



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

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**DATE:** **APRIL 14, 2023**

## CONTRACT EXTENSION

**BID TITLE:** Electronic Security - CCTV

**CONTRACT #:** BP#0407-20 (4700007587)

**CONTRACT DATES:** 06/22/2020 – 05/31/2024

**BUYER:** **Susan Archacki**

**PHONE:** 585-753-1110

**FAX:** 585-753-1104

**VENDOR(S):** #11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623

**CHANGES AS FOLLOWS:** THE ABOVE CONTRACT HAS BEEN EXTENDED THROUGH  
May 31, 2024.

A handwritten signature in black ink, appearing to read "Susan", is written over a horizontal line.

Susan Archacki  
Buyer

XC: BP FOLDER  
VENDOR  
BUYER



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

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**DATE:** **AUGUST 23, 2022**

## CONTRACT EXTENSION

**BID TITLE:** Electronic Security - CCTV

**CONTRACT #:** BP#0407-20 (4700007587)

**CONTRACT DATES:** 06/22/2020 – 05/31/2023

**BUYER:** **Susan Archacki**

**PHONE:** 585-753-1110

**FAX:** 585-753-1104

**VENDOR(S):** #11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623

**CHANGES AS FOLLOWS:** THE ABOVE CONTRACT HAS BEEN EXTENDED THROUGH May 31, 2023. The price changes are effective immediately.

A handwritten signature in black ink, appearing to read "Susan Archacki".

Susan Archacki  
Buyer

**XC:** BP FOLDER  
VENDOR  
BUYER



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

**DATE:** **AUGUST 20, 2021**

## CONTRACT UPDATE

**BID TITLE:** **Electronic Security - CCTV**

**CONTRACT #:** **BP#0407-20 (4700007587)**

**CONTRACT DATES:** **06/22/2020 – 5/31/2022**

**BUYER:** **Susan Archacki**

**PHONE:** **585-753-1110**

**FAX:** **585-753-1104**

**VENDOR(S):** **#11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623**

## **CHANGES AS FOLLOWS:**

The following item has been added to the contract:

**4K NETWORK FIXED DOME CAMERA      \$720.02 each**

The following change has also been made:

All camera prices have been altered so that none contain the licensing fee of \$145.59. In the instances a license needs to be added to a camera purchase, it can be done separately using line 190, LATITUDE ENTERPRISE ONE CHANNEL LIC.

A handwritten signature in black ink, appearing to be "Susan Archacki".

**Susan Archacki  
Buyer**

**XC:    BP FOLDER  
         VENDOR  
         BUYER  
         B. SITTER**



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

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**DATE:** JUNE 3, 2021

## CONTRACT EXTENSION

**BID TITLE:** Electronic Security - CCTV

**CONTRACT #:** BP#0407-20 (4700007587)

**CONTRACT DATES:** 06/22/2020 – 05/31/2022

**BUYER:** Susan Archacki

**PHONE:** 585-753-1110

**FAX:** 585-753-1104

**VENDOR(S):** #11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623

**CHANGES AS FOLLOWS:** THE ABOVE CONTRACT HAS BEEN EXTENDED THROUGH  
May 31, 2022.

Susan Archacki  
Buyer

XC: BP FOLDER  
VENDOR  
BUYER  
B. Sitter



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

**DATE:** MARCH 15, 2021

## CONTRACT UPDATE

**BID TITLE:** Electronic Security - CCTV

**CONTRACT #:** BP#0407-20 (4700007587)

**CONTRACT DATES:** 06/22/2020 – 5/31/2021

**BUYER:** Susan Archacki  
**PHONE:** 585-753-1110  
**FAX:** 585-753-1104

**VENDOR(S):** #11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623

## **CHANGES AS FOLLOWS:**

The following items have been added to the contract:

01981-001	360deg Situational Awareness Camera	\$1584.69
5502-431	T94A01D Pendant Kit for Q60&Q55 series	\$44.10
C9300-24U-A	Catalyst 9300 24PT UPOE Network Adv.	\$ 3235.00
5801-951	Axis 64GB Class 10 Microdxc	\$48.18
01148-001	T8129-E Outdoor POE Extender	\$269.10
LAT-NT-CHAN	Latitude Enterprise One Channel License	\$145.59
01752-004	Q6075-E PTZ Camera w/HDTV 1080P...	\$2934.69

A handwritten signature in black ink, appearing to be "Susan Archacki".

Susan Archacki  
Buyer

XC: BP FOLDER  
VENDOR  
BUYER  
B. SITTER



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

**DATE:** MARCH 15, 2021

## CONTRACT UPDATE

**BID TITLE:** Electronic Security - CCTV

**CONTRACT #:** BP#0407-20 (4700007587)

**CONTRACT DATES:** 06/22/2020 – 5/31/2021

**BUYER:** Susan Archacki

**PHONE:** 585-753-1110

**FAX:** 585-753-1104

**VENDOR(S):** #11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623

## **CHANGES AS FOLLOWS:**

The following items have been added to the contract:

01981-001	360deg Situational Awareness Camera	\$1584.69
5502-431	T94A01D Pendant Kit for Q60&Q55 series	\$44.10
C9300-24U-A	Catalyst 9300 24PT UPOE Network Adv.	\$ 3235.00
5801-951	Axis 64GB Class 10 Microdxc	\$48.18
01148-001	T8129-E Outdoor POE Extender	\$269.10
LAT-NT-CHAN	Latitude Enterprise One Channel License	\$145.59
01752-004	Q6075-E PTZ Camera w/HDTV 1080P...	\$2934.69

Susan Archacki  
Buyer

**XC:** BP FOLDER  
VENDOR  
BUYER  
B. SITTER



# CONTRACT INFO SHEET

Monroe County Division of Purchasing  
200 County Office Building, Rochester NY 14614

