

**Audiovisual Proposal for:  
The County of Monterey  
Chamber, Broadcast, & Digital Signage Systems**



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**Spinitar**

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This Proposal – Scope of Work EXHIBIT A is between the County of Monterey, a political subdivision of the State of California, (hereinafter referred to as "COUNTY" OR "YOU"), and Spinitar (hereinafter "CONTRACTOR" or "WE").

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## ❑ **Executive Summary**

This proposal addresses the following systems and services

- Chamber & Production (168 W Alisal Street Rd.)
- Broadcast Headend (1590 Moffett Rd.)
- Digital Signage/Kiosks (Alisal & Schilling Lobbies)
- Portable Systems – Ad Hoc and in conjunction with Sea Cave Rm
- Sea Cave Room – Communications Production Facility
- Monterey Room – Zoom Room & Backup Meeting facility
- Post Install:
  - Spares
  - Systems Monitoring & Management
  - Warranty & Support Services

Spinitar will provide AV Systems in areas listed above and as listed in the System Descriptions below to allow for in-Chamber speech reinforcement and AV Presentation, HD Recording, Community Broadcast and online Streaming of Chamber proceedings. All existing equipment that is old or does not provide required performance or features will be replaced. As listed in this proposal, very few components will be reused.

A portable package of audio and video components and subsystems is included to allow for capture and immediate or future broadcast of Press Conferences or other events involving up to two people outside of the Chamber.

We have a proposal to upgrade the Monterey Room for use as a limited functionality Backup Boardroom system. It can be switched back to the existing Zoom Room mode with a push of a button.

The Sea Cave Room will be turned into a Communications Production Room for the capture of Zoom Conferences, Public Address, and Interviews.

Due to the importance that the County places on continued operation of the Chamber AV and Broadcast System, we have planned extensively for a resilient design, inclusion of critical spare components to allow for restoration of service using on-site parts, and rapid remote and on-site services to implement repairs.

## ❑ System Descriptions & Scope of Work

### ○ Chamber

#### Video Display System

The Display System for the audience in the Chamber will be handled by (2) 130" LED Walls behind the Dais and (2) 85" Displays to support the back rows.

The Display System for the members, Clerks, and other staff at the front of the room will be handled by 22" LCD Displays for every seat.

#### Video Walls

We will install (2) Samsung 130" diagonal (9.5'w x 5.3'h) LED Video Wall on the wall behind the Dais. The 1.5mm pitch of the LEDs will result in 1920 pixels across by 1080 high. This will allow what is known as 1080p or Full HD resolution. This is the standard resolution standard that will be used for all video capture and distribution.

The cabinetry on the back wall will be cut down to approximately 54" above the raised Dais Floor. A border board, much like a fireplace mantle, will be placed at that elevation and the video wall will be above that with approximately a 9" upper and lower border to allow for easy air movement behind the walls to keep them cooled.

Each wall may have different video sources routed to it if desired. Installation will be by Samsung.

#### 85" LCDs at back of Room

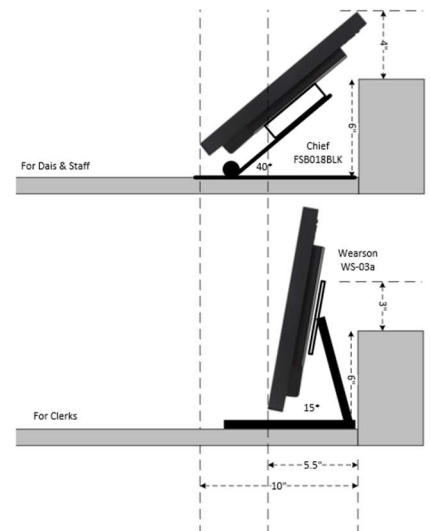
We will mount (2) Samsung 85" LCD Displays from the ceiling in the back half of the room. They will be mounted off to the sides pointing diagonally in to minimize obstructing camera views from the back wall.

#### 22" Monitors

A 22" Crestron Touch Monitor will be placed in front of each of the 14 Dais members, 2 Clerks, and 2 Staff members. Each Touch Monitor can provide a combination of Control Functions, Video Window, and access to PCs.

The Dais and Staff monitors will be mounted on Chief mounts that can fold back fairly flat to minimize obstruction of cameras viewing member faces.

The Clerk Monitors will be mounted with Wearson WS-03a mounts that can articulate more upright for better viewing by the Clerks.



- Board members will be able to:
  - Log into their seat so the System knows who is sitting where (for use with Camera Presets and automatic Name Titles)
  - Have basic controls such as Microphone Mute and Video Mode selection
  - View Presentation Content
    - Video window with controls on the side or toggling full/partial screen video by touching the image.
  - View Broadcast
- Staff Members will have the same capabilities.
  - We do have a PC allocated to each seat to allow, at the least, viewing of the agenda via Votecast or perhaps PDF version of the Agenda if you do not wish to make VoteCast available to them
- The Clerk's Panel will have:
  - Full control of the system within the limits we agree on during the Design Phase.
  - Ability to preview any video signal
  - Ability to send the AirMedia Access Code to the Lectern
- The Clerk will have three monitors (Clerk 2 will have two) that may view and control either of the two Clerks' PCs, the Presentation PC, Zoom VTC PC and an extra VTC that will not be distributed to others or broadcast but will be used strictly by the Clerk to administer Zoom Calls.

### **Video Presentation Sources**

Video Presentation Sources will include:

- Lectern Laptop
- ADA Laptop Input/OFE Document Camera
- Staff 1 Laptop
- Staff 2 Laptop
- Clerk1 Laptop
- Clerk2 Laptop
- AirMedia (Wireless Presentation) (County Network)
- AirMedia (Wireless Presentation) (Public Network)
- Presentation PC
- Incoming Videoconference PC
- Vote Results

We will provide a Presentation PC in the AV Racks that may be viewed and controlled by either Clerk. Control may be also assigned to either Staff member, or someone at the Lectern. A Logitech Spotlight presentation tool (sometimes called a Clicker) will be available for use at the Lectern to advance slides. The County is responsible for loading PowerPoint or other applications on this PC. Each Clerk and Staff member will have a Logitech Wireless Keyboard and Mouse that may be used for this or other PCs to be described later.



We will provide (6) locations to connect Laptops to the system via HDMI Cable.

At each of the two Clerk's stations, we will provide an HDMI Input plate on the backsplash. The plate will also include a USB 2.0 link to whatever PC the Clerk's Keyboard is actively assigned to. Primary intent is for connection of Thumb Drives.

At the Staff and Lectern locations, we will replace the existing Altinex Pop'n'Plug Jr Table Boxes.

These are similar to the ones that are already in these locations except that the VGA Jack has been replaced with an HDMI jack, and they will be new so you do not need to hold the spring loaded top open by hand. Your existing Document Camera may be connected to the Pop'n'Plug at the ADA Lectern location.



If the Clerk assigns Wireless Keyboard & Mouse control of the Presentation OC to the Staff or Lectern, their USB jack will also be available as a USB 2.0 link to the Presentation PC. At all other times, the Staff's Keyboard, Mouse, and USB jack will be assigned to their own PC (typically used for reading the Agenda).

We will also provide a Crestron AirMedia 3200. This device will allow connection and presentation of laptops and personal devices via WiFi. The appliance has (2) Network connections so that it can be connected to via the County or Guest WiFi Networks.

The 4-digit pin code shall be privately distributed to Dais, Clerk, & Staff Monitors as well as the Lectern Touch Panel without being seen on the Room Displays.

#### Logo Player

The system includes a Digital Media Player to play still or motion graphics. The intent is to allow a logo to be displayed when presentation content is not being presented and it is not desired to display the Broadcast signal. It is an alternative to a blank screen. We will load and provide for playback of a still or motion file for each Meeting Group provided by the County.

#### Vote Results Display

The County shall provide a Granicus PC that will be used to display the results of the Granicus Votecast application.

## Audio System

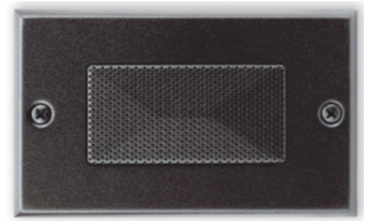
The Audio System design will be converted to nearly all digital. We will be using Dante Transporter modules under the Dais, Staff Table, and Lectern to convert all microphone to Dante digital audio for transport over the network. This also gives us a very simple means of turning the Mute Status LED on the Mic Mount on and off by issuing commands over the network. There will be far fewer cables in the new system.

We will be providing 27" Clock Audio Gooseneck Microphones (the longest size) at all positions except the Staff Tables. Because their Worksurface is shorter than the Dais and Clerk Tables, a 23" microphone will provide a similar reach.

