

Carousel's Mission

To transform our clients' businesses by delivering technology solutions that become a critical component of their organization's success.

Scope of Work

Pinellas County

St. Petersburg Host A Move and
VESTA Position Addition

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<i>Customer Name/Location</i> Pinellas County, FL	<i>Prepared by</i> Timothy Deranek	<i>Date prepared</i> 08-21-18
<i>Project Description</i> St. Petersburg PD Host A VESTA 9-1-1 Move and VESTA Position Addition		

This *Scope of Work* ('SOW') document describes the services and deliverables that will be performed by *Carousel Industries* in collaboration with *Motorola Solutions*, the system manufacturer. These installation and support services will provide Pinellas County (Customer) with the implementation, configuration and support of significant new hardware and software to facilitate the relocation of the HOST A VESTA server equipment and the addition of thirty-eight (38) new VESTA positions at the new St. Petersburg Police Department building.

Background

The St. Petersburg and Clearwater multi-site Geo-Diverse VESTA 9-1-1 is being installed by Carousel Industries and Motorola Solutions. Carousel Industries is currently installing the Host A VESTA backroom equipment and fifteen (15) fixed VESTA workstation positions at St. Petersburg PD. The City of St. Petersburg is building a new Police Department building directly across the street from their current location. When the new building is completed and Pinellas has installed the new Layer 2 circuits to the PSC (Host B) and Layer 3 WAN circuits for connectivity to Clearwater, Carousel will install new Cisco LAN equipment and test the WAN. Carousel will then install thirty-eight (38) new VESTA positions and relocate the existing Host A VESTA core server, the VESTA Analytics and Heads Up Display servers. Finally, Carousel will move the existing fifteen (15) VESTA workstations to the new St. Petersburg PD building to bring the total number of VESTA positions at the new St. Petersburg PD to forty-three (43).

Key Solution Elements & Deliverables

Location 1: St. Petersburg Police Department (Host A) 1301 1st Ave N, Saint Petersburg, FL

Site Survey and Call Flow Meeting

Carousel's project team will perform a site survey at the new St. Petersburg location to review, space, power, and overall site environments in preparation for the equipment delivery and installation. All issues and concerns will be documented and presented to the County as Exhibit E – "Site Survey Assessment" for any required attention or resolution. The County agrees that any urgent items discovered in the Site Survey Assessment will be addressed by County within 3 weeks from delivery of the Site Survey Assessment to ensure the project can stay on track. Any delay in addressing those items may result in delays and the customer understands that those delays will impact project timeline.

The project team will lead a Call-Flow meeting with the County and St. Petersburg to discuss, define, and document the various call flow patterns required for the systems operation including:

- Review inventory of all lines and trunks including circuit numbers and descriptive labels
- ACD queues, priorities, and queue overflows
- Call-taker roles / skills
- Dial Plans – i.e. dialing procedures/preferences, etc.

The County and Carousel agree that the output of the call-flow meeting will result in a County-approved documented call flow plan which will be added as Exhibit F – Call Flow Plan to the SOW. It is further agreed, that the Call Flow Plan will be used to program the system by Motorola Solutions and Carousel personnel. Any changes to the approved Call Flow Plan will need to follow the Change Control Process – Exhibit C and the County agrees they may incur additional charges and/or delays in the project.

Equipment Delivery and Installation

Carousel personnel will be on-site to receive and inventory the system components. Installation will commence upon completion of the inventory.

