

Correctional Service Canada
Technical Services Branch
Electronics Systems

Issue 1
November 18, 2015

STATEMENT
OF
TECHNICAL REQUIREMENTS

FOR THE ADDITION

of

STRIP AND V&C CCTV CAMERAS

at

COLLINS BAY INSTITUTION
(MEDIUM SECURITY)

Appendix C

Site Specific Requirements and System Layout

This Statement of Technical Requirements is approved by the Correctional Service of Canada for the addition of strip and V&C CCTV cameras at Collins Bay Institution (medium security) upgrade of the existing Hybrid CCTV System at Millhaven Institution.

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SITE SPECIFIC REQUIREMENTS

The contractor will provide the following equipment for the Main Strip, Health Care and the Visits and Correspondence areas at Collins Bay Institution:

1. Cameras:

The contractor must supply and install cameras to meet the standards and specifications detailed in this statement of work and the specific requirements detailed in ES/STD-0232 Electronics Engineering Specification – Fixed Network Colour Dome Camera detailed in Appendix F of this STR.

1.1. Camera #1

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing north. The camera will be set to “corridor mode”

1.2. Camera #2

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing south. The camera will be set to “corridor mode”

1.3. Camera #3

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing south. The camera will be set to “corridor mode”

1.4. Camera #4

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing north. The camera will be set to “corridor mode”

1.5. Camera #5

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing south. The camera will be set to “corridor mode”

1.6. Camera #6

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing north. The camera will be set to “corridor mode”

1.7. Camera #7

The contractor must supply and install a type 2 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing south. The camera will be set to “wide angle”. FOV shall capture the inmate canteen area (on the left side of the view as well as the strip control desk on the right side of the view)

1.8. Camera #8

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing south. The camera will be set to “corridor mode”

1.9. Camera #9

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing north. The camera will be set to “corridor mode”

1.10. Camera #10

The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing north. The camera will be set to “corridor mode”

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- 1.11. Camera #11
The contractor must supply and install a type 1 camera in corridor 101 at the location shown in Appendix E – map CBMC-1 Main Corridor. The camera will be ceiling mounted in the center of the corridor facing south. The camera will be set to “corridor mode”
- 1.12. Camera #12
The contractor must supply and install a type 4 camera in room 102 at the location shown in Appendix E – map CBA14-1 Hospital. The camera will be ceiling mounted in the north/west corner of the room facing the door to hallway 101.
- 1.13. Camera #13
The contractor must supply and install a type 2 camera in hallway 101 at the location shown in Appendix E – map CBA14-1 Main Corridor. The camera will be ceiling mounted above the double doors as shown on the map facing east.
- 1.14. Camera #14
The contractor must supply and install a type 2 camera in CBA1-1Room 144 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted above the security grille in the center of the wall facing east.
- 1.15. Camera #15
The contractor must supply and install a type 2 camera in CBA1-1Room 136 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted above the security windows of the V&C office (room 148) the camera will face north/west capturing the vending machines and doors to room 140 and 141.
- 1.16. Camera #16
The contractor must supply and install a type 2 camera in CBA1-1Room 136 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted in the south /west corner of the room. The camera will face north/east towards the V&C office windows.
- 1.17. Camera #17
The contractor must supply and install a type 2 camera in CBA1-1Room 136 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted in the north /east corner of the room. The camera will face south/west towards camera #16.
- 1.18. Camera #18
The contractor must supply and install a type 2 camera in CBA1-1Room 136 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted in the south /east corner of the room. The camera will face north/west.
- 1.19. Camera #19
The contractor must supply and install a type 2 camera in CBA1-1corridor 126 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted above the door to area 125. The camera will face west and be adjusted to “corridor mode”.
- 1.20. Camera #20
The contractor must supply and install a type 2 camera in CBA1-1Room 125 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted on the west wall above the windows. The camera will face east and will view both the south end of corridor 104A and barrier at the top of the strip.
- 1.21. Camera #21
The contractor must supply and install a type 2 camera in CBA1-1Room 125 at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted on the east wall above the windows. The camera will face west and will view both the south exit of corridor 126 and barrier at the top of the strip.
- 1.22. Camera #22
The contractor must supply and install a type 3 camera in CBA1-1room 101 (main entrance) at the location shown in Appendix E – map CBA1-1. The camera will be wall mounted above the inner vestibule doors. The camera will face south.

