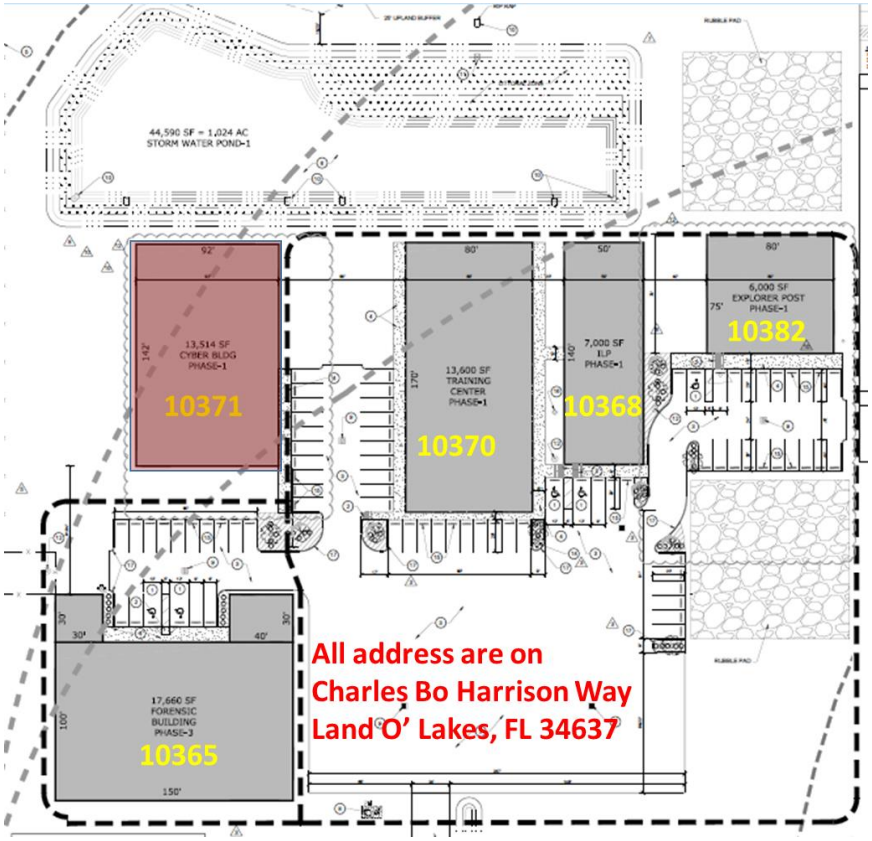
Attachment A

Network Infrastructure for the F1RST Cybersecurity/SAR Building

SCOPE OF WORK

The primary scope of work for the FIRST project is the successful delivery, installation, and configuration of network infrastructure for the F1RST Cybersecurity/SAR Building at the Pasco Sheriff's Office (PSO) in support of offices, classroom, conference room, and Situational Awareness Room based on specific business needs and unique functionality. All procurement of hardware delivered shall be installed and configured by the selected vendor as outlined within the RFP documents.

Building/Site Overview



1.0 F1RST CYBERSECURITY/SAR BUILDING

1.1 CYBER/SAR Building Equipment Requirements

Routers	Model numbers	Qty	Notes
Model requirements:			
Router with support of BGP, Multicast traffic and potential need of encryption.	Catalyst 8300-1N1S-4T2X	2	
Firewall	**Model numbers**	**Qty**	**Notes**
Palo Alto	PA-3430	2	
WAN Connections	**Model numbers**	**Qty**	**Notes**
2Gbit WAN circuits	Spectrum and or Frontier	1	PSO to provide the circuits
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Switches	**Model numbers**	**Qty**	**Notes**
Model requirements:			
Distribution layer switch	Catalyst 9300	1	
Access layer switch	C9300L-48UXG-4X-A	4	
Stacking modules:			
Switch stacking kit	C9300L-STACK-KIT	4	Stack kit for each switch.
Power Management:			
Optional secondary power supply	PWR-C5-1KWAC	4	Redundant power supplies for switches
Secondary power supply	Catalyst 9300	1	Redundant power supplies for 9300 switch. 370w power supply
Warranty services	SNT	4	Smartnet service on switches. PSO to acquire
Access Points			
Model Number:			
Indoor AP	CW9164I-x	12	
SFP Modules			
(1Gbit) 1000BASE-LX/LH SFP	GLC-LH-SMD=	4	
(10Gbit) SFP+	Cisco SFP-10G-LR	8	
Network Rack	**Model numbers**		**Notes**
Network Cabinet	Ecostruxure Micro Data Center (MDC42SX5KVAT)	2	Use the Chatsworth brand. Second rack for future growth.
Network ladder	Chatsworth Quick Ship Cable Runway Kit	4	Use Chatsworth brand ladder attached to top of rack and wall.
Cable management	Chatsworth Velocity®™ Standard	4	Trays on sides of rack and straps like Velcro