Any length microphone may be plugged in or removed from the Clock Audio Mic Base with integrated Mute Switch and Tri-Color LED.



At the Dais and Clerk Tables, the audio will be reinforced through small RDL Speakers mounted in the backslash in front of each member. Each speaker will get a unique mix tailored to that location to minimize the potential for feedback.



At the Staff Table and at the Lectern, the cabinetry is not being modified, and we will mount (2) small speakers on the Staff desktop, and (1) each on the upper and lower (ADA) Lectern surface.



We will be installing new ceiling speakers in the Chamber Ceiling, dividing the space into smaller more controllable zones and adding amplification so each speaker need be no louder than necessary rather than just as loud as loudest speaker needs to be. There will be virtually no chance of feedback with a properly design audio system. The front row of speakers appears to have been added more recently and will probably not need to be changed. A decision will be made after detailed on-site analysis during the Engineering Phase.



We will refresh your Listen Technologies Assistive Listening System (ALS). It provides RF directly to your existing digital receivers. We will replace your existing Transmitter and Antenna in the Production Room. A new WiFi Transmitter also provides a Network feed which you can connect to your Guest WiFi (if you wish) to allow people to listen using their existing Phone



and earbuds. Per ADA (Americans with Disabilities Act), you need to have at least (10) receivers. You have many more than this (with chargers) and do not need more.

#### Translation System

We will add a second Assistive Listening Transmitter which will be used to distribute Spanish audio (when translation is available) (Transmitter already sold and installed in Triage Phase). We will also provide a PC dedicated for Spanish Translation via Zoom. The incoming audio on this PC will be routed to the 2<sup>nd</sup> ALS Transmitter.

Mode 2 – Selected by Clerk or Producer

When the person speaking at the Lectern is speaking Spanish (or another language that needs to be translated), the remote Translator will translate the Lectern Microphone audio to English and responses from the Board to Spanish. When in this mode, both the incoming English and Translated Audio will be amplified through the Speaker System. (Exact details of operation to be finalized during the design phase.)

#### Speaker Distribution/Overflow

During a meeting the active audio may be distributed to existing speakers in Overflow spaces including:

Closed session conf room 1032 – 2 speakers

Breakout room 1034 – 1 speaker

Constituent conf room 1035 – 2 speakers

Interview Rm 1036 – 2 speakers

Breakout room 1037 – 2 speakers

Open office 1069 – 3 speakers

Monterey Room 2092 – 8 speakers

The existing speaker in each of these rooms will be reused. New amplification will be added and the volume controls on the wall in each room will be reused. The exception is the Monterey Room. In this room, we will add an NVX Receiver and a new HDMI input for the Matrix so that room can select to view the Chamber Broadcast.

## **Control System**

### Overview

The Chamber AV System will be primarily controlled by one of the 22" Panels at either Clerk position, with duplicate controls available to the Producer at the Production Console. Each Board member can control their own Mic Mute from their Touch Monitor or the pushbutton on the Mic Jack. Board members can also select Presentation or Broadcast video, although Presentation will automatically override and appear on their screen at the start of any presentation. And the Chair can control the Lectern Microphone and Speaker Timer (as can the Clerk and Producer.) The Producer will have extensive additional controls for Production that will be described later in this proposal.

### Clerk Station

The Clerk will have (4) Touch Monitors. The left monitor is intended to always show the Control Panel with Video Preview capability. The other three monitors can each be assigned to any PC. The Clerk may touch any of these monitors to select what PC is displayed on that monitor. The Clerk will have a Wireless Keyboard and Mouse which they can assign to any of the three monitors by Touching the Monitor and selecting Kybd/Mouse Control button. The second Clerk position will work the same except they will only have (3) Touch Monitors.

- MON 1 – Touch Control and Video Preview (PC not controllable)
  - MON 2 – Clerk PC (or any PC)
  - MON 3 Agenda (Legistar ) (or any PC)
    - [2 instances of Legistar (1 current, 1 old for copying)
  - MON 4 Presentation, Zoom, Clerk's Zoom PC (or other PC)
  - Need to be able to Route Clerk Zoom to CHAIR's MON
- The Clerk will always have access to a "Public On/Off" button to enable and disable any audio or video from leaving the room. You can still keep phone and VTC enabled if you choose, but the Public button will be Yellow rather than Green or Red to confirm that some signal is enabled. Audio to remote rooms and Assistive listening would be cut off with Public Off.

### Lighting Control

Adjacent to the Clerk are existing Dimmers and Switches to control the Chamber Lighting and Shades.

We will eliminate the switches in the Clerks area and provide an integrated Dimming System that will be installed in the Electrical Room (just behind the Chamber). We will provide a Crestron CAEN Lighting Control Frame, Dimmer modules, and interface devices for the Fluorescent Ballasts.

Simple Lighting Presets will be available at the Clerk and Production Touch Panels. Also, we will provide (2) 2-button On/Off controls that will be

installed near the Production Room Door and the Door to the back hallway NE of the Dais.

We will move the Shade Controls to the Crestron Relay controller, and provide Blackout & Sun Shade controls on the Clerk and Production Touch Panels.

#### Chamber Chairs

We will provide new chairs for the Dais, Clerk and Staff.

The Dais will get (14) La-Z-Boy black Aberdeen high-back Executive Chairs. These leather chairs have adjustable seat height and tilt. The maximum width is 29". The maximum height at the top of the back is 49".

The Clerks and Staff will get (6) of the La-Z-Boy black Arcadian series chairs. These leather chairs also have adjustable seat height and tilt. The maximum width is 23". The maximum height at the top of the back is 46". These are slightly shorter to help reduce obstruction of audience view.

- **Chamber Production**

The Production System is responsible for combining the Microphone, Presentation, and Conference audio with Camera, Video Conference, and Presentation signals into a signal ready to broadcast. This signal will be sent to the Broadcast System at the Moffitt ITD building.

We will also be combining the incoming Spanish Translation Audio from the Spanish Zoom PC with the active Broadcast Video to create a second stream to be sent to the Broadcast facility for the new "Spanish Channel". See details in the Broadcast section.

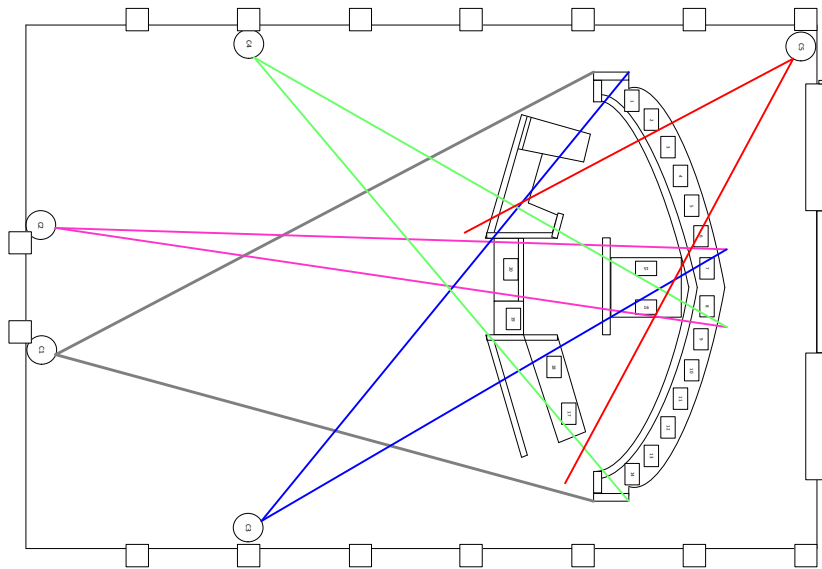
**Production Equipment**

Cameras

We will be providing (5) Vaddio RoboShot 40 UHD for the Chamber. These are equipped with Vaddio's "Tri-Sync" technology that allows presets to be recalled with simultaneous Pan, Tilt and Zoom. It is easy to not think about this being a feature we expect, since human camera operators have been doing this for almost a hundred years. But it is relatively new to automated cameras. The 3840x2160 UHD (think 4K) image sensor is important in its ability to zoom in 20x from the back of the Chamber. And, if needed, it can continue zooming using the extra UHD pixels while still continuing to output 1080HD.

