ITEM #20

ADDITIONAL MATERIAL

REGULAR MEETING

MARCH 21, 2024

SUBMITTED AT THE REQUEST OF

OFFICE OF REGIONAL COMMUNICATIONS AND TECHNOLOGY

**WORK AUTHORIZATION FOR SYSTEM AND SERVICES AGREEMENT BETWEEN
BROWARD COUNTY AND WEST SAFETY SOLUTIONS CORP.**

Contract Number: <u>A2114195A1</u>

Work Authorization No. **WA-ORCAT-WEST-25**

This Work Authorization is between Broward County and Intrado Life & Safety Solutions Corporation, f/k/a West Safety Solutions Corp. ("Intrado"), pursuant to the System and Services Agreement Between Broward County and West Safety Solutions Corp., dated December 5, 2017. In the event of any inconsistency between this Work Authorization and the Agreement, the provisions of the Agreement shall govern and control.

Services to be provided:

Intrado shall provide hardware, software, configuration, and professional services to satisfy additional requirements identified during the VIPER 7 Design Sessions. See Exhibit A, Statement of Work ("SOW"), for additional details.

The amount permitted under the Agreement for Optional Services is $3,495,000.

The time period for this Work Authorization will be two hundred and sixty (260) days after the County's Notice to Proceed, unless otherwise extended or terminated in writing by the Contract Administrator.

Fee Determination: Payment for this Work Authorization is as follows, and shall be invoiced in accordance with Section 13.2 (Payment Milestones) of the Statement of Work:

Hardware & Software	$397,430.07
Professional Services	$99,569.05
Credit for Equipment Return	($54,033.34)
Software and Maintenance and Support Fees for Year One	$1,170.00
Total Fixed Cost of this Work Authorization	**$444,135.78**

Recurring Fees for Maintenance and Support Services
Recurring Maintenance and Support Services fees shall be invoiced quarterly in arrears in the amount of $31,040 per year commencing on the first anniversary of Final Acceptance. These amounts shall be allocated to the Maintenance and Support Services not-to-exceed amount under the Agreement and are stated here for informational purposes only.

IN WITNESS WHEREOF, the Parties hereto have made and executed this Work Authorization No.25: BROWARD COUNTY through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Director of Purchasing, authorized to execute same pursuant to the Board action on the 21st day of March, 2024, and Intrado Life & Safety Solutions Corporation, signing by and through its _____, duly authorized to execute same.

BROWARD COUNTY

BROWARD COUNTY, by and through
its Director of Purchasing

By: _____
Director of Purchasing

_____ day of _____, 2024

Approved as to form by
Andrew J. Meyers
Broward County Attorney
115 South Andrews Avenue, Suite 423
Fort Lauderdale, Florida 33301
Telephone: (954) 357-7600

By_____
Sara F. Cohen   (Date)
Assistant County Attorney

By_____
Rene D. Harrod   (Date)
Chief Deputy County Attorney

WORK AUTHORIZATION FOR SYSTEM AND SERVICES AGREEMENT BETWEEN BROWARD COUNTY AND WEST SAFETY SOLUTIONS CORP.

<u>Intrado</u>

Intrado Life & Safety Solutions Corporation

By: _____
    Authorized Signer

_____
Print Name and Title

_____ day of _____, 2024

1. Project Description

In support of the VIPER 7 upgrade project, Intrado shall provide hardware, software, configuration, and professional services to satisfy the additional requirements identified during the VIPER 7 Design Sessions completed in December 2023.

