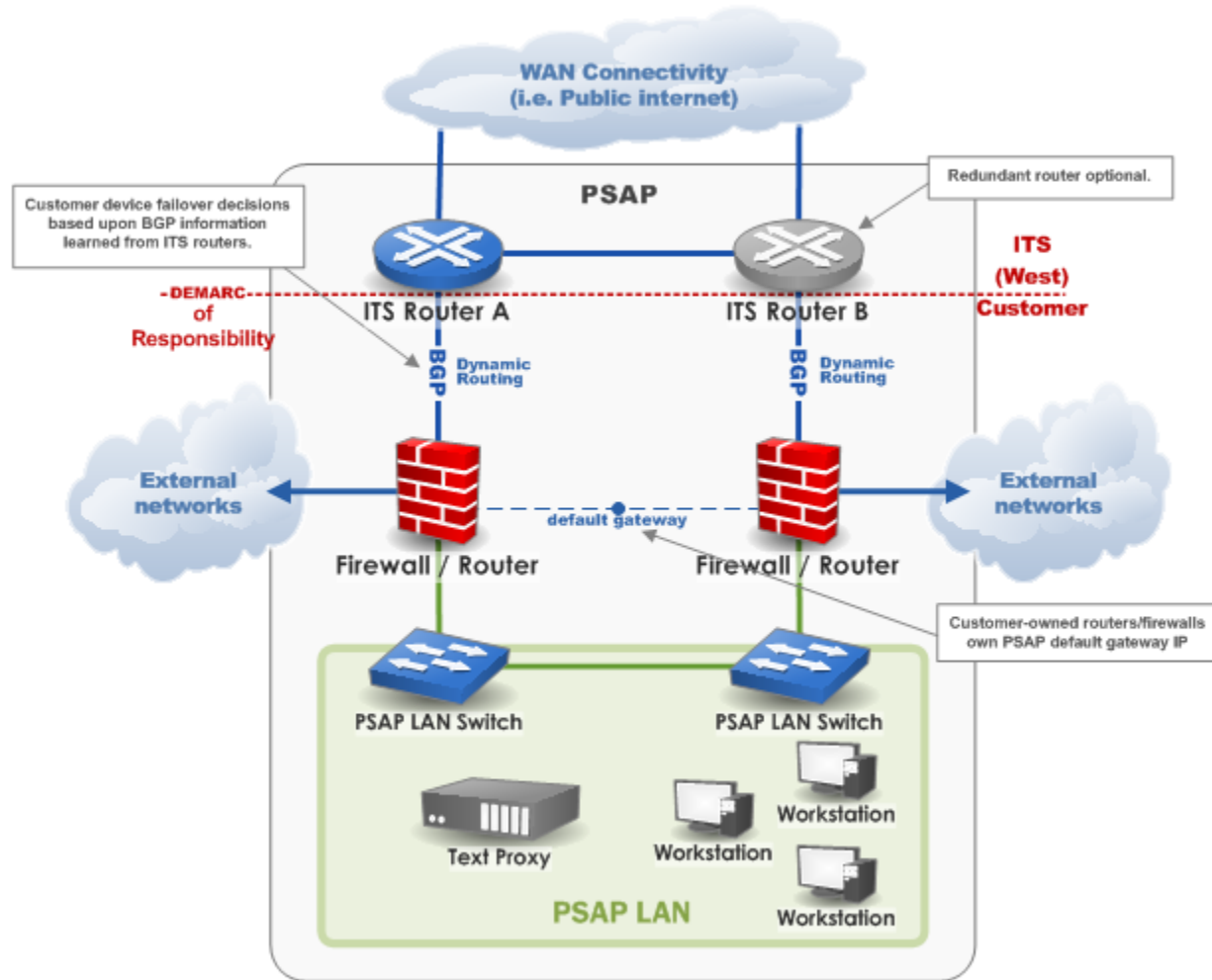


Figure 2: Host-Remote/Multi-node/ESInet Architecture

2.4.2.1. Host-Remote/Multi-node/ESInet PSAP Requirements

- Site is part of a host/remote or multi-node deployment.
- Customer must maintain routers & firewalls to interconnect with ITS routers.
- Customer router/firewalls must support the BGP routing protocol.
- Customer router/firewalls must have one free port per ITS router.
- Uplinks to ITS routers must be Ethernet patch cables.
- Uplinks to ITS routers must be set to 100Mb/full-duplex.

2.4.3. Standalone non-Isolated PSAP

The standalone non-isolated PSAP architecture is suited for simple standalone PSAPs that currently have or will require connectivity to other (non-West) networks. In this design, ITS routers connect to Customer-managed routers or firewalls to reach the PSAP LAN. This option also meets i3 best practices (assuming Customer-managed router/firewall serves as a BCF device). This design requires that Customer purchase routers/firewalls if they do not have them already (they should have them if they are routing to external networks).

In this design, routing between ITS routers and Customer-managed routers/firewalls is static.

