

**CALL NO. 18.1
FOR PROFESSIONAL SERVICES
TO BE PROVIDED TO THE
CITY OF SANTA CLARA, CALIFORNIA
BY ELB US INC.**

The Parties to this Call No. 18.1 ("Call") agree that this Call is made pursuant to the terms of a Call Agreement between the Parties entitled, "Call Agreement by and between the City of Santa Clara, California and ELB US Inc.," dated June 22, 2017, the terms of which are incorporated by this reference. This Call describes the Services to be provided to the City of Santa Clara, California ("City") by ELB US Inc. ("Contractor"), which are more fully described in Contractor's proposal to City entitled, "ELB Response to City of Santa Clara – Central Park Library - Audio Visual Services" dated March 8, 2018, and "City of Santa Clara – Central Park Library Conference Room" dated June 4, 2018, and "City of Santa Clara Various AV Upgrades" dated June 11, 2018, and "City of Santa Clara City Hall Café Audio System" dated June 11, 2018 ("Proposal"), attached to this Call as Exhibit A and incorporated by this reference.

The Services to be performed under this Call shall be completed within the time period beginning on July 1, 2018 and ending on June 30, 2019. The attached Proposal contains a complete description of the Services, and performance dates for the completion of such Services, to be performed by the Contractor under this Call. In no event shall the amount paid to the Contractor for the Services provided to City by the Contractor under this Call, including all fees or pre-approved costs and/or expenses plus a contingency budget for unplanned remediation items, exceed Four Hundred, Forty-Two Thousand, Three Hundred and Eleven Dollars (\$442,311.00), subject to budgetary appropriations.

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but both of which shall constitute one and the same instrument; and, the Parties agree that signatures on this Agreement, including those transmitted by facsimile, shall be sufficient to bind the Parties.

(document continues to next page)



The Parties acknowledge and accept the terms and conditions of this Call as evidenced by the following signatures of their duly authorized representatives. The Effective Date is the date that the final signatory executes the Call. It is the intent of the Parties that this Call shall become operative on the Effective Date.

CITY OF SANTA CLARA, CALIFORNIA
a chartered California municipal corporation

APPROVED AS TO FORM:

Dated: _____

BRIAN DOYLE
City Attorney

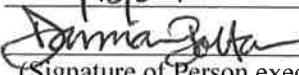
ATTEST:

JENNIFER YAMAGUMA
Acting City Clerk

DEANNA J. SANTANA
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771

“CITY”

ELB US INC.
a Delaware corporation

Dated: 06/15/2018
By: 
(Signature of Person executing the Agreement on behalf of Contractor)
Name: Damian Bolton
Title: President
Local Address: 415 Boulder Court, Suite 500
Pleasanton, California 94566
Email Address: Sales@elbglobal.com
Telephone: (925) 400-6175
Fax: (925) 475-5096

“CONTRACTOR”

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EXHIBIT A

SCOPE OF SERVICES

The Services to be performed for the City by the Contractor under this Agreement are more fully described in the Contractor's proposals entitled, "ELB Response to City of Santa Clara – Central Park Library - Audio Visual Services" dated March 8, 2018, and "City of Santa Clara – Central Park Library Conference Room" dated June 4, 2018, and "City of Santa Clara Various AV Upgrades" dated June 11, 2018, and "City of Santa Clara City Hall Café Audio System" dated June 11, 2018 and in the finalized Bill of Materials, amended from time to time and hereby incorporated by their reference which are summarized and attached below to this Exhibit A.





ELB Response to City of Santa Clara – Central Park Library - Audio Visual Services 3/8/18

ELB Reference

58972 (Project Tracking System)

From

Catrina Reynolds
Business Development Manager
ELB US Inc.
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Pleasanton, CA 94566
Direct 925.523.7113
C.Reynolds@elbglobal.com

City of Santa Clara ELB Response to City of Santa Clara's Request for Proposal Audio Visual Services |
ELB Ref #58972

PROJECT SPECIFICS – SANTA CLARA CENTRAL PARK LIBRARY COST PROPOSAL

Redwood & Edinger Rooms – Main System \$282,752.44

Equipment & materials	Per Final BOM	\$153,954.58
144 hours	Installation	\$18,720
64 hours	Engineering	\$8,960
32 hours	CAD	\$2,880
40 hours	Programming	\$5,000
56 hours	Testing & Commissioning	\$7,280
64 hours	Project Management	\$7,040
Project Administration		\$2,652
Total Labor charges		\$51,092
Tax		\$19,373.86
Freight		\$5,800
Total (including tax and freight)		\$282,752.44

SYSTEM DESCRIPTION - Redwood & Edinger Rooms

The AudioVisual System for the Redwood & Edinger Rooms, has been designed to allow each room to operate individually, as well as together for large events. Audio, Video and Control functionality will work seamlessly across both rooms.

