EXHIBIT “B”

SCOPE OF WORK AND PRODUCT SPECIFICATION

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I. INTRODUCTION

The Southwest Florida Water Management District is upgrading the Brooksville Office Boardroom Audio-Visual and Video System. The District will be utilizing existing selected devices, cables, and displays in the upgraded system.

The system will be a hybrid Video-Broadcast and Audio-Visual system. All signals will be converted to 1080P HD-SDI signals for matrix switching for video production and presentation displaying of local computers, videoconferencing send & receive signals, PTZ (Pan, Tilt, Zoom) cameras, DVR (Digital Video Recorder) playback from production systems, along with the recording of meetings for official documentation. The system will allow for displaying computer graphics (‘Content’) and Video Signals (‘Video’) from both Microsoft Teams and local sources.

A Utility PC (Personal Computer) with network access will be installed and utilized for all programming uploads and interfacing with IP (Internet Protocol) connected devices. All programming files and configurations shall be stored on this PC for future modifications of systems. Copies of all configuration files shall be provided to the District. The A/V Contractor will be expected to provide all files and utilize the Utility PC to access all equipment GUIs (Graphical User Interface).

Four PTZ Cameras will be installed in the Boardroom. One on the front wall behind the Dais, one on the rear Soffit Center, and one on each of left and right Soffit above the Staff Tables.

The audio system will utilize DSP (Digital Signal Processing) technology to distribute audio and mix-minus signals to all system speakers, recording devices, VTC (Video Teleconferencing Capability) systems, processing incoming audio VTC signals, as well as local computers, and television production systems. The District shall provide programming for the DSP system.

Devices shall be operated via a Crestron Control System and Crestron Touch Panels. All Cameras, DSP systems, microphone mute functions, boardroom displays and video/data projectors, will be controlled via RS232, RS422, and/or IP control protocols. Existing projections screens will be controlled by relay from the control system. Existing power controllers will be controlled by relay. The District shall provide programming for Crestron Control Systems and Panels.

Video Conferencing functions will utilize a Crestron FLEX System Microsoft Teams interface, and will be interfaced utilizing SDI (Serial Digital Interface) to HDMI (High-Definition Multimedia Interface) Conversion equipment for Inputs (Transmit) signals, and HDMI to SDI Conversion equipment for Outputs (Receive) Signals. There will be two Crestron UC-C160-T Touch Screen Control Panels network connected to the FLEX System. One panel at the Recorders Desk in the Boardroom, and one in the A/V (Audio / Visual) Production Control Room.
II. THEORY OF OPERATION

A. VIDEO SYSTEMS

The approach to this system utilizes Television Broadcast principles with Audio-Visual components. The primary purpose is for a fully functional boardroom system, with live Television Production, meeting documentation recording, and internet streaming.

Television Broadcast Technology devices are utilized for conversion of all HDMI signals to HD-SDI (High-Definition Serial Digital Interface) 1080P Serial Digital Video. HD-SDI to HDMI conversions will be utilized for displays and Teams transmit signals.

All HD-SDI sources are connected to an HD-SDI router. Video outputs of the router feed the production switcher, VTC systems, displays, and recording devices.

HD-SDI to HDMI converters will be utilized for Crestron Flex Microsoft Teams Interface systems, video display monitors, projectors, and any signal destination that requires an HDMI input. The router shall be controlled via the Crestron Control System and programmed to operate from Crestron control panels.

Each dais and staff position will have an existing personal video display. Signals distributed to personal displays will be converted to HDMI and distributed within the dais and staff tables via HDMI distribution amplifiers. Dais displays will normally display the video graphics (“Content”) signal. However, any graphic or video source can be routed to all displays.

Computer HDMI outputs will be transmitted to the equipment rack via HDBaseT transmitters and receivers. HDMI Signals will be converted to HD-SDI signals by converters located in the equipment rack.

