

VSS Installation - 70RFPW24QW8000002 - Denver Federal Center

Date: 10/14/2024

Base Proposal

SYSTEC101 will be providing the following:

Please note that based on client's request, SYSTEC101 will furnish and install a complete Video Surveillance System (VSS).

Site address : 1 Denver Federal Ctr, Denver, CO 80215

Addendum	Acknowledgement
Addendum - 1	Included
Addendum - 2	Included
Addendum - 3	Included
Addendum - 4	Included
Addendum - 5	Included
Addendum - 6	Included
Addendum - 7	Included
Addendum - 8	Included

Name of the System	Divisions	Price Break down
Video Surveillance System	-	\$ 274,542.80

Grand Total:	\$ 274,542.80
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Video Surveillance System

Scope of Work

Video Surveillance System:

1. Systec101 will furnish and install a new standalone, Network Video Management System (NVMS), IP cameras, client workstation, and all additional equipment and appurtenances necessary for a fully functional IP Video Surveillance System (VSS).
2. This proposal includes (25) new enterprise camera licenses, which are a one-time purchase. Please note that the enterprise smart plan is not included in this proposal.
3. We will furnish and install a total of (14) Avigilon 24MP multi sensor 270° outdoor cameras in corner mount as per the plan.
4. We will furnish and install a total of (2) Avigilon 24MP multi sensor 270° outdoor cameras in wall mount as per the plan.
5. We will furnish and install a total of (1) Avigilon 20MP multi sensor 360° outdoor surface mounted camera in the main entrance as per the plan.
6. We will furnish and install a total of (1) Avigilon 12MP fisheye indoor camera in ceiling mount as per the plan.
7. We will furnish and install a total of (7) Avigilon SMP Dome style indoor camera in ceiling mount as per the plan.
8. We will furnish and install a total of (1) Avigilon remote workstation which can operate upto four monitors.
9. All cameras will be mounted using appropriate supporting mounting kits.
10. We will furnish and install a total of (25) Cat 6A shielded plenum cables (blue) to (25) camera outlets.
11. Each camera outlet will get (1) Cat 6A shielded jack (blue) on a 2-port surface mount box (white).
12. All outdoor cameras will be using manufacturer's cover to ensure weatherproofing.
13. All camera angles and adjustments shall be reviewed with the customer before completion for acceptance.
14. J-Hooks, double expansion anchors and threaded rods will be installed as required to support traversal of the cable bundle.
15. All cabling will be secured using velcro, tie-wraps and other necessary supporting material.
16. We will provide all necessary cables and programming to attain complete functionality as intended per design.
17. All empty ports on faceplates will be covered using blanks.
18. We will provide adequate firestop putty and sealant for cable penetration and cable travel.

MDF/IDF's buildout (TE-1-1786, TE-1-NW, TE-1-NE, TE-1-SC, TE-1-SW, TE-1-SOC):

1. We will furnish and install (1) Tripp-lite rack enclosure cabinet, 24U (black) at MDF (TE-1-1786).
2. We will furnish and install (5) Tripp-lite wall-mount rack enclosure Cabinet, 12U (black) in IDF's (TE-1-NW, TE-1-NE, TE-1-SC, TE-1-SW, TE-1-SOC).
3. We will furnish and install (1) 24-port shielded modular flat patch panel, 1RU (black) and strain relief bar rear of the patch panel at each MDF/IDF's. All Cat 6A data cables for camera outlets will be terminated in these newly installed patch panels.
4. We will furnish and install a total of (6) 1U horizontal cable manager (dual-sided) (black).
5. We will furnish and install (1) Tripp-lite SmartPro Line-Interactive Sine Wave UPS, 6U, 208/120V 5kVA 4kW at each MDF/IDF's.
6. We will furnish and install (1) Avigilon 5th generation 2U rack mount Network video recorder, 160TB at MDF (TE-1-1786).
7. We will furnish and install (1) Aruba 2930M 24G PoE+ with 1-slot network switch at each MDF/IDF's.
8. We will furnish and install (1) Aruba 3810M 16SFP+ 2-slot aggregation switch at MDF (TE-1-1786).
9. We will furnish and install (1) Veracity TIMENET Pro Master NTP Time Server with Antenna with client workstation.
10. We will furnish and install (1) Avigilon ACC-Series Matrix Kbd USB Surveillance Joystick with client workstation.
11. We will furnish and install (1) Avigilon remote monitoring workstation for up to 4 monitors at workstation.
12. We will furnish and install (1) Avigilon Unity 16:9 - 43" 4K UHD, LCD Monitor with wireless keyboard and mouse combo for client workstation.
13. We will furnish and install (1) Eclipse rackmount 17" LCD with Keyboard and Touch Pad with 32-Port KVM, 1U with 3-User in MDF (TE-1-1786).

