

Greene-Hills School
HVAC Project Committee
Special Meeting Monday, August 23, 2021
Via ZOOM Online Platform

Present: Ronald Burns, Mary Fortier, Scott Gaudet, David Hartley, David Mills, Bob Passamano, John Sklenka, John Smith,

Also Present: Peter Fusco, Tyler Long

1. CALL TO ORDER

The meeting was called to order at 6:03 p.m. by Tara Landon

2. OVERALL PROJECT UPDATE

Presented by John Smith

This has been an ongoing issue and all the legal proceedings have been completed. The city was awarded 1.2M. There are legal fees that needed to be covered. The balance of the project will be funded by the city. There is no reimbursement from the state.

3. Director of Facilities Update

Presented by Peter Fusco

Greene-Hills School was built in 2012 and the issues began shortly after taking ownership of the building. The expense to repair the ongoing failures has been paid from the Facilities operating budget since the issues started. After investigating further, it was noted that schedule 40 pvc and 20% propylene glycol are not a favorable combination when 89-degree temperatures are exceeded. There are also issues with LG heat pumps (the first version of the ERV system). Other issues that have been addressed include but are not limited to compressors, wiring harnesses, solid state control boards, and refrigerant piping leaks throughout the building. There is consideration for more of a conventional system rather than keeping the geothermal. There have been question whether LG was comparable to the Mitsubishi unit because there is a bacnet that is associated with the commands from the building energy management system to the heat pumps themselves. LG could never satisfy the traffic, forcing the programmer to slow down the program.

4. ENGINEER'S UPDATE

Presented by Tyler Long

Long Consulting is a full service mechanical, electrical, plumbing and sprinkler design engineering firm. Opened their business in 2012 and have been going strong since then. They are selective in the projects that they take on and they handle a wide variety of designs.

Long Consulting proposes to remove the geothermal system. The main pipes would be cut and the existing glycol system would be eliminated. The glycol would be drained. The piping that is outside of the building would be filled with water and the piping capped. Inside the building, the majority of the heating system is an in floor radiant heating system. There are three mechanical rooms located throughout the building. They are looking to supply condensing natural gas boilers that would provide heat and hot water for the radiant system. There are 130 fan coil units that would be demolished and replaced with standard air handling units that would connect to condensing units that would be located

on the roof. 123 of these units would be condensing units similar to residential size between 1 and 4 tons and there would be 7 – 8 ton condensing units. In addition to the boiler system for the radiant floors, they would add boilers to supplement heating to the ERV's that provide ventilation to the building. If there is ever an issue with the radiant floor heat, there is a back-up heating system inside the fan coil units. There is a structural engineer that will verify they are not overloading the roof. There is a water to water heat pump that separated the two loops. The radiant floor loop was not integrated into the geothermal loop that is failing. The geothermal loops are a number of columns that will be infilled with a putty and will remain in place. The schedule for the project follows:

- Complete documents by November
- 4 weeks for bidding
- 18 months for construction with 3 phases (1 mechanical room per phase)

A section of the school would need to be blocked off while the phases are ongoing.

5. REVIEW THE PROPOSED MEETING CALENDAR

- Thursday, September 9, 2021
- Thursday, October 14, 2021
- Wednesday, November 10, 2021
- Thursday, November 11, 2021

6. RECOMMEND NEW MEMBER

One of the appointees was unable to commit to the committee; therefore, another nominee was presented to take the spot. The nomination committee made the motion and voted to approve Danielle Couture to the committee. Danielle is a parent at Greene-Hills, is part of the PTA and has been involved with the school activities. Mr. Gaudet feels she will be an asset to the committee.

On a motion by Mary Fortier and seconded by John Smith, it was unanimously voted to approve to appoint Danielle Couture to the Greene-Hills School HVAC Project Committee and to forward to City Hall for appropriate action.

7. ADJOURNMENT

The meeting was adjourned at 7:07 p.m.

Respectfully submitted,

Tara Landon

Tara R. Landon

Administrative Assistant/Operations