Camera output signals shall be HD-SDI 1080P. Cameras shall be controlled via RS-422 and/or IP by Crestron, and IP Control by a Camera Controller located in the A/V Production Control Room.

The Television Production System will utilize a Panasonic HD-SDI Production Switcher, Panasonic Camera Controller, and an Atomos Dual Digital Video Recorder. Two Wohler Audio Panels and Closed Captioning Equipment will be located in the A/V Production Control Room.

B. AUDIO SYSTEMS
The approach for the audio system was to utilize Audio-Visual devices and DSP techniques to control audio signals within the system and controlling speaker mix-minus audio to create a feedback-controlled environment.

Each dais and staff position will have a personal speaker installed with a unique mix-minus signal developed for each board member, and staff member location.

Television Broadcast audio embedders are utilized to insert audio signals into HD-SDI signals and De-embedders to extract audio signals from HD-SDI signals.

Dais and staff table microphones, wireless microphones, ceiling microphones, computer audio signals, Microsoft Teams audio signals, and production audio signals will be connected to the DSP system. Final Ceiling microphone locations will be determined by the DSP programmer.

VOIP (Voice Over Internet Protocol) connections shall be provided by the District and utilized within the DSP for audio conferencing and phone call participation during meetings.

“All Audio Mix” and “Teams send Mix-Minus” outputs will be created within DSP programming and will be returned as inputs to the DSP. The production system will be able to choose “All Audio Mix” when recording meetings or “Teams transmit Mix-Minus” audio when operating as a functional live broadcast production system during meetings.

DSP outputs will be processed within the DSP to create mix-minus signals for personal dais speakers, amplified ceiling speakers, and for “All Audio Mix”, and “Teams send Mix-Minus Transmit” audio signals.

Each personal dais speaker and staff table position will have a unique mix-minus signal. Amplified ceiling speaker zones will have preset mix-minus signals to provide the DSP programmer expanded control of amplified audio within the boardroom.

Microphone muting will be provided by the Crestron custom 5 button single gang panels located at each dais and staff position.

An Assistive Listening System will be installed in the equipment rack and the “All Audio Mix” audio signal will be connected for both RF (Radio Frequency) transmission and ListenTechnologies cell phone app operations.

C. CONTROL SYSTEMS

Functional control will be provided via a Crestron CP4N Control System, utilizing Crestron programmed touch panels. The Crestron CP4N will control all controllable devices within the system. Three CP4N RS-232 connections will be utilized to control data projectors and one Audience Display. One Crestron CEN-COM IP to RS232 Interface will be utilized to control one Audience Monitor. Two Crestron Control Panels will be utilized for manual
operator control. One panel will be located at the Reception Desk, and one panel in the A/V Production Control Room.

Cameras will be controlled via IP by Crestron, and IP Control by a Camera Controller located in the A/V Production Control Room. An RS-422 cable will be run to each Camera location as an optional control method and control of future cameras.

Two Projectors, and the video recorder will be controlled via RS-232 and/or IP protocol as needed. Ethernet connections on projectors will be connected to the District Data Network for detailed setup and future firmware updates.

Existing projection screens will be controlled utilizing existing control cable connections and controlled via relay contacts. Two existing manual remote plates will be utilized.

The DSP system, the HD-SDI Router, and the Microsoft Teams System will be controlled via IP connected to the District Data Network.

The HD-SDI Router and the Digital Video Recorder will be controlled by RS-232 and IP as required by the District.

D. BROADCAST PRODUCTION SYSTEMS

Eight outputs of the SDI Router will be dedicated to inputs of the Production Switcher. The normalized sources will be the Four PTZ Cameras, Microsoft Teams Send and Receive Video, Podium, and the Staff PC. The Switcher Program out will feed Audio Embedders to embed selected audio mixes for both Digital Video Recorders A & B, along with Production Program Distribution to the Steaming Encoding System. The Production Program output will also be returned to the HD-SDI Router.