St. Petersburg PD (Host A)

- Pinellas County will provide the cabinet/rack space, keyboard, monitor, KVM, PDUs and other peripherals to support the following Host A system control equipment in the backroom:
 - One (1) DL380 server (with sliding rails) to host the virtualized instances of MDS-A and DDS-A **(to be moved)**
 - One (1) HP Elite 705 SFF management workstation **(to be moved)**
 - Two (2) new Cisco 3650 Core LAN Switches
 - Three (3) new Cisco 2960 Distribution LAN Switches
 - Two (2) new Mediant 1000 modular gateway chassis.
 - Two (2) new 4-port FXO gateway modules that will provide a total of eight (8) analog loop start lines or wet ringdowns ports.
 - Three (3) 1-SPAN T1/PRI Modules to support up to (3) T1 or PRIs
 - One (1) Fortinet Firewall for VESTA SMS and VESTA EIM **(to be moved)**
 - One (1) Fortinet Firewall for remote access and Managed Services **(to be moved)**
 - Two (2) TS-4 devices for redundant CAD spills from each DDS server **(to be moved)**
 - One (1) Blackbox TL158 Data Broadcaster that can provide four (4) separate CAD spills **(to be moved)**
 - One (1) Color Laserjet VESTA LAN printer **(to be moved)**
 - CDR Licensing for ECATS
- One (1) DL380 VESTA Hosted Analytics Server **(to be moved)**. Additional Analytics components that will be reused include:
 - Advanced Reporting and Dashboard Module
 - Three (3) User Reporting licenses
- One (1) DL160 Heads Up Display (HUD) Server to support real-time call and queue details **(to be moved)**. Additional HUD components include:
 - Three (3) HUD Media Players. Each player supports one (1) unique layout and one (1) HDMI outputs **(to be moved)**
 - Two (2) new HUD Media Players. Each player supports one (1) unique layout and one (1) HDMI outputs
- Three (3) new VESTA Administrative positions **(to be moved)**. Each existing position includes:
 - One (1) HP ProDesk Mini workstation, keyboard and mouse
 - One (1) VESTA HUD Supervisor viewer license
- Thirty-eight (38) new VESTA 9-1-1 call-taker positions with IRR. Each position includes:
 - One (1) HP ProDesk Mini workstation, keyboard and mouse
 - One (1) Sound Arbitration Module (SAM) with jackbox, handset and external speaker unit with 15' extension cables
 - One (1) 24-button Genovation keypad with 25' cable
- Fifteen (15) VESTA 9-1-1 call-taker positions with IRR **(to be moved)**. Each existing position includes:
 - One (1) HP ProDesk Mini workstation, keyboard and mouse
 - One (1) Sound Arbitration Module (SAM) with jackbox, handset and external speaker unit with 15' extension cables
 - One (1) 24-button Genovation keypad with 25' cable
- Monitor and Response, Antivirus and Microsoft Windows Patch Management for the new workstations
- Thirty-eight (38) HP Elite705/ ProDesk Mini 5YR Extended Warranty, 24x7 4-hour response

Station Wiring

- **St. Petersburg PD (Host A)**-Pinellas County will install forty-nine (49) new CAT5e (or better) wiring runs from the forty-three (43) VESTA 9-1-1 positions, the three (3) Admin positions and the three (3) HUD Media Player locations to the backroom equipment controller area. Pinellas County cut-down the cables and terminate on modular jacks at the workstations and patch panels in the backroom located in, or immediately next to, the VESTA cabinet. In order to insure a smooth cutover, additional CAT5e (or better) cables are recommended.

WAN Connectivity

Carousel Industries will provide new core Cisco 3650 LAN switches at the new St. Petersburg location to exclusively support the VESTA 9-1-1 solution. Pinellas County will provide all edge routers and transport from the host sites to Clearwater PD. Pinellas County will program the VESTA 9-1-1 WAN routers according to the Motorola Solutions VESTA IP networking guidelines. Carousel will test the Pinellas County WAN links to ensure that the VESTA 9-1-1 specifications are met.

Host-to-Host

The Geo-Diverse deployment between the new St. Petersburg PD (Host A) and PSC (Host B) requires two (2) diverse Layer 2 WAN connections provided by Pinellas County. Two (2) transport circuits riding alternate routes for redundancy and survivability are required.

Carousel Industries point of demarcation will be the WAN facing RJ-45 Ethernet port on the VESTA LAN switches at each location.