2. Service Description

2.1 Deliverables:

Intrado shall provide the following deliverable as part of this Work Authorization:
- Hardware – Provide ten (10) PowerWeb laptops to be deployed at all PSAPs except Emergency Operations Center ("EOC").
- Hardware – Provide the necessary hardware, installation, and configuration services to permit six (6) consoles at the EOC to connect to the Regional VIPER environment for Regional call processing.
- Hardware – Provide and install a 7-foot IT cabinet and VIPER Gateway Chassis for the Central PSAP 3rd floor server room as a part of the overall VIPER 7 Regional footprint.
- Hardware – Replace and configure the thirty-six (36) existing Remote VPN laptops deployed within the Regional and Non-Regional environments with a PowerWeb User Interface.
- Hardware – Provide, install, and configure Sentry Servers at the North and EOC PSAPs.
- Services – Provide two (2) additional onsite technicians for the installation, configuration, and testing of VIPER 7 at the Regional and Non-Regional PSAPs during Go-Live and post Go-Live support.
- Hardware – Provide, install, and configure four (4) Power Metrics Advanced Data Collectors (RDDMs) to be deployed within the Regional and Non-Regional PSAPs VIPER environments.
- Hardware – Provide, install, and configure PowerOps hardware and software for the South PSAP Training Room.
- Hardware – Provide, install, and configure memory modules to standardize RAM on each server provided for the VIPER system to a minimum of 32GB.
- Hardware – Replace or install UPS (Uninterruptible Power Supply) systems in each of the 911 equipment cabinets at all PSAPs except EOC, with 2000 VA, 1800-watt units. The UPS provided by Intrado shall have TCP/IP monitoring capabilities to provide alerts indicating loss of power and UPS malfunction.
- Software – Provide thirty (30) additional Session Capacity Expansion licenses to support TDOS mitigation for non-emergency calls at all Regional PSAPs.
- Hardware – Apply credit in the amount of $54,033.34 upon the return of the following items provided pursuant to the Second Amendment to the Agreement dated July 21, 2023:
  - Nine (9) Power 911 consoles (A9C) and associated peripheral equipment (monitor, soundbar, graphics card).
  - Five (5) Rackmount UPS, 1000 VA, 900 Watt

o Five (5) Battery Modules

2.2 Locations

Intrado shall provide all hardware, software, installation, and services associated with this Statement of Work (SOW) at the following locations unless otherwise advised:

Regional PSAP Environment

PSAP	PSAP Addresses
Central Regional	10440 West Oakland Park Blvd, 3rd Floor, Sunrise, FL 33351
North Regional	4900 Copans Rd, 2nd Floor Coconut Creek, FL 33066
South Regional	6057 SW 198th Terrace, Pembroke Pines, FL 33332

Non-Regional PSAP Environment

PSAP	PSAP Addresses
Coral Springs	2801 Coral Springs Drive Coral Springs, FL 33065
Plantation	451NW 70th Terrace, Plantation, FL 33317
Emergency Operations Center (EOC)	201 NW 84th Ave., Plantation, FL 33324

2.3 Software, Licensing, and Anti-Virus Protection

Intrado shall deliver, install, configure, and test the software listed below per the terms and conditions of the Agreement. Upon Final Acceptance (as defined in this SOW), the following software will be deemed "Software" under the Agreement and supported in accordance with Exhibit C of the Agreement (Maintenance and Support Services):

Item #	Description	Qty
Central PSAP		
914158	Laptop VPN Support License	2
914121/1	IWS Workstation - Software and Configuration	2
P10361	Session Capacity Expansion (10 sessions) for PSAP HA SBC	10
North PSAP		
914158	Laptop VPN Support License	2
914121/1	IWS Workstation - Software and Configuration	2
P10232	ELM Class 1	1
P10361	Session Capacity Expansion (10 sessions) for PSAP HA SBC	10
South PSAP		
914158	Laptop VPN Support License	2
914121/1	IWS Workstation - Software and Configuration	2
P10361	Session Capacity Expansion (10 sessions) for PSAP HA SBC	10
P10035/U	PowerOps Software Media Upgrade	1
EOC PSAP		

Item #	Description	Qty
P10232	ELM Class 1	1
P10233	ELM Class 2	7
Coral Springs PSAP		
914158	Laptop VPN Support License	2
914121/1	IWS Workstation - Software and Configuration	2
Plantation PSAP		
914158	Laptop VPN Support License	2
914121/1	IWS Workstation - Software and Configuration	2
Regional PSAPs		
914121/1	IWS Workstation - Software and Configuration	36

2.4 Hardware

Intrado shall provide, install, configure, and test the hardware listed below. Upon Final Acceptance (as outlined in this SOW), the following hardware will be deemed "Equipment" under the Agreement and supported in accordance with Exhibit C of the Agreement (Maintenance and Support Services):

