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## CCTV WORKING GROUP

### 1 PURPOSE OF REPORT

- 1.1 The purpose of this report is to update Members on the work of the CCTV Working Group

### 2 BACKGROUND

- 2.1 An initial report was considered by Full Council on 14<sup>th</sup> July 2020. The report identified that elevated levels of crime and ASB were evident in parts of the Wheatley Ward and Roche South Ward, and these locations could be considered for locations that would benefit from the installation of CCTV.
- 2.2 A consultant was appointed to assist determine a system specification, and costs for the proposed sites. The consultants finalised report was submitted in December 2020 and is attached as an appendix to this report.
- 2.3 Using the recommendations of the consultant, papers were supplied to both Rayleigh Town Council (RTC) and Rochford Parish Council (RPC) in January 2021. Proposals for each location differed due to physical and technical issues linked to both sites.

#### **Community Safety Fund**

- 2.4 The announcement of the Community Safety Fund (CSF) in the budget for 2021/22 provided for a funding stream of £100,000 to support community safety initiatives across the district. The purpose of the fund is twofold. Firstly, all Parishes have been invited to apply for a grant of £2,500 to support localised community safety initiatives, and secondly, the fund will cover up to 75% of capital costs only, associated with CCTV proposals.
- 2.5 Following the CSF announcement, revised papers and proposals were sent in June 2021 to both RTC and RPC reflecting the new capital funding conditions.
- 2.6 If the proposals are accepted by RTC and RPC, responsibility for planning applications, procurement, legislative compliance and governance would fall with those Councils. The Council would exercise no ongoing management or control function.
- 2.7 In the event that the proposals are not progressed by either RTC or RPC, any unspent monies from the Community Safety Fund will revert to the general fund.

### 3 CRIME AND DISORDER IMPLICATIONS

- 3.1 The statutory duties imposed on Rochford District Council in respect of crime and disorder reduction are set out under the Crime and Disorder Act 1998 (CADA)

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- 3.2 Sec 5 CADA 1998 sets out the bodies (known as “responsible authorities”) who are charged with the creation of a crime and disorder reduction strategy. The responsible authorities (as applicable to this authority area) are Essex Police, Rochford District Council, Essex County Council, Essex County Fire and Rescue Service, the National Probation Service and Castle Point and Rochford Clinical Commissioning Group.
- 3.1 Sec 6 CADA 1998 imposes a duty for the “responsible authorities” to formulate a strategy for the reduction of crime and disorder (including anti-social behaviour).
- 3.2 Sec 17 CADA 1998 establishes a duty on a local authority in the exercise of its various functions to do all that it reasonably can to prevent, crime and disorder in its area.
- 3.3 The legislation is not prescriptive in terms of what measures should be considered to reduce crime and disorder.

#### **4 RESOURCE IMPLICATIONS**

- 4.1 Capital funding amounting to £100,000 has been made available through the Community Safety Fund for the financial year 2021/22.
- 4.2 If both RTC and RPC accept the proposals, the total financial commitment towards CCTV capital expenditure will be £68,804, with remaining monies being available as grant funding to other Parishes within the financial year 2021/22.

#### **5 LEGAL IMPLICATIONS**

None arising out of this report.

#### **6 PARISH IMPLICATIONS**

- 6.1 Obligations to obtain planning permissions, unmetered power supply agreements, completion of procurement processes, compliance with GDPR and Surveillance Commissioner reporting requirements, in addition to day-to-day operational management and governance will fall to those Parishes that accept the proposal.

#### **7 EQUALITY AND DIVERSITY IMPLICATIONS**

- 7.1 An Equality Impact Assessment has been completed and found there to be no impacts (either positive or negative) on protected groups as defined under the Equality Act 2010

#### **8 RECOMMENDATION**

- 8.1 It is proposed that Council **RESOLVES**

- (1) to note the work undertaken by the CCTV working group,
- (2) to endorse the use of the Community Safety Fund to provide for capital funding in support of CCTV and other community safety initiatives.



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**Background Papers:-**

None.

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# Rochford DC

## Proposal to install a CCTV system in Rochford and Rayleigh

December 2020

**Rochford DC**  
**Proposal to install a CCTV system in Rochford and Rayleigh**

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## 1 Introduction

1.1 Eclipse Research was commissioned by Rochford DC to draw up a proposal for the installation of a CCTV system in Rayleigh and Rochford. The purpose of the system is to surveil the public areas where the risks of crime and antisocial behaviour have historically been at higher levels than elsewhere in Rayleigh and Rochford town centres.