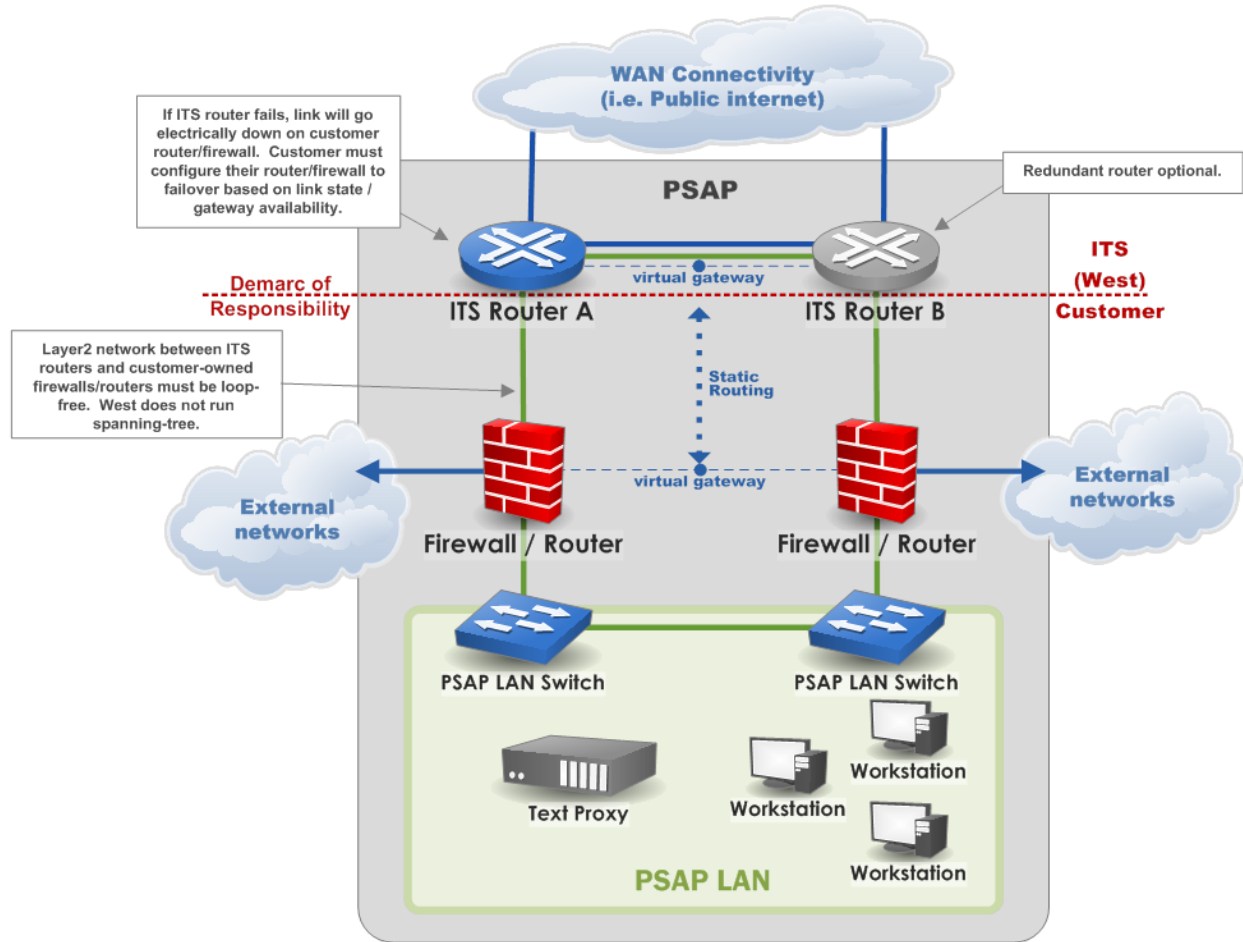


Figure 3: Standalone non-Isolated PSAP ITS Architecture

2.4.3.1. Standalone non-Isolated PSAP Requirements

- PSAP is not part of a host/remote or multi-node deployment.
- Customer must maintain routers & firewalls to interconnect with ITS routers.
- If Customer routers/firewalls are redundant, they must be clustered/stacked, or use a first-hop reachability protocol such as HSRP/VRRP.
- Customer router/firewalls must have one free port per ITS router.
- Uplinks to ITS routers must be Ethernet patch cables.
- Uplinks to ITS routers must be set to 100Mb/full-duplex.

2.4.4. Standalone Isolated PSAP

In a standalone isolated PSAP configuration, the ITS router takes over the PSAP LAN gateway, which makes this option the fastest and least complex to implement. However, it requires that the existing PSAP LAN has no routing whatsoever to external networks. This option does not use a BCF between Customer network and ITS routers. If Customer requirements call for a BCF, either the standalone non-isolated PSAP or the Host-Remote/Multi-node/ESInet architecture solution must be provided.

Figure 4 illustrates the LAN connectivity model for standalone PSAPs that do not have external network connectivity.

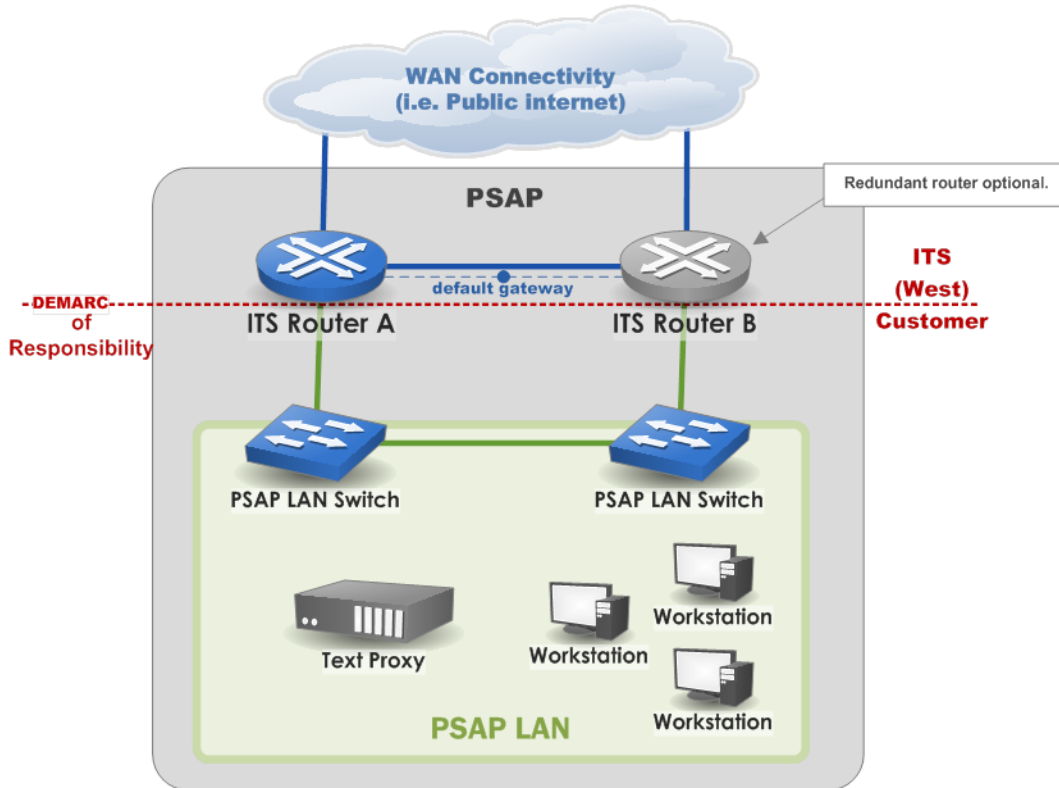


Figure 4: Standalone Isolated PSAP ITS Architecture

2.4.4.1. Standalone Isolated PSAP Requirements

- PSAP must be completely isolated from other IP networks, and is not part of a host/remote or multi-node deployment.
- ITS routers will take over the PSAP LAN default gateway IP.
- PSAP LAN switches must have one free port per ITS router.
- Uplinks to ITS routers must be Ethernet crossover cables.
- Uplinks to ITS routers must be set to 100Mb/full-duplex.

2.5. Customer Provided Public Internet

Customer provided public Internet access is required for establishment of VPN transport from the West Data Center to the PSAP. The public Internet bandwidth will be dependent upon the agreements established by the PSAP and its Internet Service Provider (“ISP”). West cannot make any guarantees on bandwidth for this transport path. Given a heartbeat of 1 check per minute, 3 Mbps of bandwidth will be consumed as an ITS baseline with expected bursts of 8192 Bps for the text application.

The following are the requirements and method of handoff to facilitate proper connectivity between the West ESInet and ITS routers co-located at Customer:

Customer must provide internet connectivity via an Ethernet handoff to the ITS router. This link must be hard-set for 100Mb/full-duplex. If the handoff is from a router, the Ethernet cable must be a cross-over cable.

Customer must provide ITS router with an IP via DHCP (preferred), or by static assignment. If static, Customer must provide an IP, subnet mask, and gateway.

Each ITS router requires a separate internet connection.

Internet connections should be plugged into GE 0/1 port on the ITS router.

Communication between the ITS routers and the following IP addresses/ports/protocols must be permitted.

IP addresses	Ports/Protocols
64.58.49.24	ICMP
64.58.49.25	UDP 500
64.58.49.26	UDP 4500
64.58.51.56	IP Protocol 50
64.58.51.57	

Customer is responsible for managing its ISP(s), and all infrastructure up to (but not including) the ITS router port.

2.6. TXT29-1-1 Failover Protection

Failover protection for TXT29-1-1 is provided for solutions that purchase a second (redundant) ITS. With a redundant ITS there are two forms of failover support for Service-ITS failover (network layer), TXT29-1-1 alternate routing (application layer).

Network Layer Failover: For standalone non-isolated PSAPs, ITS failover is accomplished via link state/gateway availability failure detection by the ITS' firewall/router. For host-remote/multi-node/ESInet architectures failover is accomplished via BGP routing. In both cases failover is accomplished in the matter of a few seconds.

Application Layer Failover: In cases where the routing to the primary PSAP TXT29-1-1 Serving Area User Agent ("SAUA") has failed, the TXT29-1-1 TCC can be configured to route to an alternate SAUA. The alternate SAUA must be a separate physical facility and have its own primary NENA PSAP ID ([FCC 9-1-1 Master Registry](#)). This failover capability only exists for host-remote/multi-node/ESInet solutions where the primary and secondary PSAPs each has its own primary PSAP NENA IDs. This failover occurs 30 seconds after the West TCC fails to connect to the primary SAUA. Establishment of the alternate SAUA is associated with the provision of Service.