We will place:

- C1) One camera on the back wall for the "Wide Shot"
- C2) A second Camera at the back for the "Center Dais Closeups"
- C3) A Camera on the Chamber Right for "Dais Left Closeups"
- C4) A Camera on the Chamber Left for "Dais Right Closeups"
- C5) A Camera on the Front Side Wall for the Staff Table and Lectern Areas

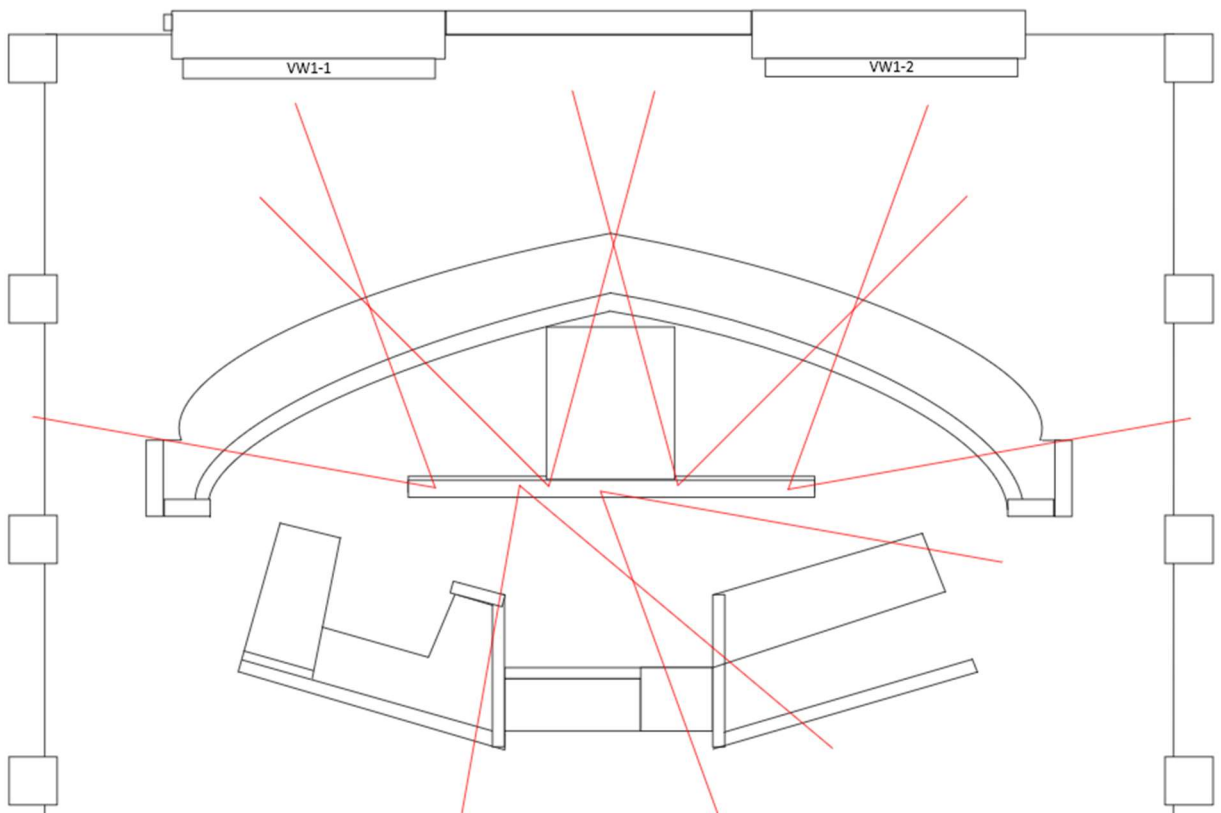


Broadcast Lighting

In order to provide better lighting for the Dais, Staff & Lectern, we will provide and install (6) LitePanels Gemini 1x1. These fixtures will be controlled via DMX 512 from the Touch Panel and have the ability to color match other room lighting.

We have included 60\* honeycomb louvers to keep the light off of the Video Walls.

The fixtures will be suspended from the ceiling in a line that is just in front of the current projector position. With the fixtures suspended from a mounting bar above the ceiling line, Four will be pointed at the Dais, one at the Staff Table and one at the Lectern Area.

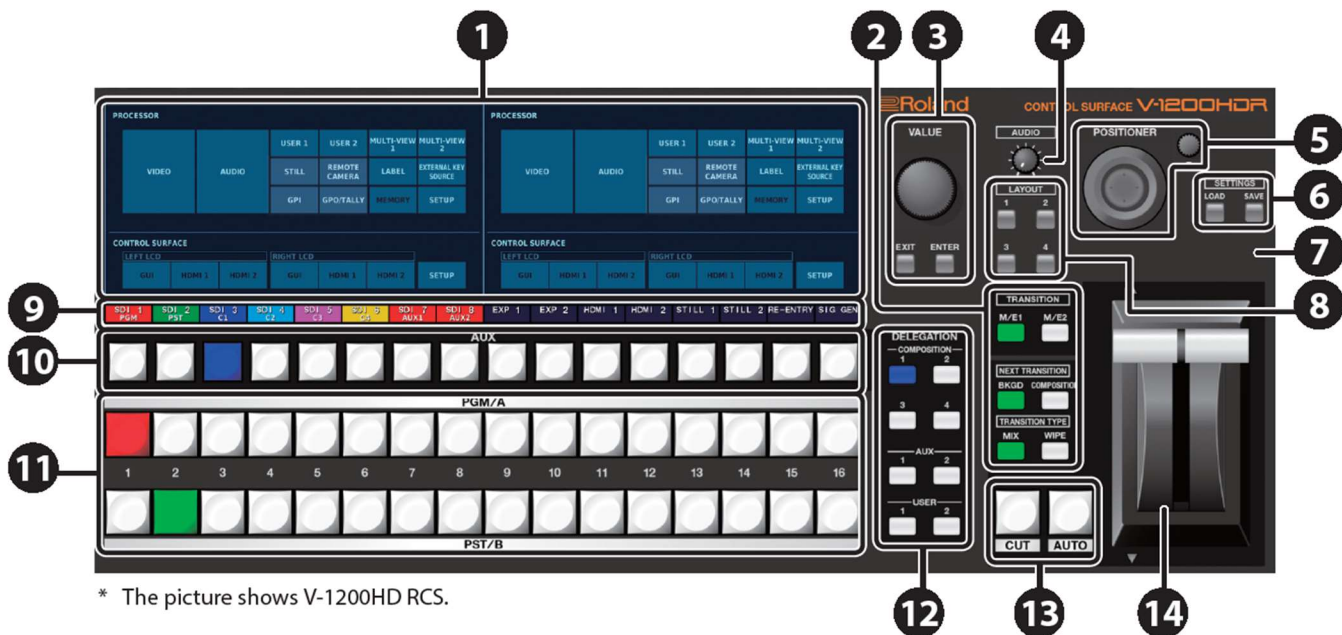


## Production Switcher

The heart of the Production System is the Production Switcher. We will be providing the Roland V1200HD. This unit is unique in its ability to offer all of the standard switching features of any Production Switcher, but be completely remote controlled by the Crestron System. This device accepts up to (6) SDI Inputs (more with expansion module), and (2) HDMI Inputs. We will be using it for (5) Cameras and (2) HDMI inputs for active Presentation and Video Conference. Note that the signals flow through the electronics module which will reside in the Equipment Rack. The Controller simply connects with a single Ethernet Cable and sits on the Production Console.



Using Crestron Programming, we have made the Switcher very easy to use – even in manual mode, by being able to recall single and multi-window layouts.



\* The picture shows V-1200HD RCS.

## Brief Technical explanation of Switcher usage overview

Row 9 shows the names we have electronically labeled each source (Wide Cam, Dais Left, Presentation, VTC, etc.).

The top of row 11 shows the current source highlighted in red.

The bottom of Row 11 allows selection of the "next" source highlighted in green. In Power Assist Automation mode, the system will select this source for you. As a producer, you simply press the "TAKE" button on the Touch Panel or "CUT" or "AUTO" dissolve button in area 13 and the switch

executes. In manual mode, the process is the same except you figure out who is talking and pick the next shot.

Row 10 (AUX BUS) will be used to select the signal being sent as the outgoing signal on a Video Conference. It will generally be the same as you are broadcasting, except when someone on the videoconference is talking, You would not want to send a delayed version of their own image back to them. It could be very disconcerting. So the automation will automatically select the best source – usually just a wide shot of the Chamber.

#### Character Generator

We are taking a slightly non-traditional approach to the Character Generator. I would rather not get too deep in this proposal. But, for any Video geeks reading this, suffice to say that we are laying the graphics on the Switcher Output, not on a Downstream Key. This is to simplify operation and allow an extra feature of the Switcher to be used for Video Conferencing. Rather than using the Row 10 source for keying graphics, we will use that row for Video Conference as described above and simply place layers of graphics on top as desired.

We will be using the ChyTV HD Pro. This was created by the same engineers that developed the Chyron CODI and so many other Broadcast Standard Character Generators. There are many features of this unit that offer unique capabilities. But the most important at the moment, is the fact that it can draw on data from files to layer on the broadcast signal. We will use this for taking Member Names and Agenda Titles from a common file (one per Meeting Group).

#### Matrix Switcher

As with the Broadcast Headend System, the Production System will have a KUMO 16x16 SDI Matrix Switcher to allow routing as needed. It will be intelligently controlled by Crestron. And, it will also have a Kumo button Controller for emergency backup or alternate usage as desired.