Each room shall be functionally identical and shall feature the same inputs and outputs, source devices and destinations. Control over each room in separate mode shall be functionally identical.

Video Sources and Inputs

Each of the inputs and source devices below shall be selectable for viewing on the projection screen. These sources may also be routed to other destinations such as a video recorder, rack-mounted monitor, or streaming video encoder.

Lectern Inputs

- Each lectern / podium shall feature an on-board switcher featuring Qty (1) HDMI input and Qty (1) VGA & 3.5mm audio input for different laptop possibilities.
- An adapter ring shall be provided to allow mini-DisplayPort and USB-C connections as well.
- All video inputs from the Lectern shall be connected to the system via a single cable with a ruggedized, professional touring grade connector.
- There shall be two locations in each room where the Lectern may be connected to the system. The first is at the existing floor box. The second shall be a new input located at the display wall. Both connections shall feature the heavy-duty connector mentioned above.

HDMI Inputs



- Each room shall feature Qty (2) direct HDMI inputs. These have been included to provide greater system flexibility and are intended for sources such as a camera or an additional laptop.
- One HDMI input shall be located at the existing floor box, and the other shall be located at a new wall plate.

Rack PC

- Each room shall feature an Owner Furnished (OFE) PC. This PC may be used to present, perform video conference calls, etc.

Cable TV Receiver

- An OFE Cable TV (CATV) receiver shall connect to the system from television viewing.
- The Touch Panel control shall be capable of changing channels. (NOTE – this is dependent upon the capability of the OFE CATV Receiver itself.)

Blu-Ray Player

- An OFE Blu-Ray Player shall be included for both rooms.
- The Touch Panel control over Blu-Ray player functionality shall be provided.

AppleTV

- This will allow AppleTV programming, as well as wireless connectivity of Apple devices for display on the projection screen.
- Some basic control of the AppleTV will be possible via the Touch Panel, however the Apple Siri remote cannot be fully replicated.

ActionTec MiraCast Receiver

- This unit works like the AppleTV, except for Windows and Android devices.

Barco ClickShare

- This device provides a set of USB dongles that may be connected to a laptop for wireless presentation. No software needs to be loaded on the laptop for the wireless connection, it is entirely managed by the USB dongle.
- Up to four laptops may be connected simultaneously and may be shared on the projection screen one-at-a-time, or up to all four together.

Digital Signage Player

- Each room shall feature a Digital Signage Player capable of custom video displays. Content may be set or changed regularly via a web interface.
- The specific player shall feature the necessary hardware interface to be used as a part of an emergency notification system, whereby if an emergency announcement is made via the signage network, that message will be given priority over any in-room content. This of course can be managed and protected to ensure no unnecessary interruptions are made.

Video Conferencing

The system has been designed to provide the capability to host and/or join video conferences via Skype for Business. A Skype for Business license will be required for each rack-mounted PC. (It is understood this can be provided by the City's IT Department.)



Pan/Tilt/Zoom (PTZ) Camera

- Qty (2) new PTZ Cameras will be installed in each room for use with both video conferencing and video streaming / lecture capture. The camera shall be controllable via the Touch Panel Controller, including four camera presets.
- Additional inputs will be available to add additional temporary, or event-specific cameras to each room as needed.
- Additional permanent cameras may be installed at a later date.

Video Conference Bridge

- This device shall provide the necessary format conversion to and from the AV System to the USB interface of the rack-mounted PC.

Placing Calls

- The Touch Panel Controller may be used to set the overall system to prepare to make a video conference call, however, Skype calls must be placed via the PC. This is a function of Skype for Business.

Video Recording and Streaming

A major component of the system to allow Users to easily record a session, as well as to live stream events.