3. Severity Levels

West will address all service issues, whether identified by West or by Customer, according to the West-confirmed Severity Level. Severity Levels determine the appropriate contact procedure and the actions that will be taken by West for initial notification time, status update time, and incident management.

Following are service disruption definitions and procedures for each Severity Level and the response time goals for each Severity Level:

3.1. Severity Level 1

Severity Level 1 is only covers Voice and ALI delivery. It does not apply Service.

3.2. Severity Level 2

West systems supporting Service are completely inoperative or severely impacted, resulting in complete loss in delivery of Service.

Resolution Procedure: West will apply immediate and sustained effort until a resolution is in place. If a resolution cannot be readily identified, West will initiate internal escalation procedures to assure resources are appropriately assigned for problem resolution efforts. Systems supporting Service are impaired, where major functions are operative but functioning at limited capacity or critical elements are no longer redundant.

3.3. Severity Level 3

West systems supporting Service are impaired, where major functions are operative but functioning at limited capacity or critical elements are no longer redundant.

Resolution Procedure: West will correct Service disruption or provide a procedure for the PSAP to bypass or work around such disruption in order to continue operations if possible. If a bypass procedure is utilized, West will provide PSAP with an action plan for the development of the final resolution, and West will continue resolution activity until full service is restored to PSAP.

3.4. Severity Level 4

West systems supporting Service are impaired and some functions are not operating, but those functions are not mandatory or critical to 9-1-1 text delivery or are considered minor or cosmetic and have only a minor impact on usability.

Resolution Procedure: West will address via standard maintenance procedures during West normal business hours. If a software fix is required, West will provide a fix during the next scheduled software release.

3.5. Onsite Response Time Goals

The on-site response time goals are stated in the chart below. On-site response times will apply if West determines it is necessary to go on-site to repair a problem with Service.

Severity Level	On-Site Response Time Goal
1	Not Applicable
2	12 hours

4. Responsibility Matrix

The following matrix outlines the typical responsibilities of each party for the implementation and ongoing provision of Service. Where both parties have been listed, additional detail on the responsibilities of each party is included in the sections below. Failure of a party to satisfactorily complete a required task could materially impair West's ability to provide Service.

Task	Responsibility
Project Implementation	
Project Management	West/Customer
Develop West Methods and Procedures	West
PSAP Facilities	Customer
PSAP Facility Site Preparation (floor space, power, etc.)	Customer
PSAP Data Collection	Customer
Text Routing Cell Sector Data	West
Non-West PSAP Equipment Note: This may be legacy equipment or new equipment purchased under another Customer agreement and or non-West PSAP equipment, such as CAD system, voice recording equipment, and radio system; if applicable	Customer
End to End Testing of Service Prior to Production	West/Customer

Task	Responsibility
Production Turn-up of Service	West/Customer
Ongoing Responsibilities	
TCC Log Storage and Backups	West
TCC Network Maintenance	West
TCC Network Monitoring	West
ITS Network and System Maintenance	West
Data Transport	West/Customer
Public Internet Service Maintenance (where applicable)	Customer
Text Application Upgrades	West
Text Log Storage and Backups	West
Maintain West Methods and Procedures	West
Problem Reporting, Triage and Resolution	West/Customer

Table 1: Responsibility Matrix

4.1. West Responsibilities

West will provide and maintain geographically redundant TCC systems.

West will interconnect with Wireless Carrier SMS hubs to route SMS generated by the participating Wireless Carrier subscribers to Customer. Only 9-1-1 text traffic originating from the participating Wireless Carrier subscribers will be routed to Customer.

West will monitor and alarm the West Network to proactively detect any hardware application failures.

West will perform monitoring of communications between the VIPER® and the West Network.

When West detects a service affecting event, or upon request by Customer, West will perform troubleshooting for issues that are within the direct control of West for IP connectivity to the SMS hub provider. West will contact the SMS hub provider, as necessary, for support issues related to SMS hub network.

4.2. Customer Responsibilities

Customer will provide personnel to participate and help execute the end-to-end system acceptance test plan. Customer participation includes providing call takers to receive and process test text messages at pre-scheduled timeframes.

Customer will ensure that the workstations have been upgraded to current versions of software supporting the required VIPER and Power functionality.

Customer will provide Internet access conforming to minimum requirements as specified in Section 2.5 above.

Customer will provide rack space for the West communications equipment (routers/switches and remote power/console servers) in Customer's equipment room within 100 feet of the communications demarcation point. The West communications equipment requires one rack unit slot per router and will come with brackets to support installation in a standard 19-inch equipment rack. Customer will ensure the equipment rack that houses the West communications equipment is adequately grounded and anchored (to the floor, ceiling or adjacent racks). Customer will also provide commercially reasonable physical security for West provided communications equipment. West recommends that Customer-provided rack

space be in a location that receives limited building traffic. Customer will also provide an AC power feed (110v/1.5A) for the West communication equipment.

Note: This activity may include coordination between West and Customer's appropriate technical and operational groups to assure a solid understanding of the network architecture, data exchange procedures, PSAP needs, standard operational procedures, and services as designed for Customer.

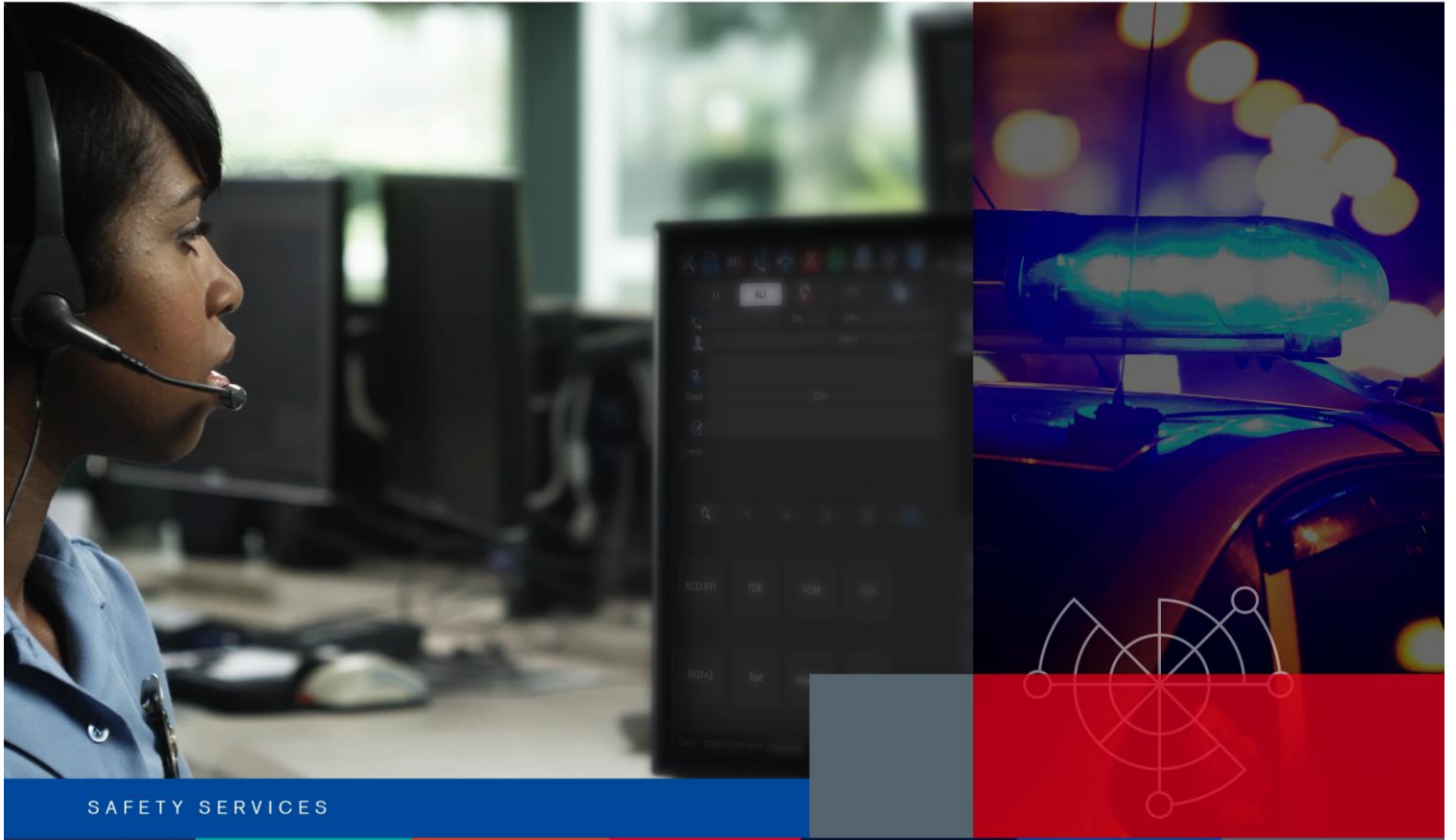
Customer will not impair or prevent West's ability to provide Service. If such occurs and is not remedied within 90 days of West's request to proceed and with all parties acting in good faith, then Customer will be obligated to compensate West for services rendered and/or for cost incurred to put the infrastructure in place to attempt to render Service.

