



**DATE:** August 9, 2024

**SUBJECT:** Letter of Clarification No. 2

**RE:** Miller Outdoor Theatre Upgrades Amplifier & Subwoofer Upgrades Invitation to Bid

**TO:** All Prospective Bidders

Houston First Corporation issues this Letter of Clarification No. 2 regarding the referenced Miller Outdoor Theatre Amplifier & Subwoofer Upgrades Invitation to Bid to answer questions timely received from prospective bidders:

**Question 1:** Are there existing speaker runs to be utilized for the delay sub additions?

Answer: Yes, there are existing speaker runs. Several will need to be repurposed for the subwoofer additions.

**Question 2:** Can you tell us the model number of the Delay speakers and the type/manufacture of the rigging used on the Delay speakers?

Answer: EV XLC DVX 907 and 127. The rigging is EV proprietary EV hardware suspended by load rated cable and chain identifiable by manufacturer.

**Question 3:** The chain hoists look like Columbus McKinnon (CM). If so, what are the model numbers and the voltage/wiring for the control? If not, can you tell the make and model number of the existing chain hoists?

Answer: The hoists are CM "1 Ton" units. The operational voltage is 120-208v, 3-phase. The control wiring is older "3 wire" Hubble type connectors designed for compatibility with our Motion Labs control system.

**Question 4:** Are Netgear M4300 network switches approved to use? They do Dante, AES67 and are easily configurable with a web GUI. Are there any PoE requirements for these switches?

Answer: The only requirement for network switches is that they are extreme duty (i.e. "commercial/industrial" quality capable of continuous operation).

**Question 5:** Are your existing fiber networks OM3 or OM4? That will help in picking the correct SFP+ module?

Answer: Fiber will not be necessary, as the switches will be fairly local to existing network infrastructure and simply connected via Cat cable and RJ45 jacks.

**Question 6:** Are you looking to get rid of the portable amp rack?

Answer: Not necessarily. HFC will evaluate and determine utility of replaced equipment and repurpose if possible, or eliminate.

**Question 7:** What hours are you looking for work to be performed?

Answer: Off-season work hours for MOT are typically between 7am 7 pm M-F depending on tasks to be completed and needs of supervisory personnel. Given that, work hours and days can be flexible depending the needs of the project and contractor.

**Question 8:** Do we need any special permitting that we need to consider for this project (e.g., electrical)?

Answer: HFC is not aware of any special permitting requirements. This is a replacement project for signal cable, not a new installation with power cable.

**Question 9:** When are motors scheduled to be serviced this year?

Answer: Motors are inspected, serviced and certified every off season After 1/1 and time dependent on contractor availability.

**Question 10:** Will new network switches be required for this system? Or will Miller Theater provide Dante compliant network switches with sufficient number of ports to interface to the new power amplifiers, new DSP units, and any OFE existing Dante equipment?

Answer: Network switches will be provided by project contract awardee.

**Question 11:** Is the intent of the design to have a Dante network that has all main and monitor amplifiers on one common network? Or is a separate network for each acceptable?

Answer: Ideally, there will be one network.

**Question 12:** Will both Dante Primary and Secondary networks be required for this system?

Answer: Indeed, both primary and secondary networks, operating simultaneously, will be required.

**Question 13:** Will any analog connections from/to the new DSP units be required for this system? If so, will you please specify the required analog connectivity.?

Answer: There will be some analog connections to the new system. Specifically, all backstage speaker systems (70v "showfeed"), ADA compliance (assisted listening, descriptive services) transmitters, archival record feeds, etc.

**Question 14:** What is the wire gauge (AWG) of the existing speaker wires that are connected to the existing Main Subwoofers?

Answer:10 awg.

**Question 15:** Are additional speaker wires available to drive Main Subwoofers? If so, how many additional speaker wires are available?

Answer: There are 5 speaker runs to each of the main subwoofer hangs. The project is a 10 for 10 direct replacement of existing subwoofers so no other runs needed.

**Question 16:** Are additional speaker wires available to drive the new Delay Subwoofers? If so, how many additional speaker wires are available and what is the wire gauge (AWG) of the wiring?

Answer: See Question 1. All speaker runs are 10 awg.