Item #	Description	Qty
Central PSAP		
911830	VIPER Gateway Chassis G3	1
912817	7 Foot IT Cabinet	1
913850/S	IWS Viper Enabling Kit (Sonic)	2
914114/1	IWS Laptop with backpack	2
E11033	MEMORY MODULE, SDRAM, 8GB (1x8GB) Single Rank x8, PC4-21300, DIMM 288 pin, (DDR4-2666) Unbuffered, ECC, (For DELL R240)	30
Q13706	MEMORY MODULE, DRAM, 8GB, 1RX8 DDR4 UDIMM 3200 MT/s ECC	4
Q13711	UPS, Rackmount, 2000 VA, 1800 Watt, 2U, EATON	1
Q13712	BATTERY Module, Extended, 2U Rack/Tower, EATON, For UPS 2000-3000 models	1
Q13669	Module, Cisco Catalyst NIM Module 2-port 1GE SFP with MACSec	2
Q13670	Adaptor, Cisco Catalyst SM to NIM Module	2
Q13671	Module SFP, 8-port Layer 2/3 GE Switch Network Interface	2
914840/1	Modem DSU/CSU (Digital)- 2 units	1
North PSAP		
914961	IWS Server RACK Bundle - Type B	1
915101	Sentry Server Console Kit	1
913850/S	IWS Viper Enabling Kit (Sonic)	2
914114/1	IWS Laptop with backpack	2

Item #	Description	Qty
E11033	MEMORY MODULE, SDRAM, 8GB (1x8GB) Single Rank x8, PC4-21300, DIMM 288 pin, (DDR4-2666) Unbuffered, ECC, (For DELL R240)	30
Q13706	MEMORY MODULE, DRAM, 8GB, 1RX8 DDR4 UDIMM 3200 MT/s ECC	4
Q13711	UPS, Rackmount, 2000 VA, 1800 Watt, 2U, EATON	1
Q13712	BATTERY Module, Extended, 2U Rack/Tower, EATON, For UPS 2000-3000 models	1
Q13669	Module, Cisco Catalyst NIM Module 2-port 1GE SFP with MACSec	2
Q13670	Adaptor, Cisco Catalyst SM to NIM Module	2
Q13671	Module SFP, 8-port Layer 2/3 GE Switch Network Interface	2
914840/1	Modem DSU/CSU (Digital)- 2 units	1
South PSAP		
913850/S	IWS Viper Enabling Kit (Sonic)	2
914114/1	IWS Laptop with backpack	2
E11033	MEMORY MODULE, SDRAM, 8GB (1x8GB) Single Rank x8, PC4-21300, DIMM 288 pin, (DDR4-2666) Unbuffered, ECC, (For DELL R240)	21
Q13706	MEMORY MODULE, DRAM, 8GB, 1RX8 DDR4 UDIMM 3200 MT/s ECC	4
Q13711	UPS, Rackmount, 2000 VA, 1800 Watt, 2U, EATON	1
Q13712	BATTERY Module, Extended, 2U Rack/Tower, EATON, For UPS 2000-3000 models	1
Q13669	Module, Cisco Catalyst NIM Module 2-port 1GE SFP with MACSec	2
Q13670	Adaptor, Cisco Catalyst SM to NIM Module	2
Q13671	Module SFP, 8-port Layer 2/3 GE Switch Network Interface	2
914840/1	Modem DSU/CSU (Digital)- 2 units	1
EOC PSAP		
914961	IWS Server RACK Bundle - Type B	1
915101	Sentry Server Console Kit	1
912820/24	Cisco C3650-24-TS-S 24 port Switch (with stacking module)	7
915138/1	Sentry Monitoring per Node per Year - Year 1	7
E11033	MEMORY MODULE, SDRAM, 8GB (1x8GB) Single Rank x8, PC4-21300, DIMM 288 pin, (DDR4-2666) Unbuffered, ECC, (For DELL R240)	30
P10392	Router, Rackmount, 1U, C8200L	2
Q13706	MEMORY MODULE, DRAM, 8GB, 1RX8 DDR4 UDIMM 3200 MT/s ECC	4
Q13669	Module, Cisco Catalyst NIM Module 2-port 1GE SFP with MACSec	2
Q13670	Adaptor, Cisco Catalyst SM to NIM Module	2