Common:

1. All patch panels will be provided with a strain relief bar.
2. All cabling will be secured using velcro, tie-wraps and other necessary supporting material.

Backbone cabling:

1. We will furnish and install a total of (5) 6-strand tight buffered multimode (OM4) indoor/outdoor plenum rated fiber optic cable runs from MDF (TE-1-1786) to IDF's (TE-1-NW, TE-1-NE, TE-1-SC, TE-1-SW, TE-1-SOC). The fiber shall terminate on MDF (TE-1-1786) end in a 4U fiber enclosure with LC connectors in a 6F (OM3/OM4) duplex LC adapter panel and in IDF's (TE-1-NW, TE-1-NE, TE-1-SC, TE-1-SW, TE-1-SOC) end in a 1U fiber enclosure LC connectors in a 6F (OM3/OM4) duplex LC adapter panel. We will also provide LC-LC duplex (OM4) patch cables, 1M on both ends.
2. We will provide all necessary fiber optic cabling hardware and equipment.

Common:

1. SYSTEC101 will install, terminate, test and label all the cables provided above.
2. All patch panels will be provided with a strain relief bar.
3. All labeling will be machine printed.
4. All the penetrations made for the installation of telecommunication cables will be firestopped using putty and sealant.
5. All terminations and testing will be done as per TIA/EIA/BICSI standards.
6. We will provide the Owner with closeouts (test results and as-builts) at the end of the project.

Scope of work by others:

1. All 110 VAC, conduit, coring, stub-ups, single device cover, junction boxes, and structural reinforcement.
2. Adequate on-site storage will be provided.
3. Furnishing and installation of TV's, WAP system, access control system, intrusion detection and intercom system.
4. Furnishing and installation of network equipment (switches, SFPs, uplink patch cords and servers) and ISP link (firewall, routers and demarc extension).
5. Furnishing and installation of HVAC and electrical systems in the IDF/MDF Room.
6. Furnishing and installation of Empty conduits and stub up conduits.
7. Furnishing and installation of fire alarm systems.

Qualifications:

1. **Due to extreme price fluctuations, we can only hold the material pricing for 90 days. Any material price hikes after 90 days will be borne by the client.**
2. If required, stub ups, conduits, raceways and coring are to be provided by the customer.
3. Pricing does not include any wiremold raceways, power poles, PDU's or any scope of work related to security, networking equipments.
4. SYSTEC101 must have proper access to all areas necessary to complete the project in a timely fashion.
5. No cutover, ISP cabling and copper backbone cabling is included in this proposal.
6. Based on General - Panduit (Mini-com) cabling solution.
7. Any additional labor or material required beyond the scope of this proposal will be done on a change order, signed by a customer representative.
8. Conduits, back boxes and pull boxes should be made ready prior to cabling installation.
9. Uplinking the entire network using active electronics by others. We will only provide empty network infrastructure, powering the network using network equipment and routers, and connecting them to ISP link is responsible by owner or ISP.
10. No copper backbone cabling is included in this proposal.
13. This proposal includes prevailing wage rate.
14. **The ladder racks, grounding & bonding, telecommunications grounding busbars and fire rated plywood backboard at MDF/IDF's end to be existing one. If newly required, a new changed order will be proposed.**
15. **No conduit and back box will be provided. It should be furnish and installed by the electrical contractor. We will be not responsible for it.**