	Pack (VSP)		
Punch down panels	Cable Matters 48 port, 2 RU 180012-Cat6	12	
Copper patch cables	Cable Matters Snagless Cat6 Blue Ethernet 5' Cable	150	5 ft' Cat6 copper cables
Copper patch cables	Cable Matters Snagless Cat6 Blue Ethernet 7' Cable	100	7 ft' Cat6 copper cables
Fiber patch cables	C2G 28758 OS2 Fiber Optic Cable - LC-LC 9/125 Duplex Single-Mode PVC Fiber Cable, Yellow (9.8 Feet, 3 Meters)	4	
LIU tray	Corning LANscape Closet Connector Housing, Accepts 2 CCH Panels CCH-01U	2	
LIU fiber bulk head	CCH-CP12-A8	2	
Power Management	**Model numbers**		**Notes**
Power strips	EMAT08-10	4	EATON MANAGED RACK PDU with standard 5-15P. We need power strips with remote management capability.
UPS	SRT1500XLA	4	SMART UPS SRT 1500VA 120V
Rail mounting kit	SRTRK4	4	APC SMART-UPS SRT 19RAIL KIT FOR SRT SRT 2.2/3KVA
Management	AP9631	2	UPS NETWORK MANAGEMENT CARD 2 WITH ENVIRONMENTAL MONITORING WITH ENVIRONMENTAL MONITORING
Temperature sensor	AP9335TH	2	APC TEMPERATURE + HUMIDITY SENSOR
Network management	AP9630	2	UPS NETWORK MANAGEMENT CARD 2
Labor	**Model numbers**		**Notes**
Copper Termination costs	CAT6		Run copper cabling and terminate on both ends
4-Port Keystone Faceplate and Cat6 Keystones	Tripp Lite brand (N042-001-04-WH), (N080-106) and (N238-025-BL)	Approx. 75-100 plates	Various data wall jacks to support 2-6 keystones. **Tripp Lite brand is a requirement of this RFP. No other alternate will be accepted.**
Cost of Fiber Termination			

1.2 CYBER/SAR Building Network Equipment and Cabling Scope of Work

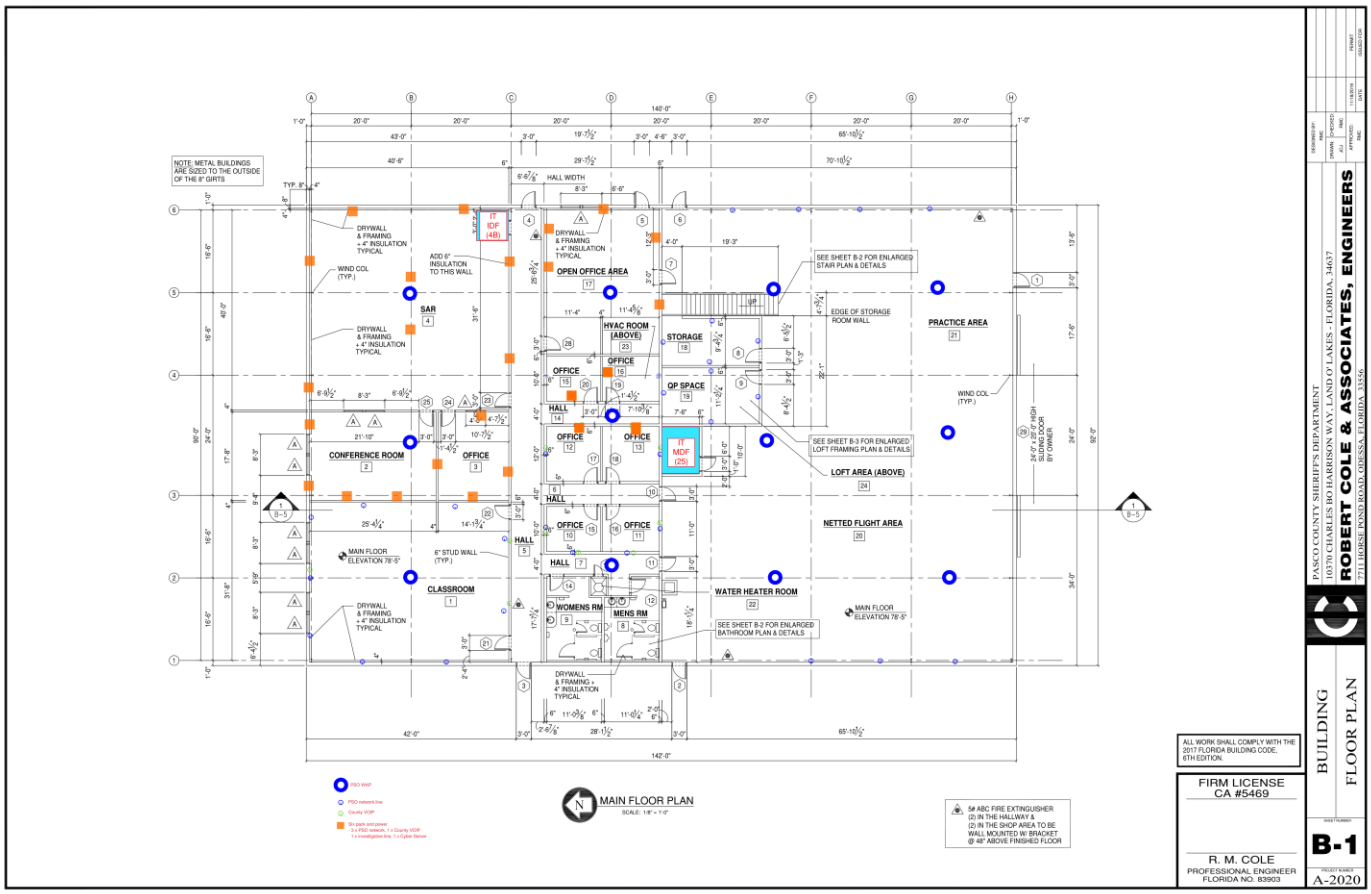
1.2.1 VENDOR will run the copper network cabling to the gang-boxes and access points throughout the facility to the patch panel in the network closet. VENDOR will terminate and test all copper cabling at the gang-box keystone and at the network closet on the patch panel.

