

CITY OF STRONGSVILLE, OHIO

ORDINANCE NO. 2014 – 018

By: Mayor Perciak and All Members of Council

AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO A CONTRACT WITH AT&T (PUBLIC SAFETY SOLUTIONS) FOR THE PURCHASE AND INSTALLATION OF A NEW, UPDATED 911 CALL HANDLING SYSTEM TO ENHANCE THE CITY'S DISPATCH SERVICES, WITHOUT PUBLIC BIDDING, AND DECLARING AN EMERGENCY.

WHEREAS, in 2005, and through this Council's passage of Ordinance No. 2005-221, the City of Strongsville purchased and installed various upgraded 911 equipment to replace the then existing 911 equipment utilized by the City; and

WHEREAS, it is now the recommendation of the City's Director of Communication & Technology that the entire existing 911 system, both hardware and software, should be replaced at this time in order to upgrade and enhance the City's public safety dispatch services; and

WHEREAS, after appropriate study, the Director of Communication & Technology has concluded that to meet the City's specifications and requirements, the best new system for such purposes is the "Geo-Diverse Cassidian Communication 4X System," as provided by AT&T, a public utility, through its Public Safety Solutions; and

WHEREAS, AT&T has submitted its proposal to the City for the purchase and installation of such a new 911 Call Handling System with training and professional services but without any other options, to enhance the City's dispatch services, all as set forth in the Proposal attached hereto as Exhibit "A" and incorporated herein; and

WHEREAS, Article V, Section 5(b) of the Strongsville City Charter provides that the City can authorize the expenditure of funds without public bidding for the product or service of public utilities; and

WHEREAS, Ohio Revised Code Section 9.30 provides that a municipal corporation may acquire the service, product, or commodity of a public utility at the schedule of rates and charges applicable to such service, product or commodity on file with the Public Utilities Commission, without the necessity of advertising to obtain bids, and without notice, irrespective of the amount of money involved; and

WHEREAS, recently adopted Ohio Revised Code Sections 128.03 and 128.09 further specifically provide that requirements of competitive bidding are not applicable in connection with purchase and installation of an enhanced wireless 911 system; and

WHEREAS, this Council has reviewed the Proposal submitted by AT&T and is desirous of the City entering into a contract for such new 911 Call Handling System without the necessity of public bidding.

CITY OF STRONGSVILLE, OHIO
ORDINANCE NO. 2014 - 018
Page 2

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF STRONGSVILLE, COUNTY OF CUYAHOGA AND STATE OF OHIO, BY UNANIMOUS AFFIRMATIVE VOTE:

Section 1. That the Mayor be and is hereby authorized and directed to enter into a contract, without public bidding, with **AT&T (PUBLIC SAFETY SOLUTIONS)** for the purchase and installation of a next generation 911 Call Handling System and related training and professional services, but without options, all consistent with the Proposal and for the prices attached hereto as Exhibit "A," but in a total amount not to exceed \$170,536.00, and in a contractual form to be approved by the Law Director.

Section 2. That the funds for the purposes of said contract have been appropriated and shall be paid from the General Capital Improvement Fund.

Section 3. That it is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council; and that all deliberations of this Council, and any of its committees, that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 4. That this Ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, health, safety and welfare of the City, and for the further reason that it is immediately necessary to enter into such contract in order to replace, enhance and upgrade the existing 911 call system related to providing dispatch services, to ensure the usual daily operation and continuity of services of the public safety department of the City, and to conserve public funds. Therefore, provided this Ordinance receives the unanimous vote of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor.

Michael Daymut
President of Council

Approved: Michael Daymut
Acting Mayor

Date Passed: February 3, 2014

Date Approved: February 4, 2014

	<u>Yea</u>	<u>Nay</u>
Carbone	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Daymut	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DeMio	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dooner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Maloney	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schonhut	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Southworth	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Attest: Leslie J. Seefried
Clerk of Council

ORD. No. 2014-018 Amended: _____
1st Rdg. 02-03-14 Ref: _____
2nd Rdg. Suspended Ref: _____
3rd Rdg. Suspended Ref: _____

Pub Hrg. _____ Ref: _____
Adopted: 02-03-14 Defeated: _____



911 Call Handling Solution

For

*The City of
Strongsville*

Proposed by:

AT&T Public Safety Solutions

10/28/2013



EXHIBIT A

EXECUTIVE SUMMARY

AT&T is pleased to have an opportunity to provide a proposal to the City of Strongsville for a next generation 9-1-1 Call Handling system.

AT&T's next generation call handling solution will allow for better collaboration and by bringing multiple PSAPs under a standardized system versus what has historically been handled by disparate systems on a city by city basis. It is our belief that the sharing of personnel, resources and information will aid all the people living and working within the city and surrounding area as it will be more cost effective and it will help attract new businesses. It also provides business continuity and disaster recovery capabilities that are not currently in place. The flexibility of the new system will allow call takers from one PSAP to answer calls for their own jurisdiction or providing both back up and a standard appearance to the call taker.

The new system proposed by AT&T will directly impact the ability of those in the City of Strongsville and surrounding areas to communicate and allocate critical resources in a time of an emergency which will improve upon the efficiency. Better use of resources in this day and age is a requirement and not a luxury. This next generation infrastructure not only will replace end of life hardware that is in place today, but it also allows the communities served by the new call handling solution an opportunity to take advantage of Text to 911 capabilities and other IP based services that are only available in an I3 compliant architecture. Overall, this new platform will enable dispatch center call taking operations while reducing the amount of equipment being purchased.