**DATE:** **NOVEMBER 6, 2020**

## CONTRACT UPDATE

**BID TITLE:** Electronic Security - CCTV

**CONTRACT #:** BP#0407-20 (4700007587)

**CONTRACT DATES:** 06/22/2020 – 5/31/2021

**BUYER:** Susan Archacki

**PHONE:** 585-753-1110

**FAX:** 585-753-1104

**VENDOR(S):** #11107677  
Johnson Controls  
90 Goodway Drive  
Rochester, New York 14623

## **CHANGES AS FOLLOWS:**

The following items have been added to the contract as of October 16, 2020:

PP351	Pelco Rooftop Parapet Mount	\$462.56
PP350	MNT PARAPT wall 2-1/2 dia spec	\$371.65
CX-ARMX-G3	Wall Mount Bracket (1.5in)	\$ 66.07
CX-POLE-G3	Pole Adapter for Cx-xxxx-G3	\$66.07
IPPWR1	IP Camera Surge Protector	\$66.73
CP-POE-60W-US	US POE injector for CP-63xx/C	\$264.27

The following item has been added to the contract as of November 6, 2020:

1080P Network Fixed Dome Camera NO LIC	\$420.00
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Susan Archacki  
Buyer

XC: BP FOLDER  
VENDOR  
BUYER  
B. SITTER

## TERMS AND CONDITIONS

**BID ITEM:**

**Electronic Security - CCTV**

**FOR:**

**Department of Environmental Services**

**PURCHASING  
CONTACT:**

The Buyer, identified below, is the sole point of contact regarding this Bid from the date of issuance until the bids are opened and the results made public.

Susan Archacki  
Monroe County Division of Purchasing  
200 County Office Building  
39 West Main Street  
Rochester, NY 14614  
Email: [susanarchacki@monroecounty.gov](mailto:susanarchacki@monroecounty.gov)  
585-753-1110

All requests for bid clarification must be submitted in writing to the Buyer referenced above and received no later than **NOON (12:00 PM Eastern Time) May 11, 2020.**

**All questions will be answered and documented in writing as an Addendum to the Bid. These will be sent out to all Bidders who received the original Bid no later than May 14, 2020.**

**DUPLICATE COPIES:**

**PLEASE SUBMIT YOUR BID IN DUPLICATE; THE ORIGINAL AND ONE (1) COPY.**

**BID INFORMATION:**

At the time of bid, the bidder shall supply detailed specifications covering the item(s) contained herein and shall clearly indicate any areas in which item or items offered do not fully comply with the specifications contained herein.

**SUBMITTAL OF  
FORMAL PROPOSAL:**

Bid proposal must be legible and submitted in the original form, bearing an original signature. **EMAILS AND FACSIMILES ARE NOT ACCEPTABLE.**

All bidders must submit proof that they have obtained the required **Workers' Compensation and Disability Benefits Insurance** coverage or **PROOF** that they are exempt. (Visit [www.wcb.ny.gov](http://www.wcb.ny.gov) for forms.)

**SPECIFICATION  
ALTERATIONS:**

Specifications will be construed to be complete and be considered the entire description of the goods or services upon which Monroe County is now seeking bids. **Only formal written addenda can materially alter this set of specifications.** No verbal statement made by a Monroe County employee or anyone else is binding nor shall such statement be considered an official part of this public bid proposal.



**NYS WAGE RATES:**

Pursuant to the provision of Section 220-A of the New York State Labor Law, as amended, the Contractor (and related Subcontractors) will be obligated to pay all workers in the covered classes only the applicable prevailing wage rates and supplements. The minimum hourly wage rate to be paid the various classes of labor performing work under this contract shall be in accordance with schedules which have been established or may hereafter be established or increased, by the New York State Department of Labor during the contract term. **Refer to NYS Wage Schedule PRC# 2020004461 developed for this project.**

**BRAND REFERENCE:**

References to a manufacturer's product by brand name or number are done solely to establish the minimum quality and performance characteristics required. Bidders may submit bids on alternates, but must attach two (2) copies of manufacturer specifications for any alternate at the time of the bid. Further, the bidder must demonstrate that the alternate proposed has a sufficient operating track record to show the equipment will perform per the specified brand. The acceptance of a bidder's alternate rests solely with Monroe County.

**QUALIFIED BIDDER:**

Each bidder must be prepared to present satisfactory proof of his capacity and ability to perform this contract. Such proof may include, but is not limited to, an inspection of the bidder's facilities and equipment, financial statements, references and performance of similar contracts. **The Purchasing Manager reserves the right to reject any bid where the bidder cannot satisfy the County as to their ability to perform. Monroe County reserves the right to reject any and all bids if the Monroe County Purchasing Manager deems said action to be in the best interests of Monroe County.**

**METHOD OF AWARD:**

Monroe County intends to award the bid to the lowest responsive and responsible bidder based on the **TOTAL**. **Bidder must bid on all items in order to be considered.** **The County reserves the right to reject any and all bids if the Purchasing Manager deems said action to be in the best interest of the County.**

**PURCHASE ORDER  
ISSUANCE:**

Delivery of services may be directed by the receipt of a Purchase Order only. **Items that are not part of this bid will not be paid for by Monroe County.** Purchase Orders may be adjusted to accommodate unforeseen conditions that may arise within the original scope of work. Contractor must be prepared to begin project within **one (1) week ARO.**

As to all purchase orders issued by Monroe County, exceptions may only be authorized, in writing, by the Purchasing Manager or her authorized agent prior to delivery.

**WARRANTY/  
GUARANTEE:**

All warranties by manufacturer shall apply. Bidder shall, as part of its proposal, furnish its warranty/guarantee for all goods/services to be furnished hereunder. As a minimum, Bidder shall warrant all goods/services for a period of one (1) year from date of acceptance. Bidder shall be obligated to repair or replace all defects in material or workmanship which are discovered or exist during said one (1) year period. All labor, parts and transportation shall be at Bidder's expense.

