

## **BAI meeting with Studio IO**

March 26, 2025 \* 8am

Present: Fr. Ryan Pruess, Andy Miller, Thomas Almendra, Tom Groeschl, Paul Thelen, Michael Raia, Ryan Pigg, Katie Ortega, Michelle Ludtke

Two wireless microphones are needed at the Ambo. We do have a handheld microphone and would like that as well. The microphones would want to be on separate lines. Would like the availability to have 3 microphone channels- belt pack. Have availability to have 3 microphones available at once.

Microphone on ambo is a very good microphone and would keep the same model.

Town hall style and meetings- want handheld.

Father's preference in microphone is around ear and that is said to work best preferred over lapel. Other sites have Countrymen or Q Audio. Q Audio microphone is more durable and cords are easy to replace. If there are problems, it is almost always with the cords. Mics are as close to flush tone as possible.

The mics have lithium ion batteries where the entire pack goes on the charger. The handheld is the same where it gets charged- no changing batteries.

Spoken word- where would hardwired spoken microphone be used. If they needed more, they would use hardwired and place in altar. No need for outdoor use here at Sacred Heart- so no antennae needed.

No use for sound to be in the music room.

Controls for spoken word system:

\*Separate control between choir and spoken word.

\*Would not have a physical mixer for spoken word mics but would be a touch screen electronic control. Those controls would be simple and may only change if there is a change in person for volume. Touchscreen would be hardwired and could be located where we would like. Makes most sense to have the equipment used for adjusting to be located in the choir area. System is currently left on all of the time. This system would have the ability to be turned on and off. Current system is analog. New system would be more digital.

Room Acoustics for church:

Last night did some acoustical testing. Reverberation time- the time it takes for a loud noise to completely be gone. Right now is a good balance between word and song. The

occupancy makes a difference in the reverberation time. **Michelle to send Mass attendance numbers to Andy.**

Paul mentioned at Holy Family, padded seats were added for sound.

Discussion of what the flooring will be in the church. Father said that tile is preference, but carpet squares have been discussed. Curved wall in the back of church has the potential of sound tiles in the back. Center bay of wood structure- possibility of drywall and paint, but option of having a canvas applique in that space.

Pews have not been padded in any of the plans. May need to have a combination of the back curved wall and the center main aisle. Treatment on the back wall has a delayed reflection. Right and left of the center front has better clarity in the ability to hear. Audio system layout and design has impact on direct impact and speech intelligibility. Overhead sound system looks like it may be best and mounted to the beams. Ceiling is low enough that we can do that here. Looking at probably deck-mounted system and keeping as compact as possible. Advantage when moving choir to back and spoken word in the front would be okay and work with two systems. Once system is equalized, it works great.

Tom asked if the curved wall or the center ceiling be more effective? Michael Raia is okay with whatever is needed acoustically between the ceiling or curved wall- the plans can handle either one.

The back doors of the church are currently glass, but will be wood. The direction of the speakers can help to address the sound and that is more influential.

#### MUSIC:

A person at the piano/organ and same person cantors themselves. Boom mic at piano and if there is a separate cantor then then microphone moved there. Combined choir rotate from SH to HF. Paul stated about 30 people are in the choir here- would want seating for that many. Occasionally other instrumentalists join as well. Choir mics pick up those instruments. Is the piano mic'd independently? Currently not.

Overhead choir mics like we have now? Because of the size of the ceiling, hanging down works well. Currently need to add mics for the children's choir. Usually two rows for children's choir- most is about 15 children.

16 channels in digital mixer seems like it will be more than enough.

Discussion about Hispanic Mass and additional instruments- typically 4 additional instruments. Each musician is mic'd individually plus couple additional singers. Would want a wedge or two for sound with Hispanic and can also use with the English Mass.

Are concerts using front of the church? Yes, United Singers. Would recommend have a floor jack. Use same controller for spoken word. HDMI jack would connect for playing video. Recommendation from Andy for a large rolling in screen. 85" screen- having 2 screens will be sufficient. Controls would be in the choir area. Paul asked for hardwiring to be in place. Consumer level television- could review in Consumer Reports magazine. Would we need more than 1 HDMI connect? Paul suggested having 2 HDMI imports. If we do livestreaming would want output and also Ethernet cable to the choir. Paul suggested we would need the hardwiring done and we could do the rest of the connecting. Great thing about doing this all with one processor, then all of the audio and video will stay in sync which is a big plus.

#### HEARING LOOP:

Currently the wire is installed basically on top of the carpet. They will do a double-loop system using the same base wire system and give us a credit and be able to use the same system because it is not too old. Telecoil system is still in the back of Sacred Heart so currently either system is available for anyone to use. Be sure that the hearing loop is on the GC radar. Will need to have hearing loop and audio removed prior to demo if being salvaged.

Organ wires are currently through the riser steps. Electrician would handle the speaker wires for the organ. Will need to be careful to label the wires. Be sure to not lose the wires OR the path for the speakers. Conduit by the music room has 4 or 5 wires that come out there. Also have wire nuts on the speaker wires, which is not recommended, but is currently working.

No advantage of tying the organ speakers into the new sound system. Will want to have a monitor speaker for the choir by the organ. Paul suggests that the current console and speakers work well together- no need to upgrade at this point.

Planning to keep the choir area as a slope, but will have a flat surface built for the instruments area. Chairs are being planned to be in the space. Paul would like to have a slotted space for storage of books, music binders.

Katie stated that they will re-work plan for 30 people in choir area. Potentially if there is overflow of choir members, they could stand in front of the instruments.

70 volt system where speakers could be in the narthex and chapel. Adoration chapel is used for during Mass as extra seating. Currently there is a switch in the chapel that can be adjusted for Mass or if used as an Adoration chapel. Auxillary speakers in vesting sacristy, working sacristy and altar server sacristy and replaced in the chapel and narthex. Would like to add a speaker to the meeting room as well-this room may serve as a family room or nursing room during Mass. The speakers would have a volume control on the wall in

sacristies, chapel, and meeting room. The narthex speaker would be included with the choir control.

Confessionals- making sure sound attenuation needs to be addressed. Most likely improved sound tile will need to be added. **Asked Andy** to look at this area for sound absorption. Combining two rooms to make one confessional. Doors should make a huge difference and adding a sweep to the door.

Discussion of having a tv on a cart that could be in the narthex area, but would not need to have a jack.