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 Geneva School District

To: Donna Oberg
 From: Elizabeth Janowiak
 Date: January 23, 2013

Please submit this purchase information to the BOE for the January 28, 2013 meeting.

The Technology Staff are continuing to implement the components of Phase 2 of the Technology Capital Outlay Plan approved by the Board of Education this past August. One of the improvements included in this phase is an upgrade to audio systems at the high school auditorium.

With your approval, the items below will be purchased through Pentegra Systems as a continuation of the sound improvement project started last year with the purchase of updated wireless microphones.

Equipment	Qty	Total Amount
Audio System Upgrade including:		\$34,690.00
RDL D-CIJ3D auxiliary input jack	1	
Custom 6-input microphone patch panel	1	
CRESTRON DIGITAL MEDIA DM-TX-200 twisted pair transmitter plate	1	
CRESTRON DIGITAL MEDIA DM-RMC-100 twisted pair receiver	1	
CRESTRON MC2E remote control processor	1	
CRESTRON TPS-4 touch screen remote control panels	2	
SHURE ULXP124/58 combo hand held / lapel wireless microphone system	1	
BSS SOUNDWEB LONDON BLU-100 digital signal processor	1	
YAMAHA LS9-32 32 channel digital mixing console (includes installation and training)	1	
Installation and Training for all components		

For your reference, the entire scope of work for the audio upgrade project is provided on page two. Item One (1) was completed in Summer 2012. Items 2-6 we hope to complete prior to the 2013 spring musical at GHS. Accessories listed in Item 7 will be considered for purchase in the near future.

Understandings

The system design is based on the following criteria:

Ease of use: The system must be able to perform complex functions without the aid of skilled operators. While Pentegra will train operators upon completion of the system, it is certain that there will be times when the system will be used without the aid of operators.

Support for performance: The space is often used for high impact Theatrical and Musical events. Contemporary performance requirement has caused an exponential increase in the capability requirements for audio systems. Numbers of inputs, monitoring requirements, wireless microphones, recording and playback needs must be carefully considered.

Instructional Value: Future Theatrical designers and technicians are being exposed to Theatre Technology for the first time. The space should be an effective instructional tool.

Scope of Work

Pentegra Systems will upgrade the existing sound system to improve ease of operability and reliability:

1. New wireless microphone systems will be quoted to replace the existing systems that operate on the now illegal 700 mhz band.
2. The system will be designed to have two overall modes of operation: Lecture Mode and Performance Mode. Upon powering up the sound system, it will operate in Lecture mode. In this mode, the user will have access to a wireless hand held or lapel microphone system, AV audio input for a laptop, iPod, or CD player, and a wired microphone jack. A simple to use remote control panel will allow volume adjustment of these inputs, therefore making it unnecessary to access system components located in the control booth. For productions, an override switch in the booth will allow operators to enter Production Mode. In this mode, all system elements are controlled and operated from the control booth and the Lecture Mode inputs and functions are disabled.
3. The existing projection system will be enhanced to provide easy connectivity at the stage for VGA and HDMI/Display Port based sources such as laptops and tablets.
4. An option for a new professional grade digital mixing console will be furnished. The mixing console will allow storage and recall of up to 300 scenes. The mixing console will be set up to allow users to access the mixer remotely via an iPad app. (The iPad is to be furnished by owner and requires a free app download from iTunes.)
5. The entire system will be under control of a digital signal processor. This device performs all input and loudspeaker equalization, balancing, level and dynamics control. The device is programmed via secure computer link and has no knobs or levers that may be mis-adjusted or tampered with.
6. The main loudspeaker systems will be inspected and their focus will be verified. If inadequacies are discovered, they will be reported to the school as well as recommended remedies.
7. A list of recommended accessory items is provided. These may be purchased now or in the future.

CLEAR-COM CC-95 Intercom Headset

CLEAR-COM RS-601 Intercom Beltpack

CLEAR-COM DX100 Wireless intercom system with 4 headsets

SHURE ULX24/58 Hand Held Transmitter for Use with Existing Wireless Microphone System

ELECTRO-VOICE ZXA-1 Self Powered Monitor Speaker with Cable

SHURE MX391/C Stage Floor Microphone

SHURE MX202B/C Hanging Microphone

LISTEN ALS System with 10 Personal Receivers and Earsets (Includes Installation)