UNIVERSITY OF SOUTHERN INDIANA

November 1, 2019

FROM: Dan Martens DRM
Director of Procurement
812 464-1847
812 461-5275 Fax

SUBJECT: 20-20-33110-03140
Atheneum Auditorium AV System Upgrade / Due 11-14-19/2PM/Local Time

Addendum #1

This addendum forms a part of and modifies bidding requirements that pertains to the above mentioned project.

Questions due by 4PM/Local Time on Thursday, November 7, 2019 to Jeff Sponn: jsponn@usi.edu
Answers provided by Tuesday, November 12, 2019.
Bids due Thursday, November 14, 2019/2PM/Local Time.

All bidders shall acknowledge receipt of this addendum on the bid proposal form.

DM/bw

Memorandum
To: Procurement Services
From: Andrew Black, Information Technology
Subject: ***Request for Proposal Addendum***
Date: November 1st, 2019

Please use the following specifications to request proposals from qualified vendors related to an audio-visual upgrade project at the Atheneum in New Harmony, Indiana.

Atheneum Auditorium AV System Upgrade

Summary of project:

This is an addendum to the original RFP, and this addendum should be referenced when conflicting information and/or requirements exist with the original RFP. This addendum supersedes the original RFP.

The vendor providing the successful proposal will provide an audio-visual system upgrade of the existing data projector, legacy video connections, audio system, and evaluation of the existing ancillary equipment at the Atheneum Auditorium located in New Harmony, Indiana. The vendor will evaluate the existing AMX system that is a rechargeable wall mounted interactive panel that controls a data projector, and upgrade existing video path from source to projector to accommodate 4K connections via HDMI (and corresponding audio inputs) located on the stage. Audio from these devices as well as 4 hard-wired microphone jacks are currently properly amplified and delivered to the auditorium through left, center, and right speakers installed behind the existing projection screen. Vendor will remove and replace existing speakers and evaluate Crown amplifiers (two XLS 202) for potential inclusion (or replacement) in the upgrade to 7.1 surround sound. Video/audio playback for a short film on DVD, entrance door open/close and lighting are currently integrated and controlled with the existing AMX control system. The entrance door and lighting controls are mechanical relay in nature. Lighting infrastructure will need to be updated to add dimming capabilities to the existing LED ambient lights, that can be integrated into the AMX control. Vendor will evaluate mechanical relay functionality for the door opening/closing system and ability to also integrate with the AMX control system. Owner notes that

required door repairs will be the owners responsibility up to the mechanical relay. Awarded vendor will work in conjunction with owner to restore AMX controlled door open/closing ability after owner has completed physical repairs up to the relay. Mechanical shades for 2 windows are requested, to also be integrated into the AMX control. See Projection section under Scope of Work for specific details on owner desired projector choices and options. All bids should include 2 complete, separate bids; one for each potential projector. Owner then will choose one bid based on cost and projector performance.

Completed system will perform the following with a single touch on the AMX system*:

- Closing of theater door(s)
- Lowering of 2 window shades
- Medium rate dimming to off state of theater lighting
- Power on new data projector
- Start playback of one solid-state based digital format video file
- Audio amplification of corresponding video

At video conclusion:

- Power down projector,
- Return audio amplification to low power consumption state
- Slowly fade up house lights
- Open window shades
- Open theater doors

See integration section for additional AMX defined functionality

Vendor will evaluate current Shure wireless microphones for potential of wireless spectrum changes that could affect future use and compensate as necessary. Vendor will supply 2 additional wireless channels that will accommodate 2 lavalier or 2 hand-held or one of each. Vendor will also supply Assisted Listening devices for up to 6 people that receive any audio signal being amplified. All existing A/V wiring, including video over twisted pair, should be evaluated for age related wear and viability in regards to inclusion in the existing/new audio & video signal

paths. Visits to the space and consultation with both Atheneum and Information Technology staff are highly encouraged prior to the proposal deadline.

All cables, wiring and parts required to make these rooms fully functional will be provided by the vendor. Unless otherwise noted below, all components, labor, and compiled software programming and software programming support will be provided by the vendor as a part of the project and will become property of the University of Southern Indiana at the completion of the project. Work is to commence as soon as possible in coordination with Atheneum staff and subject to room availability. Project completion (including testing) is required before March 1st, 2020. Regular updates to Atheneum and Information Technology staff during the progress of the work are also expected.

Scope of work:

Projection

Owner is specifying vendor provide 2 separate complete bids, one for each potential projector. The owner will then make a decision as to which bid to choose after comparing each projector simultaneously on site. If the owner, after examining bids, is able to eliminate one projector solely on cost considerations, the simultaneous projector evaluation will not be necessary. The owner has chosen the Epson PowerLite PRO L1405U and the Epson PowerLite PRO L1505UH, and each separate bid should include either/or of these 2 options. Owner requests that each complete bid also includes a 2 year extended warranty with express replacement option for the projector. The chosen projector/bid will utilize current structure constructed by Atheneum staff. Power to the projector will be provided by the owner. Connection to the projector will consist of one twisted pair solution providing for both 4K video and control signals. A/V connections will be made by the vendor from the rack to existing in-floor low-voltage box near the podium area located on the stage using cabling sufficient in quality to carry 4k video. A/V and control connections will be made by the vendor from the rack to the projection booth. Control connections will also be made by the vendor to window, door and lighting controls. A projection screen is already present in the space and the projector must be aligned and calibrated to provide a clear image on this screen using as much of the surface area of the screen (31'8" x 22'11") as possible for the projected image without altering source video aspect ratio.