**SECURITIES AND  
INSURANCE:**

Any Certificate of Insurance, Bonds, or other forms of security required by this bid are to be submitted to the Purchasing Manager no later than ten (10) normal business days following the date of notification of award. Documents must be received by the close of business, 5:00 PM, on that day.

**COMPLIANCE WITH  
THE LAW:**

The Contractor agrees to procure all necessary licenses and permits. The Contractor shall comply with all laws, rules and regulations pertaining to the payment of wages and all other matters applicable to the work performed under this contract.

**SUBCONTRACT:**

The Contractor shall not subcontract any work without first obtaining the written consent of the Monroe County Purchasing Manager.

**INDEMNIFICATION:**

The Contractor agrees to defend, indemnify and save harmless the County, its officers, agents, servants and employees from and against any and all liability, damages, costs or expenses, causes of action, suits, judgments, losses and claims of every name not described, including attorneys' fees and disbursements, brought against the County which may arise, be sustained, or occasioned directly or indirectly by any person, firm or corporation arising out of or resulting from the performance of the services by the Contractor, arising from any act, omission or negligence of the Contractor, its agents and employees, or arising from any breach or default by the Contractor under this Agreement. Nothing herein is intended to relieve the County from its own negligence or misfeasance or to assume any such liability for the County by the Contractor.

**BP# 040407-20, Electronic Security  
Specifications**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

**A. Scope:**

1. BIDDER shall provide all labor, material, equipment and incidentals as directed by the COUNTY, specified and required to furnish, install, test and place into satisfactory operation a Security System CCTVs as specified herein. This system shall be comprised of a Closed Circuit Television (CCTV) Surveillance System.
2. BIDDER shall employ the services of a Security System Supplier with proven experience in the field. Security System Supplier shall assume full responsibility for the selection of equipment and components required. Specifically this shall include defining the required system components, preparing detailed system schematics, interconnecting wiring diagrams, field debugging, calibrating, and configuring the system as well as instructing plant personnel on the care and use of the system.
3. The CCTV system provided shall be turnkey system solutions, wherein each component is seamlessly integrated with the overall system. The CCTV System shall employ common controls communications protocol and video signal formats throughout.

**B. Coordination:**

1. BIDDER shall be responsible for all coordination and scheduling work with COUNTY once notified.
- 2.

**C. References:**

1. Standards referenced in this Section are listed below:
2. American National Standards Institute, (ANSI).
3. Factory Mutual, (FM).
4. Institute of Electrical and Electronic COUNTYS, (IEEE).
5. National Electrical Code, (NEC).
6. National Electrical Manufacturers Association, (NEMA).
7. Underwriters' Laboratories, Inc., (UL).

**D. Related Sections:**

1. Section 01 11 00, Summary of Work
2. Section 01 14 00, Work Restrictions
3. Section 01 31 13, Coordination with COUNTYS Operation

**1.2 GENERAL CONSTRAINTS**

- A. All operations of existing electrical switches, breakers, disconnects, and other electrical equipment shall be done by COUNTY, unless otherwise directed by the COUNTY. No shutdowns of electrical service shall occur without COUNTY's knowledge.

### 1.3 HIGH SECURITY CONSTRAINTS

- A. All operations of existing electrical switches, breakers, disconnects, and other electrical equipment shall be done by COUNTY, unless otherwise directed by the COUNTY. No shutdowns of electrical service shall occur without COUNTY's knowledge.

### 1.4 COORDINATION WITH UTILITIES

- A. It is understood and agreed that BIDDER has considered in its bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for any delays, inconveniences, or damage sustained by him due to any interference from the said utility appurtenances or the operation of moving them.
- B. BIDDER shall abide by all rules and regulations governing work adjacent to existing utilities.
- C. For new CCTV installations provide CAT 6 cable from CCTV to nearest Data Closet, coordinated with COUNTY.
- D. For existing CCTV installation provide new CCTV with using existing cable where possible and new CAT 6 cable where not possible. Coordinate work with COUNTY.

## PART 2 – PRODUCTS

### 2.1 1080p and 4K NETWORK CAMERAS

#### A. PTZ Domed Camera

1. The CCTV System installed under this Contract will be independent of any previously installed security equipment. The system shall include the following:
  - a. Pan/Tilt/Zoom and Fixed cameras contained in outdoor enclosures.
  - b. Video monitoring computers for monitoring and control of all cameras.
  - c. Fiber-to-copper transceivers for conversion of video and control signals for transmission over the fiber optic cable backbone Communications Optical Fiber Backbone Cabling.
  - d. CAT 6 cable, 24V power supplies, mounting assemblies, and all necessary appurtenances for a fully functional CCTV system.
2. Type: High Resolution, Color, Integrated Receiver, Low Light Sensitivity.
3. Provide pan and tilt drive where indicated:
  - a. Pan:
    - i. Adjustable speed.
    - ii. Preset Speed: 100 degrees per second.
    - iii. Movement: 360 degrees continuous pan rotation.
  - b. Tilt:
    - i. Adjustable speed.
    - ii. Preset Speed: 30 degrees per second.

- iii. Movement: Unobstructed +40 degrees to -90 degrees from horizontal.
- 4. Zoom: Lens: f/1.4 (f = 4.1-73.8 optical, 18 optical zoom, 4X electronic zoom).
- 5. Signal Format: NTSC.
- 6. Scanning System: 2:1 interlace.
- 7. Image Sensor: 1/4-inch interline transfer CCD.
- 8. Effective Pixels: 768 (H) x 494 (V).
- 9. Horizontal Resolution: > 470 TV lines.
- 10. Focus: Automatic with manual override.
- 11. Sensitivity: 0.02 lux at 1/4-second shutter speed.
- 12. Shutter Speed: Automatic (electronic iris)/manual - 1/4-1/10,000.
- 13. Iris Control: Automatic with manual override.
- 14. Electrical:
  - a. Input Voltage: 120 VAC.
  - b. Maximum Power Consumption: 50 VA per system.
  - c. Camera and Lens Voltage: 24 VAC.
- 15. Enclosures
  - a. NEMA 4X rated.
  - b. Maximum Wind Condition: Operational in 90 mph winds.
  - c. Material: Die-cast, extruded and sheet aluminum; stainless steel.
  - d. Operating Temperature: -40° to 122°F.