Eight Black Magic Up/Down Converters will be utilized to convert all Production Switcher Inputs from 1080P to 1080i. Two Black Magic Up/Down Converters will be utilized to convert all Production Switcher Outputs from 1080i to 1080P. All Sources will be set to 1080P. Production recordings and Streaming devices will be set to 1080P.

III. SCOPE OF WORK

A. A/V CONTRACTOR

The A/V Contractor shall be responsible for all commissioning of devices and systems included, but not limited to PTZ Cameras, Data Projectors, Conversion Equipment, HDBaseT devices, Assistive Listening System, Dais Speakers, Audio Amplifiers, and Ceiling Speakers.

A/V Contractor is responsible for providing all equipment shown on drawings or this document unless otherwise noted as District Furnished Equipment.
(A District consultant will provide commissioning assistance to the A/V Contractor for Broadcast Equipment, Device Frame Communications, and Conversion Card configurations as needed. The A/V Contractor is responsible for all commissioning and full system functionality.)

Crestron CP4N Control programming, and Biamp DSP programming shall be provided by the District Programming Contractor.

The A/V Contractor shall be responsible for the installation and termination of all cables and connections within the system, including modifications of existing cables and connectors as needed. All technicians working on the project shall be full time employees of the A/V Contractor. The On-Site Supervisor of the project shall be on site during entire installation.

The A/V Contractor shall be responsible for the removal of existing equipment and cables not being reused in the upgraded system.

The A/V Contractor shall remove and provide to the District the following existing equipment and cables:

- Two existing video projectors and hardware above the Boardroom audience seating area.
- Two existing hanging boardroom displays
- All equipment and cables in existing equipment racks not being reused for the upgraded system.
- All existing RGB 3&5 BNC component cables, Composite video cables. Some cables will be discarded at the District’s request, including existing cables to displays, dais, and staff positions.

The A/V Contractor can re-utilize, but is not required to reuse the following existing cables:

- Microphone cables from dais and staff positions.
- Existing projection screen relay control cabling
- RS-232 control cables
- Furman Power Control Cables
- All existing Ceiling Speakers and Cables

The A/V Contractor shall install two Video Data Projectors at existing projector locations above the Boardroom audience area. Existing projector mounting methods can be utilized. The A/V Contractor shall determine mounting methods, and shall provide mounting hardware, and all mounting accessories required for safest and best installation. The A/V Contractor shall submit a projector mounting method in writing to the District before the
installation of projectors for District approval. Existing mounting structure may be used if contractor evaluates the existing method to be viable.

The A/V Contractor shall connect projectors to the District Data Network and utilize IP GUI of projectors to update and optimize projector operations as needed. The A/V Contractor shall save all data files relative to projector operations on the Utility PC and provide copies of all configuration files to the District.

The A/V Contractor shall install personal desk-mount speakers, at each dais, and staff position. The District shall determine the exact location for personal speaker mounting before or during the installation.

A/V Contractor shall fabricate and provide mounting devices and mounting methods for under-desk/dais devices, including Video Converters, HDMI Distribution Amplifiers, and RDL “Stick-on” devices. Methods for mounting these devices shall be approved by the District before the installation of devices. All under desk/dais cabling shall be laced and secured to the bottom of furniture, utilizing existing cable chases when possible. Screw-down cable ties are acceptable. Stick-on cable tie mounts will not be accepted under furniture except in certain exceptions that are approved by the District.

A/V Contractor shall remove all unused existing equipment from existing equipment racks and control consoles. All removed equipment will be provided to the District for disposal.

A/V Contractor shall install all equipment in the A/V Production Control Room including rack equipment and in the operator console. A/V Contractor shall work with District Staff for proper mounting of all Displays, Rack Equipment and Devices within the A/V Production Control Room.