1.2 The following proposes the locations and areas to be surveilled by permanent CCTV cameras, how they should be managed and operated and the estimated costs for the system's installation and operation. A brief operational requirement is described for each camera together with the most suitable location for their installation. This is followed by a proposal that the cameras are monitored live rather than passively, where incidents are identified and recorded images reviewed after the event.

1.3 The Information Commissioner advises that CCTV images should be encrypted in transit and at rest if they are transmitted across insecure media (wirelessly or the internet) or if images are recorded in insecure locations. This too is considered, below.

1.4 Maps showing the proposed locations of the cameras in Rayleigh and Rochford are appended, together with minimum specifications for the cameras, columns and transmission equipment to be installed in the field. First, where are the cameras to be installed and what are they to surveil?

## 2 Description of CCTV system

### Rayleigh town centre

2.1 It is proposed to install five, high-definition, pan, tilt and zoom, colour cameras in Rayleigh High Road and Eastwood Road. The areas to be surveilled were identified during a site visit with local councillors in December 2019 and represent the locations with the highest levels of crime and antisocial behaviour, historically.

2.2 The cameras are to be installed on lighting columns, the permission of Essex CC highways services, permitting. The camera locations have been selected to keep blank spots to a minimum, trees permitting. This will create a CCTV system that surveils the public areas of the High Street between Holy Trinity Church at one end and beyond Iceland towards the top of the hill, at the other end, also, along Eastwood Road. The cameras will connect to a central hub via licence-free wireless transmission; the hub will be a street-side cabinet housing a switch and connection to the control room in Chelmsford where they will be managed and operated.

### Locations of cameras to be installed

Camera number	Location	Operational requirements
1	Column 6, o/s 16 High Street (H Witham)	To surveil northern end of High Street as far as Holy Trinity Church, including public areas around public house, various restaurants and night club.
2	Column 15, o/s 61 High Street (Santander)	To surveil High Street and Bellingham Lane, including public areas around cash points and market.
3	Column 22, High Street junction with Crown Hill	To surveil High Street and Crown Hill, including public areas around war memorial, market, pubs and restaurants.
No camera	Column 28, High Street	Transmission hop, only
4	Column 37, 131 High Street (Opposite Library)	To surveil southern end of High Street to Eastwood Road, including public areas around library, shops, pubs and restaurants.
5	Column 10, Eastwood Road junction with Websters Way (outside M&S Food Hall)	To surveil Eastwood Road and Websters Way including public areas shops take-away food places.

### Rochford town centre

2.3 It is proposed to install three, high-definition, pan, tilt and zoom, colour cameras in Rochford. The areas to be surveilled were identified during a site visit with the Council's

community safety officer in November 2020 and represent the locations with the highest levels of crime and antisocial behaviour, historically.

2.4 The areas to be surveilled are the market square and railway station in West Street and Rochford Garden Way. Unlike that proposed for Rayleigh, this is not one comprehensive area and a local wireless network is not feasible. Rather, it is proposed to install ones that transmit via the 4G network that, whilst more expensive, will connect wherever there is a suitably strong signal from one or other of the mobile phone operators' network. As above, all cameras will connect to Chelmsford control room for management and operation.

Camera number	Location	Operational requirements
6	Column 8, 36 West Street (Market Square)	To surveil the market square and East / West along West Street, including the public areas around the market stalls, shops, cafes and take-aways.
7	Column 6, West Street, opposite Rochford Railway Station	To surveil East / West along West Street, including the public areas around Sainsbury's supermarket, access to the railway station and the bus stop.
8	Existing CCTV column, Rochford Garden Way junction with The Boulevard	To surveil the public areas around the housing premises in this location.

### CCTV columns

2.5 It is not permissible to mount the CCTV cameras and equipment on Essex County Council's street furniture, lighting columns, so flange-mounted, cabinet-base, CCTV columns will be required, complete with new UKPN unmetered power supplies.

2.6 In one location, Rochford Garden Way, a CCTV column was erected, previously, and this will be brought back into use. A new unmetered power supply will be required, however.