Host-to-Remote

As indicated above Pinellas will be responsible for providing the Layer 3 edge routers and transport from the Host sites to Clearwater PD. While two (2) redundant and diverse methods of transport are recommended, it is not required.

Carousel Industries point of demarcation will be WAN facing RJ-45 Ethernet port on the VESTA LAN switches at each location.

Pinellas County will be responsible for the coordination required with the carrier(s) to ensure that the Layer 2/Layer 3 WAN links meet the requirements as outlined in the following documents:

1. **VESTA 9-1-1 Release 7 IP Networking Guide**

Carousel will:

- Coordinate the WAN assessment testing once Pinellas has confirmed that all WAN links to the new St. Petersburg Host A site are available
- Report network test results to Pinellas County

Pinellas County will be responsible for coordinating any remediation with the WAN providers.

The VRA WAN Testing included in the quote is good for one (1) round of testing at each of the sites. Any network issues or delays that require further testing will incur additional WAN Testing changes.

Additional Installation Task

- Carousel will cable control equipment to the telco network interface. Cross-connect network lines and trunks to system.
- Power-up and program workstations for line appearances, transfer keys, screen layout, etc.
- Install miscellaneous handoffs for integration with external systems at each location (requires coordination by Pinellas with 3rd party vendors)
 - CAD handoff
 - Audio handoff to radio system for headset integration
 - Audio handoff from radio system to VESTA for Radio Instant Recall Recorder (IRR)
 - Recorder handoff

- SMS Texting Control Center
- IP 9-1-1 Call Delivery at each host
- Turn-up and test overall system operability
- Enable system for Remote Monitoring & Response
- Provide cutover day coverage and 2nd day support

For a complete list of all system components refer to Exhibit A- Final System Quote.

Training

No additional training has been quoted as part of this project.

Design Assumptions

- Pinellas County will order all new telephony network circuits (9-1-1, administrative lines, ALI circuits) for the new building location
- Pinellas will be responsible for the ordering and the coordination of any new 9-1-1 IP call delivery to the new building location. The existing VESTA EIM/SMS Firewall will be moved once the new circuit has been tested.
- Pinellas will be responsible for the ordering and the coordination of 9-1-1 SMS delivery from the Text Control Center (TCC). The existing VESTA EIM/SMS Firewall will be moved once the new circuit has been tested.
- Pinellas County will supply suitable system-wide UPS battery, electrical and grounding services for all equipment at the new St. Petersburg and PSC location.
- Pinellas County will provide a dedicated NTP port for the VESTA LAN from their existing backroom Master Netclock at the new St. Petersburg Host A location.
- Pinellas will provide the backroom cabinet/rack and peripheral equipment to house the new and relocated system control equipment at the new St. Petersburg (Host A) location.
- Pinellas will provide all VESTA workstation monitors and HUD displays at the new St. Petersburg PD building.
- Pinellas County will provide all workstation, HUD media play and MDF to IDF CAT5e or better structured cabling at the new St. Petersburg PD location.

Services

This SOW lists major components. The list of material is included in the System Quote. All non-disruptive installation labor will be done during daytime operations, which is assumed to be Monday through Friday, 8AM-5PM local time.

- If any work requires an out of service period, the Project Manager and Lead Technician will work with the customer to identify and minimize disruption during the duration. *The customer is responsible for developing the emergency communications plan during outages.*
- Technicians may require internet access, while on-site in the event firmware downloads and updates are required.
- Exact scheduling will be determined with the customer, but installation will occur during a continuous period, until completed. Changes to or delay of this schedule (once determined) may result in additional labor costs and Project Management time added, via Exhibit C – Change Control Process. Changes to or delay of this schedule (once determined) may result in additional labor costs and Project Management time added according to Exhibit C -Change Control process.
- The Project Manager will provide equipment installation specifications (i.e., space, power and grounding) and the customer will be responsible for ensuring that the allocated space is ready.
- Any site 'not ready' issues that cause additional cost due to resource rescheduling and management may be chargeable via Change Order within Exhibit C – Change Control Process.
- Carousel Industries will be responsible for hardware server configuration; licensing, testing, firmware updates during the equipment preparation phase.