5. Service Limitations and Disclaimers

The following service limitations and disclaimers apply:

- Service cannot be enabled until Customer has modified its network to route to the West TCC.
- PSAP billing will begin upon completion of deployment and text readiness delivery from West to the PSAP. Completion is defined as the PSAP being able to accept text messages.
- West interconnects with third party TCC's, however the performance of the third party TCC is not the responsibility of West.
- West's responsibility for text message routing and processing begins when text messages have been delivered to the West TCC and is limited to the routing and delivery of text messages from West to the identified Customer's End-User. West is not responsible for the delivery or timing of SMS Request for Assistance text messages through the carrier networks.
- Network failures could result in Service being temporarily unavailable. Due to the SMS network and/or wireless carrier servers, new and in-process text dialogues could be delayed or lost.
- End-User cannot initiate a text session with a caller.
- TXT29-1-1 interface will not bid the ALI system nor receive an ALI response for text messages. No ALI-like data will be provided for text messages.
- Service is an emerging technology and is not a replacement for established landline and wireless 9-1-1 services. Service relies on industry SMS infrastructure which is not built to public safety standards, and may include increased latency and the potential for dropped messages.
- Service requires that mobile phones must be text-enabled and be capable of sending properly formatted text messages.
- West has no control over the truncating and sequence delivery of SMS messages.
- West has no control over the character count limitations per device and/or carrier network.
- West has no control or authority to mandate the content of bounce back messages.
- West has no control of routing messages that do not come to the West TCC.
- West has no control over improper routing of SMS messages from third party TCC providers.
- West Outage Notification is limited to West systems and will not include carrier network specific information.
- ITS is not an option to support voice 9-1-1 calls or ALI services.
- West's responsibility for service performance is limited to its equipment and West-provided network.
- Customer understands and accepts that the overall service availability of Customer-provided Internet path will be impacted by the reliability of the Internet connection provided by Customer. Customer takes sole responsibility to restore the Internet connection with its selected ISP.
- Equipment charges will be assessed upon delivery of equipment.
- Solutions where the TXT29-1-1 solution requires transport to remote PSAPs will require use of Customer WAN solution connecting the PSAPs. Unless provided by West, Customer understands and accepts that the overall service availability impacted by outages on Customer WAN. Unless provided by West, Customer takes sole responsibility to restore the Internet connectivity between its geographically dispersed locations.
- After installation of ITS circuit, Customer has three days to acknowledge acceptance of Service or acceptance will be assumed and monthly billing for the ITS will commence.

- A transfer initiated must be initiated from a PSAP using the West TCC. However the transfer can be destined for a non-West TCC PSAP.
- Transfers delivery may be limited to the primary PSAP designated within a circle shape file. The shape file is determined by the PSAPs TCC provider.
- Airbus Vesta CPE PSAPs can use the external transfer capability.
- Backup/Failover is an optional feature.
- Backup/Failover feature will allow auto failover to the designated secondary PSAP after 30 seconds of the text not being answered at the primary PSAP.
- West is limited to providing updated location information based on what is provided from the carriers commercial location servers.
- West is not responsible for the delivery of MMS to the TCC.
- West will only email the MMS to the pre-configured email addresses provided by the PSAP.
- MMS will only be delivered to a PSAP that requests MMS delivery.



TXT29-1-1[®] Power Channel Service Guide

Version 2017.09.21

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1. Introduction

This Service Guide is intended for West Channel Partners reselling the TXT29-1-1 Power Service (“Service”) whose display of TXT29-1-1 messaging is integrated with West VIPER® systems.

Service is a fully managed solution offering emergency delivery of Short Message Service (“SMS”) over an IP network. Emergency text messages, initiated from all Carriers within the Public Safety Answering Point (“PSAP”) jurisdiction, are routed to the PSAP using text initiator cell sector location and displayed on the Power 911® screen at the call taker positions. Thereafter call takers may engage in a text dialogue with the caller to establish the nature of the emergency and dispatch accordingly.

Supporting Service is Internet Transport Service (“ITS”). ITS is a data transport service between the PSAP and the West Data Center in support of text message transport to the PSAP. ITS creates a secure VPN tunnel utilizing Customer provided internet access for data transport. With the purchase of a redundant ITS, ITS will also provide link failover protection.

2. Service Overview

2.1. Description

Service enables PSAP call taker to receive and respond to an emergency service request using an SMS text message. Service provides a messaging gateway, routing services, and a communications interface for emergency service requests sent via SMS text message to 9-1-1.

West’s network is able to simultaneously process, route, and track emergency text dialogues for multiple Service customers. On receipt of a new SMS message a session is established between the Text Control Center (“TCC”) and Power 911 workstation with a visual indication on the workstation that there is a new text message. An available call taker selects the TEXT button to answer the request and to send and receive text messages with the Request Initiator (“RI”), referred to as a text dialogue.

2.1.1. Internal Transfer

TCC now supports a variety of “in-band” commands that can be sent by the PSAP to invoke certain feature-specific actions on the TCC. Transfer is initiated utilizing the #T command.

- Allows 2 PSAPs to correspond privately utilizing the #P command
- Conference in another PSAP
- Transfer text dialog to another PSAP
- Upon a PSAP transfer the LAST known location is forwarded, in the initial message.
- Airbus Vesta CPE PSAPs utilize their own transfer ability and not this in-band TCC command. Their internal transfer ability is developed within their own software.

2.1.2. External Transfer

External PSAP transfer extends the existing transfer function utilizing the same #T command to prompt a transfer.

- External PSAP transfer allows for transfer of TXT29-1-1 dialogs to PSAPs using a different TXT29-1-1 TCC provider, other than West.
- In order to utilize the external transfer function the PSAP must be West text enabled.
- The PSAP receiving the transfer does not need to be West text enabled.
- External transfer operates like the internal West PSAP transfer functionality.
- Upon text enablement with West, key words will be established for selected PSAPs to support transfer.
- Upon text enablement with West, settings can be configured to allow for multiple transfers of a text dialog, allowing for an unlimited amount. The default setting for multiple transfers is 10.

2.1.3. *Back-up/Failover*

Back-up/Failover allows for a PSAP to designate an alternate PSAP to receive its TXT29-1-1 messages if the PSAP does not answer a text within 30 seconds. This is an optional service.

- Designation of a primary and secondary PSAP
- Messages continue to try the primary
- Route to secondary after 30 seconds if no answer (this is a universal setting, non-configurable)

2.1.4. *Location Update*

TCC allows the special command, called the “locate command”, to obtain updated location information of an emergency texter. Specific keywords provide the PSAP call taker with the ability to request a location update for an active dialog.