Pearl-2 Rackmount

- This device shall manage video recording and video streaming.
- This unit is capable of multiple configurations that will allow both live video of a presenter, as well as presentation content to be shared simultaneously.
- Basic recording features shall be manageable via the Touch Screen Controller, while more advanced features are accessible via web interface.
- The Pearl is a multi-functional device. Video Recorder, Lecture Capture, Live Production Switcher, and Streaming Server.

Projectors and Projection Screens

- A new projector shall be installed in each room.
- The new projectors feature high-output, 8,000 lumen laser light modules. Laser projector do not require replacement lamps and will last for approximately 20,000 hours of use. In addition, due to more constant brightness, laser projector appears 10% - 20% brighter than equally rated lamp projectors.

Video Routing – Video Matrix Switcher

This is the major video signal switching component of the system. A single switcher shall be used for both rooms. All sources may be routed to any destination via the Touch Panel Controller

Video Streaming Encoders and Decoders

- Each room shall feature a video streaming encoder that will allow any video source to be streamed over the network. This is a single source stream, such as a PowerPoint presentation or CATV broadcast. This stream can be sent to anywhere within the Library and viewed via PC or



streaming video decoder. This method will allow the use of multiple displays without requiring dedicated video connections.

- In addition, two streaming decoders shall be included with the overall system. These decoders may be used anywhere on the same network the encoders are connected to, in order to allow easy distribution of program material (audio and video). Additional decoders may be added at any time with no need for additional infrastructure.

Audio Inputs and Outputs

Lecterns

- Each Lectern shall keep the existing microphone, which shall be capable of being connected at the floor box and at the new wall plate input panel in each room.
- The Lectern Mic volume and mute function may be adjusted from the Touch Panel Controller.

Auxiliary Mic Inputs

- In addition to the lectern mic inputs, an additional mic input shall be added at the floor box and at the wall plate input panel.
- These Aux Mic inputs will be controllable via the Touch Panel Controller as well.

Line Level Audio Inputs and Outputs

- At the floor box, a plate with line level audio inputs and outputs shall be installed in order to provide easy connection to the system for a musical act. A stand-alone audio mixer (described below) can be connected here.

Rack Audio Inputs and Outputs

- Each room shall feature an auxiliary 3.5mm (1/8") audio input jack at the equipment rack.
- Each room shall receive a pair of auxiliary XLR audio input jacks and XLR audio output jacks at the equipment rack.

Outboard Audio Mixer

Intended to allow visiting musical acts, or guests with larger numbers of wired microphones to easily connect into the system. The audio mixer will allow those Users to control their audio directly from the mixer, while the Digital Audio Signal Processor located in the rack will provide the necessary audio limitation to protect the system.

Digital Audio Signal Processor (DSP)

Similar to the video matrix switcher, the Audio DSP routes audio sources to the necessary destinations such as the power amplifier or a recording or streaming device. The Audio DSP also controls audio volume and provides the necessary processing to allow high quality audio.

Audio-Only Telephone Calls

The Audio DSP features a VoIP connection for each room, which will allow Users to place telephone calls directly from the room using the Touch Panel Controller to dial the call.

Wireless Microphones

- Each room shall feature Qty (8) digital wireless microphone channels, for a total of Qty (16) system-wide. Up to Qty (16) mics may be used in a single room as required.



Handheld Wireless Microphone Transmitters

- Each room shall feature Qty (6) handheld wireless mics, for a total of Qty (12) handheld wireless microphones. NOTE – Qty (6) per room shall be the default, but the system may be configured (at the touch of a button) to allow up to all twelve handheld wireless mics to be used in a single room as needed.
- Table-top and floor-standing microphone stands have been included for greater flexibility and a variety of used for the handheld microphones.

Bodypack Wireless Microphone Transmitters & Microphones

- Each room shall feature Qty (2) bodypack transmitters that can be connected to a microphone. A total of Qty (4) bodypacks shall be included in the overall system.
- Qty (2) standard lavalier-style microphones have been included in each room, for a project total of Qty (4).
- Qty (2) head-worn fitness-style microphones have been included in each room, for a project total of Qty (4). These are available in Blue, Red, Yellow, or Black.
- Qty (4) new over-the-ear microphones have been added to the system. These may be used with any of the wireless bodypacks.
- In addition, any existing over-the-ear microphones may be used with the new wireless bodypack transmitters.