As the City of Strongsville looks to select a vendor for the next generation call handling solution they need to select a vendor that not only has a long track record of success, a deep understanding of technology, but one that can integrate, manage and support the system throughout the life of the contract. Any solution that is recommended needs to be an NENA i3 compliant architecture. Once that architecture is in place this will allow adoption to a state wide or even nationwide network when the opportunity arises.

AT&T is committed to providing the City of Strongsville the most complete, secure, standards based next generation public safety solution that is available.

Our experience working with the City over the years has allowed AT&T to fully understand the goals and objectives of the City of Strongsville as you look to migrate away from legacy infrastructure to next generation infrastructure..

This project is very important to AT&T. As one of the most densely populated cities in Cuyahoga County we feel that the City of Strongsville will play an integral role in the development of a County or Statewide ESINet and Next Generation 9-1-1 network when legislation and funding will allow. It is important for AT&T to have the City of Strongsville as a strategic partner in moving forward in providing future Next Generation network and

applications. AT&T has a vested interest in this process as well as we have over 7,000 employees who work and live within the state of Ohio, many of which reside in the City of Strongsville.

AT&T is the most capable partner to satisfy all of the City of Strongsville's current needs, while providing the flexibility of technology and contract to accommodate the changes expected over the life of this project. In today's world, fast, reliable emergency response is more important than ever. Citizens expect prompt response and accurate dispatch. The City of Strongsville faces challenges similar to many emergency response organizations around the country, including:

- Complying with government guidelines, NENA i3 & APCO specification intended to address constant change in the NG E911 & technology markets.

- Increasing efficiency, reducing response time, and doing more with fewer resources.

- Providing call takers with fast, accurate information in order to make quick decisions.

- Selecting equipment that will continue to serve your needs well into the future.

High Level Overview

AT&T is proposing a NENA standards compliant i3 IP- call handing Hosted Solution, with a migration path to the Emergency Services Internet Protocol (ESINet) solution. Because the architecture is completely software-based, this system will evolve as new technologies become available. It also means the City will not be locked into a proprietary based hardware platform. Common off the shelf servers, switches and other hardware components can easily be procured from any of the leading hardware manufacturers offering the city flexibility in the selection of hardware and provide significant cost savings.

As much as we plan, build in redundancy and backup plans there is always the possibility for things to go wrong. In the Public Safety environment these risks must be mitigated. AT&T is the only company that can do this by providing an End to End Enterprise Solution. What that means to the City of Strongsville is that there is one phone call regardless if it's the 911 CAMA trunks, Hardware, IP Network, Maintenance, or database. Precious time and money can be saved versus waiting for multiple vendors trying to isolate and resolve the problem. We feel this is a compelling argument as one looks to ensure the safety of the citizens they are trying to protect.

AT&T is a partner of many of the premier 9-1-1 system manufacturers. This is important, because this position gives only AT&T the ability to evaluate each individual community's needs, and appropriately define the right platform for that given situation. There is no single manufacturer that is right for all situations. AT&T is proposing a Geo-Diverse /Multi Mode Solution with the control functionality at 2 of the City of Strongsville locations. Once these fully redundant controllers are connected by an IP network it becomes ONE Enterprise System. It would not matter which workstation would be assigned which Controller. The Controllers can grow up to 200 positions. This will provide for greater flexibility and redundancy.

i3 compliant versus i3 aligned

AT&T is committed to the success of a standards based, Next Generation 9-1-1 enterprise – i3. AT&T is not “i3 like”, “materially similar to i3” or “i3 aligned”. The solution proposed herein and the commitment going forward is that the AT&T solution for the City of Strongsville, as well as all other AT&T solutions, is fully i3 compliant. As elements of the i3 standard continue to be ratified, updated and enhanced – AT&T will continue to be fully compliant.

With AT&T, i3 and ESInet is not a concept but a reality. We have a number of systems already in production or in the process of implementation that include the State of Tennessee, Brevard County FL, Palm Beach County FL, San Antonio TX, and the US Navy.

There is a significant risk in pursuing options that are not fully i3 compliant. When a manufacturer pursues a course that includes non-standard or proprietary elements, that solution has a tendency to stagnate when compared to the industry standard. Additionally, that solution has a tendency to become an island environment, too dissimilar from neighbors or other entities that the City may want to share information with or mutually provide emergency services – in whatever form they may be.

It is also important to mention Text to 911. Currently AT&T is conducting field trials of SMS to 911 in the State of Tennessee. Unlike trials conducted by other vendors our trial will be conducted on a statewide level to PSAP's that are i3 standards compliant regardless of what type of equipment. More information will be provided as this trial continues.

You want experienced providers to design, implement, and manage your new IP- E911 system.

AT&T's experience in public safety dates back to 1975 when one of the original AT&T companies Illinois Bell installed the first E911 system in the United States for the Chicago Police Department. Today, AT&T provides system integration services to large and small public safety agencies throughout the nation including the US Navy. AT&T represents much more than a vendor performing a one-time service. AT&T companies have an established, long-term commitment to customer support. The AT&T 911 Resolution Center provides quick responses to customer requests for remote diagnostics, service, and repair. This center operates on a 24x7x365 basis offering our customers support at all times. Combined with AT&T installation, maintenance, project management, and training support, your new IP- hardware will provide a cost-effective means for meeting Strongsville's Public Safety requirements for decades to come. Our solution will allow for easier programming and faster, more accurate dispatch.

