

BROADCAST COMMITTEE AGENDA

January 13, 2020

6:30 p.m.

304 E. Grand River, Conference Room 4, Howell, MI 48843

Members:

Gary Childs, Wes Nakagiri, Douglas Helzerman

	Pages
1. CALL TO ORDER	
2. APPROVAL OF MINUTES	1
Minutes Dated: August 26, 2019	
3. APPROVAL OF AGENDA	
4. CALL TO THE PUBLIC	
5. REPORTS	
6. DISCUSSION	3
6.1 Board Chambers Broadcast System	
Third Coast Tech, LLC Proposal dated 12-19-2019	
6.2 Board Chambers AV Upgrades	8
Third Coast Tech, LLC. Proposal dated 12-19-2019	
7. CALL TO THE PUBLIC	
8. ADJOURNMENT	

BROADCAST COMMITTEE

MEETING MINUTES

August 26, 2019, 6:30 p.m.
304 E. Grand River, Conference Room 4, Howell, MI 48843

Members Present: Gary Childs, Wes Nakagiri, Douglas Helzerman

1. CALL TO ORDER

Commissioner Childs called the meeting to order at 6:30 p.m.

2. APPROVAL OF MINUTES

Meeting minutes dated: April 22, 2019

Motion to approve the minutes as presented.

Moved by: W. Nakagiri

Seconded by: D. Helzerman

Yes: (3): G. Childs, W. Nakagiri, and D. Helzerman

Motion Carried (3-0-0)

3. APPROVAL OF AGENDA

Motion to approve the Agenda as presented.

Moved by: W. Nakagiri

Seconded by: D. Helzerman

Yes: (3): G. Childs, W. Nakagiri, and D. Helzerman

Motion Carried (3-0-0)

4. CALL TO THE PUBLIC

None.

5. REPORTS

6. DISCUSSION

Committee members, Rich Malewicz, Diane Gregor, Ken Hinton, and Elizabeth Hundley discussed the proposals and other possible options for improving audio/video and recording in Board Chambers including:

- Recording and publishing vs live stream
- Number and placement of monitors, microphones, and cameras
- Issuing an RFP
- Labor to run equipment and any possible costs

Committee members unanimously agreed that Administration should include this cost in the 2020 Budget for the Board of Commissioners.

Commissioner Childs requested Information Technology to obtain quotes for equipment cost only.

7. CALL TO THE PUBLIC

None.

8. ADJOURNMENT

Motion to adjourn the meeting at 7:10 p.m.

Moved by: W. Nakagiri

Seconded by: D. Helzerman

Yes: (3): G. Childs, W. Nakagiri, and D. Helzerman

Motion Carried (3-0-0)

Natalie Hunt, Recording Secretary

Broadcast Video Recording System

Livingston County

304 E. Grand River
Howell, MI 48843 United States
517.546.3520



Presented By:



Third Coast Tech, LLC.
4514 Pontiac Lake Rd.
Waterford, Michigan 48328
800-828-9517
www.thirdcoasttech.com

Modified: 12/19/2019
Revision: 0

Video Recording System

TCT will install new video recording system in Livingston County's Boardroom. System will consist of new pan tilt zoom camera, Video Auto switcher, Broadcast quality video recorder. Recording sources will include cameras and content feed from presentation switcher. Controls will be from touch panel. camera switching will be automatic.

New system will feature:

** State of the art video recording system featuring a PTZ camera and remotely auto switch.*

** Video Recording system*

** System control from Touch panel*

** 1 year parts and labor warranty*

9	<p>Audio Technica</p> <p>Quick-mount plug-in desk stand with user-programmable control switch (touch on/off, touch to talk, touch to mute) and LED mic status indicator. 3-pin XLR-F-type in, 3-pin XLR-M-type out.</p>	\$1,216.80
1	<p>Audio Technica</p> <p>The System 10 PRO Rack-Mount Digital Wireless System from Audio-Technica includes an receiver chassis with rack-mount adapters, two receiver units with corresponding receiver unit mounting brackets, a joining plate, one cable, one AC adapter, and two Wireless transmitter basis</p>	\$1,136.20
12	<p>Audio Technica</p> <p>Ideal for conference centers, boardrooms, courtrooms, houses of worship, and other installed applications, the U857Q is designed to plug directly into a panel- or desk-mounted XLR-F-type connector. This cardioid condenser quick-mount gooseneck microphone offers unsurpassed immunity from radio frequency interference thanks to Audio-Technicas UniGuard innovations. The 14.47 long microphone features an ultra-flexible small-diameter gooseneck and accepts interchangeable elements, available in cardioid, hypercardioid, omnidirectional and UniLine line cardioid polar patterns. Equipped with self-contained electronics, the phantom-powered microphone also offers an 80 Hz low-cut UniSteep filter that reduces pickup of low-frequency ambient noise.</p>	\$2,574.00
1	<p>Biamp</p> <p>The TesiraFORT DAN VT is a digital audio server with 12 analog inputs and 8 analog outputs, and includes Acoustic Echo Cancellation (AEC) technology on all 12 inputs. It includes up to 8 channels of configurable USB audio, a 2-channel VoIP interface, a standard FXO telephone interface, and Dante digital audio networking.</p>	\$2,728.70