Item #	Description	Qty
Q13671	Module SFP, 8-port Layer 2/3 GE Switch Network Interface	2
914840/1	Modem DSU/CSU (Digital)- 2 units	1
Coral Springs PSAP		
913850/S	IWS Viper Enabling Kit (Sonic)	2
914114/1	IWS Laptop with backpack	2
E11033	MEMORY MODULE, SDRAM, 8GB (1x8GB) Single Rank x8, PC4-21300, DIMM 288 pin, (DDR4-2666) Unbuffered, ECC, (For DELL R240)	30
Q13706	MEMORY MODULE, DRAM, 8GB, 1RX8 DDR4 UDIMM 3200 MT/s ECC	4
Q13711	UPS, Rackmount, 2000 VA, 1800 Watt, 2U, EATON	1
Q13712	BATTERY Module, Extended, 2U Rack/Tower, EATON, For UPS 2000-3000 models	1
Q13669	Module, Cisco Catalyst NIM Module 2-port 1GE SFP with MACSec	2
Q13670	Adaptor, Cisco Catalyst SM to NIM Module	2
Q13671	Module SFP, 8-port Layer 2/3 GE Switch Network Interface	2
914840/1	Modem DSU/CSU (Digital)- 2 units	1
Plantation PSAP		
913850/S	IWS Viper Enabling Kit (Sonic)	2
914114/1	IWS Laptop with backpack	2
E11033	MEMORY MODULE, SDRAM, 8GB (1x8GB) Single Rank x8, PC4-21300, DIMM 288 pin, (DDR4-2666) Unbuffered, ECC, (For DELL R240)	21
Q13706	MEMORY MODULE, DRAM, 8GB, 1RX8 DDR4 UDIMM 3200 MT/s ECC	4
Q13711	UPS, Rackmount, 2000 VA, 1800 Watt, 2U, EATON	1
Q13712	BATTERY Module, Extended, 2U Rack/Tower, EATON, For UPS 2000-3000 models	1
Q13669	Module, Cisco Catalyst NIM Module 2-port 1GE SFP with MACSec	2
Q13670	Adaptor, Cisco Catalyst SM to NIM Module	2
Q13671	Module SFP, 8-port Layer 2/3 GE Switch Network Interface	2
914840/1	Modem DSU/CSU (Digital)- 2 units	1
Regional PSAPs		
914102/BB	IWS Workstation Prebuilt Building Block	1
914114/1	IWS Laptop with backpack	36
P10193/1	Power Metrics Advanced - Data Collector: single RDDM	4

2.5 Professional Services

Intrado shall provide all necessary services to implement the above-listed hardware and software as part of this project, which services shall include the following for the sites listed

in Section 2.2 (Locations) above:

- All necessary installation (including onsite), setup, and configuration services.
- Program and project management.
- Provide onsite technical support for Preliminary Acceptance Testing, Go-Live, and Post Go Live Support.

All services must be provided in compliance with County's Change Management Process and within the specified maintenance window of 11pm to 6am Monday through Thursday, or as approved by the County.

The service descriptions listed below are inclusive of all necessary travel and related expenses; no additional travel or expenses will be invoiced or paid. The quantities ("Qty") listed below are the estimated quantities as determined by Intrado and are not a limitation on the amount of work required by Intrado to complete this SOW. Intrado shall complete all work required under this SOW for the fixed fee stated in Section 13 (Financial), regardless of whether the actual quantities required are more or less than the estimated amounts.

Item #	Description	Qty
950510	Project Management Services (Days)	10
P10314	Professional Services (Days)	31
950520	Engineering Professional Services (Days)	2
950852	Front Room Equipment Staging - Per Position	36
P10294	Remote Installation Support Service (Days)	1

3. **Technical Approach**

   The services shall be provided in the following phases:

   1) **Notice to Proceed ("NTP")**

      County will issue a Notice to Proceed ("NTP") to commence the project.

   2) **Delivery, Installation and Configuration**

      Intrado will be responsible for delivery, installation, and configuration of all software and hardware. All Intrado Subject Matter Experts (SME) shall be onsite during the project activities and deliverables listed in Section 2 (Service Description).

   3) **Preliminary Acceptance Testing (PAT)**

      Preliminary Acceptance Testing shall be performed by County after system testing is completed by Intrado. All Preliminary Acceptance Testing criteria is outlined in Section 14 (Preliminary Acceptance Testing) below. Intrado Technical SME shall be onsite during this phase to resolve any issues.

4) **Cutover – Go-Live**

Go Live will be aligned to the VIPER 7 cutover schedule at each PSAP location and will take place after the successful completion of Preliminary Acceptance Testing.

5) **Post Go-Live Support**

Intrado's Installation Engineers shall remain onsite for five (5) business days after successful Go Live. Intrado Installation Engineers shall be responsible for resolving any issues that may occur before closing out the five (5) day support period.