One Truck versus Fleet of Trucks

AT&T doesn't rest its emergency preparedness on a single truck. Rather, AT&T has over 86,000 vehicles in their fleet, making AT&T the largest commercial fleet in the United States—larger than UPS.. Because the fleet was in place, AT&T is not dependent on moving vehicles

from other commitments, customer tours or other distractions to being on site when needed. We are the only telecommunication company in the United States that owns a fleet of trucks and people that can support communities such as the City of Strongsville.

We can help you realize the benefits of new technology to increase productivity and communicate more effectively.

We are in a most exciting time period for the public safety telecommunications industry. New technology is being applied in the communications center. CTI, coupled with Local Area Networks, is fostering new levels of call-processing proficiency. Today's intelligent workstations consolidate desktop equipment into multi-functional call processing tools. Islands of technology such as the telephone, recording devices, teletype, and computer-aided dispatch are integrated into a PC-based computer interface where 911 Call Takers process calls and perform a variety of life-saving functions with point-and-click efficiency. In the critical call center, this translates to increased productivity, greater efficiencies, and highly effective communications.

AT&T's experience, understanding of technology, long-term commitment to the customers we serve, and our service delivery expertise. We use the best equipment and provide it at the best blend of price and performance. We hire, train and retrain the best people to ensure that your systems are supported at all times. We provide the support you need after we implement the system. We are proposing a system that provides flexibility and ample room for growth.



City of Strongsville

Pricing Assumptions – Cassidian Platform

10/25/2013

The following is a brief description of pricing and services proposed. If the City of Strongsville chooses to move forward a mutually agreed upon Scope of Work will be developed. The Scope of Work will provide detailed description of the project as well as roles and responsibilities. This document will become part of the contract.

AT&T's solution is a turnkey solution which included all the implantation services such as on site technical installation, project management, and training. One year of Cassidian Software Support is included in the base price (additional years are provided as an option). A one year warranty that includes all parts and labor warranty is included in the base pricing.

1. The system proposed is a Geo- Diverse Cassidian 4X Communication System. The system will be installed as a Side A at the Strongsville Communication Center and Side B at a currently unmanned backup center within the City of Strongsville. . The pricing is based on the installation of 8- 911 Sentinel workstations installed at the Communication Center; however a number of workstations can be installed at the backup center with no additional charge if identified pre-site survey.
2. An Aurora MIS System is included in the base price. The Aurora server has been configured for up to 250,000 calls annually.
3. The system was designed with up to 16- 911 CAMA trunks with redundant gateways. 8 –CAMA trunks will be installed at both the A and B sides for redundancy.
4. CAD interface is included at both the A&B Sides.
5. A T-1 Interface is included for the connectivity of 10 digit trunks from the Cisco Call Manager.
6. The system included an IP interface for LTR

City of Strongsville Requirements

1. Provide the Multi-Mode fiber between the A and B side.
2. Provide the Routers at both the A and B side. AT&T will provide connectivity requirements
3. Netclock (or other) will be required at both the A and B side.
4. Racks for Servers, routers, and workstations as required. AT&T will provide requirements.

5. Printers, and monitors for workstations. Cassidian recommends 25" monitors for the workstations. If a multi application monitors is provided a Video Arbitrator will need to be provide by the City of Strongsville. AT&T and Cassidian will assist and provide best effort.
7. Provide VPN or DSL for remote access and Firewall.

Pricing Summary

10/25/2013

Cassidian Communication 4X System

Sentinel 4 – Geo-Diverse System

A and B side- Hardware/Software	\$122,607.00
Cassidian Professional Services	\$ 19,152.00
Training – User and Admin	\$ 13,387.00
AT&T Installation Services	\$ 15,390.00
Total	\$170,536.00

Options – Not included in the above pricing

Cassidian Software Support (4 year total)	\$42,517.00*
3 Position Command Post	\$47,025.00
4 year Software Support for CP	\$10,479.00
AT&T Maintenance Agreement (Annual based on 5 year term)	\$13,397.00 Annual/Post warranty.
Spare Parts Kit	\$11,756.00

*Year 1 of Cassidian Software Support of \$14,995. is included in the base price. AT&T and Cassidian will provide Software Support for years 6-10 as the same cost for as initially configured.