- #L is the command used by the PSAP call taker.
- Upon a PSAP transfer, the LAST known location is forwarded in the initial message.

2.1.5. *Media Delivery Configurable by Carrier & PSAP*

Media and media notifications are available to PSAPs that opt-in for receipt. The PSAP will opt-in or out at the time of requesting service. A project is underway to address the PSAPs that are already text enabled that want to establish MMS delivery in the below outlined method.

How it works:

- PSAPs pre-configure three email addresses where TCC will auto-send media files. This removes the need for PSAPs to call West to retrieve their media files.
- PSAPs can have the ability to choose whether they would like to receive MMS files or not. The default, upon deployment, is set to not send MMS. If the PSAP chooses to shut MMS off after opting in, they need to put in a ticket with the help desk for Mobility Sys Admin.
- If the PSAP call taker does not have immediate access to the pre-configured mailbox(es) receiving the media files, an in-band command can be initiated to have the media sent immediately to an email of its designation ex. #email Janedoe@psap.com. The PSAP policy will dictate if the call takers utilize this command.
- A PSAP will be able to transfer media files to another PSAP. Example- If PSAP A initiates a transfer to PSAP B as long as PSAP B elects to receive media, the files are transferred. If PSAP B has opted out of receiving media files, they will remain logged at PSAP A.
- Group MMS messaging is not available. Example: The texting party is having a heart attack and text messages 9-1-1 and their spouse. The message will go through to 9-1-1. It is the responsibility of texting application provided by the carrier to manage this situation, NOT TCC.
- MMS size limitations are based on what the carrier can accept. The default is set to 5 MB which is the largest carrier requirement encountered to date. If this increases in the future, we can scale to the increased limits required by the carrier.
- If a carrier does not deliver MMS to a PSAPs jurisdiction that PSAP cannot accept MMS from that carrier.
- MMS plain text is delivered to the PSAP in its original state uninterrupted. If non-text MMS media is received and the PSAP is not prepared or has not opted in to receive MMS, the non-text media is not sent to the PSAP and a message is sent to the texting party informing them that the image, video, audio, etc. was not delivered to the PSAP.

2.1.6. *Configurable Timeout Timer*

The TCC has a configurable timer that will terminate the text dialog after a period of inactivity. The default time value is 120 minutes. The timer can be applied on a per PSAP basis. When the activity timer triggers, the TCC sends a canned message to the texter informing them that the session has timed-out.

2.2. *Service Features*

Service includes the following features:

- Visual alert to call taker that an emergency text message has arrived
- Ability to accept, complete and place in queue any incoming text messages
- Pre-loaded and configurable messages to make responses quick and efficient
- Call taker may respond to a text message while on a voice call, if they so choose
- Ability to display RI location as an inband message
- Ability to automatically failover to a back-up PSAP if connectivity to the primary PSAP is lost or text equipment at the PSAP fails
- Log retention of text dialogues

2.2.1. User Interface

The TXT29-1-1 Power 911 user interface provides the following functions for Service:

- Accept, complete, and put-on-hold incoming text message sessions.
- Display of the call back number (“CBN”) of the wireless device initiating the SMS text message.
- Window for viewing an in-process text dialogue.
- Text entry window for entering and sending a SMS text response to the RI.
- Dialogue closure button for closing the dialogue
- View-only retrieval of completed text dialogues
- Back-up/Failover
- External Transfer
- Location Update

The interface will queue text message requests to a dedicated on-screen text message queue button on each workstation configured for this feature. The number of text dialogues that can be queued at a PSAP is configurable. When the upper limit is exceeded, a new text message will not be added to the queue, and a system busy/call 9-1-1 response will be sent to the RI.

2.2.2. Daily Operational Support and Escalation Procedures

West will provide daily operational support to the extent outlined in the service order for Customer. West will provide appropriate contact information to Customer. West is dependent on Customer or Customer’s PSAP to provide timely and accurate information to resolve problems. Failure of providing timely and accurate information to West will impair the ability to resolve escalated incidents.

2.2.2.1. Subpoena Compliance

West will reasonably comply with requests made by Customer for specific subpoena-related audit record data. West can accommodate most requests within five business days, provided that the request contains the full CBN (wireless text call), PSAP name, and a specific date and time. Requests for data that are vague or require extensive research will not be processed until additional detail is provided by Customer.

Requests that require extensive research will be subject to additional charge.

2.2.2.2. System Audit Records

West will store system audit logs for the West systems involved in 9-1-1 text processing. For example:

- Text service transcripts

West stores system audit logs for minimum one year. West can provide pricing for data recovery past the service order term, on request.

2.3. ITS Overview

ITS routers are deployed in either a single-router or dual-router architecture. Each ITS router is dual-homed to geographically-redundant POPs within the West ESInet. All application connectivity will traverse a device with border-control functionality (“BCF”) to reach elements within the West ESInet such as the TCC for delivery of West’s Integrated Service as shown in Figure 1.

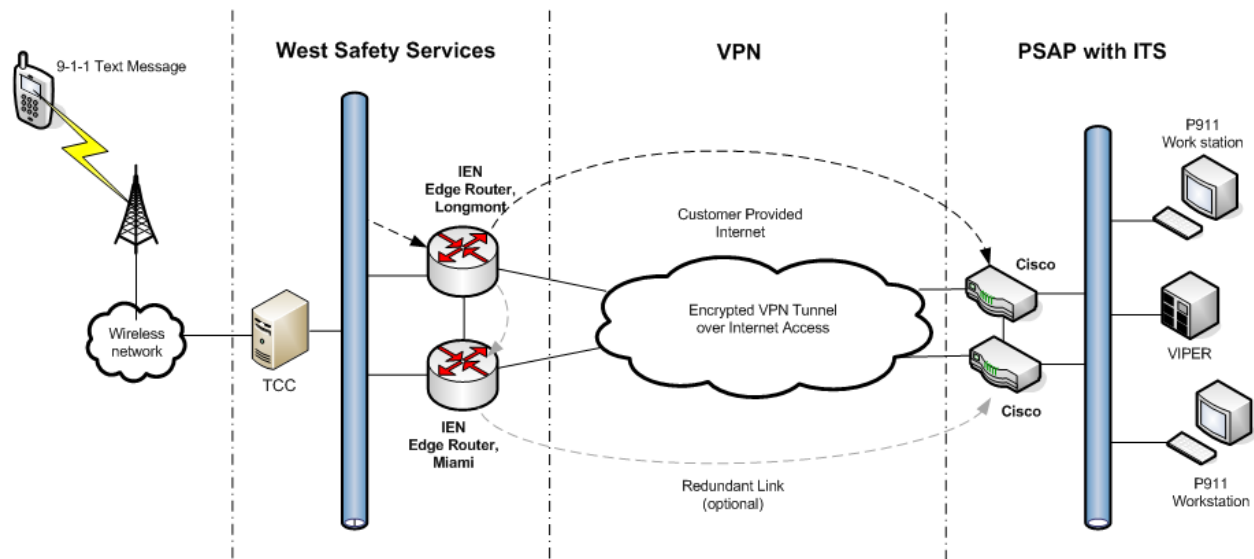


Figure 1: TXT29-1-1: High Level Diagram

ITS is deployed in one of three configurations:

- a. Host-Remote/Multi-node/ESInet
- b. Standalone PSAP with shared use public IP connection (non-Isolated)
- c. Standalone PSAP with dedicated public IP connection (Isolated)

2.3.1. Service Use Cases

The only supported use case for ITS is Service.