Microphone Control

- Using the Touch Panel Controller, the Users may raise and lower microphone volume, as well as mute a microphone as needed.
- The system will be programmed to reset microphone levels to a default setting each time the system is turned OFF.

Assistive Listening System (ALS)

A new, high-quality ALS system has been included in order to meet ADA requirements.

Audio Recorder

In addition to the video recording capabilities, each room shall feature a networked digital audio recorder.

- Capable to recording to USB stick, SD Card, or to a network file (or all three simultaneously).
- Files may be managed via web interface.

Uninterrupted Power Supply (UPS)

Qty (2) UPS backups shall be included, one per equipment rack / room, in order to protect the equipment from power outage. The UPS units shall sense power outage and send shutdown commands to the AV system in order to preserve equipment life.

Control System

The control system shall manage overall functionality of the system. ELB will create default settings in cooperation with Library staff so the systems will behave predictably and reliably each time they are turned ON.

- Qty (4) new 10-inch touch panels shall be included with the system.
 - Qty (2) will be wall-mounted, one per room. These shall be white.
 - Qty (2) will be mounted at the equipment racks and shall be black.



PROPOSAL ASSUMPTIONS, INCLUSION ASSUMPTIONS

1. It is assumed that the ceiling is drop-tile.
2. All floor boxes, back boxes, terminal cans, pull boxes, and junction boxes to be provided and installed by the Customer.
3. It is assumed that tables and appropriate AV cable pathways (ie. user cables, control panel cables) will be provided by Customer and onsite prior to ELB's onsite for installation.
4. Appropriate Credenza or other furniture containment for the AV equipment rack is to be provided by the Customer
5. All Owner Furnished (OFE) equipment will be provided to ELB prior to ELB's onsite installation. In the case where OFE equipment is required to enable ELB to Pre-build and test the system in ELB's shop, Customer will, upon request, ship equipment to ELB.

INCLUSIONS

1. ELB will provide a turn-key system as described in the Scope of Work Section of this agreement.
2. ELB will provide AV installation including AV signal cable, terminations to AV equipment, including wall and floor plates as described herein.
3. ELB will advise for any AV related infrastructure requirements.
4. ELB will coordinate with other trades as required.
5. The scope of work for the engineering and drafting services in this project includes the creation of PDF drawings and a Bill of Materials, receiving feedback on these deliverables and producing a final set of PDF drawings and a final Bill of Materials. Upon acceptance of these final documents, ELB will produce a full set of CAD drawings for final review, incorporate any final changes, and complete the scope of this project by submitting a Final Design Pack to the client.

EXCLUSIONS

1. Conduits, cable trays, cable ladders, connection boxes, pull boxes, terminal cans, junction boxes, floor boxes and outlet boxes permanently installed in walls, floors, and ceilings.
2. Installation or modification of any millwork, or casework.
3. Room lighting fixtures, power receptacle outlets, and interconnecting wiring for these circuits and all AC electrical breaker panels, outlets and wiring required.
4. Structural support (backing), wall openings, wall or floor penetrations, ceilings and trim, fire prevention and safety devices, rough and finished trim, painting and patching, drapes, shades or curtains, carpets, floor coverings, glazing, asbestos work and acoustical treatments. Relocation or movement of any ceiling or wall obstructions.
5. All data/network and telecom service, cable, termination and connections to be made by others.
6. Acoustical treatments, variable or fixed, of any kind; such as curtains, diffusers, absorptive materials, bass traps, or similar.
7. Security systems, door locks, CCTV monitoring systems.



City of Santa Clara – Central Park Library

Conference Room Audio Visual Services

ELB Reference 58973 (Project Tracking System)

PROJECT SPECIFICS – SANTA CLARA CENTRAL PARK LIBRARY STAFF CONF ROOM

Equipment & materials	Per Final BOM	\$8,506.52
Total Labor charges		\$4,415.00
Tax		\$ 1078.08
Total (including tax and freight)		\$ 13,999.60

SYSTEM DESCRIPTION – CENTRAL PARK LIBRARY CONFERENCE ROOM

Designed to provide easy interface for local presentation from any table location, as well as Skype for Business video conference calls via local PC, this Conference Room System will provide audio echo cancellation for local users.