Strongsville PD - Side A

Cassidian Communications 4X System

Qty.	Part No.	Description	Unit Price	U/M	Total
Cassidian Communications 4X System					
1	873099-00104.2	SENT 4 R2 LIC/DOC/MED	\$1,710.00	EA	\$1,710.00
1	873099-03002	R4 CAD INTF LIC	\$570.00	EA	\$570.00
1	04000-01584	BLKBX TL158A-R4 DATACAST	\$401.28	EA	\$401.28
1	04000-01010	CBL DB25M/DB25M 10FT	\$9.12	EA	\$9.12
1	65000-00182	CBL RJ45-10P/DB25M 4FT	\$23.94	EA	\$23.94
VM Medium/Large Server Bundle					
1	853031-MLSVR	V-ML SVR BNDL GEO	\$13,929.66	EA	\$13,929.66
1	06500-00501	2-POST 5U RACKMNT KIT	\$297.54	EA	\$297.54
1	04000-68005	V-SVR BASIC SPT 1YR	\$108.30	EA	\$108.30
Cassidian Communications 4X Licenses					
8	873099-00314.0	SENT 4 PER SEAT LIC	\$6,270.00	EA	\$50,160.00
8	809800-35090	R4 SW SPT 1YR	\$1,128.60	EA	\$9,028.80
Workstation Equipment - z220					
8	61000-409603S	WKST HP Z220 SFF	\$1,810.32	EA	\$14,482.56
8	65000-47001	TWR STAND SFF Z220	\$42.00	EA	\$336.00
8	04000-26957	ADPTR DISPLAY PORT-VGA	\$53.00	EA	\$424.00
8	853004-00401	SAM EXT SPKR KIT	\$168.00	EA	\$1,344.00
8	853030-00302	R4 SAM HDWR KIT	\$1,652.00	EA	\$13,216.00
8	809800-35109	R4 IWS CFG	\$200.00	EA	\$1,600.00
8	809800-35108	R4 IWS STG FEE	\$300.00	EA	\$2,400.00
1	870890-07501	CPR/SYSPREP IMAGING	\$0.00	EA	\$0.00
Cassidian Communications 4X Modules					
Cassidian Communications 4X IRR Module					
8	873099-00502	R4 IRR LIC/DOC/MED	\$1,134.30	EA	\$9,074.40
8	809800-35110	R4 IRR SW SPT 1YR	\$179.00	EA	\$1,432.00
2	04000-29616	SWITCH 2960 + CBL 24-PORT	\$1,094.40	EA	\$2,188.80
2	04000-02963	SPT 24X7 24-P 2960 1YR	\$266.76	EA	\$533.52
1	04000-01900	RACK MNT KIT 1921 ROUTER	\$1,068.18	EA	\$1,068.18
1	04000-01920	ROUTER 1900 DATA LIC	\$497.04	EA	\$497.04
1	04000-01926	SPT 1921 ROUTER 1YR 24X7	\$186.96	EA	\$186.96
1	809800-00199	ROUTER CFG FEE	\$606.48	EA	\$606.48
Peripherals & Gateways					
1	850830-03011	KIT EXT MODEM PKG 56K	\$666.90	EA	\$666.90
2	04000-00129	MED 1000B CHASSIS BNDL	\$2,091.90	EA	\$4,183.80
3	04000-00116	MED 1000 FXO-LS BNDL	\$394.44	EA	\$1,183.32

2	04000-00119	MED 1000 FXS BNDL	\$378.48	EA	\$756.96
2	04000-00186	SW SPT M1000 GATEWAY 1YR	\$342.00	EA	\$684.00
1	04000-00112	MED 1000 DIGITAL BNDL (1) T1 for admin / PBX interface, (1) T1 for 911	\$4,637.52	EA	\$4,637.52
1	04000-00191	SW SPT M1000 T1 MOD 1YR Note: Strongsville to provide Firewall.	\$342.00	EA	\$342.00
Peripherals & Equipment Racks Note: Strongsville to provide racks, monitors, KVM, printers, and cables for server and workstations					
8	65000-00002	CBL PATCH PNL/SW GRAY 3FT	\$10.26	EA	\$82.08
2	65000-00124	CBL PATCH 15FT	\$15.96	EA	\$31.92
Time Synchronization Equipment Note: Strongsville to provide Time Sync					
Cassidian Communications 4X System Subtotal					\$138,197.08

Aurora - MIS System

Qty.	Part No.	Description	Unit Price	U/M	Total
Aurora 2.2 - Standard MIS System					
1	873399-00102.2	AURORA 2.2 DOC/MED	\$0.00	EA	\$0.00
1	873391-00501	AURORA STD LIC	\$2,280.00	EA	\$2,280.00
1	873391-00301	AURORA USER LIC	\$855.00	EA	\$855.00
1	04000-00339	SQL 2008R2 CAL RUN ENT	\$200.64	EA	\$200.64
8	873391-00201	AURORA COLLECTION LIC	\$912.00	EA	\$7,296.00
8	809800-03301	AURORA STD SPT 1YR	\$164.16	EA	\$1,313.28
Aurora Server Equipment					
ML350p/G8 Server Equipment					
1	62040-J819201	SVR RACK ML350P/G8	\$3,328.80	EA	\$3,328.80
1	64021-10025	KYBD/MOUSE BNDL Note: A keyboard and mouse is not part of the G8 server	\$50.16	EA	\$50.16
0	06500-00501	2-POST 5U RACKMNT KIT	\$297.54	EA	\$0.00
4	64000-20064	HD DRIVE 300GB SAS 10K G8	\$500.46	EA	\$2,001.84
1	64000-20064	HD DRIVE 300GB SAS 10K G8 Note: Configure server with R10 (4 x 300GB) and 12GB RAM. Server is configured for up to 250,000 calls	\$500.46	EA	\$500.46
1	64000-40093	4GB RAM ML350P/DL380P/G8	\$169.86	EA	\$169.86
1	04000-00396	SVR WIN 2008 + 5 CAL	\$974.70	EA	\$974.70
1	04000-00340	SQL 2008R2 SVR RUN ENT	\$78.66	EA	\$78.66
1	04000-00426	PRESENT TENSE CLIENT	\$62.70	EA	\$62.70
1	809800-01416	MIS SVR CFG	\$570.00	EA	\$570.00
Peripherals & Equipment Racks					
1	65000-00124	CBL PATCH 15FT	\$15.96	EA	\$15.96
Aurora - MIS System Subtotal					\$19,698.06