## B. Fixed Domed Network Camera Specifications

### 1. Overview

- a. Alarm Output
  - i. 1 Relay Contact
- b. AES
  - i. 1/1.75 to 1/10,000 (auto)
- c. Day/Night Mode
  - i. Yes
- d. Dimensions
  - i. 138 x 104 mm (5.43 x 4.09 in.)
- e. Firmware Upgrade
  - i. Flash memory for upgrade of camera firmware over the network
- f. Privacy Zones
  - i. Yes
- g. Scanning Mode
  - i. Progressive

- h. Security
  - i. User account with password protection and IP filter
- i. Sensitivity
  - i. 0.07 (color)/0.01 (BW), 0 Lux with IR illuminator ON, measured at 30 IRE
- j. Signal to Noise Ratio
  - i.  $\pm 50$  dB
- k. Tamper Detection
  - i. Yes
- l. Shutter WDR
  - i. On / Off
- 2. Alarm
  - a. Alarm In
    - i. 1 dry alarm contact
- 3. Audio
  - a. Bi-directional Audio
    - i. 1 Audio Line Input, G.711 a/ $\mu$ -law, AAC support + 1 Audio Line Output
- 4. Compliance & Certifications
  - a. USA
    - i. UL/cUL 60950-1, FCC47 CFR Part 15 subpart B / ICES-003
- 5. Connections & Communications
  - a. Ethernet
    - i. 10/100, IEEE 802.3, auto sensing 1 x RJ45
  - b. Network Protocol
    - i. TCP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, SSL, LDAP
  - c. Remote Configuration
    - i. via web browser or supported video management software
  - d. Supported Web Browser
    - i. Internet Explorer 10+, Firefox 50+, Chrome 55+
- 6. Environmental
  - a. Humidity

- i. 90% (non-condensing)
- b. Operating Temperature
  - i. -40°C to 50°C (-40°F to 122°F)
- c. Storage Temperature
  - i. -40°C to 60°C (-40°F to 140°F)

#### 7. Imaging & Optical

- a. Backlight Compensation
  - i. On / Off
- b. DSS
  - i. 1/7.5(6.25)~1/60(50) NTSC(PAL)
- c. Image Sensor
  - i. 1/2.9" BSI CMOS
- d. Lens Type
  - i. Varifocal 3.4-9mm, 42°-104° HFOV, F1.5, D/N, motorized auto-focus / auto-iris, P-Iris lens
- e. Mechanical IR Cut Filter
  - i. Yes
- f. Noise Reduction
  - i. 3D
- g. Sensor Resolution
  - i. 3840 x 2160
- h. White Balance
  - i. Auto / ATW / Manual / One Push

#### 8. IR Illumination

- a. Peak Emission Wavelength [nm]
  - i. 850.0

#### 9. IR Illuminator

- a. IR Distance
  - i. up to 30m (98 ft.)
- b. Angle of Illumination
  - i. Full 60°
- c. LED Type
  - i. high efficiency SMD

## 10. Measurement & Analysis

- a. Automatic Gain Control
  - i. Auto

## 11. Physical

- a. Enclosure
  - i. Indoor/Outdoor: IK7 rated vandal IP67
- b. Unit Weight
  - i. 0.82kg (1.8 lbs.)
- c. Bubble F-Stop
  - i. F0.0 - clear bubble
- d. Bubble Rating
  - i. IK10 vandal resistant polycarbonate

## 12. Power

- a. Input Voltage
  - i. 802.3af PoE
- b. Power Connection
  - i. PoE / RJ45
- c. Power Consumption
  - i. 8W / 12W with heater and IR

## 13. Video & Recording

- a. Rate Control
  - i. CBR, CVBR, VBR, MJPEG
- b. Resolution Range
  - i. Scalable from D1 to 4K
- c. Video Compression
  - i. Enhanced H.265 Main Profile + Enhanced H.264 Main/High/Baseline Profile + MJPEG
- d. Video Motion Detection
  - i. Yes
- e. Maximum Performance
  - i. H.264/H.265 30/25 FPS @ 4K (NTSC/PAL) or H.264/H.265 15/12 FPS @ 4K + 1080P + D1 (NTSC/PAL) or H.264/H.265 60/50 FPS @ 1080P + 30/25 FPS @ 720P + D1 (NTSC/PAL)
- f. SD Card Recording<sup>1</sup>



- i. microSDXC up to 128GB (Class 10)
- g. Video Bandwidth
  - i. Configurable between 64Kbps and 20Mbps

## C. Fixed Bullet Network Camera Specifications

### 1. Overview

- a. Alarm Output
  - i. 1 Relay Contact
- b. AES
  - i. 1/1.75 to 1/10,000 (auto)
- c. Day/Night Mode
  - i. Yes
- d. Privacy Zones
  - i. Yes
- e. Scanning Mode
  - i. Progressive
- f. Security
  - i. User account with password protection and IP filter
- g. Sensitivity
  - i. 0.07 (color)/0.01 (BW), 0 Lux with IR illuminator ON, measured at 30 IRE
- h. Tamper Detection
  - i. Yes
- i. Shutter WDR
  - i. On / Off
- j. View Port
  - i. IK7 vandal resistant polycarbonate

### 2. Alarm

- a. Alarm In
  - i. 1 dry alarm contact

### 3. Audio

- a. Bi-directional Audio
  - i. 1 Audio Line Input, G.711 a/μ-law, AAC support + 1 Audio Line Output