#### Backup Recorder

We will install the SPARE Cablecast VIO4 Video Server in the Production Room Rack. It will be able to record an extra copy of any video sent to the Broadcast facility.

We will also be providing one KiPro Go Multichannel HD Recorder in your Portable Kit. This could be used if there is ever need. We will also provide one year of Adobe Premier for use in case it is necessary to modify and/or export files from the VIO4 or KiPro.

#### Captioning

The VIO4 includes internal captioning ability when paired with their AI-based captioning Service. This can be applied in real-time as signals are broadcast, or onto any video files deposited onto the Server in non-real-time. Since the captions will not survive transport across the VBrick link to

the Broadcast Center at the ITD, we will not apply captioning at the backup VIO4 in the Production Room Rack. Captioning will be addressed again in the "Broadcast" section of this proposal.

#### Transport to the ITD Broadcast facility

The VBrick Encoder and Decoder current being used to send audio and video to the ITD cannot be upgraded from Standard Definition to High Definition. So we will provide a new Encoder & Decoder pair to send the video and English audio. We will provide a second pair to send the video and Spanish audio to the ITD as well.

#### Racks

We will install all production equipment into two new racks that will replace the two racks currently in the Production Room. A new 8' production console will be provided as shown in the Production Room section. The rack equipment necessary to process video for the console displays will be located in the 11RU rack shown under the console, as will two micro PCs for the CG (Character Generator) System and the Miscellaneous functions PC.

#### Production Console

We will provide a freestanding console that will support two 43" 4K displays and a 32" Program/Test Monitor. Two monitoring speakers will also be on stands.

On the Desktop will be the Roland Video Switcher Controller, a 22" Touch Monitor (with Video Preview), a Camera Controller, and a wireless Keyboard & Mouse to allow control of any PC.

The left 43" Monitor will show the Multi-Viewer from the Roland Switcher. We will configure it to show the 5 cameras, the active Presentation, and the VTC PC.

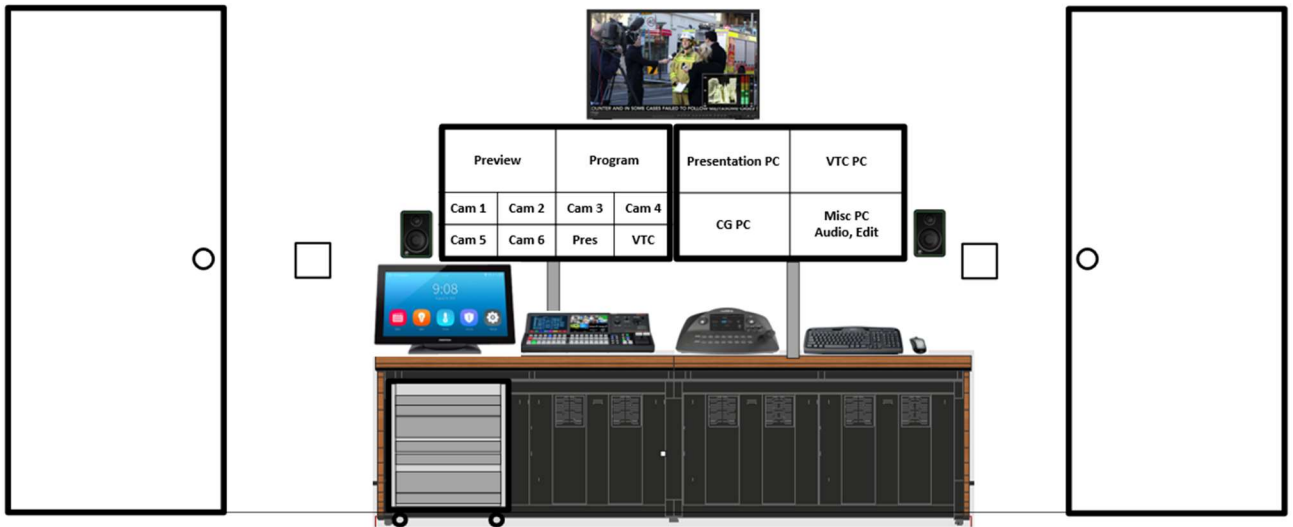
The right monitor will actually show (4) 1080p signals on the one UHD Screen from:

- 1) The Presentation PC
- 2) The VTC PC
- 3) The CG Control PC
- 4) A Multi-purpose PC for Production Staff.
  - This PC can be used to show the Biamp DSP Audio Interface for diagnostic or administrative purposes.
  - This PC can be used for firmware updates, or remote access to any applicable equipment with remote access such as the Chamber Cameras or the Cablecast Billboard and Scheduling System.

A 32" Monitor will be above the 43" Monitors. HDMI sources may be assigned to this monitor via the Production Touch Panel. The Monitor will have Audio Metering capability that is enabled by default.



We will reinstall an existing Standard Definition TV on the wall to allow for confidence monitoring of the CATV signal being received from Comcast. A 11RU Rack is shown under the left side. This houses the interface equipment between the Console equipment and the two Main Equipment Racks on the on the opposite corner of the room.



○ **Broadcast Automation**

Camera Locations and Presets

For the Board Meetings, there will be one camera at the back that always has a wide shot. This may be full width to capture the entire room, or zoomed in to capture all applicable Board members. There will also be three “Closeup” Cameras for Left, Center and Right. If a camera needs to move to another preset for the same camera, the wide shot will always appear between the two shots so the camera image will never be seen while moving. If two people at the Dais are going back and forth in a discussion (more than once in x seconds), the system will pull out to a preset that encompasses both members. There is also a camera pointing at the Staff and Lectern Area that will utilize presets triggered by those microphones.

Camera Switching

The automation software operates in your choice of three modes:

- Full Automation – All cameras and position/zoom presets are selected and switched automatically based on microphone data, selected modes, and selected operational options
- Power Assist - All cameras and position/zoom presets are selected based on microphone data, selected modes, and selected operational options. However, the proposed Board shot is placed in Preview rather than program. The operator may use this suggestion or select another and then “Take” when ready.
- Full Manual – The Multi-window Layouts are automatically selected based on selected parameters. However, Board Camera/VTC selection is fully handled by the Production Operator.

### Logo Player

Logos are prepared for every meeting group that will be using the room (County Board, Sanitation board, etc.). This is part of the Meeting Editor function (see Parliamentary System) This logo appears on the Touch Panels when there is no Presentation, Broadcast, or other video present. In "Full Automation" mode, the date and time will be placed over the appropriate group logo and this image will be broadcast for "xx" amount of time until the meeting starts and the applicable local or remote image is selected.

### Agenda Titling

The Agenda Titles may be copied or typed into a Character Generator file that is prepared for each Meeting Group in the Meeting Editor. When the Clerk selects and starts a given meeting, the Agenda Title List appears on their Touch Panel (and the Production Touch Panel). As the Meeting proceeds, the Clerk or Producer may scroll through the list and select a new Agenda item. This title is then able to appear on the Broadcast Graphics. You can choose to list the items with or without an Agenda Item #.

### Member Titling

Member Names may automatically be available to appear. All member names are entered into the Character Generator Spreadsheet file. When a member "logs in" to a seat using their Touch Panel, the system knows where they are located and how to place their title on the screen when they speak.



- **Parliamentary System**

We know you will be using the Granicus Legistar and VoteCast for most functions: Motion handling, Voting, Agenda review.

iPads and Charge Stations

We will provide (14) iPads each mounted on an iPort Luxe Charging Station.



Vote Results

We will interface to the Owner Furnished Granicus Vote Results PC to display Vote Results.

Meeting Editor

We do propose using a couple of elements from our Parliamentary System. The first is the Meeting Editor. As described in various sections above, it will allow us to link specific members to particular microphones for use in Automatic Camera recall, and Automatic member name titling. Using a Web Interface, the Clerk or any designated Admin will enter the name of the Meeting Group (such as "County Board", "Planning Commission", or "Regional Sanitation". They will fill in the Board Members' names, Chairman/Vice Chairman status. Chairman Touch Panels have the ability to control the Timer and Mute the lectern microphone.

The Clerk will start the meeting prior to users entering the room. Users log in to a specific seat and microphone by selecting their names from the on-screen list. This will allow the system to associate a specific Touch Panel and Microphone with a specific name. If desired, it is also possible to overlay titles with the members name during close-ups because the system knows where everybody is sitting.

Speaker Timer

As described above, we will also integrate a Speaker Timer function. This will appear at the bottom all Touch Panels and Room Displays. The Clerk, producer, or Chair (or Vice-chair in chair's absence) may set, start & stop the timer. It will count down in Green numbers from the set starting allowance. At a second defined time (e.g. :20 seconds) it turns yellow. At 0:00 it turns red, starts flashing, and begins counting up to indicate how far over the limit the speaker has proceeded.