2.3.2. Host-Remote/Multi-node/ESInet Requirements

The Host-Remote/Multi-node/ESInet architecture is suited for PSAPs or host sites which are part of larger deployments (host/remote, multi-node, etc.). Use this option when ITS routers will be deployed at multiple sites within Customer's PSAP network/ESInet and dynamic cross-site failover is required. This design requires Customer to purchase routers/firewalls if they do not have them already (they should have them if they are running a host/remote or multi-node setup). This option also meets i3 best practices (assuming Customer-managed router/firewall serves as a BCF device).

In this design, routing between ITS routers and Customer-managed routers/firewalls is dynamic (to support cross-site failover).

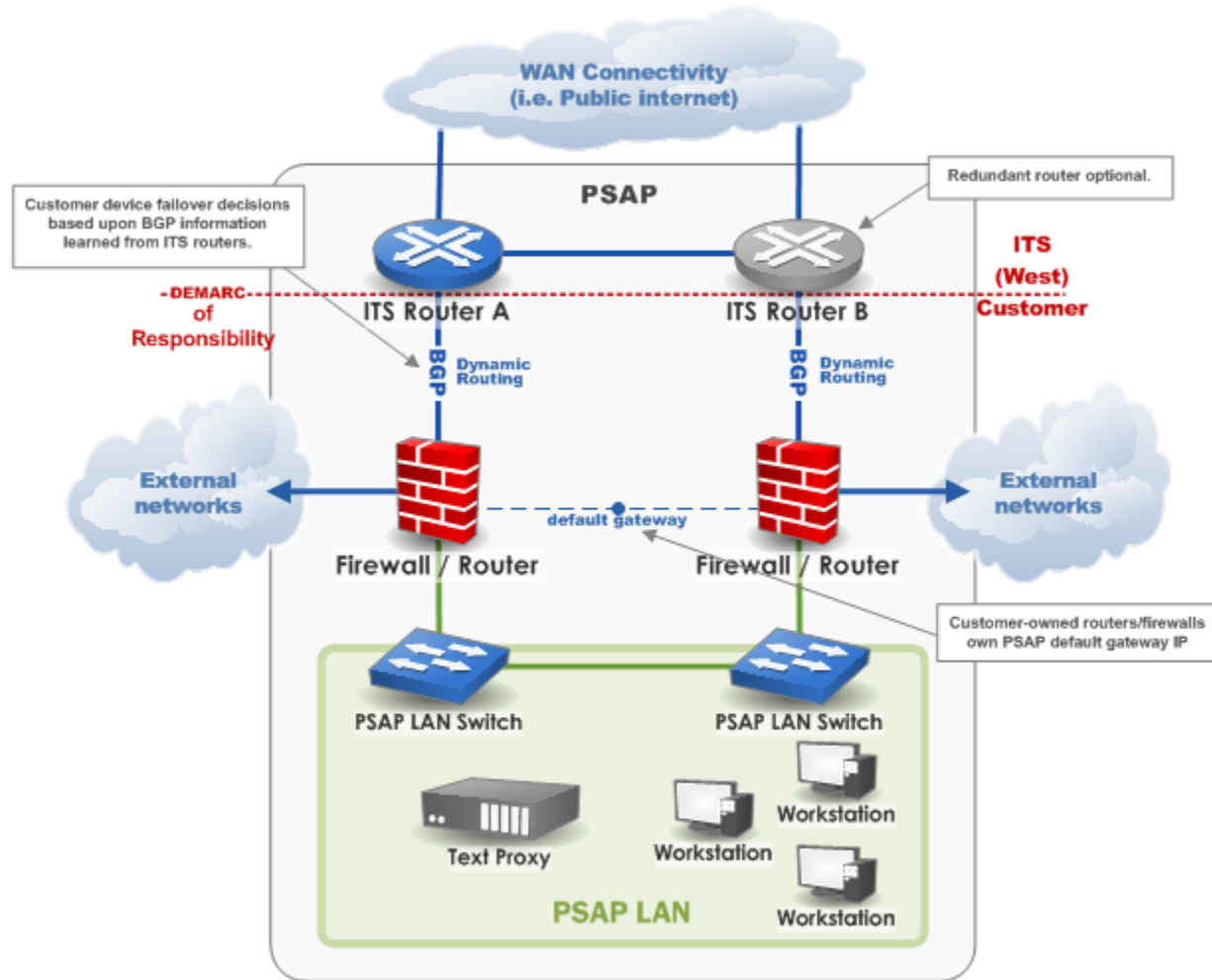


Figure 2: Host-Remote/Multi-node/ESInet Architecture

2.3.2.1. Host-Remote/Multi-node/ESInet Solution Requirements

- Site is part of a host/remote or multi-node deployment.
- Customer must maintain routers & firewalls to interconnect with ITS routers.
- Customer router/firewalls must support the Border Gateway Protocol (“BGP”) routing protocol.
- Customer router/firewalls must have one free port per ITS router.
- Uplinks to ITS routers must be Ethernet patch cables.
- Uplinks to ITS routers must be set to 100 MB/full-duplex.

2.3.3. Standalone non-Isolated PSAP

The standalone non-isolated PSAP architecture is suited for simple standalone PSAPs that currently have or will require connectivity to other (non-West) networks. In this design, ITS routers connect to Customer-managed routers or firewalls to reach the PSAP Local Area Network (“LAN”). This option also meets i3 best practices (assuming Customer-managed router/firewall serves as a BCF device). This design requires that Customer purchase routers/firewalls if they do not have them already (they should have them if they are routing to external networks).

In this design, routing between ITS routers and Customer-managed routers/firewalls is static.