### 4. Compliance & Certifications

- a. USA
  - i. UL/cUL 60950-1, FCC47 CFR Part 15 subpart B / ICES-003

### 5. Connections & Communications

- a. Ethernet
  - i. 10/100, IEEE 802.3, auto sensing 1 x RJ45
- b. Network Protocol
  - i. TCP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, SSL, LDAP
- c. Remote Configuration

- i. via web browser or supported video management software
  - d. Supported Web Browser
    - i. Internet Explorer 10+, Firefox 50+, Chrome 55+
- 6. Environmental
  - a. Humidity
    - i. 90% (non-condensing)
  - b. Operating Temperature
    - i. -40°C to 50°C (-40°F to 122°F)
  - c. Storage Temperature
    - i. -40°C to 60°C (-40°F to 140°F)
- 7. Imaging & Optical
  - a. Backlight Compensation
    - i. On / Off
  - b. DSS
    - i. 1/7.5(6.25)~1/60(50) NTSC(PAL)
  - c. Image Sensor
    - i. 1/2.9" BSI CMOS
  - d. Lens Type
    - i. CB-3304-11-I: Varifocal 2.8-8.5mm, 36°- 103° HFOV, F1.2, D/N, motorized auto-focus / auto-iris, P-Iris  
CB-3304-21-I: Varifocal 9-22mm, 15°- 34° HFOV, F1.5, D/N, motorized auto-focus / auto-iris, P-Iris
  - e. Mechanical IR Cut Filter
    - i. Yes
  - f. Noise Reduction
    - i. 3D
  - g. Sensor Resolution
    - i. 2560 x 1440
  - h. White Balance
    - i. Auto / ATW / Manual / One Push
- 8. IR Illumination
  - a. Peak Emission Wavelength [nm]
    - i. 850.0
- 9. IR Illuminator
  - a. IR Distance
    - i. up to 30m (98 ft.)
  - b. Angle of Illumination
    - i. Full 60°
  - c. LED Type
    - i. high efficiency SMD
- 10. Measurement & Analysis
  - a. Automatic Gain Control
    - i. Auto
- 11. Physical
  - a. Enclosure
    - i. Indoor/Outdoor: IK7 rated vandal IP67

12. Power

- a. Input Voltage
  - i. 802.3af PoE
- b. Power Connection
  - i. RJ45

13. Video & Recording

- a. Rate Control
  - i. CBR, CVBR, VBR, MJPEG
- b. Resolution Range
  - i. Scalable from D1 to 4K
- c. Video Compression
  - i. Enhanced H.265 Main Profile + Enhanced H.264 Main/High/Baseline Profile + MJPEG
- d. Video Motion Detection
  - i. Yes
- e. Maximum Performance
  - i. H.264/H.265 30/25 FPS @ 4K (NTSC/PAL) or H.264/H.265 15/12 FPS @ 4K + 1080P + D1 (NTSC/PAL) or H.264/H.265 60/50 FPS @ 1080P + 30/25 FPS @ 720P + D1 (NTSC/PAL)
- f. SD Card Recording1
  - i. microSDXC up to 128GB (Class 10)
- g. Video Bandwidth
  - i. Configurable between 64Kbps and 20Mbps

D. Enclosures

- a. NEMA 4X rated.
- b. Maximum Wind Condition: Operational in 90 mph winds.
- c. Material: Die-cast, extruded and sheet aluminum; stainless steel.
- d. Operating Temperature: -40° to 122°F.

E. License shall be provided with each CCTV installation.

F. Cameras shall be compatible with DV-TEL network.

G. 1080p and 4K 180/360 Camera Specifications

1. A. Camera Features

- a. Image Sensor 1/2.8" BSI CMOS (x4 Each)
- b. Sensor Resolution 1920x1080 (x4 Each)
- c. Scanning Mode Progressive
- d. Sensitivity 0.02 (color) / 0 (BW)
- e. Lens Type Fixed 3.6mm, 92° HFOV, F2.0
- f. Automatic Electronic Shutter 1/1.75 to 1/10,000 (auto)
- g. Digital Slow Shutter (DSS) 1/7.5(6.25)~1/60(50) NTSC(PAL)
- h. White Balance Auto / ATW / Manual / One Push
- i. Automatic Gain Control (AGC) Auto
- j. Back Light Compensation On / Off
- k. Iris Control Auto Shutter
- l. Shutter WDR 120 db

- m. Noise Reduction 3D
- n. Tamper Detection Yes
- o. Privacy Zones Yes
- p. Video Motion Detection Yes
- q. Day / Night Mode Yes
- r. Mechanical IR Cut Filter Yes
- s. Signal to Noise Ratio (SNR) More than 50dB when AGC off

## 2. Video

- a. Compression H.265 main profile, H.264 main profile/high profile (MPEG-4 Part
- b. 10/AVC), Motion JPEG
- c. Maximum Performance 180 mode: H.264/H.265 30/25 FPS @ 3840x1440 + D1 (NTSC/PAL)
- d. H.264/H.265 20/20 FPS @ 3840x1440 + 1920x720 + D1 (NTSC/PAL)
- e. 360 mode: H.264 30/25 FPS @ 4K (NTSC/PAL)
  - i. or H.265 27/25 FPS @ 4K (NTSC/PAL)
  - ii. or H.264/H.265 15/15 FPS @ 4K + 1080P + D1 (NTSC/PAL)
- f. Analog Output 1 - composite video output BNC
- g. Resolution Range 180 mode: Scalable from D1 to 3840x1440 360 mode: Scalable
  - i. from D1 to 3840x2160
- h. Bandwidth Configurable between 64Kbps and 20Mbps
- i. Rate Control CBR, CVBR
- j. SD Card Recording 1 microSDXC up to 128GB (Class 10)

## 3. Audio

- a. Bi-Directional Audio 1 Audio Line Level Input, G.711 a/μ-law, AAC support, 1 Audio
- b. Line Level Out
- c. Audio Connections Terminal block

## 4. C. IR Illuminator

- a. Distance Up to 25 m (82 ft.)
- b. Angle of Illumination Full 60°
- c. Number of IR LEDs High efficiency SMD
- d. Peak Emission Wavelength (nm) 850