1.2.2 VENDOR will physically label all wiring at the gang box face plate, copper patch panels and fiber LIU.

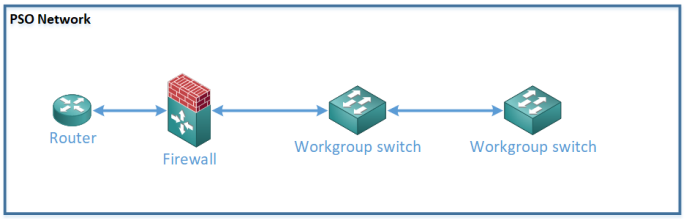
1.2.3 VENDOR will test and provide results on all fiber cabling throughout the CYBER/SAR building.

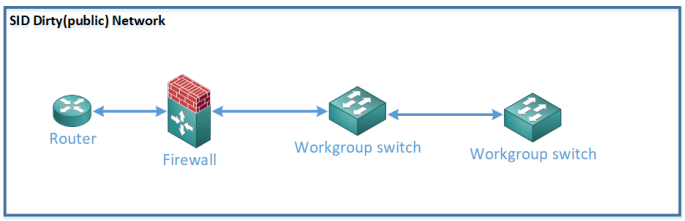
1.2.4 VENDOR will install and ground network racks, cable organizers and ladders to be used for cable management. Network racks must be oriented in a way where there is a minimum clearance of at least 30 inches on all sides of racks. This is to allow the installation of equipment and for a person to navigate around racks.

1.3 CYBER/SAR Building Network Wiring Diagram



Location	DESCRIPTION
Cyber/SAR	Cyber/SAR Network Diagrams

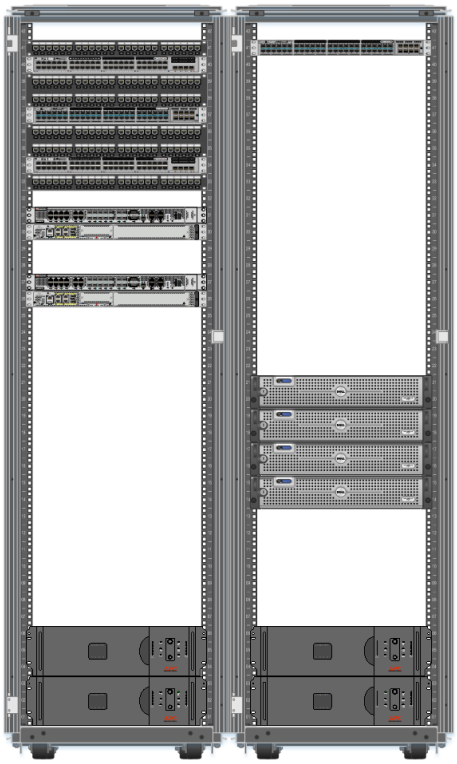




1.4 CYBER/SAR Building Network Rack Diagram

MDF:

Location	DESCRIPTION
Cyber/SAR	Cyber/SAR MDF Cabinet



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