Cassidian Communications Services

Qty.	Part No.	Description	Unit Price	U/M	Total
		Field Engineering Services			
128	809800-17101	FIELD ENG-PRIMARY	\$114.00	UN	\$14,592.00
		Training			
3	000001-06701	VSENT 4.X AGENT TRNG	\$1,368.00	EA	\$4,104.00
1	000001-06704	VSENT 4.X ADMIN TRNG	\$4,560.00	EA	\$4,560.00
1	000002-24404	AURORA ADMIN TRNG	\$2,280.00	SU	\$2,000.00
1	000000-08538	CUTOVER COACHING TRNG	\$1,425.00	EA	\$1,425.00
1	809800-00114	TRAVEL EXPENSE TRNG	\$607.62	EA	\$607.62
2	809800-00115	DAILY TRAINER EXPENSE	\$345.42	EA	\$690.84
Cassidian Communications Services Subtotal					\$27,979.46

Quote Summary

PRODUCT	TOTAL
Cassidian Communications 4X System	\$138,197.08
Aurora - MIS System	\$19,698.06
Cassidian Communications Services	\$27,979.46
AT&T Professional Services	\$10,260.00
TOTAL QUOTE	\$196,134.60
Strategic Incentive	(\$63,700.00)
GRAND TOTAL	\$132,434.60

Power Draw Information

Product	Total Amps
Cassidian Communications 4X System	25.2
Aurora - MIS System	4.6
ORION Mapping	0
Total Amps	29.8
Total Watts/VA	3576
Total KVA	3.576
BTU's	9766.06



Strongsville PD - Side B

Sentinel 4 (Geo-Diverse on LAN)

Cassidian Communications 4X System

Qty.	Part No.	Description	Unit Price	U/M	Total
Cassidian Communications 4X System					
1	873099-00104.2	SENT 4 R2 LIC/DOC/MED	\$1,710.00	EA	\$1,710.00
1	873099-03002	R4 CAD INTF LIC	\$570.00	EA	\$570.00
1	04000-01584	BLKBX TL158A-R4 DATACAST	\$401.28	EA	\$401.28
1	04000-01010	CBL DB25M/DB25M 10FT	\$9.12	EA	\$8.00
1	65000-00182	CBL RJ45-10P/DB25M 4FT	\$23.94	EA	\$8.00
VM Medium/Large Server Bundle					
1	853031-MLSVRG	V-ML SVR BNDL GEO	\$13,929.66	EA	\$13,929.66
1	06500-00501	2-POST 5U RACKMNT KIT	\$297.54	EA	\$297.54
1	04000-68005	V-SVR BASIC SPT 1YR	\$108.30	EA	\$108.30
Cisco Switch/Router Equipment					
2	04000-29616	SWITCH 2960 + CBL 24-PORT	\$1,094.40	EA	\$2,188.80
2	04000-02963	SPT 24X7 24-P 2960 1YR	\$266.76	EA	\$533.52
1	04000-01900	RACK MNT KIT 1921 ROUTER	\$1,068.18	EA	\$1,068.18
Peripherals & Gateways					
1	850830-03011	KIT EXT MODEM PKG 56K	\$666.90	EA	\$666.90
2	04000-00129	MED 1000B CHASSIS BNDL	\$2,091.90	EA	\$4,183.80
3	04000-00116	MED 1000 FXO-LS BNDL	\$394.44	EA	\$1,183.32
2	04000-00119	MED 1000 FXS BNDL	\$378.48	EA	\$756.96
2	04000-00186	SW SPT M1000 GATEWAY 1YR	\$342.00	EA	\$684.00
<i>Note: AT&T to provide Firewall.</i>					
8	65000-00002	CBL PATCH PNL/SW GRAY 3FT	\$10.26	EA	\$82.08
2	65000-00124	CBL PATCH 15FT	\$15.96	EA	\$31.92
Time Synchronization Equipment					
<i>Note: Customer to provide Time Sync</i>					
Cassidian Communications 4X System Subtotal					\$28,412.26

Aurora - MIS System

Qty.	Part No.	Description	Unit Price	U/M	Total
		Included at A side			
Aurora - MIS System Subtotal					\$0.00

Cassidian Communications Services

Qty.	Part No.	Description	Unit Price	U/M	Total
40	809800-17101	Field Engineering Services FIELD ENG-PRIMARY	\$114.00	UN	\$4,560.00
Cassidian Communications Services Subtotal					\$4,560.00

Quote Summary

PRODUCT	TOTAL
Cassidian Communications 4X System	\$28,412.26
Aurora - MIS System	\$0.00
Cassidian Communications Services	\$4,560.00
AT&T Professional Services	\$5,130.00
TOTAL QUOTE	\$38,102.26
 GRAND TOTAL	 \$38,102.26

Power Draw Information

Product	Total Amps
Cassidian Communications 4X System	8.2
Aurora - MIS System	0
ORION Mapping	0
 Total Amps	 8.2
Total Watts/VA	984
Total KVA	0.984
BTU's	2687.3



CommandPOSTs

Sentinel 4 (Geo-Diverse on LAN)