All video/audio devices will be controlled by the wireless interactive controller and switched to the projector using the vendor supplied scaler/switcher. Video devices from the stage located low voltage box will supply input to the scaler as follows:

Podium Computer	15-pin D-sub mini
Podium Computer	HDMI (including audio)

Audio inputs will be available as follows:

Podium computer	3.5mm mini jack
Auxiliary inputs	stereo pair RCA jacks
XLR inputs	

A solid state playback device will be supplied by the vendor. This player is to be controlled by the wireless interactive controller and will supply input to the scaler via HDMI output. The solid state playback device should be able to deliver digital video to the projector from a file at up to 4K resolution and up to 60fps in a variety of codecs and wrappers, including, but not limited to, .mov, .mkv, .m4v, .mp4 and .wmv. Codec playback compatibility should include common in-use codecs, including but not limited to H.264, H.265/HEVC and VP9. AV1 and VVC are desirable compatible codecs, but not required. Storage capacity should be at least 1TB.

Vendor will supply Blu-Ray video disc player that can be operated via the AMX system or player specific remote control (if available). Vendor may include a UHD or 4K Blu-Ray player as long as backwards compatibility to SD DVD is included.

Output from the scaler/switcher will be at the native resolution of the projector.

A laptop computer would be supplied by users at a podium, and should not be included in the vendor proposal. The control system device (updated, if necessary) will be mounted in the wall in the existing location at the entrance to the auditorium. Programming of the AMX devices will be described in some detail below.

Audio

Awarded vendor will install a 7.1 audio system, including speakers, decoding hardware/software, wiring and proper amplification to the 2 levels in the theater. The 2nd level is commonly referred to as the balcony. Properly encoded 7.1 channel audio sources originating from the solid state playback device, Blu-Ray player or auxiliary input should all properly decode and transmit 7.1 sound. In the absence of 7.1 encoded source audio, the system will provide owner choice in transmitting 5.1 surround (if source is encoded) simulated surround or sound as encoded in the source.

Vendor will remove current speakers and install new speakers, wiring and ancillary support items, in the best deemed location for experiencing the surround capabilities, in both levels of the theater. Aesthetics are asked to be considered when altering any structure in view of the theater audience/seating. As noted, the current system includes 3 speakers behind the installed screen. Awarded vendor will be responsible for removing and replacing the screen should it be necessary, and will assume responsibility of returning screen in same condition. All current speakers will be removed and owner given opportunity to retain or have vendor dispose of speakers, as well as any other equipment eliminated from the current audio/video signal path.

Audio in the system will be separated into two signal paths: one for device audio (solid state, Blu-Ray, computers, auxiliary video inputs) and one for microphone audio (both the existing microphone system and the additional wireless microphone system). Volume for these discrete signal paths will be controlled independently within the AMX software programming.

Integration

All system components will be fully integrated with the AMX control system, projection system, and the audio system with all necessary cables and incidental electronics required to create a fully functioning audio-visual system for the owner. Schematic and A/V signal path drawings of the system design must be supplied to the owner upon completion of the project. These drawings must show all relevant interconnections between devices in the system. Manuals for each

new component in the system must also be provided to the owner upon completion of the project.

The display on the control system will be similar to up to date existing devices installed at the University of Southern Indiana. Each system input will be selected by tabbed navigation along the left side of the touch panel. When touched by the end-user, the system components are triggered to allow for a "one-touch" response to the user request.

The owner (Information Technology and Atheneum staff) will be contacted by the vendor before any significant time is invested in programming the AMX control system to receive signed approval from the owner after presenting acceptable upgraded layout and design concepts of the AMX control panel.

The auditorium is primarily used for showing a short feature film to guests of the Atheneum. Special consideration should be taken in design of the control since the showing often runs numerous times per day. For example, when the operator touches the "Movie" button on the screen, the system will respond by starting the projector in black screen mode, and selecting the appropriate video input on the scaler/switcher. During warm-up the touch panel will display a progress bar indicating to please wait while the projector is warming up. After the projector has warmed up the touch panel display will show a single "Play Now" button that when pressed will delay for 10 seconds allowing time for the window covering to close, doors to close and the lights to dim before starting the movie. When any other input to the system is selected an appropriate subset of controls should be displayed (play, pause, stop, etc.). Touch panel button controls along the top of the controller will give persistent access for the user to volume and lighting controls.

A set of manual controls will allow the user to see use hours on the projector as well as allow turning on and off the projector, along with opening and closing the window shades, entrance door(s) and lighting. Programming should also provide "reassurance" to the end user that the system is responding to touch commands with feedback screens (such as "Please wait while the system powers up") and slider bars that indicate the relative position of volume controls.

The AMX control panel will have visible at all times an "emergency" button that will override current operations and perform the following: mute house sound, black the projected image, bring up house lights to full and open the window shades and the door(s). After operation of this "emergency" button, a return to normal one button automatic file playback or manual control of system as detailed in the Project Summary should be available on screen, via a one touch "exit emergency" mode button.

The installed system must fully recover to a normal operating state in the event of a power outage.

Materials and instructions for re-installing software will be supplied to the end user.

Conclusion:

Requests for proposal should include component and unit pricing. Examination of Atheneum theater referenced in this document may be arranged by appointment by contacting John Busch, Lead Maintenance Mechanic USI/Historic New Harmony at 812-568-6516 or jbusch@usi.edu Andrew Black/USI IT can be reached at 812-461-5468 ablack@usi.edu Proposals must be received by Thursday, November 14, 2019/2PM/Local Time.