VSS Installation

Equipment and Labor

Part Number	IP Cameras and Mounting accessories	Quantity	Material Price	Labor Cost	Unit Price	Ext.Price
20C-H5A-4MH	Avigilon 20MP multi sensor camera 4x5 WDR, indoor/outdoor, 360 FOV	1	\$ 2,757.00	\$ -	\$ 2,757.00	\$ 2,757.00
H5AMH-AD-DOME1	Avigilon Outdoor surface mount adapter for H5A multisensor (white)	1	\$ 199.28	\$ -	\$ 199.28	\$ 199.28
24C-H5A-3MH	Avigilon 24MP multi sensor camera 8x3 WDR, indoor/outdoor, 270 FOV	16	\$ 2,651.00	\$ -	\$ 2,651.00	\$ 42,416.00
WLMT-1001	Avigilon wall mount arm for H5A multisensor cameras (white)	16	\$ 52.00	\$ -	\$ 52.00	\$ 832.00
H5AMH-AD-PEND1	Avigilon NPT pendant adaper for H5A multisensor cameras (white)	16	\$ 121.32	\$ -	\$ 121.32	\$ 1,941.12
CRNMT-1001	Avigilon corner mount for H5A multisensor cameras (white)	14	\$ 145.00	\$ -	\$ 145.00	\$ 2,030.00
12.0W-H5A-FE-DO1-IR	Avigilon 12MP fisheye camera, WDR, indoor/outdoor	1	\$ 1,330.42	\$ -	\$ 1,330.42	\$ 1,330.42
5.0C-H5SL-DO1-IR	Avigilon 5MP outdoor IR IP dome camera	7	\$ 590.01	\$ -	\$ 590.01	\$ 4,130.07
H4SL-MT-DCIL1	Avigilon ceiling mount bracket for H5SL cameras (white)	7	\$ 35.39	\$ -	\$ 35.39	\$ 247.73
H5AMH-DC-COVR1	Avigilon bubble cover for H5A multisensor cameras (clear)	17	\$ 87.98	\$ -	\$ 87.98	\$ 1,495.66
ACC7-ENT	Avigilon enterprise edition camera license (smart plan not included)	25	\$ 316.51	\$ -	\$ 316.51	\$ 7,912.75
Part Number	Cabling, Termination, Racks, Server, Switches and accessories	Quantity	Material Price	Labor Cost	Unit Price	Ext.Price
7131786	General Cat 6A U/FTP 4-pair shielded plenum cable (blue) (per ft)	5000	\$ 1.22	\$ -	\$ 1.22	\$ 6,120.00
CJS6X88TGBUY	Panduit Mini-com Cat 6A shielded jack (blue)	25	\$ 24.08	\$ -	\$ 24.08	\$ 602.10
CJS6X88TGY	Panduit Mini-com Cat 6A shielded jack (black)	25	\$ 24.08	\$ -	\$ 24.08	\$ 602.10
CBX2WH-AY	Panduit Mini-com 2-port surface mount box (white)	25	\$ 7.15	\$ -	\$ 7.15	\$ 178.80
CMBWH-X	Panduit Mini-com blanks (white)	25	\$ 0.60	\$ -	\$ 0.60	\$ 15.00
STP6X3BL	Panduit Cat 6A shielded patch cord 3ft, (black)	65	\$ 23.51	\$ -	\$ 23.51	\$ 1,528.02
CP24BLY	Panduit Mini-com 24-port shielded modular flat patch panel, 1RU (black)	6	\$ 63.31	\$ -	\$ 63.31	\$ 379.87
WMPSE	Panduit PatchLink 1U horizontal cable manager (dual-sided) (black)	6	\$ 87.89	\$ -	\$ 87.89	\$ 527.33
SRB19BLY	Panduit strain relief bar	6	\$ 24.68	\$ -	\$ 24.68	\$ 148.10
SR24UB	Tripp-lite rack enclosure cabinet, 24U (black)	1	\$ 1,162.94	\$ -	\$ 1,162.94	\$ 1,162.94
SRW12US	Tripp-lite wall-mount rack enclosure Cabinet, 12U (black)	5	\$ 557.48	\$ -	\$ 557.48	\$ 2,787.42
SM5000RT3UTAA	Tripp-lite SmartPro Line-Interactive Sine Wave UPS, 6U, 208/120V 5kVA	6	\$ 5,241.59	\$ -	\$ 5,241.59	\$ 31,449.53
NVR5-PRM-160TB-S19-NA	Avigilon 5th generation 2U rack mount Network video recorder, 160TB	1	\$ 60,736.00	\$ -	\$ 60,736.00	\$ 60,736.00
JL320A	Aruba 2930M 24G PoE+ with 1-slot switch	6	\$ 1,812.46	\$ -	\$ 1,812.46	\$ 10,874.74
JL075A	Aruba 3810M 16SFP+ 2-slot switch	1	\$ 6,000.00	\$ -	\$ 6,000.00	\$ 6,000.00
POE-INJ2-60W-NA	Avigilon Unity 60W single-port PoE Injector	25	\$ 177.00	\$ -	\$ 177.00	\$ 4,425.00
VTN-TN-PRO	Veracity TIMENET Pro Master NTP Time Server with Antenna	1	\$ 732.10	\$ -	\$ 732.10	\$ 732.10
ACC-USB-JOY-PRO	Avigilon Unity ACC-Series Matrix Kbd USB Surveillance Joystick	1	\$ 1,093.25	\$ -	\$ 1,093.25	\$ 1,093.25
RM7-WKS-4MN-NA	Avigilon remote monitoring workstation for up to 4 monitors	1	\$ 3,800.00	\$ -	\$ 3,800.00	\$ 3,800.00
M4K43-G2-NA	Avigilon Unity 16:9 - 43" 4K UHD, LCD Monitor	1	\$ 1,694.00	\$ -	\$ 1,694.00	\$ 1,694.00
MK270	Logitech Wireless Keyboard and Mouse Combo (black)	1	\$ 27.60	\$ -	\$ 27.60	\$ 27.60
ER1-17N32-Cat6-M3X-IP	Eclipse rackmount 17" LCD with Keyboard and Touch Pad with 32-Port KVM, 1U with 3-User (3 Active) [1 x Local, 1 x Remote, 1 x IP]	1	\$ 4,251.60	\$ -	\$ 4,251.60	\$ 4,251.60