Cassidian Communications 4X CommandPOST System

Qty.	Part No.	Description	Unit Price	U/M	Total
Cassidian Communications 4X CommandPOST System					
3	873099-00314.0	SENT 4 PER SEAT LIC	\$6,270.00	EA	\$18,810.00
3	809800-35090	R4 SW SPT 1YR	\$1,128.60	EA	\$3,385.80
CommandPOST Hardware					
3	61050-J409611-V	SENT CPOST 8570P W7	\$1,586.88	EA	\$4,760.64
3	04000-00486	ADV DOCK STATION 8570P	\$459.42	EA	Optional
3	04401-00097	BATTERY 9-CELL 8570P 100W	\$322.62	EA	Optional
3	64021-10025	KYBD/MOUSE BNDL	\$50.16	EA	Optional
3	64007-50014	KEYPAD 24 KEY PS2/USB	\$111.72	EA	Optional
3	64007-50015	KEYPAD 35 KEY PS2/USB	\$248.52	EA	Optional
3	853004-00401	SAM EXT SPKR KIT	\$191.52	EA	\$574.56
3	853004-00301	CPOST SAM HDWR KIT	\$2,601.48	EA	\$7,804.44
3	809800-35109	R4 IWS CFG	\$228.00	EA	\$684.00
3	809800-35108	R4 IWS STG FEE	\$342.00	EA	\$1,026.00
Cassidian Communications 4X IRR Module					
3	873099-00502	R4 IRR LIC/DOC/MED	\$1,134.30	EA	\$3,402.90
3	809800-35110	R4 IRR SW SPT 1YR	\$204.06	EA	\$612.18
Cassidian Communications 4X CommandPOST System Subtotal					\$41,060.52

Aurora - MIS System

Qty.	Part No.	Description	Unit Price	U/M	Total
Aurora 2.2 - Standard MIS System					
3	873391-00201	AURORA COLLECTION LIC	\$912.00	EA	\$2,736.00
3	809800-03301	AURORA STD SPT 1YR	\$164.16	EA	\$492.48
Aurora - MIS System Subtotal					\$3,228.48

Cassidian Communications Services

Qty.	Part No.	Description	Unit Price	U/M	Total
Field Engineering Services					
24	809800-17101	FIELD ENG-PRIMARY	\$114.00	UN	\$2,736.00
Cassidian Communications Services Subtotal					\$2,736.00

Quote Summary

PRODUCT	TOTAL
Cassidian Communications 4X System	\$41,060.52
Aurora - MIS System	\$3,228.48
Cassidian Communications Services	\$2,736.00
<hr/>	
TOTAL QUOTE	\$47,025.00
<hr/>	
GRAND TOTAL	\$47,025.00

Power Draw Information

Product	Total Amps
Cassidian Communications 4X CommandPOS	3.27
Aurora - MIS System	0
ORION Mapping	0
Total Amps	3.27
Total Watts/VA	392.4
Total KVA	0.3924
BTU's	1071.64



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www.cassidiancommunications.com

Solutions Engineering

Strongsville PD

Geo-Diverse Vesta / Sentinel 4 (VS-4) Solution

Assumptions / Notes:

1. Solution is designed as Geo-Diverse.
2. The customer is responsible for Layer 2 Bridge between Host A and Host B as well as WAN Layer 3 connectivity to remote sites as per the Cassidian IP Networking Guide.
3. The use of dual routers and dual IP facilities to each PSAP is recommended to reduce risk of service outage due to single points of failure.
4. For troubleshooting purposes, Patrol DEMARC points will be the Ethernet Switch Ports facing the WAN and optional TS-4 serial port facing the Equipment.