The Speaker Timer will also appear on two 5" LED Display/Touch Panels at the upper and Lower ADA Lectern.

The Speaker Timer can also appear on the "Lower Third" graphic of the Broadcast signal if desired.

### Inter-Touch Panel Messaging

We will provide the ability to send messages between Chair, County Counsel, Administrative Officer (CAO) and the Clerk.

#### ○ **Broadcast Headend**

The Broadcast Headend receives the English and Spanish Broadcast signals from the Production Room and allows for live playout and scheduled replays to the Broadcast Distribution destinations. The Video Server also includes a Video Billboard System that can generate Community Messaging and upcoming Meeting Playback Schedule in between live and recorded meeting playback.

### Matrix Switcher

We will use an AJA KUMO1616 Matrix (same model as the one used in the Production System) to act as a Patch Bay to route signals as needed through the Headend System.

The control of the Matrix Routing is critical. We included a standard Kumo Button Controller to use for selecting an Input and Output in an emergency. However, in general, an operator may not want to find a system diagram in order to understand the signal flow they are about to create. For this reason, we have planned for an "intelligent" alternative. We will provide a rack mounted Touch Panel that will be programmed with logical names for each Input and Output, and it will have intelligent suggested choices of destination for each output on the main screen. Unusual choices will require accessing the Advanced control page or using the Kumo button controller.

### FS-2 Audio Video Processor

We will use an AJA FS-2 to receive the English and Spanish streams (received by new VBrick 9000 Decoders) and combine the English and Spanish audio with the Chamber master Production Video to create a single SDI signal with the English and Spanish audio digitized into (4) embedded audio channels of the resulting HD-SDI 1080p signal.

### Video Server

We will replace your existing Leightronix Nexus Video Server with a Cablecast VIO4 Video Server. This Server will take in the 1080p signal and process it to create three different signals that may be distributed to destinations:

- 4:3 Standard Definition Video with English Audio (480i)
  - English Subtitles
- 16:9 High Definition Video with English Audio (1080p)
  - English Subtitles
- 16:9 High Definition Video with Spanish Audio (1080p)
  - English Subtitles initially may be replaced with Spanish subtitles once available by the Cablecast AI-Captioning software later this year.
  - Note: we have included a bundle of 1000 Hours of

Cablecast AI-based Captioning which may be used for English and Spanish (if available).

The Video Server will also be able to receive 1080p HD streams from remote sites (via the Portable System encoder) and record and/or stream these to the Broadcast Distribution just as though they were wired inputs to the Server.

- Note: we have included a one year bundle of 100GB/Month (approximately 80 Hours/month) of Cablecast RTMP Stream Service to allow receipt of streams from the Portable System, or direct from Zoom.

### Broadcast Distribution

The Broadcast System will distribute the audio and video to the following destinations:

- Comcast Ch 28 (Standard Definition English)
  - We will reuse the existing VBrick 9000 Encoder
- U-Verse (assumed to be Standard Definition English)
  - We will reuse the Inlet Technologies Encoder
- Granicus Video Encoder (720p English with Agenda)
- YouTube (English)
  - We will provide a CableCast Live 350 Encoder
- YouTube (Spanish)
  - We will provide a second Live 350 Encoder
  - Note that the LIVE 350 may be started and stopped via schedule running on the VIO4

### Temporary Virtual Broadcasts

In order to allow for meetings to continue during the Implementation of the Production Room and Chamber, we will build out the Broadcast Headend first and, as noted above, you may use the RTMP service to archive and rebroadcast the Zoom Meetings just as if they had been recorded live in the Chamber.

### Test Monitor

We will provide a dual 9" Rack Monitor from TV Logic that is capable of viewing both the 1080i and 480i signal, showing Waveform & Vectorscope images, displaying the Closed Caption, and amplifying the embedded audio through its speaker.

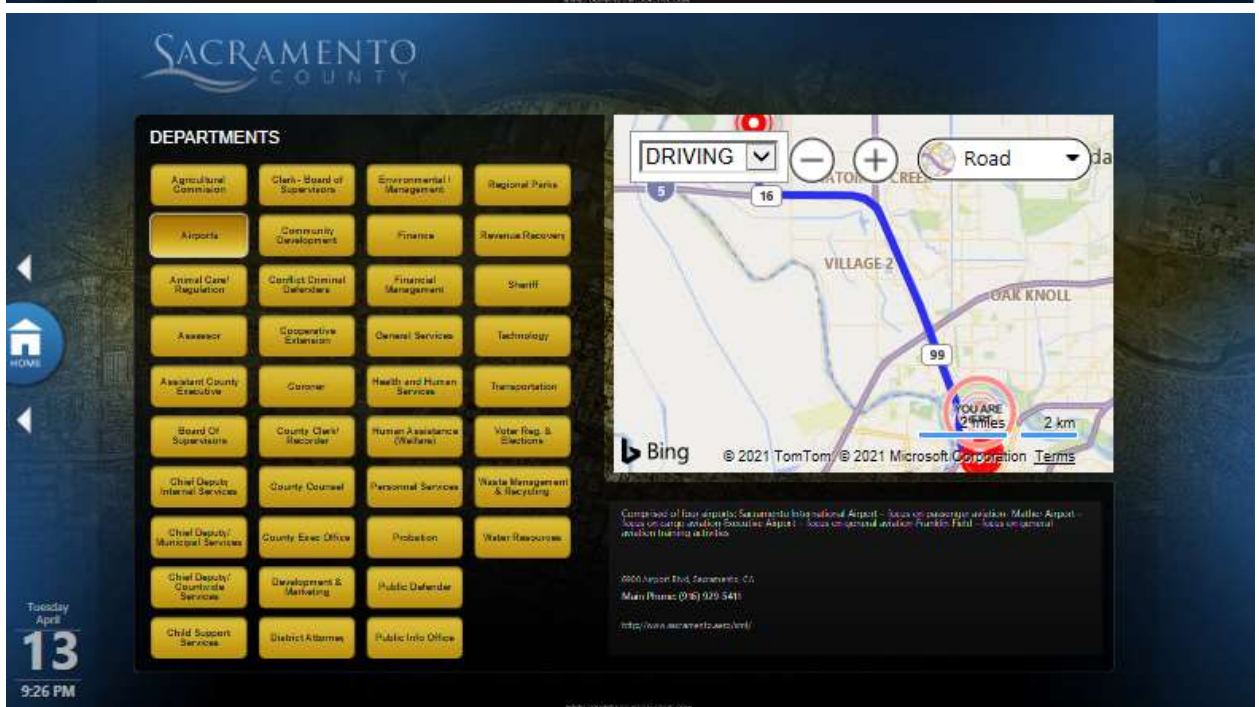
### Equipment Rack

We will provide a new equipment rack for the new equipment and existing Broadcast interfaces. The system will be programmed and tested in our shop prior to "Turnover Day" (less the Comcast and AT&T interfaces).

We will identify the best rack, cable management, and turnover procedure during the Engineering Phase.

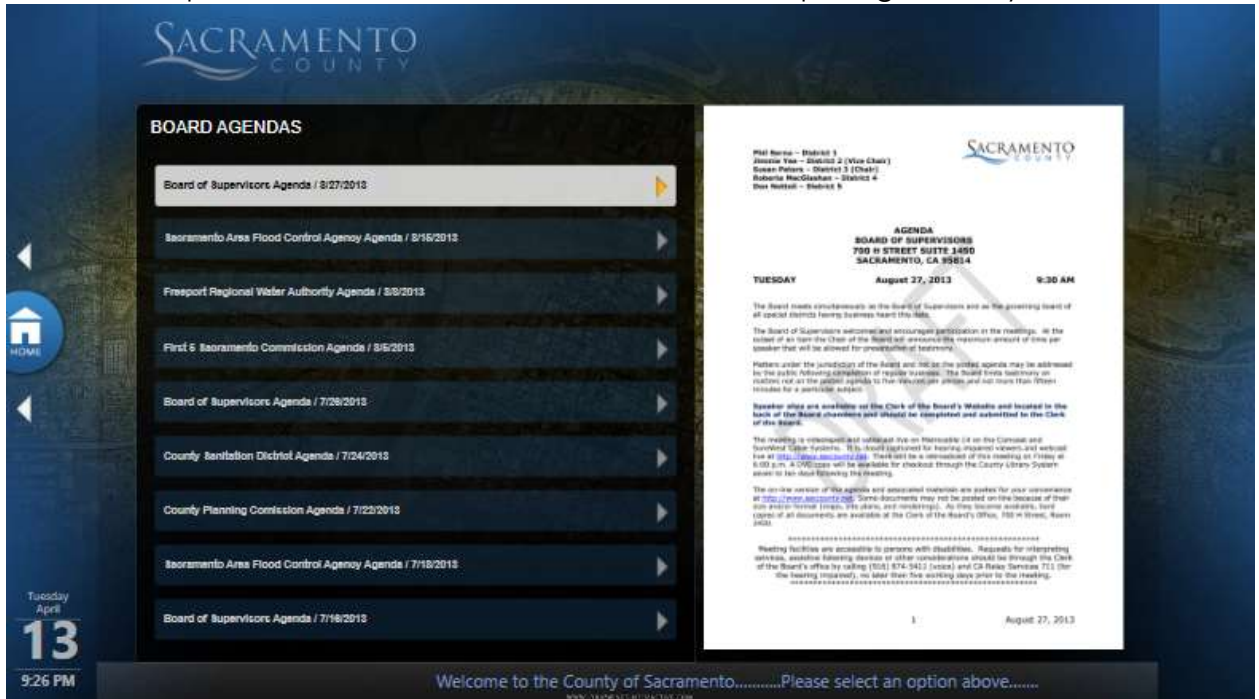
- **Digital Signage/Kiosks**  
**Signage Software**