6) **Final Acceptance**

Upon Go-Live, County shall conduct Final Acceptance Testing for sixty (60) days. The sixty days of Final Acceptance will align with the overall acceptance period for the VIPER 7 project. Intrado will be responsible for resolving any issues to the satisfaction of County during Final Acceptance Testing.

4. **Implementation Strategy**

Intrado shall install and configure the hardware and software deliverables outlined in Section 2 (Service Description) in accordance with the VIPER 7 Project Installation Schedule at each of the six (6) Regional and Non-Regional PSAP(s). The implementation of all deliverables in this SOW will be aligned with the overall Implementation Strategy for the VIPER 7 project.

5. **System Configuration**

Intrado shall configure the system according to the following configuration requirements:

REQ ID	Requirement
Software	
SC001	Install and configure the required Session Capacity Expansion licenses to support TDOS mitigation for Non-Emergency calls at all Regional PSAPs.
Hardware	
SC002	Make the necessary configuration changes to the Intrado Session Border Controller (SBC) within the Regional VIPER environment to support TDOS mitigation for Non-Emergency calls
SC003	Perform the necessary configurations to allow six (6) consoles at the EOC to connect to the Regional VIPER environment.
SC004	Install and configure Power Web on thirty-six (36) Remote VPN laptops to be deployed within the Regional and Non-Regional environments.
SC005	Configure Sentry Servers to be installed at the Secondary hosts (North and EOC) within the Regional and Non-Regional environments.

REQ ID	Requirement
Software	
SC006	Configure PowerOps station to be installed in the South PSAP Training Room.
SC007	Install and configure memory modules (RAM) to achieve a minimum of 32GB RAM on each server provided for the VIPER system.

6. Project Management

Intrado shall assign a dedicated Project Manager who, for the duration of the project, shall:

1. Ensure the SOW is completed and provide County with a project schedule that contains an overview of the key project milestones, including but not limited to the following:
    a. Equipment Delivery
    b. Installation and Configuration
    c. Testing schedule
    d. Go-Live schedule
2. Ensure Intrado assigned resources are scheduled for the activities and deliverables outlined in Section 2 (Service Description)
3. Perform comprehensive risk assessment and mitigation planning.
4. Ensure project status meetings are scheduled with County, led, documented, and meeting minutes are distributed.
5. Maintain issue log and ensure all issues are prioritized and worked in a timely manner.
6. Maintain all project related communications and documentation.

7. Intrado Responsibilities

Intrado shall be responsible for the following details which include:

a) Delivery, Installation and Configuration
Intrado will be responsible for the delivery, installation, and configuration of all the hardware and software outlined in Section 2 (Service Description) for both the Regional and Non-Regional Environments.

b) Testing
System testing shall be conducted by Intrado and shall include executing the PAT criteria outlined below to ensure that the system is ready for testing. County will also verify and validate Intrado's system testing results before County commences PAT.

8. Documentation

A. Event Plan

Intrado shall provide a draft of the step-by-step event plan at least fifteen (15) days prior to Go Live for County review and approval. The event plan shall align with the

event plan for the overall VIPER 7 project. If requested by County, Intrado will incorporate all of County's required changes into the event plan and shall resubmit the event plan for County approval.

B. Change Management Request (CMR)

Upon the County's approval of the event plan, Intrado shall submit the CMR documentation for County SME's approval by 2PM on the Tuesday of the week preceding the implementation week.

9.   Process Change Request

Any changes to this SOW must be approved and documented in writing by way of an amendment to this Work Authorization.

10.   Security and Access

a) Intrado personnel performing project related activities in the Central PSAP and EOC will be escorted by Intrado's authorized site support personnel when available. If Intrado's authorized support personnel are not available, County staff will be responsible for escorting Intrado personnel performing project related activities in the PSAPs.

b) Intrado shall cooperate with County and provide any and all information that County may request in order to determine appropriate security and network access restrictions and verify Intrado's compliance with County security standards.

11.   Managerial Approach & Communication

A. Managerial Approach

Intrado shall ensure that the persons responsible for the performance of the services under this Work Authorization and, to the extent applicable, identified below (collectively "Key Personnel"), are appropriately trained and experienced and have adequate time and resources to perform in accordance with this SOW. To the extent Intrado seeks or is required to make any change to the composition of the Key Personnel, Intrado shall provide the County with thirty (30) days advance notice (or as much advance notice as is possible if thirty (30) days' notice is not possible) regarding such changes and the management plan associated with such changes. County shall not be responsible for any additional costs associated with a change in Key Personnel.