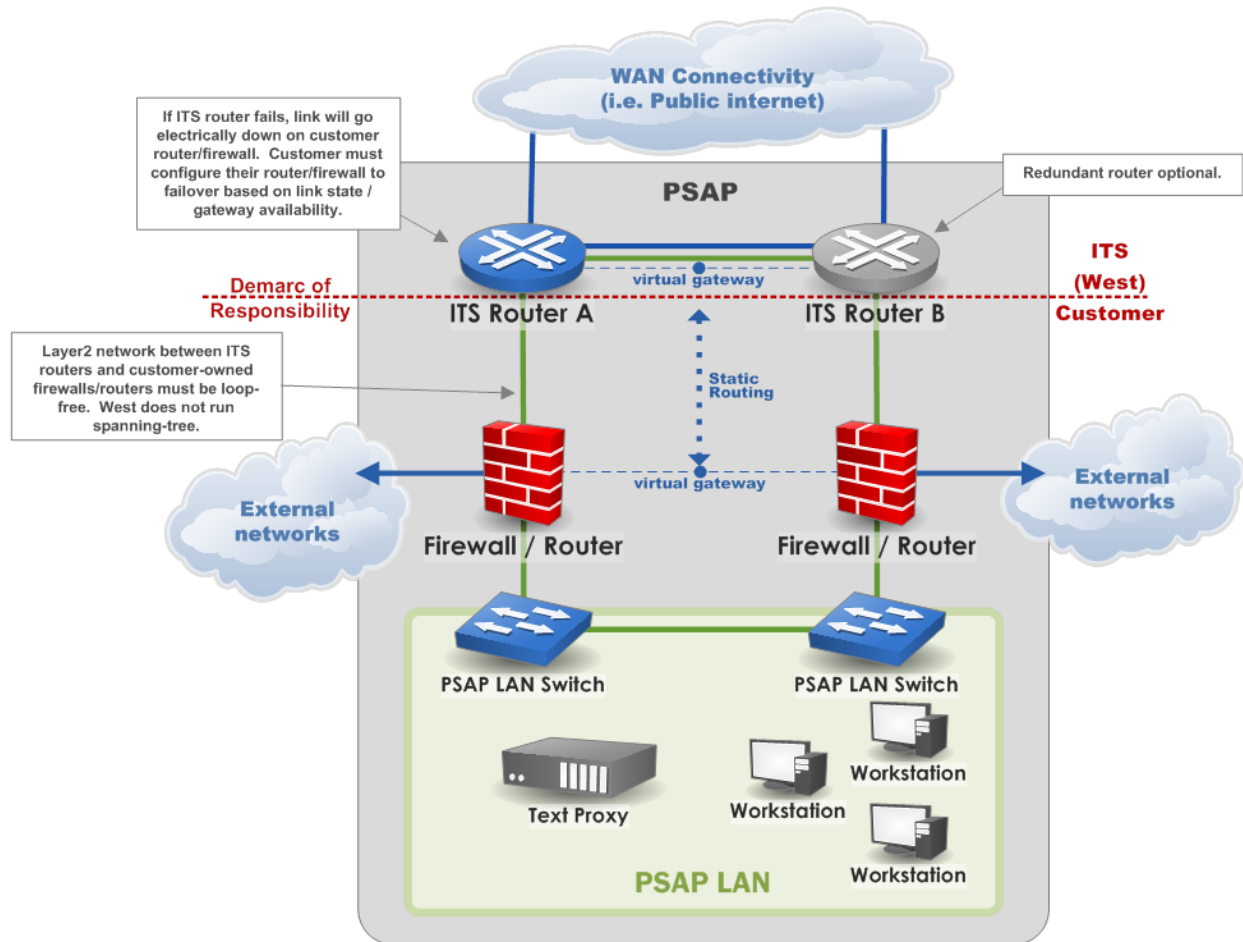


Figure 3: Standalone non-Isolated PSAP ITS Architecture

2.3.3.1. Standalone non-Isolated PSAP Requirements

- PSAP is not part of a host/remote or multi-node deployment.
- Customer must maintain routers & firewalls to interconnect with ITS routers.
- If Customer routers/firewalls are redundant, they must be clustered/stacked, or use a first-hop reachability protocol such as HSRP/VRRP.
- Customer router/firewalls must have one free port per ITS router.
- Uplinks to ITS routers must be Ethernet patch cables.
- Uplinks to ITS routers must be set to 100 MB/full-duplex.

2.3.4. Standalone Isolated PSAP

In a standalone isolated PSAP configuration, the ITS router takes over the PSAP LAN gateway, which makes this option the fastest and least complex to implement. However, it requires that the existing PSAP LAN has no routing whatsoever to external networks. This option does not use a BCF between Customer network and ITS routers. If Customer requirements call for a BCF, either the standalone non-isolated PSAP or the Host-Remote/Multi-node/ESInet architecture solution must be provided.

Figure 4 illustrates the LAN connectivity model for standalone PSAPs that do not have external network connectivity.

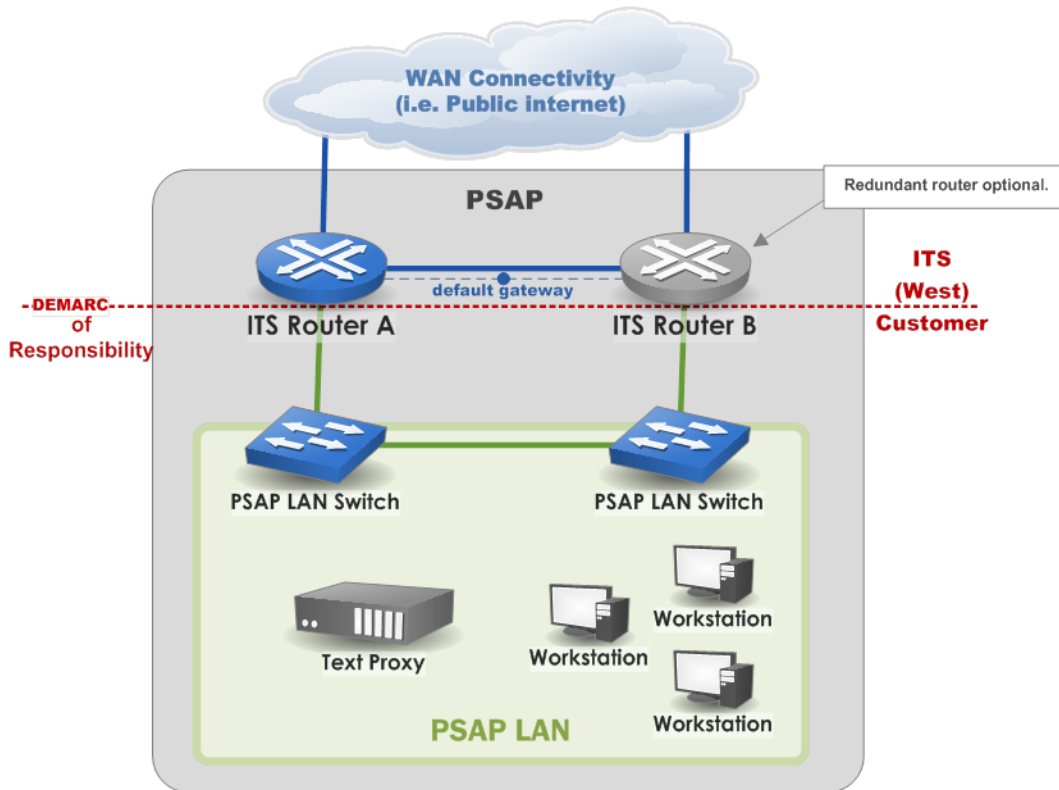


Figure 4: Standalone Isolated PSAP ITS Architecture

2.3.4.1. Standalone Isolated PSAP Requirements

- PSAP must be completely isolated from other IP networks, and is not part of a host/remote or multi-node deployment.
- ITS routers will take over the PSAP LAN default gateway IP.
- PSAP LAN switches must have one free port per ITS router.
- Uplinks to ITS routers must be Ethernet crossover cables.
- Uplinks to ITS routers must be set to 100 MB/full-duplex.

2.4. Customer Provided Public Internet

Customer provided public internet access is required for establishment of VPN transport from the West Data Center to the PSAP. The public internet bandwidth will be dependent upon the agreements established by the PSAP and its Internet Service Provider (“ISP”). West cannot make any guarantees on bandwidth for this transport path. Given a heartbeat of 1 check per minute, 3 Gig of bandwidth will be consumed as an ITS baseline with expected bursts of 8192 Bps for the text application.

The following are the requirements and method of handoff to facilitate proper connectivity between the West ESInet and ITS routers co-located at PSAP:

- Customer must provide internet connectivity via an ethernet handoff to the ITS router. This link must be hard-set for 100 MB/full-duplex. If the handoff is from a router, the ethernet cable must be a cross-over cable.
- Customer must provide ITS router with an IP via Dynamic Host Control Protocol (“DHCP”) (preferred), or by static assignment. If static, Customer must provide an IP, subnet mask, and gateway.
- Each ITS router requires a separate internet connection.
- Internet connections should be plugged into GE 0/1 port on the ITS router.

- Communication between the ITS routers and the following IP addresses/ports/protocols must be permitted.

IP addresses	Ports/Protocols
64.58.49.24	ICMP
64.58.49.25	UDP 500
64.58.49.26	UDP 4500
64.58.51.56	IP Protocol 50
64.58.51.57	

Customer is responsible for managing its ISP(s), and all infrastructure up to (but not including) the ITS router port.

2.5. TXT29-1-1 Failover Protection

Failover protection for Service is provided for solutions that purchase a second (redundant) ITS. With a redundant ITS there are two forms of failover support for Service-ITS failover (network layer), TXT29-1-1 alternate routing (application layer).

Network Layer Failover: For standalone non-isolated PSAPs, ITS failover is accomplished via link state/gateway availability failure detection by Customer's firewall/router. For host-remote/multi-node/ESInet architectures failover is accomplished via BGP routing. In both cases failover is accomplished in the matter of a few seconds.