Four Winds Interactive (FWI) will provide the signage software and some custom content templates. They prepared the following examples from Sacramento County. We have budgeted sufficient custom services for development of similar for you, Examples are shown below.

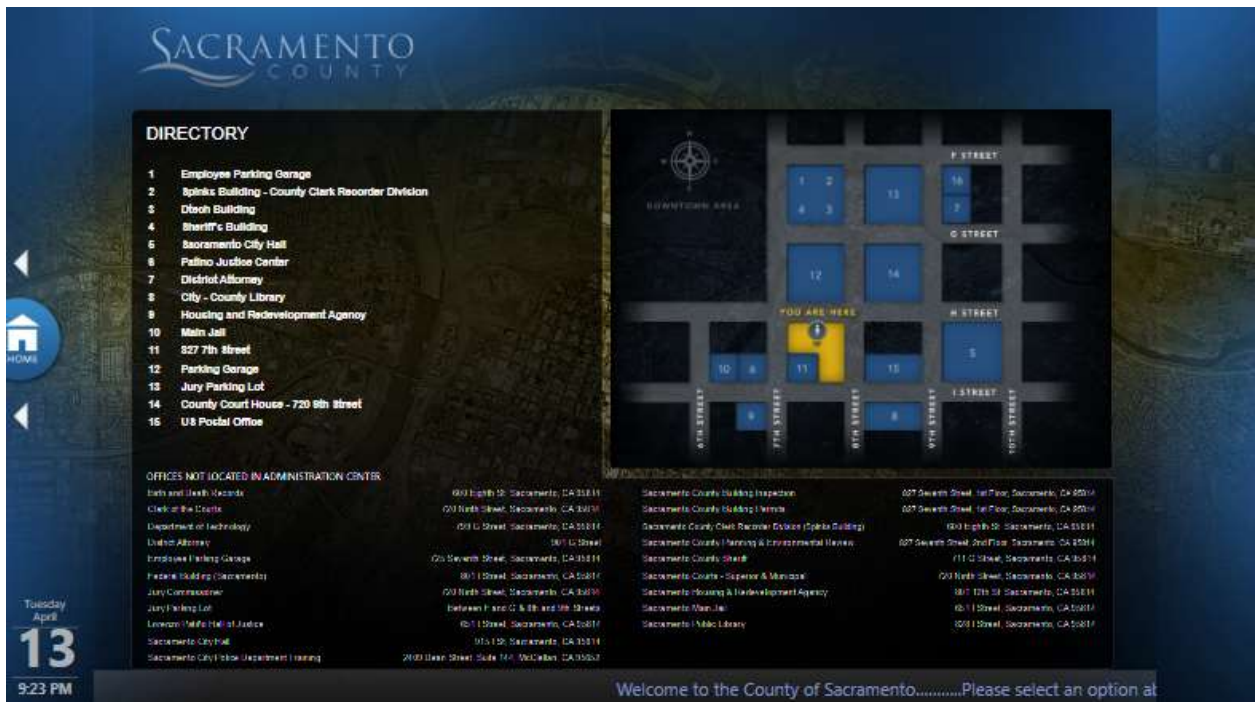




As requested, note that we have included a sample Agenda layout.



Directory layout



**Kiosk at Schilling & Alisal Lobby**

We will be working with a custom fabricator, Fabcon, that specializes in digital signage kiosks.

We have included budget for the "Manta" landscape oriented Kiosk. The displays will be 43" ELO Touch Monitors.

The pages can be laid out in a way that puts the interactive elements at the bottom within reach of someone in a wheelchair.

We have included the budget for the Electrical work to provide power to these Kiosks.

In addition, and as requested, we will place a matching 43" interactive Signage Display w/PC on the wall across from the Room 1070 Counter. That PC will be able to send pages to a County furnished Network Printer behind the counter.





o **Portable System**

We understand that you want the portable system to be able to:

- Record and/or Transmit to the Broadcast Center a press announcement or presentation by one or two people.
- You would like to be able to have the two people join a Zoom Call which is part of the produced recording or Broadcast.
- The system will also be used in the Sea Cave Room to support recording and Zoom Live Interface.

Subsystems and equipment will include:

- Two Wireless Receivers with 2 Handheld & 2 Lavalier Microphones
- 2 portable speakers on stands
- Audio Processor/Mixer with Echo Cancellation
- 2 Camcorders with Cases, Tripods, Shotgun Mics,
- Video Recording Hardware w/Headphones & Timecode Gen
- 2 Litepanels Gemini Lights (same model as Sea Cave) on Stands with Softboxes
- Streaming Encoder

We will provide a Dolly Case (similar to luggage on wheels) with racked equipment and a smaller cases for Microphones, Cameras, Tripods, Cables. There will also be a PC in the case for connection to Zoom or other VTC software.

The case will also have an AJA KI PRO GO multi-channel video recorder for later editing and distribution.

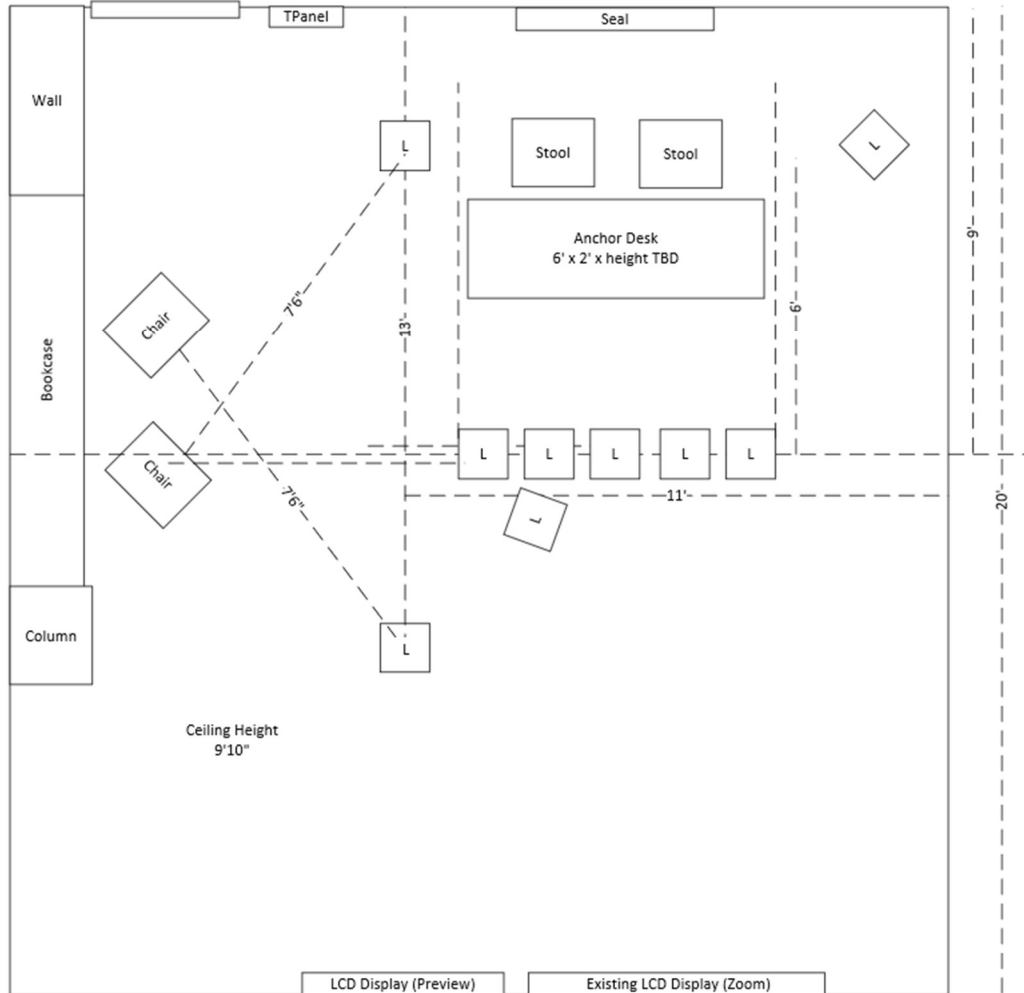


We will provide a Blackmagic Design Web Presenter 4K to send the signal to the Broadcast Center. The CableCast RTMP service will receive, record, and forward the H.264 RTMP signal.