The A/V Contractor shall provide an installation technician during the commissioning, programming, and testing phases of the installation. The Onsite A/V Technician shall coordinate with the District for participation in the testing process.

B. A/V INSTALLATION METHODS

All work shall conform to the (NEC) National Electrical Code and the (NFPA) National Fire Protection Association. The A/V Contractor is responsible for Firestopping all wall penetrations per local codes.

The existing equipment racks are equipped with vertical lace-bars and vertical power strips. Additional Power Distribution shall be the responsibility of the A/V Contractor. The A/V Contractor shall provide a clean and professional installation of equipment and cabling within the rack space. Every effort shall be made to create separate lacing bundles by type cables. Audio, Video, Control, and Network cables shall be laced in separate bundles.
The A/V Contractor shall provide under-floor cable management. All cables should lay neatly underneath raised flooring without tangles and excess cable. Prefabricated cables shall be neatly tied at all locations. Detailed inspections of underfloor cabling and cabling methods will be performed by the District. A/V Contractor will be responsible to make corrections to methods as needed.

The Utility PC shall be installed with adequate length service loops on all connected cables to allow the PC to be pulled out on the provided computer rails.

All power cords shall be neatly strapped with cable ties and attached to lace bars, rack structure, and furniture in a clean and orderly method. Loose power cords and cables will not be accepted.

All audio cables connected by screw-down and phoenix connectors shall be dressed with shield/drain wire tubing and shrink tubing over the overall jacket, covering the end of the jacket and tubing. All three-piece BNC connectors shall be terminated utilizing manufacturer-approved strippers and crimp tools, using industry-standards and methods.

All wall penetrations shall comply with all state and local codes. Penetrations shall utilize existing conduit cable paths and shall be finished with approved fire and smoke protection methods. All materials shall meet all state and local codes. Existing wall penetrations shall not be used if they do not meet local and state codes. New wall penetrations shall be created. The A/V Contractor shall report any existing wall penetrations that need to be updated to the District before using existing wall penetrations.

All Installation Procedures shall follow the A/V and Television Broadcast standards provided by InfoComm, BISCI (Building Industry Consulting Service International), NEC (National Electrical Code), NSCA (National Systems Contractors Association), ISO/IEC (International Organization for Standardization / International Electrotechnical Commission), and other A/V Organizations that pertain to this project. Procedures and Methods shall follow all State, County, and City Regulations.

All equipment types, connectivity, and specifications are specified in this document and the system design drawings provided by the District. It is the A/V Contractor’s responsibility to verify all Quantities, Connectivity, and Functionality. Any questions related to this design package shall be directed to the District.

The A/V Contractor shall maintain a clean work environment at all times. A/V Contractor shall remove all trash items, keep neat storage areas, tools, boxes, cable, and related equipment. Arrangements for on-site storage shall be coordinated with the District.

The A/V Contractor shall be responsible for all J-Hooks, and related material for cables in ceiling areas. Plenum cables ties shall be used with all ceiling areas. J-Hooks shall be placed...
at locations meeting all codes and standard practices. All network cables shall be tested to meet data standards for each particular cable being utilized.

The A/V Contractor shall utilize qualified Audio/Visual technicians on this project. **A CTS certified Audio/Visual technician is required to be present at all times during the installation and testing.**

It is the responsibility of the A/V Contractor to review all related documents and drawings of this project. Any uncovered technical issue shall be reported to the District.

**C. A/V CONTRACTOR WARRANTY AND SERVICE**

All equipment shall be new and provided by an authorized dealer with full warranty and service guarantees. Full warranty for all equipment shall begin at the sign-off of completion of the installation and testing.

The A/V Contractor shall provide a minimum of two years' warranty on all workmanship related to the installation of equipment, cabling, and connections. The A/V Contractor shall provide an extended warranty on all equipment that has less than a two-year factory warranty for a full two-year warranty provided by the A/V Contractor.