**Question 17:** Each of the existing power amplifiers that are currently installed draws 1000W @ 4 ohms. All new power amplifiers draw well in excess of 1000W @ 4 ohms. Is there sufficient AC power at the equipment rack for the new power amplifiers? If not, who is responsible for providing the required AC power improvements?

Answer: Power requirements overall should be the same or less given the overall reduction in the number of amplifiers. Please refer to Bosch Communications for further clarification.

**Question 18:** To maximize output from the subwoofer systems, power draw will be 17A @ 230V or 34A @ 115V. Are 115V/30A circuits available at the equipment rack? Are 230V/20A circuits available in the equipment racks? If not, who is responsible for providing the required AC power improvements?

Answer: All circuits to the racks are 120v 30 amp. Any improvement would need to be provided by or specified and contracted by the contract awardee.

**Question 19:** What is the depth of the existing equipment racks? The new power amps require 20.24", not including connectors. Allow an additional 6" behind each amplifier for connectors and proper wire management?

Answer: There is 30" of clearance in the racks.

**Question 20:** There are qty. (2) EV CPS2.6 power amplifiers in the equipment racks that are driving front fill speakers. Will these power amplifiers be re-used in the new design, or will these speaker circuits need to be connected to available channels of the new power amplifiers?

Answer: The CPS 2.6 amps will be replaced by the new amplifiers.

**Question 21:** There are qty. (3) EV CPS4.10 power amplifiers located in one of the equipment racks. Will these power amplifiers be re-used in the new design, or will these speaker circuits need to be connected to available channels of the new power amplifiers?

Answer: The 3 CPS 4.10 amplifiers will be re-used.

**Question 22:** Amp channels\_Current XLC setup.pdf mentions side fill speakers on page 6. Are there side fill speakers/speaker outputs that need to be interfaced to channels of the new power amplifiers?

Answer: The side-fill and drum-fill amplifiers will be replaced with channels from the new system.

**Question 23:** Amp channels\_Current XLC setup.pdf mentions drum fill speakers on page 6. Are there drum fill speakers/speaker outputs that need to be interfaced to channels of the new power amplifiers?

Answer: See Question 22 above.

**Question 24:** Will the rigging design require the stamp of a structural engineer licensed in the State of Texas?

Answer: HFC is not aware of any such requirement. Note that the contractor will be rigging back to existing rigging points

**Question 25:** Are drawings of the building structure available?

Answer: Structural drawings are available and may be shared with the contractor selected upon request.

**Question 26:** Is there a preferred vendor for fly hardware for the new speaker cabinets?

Answer: The Specifications of the fabricated hangers will be provided by Bosch at [bu.v.design@us.bosch.com](mailto:bu.v.design@us.bosch.com). The other hardware required is as listed in the Invitation to Bid, including part numbers and quantity. The speaker cabinets must be Electro-Voice; that is the requirement.

**Question 27:** What is the required warranty for new equipment?

Answer: Please refer to Section 3 of the Miller Outdoor Theatre Audio Upgrades Agreement.

**Question 28:** Who is responsible for system tuning after the installation of new DSP/power amplifiers?

Answer: The contractor. Please refer to Section 1.4 of the Miller Outdoor Theatre Audio Upgrades Agreement.

**Question 29:** Will the existing motor controls be reused or replaced?

Answer: Existing motor controls will be re-used.

**Question 30:** What chain length is required?

Answer: 60' for the main hangs; 80' for the delay hangs.

**Question 31:** Can you specify the model for the chain hoists?

Answer: Columbus McKinnon 1-Ton 120-208 3-phase retro-fitted for 3-wire control.

**Question 32:** Are we required to use union labor at the facility for this project?

Answer: No.

**Question 33:** Would a California-registered small business enterprise and/or disenfranchised business enterprise meet the diversity requirement?

Answer: Acceptable agencies are as defined in the [HFC Diversity Program](#). Additionally, please be advised that, as noted in the Invitation to Bid, while bidders should note if they are certified as a diversity participant in their submittal, such certification shall not lessen or otherwise alter the requirement to use good faith efforts to award subcontracts to diversity participants.

Letters of Clarification become a part of the Invitation to Bid automatically upon issuance and supersede any previous specifications and/or provisions in conflict therewith. By submitting their bid, bidders are deemed to have received all Letters of Clarification and to have incorporated them into their bid.