### Live-monitoring of CCTV images

2.7 It is proposed that the system is to be monitored 24/7 at a local authority CCTV control room in Essex. The benefits of live-monitoring of the cameras as opposed to passive or post-event review of recorded images is significant. Recent research has found that:

'Actively-monitored CCTV schemes evidenced significant reductions in crime, while passively-monitored schemes were not associated with reductions in crime. This argues against the use of CCTV as a stand-alone tactic. Rather than relying on



conspicuous camera presence, public safety agencies should employ active camera monitoring to proactively identify and address incidents of concern.’<sup>1</sup>

## 2.8 Further:

‘The effect of CCTV appears to be enhanced when it is installed alongside other complementary measures, raising its credibility as a source of increased risk to potential offenders.’<sup>2</sup>

2.9 In summary, the research shows that CCTV has been associated with a reduction in offending in car parks and town centres particularly when actively-monitored by trained operators but it needs to be supported by complementary community safety initiatives to be properly effective and, in town centres, policing strategies to respond to incidents.

### Chelmsford CCTV control room

2.10 In respect of this, it is proposed that the cameras are managed and operated by Chelmsford City Council. Chelmsford Council operates its control room from secure premises with trained, licenced CCTV operators 24-hours per day.

2.11 The control room will record all of the camera images received, viewing live images and reviewing and downloading recorded images, as required by the Police and other agencies. The control room operates an Essex Police radio, which allows it to both receive advice on and report incidents to the Police, as necessary.

2.12 Rochford Council can be assured that its cameras will be operated correctly, within the law and according to best practice and, that personal data (camera images) will be stored securely and reviewed and downloaded only when necessary.

### Encryption

2.13 In order to meet the Information Commissioner’s advice on the encryption of personal data stored or transmitted over insecure media, the following is to be noted:-

- a) All signals transmitted wirelessly are to be encrypted;
- b) All signals that are transmitted over the internet are to be encrypted and, if viewed at a remote location (ie not a secure CCTV control room), are to require a form of authentication for access;
- c) The system is to be capable of encrypting data to be exported for say, subject access requests, and a key is to be generated for accessing it, which is to be disclosed to the recipient separately; and

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<sup>1</sup> Piza, E., Welsh, B., Farrington, D. and Thomas, A. (2019). CCTV Surveillance for Crime Prevention: A 40-Year Systematic Review with Meta-Analysis. *Criminology & Public Policy*.

<sup>2</sup> Tilley N (1993) *Understanding Car Parks, Crime and CCTV: Evaluation Lessons From Safer Cities* London: Home Office Police Research Group

- d) Data recorded in remote locations is to be encrypted at rest, this does not apply to that recorded at the CCTV control room.

### 3 Summary and estimated costs

2.14 In summary, it is proposed to install permanent CCTV cameras in Rayleigh and Rochford that will surveil areas with a high incidence of crime and antisocial behaviour. In total five cameras are to be installed in Rayleigh town centre and three in Rochford surveilling East Street market square, railway station and a housing scheme.

2.15 The cameras in Rayleigh are to transmit wirelessly to a central hub, where they will be connected by leased fibre to the control room for operation and recording. The cameras in Rochford are more dispersed and cannot be connected wirelessly in the same manner. Rather, they will use the 4G network and connect to the control room by a broadband service.

2.16 All cameras will be managed and operated by trained and licenced operators at a secure, local authority CCTV control room. The estimated costs for the system, both for supply and installation and the annual charges, are shown below. Also, the estimated costs for the installation and operation of a 4G relocatable camera.

## Estimated costs for CCTV systems in Rayleigh and Rochford town centres (£)

	Number	Unit cost	Total capital	Total revenue
<b>Transmission</b>				
BT RS1000d leased fibre connection to Chelmsford control room (Raleigh to CCTV control room)	1	8750	8750	1200
<b>Rayleigh town centre</b>				
Cameras HIK 1080p PTZ dome and bracket	5	1000	5000	
Silvernet point-to-point 5GHz, 95Mb/s	6	1350	8100	
Cisco IE1000 4-channel switch	1	950	950	
<b>Rochford town centre</b>				
Cameras, Vemotion 4G, 1080p, PTZ dome, 31 days recording, IP67, 256AES encryption 4G transmission	3	4200	12600	
Maintenance and support	3	500		1500
Vemotion hosting	3	470		1410
4G SIM, unlimited data, 24 months, paid in advance; annual charge shown	3	280		840
Installation and commissioning - both town centres	6	550	3300	
<b>Columns</b>				
Altron 1545 cabinet-base camera columns 8m	7	3500	24500	
UKPN power 230V (UMS)	9	1500	13500	
Traffic management	8	650	5200	
Slimline column (for wireless hop)	1	3000	3000	
Equipment (Sarel) box	2	120	240	
<b>Chelmsford control room (estimates)</b>				
Flir licence fee to be added to system	8	100	800	
Commissioning onto control room systems (ONVIF)	1	450	450	
Vemotion integration	1	500	500	
Operation, live view, review and download, 24/7	1	10000		10000
Broadband at Chelmsford	1	600		600
Camera maintenance	5	150		750
<b>Total</b>			<b>86890</b>	<b>16300</b>
<b>Contingency @ 10%</b>			<b>8689</b>	
<b>Grand total</b>			<b>95579</b>	<b>16300</b>