Name	Title	Email
*TBD	Intrado – Project Manager	TBD
Rafael Diego	Intrado – Support Manager	Rdiego@intrado.com

Name	Title	Email
Brian Elvington	Intrado – Account Manager	belvington@intrado.com

*Intrado shall provide the name, email, and phone number of the Project Manager and technical resources assigned to the project prior to or during the kickoff call.

B. **Communications Matrix**

Event	Objective	Medium/ Frequency	Resources Assigned	Owner	Deliverable
Project Team Meetings	Review status of the project with the team	Conference Call	Project Team	Project Manager – Intrado	Agenda, Meeting Minutes, Project Schedule
Event Plan and Technical Review Meetings	Discuss and development of technical solutions for the project	Face to face or conference call, frequency and format determined jointly by County and Intrado	Project Technical Staff	Project Managers – Intrado (Lead) and County	Agenda, Meeting Minutes
Configuration, Cutover, and Post Cutover support	Configuration, cutover, and post cutover will be done by onsite technical resources scheduled and developed by Intrado	Daily status briefings until post support is complete	Project Manager and Technical Subject Matter Experts	County and Intrado	All phases of the project are complete

12. **Timeline**

Intrado shall perform and complete the services in accordance with the following timeline, unless otherwise approved in writing by the Contract Administrator.

Task/Activity	Timeframe
Notice To Proceed (NTP)	Apr-2024
Equipment Delivery (Regional and Non-Regional)	May-2024
Regional PSAPs	
Installation and Configuration Activities	Jul-2024
System Integration Testing	Jul-2024
Preliminary Acceptance Testing	Aug-2024
Go-Live	Oct-2024
Final Acceptance	Dec-2024
Non-Regional PSAPs	

Task/Activity	Timeframe
Installation and Configuration Activities	Sep-2024
System Integration Testing	Sep-2024
Preliminary Acceptance Testing	Nov-2024
Go-Live	Q1-2025
Final Acceptance	Q1-2025

13.   Financial

Payment Milestones

For each Milestone indicated below, Intrado shall invoice County the invoice amount only after receipt of written confirmation from the County Contract Administrator that the Milestone has been satisfactorily achieved.

Milestone (Fixed Fees)	Percentage	Invoice Amount
Milestone #1 – Equipment Delivery	20%	$88,827.16
Milestone #2 – Successful Completion of Preliminary Acceptance Testing (Regional and Non-Regional)	20%	$88,827.16
Milestone #3 – Go-Live (Regional and Non-Regional)	30%	$133,240.73
Milestone #4 – Successful Completion of Final Acceptance Testing (Regional and Non-Regional)	30%	$133,240.73
Total Fixed Fee Amount	**100%**	**$444,135.78**

14.   Preliminary Acceptance Testing

Preliminary Acceptance Testing will be performed by County after system testing is completed by Intrado for each PSAP. Intrado Technical SME(s) shall be onsite during Preliminary Acceptance Testing to resolve any issues. The following test criteria must be successfully completed for each of the PSAPs noted in the Service Description above based on the design approved by County. Additional test criteria and test scripts may be added by County based on the approved scope of the project.

Test #	Test case	County Verifiable Test Criteria
Remote VPN Laptops (36)		
PAT001	Remote login to the system using VPN (Regional and Non-Regional PSAP(s).	Successfully was able to login to the VIPER Phone system using the Intrado laptop set up and successfully launched PowerWeb.