Part Number	Backbone Cabling	Quantity	Material Price	Labor Cost	Unit Price	Ext.Price
006T8P-31191-29	corning 6-strand tight buffered multimode (OM4) indoor/outdoor plenum	4000	\$ 2.59	\$ -	\$ 2.59	\$ 10,368.00
CCH-CP06-E4	Corning 6F (OM3/OM4) duplex LC adapter panel	10	\$ 91.08	\$ -	\$ 91.08	\$ 910.80
95-050-99-X	Corning (OM3/OM4) LC Connectors	60	\$ 21.47	\$ -	\$ 21.47	\$ 1,288.08
CCH-01U	Corning 1U fiber enclosure	5	\$ 323.94	\$ -	\$ 323.94	\$ 1,619.70
CCH-04U	Corning 4U fiber enclosure	1	\$ 490.80	\$ -	\$ 490.80	\$ 490.80
050502Q5120001M	Corning OM4 LC-LC duplex patch cord, 1M	40	\$ 31.12	\$ -	\$ 31.12	\$ 1,244.64
J9150D	HPE Aruba 10GBASE SFP LC MMF transceiver module	10	\$ 20.40	\$ -	\$ 20.40	\$ 204.00
Part Number	Supporting Materials	Quantity	Material Price	Labor Cost	Unit Price	Ext.Price
FS200	STI 2" Fire stop sleeve	5	\$ 61.14	\$ -	\$ 61.14	\$ 305.70
FS400	STI 4" Fire stop sleeve	1	\$ 131.33	\$ -	\$ 131.33	\$ 131.33
SSP100	Firestop putty	15	\$ 51.30	\$ -	\$ 51.30	\$ 769.50
SSS100	STI Fire barrier sealant	6	\$ 22.50	\$ -	\$ 22.50	\$ 135.00
ICCMSJHW44	ICC 2" Batwing J-hook	250	\$ 3.96	\$ -	\$ 3.96	\$ 990.00
1700-1PK-BB40	3M Electric tapes	12	\$ 3.60	\$ -	\$ 3.60	\$ 43.20
30987	3/4" Velcro (75ft)	3	\$ 33.48	\$ -	\$ 33.48	\$ 100.44
PLT3I-C	Panduit Tie wraps (100/bag)	4	\$ 32.52	\$ -	\$ 32.52	\$ 130.08
N/A	Labeling kits	1	\$ 162.00	\$ -	\$ 162.00	\$ 162.00
N/A	Miscellaneous cost	1	\$ 2,400.00	\$ -	\$ 2,400.00	\$ 2,400.00
N/A	32' Scissor Lift Rental for 1 Week includes pickup and drop	1	\$ 882.00	\$ -	\$ 882.00	\$ 882.00
Part Number	Labor	Quantity	Material Price	Labor Cost	Unit Price	Ext.Price
N/A	Labor for completing the stated Scope of Work	516	\$ -	\$ 85.00	\$ 85.00	\$ 43,860.00
N/A	Programming	32	\$ -	\$ 85.00	\$ 85.00	\$ 2,720.00
N/A	Project Management and Handling Charges	16	\$ -	\$ 85.00	\$ 85.00	\$ 1,360.00

Total Equipment :	\$ 226,602.80
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Tax Exempt	0.00% \$ -
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Total Labor:	\$ 47,940.00
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Grand Total :	\$ 274,542.80
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Purchase Authorization

Date