Title: Strongsville PD VS-4 Geo-Diverse Solution

Revision 1

Date: 10/25/13

☒ Preliminary ☐ Final

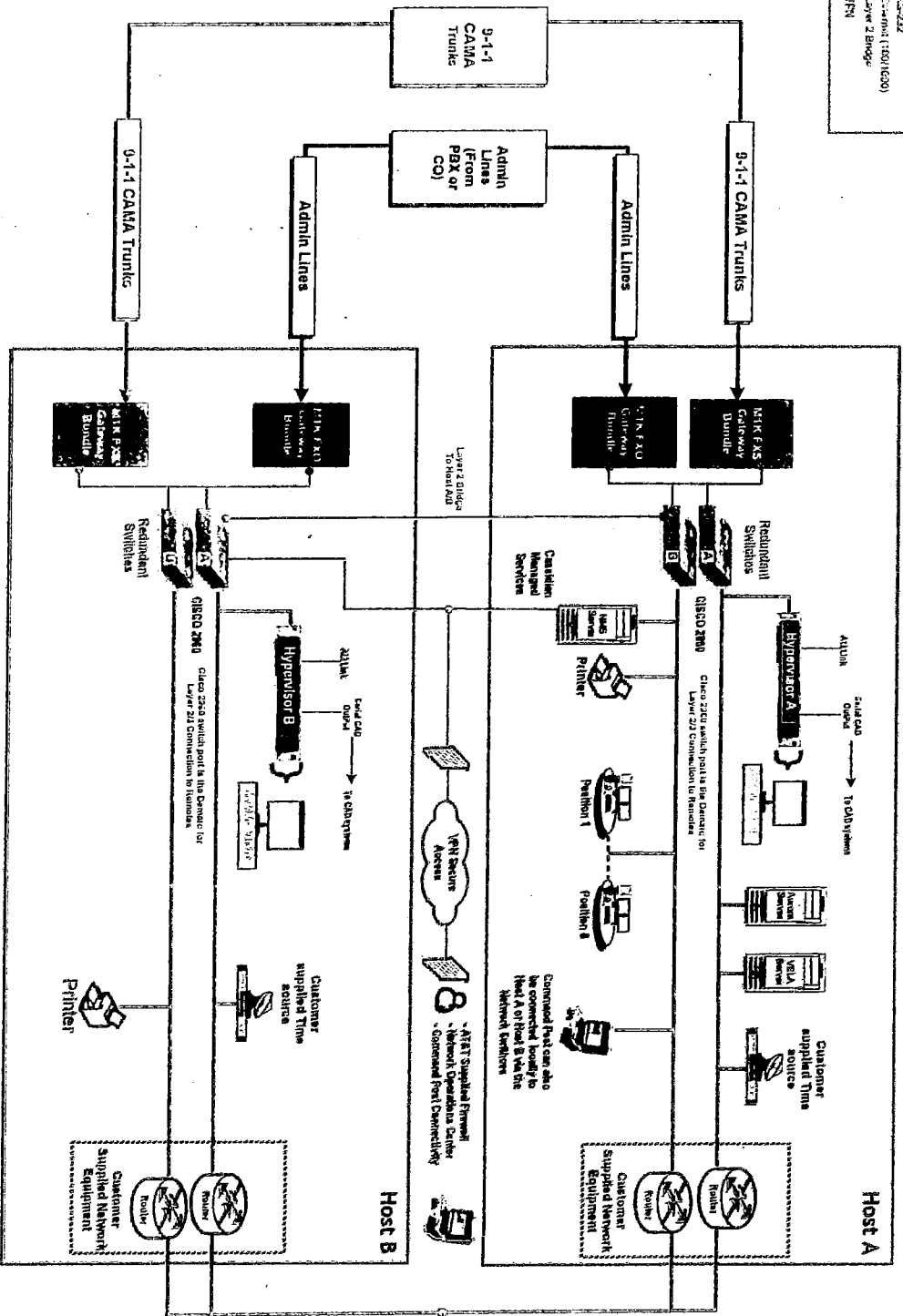
Solutions Engineer: Bill Hall

Page: 1 of 5

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Vesta Sentinel 4 (VS-4) Solution

Legend
9-1-1 Trunk
Admin Line
Customer (100/100)
Layer 2 Bridge
Customer VPN

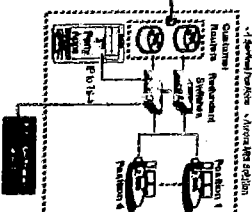


Future Expansion
(VS-4 supports
Host/Remote
configurations)

Layer 3 Link

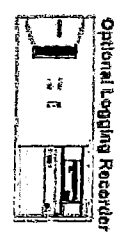
1. WAN connections between each host and each remote site must be Layer 3 network connection which supports QoS. Redundant connectivity to remote sites is recommended.
2. All WAN links must meet or exceed the bandwidth estimate provided by Cassidian Communications.
3. The VLAN/trunk must be dedicated solely for the use of the Vesta / Sentinel 4.x elements.

Optional Future Expansion



1. The Metro Ethernet / L2 Network connection must provide a guaranteed 24/7 CIR Bandwidth CIR (no bursting or averaging).
2. The Metro Ethernet / L2 Network connection must be routed up to the nearest Mbps to match the rate limiting granularity on the Cisco switch.
3. The Metro Ethernet / L2 Network connection is using a CoS 5 or DSCP 46 value to ensure that no other Metro E traffic can take our bandwidth under any circumstances.
4. The Metro Ethernet / L2 Network connection is a virtual point-to-point circuit with no intermediate or edge devices participating in our Layer 2 spanning-tree. This means we cannot have any transport devices sending us BPDUs or acting as Root Switch. (as identified in the Cassidian IP networking Guide).
5. Dual WAN connections are required for redundancy.

To Remote Switch



Dispatch Headset



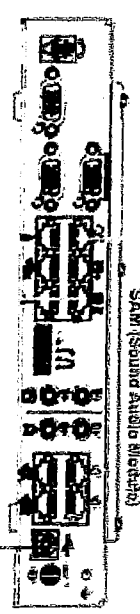
Supervisor Headset



Integrated Dispatch Headset

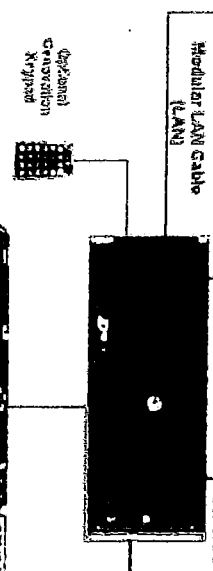
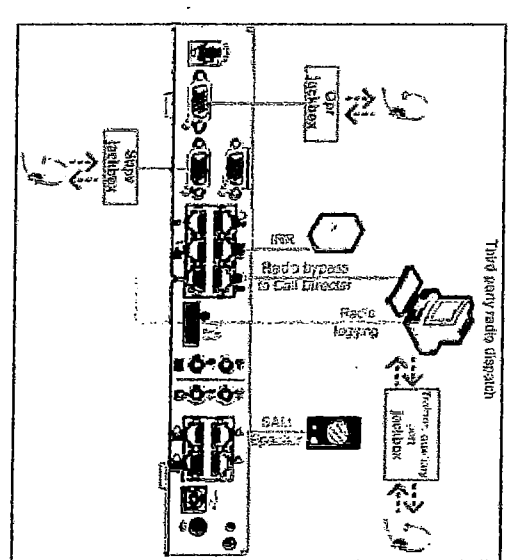
Radio Console