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2. NVUS Clients:

2.1. The contractor must provide 4 x 2RU clients to produce the video stream to the monitors from the Genetec VMS.

2.2. Each NVUS client provided will have the following attributes.

- 2.2.1. – EIA-310 Compliant rack mount chassis
- 2.2.2. – Intel Core i5-4570T 2.9GHz processor
- 2.2.3. – 8GB RAM DDR3 or better
- 2.2.4. – 2 x 10/100/1000Mbps Ethernet ports
- 2.2.5. – Intel HD Graphics 4600 adapter or better
- 2.2.6. – 120GB 2.5" SATA3 6Gb/s Solid State Drive or better
- 2.2.7. – 1 x DisplayPort or HDMI video ports
- 2.2.8. – will fit into an EIA 19" cabinet with no more than 24" depth.

2.3. Each monitor will receive video via an HDMI extender embedded into a single gang faceplate receiving power through the HDMI interface. Monoprice HDMI over CAT5E / CAT6 Extender Wall Plate (Pair) - Single Port (1P) or equivalent.

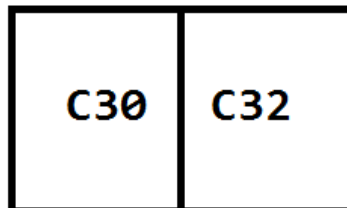
2.4. Client Installation Details:

2.4.1. The contractor must provide and install 2 clients into the existing equipment cabinet located in the electronic equipment room behind the strip control desk (CBB3-108). Both clients will be powered from the UPS supported circuits in the existing cabinet. Monitors will be flush mounted into the existing console at the strip control desk. The contractor must modify the existing console and relocate console equipment to accommodate the layout described in this statement of technical requirements.

2.4.1.1. Client #1 (type 2 client) will support one 27" LED monitor (monitor #1) that meets or exceeds the following:

- 2.4.1.1.1. Have a minimum resolution of: 1920x1080
- 2.4.1.1.2. Aspect Ratio: 16:9
- 2.4.1.1.3. Response Time: 5ms or better
- 2.4.1.1.4. Contrast Ratio: 1000:1
- 2.4.1.1.5. Input Connectors: D-Sub & HDMI
- 2.4.1.1.6. 178° / 178° Viewing Angle (Horizontal / Vertical)
- 2.4.1.1.7. VESA compliant mount

2.4.1.2. Monitor #1 will display 2 spot monitors, C30 (eye in the sky) and C32 (strip control PTZ).



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2.4.1.3. Monitor #1 will be equipped with a mouse to allow PTZ operation of the cameras on this monitor. The contractor must provide a wired USB mouse and the USB extender be mounted inside the console behind the monitor. (USB extender must be inaccessible to operators).

2.4.1.4. Client#2 (type 1 client) will support 2 x 27" LED monitors (monitors #2 & #3) that meet or exceed the following:

- 2.4.1.4.1. Have a minimum resolution of: 1920x1080
- 2.4.1.4.2. Aspect Ratio: 16:9
- 2.4.1.4.3. Response Time: 5ms or better
- 2.4.1.4.4. Contrast Ratio: 1000:1
- 2.4.1.4.5. Input Connectors: D-Sub & HDMI
- 2.4.1.4.6. 178° / 178° Viewing Angle (Horizontal / Vertical)
- 2.4.1.4.7. VESA compliant mount

2.4.1.5. Monitor #2 will display a 6 split screen in the following format.

1	2	3
4	5	6

2.4.1.6. Monitor #2 will be configured to display the following cameras.

- 2.4.1.6.1. Position #1 – Existing camera C10 (programs desk)
- 2.4.1.6.2. Position #2 – New camera C1 Titled "salad bowl north"
- 2.4.1.6.3. Position #3 – New camera C2 Titled "salad bowl south"
- 2.4.1.6.4. Position #4 – New camera C3 Titled "4 block south"
- 2.4.1.6.5. Position #5 – New camera C4 Titled "4 block north"
- 2.4.1.6.6. Position #6 – New camera C5 Titled "Parole Offices south"

2.4.1.7. Monitor #3 will display a 6 split screen in the following format.

7	8	9
10	11	12

2.4.1.8. Monitor #3 will be configured to display the following cameras.

- 2.4.1.8.1. Position #7 – Existing camera C42 (east strip entrance)
- 2.4.1.8.2. Position #8 – Existing camera C65(strip entrance 1)
 - rename to "west strip entrance 1"
- 2.4.1.8.3. Position #9 – Existing camera C66(strip entrance 2)
 - rename to "west strip entrance 2"

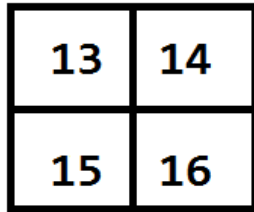
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- 2.4.1.8.4. Position #10 – New camera C9 Titled “fish bowl north”
- 2.4.1.8.5. Position #11 – New camera C10 Titled “segregation north”
- 2.4.1.8.6. Position #12 – New camera C11 Titled “segregation south”

The contractor will provide and install 2 clients (clients 3 & 4) into the CER equipment cabinet in the CER located in CBA1-B room B14B. The clients will be supported by existing circuits from the local CER UPS.