## 5. Network

- a. Network Protocols TCP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP,
- b. RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X,
- c. QoS, IPv4, IPv6, SSL, LDAP
- d. Ethernet 10/100, auto sensing, half / full duplex (RJ45)
- e. Remote Configuration Via web browser or supported video

- management software
  - f. Firmware Upgrade Flash memory for upgrade of camera firmware over the network
  - g. Supported Web Browser Internet Explorer 10+, Firefox 50+, Chrome 55+
  - h. Security Password protection, IP address filtering, HTTPS encryption,
  - i. IEEE 802.1X network access control, Digest authentication
6. Alarm
- a. Input / Output 1 Dry Alarm Contact In / 1 Relay Contact Out
7. Physical
- a. Enclosure Indoor/Outdoor: IK10 rated vandal IP67
8. Mechanical
- a. Bubble Rating IK10 vandal resistant polycarbonate
  - b. Bubble F-Stop F 1.0 - Smoked Bubble (Standard)
  - c. Pan / Tilt / Rotate 360 mode: Tilt 63° degrees (fixed) 180 mode: Tilt 45° degrees
  - d. synchronized down from horizon
9. Electrical
- a. Input Voltage 802.3at PoE+, 24 VAC
  - b. Power Consumption 24.9W with heater and IR On
  - c. Power Connector PoE / 2-pin terminal block
10. Environmental
- a. Operating Temperature -40° to 50° C (-40° to 122° F)
  - b. Storage Temperature -40° to 60°C (-40°F to 140°F)
  - c. Humidity 90% (non-condensing)

## 2.3 Camera Mounts and Hardware

- A. All mounting brackets shall be corrosion-resistant construction and shall be load rated to support camera, housing, and pan and tilt drive components and accessories specified herein. Mounting heads shall be adjustable.
- B. Building Exterior Mounting Types:
- 1. Parapet
  - 2. Fixed Wall Mount
- C. Building Interior Mounting Types:
- 1. Drop Ceiling
  - 2. Arm
  - 3. Flush Mount
- D. Pole or Post Mounting Types:

1. Steel
2. Wood

### **PART 3 – EXECUTION**

#### **3.1 INSPECTION**

- A. BIDDER shall examine the conditions under which the Work is to be installed and notify the COUNTY, in writing, of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected.

#### **3.2 EQUIPMENT INSTALLATION**

- A. Installation:
  1. Install in conformance with the requirements of National Electrical Code.
  2. Install all security equipment at the locations and in accordance with the manufacturer's recommendations.
  3. BIDDER shall ensure that adequate strain relief is provided in the installation of cameras to prevent premature damage to cables caused by continual flexing in pan/tilt applications.
  4. The CCTV System shall be installed and wired completely by BIDDER who shall utilize the services of a manufacturer-trained and authorized Security System Supplier.

#### **3.3 FIELD TESTING**

- A. After installation of the equipment, controls and all appurtenances, BIDDER shall field test the equipment for system operation and conformance to the specified performance parameters.
- B. BIDDER, under the observation of the COUNTY, shall provide the services of factory-trained technicians to perform the following:
  1. Check and approve the installation of all components of the CCTV monitoring system and all cable connections between various components prior to placing the components into operation.
  2. Conduct a complete system checkout and adjust cameras, check operational functions of all of the equipment supplied under this Contract. All problems encountered shall be promptly corrected to prevent any delays in start-up.
    - a. Check full range of travel for camera pan and tilt as well as speed of travel. Check shall be executed from system controller and shall include tilt up and down, pan right and left and preset.
    - b. Check full range of lens function, including iris open, close, focus far, near, zoom telephoto and wide angle.
  3. BIDDER shall provide all test equipment necessary to perform the testing during system checkout and testing.
  4. BIDDER shall be responsible for initial system operation and shall make any changes, adjustments or replacements of any or all components, within the warranty period, if required, until the equipment supplied performs satisfactorily as intended.

5. BIDDER shall furnish to the COUNTY certified copies of set-up and adjustment reports for all specified devices.
6. BIDDER shall furnish the COUNTY an installation and inspection report certifying that all equipment has been installed correctly and is operating properly. The report shall be signed by the authorized representatives of BIDDER and the system supplier.

## **SUMMARY OF WORK**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. BIDDER shall provide all labor, material, equipment and incidentals as directed by the COUNTY, specified and required to furnish, install, test and place into satisfactory operation a Security System CCTVs as specified herein. This system shall be comprised of a Closed Circuit Television (CCTV) Surveillance System.
- B. BIDDER shall employ the services of a Security System Supplier with proven experience in the field. Security System Supplier shall assume full responsibility for the selection of equipment and components required. Specifically this shall include defining the required system components, preparing detailed system schematics, interconnecting wiring diagrams, field debugging, calibrating, and configuring the system as well as instructing plant personnel on the care and use of the system.
- C. The CCTV system provided shall be turnkey system solutions, wherein each component is seamlessly integrated with the overall system. The CCTV System shall employ common controls communications protocol and video signal formats throughout.
- D. Section includes:
  - a. Work Covered by Contract Documents
  - b. Work by COUNTY
  - c. Work Restrictions

#### **1.2 WORK BY COUNTY**

- A. COUNTY will perform the following construction activities in connection with the Work at the Project site:
  1. Personnel security of work area shall be by the COUNTY.
  2. Electrical connections and controls shall be by the COUNTY.

#### **1.3 COORDINATION WITH UTILITIES**

- A. It is understood and agreed that BIDDER has considered in its bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for any delays, inconveniences, or damage sustained by him due to any interference from the said utility appurtenances or the operation of moving them.
- B. BIDDER shall abide by all rules and regulations governing work adjacent to existing

utilities.

