

**TO: Honorable Mayor and City Council**  
**FROM: Mike Gesme, PEG Access Coordinator**  
**SUBJECT: Council Chambers Technology Updates**  
**MEETING DATE: June 19, 2018**

## **BACKGROUND**

The audio/visual technology in the Council Chambers at City Hall is showing its age. Components have begun to fail, and the system does not support current formats. In particular, we have lost control over microphone volume, the document camera and laptop inputs are limited to a low resolution, and the projector often requires the room lights to be turned off.

After reviewing our needs with two companies, I recommend we move forward with the attached proposal from EPA Audio Visual. The proposal includes the equipment, installation labor, and programming for the following:

- Brighter, widescreen projector
- High definition document camera
- Digital laptop connection to support modern devices
- Updated Crestron control system to manage all devices
- Speakers above Council area for voice reinforcement
- Individual control over microphone levels
- Clean up installation of 4 side table microphones

This updated presentation equipment will also integrate with our recently upgraded production and broadcast system in the cable television studio.

Funding for this project would come from the cable television fund.

The Cable Commission has reviewed the proposal and recommends approval.

## **REQUESTED COUNCIL ACTION**

I respectfully request a motion to approve the EPA Audio Visual proposal.

PROJECT  
PROPOSAL

Your Space... Our Technology



**Council Chambers**

**Audio Visual Upgrade**



7910 State Highway 55

Rockford, MN 55373

763-477-6931 • 800-362-3674

*www.epaaudio.com*

*This Proposal Compiled for:*

**Mike Gesme**  
Council Chambers  
Audio Visual Upgrade

City of Cannon Falls  
918 River Road  
Cannon Falls, MN 55009

*Presented by:*

**Jay Shearer**  
EPA Regional Sales Manager

**Justin Dorion**  
Designer/Programmer

*May 21, 2018*

City of Cannon Falls  
Mike Gesme  
918 River Road  
Cannon Falls, MN 55009

May 21, 2018

Subject: Council Chambers  
*City of Cannon Falls - Mike - Council Chambers - 052118*

Based on the information given and site visit, we have prepared this proposal to install the audio visual system at City of Cannon Falls. This proposal includes the scope of work, system costs, standard warranty, scheduling and implementation.

EPA is a premier communication technology integration firm. We specialize in design and design/build A/V solutions as well as A/V technology upgrade solutions for integrated multimedia presentation systems, audio systems, distributed media, video conferencing and portable systems.

## Scope of Work

EPA Audio Visual, Inc. will integrate a new digital video system in the council chambers. The system will be based around Crestron's 3-Series® 4K DigitalMedia™ System 150

### ***Council Chambers:***

**Video:** A new 5000 lumen WUXGA lamp free laser projector will be installed and display onto a widescreen format, recessed electric screen. Video sources for presentation system will consist of an analog VGA w/audio and HDMI connection at the podium, as well as a digital HD document camera. An HDMI to SDI converter will be used to send a video feed of the presentation sources to the Tricaster for broadcasting; this will be the same feed that is sent to the projector. An auxiliary feed at the rack location will allow for a HDMI connection for cable TV feed etc.

**Audio:** The existing 12 microphones will be re-used, the two on each side of the dais will get an XLR input plate to allow all 12 channels to be controlled independently, and clean up cabling. Two new audio DSP's will handle and route the program sources and all microphones. The audio signals will then get amplified via a 4-channel amplifier and distributed to the existing 9 ceiling speakers. Two of the speakers on the outer edge of the audience seating will be re-located by the council members to allow for speech reinforcement.

**Control:** A new digital Crestron switcher/processor and 10" touch panels will act as the control operation of the room. This will allow users to easily switch video sources, power the projector on/off, raise and lower the projector screen, and control microphone levels. Both panels located at the dais and control room will mirror each other for simple operation in either space.

**Equipment Rack:** The new equipment will be housed in the existing 24-space rack.

*A general contractor, hired by the owner, will be required to provide the necessary AC power requirements at the ceiling mount location for the projector and electric screen as well as be responsible for the mounting of the electric screen prior to EPA's arrival.*

*EPA is not responsible for the functionality of existing equipment or faulty infrastructure incorporated into the upgraded system.*

Construction and electrical requirements necessary to complete this room are not included in the proposal. A general and electrical contractor may have to be contracted by the owner.

## System Implementation

EPA provides a turnkey audio visual system, including equipment, materials, testing, training and warranty. Installation includes engineering, labor, and hardware for display, audio, video, control systems, equipment rack, equipment mounting, plates, panels, connectors and cables. The following items are dependent on project requirements:

### Application Engineering:

- Meet with the client's representatives to answer questions during proposal and project reviews.
- Develop and review equipment lists and scope of work to ensure functionality of proposed system.
- Advise conduit and electrical requirements when applicable.
- Review architectural, electrical and millwork drawings.
- Recommend or review acoustical changes or requirements.
- Provide speaker placement for proper coverage.