Test #	Test case	County Verifiable Test Criteria
PAT002	Screen resolution and GUI display options are correct. GUI should be shown at full screen.	PowerWeb GUI display options are same as any other positions within the Regional and Non-Regional PSAP(s).
PAT003	Verify the call-taker can login to the system using all roles defined in the system and is able to answer all 911 calls and non-emergency calls (Regional PSAPs).	Successfully logged in to all nodes within the assigned VIPER environment (Regional) using all roles defined in the system, launched PowerWeb, and was able to answer all 911 calls and non-emergency calls.
PAT004	Verify the call-taker receives abandoned call notification for Regional and Non-Regional PSAP(s).	Verify that abandoned 911 calls list is produced correctly for Regional PSAP(s) in the same manner as all other abandoned 911 calls list are produced.
PAT005	Verify the call-taker can receive a Text to 911 message.	Successfully was able to receive a Text to 911 message and was able to process a session.
PAT006	Place a test 911 call on '**park**' and retrieve it (Regional PSAPs).	Successfully placed a 911 call on 'park' and was able to retrieve the call.
PAT007	Verify ALI rebid (Regional and Non-Regional).	While on a call press the RTX button. The RTX indicator flashes until the new ALI appears in the ALI panel and the status bar displays "Waiting for ALI." Once ALI is received, the status bar displays the message: "New ALI received."
PAT008	Transfer a 911 call.	Place the call on park (Regional)/hold and then wait for another call-taker to pick up the call.
PAT009	Verify correct ANI and ALI is displayed on the Power 911 console upon receiving a 911 call using all roles defined in the system (Regional PSAPs).	The correct ANI and ALI were displayed at the Power 911 console upon receiving a 911 call for all three (3) Regional PSAPs using the Regional Role agent ID.
PAT010	Verify all test call records for Regional and Non-Regional PSAP(s) appear in ECaTS.	The record for all test calls appeared in the ECaTS.
PAT011	Verify all test call records for Regional and Non-Regional PSAP(s) appear and saved in the PowerWeb 911 and audio is clear.	The voice records appeared and saved in the PowerWeb 911 for all test calls and was able to replay and confirm the quality of the audio.
PAT012	Verify all test call records for Regional and Non-Regional PSAP(s) appears on ePrinter.	The voice records appear in the ePrinter for all test calls.
PAT013	Place Outgoing call using automatic line select and specific line button.	Enter a number in the white box and make sure the call is successfully completed.

Test #	Test case	County Verifiable Test Criteria
PAT014	Ability for call-takers to go in different states (Not Ready, Follow Up, etc. , Regional PSAPs).	The call-taker was able to go to different states (Not Ready, Follow Up, etc.) for Regional PSAP environment with no issue.
PAT015	Verify that the call-taker can login to the system using the Coral Springs/Plantation Agent ID, receiving a call (**ringer** notification), and able to answer all 911 calls. (Non-Regional PSAPs).	Successfully logged in to both Non-Regional PSAP Remote VPN Laptops, launched Power 911, and was able to answer all 911 calls.
PAT016	Verify the call-taker can receive a Text to 911 message via **ringer** notification (Non-Regional).	Successfully was able to receive a Text to 911 message and was able to complete a session.
PAT017	Verify correct ANI and ALI is displayed on the PowerWeb 911 console upon receiving a 911 call (using Coral Springs & Plantation agent ID).	The correct ANI and ALI were displayed at the Power 911 console upon receiving a 911 call for Coral Springs & Plantation using the correct agent ID.
PAT018	Place a test 911 call on '**hold**' and retrieve it (Regional & Non-Regional PSAP).	Successfully placed a 911 call on 'hold' and was able to retrieve the call.
PAT019	Initiate a call to a Baudot TTY machine.	Successfully initiated a TTY call for both Regional & Non-Regional PSAPs.
ECaTS Reporting		
PAT020	Network Redundancy (RDDM).	Verify that by disabling one of the RDDM within Central/North and Corals Springs/EOC PSAP(s), the data will be still pushed to the Intrado Data Center and user can access the system and be able to generate reports while one RDDM is disabled.
Regional Consoles at EOC		
PAT021	Verify screen resolution and GUI display options are correct. GUI should be shown at full screen.	Successfully verified that screen resolution and GUI display options are correct.
PAT022	Verify that the queue buttons, ringing, lamping, and the voice path for all lines (intercom also) are functioning as expected.	Successfully verified that the queue buttons, ringing, lamping and voice path for all lines are functioning as expected.
PAT023	Verify that all required list modules are configured (i.e., Active Calls, History Calls, Released Calls, etc.).	Successfully verified that all required list modules are configured.