- C. For new CCTV installations provide CAT 6 cable from CCTV to nearest Data Closet, coordinated with COUNTY.
- D. For existing CCTV installation provide new CCTV with using existing cable where possible and new CAT 6 cable where not possible. Coordinate work with COUNTY.

## **WORK RESTRICTIONS**

### **PART 1 - GENERAL**

#### **1.1 SITE RESTRICTIONS**

- A. Confine construction activities to the construction limits indicated on the Work Area. Do not disturb portions of the Project site beyond areas in which the Work is indicated.
- B. Keep driveways, loading areas, and entrances serving the Project site clear and available to the COUNTY, COUNTY's employees, other BIDDERS and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
  - 1. Schedule deliveries to minimize the use of driveways and entrances by construction operations.
  - 2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- C. Use of Existing Access Roads:
  - 1. BIDDER will be allowed to use the COUNTY's existing access roads.
  - 2. BIDDER shall clean existing access roads over which the BIDDER's vehicles travel. Cleaning shall be as directed by the COUNTY.

#### **1.2 MAINTENANCE AND PROTECTION OF TRAFFIC AND ACCESS**

- A. Where Work is performed adjacent to a roadway or in a parking area, provide and maintain barricades, fences, lights, warning signs, danger signals, and other precautionary measures for protecting persons, property, and the Work. Any barricades shall be visible at night.
- B. BIDDER shall post warning signs at all approaches to the Project site and at construction entrances. Only necessary or authorized vehicles, as determined by the COUNTY, shall be allowed to enter the work area. BIDDER is responsible for maintaining such warning signs and barricades as may be necessary or required for the safety of those employed in the Work or visiting the Project site.
- C. Access shall be maintained through all phases of work and shall be delineated by means of signs, cones and/or barricades.
- D. The BIDDER shall not restrict access to any roadway, driveway or access road by construction equipment or the storage of materials. Where direct access to a roadway, driveway or access road is not possible due to necessary construction operations, the BIDDER shall plan an alternate means of access for the COUNTY and submit such plans



to the COUNTY for approval before construction operations commence.

- E. BIDDER's responsibility for maintaining barricades, signs and/or cones, as appropriate, shall continue until the Work is accepted in accordance with the General Conditions.

### 1.3 NON-WORKING HOURS CONSTRUCTION NOISE LIMITS

- A. The maximum allowable sound levels generated by construction activities occurring outside of normal working hours (Monday to Friday, 7:00 a.m. to 6:00 p.m.) shall not exceed the following:
  - 1. 55 decibels (dBA) at a distance of 50 feet from the source.
- B. The BIDDER shall record sound levels generated by construction activities during non-working hours and provide documentation to the COUNTY on a daily basis. The COUNTY may direct the BIDDER to temporarily suspend construction activities if the allowable levels are exceeded until such time that the BIDDER has implemented sufficient remedies to the satisfaction of the COUNTY.

### 1.4 EMPLOYEE IDENTIFICATION

- A. Comply with COUNTY's security procedures and access restrictions at the Site throughout the Project. Comply with the following:
  - 1. Personnel Identification: All construction personnel and others associated with the Project shall wear at all times at the Site a badge bearing BIDDER's name, employer, employee's name and, as applicable, employee number.
  - 2. Vehicle Identification: While on-Site, all BIDDER vehicles, including employee vehicles, shall display vehicle identification tag in clearly visible location on the dashboard. Vehicle tag shall be issued by the COUNTY where applicable. Vehicle tag shall include the following information: Site name, BIDDER name, contract number, vehicle license plate number and state of issue, name and employer of vehicle owner, and vehicle owner contact telephone number.

## COORDINATION WITH COUNTY'S OPERATIONS

### PART 1 - GENERAL

#### 1.1 DESCRIPTION

- E. Scope:
  - 1. This section specifies requirements for coordination with COUNTY's operations during the Work, and provides requirements for security access necessary to complete the Work without impacting COUNTY's operations other than as allowed herein.
  - 2. BIDDER shall provide labor, materials, tools, equipment and incidentals as shown, specified and required to coordinate with COUNTY's operations during the Work.

**F. Coordination:**

1. BIDDER shall be responsible for all coordination and scheduling work with COUNTY once notified.

**G. Related Sections:**

1. Section 01 11 00, Summary of Work
2. Section 01 14 00, Work Restrictions
3. Section 28 00 05, Electronic Security System - CCTV

- H. Work shall be performed such that the COUNTY's facility remains in continuous, satisfactory operation during the Work. The Work shall be scheduled and conducted by the BIDDER such that it does not impede COUNTY's operations, create potential hazards to operating equipment and personnel, or reduce the site security.
- I. Work not specifically covered herein and in the referenced sections may, in general, be completed at any time during normal work hours, subject to the operating requirements described herein.

**1.2 GENERAL CONSTRAINTS**

- B. All operations of existing electrical switches, breakers, disconnects, and other electrical equipment shall be done by COUNTY, unless otherwise directed by the COUNTY. No shutdowns of electrical service shall occur without COUNTY's knowledge.

**1.3 HIGH SECURITY CONSTRAINTS**

- B. All operations of existing electrical switches, breakers, disconnects, and other electrical equipment shall be done by COUNTY, unless otherwise directed by the COUNTY. No shutdowns of electrical service shall occur without COUNTY's knowledge.

**1.4 COORDINATION WITH UTILITIES**

- A. It is understood and agreed that BIDDER has considered in its bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for any delays, inconveniences, or damage sustained by him due to any interference from the said utility appurtenances or the operation of moving them.
- B. BIDDER shall abide by all rules and regulations governing work adjacent to existing utilities.
- C. For new CCTV installations provide CAT 6 cable from CCTV to nearest Data Closet, coordinated with COUNTY.
- D. For existing CCTV installation provide new CCTV with using existing cable where possible and new CAT 6 cable where not possible. Coordinate work with COUNTY.