The A/V Contractor shall provide a physical response time within one business day for any issues related to the installation or malfunctions of the installed system throughout the two-year warranty period. The A/V Contractor shall work with the District to facilitate, manage, and replace all failed equipment.

**D. A/V CONTRACTOR QUALIFICATIONS**

The A/V Contractor shall have a minimum of 5 years of experience installing systems of similar scope, scale, and complexity of the technology of this system. The A/V contractor must have a walk-in office located within 75 miles of the Brooksville District Office. The A/V Contractor shall be a current member and in good standing with Infocomm International, National Association of Broadcasters, National System Contractors Association, or a related Audio/Visual Association. The A/V Contractor shall employ CTS Certified Technicians to work on this project. On-site A/V Contractor Technicians shall have 2 years of verified experience installing systems of similar scope, scale, and complexity of the technology of this system.

All installers working on the project must be full-time employees of the A/V Contractor. Any exceptions must be approved by the District.

**IV. A/V CONTRACTOR PROVIDED EQUIPMENT**

**A. VIDEO EQUIPMENT**

QTY: 1  AJA KUMO1616 16x16 HD-SDI Router
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<tr>
<th>QTY</th>
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<tr>
<td>5</td>
<td>AJA OG-ROI-HDM Open Gear HDMI to 3G-SDI Scan Converter.</td>
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<td>2</td>
<td>AJA OG-Hi5-4K-Plus Open 3G-SDI to HDMI 2.0 Converter</td>
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<td>2</td>
<td>AJA OG-X-FR Open Gear Frame with Network Connectivity</td>
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<td>2</td>
<td>AJA OG-X-PS Redundant Power Supply for OG-X-FR</td>
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<td>2</td>
<td>AJA OG-3GDA-1x9 1x9 HD-SDI Distribution Amplifier</td>
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<td>AJA V2Digital Analog to Digital Video Converter</td>
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<td>Cobalt Digital 9933-EMDA-ADDA HD-SDI Audio DeEmbedder</td>
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<td>Cobalt Digital RM20-9933-EMDE-B-HDBNC Rear Module for 9933 DeEmbedder</td>
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<td>3</td>
<td>Crestron HD-EXT3 HDBaseT Extender Kit</td>
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<td>ESE ES-219A RS-170A Black Burst Generator with 4 Outputs</td>
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<td>AVP AV-D23E2-AMN75-BZ 32x2 Video Patch Panel</td>
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<td>AVP LPC-2-BLACK 2’ Patch Cables</td>
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<td>Black Magic BLACKRACK 10 Device Frame for Mini Converters</td>
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<td>Imagine 6822+ Power Supply for 6800+ Card Frame</td>
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B. AUDIO EQUIPMENT

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<th>Description</th>
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<tr>
<td>2</td>
<td>Biamp Server I/O Server I/O Chassis with 1 DSP Card &amp; 1 AVB Card</td>
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<td>8</td>
<td>Biamp SEC-4 Audio Input Card with AEC</td>
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<td>5</td>
<td>Biamp SIC-4 Audio Input Card</td>
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<td>Biamp SOC-4 Audio Output Card</td>
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<td>Biamp SVC-2 VOIP Connection Card</td>
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<td>Biamp TC5 AVB Network Switch</td>
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<td>Biamp TCM-XEX IP Ceiling Microphone</td>
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<td>Biamp TMC-NETBX IP Connection Box from TCM-XEX</td>
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<td>Biamp AVB-1 AVB Network Connection Card</td>
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<td>18</td>
<td>RDL ST-PA18 18 watt Audio Amplifier</td>
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<td>18</td>
<td>RDL PS-24AS 24V 500ma Power Supply for ST-PA18</td>
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<td>5</td>
<td>RDL STD-600 Passive Audio 600 ohm Combiner/Splitter</td>
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<tr>
<td>1</td>
<td>RDL STR-19B Stick-On Series Racking System</td>
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QTY: 12  (Pairs) Dayton Audio (Model SAT3) Desktop Mountable Speaker - Total 24
QTY: 1  Shure ULXD4D Dual Wireless Microphone Receiver
QTY: 2  Shure ULXD1 Wireless Microphone Transmitter
QTY: 3  Shure MX184B Supercardoid Lavalier Microphone (1 spare)
QTY: 2  Shure ULXD2 Handheld SM58 Wireless Microphone Transmitter
QTY: 2  Wohler AM1-2SDA Stereo Audio Monitor
QTY: 1  RME Babyface Pro FS USB Two Way Audio Interface
QTY: 1  JOECO BBR64 DANTE Recorder
QTY: 1  Listen Technologies LCS-121-0 WIFI/RF Advanced System Kit