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

12/19/2019

Project Name: Broadcast Video Recording System

Project No.: TCT-0414

Page 2 of 5

1	<p>EIPHAN</p> <p>Record, stream and switch up to three full HD video inputs from HDMI™, SDI, and USB sources. Epiphany Pearl Mini™ takes your video production to the next level.</p>	\$3,271.32
1	<p>NTI</p> <p>4K HDMI Up/Down Scaler with Audio Extractor & HDCP 2.2 Converter Up-scale 1080p to UHD 4K (3840x2160) 4:4:4 60Hz for connection to 4K displays. Down-scale 4K (4096x2160 or 3840x2160) to 1080p to view 4K sources on an HD screen.</p>	\$253.50
1	<p>PTZOptics</p> <p>Camera Mount</p>	\$109.50
1	<p>PTZOptics</p> <p>This camera has a 4.4 - 88.5mm lens providing a 20x zoom range, allowing for effective close-focus and wide-angle shots to best suit both face-to-face and group meetings. It does well in low-light conditions owing to a fast f/1.8 - f/2.8 lens aperture and minimum illumination requirement of only 0.5 lux at f/1.8. On top of this, built-in wide dynamic range and 2D and 3D noise cancellation further enhance the conferencing experience. The camera, along with its entire family of 20x and 12x models, is completely open source so developers can customize everything as they prefer using simple HTML commands.</p>	\$1,899.00
1	<p>Shure</p> <p>Converts up to four line/mic analog signals onto a Dante network for easy audio routing and browser-based control.</p>	\$600.00
1	<p>TCT</p> <p>8-Port Gigabit Ethernet PoE Switch/4-Port PoE/802.3at/af, 60W PoE</p>	\$171.18
1	<p>TCT</p> <p>Quoted at \$49/Hour as per G2G contract</p>	\$5,880.00
1	<p>TCT</p> <p>Cabling & Hardware</p>	\$899.96
1	<p>TCT</p> <p>Quoted at \$95/Hour as per G2G Contract</p>	\$3,040.00

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

12/19/2019

Project Name: Broadcast Video Recording System

Project No.: TCT-0414

Page 3 of 5

1 **TCT** \$98.00
Video Auto switcher

Video Recording System	Equipment Total:	\$14,958.16
	Labor Total:	\$8,920.00
	Total:	\$23,878.16

Lapel Mic option

Add lapel microphone to system

1 **Audio Technica** \$436.25
ATW-RC13 Rack-mount receiver chassis, ATW-RU13x1 receiver unit, ATW-T1001 UniPak® transmitter with MT830cW lavalier microphone.

Lapel Mic add	Equipment Total:	\$436.25
	Labor Total:	\$0.00
	Total:	\$436.25

Second camera option

Add camera to zoom in on table facing Board Table

1 **PTZOptics** \$699.00
The PTZOptics ZCAM-12X is a 1080p box camera with 12X optical zoom for capturing HD video even at a distance. With support for 3G-SDI & IP streaming, this camera is ideal for broadcasting high definition video signals for broadcast or video conferencing applications up to 1080p/60 resolution.

Second camera add	Equipment Total:	\$699.00
	Labor Total:	\$0.00
	Total:	\$699.00

Project Equipment Subtotal:	\$16,093.41
Project Labor Subtotal:	\$8,920.00
Project Subtotal:	\$25,013.41

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

12/19/2019

Project Name: Broadcast Video Recording System

Project No.: TCT-0414

Page 4 of 5

Project Summary

Equipment:	\$16,093.41
Labor:	\$8,920.00
Sales Tax:	\$26.18
Grand Total:	\$25,039.59

Client: Cindy Catanach

Date

Contractor: Third Coast Tech, LLC.