Test #	Test case	County Verifiable Test Criteria
PAT024	Verify the system acknowledges abandoned calls on abandoned call list	Successfully verified that the system acknowledges abandoned calls on abandoned call list.
PAT025	Verify that all feature buttons and function keys are configured correctly in the system.	Successfully verified that all feature buttons and function keys are configured correctly in the system.
PAT026	Verify caller ID for inbound admin call.	Successfully verified the caller ID for inbound admin call appears in the caller ID.
PAT027	Soft Keys Appearance and Functionality.	Successfully verified that all Soft Keys appear, and functions are displayed correctly in the Power 911 screen.
PAT028	Place outgoing call using automatic lines select.	Successfully made an outgoing call using automatic lines select.
PAT029	Place outgoing call using a specific line button.	Successfully made an outgoing call using a specific line button.
PAT030	Redialing the last 911 call handled using the redial button.	Successfully redialed the last 911 call handled using the redial button.
PAT031	Redialing a previous call from release calls.	Successfully redialed a previous call from release calls.
PAT032	Establish conference manually with another 911 console.	Successfully established conference manually with another 911 console.
PAT033	Establish conference for outgoing call.	Successfully established a conference for outgoing call.
PAT034	Establish conference for inbound call.	Successfully established a conference for inbound call.
PAT035	Retrieve a call from hold using the Line Panel.	Successfully retrieved a call from hold using the Line Panel.
PAT036	Mute and Hold functions.	Successfully verified that the Mute and Hold features are functioning correctly in the system.
PAT037	ALI rebid successful.	Successfully verified that the ALI rebid is refreshed each time the 'RTX' button is pressed in the Power 911 screen (while on an active call).
PAT038	TTY Call.	Successfully verified that the TTY call is working as designed in the system.
PAT039	Verify recording and playback of all recording channels at each Regional PSAP.	Successfully verified that all calls were recorded in the VRS loggers for all Regional PSAP(s) with good audio quality (no echo & background noise).

Test #	Test case	County Verifiable Test Criteria
PAT040	Verify ANI/ALI from a 911 call recording.	Successfully verified that ANI/AlI were stored in all 911 call recording.
PAT041	Confirm audio is clear for all positions on VRS and verify that VRS recordings contain ANI / ALI information.	Successfully verified that the audio is clear for all positions on VRS and verify that VRS recordings contain ANI / ALI information.
PAT042	Verify that all calls and text messages transcript are shown in ECaTS.	Successfully verified that user can generate reports based on call and Text message activity on each position.
PAT043	Verify call activity at ePrinter position.	Successfully verified that the call activity can be printed at the ePrinter position.
PAT044	Text to 911 Messaging.	Successfully verified that each position can receive a Text to 911 messages.
PAT045	Verify that a text message will be distributed via an Automatic Call Distribution (ACD), including audible signal.	Successfully verified that a text message will be distributed via an ACD, including audible signal.
PAT046	Verify that a text message can be transferred/conferenced from one call taker to another.	Successfully verified that a text message can be transferred/conferenced from one call taker to another.
PAT047	Verify that a text message can be transferred to a neighboring PSAP.	Successfully verified that a text message can be transferred to a neighboring PSAP.
PowerOps		
PAT048	Open all existing layouts and verifying functionality of the screen objects.	All screen objects are updated in real time. This item will be verified for each Power OPS station. There are four in total.
Sentry		
PAT049	Test Sentry alarm with AIM down.	Disconnect AIM with no active calls and leave disconnected for alarm down and reconnect for up alerts. This test will be conducted on the primary and secondary Sentry servers.
Memory (RAM) Modules		
PAT050	Verify available memory on each server provided for the VIPER System.	View server memory in Windows check Task Manager if applicable. Minimum 32GB. There will be verification on each server.
UPS		
PAT051	Disconnect from building power and run on UPS power.	Verify no systems went down and calls are still being processed. This test will need to be verified by each server plugged into the UPS.

Test #	Test case	County Verifiable Test Criteria
PAT052	Alarm Notification Test	The test is successful if the UPS system provides notification via smtp to the email distribution list when system generates an alarm. This test will need to be verified by each server plugged into the UPS.
Secure Logix (Session Expansion License)		
PAT053	Test inbound and outbound calls on all admin lines that pass through the Secure Logix ETM.	Verify caller ID and caller name.

15.   Final Acceptance

Once Intrado completes the Configuration, System Testing, Preliminary Acceptance Testing, and Go Live, County shall commence Final Acceptance Testing as follows: (a) County provides Intrado written confirmation of successful completion of each item in the Preliminary Acceptance Test Plan, and (b) the hardware and software must run for a period of sixty (60) days with no Critical or Severe failures (as defined in the Agreement). Any Critical or Severe events shall cause the 60-day test period to reset and must be resolved by Intrado to County's satisfaction prior to the restart of the 60-day period. Upon successfully completion of (a) and (b) above, County will issue written notice of Final Acceptance.