Input / Source Devices

Qty (1) Laptop input connections for local presentation:

- Qty (1) HDMI cables with Adapter Ring

These input cables will allow a User Laptop to be displayed on the in-room monitor for local presentations. An adapter ring will also be provided to accommodate featuring mini-DisplayPort (Thunderbolt) and/or USB-C monitor output ports.

Local PC

- NUC-type PC will be installed behind the display.
- This PC may be loaded with the City of Santa Clara Image for easy log-in access for City Employees, and access to whatever software is made available to that image, such as Powerpoint and Skype for Business.
- A wireless keyboard and mouse will be included as a PC interface.

AppleTV, controlled via Factory Remote Control

Video Conferencing Devices

Owner Furnished (OFE) Microsoft Skype for Business Software will serve as the primary video conferencing software. Users will access Skype for Business via the local PC using the wireless keyboard and mouse.

A USB3.0 Camera will be mounted at the display. Free control software may be loaded to the local PC for control over the image.



Display Devices

Qty (1) 82" 4K LCD Display with wall mount. A pull-out accessory will be added to allow for easy maintenance access. A removable, perforated steel panel will be installed behind the display to keep all devices neatly organized and easily accessible for maintenance.

Signal Routing Devices

These devices will move video and audio signals from the inputs at the table, to the display and camera located at the wall. These units have been carefully chosen to provide the highest signal quality, as well and up to 4K resolution to ensure new laptops will be supported now, as well as in the future.

Audio Devices

A pair of loudspeaker / microphone units have been included in order to make certain all participants around the table can be heard clearly. These speaker/mic units will be connected to the Local PC and are intended to support Skype for Business calls. Each unit features Mute and Volume UP/DOWN buttons for ease of use.

Control Devices

This system has been designed to allow video conference calls to be managed from the Local PC using the keyboard and mouse. The display will be configured to turn ON automatically and switched to the correct input when a source is connected, and OFF when that signal has been removed.

Devices such as AppleTV, Comcast tuner will need to be controlled using their own factory remotes, and the Display input for these sources will need to be switched manually as well.

City of Santa Clara – Various AV Upgrades

Audio Visual Services

ELB Reference 59583 (Project Tracking System)

PROJECT SPECIFICS – Network / PoE upgrade with Addition of New Touch Panel

Equipment & materials	Per Final BOM	\$3480.28
Total Labor charges		\$5248.00
Tax & freight		\$ 465.63
Total (including tax and freight)		\$ 9,193.91

SYSTEM DESCRIPTION – Network / PoE upgrade with Addition of New Touch Panel

The purpose of this project is to lighten the overall load on an existing Cisco 28-port managed switch that is currently performing three different tasks. It is currently being used as:

- A switch for the Crestron control network.
- A switch for the digital audio, or "Dante" network that is the backbone of the wireless microphones. (Dante is the name of the audio network protocol.)



- A PoE power supply for various Crestron transmitters and receivers currently connected to the Crestron switcher.

By separating these systems, the overall efficiency of each device will increase, thereby benefitting performance and overall lifespan.

In addition, the above tasks will require a complete re-testing of the entire control system. This is an opportune time to add the additional touch panel that was requested at the Dais / Clerk table, as that touch panel will need to be fully tested with each and every button pressed. By adding the new touch panel at this time, the control system testing can be performed for both simultaneously.

1. Installation of new Cisco switch.

A new Cisco switch will be installed at the AV, or "Crestron" Rack near the existing Cisco switch. Any and all existing cables related to the Dante audio network will be re-routed to the new switch.

Each wireless microphone, and any other Dante devices in the system will be thoroughly tested.

The existing Cisco switch will be kept in service as the Crestron control network switch. Both switches will be clearly labeled with the assigned system.

2. Installation of new Crestron PoE power supply.

The Crestron DM switcher is connected to various transmitters and receivers that help to distribute the video and control signals. These transmitters and receiver require electrical power. The DM switcher is capable of delivering that power, along with video and control signals over a single cable. The DM switch, however, is not capable of supplying the power required for these satellite devices. The PoE power supply will be installed at the Crestron rack next to the DM switcher in order to provide that power.

3. New Crestron Touch Panel.

The City has requested an additional touch panel be installed at the Dais or Clerk's Table. Given the nature of the testing required for the above items, this will be a convenient time to add this touch panel. In addition, the touch panels are all PoE.