Cable to back room



SAM (Sound Audio Module)

USB Connection To PC



Modular LAN Cable (LAN)

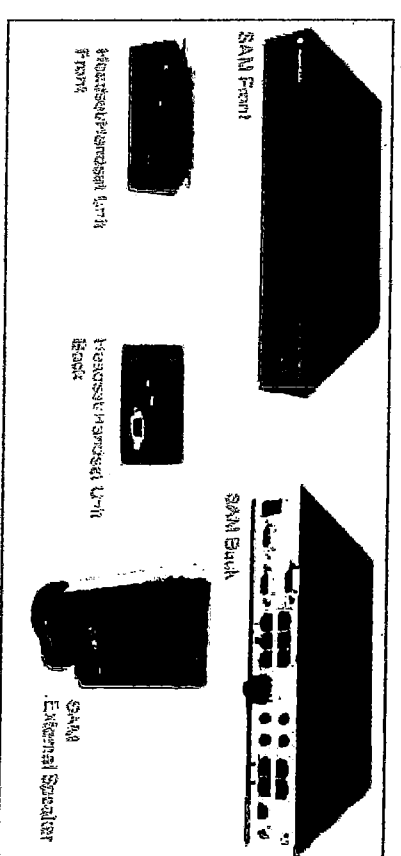
Optional Operation Keypad

Keyboard

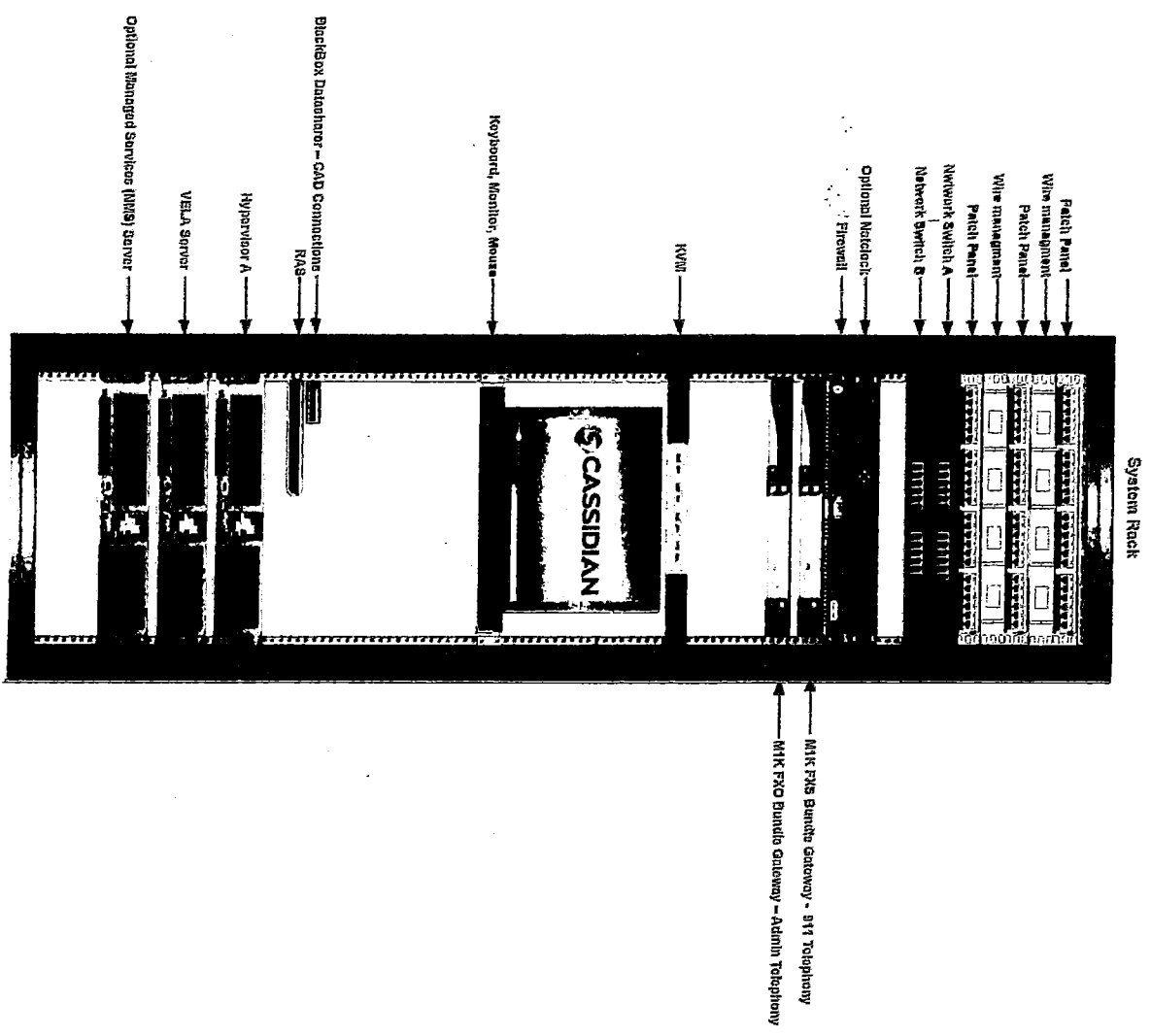


Mouse

VS-4 Workstation



Host A Rack



Host B Rack