LCS-121-0 Includes:
QTY: 1  LW-100P-02 LE 2 Channel Wifi Server
QTY: 1  LW-202 LE Venue Awareness Kit
QTY: 1  LT-800-072-01 Stationary RF Transmitter (72 MHz)
QTY: 1  LA-304 Assistive Listening Notification Signage Kit
QTY: 1  LA-122 Universal Antenna Kit (72 MHz)
QTY: 1  LA-326 Universal Rack Mount Kit
QTY: 2  LPT-A107-B Dual RCA to Dual RCA Cable 6.6 FT. (2 M)
QTY: 2  LR-4200-072 Intelligent DSP RF Receiver (72 MHz)
QTY: 2  LA-401 Universal Ear Speaker
QTY: 2  LA-430 Intelligent Ear Phone/Neck Loop Lanyard
QTY: 2  LA-423 4-Port USB Charger

C. CONTROL EQUIPMENT

QTY: 1  Crestron CP4N Series 4 Control System
QTY: 1  Crestron CEN-COM IP to RS232 Interface
QTY: 2  Crestron TS1542-TILT-B-S 15" Touch Control Panel Black
QTY: 6  Crestron PWE-4803RU POE+ Injector
QTY: 4  Crestron HDDA44KZE 1x4 HDMI Distribution Amplifier
QTY: 22  Crestron HZKPCN Horizon Custom Mic Mute Button Panels
QTY: 22  FSR DSKB-1G 1 Gang Desktop Mountable Box
QTY: 1  Crestron CNPWS-75 75 Watt Cresnet Power Supply
QTY: 1  Crestron CNTBLOCK Cresnet Distribution Block

D. DISPLAY EQUIPMENT

QTY: 2  NEC P525UL 5200 Lumen Lazer Data Projector
QTY: 2  Projector Mount Adapter Plate As Required – Model Determined by A/V Contractor
QTY: 2  Extension Pole/Mount As Required - Model Determined by A/V Contractor
QTY: 2  NEC-M431-PT 43” LED LCD Public Display Monitor with anti-glare
QTY: 3  NEC-M431-PT 43” LED LCD Public Display Monitor with anti-glare

E. Custom Equipment

QTY: 1  Custom 1RU Connection Panel with SDI Input, SDI Output, HDMI Input, Audio Input and Output Connections

F. UTILITY COMPUTER EQUIPMENT

QTY: 1  SL-1U-LLH310M-LA Rack-Mountable Windows 10 Utility PC

- Intel H310 Chipset and 8th and 9th Gen Core i7/i5/i3 (LGA1151) processor
- G4900 - 3.1GHz Intel Celeron CPU - Dual Core, 2MB Cache, UHD Graphics 610 (54W)
- 4GB DDR4 2666MHz RAM
- **LAN:** 1x Ports (GB (10/100/1000))
- VGA + DVI-D + HDMI
- 6x USB 2.0 Ports
- 4x USB 3.1 Ports
- 1.0TB SATA 6.0Gb/s 7200RPM 64MB 3.5" - WD Blue
- Realtek® ALC887 codec
- Windows 10 Software Installed