A new cable will be pulled to the Dais, capable of reaching the Clerk's Table. The new touch panel will be added and tested thoroughly to ensure proper operation.

PROJECT SPECIFICS – Council Chamber Loudspeaker and Audio Upgrade

Equipment & materials	Per Final BOM	\$11,473.78
Total Labor charges		\$11,903.00
Tax & Freight		\$ 1,505.84
Total (including tax and freight)		\$ 24,882.62

SYSTEM DESCRIPTION – Council Chamber Loudspeaker and Audio Upgrade

1. Removal of Existing Loudspeakers and Existing Power Amplifier.

ELB will remove two loudspeaker pairs, “Mains” and “Fills” currently installed in the Council Chambers. The existing mounts for these loudspeakers, and related loudspeaker cable will be removed as well.

The existing ceiling-mounted loudspeakers over the Dais, the existing loudspeakers in the Lobby, and the Loudspeakers located outside the Council Chamber will remain in place and will be utilized as a part of the upgraded loudspeaker system.

The existing Power Amplifier located at the “Crestron AV Rack” will also be removed at this time.

2. New Loudspeakers.

Once the existing loudspeakers have been removed, Qty (8) new loudspeakers will be ceiling-mounted in a more evenly distributed manner. This will allow each loudspeaker to be set to a lower overall output level, which will significantly improve the feedback and distortion heard through the podium microphone. By distributing the loudspeakers, loud, articulate sound reinforcement will be maintained throughout the Chambers. In fact, the audio will be more even across the entire space, as each audience member will be closer to a loudspeaker.

The new loudspeaker will be much smaller than the existing loudspeakers. Available in white or black.

New loudspeaker cable will be run to each new loudspeaker.

3. New DSP Processing Cards.

This is an opportune time to add DSP processing power to the existing Bimap audio processor. The current processor is running at 92%. These two additional processor cards will significantly reduce and distribute the load, which will allow the overall system to run more efficiently.

4. New Digital Audio Network Interface.

The existing system is currently running close to physical capacity. While the overall system is capable of expanding, this device is the most cost-effective method for adding the small number of additional outputs required for the new loudspeakers.

This new digital audio network interface will provide enough outputs for the new loudspeakers to be configured properly with varying delay in order for the audience to hear completely time-aligned audio.

This audio network interface will also provide several spare inputs and outputs for future and will be installed at the AV or “Crestron” rack next to the existing Biamp Audio DSP.

5. New Power Amplifiers.

Power for the new loudspeakers will be provided by Qty (2) new 4-Channel 8Ω power amplifiers. These amps will be connected to new cable pulled for the new loudspeakers.

In order to provide adequate power to the existing loudspeakers above the Dais, in the lobby and outside the Council Chambers, Qty (1) new 4-Channel, 70V power amplifier will be installed and connected to those loudspeaker zones.

The new power amplifiers will be installed at the AV or "Crestron" rack in approximately the same location as the existing amplifier.

NOTE: In the event construction work on the Council Chambers ceiling may cause friable asbestos, ELB will not be able to perform the de-install of existing equipment or installation of new equipment. This issue will need to be fully resolved prior to any work on the Council Chambers ceiling.

PROJECT SPECIFICS – Council Chamber Display Upgrade

Equipment & materials	Per Final BOM	\$22,115.99
Total Labor charges		\$15,763.00
Tax & Freight		\$ 2,928.14
Total (including tax and freight)		\$ 40,807.13

SYSTEM DESCRIPTION – Council Chamber Display Upgrade

Council Chamber Display Upgrade

1. REMOVAL OF EXISTING EQUIPMENT
2. INSTALLATION OF NEW EQUIPMENT: Qty (4) 82" Displays

1. REMOVAL OF EXISTING EQUIPMENT

ELB will remove the existing projectors, projector mounts, and projection screens. The existing Crestron DM receivers will be re-used as a part of the upgraded system.

A licensed electrician will be required to disconnect existing high-voltage power currently connected to the projection screens.

ELB will provide a powered personnel lift in order to raise and lower equipment into place.

Existing low-voltage cable that will no longer be required will be back-pulled at the time new cable is pulled.

2. INSTALLATION OPTION

Install Qty (1), new Dual-Channel DM output card in the existing Crestron switcher. This card, along with an existing dual-output card currently providing signal for the two projectors, will manage signal to the new displays.