- **Sea Cave Rm (Video Production Room)**

The Sea Cave Room will be used for Video Capture of Interviews, Press Announcements, and Remote Interviews at the Anchor Desk via Zoom. Permanent facilities will include Controlled Lighting, two video displays, and a Sound Bar. The Portable System has been upgraded (as described above) to provide functions appropriate for the room.

**Proposed Layout**



## **Lighting System**

We will install 9 LitePanels Gemini 1x1 fixtures. Five will be pointed at the County provided "Anchor Desk." Four more will be mounted on Manfrotto Top 2C Pantographs that may be lowered as desired.



We will install a Master Processor and Ethernet to DMX512 converter in the nearest IDF. A white 10" Touch Panel will be installed on the wall to allow setting levels and color of each panel and saving as a preset. Also, combinations of preset fixtures may be saved as Scenes for instant recall.

## **Video System**

The existing LCD will be used for connection to the Zoom PC in the Portable System Case. A Sony Sound Bar will be mounted underneath.



A second display will be mounted adjacent so the presenters at the Anchor Desk and the Production staff can see the Outgoing Zoom feed.

Two Canon XA-55 Cameras can be used as camcorders recording directly to internal memory when appropriate. For multi-camera shoots, up to 3 cameras and a feed from the Zoom PC can feed an AJA KI PRO GO multi-channel recorder with an outboard Timecode Generator which will feed LTC Timecode to the recorder to simplify editing.

## **Studio Furniture**

We will provide the following Studio furniture:

### **TV Set Designs – Medium Curved Desk**

With County Logo on the front

Finish colors and logo files will be coordinated in the Engineering Phase of the Project.

### **Zuri Furniture – Coveteur Stool**

Qty 2 - In Gray

Soma - Isaac Upholstered Armchair

Qty 2 - In Indigo

Fabric: Sunbrella® Performance Chenille

17-Stories – Round Nesting Tables

Qty 1 - Walnut top as shown

Laurel Foundry – Paramus 22" Tall Cross Legs End Table

Qty 1 – Dark Concrete top as shown

(verify finish prior to order)

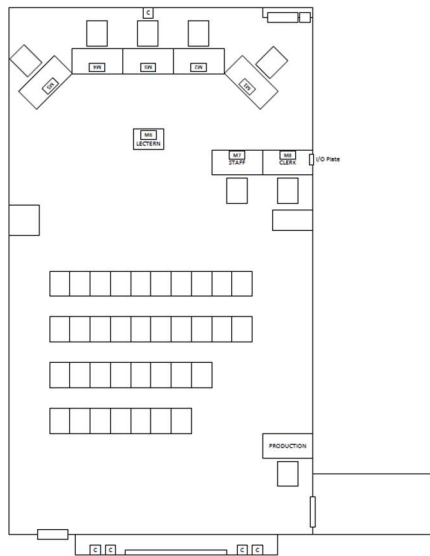
Select Color: Dark Concrete



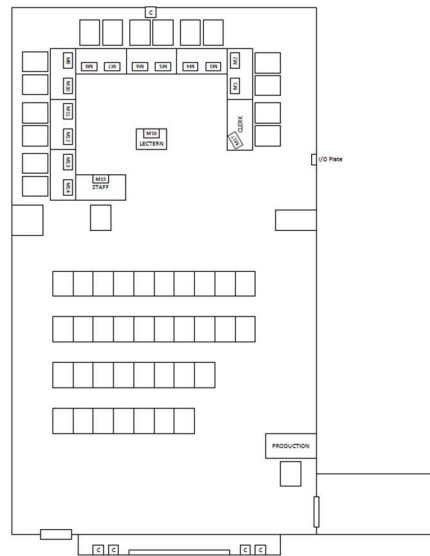
○ **Monterey Room - Backup Board System**

The basic concept will be to continue to let the room be used as a Zoom Room as it is currently configured, but add equipment to allow for the Board to use the room for meetings while the Chamber is shut down for upgrades. The room will be able to switch modes with the press of a button.

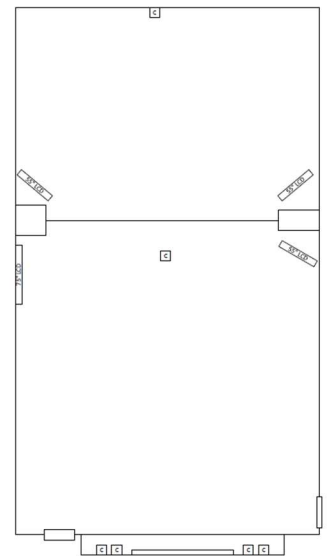
**Proposed Layout**



FLOOR PLAN FOR COUNTY BOARD



FLOOR PLAN FOR PLANNING COMMISSION



REFLECTED CEILING PLAN

### **Display System**

We will add an 85" LCD Display on the left wall to supplement the existing ceiling mounted 55" display on the right to support audience viewing of Presentation content. The two other 55" displays will be used for the Board. The Video Wall may be used if desired or left dark.

### **Presentation Inputs**

The existing Zoom PC in the rack will be reused. There is one existing HDMI Input on the right side and we will add one more for connection by the Clerk or Production Desk.

### **Audio System**

We will use the Shure MCXW Microflex Complete Wireless Conference System to support Dais microphones and speakers. We will provide 17 Microphone Stations as shown on the proposed layout above. Each station is wireless with rechargeable batteries and includes a Speaker so they can hear each other without having the ceiling speakers turned up loud. We have included three 8-port charging stations and 17 spare batteries. We have included a portable shelving unit to place in the closet for storage for the Mics and Battery Charging Stations (48"x18"x76" on casters)



The existing QSC Core510 DSP will be reused. We have budgeted for additional "soft" Dante I/O to support the new channels of ceiling MXA and Desk mounted MXWC microphones.

We will plan to reuse the existing ceiling speakers. We will rezone them as necessary. The existing Listen Technologies Assistive Listening System will be reused.

### **Camera System**

Unlike the Chamber, the MXWC System cannot tell us **exactly** who is talking in order to create closeup presets for each person. So we will install 2 more Shure MXA 910 microphones in the ceiling, much like they are in the ceiling at the other end of the room for the 1 beyond System. We will utilize the 4 existing cameras to assign presets for each area where the active speaker is located.

We will add one camera on the back wall (if you consider the Video Wall the Front Wall) to allow capture of someone speaking at a Lectern (County furnished). We will upgrade the WireCast Switcher Software inside the 1Beyond Server to allow for use of NDI inputs so we can input the video from the sixth camera.

The video system will not be "produced" with additional camera manipulation or the addition of graphics. The goal will be to create a Zoom

meeting that can be received by the new upgraded Broadcast Headend using the CableCast RTMP service. Once received into the CableCast VIO4, the signal will be recorded and distributed as planned to the Cable and Web destinations. The "Spanish Channel" will not be online until the Chamber is completed.

### **Control System**

We will provide two 22" Touch Panels so the Clerk and Production operator may control all necessary aspects of the system. These will have electronic components permanently attached under the Table and tethered to the wall to be moved into place when needed for Board Meetings. Both Touch monitors will have Video Preview capability. The existing keyboard and Mouse will be reused to control the Zoom PC as needed.

### **Rack**

We will add a new equipment rack as the existing rack is packed quite tightly and fairly unserviceable. We will move all components into a new rack. We will add a KVM and rack mount keyboard & monitor.

## ❑ Post Installation

### ○ Training

After commissioning with your technical representatives, we will provide User Training, Clerk Training, Production training, and Administrative level Training (each progressively more technical and detailed). We will provide Training Manuals for each primary system. We will collaborate on the exact Training Program during the Engineering Phase.

### ○ Documentation

Once the system is complete and we are 100% done making changes, we will turn in the current marked up plans to CAD and have a full documentation package prepared. This will include:

- All manufacturer's owner's manuals
- Final Drawing Set
- Final IP Chart
- Final Programming Device Control Code
- Final DSP Configuration Files
- A System Operations Manual with a layout of the GUI and a description of the function of every button. Additional conceptual instructions necessary for the operation of the system and broadcast will be included in that manual as well.