- For new network facilities (9-1-1 Trunks, ALI Circuits, T-1s, CO Ring down Trunks, SMS, IP call delivery) being installed, any delay of network services or site readiness that effects required labor hours may result in a change order (Exhibit C – Change Control Process) for additional technician hours and Project Management time.
- The County will be responsible for any network ordering and coordination of circuit in-service and testing date & time. Reuse of existing network facilities will require circuit technical information to include circuit IDs/ DID numbers, signaling protocol, any technical specifications and Network Vendor contact information in the event of service issues. The County agrees that any missing information may delay the project timeline and it is their responsibility to have all information gathered in a timely fashion working with their Carousel Project Manager.
- The *Carousel Industries* Project Manager will provide Milestones documentation prior to installation. Customer signoff will be required on these documents. The PM will conduct periodic status and planning conference calls as mutually agreed to.

Solution Team

Name	Title	Phone	Email
Timothy Deranek	Solutions Architect, Public Safety	401-583-7327	tderanek@carouselindustries.com
Elizabeth DellaPenna	Senior Account Executive- Public Safety	(813) 864-8820	edellapenna@carouselindustries.com

Project Management

Project Manager Responsibilities

Carousel Industries will designate a Project Manager to be responsible for overseeing the project. The Carousel Project Manager will be the single point of contact ('SPOC') for all issues related to system implementation. The SPOC will direct implementation to support installation and the scheduled in-service date. The *Carousel Industries* project manager will:

- Conduct formal project meetings to set mutual expectations regarding the implementation of the new communications system and its adjuncts.
- Create and maintain project plan and milestone schedule.
- Provide environmental specifications to Customer.
- Coordinate equipment delivery and inventory management
- Manage change control process. (Exhibit C – Change Control Process)
- Schedule resources.
- Conduct routine project status meetings.
- Conduct project closure meeting.
- Provide a cutover test plan
- A Project Binder providing important data regarding the management and support of the solution

Customer Responsibility

Customer will be responsible for the following:

- Designation of a single point of contact for the *Carousel Industries* Project Manager to work with on the project
- Attendance on all status calls in regard to the project
- Attendance by current Telecommunications provider on the Customer Kickoff Call (i.e. local technician)

