



Project Estimate

Date Prepared 5/12/2017

*Estimate is Valid for 30 Days from the above date

Prepared for: Montague Town Hall
1 Avenue A
Turner Falls, MA 01376

Project Location: Town Hall

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Meeting Room Camera and Audio Upgrades - Phase 1	
Project Description:	<p>Scope of work:</p> <ol style="list-style-type: none"> 1. Install locking wall rack in room and install conduit from ceiling to rack – Pull all new AV equipment wiring to this rack 2. Pull new SDI and Cat6 wire to 6 possible camera locations (current and future) 3. Install 4 new HD-PTZ Cameras on walls and locations TBD 4. Pull wire to 8 microphone locations for microphones 5. Install PTZ camera controller for control of 4 new cameras and future possible cameras – Program to new cameras with pres 6. Test and tune audio and video 7. Provide 1 day of training with staff on system and 1 come back for additional training as needed <p>Notes</p> <ol style="list-style-type: none"> 1. All wiring will be professionally ran in conduit or above ceiling – no wire will be exposed 2. Call cameras will be wired back to rack and switcher for control and signal 3. System will allow for future upgrades or Phase 2 upgrades

Time Frame TBD

*Time Frame refers to the full cycle from project approval to completion

Materials

Description	Quantity	Price	Total	Manufacturer Warranty (if applicable)
Base Equipment				
Middle Atlantic DWR-16-22 – Locking wall rack for equipment	1	\$689.00	\$689.00	
Middle Atlantic LVFD-16 – Locking Vented Door for Rack	1	\$275.00	\$275.00	
Power Strip for Rack - Vertical, surge protected	1	\$150.00	\$150.00	
Conduit from rack to ceiling	1	\$50.00	\$50.00	
SDI Cabling	1	\$500.00	\$500.00	
Cat6 Cabling	1	\$250.00	\$250.00	
Audio 9451 Cabling	1	\$250.00	\$250.00	
Rack Shelves, blanks and assorted install hardware (wireties, screws, labels, etc)	1	\$50.00	\$50.00	
Custom Interface Panel	1	\$250.00	\$250.00	
Connects the Data-Video Switcher to the rack with custom cabling in tech-flex wrap between panel and switcher				
Panel will have:				
▪ 6 SDI Connectors for Cameras				
▪ 2 HDMI Connectors				
▪ 2 Audio Connectors				
▪ Ethernet and Spare Lan				
▪ 2 Spare SDI Connectors for PGM				
		Subtotal	\$2,464.00	
Cameras				
PTZ Optics 12x SDI Cameras Gen 2 in Grey	4	\$1,799.00	\$7,196.00	
PTZ Optics Wall Mounts	4	\$109.00	\$436.00	



PTZ Optics Joystick IP to control Cameras and Presets (controls up to 8 cameras)	1	\$799.00	\$799.00
Netgear 24 Port POE Plus POE and IP Switch to Power and Control Cameras (powers camera over POE and control signal over POE)	1	\$450.00	\$450.00
		Subtotal	\$8,881.00

Audio and Microphone Upgrades

Shure MXA910 Ceiling microphone for tables and members speaking	1	\$4,000.00	\$4,000.00
Shure MX310 ceiling microphone over audience to pick up public speaking	1	\$999.00	\$999.00
RDL Ethernet to Audio adaptor for breaking out microphone audio to recording	1	\$250.00	\$250.00
Cat6 wire - 1000ft blue	1	\$225.00	\$225.00
		Subtotal	\$5,474.00

Total Material Cost **\$16,819.00**

Installation

Number of Days	4
Number of Technicians	2 (junior/senior)

Total Installation Cost **\$4,448.00**

Tuning, testing, and training

Number of Days	1
Number of Technicians	1.5 (1/2 day to return at later date)

Total Cost **\$1,068.00**

Project Subtotal **\$22,335.00**

CT Sales Tax (if Applicable) **\$0.00**

Project Total **\$22,335.00**