Install Qty (2) new Crestron receivers at two new 82" displays. The two existing receivers currently located at the projectors, will be re-purposed at the other new 82" displays.

New low-voltage signal cable will be pulled from the Crestron rack to all new displays locations.

Install Qty (2) new 82" Samsung 4K displays facing the audience, with Qty (2) new 82" Samsung 4K displays facing the Dais. These displays will form a line roughly approximate to the rail along the edge of the dais.

Add Touch Panel control for all new displays, while removing existing control and buttons for the projectors and projection screens.

NOTE: In the event construction work on the Council Chambers ceiling may cause friable asbestos, ELB will not be able to perform the de-install of existing equipment or installation of new equipment. This issue will need to be fully resolved prior to any work on the Council Chambers ceiling.

City of Santa Clara – City Hall Café Audio System Audio Visual Services

ELB Reference 60312 (Project Tracking System)

PROJECT SPECIFICS – City Hall Café Audio System

Equipment & materials	Per Final BOM	\$ 5,582.81
Total Labor charges		\$ 6,664.00
Tax & Freight		\$ 736.05
Total (including tax and freight)		\$ 12,982.86

SYSTEM DESCRIPTION – City Hall Café Audio System City Hall Café Audio System

A new, installed audio system for playback of video and audio source devices and local speech reinforcement. This system has been designed to allow access to volume control and source select without allowing access to system functionality.

Input Sources

- Cable TV Tuner: The existing CATV Tuner will be connected to the new Audio system for even coverage of television broadcast audio.
- OFE Media Player: The new audio system will feature a 3.5mm audio input jack to allow Users to connect a media player such as an iPod or smart phone to the system for playback. The 3.5mm jack will be located on the outside of the equipment rack in order to allow User access.



- Wireless Microphones: Two handheld wireless microphones, with floor stands, will be made available for speech reinforcement. A rack drawer has been included in order to provide secure storage for the wireless microphones.
- Future: The Audio Processor/Amplifier is modular to allow future expansion. A possible future expansion might be an input card for emergency paging or audio feed from the Council Chambers audio system.

Audio Processor / Power Amplifier and Loudspeakers

- The Audio Processor (DSP) is integrated with the power amplifier for efficiency and lower cost. In addition, the DSP features a modular card chassis to allow input and output cards to be added as required. This provides for greater future flexibility. The DSP will provide the necessary EQ for a high-quality audio system.
- Qty (6) ceiling-mounted loudspeakers have been called out for even distribution of audio throughout the Café.

Control

- A master volume controller has been included for easy User access to volume control, without the need to access the Audio Processor/Amplifier. The Volume Control will be located out the outside of the equipment rack.
- A source select button panel has been included to allow the User to select between inputs in order to adjust volume for that input. This input select button panel will be located next to the volume control on the outside of the equipment rack.

Equipment Rack

- A wall-mounted equipment rack with a lockable front door will house the equipment. The volume and input select controls, along with the 3.5mm input panel will be mounted on the outside of the rack for User access.
- A rack-mounted drawer will be installed behind the lockable rack door in order to provide a secure location to store the wireless microphones.

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EXHIBIT B

FEE SCHEDULE

Consultant shall provide a schedule of rates and fees which includes all billing amounts and costs as follows (if applicable):

In no event shall the amount billed to City by Contractor for services under this Agreement exceed Four Hundred, Forty-Two Thousand, Three Hundred and Eleven Dollars (\$442,311.00), subject to budget appropriations.

This fee schedule below includes all fees or pre-approved costs and/or expenses identified for this Call 18.1 and a contingency budget for unplanned remediation items.

Project Phase - Upgrade Library Conference Room Broadcasting			
Item	Cost	Quantity	Total Cost
Library Public Conference rooms Upgrade - #58972	\$282,752.44	1	\$282,752.44
Library Staff Conference room Upgrade - #58973	\$ 13,999.52	1	\$ 13,999.52
Various AV Upgrades - #59583	\$74,883.66	1	\$ 74,883.66
City Hall Café AV System - #60312	\$ 12,982.86	1	\$ 12,982.86
Sub Total			\$ 384,618.48
15% contingency budget for unexpected remediation items			\$ 57,692.52
Total			\$ 442,311.00