QTY: 1  SL-RMKB-RKP117e 1U Rackmount 17” LCD Keyboard Display Drawer

G. PRODUCTION EQUIPMENT

QTY: 2  Wohler AMP1-2SDA Rackmount Audio Monitor

H. PREFABRICATED HDMI CABLES

LOT  Extron 26-650-35 HDMI to HDMI Pro/35 35FT Cable
LOT  Extron 26-663-02 HDMI to HDMI Ultra/1.5 – 1.5 FT Cable
LOT  Extron 26-663-03 HDMI to HDMI Ultra/3 - 3FT Cable
I. CABLES AND CONNECTORS

<table>
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<th>Lot</th>
<th>Description</th>
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<tr>
<td>Lot</td>
<td>Belden 1695A- Black RG6 Serial Digital Coax, Flamarrest Jacket</td>
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<td>Lot</td>
<td>Belden 1694A Belden RG6 Serial Digital Coax</td>
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<td>Belden 9451- Black Audio Cable - 2 Cond 22 AWG TC, Shielded, Riser</td>
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<td>Belden 9451P- Black Control Cable 2 Cond 22 AWG TC, Shielded, Plenum</td>
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<td>Belden 6299UE Speaker Cable, 2 Conductor 16 AWG BC, Unshielded, CMP</td>
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<td>Belden 2412A – Blue Category 6+ Enhanced Cable, 4 Pair, U/UTP, CMR</td>
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<td>Crestron Cresnet-P-TL Cat6A Cresnet Cable</td>
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<td>Kings BNC Connector for Belden 1694A</td>
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<td>Kings BNC Connector for Belden 1695A</td>
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<td>RCA Audio Connectors</td>
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<td>RJ-45 EOL Connectors</td>
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V. DISTRICT I.T. DEPARTMENT

Commissioning of the Video Production Switcher and Digital Video Recorder will be provided by the District. Closed Captioning Systems will be commissioned by the District.

The District shall provide one 48 port managed network switch for the new system. The District I.T. Department shall provide IP Address assignments for all system devices. The District shall provide required cables and connectors to connect the A/V Network switch to interconnect with the District Data Network. The A/V Contractor shall provide Cat6 cables and connectors required for all device connections documented on system line drawings.

The District will provide all the electrical requirements for this project.

VI. DISTRICT FURNISHED EQUIPMENT

A. Equipment to Remain in Place

The District shall provide the following equipment that will remain in place:

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<tr>
<td>LOT</td>
<td>Production Control Room Furniture, Electrical Power &amp; Rack Equipment</td>
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<tr>
<td>LOT</td>
<td>Restroom, Breakroom, Dais &amp; Audience Rear Ceiling Speakers</td>
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</tbody>
</table>
QTY: 23 Dais and Staff Table Dell Graphic Display Monitors
QTY: 22 Dais Staff Table Microphones
QTY: 10 Extron SF228T Ceiling Speakers
QTY: 6 JBL CTL-26DT Ceiling Speakers
QTY: 2 JBL CM62 Ceiling Speakers
QTY: 24 Dell P2419 Dais & Staff Table Monitors
QTY: 6 20” Dais & Staff Table Mounted Displays
QTY: 8 Furman HP-15 Relay Power Control Devices
QTY: 6 Press Audio/Video Output Wall Plates
QTY: 1 Recorder Desk Audio Output Panel

B. REUTILIZED EQUIPMENT

The District shall provide the following equipment that will be reutilized in the upgraded system.