## Relocatable camera estimated costs for supply, installation and relocation (£)

	Number	Unit cost	Total capital	Total revenue
<b>Supply of camera</b>				
Cameras, Vemotion 4G, 1080p, PTZ dome, 31 days recording, IP67, 256AES encryption 4G transmission	1	4200	4200	
Laptop for management, review and download of recorded images, if required	1	500	500	
<b>Sub-total</b>			<b>4700</b>	
<b>Installation / relocation of unit</b>				
Power supply UMS, if required	1	1500	1500	
Commando socket (weatherproof), if required	1	170	170	
Installation / relocation	1	160	160	
<b>Sub-total</b>			<b>1830</b>	
<b>Annual running costs</b>				
Maintenance and support	1	500	501	500
Vemotion hosting	1	470	471	470
4G SIM, unlimited data, 24 months, paid in advance; annual charge shown	1	280	281	280
<b>Sub-total</b>				<b>1250</b>

## Appendix A

### Minimum specifications for equipment to be supplied and installed

#### Camera columns

- 6m-8m cabinet-base column
- Flange-mounted
- Close fitting door
- High-security lock
- Wood back-board
- Power distribution via 13A sockets
- All electrical equipment to be housed in IP-rated waterproof enclosures
- Earthing points within cabinet and on door
- Convection venting with fire retardant filters
- Painted to colour as advised by the client

#### Cabinet, if required

- Close fitting door
- High-security lock
- Wood back-board
- Power distribution via 13A sockets
- All electrical equipment to be housed in IP-rated waterproof enclosures
- Painted to colour as advised by the client
- Convection venting with fire retardant filters
- Galvanised finish
- Earthing points within cabinet and on door

#### Cameras

- Anti-vandal dome
- Colour, pan tilt and zoom
- 360-degree, continuous rotation
- 1080p resolution
- IP67 (minimum)
- Power supplies to be housed in locked, metal, waterproof enclosure
- Dedicated CCTV column or lighting column mounted, as necessary
- Painted to colour as determined by the client
- ONVIF compliant
- 3-year warranty
- All cameras to be commissioned onto the CCTV control room VMS and recording systems (FLIR) for live view and review of recorded images by the control room operators
- Bracket

## 4G cameras and transmission equipment

- This is to be a permanent installation and integrated 4G relocatable, re-deployable or rapid deployment cameras units are not required
- Minimum camera specification, as above
- Encoder and 4G transmitter to be housed in the waterproof enclosure
- AES 256bit encryption for recording and transmission
- 31 days on-board recording at 25 images/s, 1080p resolution
- Low resolution transmission to control room 24/7
- All images received at control room to be recorded on control room NVR, for fast review
- High resolution recorded images to be downloaded from camera, as required
- Product VMS to be installed at control room review suite for review and download of high-resolution recorded images
- Cameras to be commissioned on to control room camera control system (FLIR) for selection, live view and review of recorded images by the control room operators
- Unlimited data SIM cards to be supplied with 24-month contract term
- To be hosted by supplier or other third party

## Wireless transmission equipment (5GHz)

- Integrated 12dbi antenna
- SNMP, preferred (simple management network protocol)
- AES 256bit encryption
- Multiple-input multiple-output with spatial multiplexing
- DFS (Dynamic Frequency Selection)
- TPC (Transmit Power Control)
- WEB management
- ONVIF Compliant
- Surge protected radio and PSU
- Up to 95Mbps throughput
- Network management software suite (FOC, preferred) to monitor all wireless elements in the network; also to monitor IP cameras.
- IP 66-rated
- Marine-grade pan tilt bracketry, not plastic mounting / coupling to wireless unit
- 802.11af PoE powered

## Switches (at edge)

- Environmentally hardened
- Ruggedised enclosure
- IEEE 802.1x security (authentication server)



**Appendix B**  
**Maps showing location of cameras**

**Rayleigh town centre**



**Rochford**