### Project Management:

- Meetings with client's technical/contract representatives to answer questions and/or resolve issues.
- Coordinate installation process, system implementation, monitoring and submittal review with client and their contractors.
- Stage equipment and materials at our location.
- Submit owner's manuals and equipment documentation upon request.
- Supervise end user training on systems.

### Installation Labor:

- Terminate and label AV system cable that is part of our project.
- Mount/rack AV equipment as specified in the scope of work.
- Adjusting and balancing audio gain settings, equalization and DSP configuration.
- Assure that the system meets design criteria and functions per the scope of work.
- Site clean-up and disposal of packaging, etc. This does not include existing equipment recycling.
- Pricing is based upon standard business hours of 8:00 am until 4:30 pm CST Monday through Friday. Second and third shifts may require additional labor unless a prior agreement has been made.

### Exclusions:

- All conduit, high voltage wiring, breakers, relays, boxes, receptacles, etc.
- Building or site construction or demolition.
- Concrete cutting, core drilling etc.
- Sheet rock replacement or repair necessary for implementation of AV system.
- Ceiling tile or grid work removal or replacement.
- All millwork (moldings, trim, etc.).
- Permits (unless specified in contract).
- Painting or refinishing necessary for implementation of AV system.

## System Costs

The system costs include the provision of equipment, hardware, cable, connectors, etc., as well as all engineering, project management, and field installation labor necessary to provide a complete operational system as described above.

**Video Equipment:**

| Qty | Brand      | Model and Description   | \$Each   | \$Extended |
|-----|------------|---|----------|------------|
| 1   | Da-Lite    | 88159, 65"x116"Advantage Deluxe Electrol Recessed Electric Screen | 2,975.00 | 2,975.00   |
| 1   | Sony       | VPL-PHZ10, 5000 lm WUXGA Laser Projector                          | 2,645.00 | 2,645.00   |
| 1   | Chief      | RPMCU, RPA Universal Projector Mount                              | 173.00   | 173.00     |
| 1   | Chief      | CMS440, Projector Ceiling Kit                                     | 92.00    | 92.00      |
| 1   | Chief      | CMA472, Above Ceiling Plenum Enclosure                            | 89.00    | 89.00      |
| 1   | Chief      | CMS006, 6" Fixed Extension Column                                 | 18.00    | 18.00      |
| 1   | Elmo       | P30HD, Visual Presenter   | 2,318.00 | 2,318.00   |
| 1   | NewTek     | Tricaster (SDI Feed)  | Existing | Existing   |
| 1   | Crestron   | DM-TX-4K-302-C, 4K DM 8G+® Transmitter 302 (w/ VGA)               | 1,160.00 | 1,160.00   |
| 1   | Crestron   | DM-RMC-4K-100-C, 4K DM 8G+® Rx & Room Controller 100              | 522.00   | 522.00     |
| 1   | BlackMagic | BMD-CONVMBHS24K6G, HDMI to SDI Converter                          | 145.00   | 145.00     |
| 3   | Liberty    | M2-HDSEM-M-10F, 10' Reduced Profile HDMI Cable                    | 12.00    | 36.00      |
| 2   | Liberty    | M2-HDSEM-M-03F, 3' Reduced Profile HDMI Cable                     | 8.00     | 16.00      |
| 1   | Liberty    | E-MVAM-M-12, 12' VGA Micro Cable w/ Audio                         | 22.00    | 22.00      |
| 1   | Liberty    | EPAWQ539833, 1RU HDMI Pass-Thru Plate                             | 62.00    | 62.00      |

**Audio Equipment:**

| Qty | Brand       | Model and Description                                       | \$Each   | \$Extended |
|-----|-------------|---|----------|------------|
| 9   | JBL         | Control 24CT, 4" Compact Ceiling Speaker                    | Existing | Existing   |
| 11  | Shure       | MX418D/C, 18" Desktop Base Gooseneck Microphone w/ LED      | Existing | Existing   |
| 1   | Shure       | MX418/C, 18" Gooseneck Microphone w/ Shock & Flange Mount   | Existing | Existing   |
| 1   | Lab.Gruppen | E 5:4, 500 Watt 4-Channel Amplifier                         | 723.00   | 723.00     |
| 2   | Liberty     | EPA-WQ539808, Double Gang XLR Plate                         | 38.00    | 76.00      |
| 1   | Biamp       | TesiraFORTÉ AVB CI, DSP: 12(AEC) in x 8 out                 | 2,163.00 | 2,163.00   |
| 1   | Biamp       | Tesira EX-AEC, 4-Channel AEC mic/line Input Expander PoE+   | 1,022.00 | 1,022.00   |
| 1   | Biamp       | PH POE36U-1AT-R, Gigabit PoE+ Injector (for AVB expanders)  | 99.00    | 99.00      |
| 1   | MOTU        | AVB Switch, 5-Port Gigabit AVB Switch (no PoE/+ /++ output) | 395.00   | 395.00     |