### ○ Spares

It is desired that virtually any Service issue be able to be resolved within 24 hours. To make this possible, we have included spare components to allow restoration of every mission critical system. See equipment detail for the complete list of proposed spares.

### ○ Systems Management and Monitoring

The following software is included as part of this proposal

#### ○ Crestron XIO Cloud

- We will include the following Software licensed monthly for 3 Rooms (Chamber, Production Room, and Broadcast Headend) for 5 years.
- Note: 12 months x 5 years x 3 Rooms = Qty 180 of each of these 2 packages
- The budget for the Monterey Room also includes 5 years of XIO Cloud.
- SW-XIOC-EM
  - Provision users within the XIO Cloud Interface
  - Claim single devices using MAC address and Serial # pairs
  - Claim devices in bulk using MAC address and Serial # pairs (CSV)
  - Organize devices by group, subgroup, and room
  - Configure settings of groups of devices
  - Update firmware on devices
  - Schedule actions such as reboot on devices
  - Load and manage custom control system programs and projects
  - View a log of all changes made to devices via XIO Cloud

- SW-XIOC-S
      - View Live Device Status
      - Configure e-mail and SMS alerts
      - View and control touch screens remotely
      - View device functionality dashboards
  - Four Winds Digital Signage
    - Monitor Player Status – 1 Year
    - Budget included in Digital Signage Section
  - VBrick Admin & SNMP
    - Monitor Link Status – 1 Year
    - Budget included in Production System Section
  - Solar Winds
    - We will assist in adding non-Crestron components into the existing Solar Winds platform for basic IP status monitoring.
  
- **Service & Warranty**

The System will be protected by a Custom on-site Support Contract for a period of one year, renewable at 10 months.

We will diagnose and repair all systems as necessary and process all manufacturer Warranties including shipping.

We will respond to requests for Service via Phone or e-mail with 4 hours and be on site within 8 business hours.

We will also be available for remote support via VPN if you allow and configure. This allows for the fastest level of support.

And, as requested, we will provide on-site support for the first 8 County Board Meetings in the renovated Chamber.

Spinitar regular Business hours are 8a- 5p M-F. In the event there is a defect in the Spinitar installed system(s) performance (materials or workmanship), you may contact us directly at (800) 722-6444 or [support@spinitar.com](mailto:support@spinitar.com).
  
- **Manufacturer Warranty Support**

The following Extended Warranties are included in this proposal:

  - Biamp Components – 5 Years
  - Crestron Components – 5 Years
  - Samsung Video Walls – 5 Years



## ❑ **Project Approach**

This section will describe a number of elements of our plan and approach to this project.

### Labor Plan

We have detailed our proposed schedule and tasking on the attached Labor Plan. This document exposes many elements of our process and collaborative approach. There are a number of key milestones and points where we will be interacting with you (see the column to the far right labeled "County".)

The first phase will include significant review of existing workflows, discussions on proposed transitions, leading to agreement on final design. The design will drive the Engineering documents, programming, Network planning, logistical planning, and development of Training and Service Plans.

As the Engineering details are published, we will review with the Monterey County Project Team to make sure we are still all in agreement.

### Phased Approach

There are quite a number of long lead items that will cause the Chamber and Production System installation to wait for approximately 6-7 months after order. We will use this time to complete Engineering and other systems as equipment arrives, including preparation of the Sea Scape and Portable System, and implementation of the Digital Signage System. As soon as we can see that we have the equipment necessary for the Monterey Room, we will implement those upgrades. Then we will install the new Broadcast Headend racks which will allow for the Board Meetings to be handled in the Monterey Room and broadcast to YouTube, Comcast & AT&T as well as recorded for rebroadcast. With the alternate Board system in place, the Chamber may be shut down and the new Integration started.

- 1) System Engineering
- 2) Portable System
- 3) Sea Scape Room
- 4) Digital Signage System
- 5) Monterey Room
- 6) Broadcast Headend
- 7) Chamber and Production System
- 8) Post Install Services
  - a. Training
  - b. Management Software
  - c. Spare Parts
  - d. Warranty & Support Services

### Design & Engineering

The bulk of the Design has been assumed to be completed as part of the process leading to the preparation of this proposal. The key goal of the Design Phase is to explain options to you in such a way that you can understand the positive and negative impacts, and reach a decision on all open issues. Those decisions have now been made and we can proceed with the Engineering tasks that lead to implementation of all Design elements.

### Subcontracts

We will be using subcontracted services for the following:

- Samsung
  - Samsung will provide Video Wall Installation and Commissioning Support.
- Four Winds Interactive
  - Four winds will work with Spinitar and the County assigned Digital Signage representatives on the development of appropriate content based on initial discussions as described in the Scope.
- Johnson Electronics
  - We will be using Johnson Electronics to coordinate and subcontract Electrical and Millwork infrastructure preparation. This includes:
    - Video Wall
    - Dais Backsplash
    - Dais under-counter
    - Dais – Clerk Desk
    - Press Feed Electrical and LV
    - Electrical for Audience Seating
    - Power and LV Conduit for new Ceiling mounted Displays in Rear of Chamber
    - Clear old Lighting Control Conduits from Clerk/Dais area for AV usage
    - Power & Mounting structure for new Broadcast Lighting
    - Install New Lighting Control System for Architectural Lights
    - Rack Power rework
    - Digital Signage locations - Power Outlets and Conduit for Network cables
- BT&S Audio Visual Systems
  - Onsite AV Installation under Spinitar direction

### Coordination

- Project Kickoff

Once the design has been finalized and a Contract has been provided or funding otherwise authorized, we will have an internal and then Customer Kickoff. We will use this opportunity to clarify the key members of our team and yours and define a communication strategy – e.g. who is point of contact for various needs and who else needs to be cc'd.

- Owner Furnished Equipment
  - Based on comments in the RFP and made during the site visits, we understand that the County will be responsible for all Network Switches.
  - We will reinstall one small 4:3 Standard Definition Television with CATV input somewhere near the console.
  - Document Camera
  - We will reuse one MX418D/C Microphone for the ADA side of the Lectern
  - We will reuse Ceiling Speakers in Overflow Rooms
  - Comcast & AT&T Encoders in the Headend
  
- Network Coordination
 

Once we have finalized the design and identified every device which will be on the Network, we will work with County IT on Network Architecture and prepare an IP Chart ready to be populated with static addresses or a range such that we may populate it. We will also provide a VOIP configuration form so that we may configure the audio system to properly connect and authenticate with your Call Manager. We will support VLAN design as well as general discussions on requirements for dual WiFi access, and access outside of the County LAN to the Internet.
  
- GUI Review
 

Once we have the proposed Graphical User Interfaces (GUI) laid out, we will have a conference call to review with you and discuss the operations that the GUI drives. Any suggested alterations will be updated into the submittal, resubmitted for approval before being incorporated into the production version.
  
- Commissioning
 

Once we have completed testing and debugging the system, we will demonstrate the operation of all subsystems with you. Anything that does not meet the design criteria or quality standard will be placed on a Punch List and generally handled within 24 hours.

## ❑ Invoicing

### Equipment & Labor Billing

We will bill for Equipment and Labor per the proposed Billing Plan (see attached.) This is intended to ensure that payments for invoices submitted arrive in sync with our bills for equipment ordered and received.

### Invoicing

We will submit a progress invoice for Equipment and Labor in line with the schedule on the attached Billing Plan. Note that this includes a 10% retainage paid after satisfactory completion and our support of (4) meetings.

Owner shall review the invoice within 10 days and either approve or return to Contractor for revision. Approved invoices shall be paid within 60 days of receipt. Final Payment shall be released within 35 days of date of Notice of Completion.

### Bond

As requested, we have included budget for a Performance and Payment Bond at 1.2% of the Project Total. 100% of this will be included in our first Invoice after receipt of our Contract.

## ❑ Detailed Breakout & Cost Proposal

- Includes
  - Detailed Equipment & Labor Quote
    - All Cable and Materials
    - inbound (taxable) Freight Charges
    - Lift Rental Charges (if needed)
    - Hotel, per Diem & all travel related expenses
    - First Year Support
- Note regarding Pricing Summary
  - This sheet is designed to provide an overview of the project budget and includes columns for Equipment (including freight and lift rentals), Sales Tax, Spinitar Labor, Subcontract Labor, Service Contract, and annual service contracts (first year only except Crestron XIO Cloud). In order to provide a simple view, it was not possible to account for Sales Tax on Subcontractor Materials, and taxable Labor including Shop Labor and Documentation. Thus we added a cell at the bottom which lists an adjustment amount and the actual Sales Tax.
- Note: All of the following are bundled into our "Cost of doing business" and are not itemized:
  - Travel time, parking, printing, communications, reimbursables, allowances, insurance