Application Layer Failover: In cases where the routing to the primary PSAP TXT29-1-1 Serving Area User Agent ("SAUA") has failed, the TXT29-1-1 TCC can be configured to route to an alternate SAUA. The alternate SAUA must be a separate physical facility and have its own primary NENA PSAP ID ([FCC 9-1-1 Master Registry](#)). This failover capability only exists for host-remote/multi-node/ESInet solutions where the primary and secondary PSAPs each has its own primary PSAP NENA IDs. This failover occurs 30 seconds after the West TCC fails to connect to the primary SAUA. Establishment of the alternate SAUA is associated with the provision of Service.

3. Responsibility Matrix

The following matrix outlines the typical responsibilities of each party for the implementation and ongoing provision of Service. Where both parties have been listed, additional detail on the responsibilities of each party is included in the sections below. Failure of a party to satisfactorily complete a required task could materially impair West's ability to provide Service.

Task	Responsibility
Project Implementation	
Project Management	West/Customer
Develop West Methods and Procedures	West
PSAP Facilities	Customer
PSAP Facility Site Preparation (floor space, power, etc.)	Customer
PSAP Data Collection	Customer
Text Routing Cell Sector Data	West

Task	Responsibility
Non-West PSAP Equipment Note: This may be legacy equipment or new equipment purchased under another Customer agreement and or non-West PSAP equipment, such as CAD system, voice recording equipment, and radio system; if applicable	Customer
End to End Testing of Service Prior to Production	West/Customer
Production Turn-up of Service	West/Customer
Ongoing Responsibilities	
Text Application Upgrades	West
Text Log Storage and Backups	West
Text Network Maintenance	West
Text Network Monitoring	West
ITS Network and System Maintenance	West
Public Internet Service Maintenance	Customer
Maintain West Methods and Procedures	West
Problem Reporting, Triage and Resolution	West/Customer

Table 1: Responsibility Matrix

3.1. Customer Program Support

Customer designates operations contact to act as Customer's project lead for this agreement. Customer's project lead works with the West program manager to:

- Assist with the coordination West and Customer technical resources
- Coordinate Customer's technical resources for planning and design and requirements definition
- Reporting and verify problems related to Service
- Facilitate ongoing communications with West
- Assign appropriate Information Technology ("IT") Personnel and experienced call takers at each PSAP who understand the overall impact of the transition of the 9-1-1 systems
- Customer to provide ongoing resource for end-to-end testing of Service.
- Note: This activity may include West and Customer's appropriate technical and operational groups to assure a solid understanding of the network architecture, data exchange procedures, PSAP needs, standard operational procedures, and services as designed for Customer.

4. Severity Levels

West will address all service issues, whether identified by West or by Customer, according to the West-confirmed Severity Level. Severity Levels determine the appropriate contact procedure and the actions that will be taken by West for initial notification time, status update time, and incident management.

Following are service disruption definitions and procedures for each Severity Level and the response time goals for each Severity Level:

4.1. Severity Level 1

Severity Level 1 is defined by impacts to Voice and ALI delivery. It does not apply to Service.

4.2. Severity Level 2

West systems supporting Service are completely inoperative or severely impacted, resulting in complete loss in delivery of Service.

Resolution Procedure: West will apply immediate and sustained effort until a resolution is in place. If a resolution cannot be readily identified, West will initiate internal escalation procedures to assure resources are appropriately assigned for problem resolution efforts. Systems supporting Service are impaired, where major functions are operative but functioning at limited capacity or critical elements are no longer redundant.

4.3. Severity Level 3

West systems supporting Service are impaired, where major functions are operative but functioning at limited capacity or critical elements are no longer redundant.

Resolution Procedure: West will correct Service disruption or provide a procedure for the PSAP to bypass or work around such disruption in order to continue operations if possible. If a bypass procedure is utilized, West will provide PSAP with an action plan for the development of the final resolution, and West will continue resolution activity until full service is restored to PSAP.

4.4. Severity Level 4

West systems supporting Service are impaired and some functions are not operating, but those functions are not mandatory or critical to 9-1-1 text delivery or are considered minor or cosmetic and have only a minor impact on usability.

Resolution Procedure: West will address via standard maintenance procedures during West normal business hours. If a software fix is required, West will provide a fix during the next scheduled software release.

4.5. Onsite Response Time Goals

The on-site response time goals are stated in the chart below. On-site response times will apply if West determines it is necessary to go on-site to repair a problem with Service.

Severity Level	On-Site Response Time Goal
1	Not Applicable
2	12 hours

5. Feedback on Service

Customer agrees to provide feedback to West on Service. This feedback may include print and video testimonials, photographs, case studies, showcase site Customer tours, and documenting and promoting milestones. Customer grants West an unrestricted, perpetual right to use all feedback in any format for any purpose. West will work with Customer to mutually agree upon the number and frequency of these activities:

- a. Focus groups and User groups
- b. Questionnaires
- c. Surveys

6. Service Limitations and Disclaimers

The following service limitations and disclaimers apply:

- Service cannot be enabled until Customer has modified their network to route to the West TCC.
- West's responsibility for text message routing and processing begins when text messages have been delivered to the West router and is limited to the routing and delivery of text messages from

West to the identified PSAP call taker. West is not responsible for the delivery or timing of SMS Request for Assistance text messages through the carrier networks.

- Though West operates redundant messaging gateway systems, serious system or network failures could result in Service being temporarily unavailable. Due to the SMS network and/or wireless carrier servers, new and in-process text dialogues could be delayed or lost.
- PSAP call taker cannot initiate a text session with a caller.
- VIPER will not bid the ALI system nor receive an ALI response for text messages. No ALI-like data will be provided for text messages.
- Service is an emerging technology and is not a replacement for established landline and wireless 9-1-1 services. Service relies on industry SMS infrastructure which is not built to public safety standards, and may include increased latency and the potential for dropped messages.
- Service requires that mobile phones must be text-enabled and be capable of sending properly formatted text messages.
- West has no control over the truncating and sequence delivery of SMS messages.
- West has no control over the character count limitations per device and/or carrier network.
- West has no control or authority to mandate the content of bounce back messages.
- West has no control of routing messages that do not come to the West TCC.
- West has no control over improper routing of SMS messages from 3rd party TCC providers.
- West Outage Notification is limited to West systems and will not include carrier network specific information.
- ITS is not an option to support voice 9-1-1 calls or ALI services.
- West's responsibility for service performance is limited to its equipment and West-provided network.
- Customer understands and accepts that the overall service availability of Customer provided Internet path will be impacted by the reliability of the Internet connection provided by Customer. Customer takes sole responsibility to restore the Internet connection with their selected ISP.
- Equipment charges will be assessed upon delivery of equipment.
- Solutions where the TXT29-1-1 solution requires transport to remote PSAPs will require use of Customer WAN solution connecting the PSAPs. Unless provided by West, Customer understands and accepts that the overall service availability impacted by outages on the PSAP WAN. Unless provided by West, Customer takes sole responsibility to restore the Internet connectivity between their geographically dispersed locations.
- After installation of ITS circuit Customer has three days to acknowledge acceptance of Service or acceptance will be assumed and monthly billing for the ITS will commence.
- A transfer initiated must be initiated from a PSAP using the West TCC. However the transfer can be destined for a non-West TCC PSAP.
- Transfers delivery may be limited to the primary PSAP designated within a circle shape file. The shape file is determined by the PSAPs TCC provider.
- Airbus Vesta CPE PSAPs can use the external transfer capability.
- Backup/Failover is an optional feature.
- Backup/Failover feature will allow auto failover to the designated secondary PSAP after 30 seconds of the text not being answered at the primary PSAP.
- West is limited to providing updated location information based on what is provided from the carriers commercial location servers.
- West is not responsible for the delivery of MMS to the TCC.
- West will only email the MMS to the pre-configured email addresses provided by the PSAP.
- MMS will only be delivered to a PSAP that requests MMS delivery.