## **Keene Public Library**

# **Building and Grounds Committee**

## Meeting held 6/14/2024 at 10:15 AM

Members present: Susan Bloom, Paul Henkel, Marti Fiske and Kathleen Packard.

Minutes of our last meeting were approved.

# Acoustic Improvement of Cohen Hall and of the Main Lobby where the Circulation Desk is located –

The acoustical study conducted at the Keene Public Library highlights the issue of high reverberation times in both Cohen Hall and the Circulation Lobby. Reverberation times are currently 1.9 seconds in Cohen Hall and 1.7 seconds in the Circulation Lobby, which is significantly higher than the recommended range of 0.8 to 1.0 seconds. This excessive reverberation reduces speech intelligibility and music clarity.

To address this issue, the study recommends the addition of sound-absorbing materials to reduce the reverberation time.

**For Cohen Hall**, the recommended treatment area is 2500 square feet, which is approximately the floor area. Treating the entire ceiling with a 1-inch absorptive product would achieve the desired results at speech frequencies. Sprinkler heads and lighting fixtures would need to be extended.

For better music, addressing low-frequency reverberation in this space is more challenging due to its masonry walls. Using specialized resonators could be effective but would be impractical due to their size and negative architectural effect. Instead, using panels in the 45-degree angled corners of the walls could provide some low-frequency absorption.

**For the Circulation Lobby**, approximately 1800 square feet of 1-inch-thick fabric-wrapped panel absorbers are suggested.

Treating the ceiling with troweled-on acoustical plaster could be effective. Sprinkler heads would need to be extended.

Suspended panels in a so-called "cloud" can be used to absorb sound and interrupt reflections from the ceiling. This might be less expensive, but would have an architectural effect.

### Lighting in the stacks and reference area, and the meeting rooms.

Lighting in the stacks is poor and interferes with users reading titles on books. The meeting rooms would benefit from brighter lighting.

Staff suggested priorities are:

- 1) Improve sound in Cohen Hall
- 2) Improve lighting in the stacks and meeting rooms, and
- 3) Improve sound in the lobby.

**Plan**. So the plan is to get bids on the cost of the Cohen Hall ceiling, and on panels in 45-degree angled corners. Also ask Andrew Bohannon's assistance to determine the cost of extending the sprinklers and recessed lighting. Heberton Hall fund currently has \$149,290 available.

Marti will contact the acoustic engineer Eric Reuter as appropriate for follow-up.

### **Bus Shelter Graffiti and Bench**

Kathleen mentioned graffiti in the bus shelter. Marti will seek clarification regarding who will remove the graffiti. She will also inquire about a bench.

Paul Henkel, Chair