- Provide access to site and equipment, as required by the Carousel Project Manager
- Request from their current circuit provider/ILEC/911 Services Provider with respect to circuit information, demarcation points labeled, circuit level testing, referred to herein as “Telco Audit”
- Provide the results of the Telco Audit to the Carousel Project Manager, any delay in providing the Telco Audit may delay the project
- Provide cable plant and wall field, with properly labeled, toned and tested cable runs. 9-1-1 trunks, ALI circuits, and administrative lines must be clearly marked at the telco demarcation. Lines not clearly marked may result in a delay to the project timeline.
- If cable is being re-used, current certification must be provided. If certification is not available, additional charges for cabling may apply for troubleshooting as part of Exhibit C – Change Control Process.
- Provide Cat 5e cabling to Training Room for at least eight (8) training positions on temporary basis at St. Petersburg if needed.
- Floor plans for Workstation and adjunct placement must be provided. They should be marked with position number.
- Floor Plan for server room layout must be provided. This must include power, rack, and demark location. Demark location for trunks and serial connection for modem must be within 8’ from racked equipment.
- Provide a dedicated NTP port from the existing Netclock to support the VESTA network at the new St. Petersburg PD location.
- Provide environmental conditions that meet or exceed manufacturer specified.
- Actively participate in the execution of the test plan and meet all project deliverables on time to keep project on-track
- Provide required information for *Carousel Industries* engineers to perform the installation
- Assume responsibility for removal and disposal of any disconnected equipment and telephones, unless removal or trade-in is specifically negotiated as part of the contract. Removed gear remains the property of the customer.
- Assume responsibility for any network provisioning and coordination of circuit in-service/testing date/time and procedures
- Provide tested building ground per NENA recommendation
- It is to be noted that if new network facilities are installed, any delay of network services or site readiness that effects required labor hours may result in a change order for additional technician hours.
- Coordination of 3rd party vendors for status calls and onsite meetings/work as required by the Carousel Industries Project Manager
- All equipment provided to Carousel Industries by the County will be in good working order, available, accessible and operating within manufacturer specifications.
- Adequate power/UPS/generator, work area, environmental controls, wiring and other facilities will be provided by provided by the County as required.
- Access to all required facilities and staff will be provided upon arrival at the site, subject to reasonable applicable security procedures.
- Provide stamped engineering plans, blue prints, and electrical single line drawings of existing / new site, as available.
- Provide access to the Customer’s preferred contractors and consultants (e.g., Electricians, plumbers, mechanical, engineering, architects, carpenters, riggers, movers and other parties), as required by the Carousel Project Manager to ensure adherence to project timeline.
- Full disclosure and contact information of all project stakeholders, their roles and contribution including contractors, consultants, manufactures, vendor and suppliers, as required.
- Provide Carousel technicians with internet access, while on-site in the event firmware downloads and updates are required as well as communication with the Carousel team.

Additional Customer Responsibilities

- Provide adequate floor space in each telco room for installation of the system equipment rack. Relocation of any existing equipment to provide such space is the responsibility of the County
- Provide one (1) dedicated, permanent high speed internet connection, at the new Host A location. The connection will require one (1) static IP address and one (1) switch port connection.
- Provide suitable UPS battery backup power to support the system (backroom equipment and call-taker positions)
- Provide analog/digital handoffs from existing telephone system, as required, for administrative line connections to the VESTA system.
- Perform any system administration or programming of administrative phone systems required for system integration and interoperability.
- Provide existing 9-1-1 system configuration detail

Customer Test Period and System Acceptance

Carousel will notify the Customer of a System Ready date which will establish a Customer Test Period during which time the Customer may conduct system testing prior to a system cutover for live operation. The test period will not exceed 5 business days unless mutually agreed upon by both parties prior to the start of testing. The Customer is responsible to document and notify Carousel of any issues detected during the test period. Carousel will address and remediate all issues and provide feedback based upon findings. The Test Period may be extended, if deemed necessary by both parties, to address any major issues.

For system installations where no new network lines and/or circuits are being installed it may be necessary for Carousel Industries to coordinate and participate in the temporary move of existing network services to allow the customer testing. In these cases, the testing window will be of limited duration to demonstrate functionality. Services will be restored to normal operation on the existing system until system cutover.

Upon conclusion of the Test Period the system will be cutover for live operation on a date mutually agreed upon by both parties. The Customer will provide notice of System Acceptance to Carousel in writing within 5 business days of live operation (Acceptance Period). The System Acceptance date may only be extended if an issue is identified that indicates the system fails to perform in accordance with the manufacturer's specifications. The System will be deemed accepted if the acceptance period passes without notification of issue or acceptance by the Customer.

Signatory Acceptance Sheet

Carousel Industries will accept this SOW upon receipt of Customer's signature on this SOW along with a purchase order for the services and the estimated travel and living expenses set forth in pricing section if applicable.

By signing this SOW customer accepts this SOW as a binding agreement with *Carousel Industries* and agrees to abide by and accept the terms and conditions set forth herein.

PINELLAS COUNTY, FL

CAROUSEL INDUSTRIES

Customer signature

Carousel signature

Printed name

Elizabeth Della Penna

Printed name

Title

Account Executive

Title

Date

8/21/2018

Date

APPROVED AS TO FORM

By: 

Office of the County Attorney