c. New District Furnished Equipment

<table>
<thead>
<tr>
<th>QTY</th>
<th>Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Panasonic AV-HS410J HD/SD Switcher with 9+ Inputs - D-Ship with Power Supply</td>
</tr>
<tr>
<td>4</td>
<td>Panasonic AWHE42WPJ HD Integrated PTZ Camera (White)</td>
</tr>
<tr>
<td>4</td>
<td>Panasonic FEC40WMW Wall mount for HE40 Camera (White)</td>
</tr>
<tr>
<td>1</td>
<td>Panasonic AW-RP150GJ5 Advance Full PTX Camera Controller w/7” LCD</td>
</tr>
<tr>
<td>1</td>
<td>Panasonic XLRMF10 4-Pin XLR Power Supply Cable FOR RP150GJ5</td>
</tr>
<tr>
<td>1</td>
<td>Atomos SHOGUN STUDIO Dual Digital Video Recorder</td>
</tr>
<tr>
<td>22</td>
<td>AJA HI5-Plus Mini Converter - SDI to HDMI Mini Converter</td>
</tr>
<tr>
<td>12</td>
<td>Black Magic Mini Up/Down Cross Converters</td>
</tr>
<tr>
<td>3</td>
<td>Leitch 6800+ Device Card Frames</td>
</tr>
<tr>
<td>4</td>
<td>Leitch ARG-6800+D Audio Distribution Amplifiers</td>
</tr>
<tr>
<td>7</td>
<td>Leitch DA-HR6802+ SDI Distribution Amplifiers</td>
</tr>
<tr>
<td>2</td>
<td>Leitch VEA-6800+ Composite Video Distribution Amplifiers</td>
</tr>
<tr>
<td>1</td>
<td>Marshall AR-AM4-BG-2 Audio Monitor</td>
</tr>
<tr>
<td>1</td>
<td>TVONE LM-702HDA Dual Video Monitor</td>
</tr>
<tr>
<td>1</td>
<td>OSC CX-100V 8 Channel Audio Amplifier</td>
</tr>
<tr>
<td>1</td>
<td>Teradek CUBE Stream Encoder</td>
</tr>
</tbody>
</table>
QTY: 1 YRB to HDMI Converter
QTY: 1 DVD/BluRay Player
QTY: 1 HDMI to YRB Converter
QTY: 1 Podium PC Computer
QTY: 1 Spectrum Cable Television Receiver
QTY: 1 48 Port Network Switch
QTY: 4 Fostex PMO.5N Desktop Powered Speaker

Crestron Flex Microsoft Teams System

Includes:
- QTY: 1 Crestron UC Presentation Transmitter
- QTY: 1 Crestron HD-CONV0USB-260 Teams Converter
- QTY: 1 Crestron UC Engine Teams PC
- QTY: 1 Crestron AM3200 Air Media HDMI Controller
- QTY: 2 Crestron LAN/USB Converters
- QTY: 1 Crestron Audio/USB Two Way Converters

VII. SYSTEM DOCUMENTATION

The District has provided a detailed design at “Build” level engineering for a complete and working system. Any variations to this design must be approved by the District. System drawings have been provided for all aspects of the system installation. The District will provide a cable Run-list Excel Spreadsheet to the A/V Contractor before installation. The installation contractor will not be required to provide engineering for this system or provide as-built drawings. The District will document all necessary corrections or changes to this design.

VIII. CABLE AND EQUIPMENT LABELING

Each system cable will be labeled with a unique cable label. Labels shall be applied on each end of every cable. Labels shall be Brady M-143-427 1” x 1.25” x .5”, Black on Semi-clear wrap-around labels. The format for printed labels is illustrated on drawing #AV-101-E/7.
Equipment Labels shall be provided on all equipment including conversion devices at displays and dais devices. Labels shall be Brady MC-500-595-WT-BL .5” printed tape labels. Each label shall include the equipment short device name, and unique system name as shown on system line drawings. Example: “HD-SDI Router- SDIRTR-01”. Labels for Custom I/O Panels will have engraved double-stick labels.

IX. EQUIPMENT SUBSTITUTIONS

All equipment substitutions proposed by the Contractor must be preapproved by the District before entering into Agreement between the two parties. All substitutions must have exact technical abilities and operational functions.