2.4.2. Client #3 (type 1 client) will be remotely connected for video only to Monitor #4. Monitor #4 will be mounted into the control post in CBA1-1 room 103A.

2.4.2.1. Monitor #4 will display a quad split screen in the following format.



- 2.4.2.2. Position #13 – New camera C22 titled “Visitor ID processing”
- 2.4.2.3. Position #14 – New camera C14 titled “V&C entrance”
- 2.4.2.4. Position #15 – New camera C21 titled “PFV door”
- 2.4.2.5. Position #16 – New camera C10 titled “Strip North”

2.4.3. Monitor #4 will be mounted to a ceiling mounted full articulated arm in the north/east corner of the control post.

2.4.4. Client #4 will be installed into the CCTV equipment cabinets in the CER and remotely connected to Monitor #5 to be located in the V&C office. The contractor will provide both keyboard and mouse access with Client #4 to the V&C office.

- 2.4.4.1. The provided Client will display up to 9 images on a single 27” monitor. The monitors will be fed video signal directly from the associated client via a video extension device.
- 2.4.4.2. The provided Client will be equipped with a mouse for PTZ control and/or display change or switching on/off of display of specific images on the monitor. All provided mouse devices will be USB wired via a USB extension device.
- 2.4.4.3. The provided Client will display live images and recorded video from cameras assigned to this client for up to 24hours.
- 2.4.4.4. The provided client will display the Genetec camera tree on the left side of the monitor and provide access to all related V&C cameras including cameras in areas CBA1-1 Rooms 114, 126 and 143.
- 2.4.4.5. No video extraction will be possible from this client.

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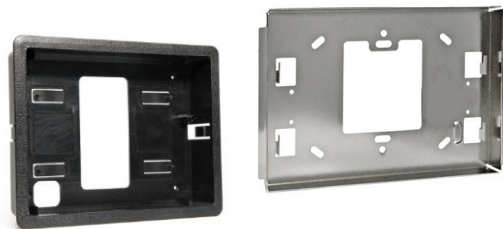
3. Strip Control Modifications:

3.1. The contractor must modify the existing strip control console to mount 3 new 16:9 monitors and relocate the door control touch screen and some outlets as detailed below.



- 3.1.1. Position #1 – door control touch screen will be relocated to position #2
- 3.1.2. Monitor in position #1 will be replaced with 16:9 monitor #1
- 3.1.3. Receptacles and faceplates to the left of #1 will be regrouped above the telephone
- 3.1.4. Intercom will be relocated to left panel mounting monitors 3&4
- 3.1.5. Monitor in position #3 will be replaced with 16:9 monitor #3
- 3.1.6. Monitor in position #4 will be replaced with 16:9 monitor #4

3.2. All new monitors will be flush mounted similar to existing monitors.



(Example of flush mount monitor brackets)

4. The contractor must expand the existing Genetec Omnicast 4.8 video archive

The contractor will provide and integrate the following equipment into the Genetec VMS archive located in CBA1-B Room B14B at Collins Bay Institution:

- 4.1. The Genetec archive is located in located in CBA1-B Room B14B. The provided archiver will include all necessary licensing for 20 additional cameras, including camera licenses, failover licenses and additional client licenses for living units client identified in section 2 of this document. Cameras 21 and 22 will be integrated into an existing archiver already in the archive.
- 4.2. The contractor must integrate the provided archiver, new clients and all cameras into the S100 FAAS onto new equipment monitoring maps to provide annunciation upon alarm conditions.

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5. Spares

5.1. The contractor must provide the following spares directly to the local ADGA maintenance workshop at least 2 weeks prior to scheduled acceptance testing.

5.1.1. – 1 x 27" monitor identical to monitors provided for this project.

5.1.2. – 1 x NVUS client new in box complete with power supply.

5.1.3. – 1 x AXIS 3364-VE 6mm CCTV camera.

5.1.4. – 1 x AXIS 3364-VE 12mm CCTV camera.