## UNIT PRICE SHEET

line no.	Material no.	Short Text	EXTENDED Text	Proposed Price
10	1046709	1080P NETWORK PTZ <b>DOMED</b> CAMERA	LATITUDE ENTERPRISE ONE CHANNEL LICENSE NEEDED	\$2,713.63
			PART NUMBER ON EXTENSION FORM (?) CP-6302-32-I	
20	1046710	1080P NETWORK FIXED DOMED CAMERA	LATITUDE ENTERPRISE ONE CHANNEL LICENSE NEEDED	\$470.16
			PART NUMBER ON EXTENSION FORM (?) CM-3202-11-I	
30	1046711	1080P NETWORK FIXED BULLET CAMERA	LATITUDE ENTERPRISE ONE CHANNEL LICENSE NEEDED	\$1,108.87
			PART NUMBER ON EXTENSION FORM (?) CB-6404-11-I	
40	1046714	4K NETWORK PTZ <b>DOMED</b> CAMERA	LATITUDE ENTERPRISE ONE CHANNEL LICENSE NEEDED	\$5,745.73
			PART NUMBER ON EXTENSION FORM (?) CP-6408-31-I	
50	1046715	4K NETWORK FIXED DOMED CAMERA	LATITUDE ENTERPRISE ONE CHANNEL LICENSE NEEDED	\$1,219.76
			PART NUMBER ON EXTENSION FORM (?) CM-6408-11-I	
60	1046716	4K NETWORK FIXED BULLET CAMERA	LATITUDE ENTERPRISE ONE CHANNEL LICENSE NEEDED	\$1,268.55
			PART NUMBER ON EXTENSION FORM (?) CB-6408-11-I	
70	1046717	CAMERA MOUNTS & HARDWARE - EXTERIOR		\$164.11
			PART NUMBER ON EXTENSION FORM (?) CX-ELBX-G3	
80	1046718	CAMERA MOUNTS & HARDWARE - INTERIOR		\$163.23
			PART NUMBER ON EXTENSION FORM (?)	
90	1046719	CAMERA MOUNTS & HARDWARE - POST/POLE		\$81.61
			PART NUMBER ON EXTENSION FORM (?) CX-POLE-G3	
100	1046720	CABLE CAT 6 ENET 10/100 IEEE 802.3...	AUTO SENSING 1 X RJ45	\$0.44
			PLENUM RATED	
101	1047007	PELCO ROOFTOP PARAPET MOUNT	MODEL NUMBER PP351	\$724.05
102	1047008	MNT PARAPT WALL 2-1/2 DIA SPEC	MODEL NUMBER PP350	\$468.24
103	1047009	WALL MOUNT BRACKET 1.5 INCH T	MODEL NUMBER CX-ARMX-G3	\$81.61
104	1047010	POLE ADAPTER FOR CX-XXXX-G3 MO	MODEL NUMBER CX-POLE-G3	\$81.61
105	1047011	IP CAMERA SURGE PROTECTOR	MODEL NUMBER IPPWR1	\$80.21
106	1047012	US UPOE INJECTOR FOR CX-63XX/C	MODEL NUMBER CP-POE-60W-US	\$243.95
110	1046721	LABOR	per hour	\$162.00
112	1048135	PROJECT/CONSTRUCTION MANAGEMNT	per hour	\$186.64
120	1047024	SHIPPING/FREIGHT		
130	1047334	360 SITUATIONAL AWARENESS CAMERA	COMPRISING OF 4X5MP SENSORS @ 20FPS IN H.264/H265 ZIPSTREAM AND MOTION JPEG PART # 1981-001 WITH LICENSE	\$1,738.69
140	1047335	T94A01D PENDANT KIT FOR Q60 & P55 SERIES	THREAD CEILING MOUNT PART# 5502-431	\$54.82
150	1047336	CATALYST 9300 24PT UPOE NETWORK ADVANT.	PART# C9300-24U-A	\$8,430.44
160	1047337	C9300 DNA ADVANT. 24PT 5YR TERM LIC	PART# C9300-DNA-A-24-5Y	\$4,417.90
170	1047338	AXIS 64GB CLASS 10 MICROSDXC	PART# 5801-951	\$43.53
180	1047339	T8129-E OUTDOOR POE EXTENDER	PART# 01148-001	\$325.79
190	1047341	LATITUDE ENTERPRISE ONE CHANNEL LIC	PART# LAT-NT-CHAN (LICENSE)	\$204.03
192	1048113	LATITUDE ELITE ONE CHANNEL LIC	PART# LAT-EL-CHAN (LICENSE)	\$215.68
200	1047342	Q6075-E PTZ CAMERA W/HDTV 1080P @60FPS,	40X OPTICAL ZOOM, OUTDOOR READY, IP66, IK10 & NEMA 4X RATED WITH LICENSE	\$3,369.34
			PART NUMBER ON EXTENSION ? 01752-004	
210	1047643	AXIS 5900-334 T8134 POE INJECTOR	60WATT MIDSPAN	\$159.81
220	1048114	CC-3103-01-I ARIEL QXGA CORNER CAMERA	2.1MM	\$989.01
230	1048115	01500-001 P3719-PL 15 MEGAPIXEL CAMERA	WITH FOUR VARIFOCAL LENSES	\$1,715.00
240	1048116	01473-001 T91867 POLE MOUNT FOR	FIXED DOME CAMERA	\$101.89
250	1048117	01513-001 T94N01D PENDANT KIT	FOR AXIS P3717-PL IP CAMERA, 1.5-INCH NPS THREAD	\$95.45
260	1048118	CNGE2FE8MSPOE+ MANAGED ETHERNET SWITCH	8 PORT 10/100TX+2 PORT 10/100/1000 BASE-TX/FX OVER POE	\$2,150.90
270	1048119	PS48VDC-5A 48VDC @ 5 AMP POWER SUPPLY	FOR THE CNGE2FE8MSPOE	\$492.58
280	1048120	ENCL OUTDR LOCKABLE POLE MOUNT ENCLOSURE	EXACT MODEL TBD	\$554.82