Date

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

Project Name: Broadcast Video Recording System

Project No.: TCT-0414

12/19/2019

Page 5 of 5

Board of Commission AV

Livingston County

304 E. Grand River
Howell, MI 48843 United States
586-601-4698



Presented By:



Third Coast Tech, LLC.
4514 Pontiac Lake Rd.
Waterford, Michigan 48328
800-828-9517
www.thirdcoasttech.com

Modified: 12/19/2019
Revision: 1

Board of Commission AV

Livingston Board of Commissioners Chambers will receive AV upgrades consisting of a new presentation system and audio reinforcement system.

Presentation system will feature one 98 inch led display for audience mounted using articulating mount. Additionally, presentation system will utilize digital media video distribution system with hardwired HDMI input at the podium location, input from room PC, and wireless presentation gateway allowing presenters to display their content wirelessly from laptops, tablets or smart devices. Video distribution system will also have additional output for future recording equipment. There will be two column mounted mini line array speakers on each side of the room for program audio.

Presentation system features:

- * 98 inch LED display (Left side of the room)*
- * Hard wired HDMI input with adapter ring (At podium location)*
- * Room PC input*
- * Wireless Presentation Gateway*
- * Mini Line array speakers*
- * Amplifier*

New system will be controlled from easy to use touch panel located at the podium location. From this touch panel, users will be able to select video sources, control system power and audio levels.

1	Crestron	\$1,560.00
	The Crestron CP3N presents a new benchmark in control system technology. Featuring the 3-Series control engine, the CP3N forms the core of any modern networked home or commercial building, managing and integrating all the disparate technologies throughout your facility to make life easier, greener, more productive, and more enjoyable. The CP3N is an enhanced version of the CP3 featuring a dedicated Control Subnet port.	
1	Crestron	\$562.50
	4x2 4K HDMI® Switcher	

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

Project Name: Board of Commission AV

Project No.: TCT-0392

12/19/2019

Page 2 of 6

1	<p>Crestron</p> <p>The HD-RX-101-C-E is a surface-mountable DM Lite receiver designed to pair with a DM Lite transmitter to form a point-to-point signal extender for HDMI signals. The DM Lite family of products offers a very simple and versatile solution for extending HD, UHD, 2K, and 4K video signals, with stereo or surround sound audio, over a single CAT5e (or better) cable. A cable length of up to 230 ft (70 m) is supported for HD 1080p, WUXGA, and 2K signals, or up to 130 ft (40 m) for UHD and 4K</p>	\$247.50
1	<p>Crestron</p> <p>The HD-TX-101-C-E is a surface-mountable DM Lite transmitter designed to pair with a DM Lite receiver to form a point-to-point signal extender for HDMI signals. The DM Lite family of products offers a very simple and versatile solution for extending HD, UHD, 2K, and 4K video signals, with stereo or surround sound audio, over a single CAT5e (or better) cable. A cable length of up to 230 ft (70 m) is supported for HD 1080p, WUXGA, and 2K signals, or up to 130 ft (40 m) for UHD and 4K.</p>	\$247.50
1	<p>Crestron</p> <p>A Crestron touch screen offers an ideal user-interface for controlling all the technology in your home, boardroom, classroom, courtroom, or command center. Touch screens do away with piles of remote controls, cluttered wall switches, and cryptic computer screens, simplifying and enhancing the way you use technology. For controlling audio, video, lighting, shades, HVAC, security, and other systems, Crestron touch screens are fully-customizable with easy-to-use controls and icons, true feedback and real-time status display, live streaming video, voice recognition, web browsing, and advanced navigation of digital media servers, tuners, and other devices.</p>	\$910.00
1	<p>Crestron</p> <p>Tabletop Kit for TSW-760, Black Smooth</p>	\$130.00
1	<p>Crimson AV</p> <p>Multiple joint arms hold screen 3.4" from wall when retracted and 27" when fully extended. Smooth tilt adjustments of +15 (forward) and -5 (back) with a locking knob and 3 side-to-side roll facilitates a variety of viewing angles and perfect screen positioning. Makes a secure installation quick and easy, simply hang the screen and turn the pre-assembled securing screws to lock in place. Integrated cable management for clean look.</p>	\$439.99
1	<p>Crown</p> <p>Cdi Series Professional Amplifier</p>	\$710.00