**Media Control System:**

| Qty | Brand    | Model and Description                                 | \$Each   | \$Extended |
|-----|----------|---|----------|------------|
| 1   | Crestron | DMPS3-4K-150-C, 3-Series® 4K DigitalMedia™ System 150 | 2,900.00 | 2,900.00   |
| 2   | Crestron | TSW-1060-B-S, 10" Touch Screen (Black)                | 1,392.00 | 2,784.00   |
| 2   | Crestron | TSW-1060-TTK-B-S, TableTop Kit for TSW-1060 (Black)   | 150.00   | 300.00     |
| 1   | Liberty  | NRS8FP, 10/100 PoE+ 8 Port Communication Interface    | 150.00   | 150.00     |
| 2   | Liberty  | NPI-H1, Niveo Professional Gigabit PoE Power Injector | 80.00    | 160.00     |

**Equipment Rack:**

| Qty | Brand           | Model and Description                        | \$Each   | \$Extended |
|-----|-----------------|--|----------|------------|
| 1   | Middle Atlantic | 24 Space Equipment Rack                      | Existing | Existing   |
| 2   | JG Solutions    | JB11-15A-EPA1, Rack Mount Power Strip        | 95.00    | 190.00     |
| 2   | Middle Atlantic | UFA-8-F1, 1RU 8"D RackShelf w/ 1RU Faceplate | 45.00    | 90.00      |

| Summary                 | \$Totals         |
|-------------------------|------------------|
| Equipment Total:        | 21,325.00        |
| Installation Materials: | 359.00           |
| Installation Labor:     | 5,520.00         |
| Custom Programming:     | 2,880.00         |
| Engineering:            | 250.00           |
| <b>Project Total:</b>   | <b>30,334.00</b> |

*\* Sales Tax not included if applicable*

## Payment Schedule

All payments are due Net-30 days from date of delivery on equipment, with an active account. All others will be required to pay fifty (50) percent upon order and the balance at completion of the project. If there is a delay in scheduling due to room availability, electrical or construction, etc. equipment will be billed at that time. Labor will be billed after final installation and training. Payment(s) can be made in the form of EFT's, Cash, Check or Credit Card. If a Credit Card is used, it must be presented at the time of order. Credit Cards may not be used after a project has been invoiced or after Net-30 or greater terms has been taken.

**Remit and Order Address:** (All payments must be mailed to address below)

EPA Audio Visual, Inc.  
7910 State Hwy 55  
Rockford, MN 55373

763-477-4395 – Fax  
[EPASTaff@epaaudio.com](mailto:EPASTaff@epaaudio.com)

## Standard Warranty

- EPA warrants the audio visual system furnished to be free from defects in workmanship (i.e. cables, connections, structures) failure for a period of one (1) year from the date of acceptance or first beneficial use, whichever occurs first. Warranty service for such defects will be handled in a reasonable and timely manner from the time of notification to EPA by the owner or their agent.
- Warranty applies only to equipment sold on contract through EPA Audio Visual, Inc. and does not include existing or owner furnished equipment.
- EPA will provide a 24-hour support phone number. It will be determined at the time of the call if a service technician will be required to make a service call. If a service call is needed, a service technician will be sent to the owner's location within a reasonable amount of time.
- Warranty period on equipment shall start on the day of installation of equipment.
- Manufacturer's equipment warranties are of varying lengths (usually 90 days to 3 years).
- EPA will warrant equipment for the term established by the manufacturer.
- Warranty does not apply to any product that has been subject to misuse, neglect, accident or operational error.

## Implementation Team

**Jay Shearer, (763) 477-6931** will serve as your **Account Manager** and will provide primary coordination of systems and equipment recommendations and pricing for the project.

**Justin Dorion, (763) 477-6931** will serve as **Project Engineer** and will oversee the various disciplines within the EPA team.

Other members of the EPA technical and administrative staff will be utilized as required for the project.

## Summary

We are confident that our participation in your project will contribute to its success. We appreciate the opportunity to submit this proposal package, and look forward to your authorization to proceed.

Sincerely,

Jay Shearer

### Customer or Authorized Representative:

Your signature below acknowledges you have read and agree to the stated proposed information and authorize EPA Audio Visual, Inc. to proceed with the project.

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Signature

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Print Name

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Title

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Date

Project Total:           \$30,334.00

**\* Sales Tax not included if applicable**

*City of Cannon Falls - Mike - Council Chambers - 052118*

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