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

Project Name: Board of Commission AV

Project No.: TCT-0392

12/19/2019

Page 3 of 6

2	<p>Jbl Pro</p> <p>70 cm J-Shaped Coaxial Line Array with 16 x 1" and 4 x 5" Drivers and Asymmetrical Coverage. Constant Beamwidth Technology, switchable 45° or 25° vertical coverage, music (flat)/speech switch, 8 ohms, 60 Hz – 20 kHz, 500W cont pink (2000W peak), wall bracket included. (priced and sold individually). New in -1 version: Included wall bracket adjusts for SWIVEL (pan) as well as tilt aiming, for increased aiming versatility. Thicker, stronger grille which is more robust for use in temporary special event applications.</p>	\$1,945.00
1	<p>Liberty AV</p> <p>This Item Includes: 1 Base security clamp, cable and hardware for DL-AR system (DL-CL) 1 4K DisplayPort to HDMI Cable Adapter (AR-DP4K-HDF) 1 4K Mini DisplayPort to HDMI Cable Adapter (AR-MDP4K-HDF) 1 Adapter Cable USB "C" male to HDMI female 9 inches long (AR-UCM-HDF)</p>	\$127.36
1	<p>NEC Display Solutions</p> <p>With industry leading experience in superior design and customer focus, the 98" NEC V984Q allows for clear, detailed imagery for unobtrusive digital signage. New contemporary and slim mechanical design with focused aesthetics allows for the smooth and stylistic integration into any type of environment while the full metal chassis coupled with real-time temperature sensors and integrated cooling fans maintain the professional quality necessary for commercial environments. With a wide range of the latest connectivity interfaces including HDMI 2.0 x3 and DisplayPort 1.2 x2/daisy chain option, these displays offer the future-proofing necessary for the investment. These displays also include expandability options such as the Open Pluggable Specification (OPS) and Raspberry Pi Compute Module slots for source integration directly into the display</p>	\$12,442.80
1	<p>RDL</p> <p>The part of the group of versatile TX series products from Radio Design Labs. The TX series feature the advanced circuitry for which RDL products are known, combined with durable, quality connectors. The ultra-compact TX series can be mounted in limited space using the adhesive methods popularized by RDL's STICK-ON Series. The TX-J2 may be mounted directly to a backboard or chassis using a variety of mounting options available from Radio Design Labs</p>	\$68.40
1	<p>TCT</p> <p>8-Port Gigabit Ethernet PoE Switch/4-Port PoE/802.3at/af, 60W PoE</p>	\$171.18
1	<p>TCT</p> <p>Quoted at \$49/Hour as per G2G service contract</p>	\$3,920.00

* Price Includes Accessories

Presented By: Third Coast Tech, LLC.

12/19/2019

Project Name: Board of Commission AV

Project No.: TCT-0392

Page 4 of 6

1	TCT Cabling & Hardware for reinforcing TV wall	\$1,649.92
1	TCT Quoted at \$95/Hour as per G2G Contract	\$2,280.00
1	Vivitek Professional presentation collaboration system USB Dongle (2-Pak)	\$362.70
1	Vivitek NovoPRO supports true screen mirroring from iOS and Android devices. It features screen preview/moderator control, 4-to-1 projection, video streaming, instant response system (IRS), file sharing, and access to cloud-based resources. Built-in, whiteboard-interactive features encourage meeting or classroom participation, and all Novo's can be managed remotely over the network. The built-in Ethernet port allows for dual-network connection to accommodate Corporate/Guest or Student/Faculty networks. The NovoPRO can also be optionally equipped with the Launcher; a USB-connected device with software preloaded that, with the insertion and click of the Launcher, displays the computer screen. A true plug-n-play-to-display solution.	\$604.50

Board of Commission AV	Equipment Total:	\$22,179.35
	Labor Total:	\$6,200.00
	Total:	\$28,379.35
	Project Equipment Subtotal:	\$22,179.35
	Project Labor Subtotal:	\$6,200.00
	Project Subtotal:	\$28,379.35

* Price Includes Accessories

Project Summary

Equipment:	\$22,179.35
Labor:	\$6,200.00
Grand Total:	\$28,379.35

Client: **Cindy Catanach**

Date

Contractor: **Third Coast Tech, LLC.**

Date

* Price Includes Accessories