

Greenwich Board of Education Minutes of the GHS Front Entry Committee Meeting

DATE: November 10, 2021

LOCATION: Virtual via Google Meet

TIME: 8:00 am

Committee Members Present:

Stephen Walko - Chairman

Jake Allen- Vice Chairman

Maureen Bonanno-Secretary

Ashley Cole

Louis Contadino

Stephanie Cowie

Christina Downey (BOE)

Leslie Moriarty (BET)

Megan Galleta

Ex-Officio Members Present:

Tom Bobkowski (BOE - Central Office)

Craig Amundson (RTM)

Dennis Yeskey (P&Z)

Ralph Mayo (GHS Principal)

Lauren Rabin (Board of Selectmen)

Will Schwartz (DPW)

Dan Watson (BOE- Central Office)

Steven Swidler (BOE Staff)

Others Present:

David Stein (Silver Petrucelli)

Bob Banning (Silver Petrucelli)

- **Call to Order:** Meeting was called to order by Mr. Walko at 8:00 a.m
- **Update on Schedule and Board of Selectmen (BOS) Meeting:**
 - Mr. Walko noted that the BOS approved the recommendation to proceed with the MI. The team will now be going before the P&Z Board of Appeals on November 17th for 2 variances, for FAR and Overall Lot Coverage as well as meeting with the Architectural Review Board. The next P&Z meeting is December 7th assuming we get on the P&Z calendar.
 - At the BOS meeting, the BOS commented on making sure that the area will be bicycle friendly. Mr. Walko will connect with Mr. Watson to understand the district/town standard for this. Additionally, the BOS discussed energy efficiency. The team met with the town's energy conservation group, exploring several options, including geothermal solutions. Mr. Walko noted that today's discussion relates to energy efficiency and the options for systems.

- Mr. Walko noted that the schedule is still in place. He also noted that we will continue to monitor the secondary road project. Mr. Walko received the Hillside road traffic study and will scan it and send it out. Mr. Walko noted that he does not yet have the Master Facilities Plan as it relates to GHS.
- **Silver Petrucelli Update on HVAC:**
 - Mr. Banning presented 3 options for heating and 2 options for cooling:
 - Heat Options:
 - Heat pump technology
 - Gas fired
 - Hot water
 - Cooling Options:
 - DX cooling (heat pump technology)
 - Chilled water
 - Mr. Banning stated that they can use any combination of the 5 pieces.
 - Mr. Banning noted that they looked at four different criteria:
 - Initial Construction Cost: Installed costs range from \$55K for the heat pump to \$100K for the chilled water. 2 pieces of equipment installed. Cost has to do with how common the equipment is and how complicated the equipment is. About 30% more when we go to 2 smaller pieces of equipment vs. 1 larger piece.
 - Operating Cost/Efficiency: Heat pumps are very efficient except in extremely cold temperatures. Gas fired heat is about 80% efficient. S&P's Mechanical Engineer met with Dan Watson's crew and confirmed that the existing hot water piping has sufficient capacity to tap into for the hot water coil system. However, their initial evaluation is that the chilled water is not of sufficient capacity. They still need to investigate this further. The smaller equipment (7.5 ton) is more efficient than the single larger unit. The chilled water efficiency will vary depending on how long the pipes are.
 - Maintenance: None of the systems are maintenance problematic but some have more parts/more moving pieces that may require more maintenance. Heat pumps have a lot of moving parts.
 - Construction Phasing: The heat pump solution and DX Cooling is a simple electrical connection. Very little impact outside of the area. The gas line would need to be tied in over the roof.
 - Ms. Cole asked what DX Cooling was and Mr. Banning responded that DX Cooling is similar to home air conditioning. Ms. Cole asked what if heating or cooling was more difficult and Mr. Banning responded that both are difficult, given that it is a glass structure. During the hottest times of the year, there will be less utilization of the space, so that should help.
 - Mr. Banning stated that the committee needs to decide if we want to stay away from natural gas and how important the redundancy is. The Energy Conservation Group suggested several ideas including geothermal and another technology with a small scale chiller which they will look into.

- Mr. Banning noted that they would like to put a recommendation together for the next meeting.
- **Discussion**
 - Mr. Stein noted that the doors will frequently be opening so this makes the space more challenging to heat/cool. Mr. Stein also noted that the most simplistic system is the heat pump as far as operating cost, and construction phasing costs.
 - Mr. Yeskey asked if the Energy Conservation Group is the same group as the Energy Advisory committee. He also noted that the state of CT has given p&Z the ability to write new regulations to deal with energy management.
 - Ms. Downey asked about the mixing and matching of the equipment and if certain combinations are better than others. She also asked for more clarification on the redundancy issue, if we only go to one unit. Mr. Banning responded that once the systems are installed, there will be shut-offs in place to isolate them from the rest of the building. Ms. Downey asked if one unit was preferable to two units. Mr. Banning responded that the redundancy would only be applicable to the space and not the entire building. Mr. Stein also noted that the radiant flooring solution would also help with the redundancy. Mr. Banning noted that they can mix any combination of the equipment and there is not a big difference in efficiency.
 - Mr. Walko stated that the architects will come back with their recommendation; however, the decision will be the Committee's. He added that there is still some work needed to determine capacity of the chilled water unit, whether there are add alternates such as radiant heat, and to see if a smaller, self contained chilled water unit is a viable option.
 - Mr. Allen asked if all 15 tons were needed to cool the space and asked for clarification on whether the 2 7.5ton units were true redundancy. Mr. Banning responded that 15 tons is needed at the peak times and agreed that it would not be true redundancy.
 - Mr. Walko asked if the cooling of the glass corridor was included and Mr. Banning responded that it was not. Mr. Stein noted that once the system is chosen for the vestibule, then they can make the recommendation for the corridor.
 - Mr. Walko noted that the committee should take into consideration the complexity of the ongoing maintenance of the systems selected and whether it is easy to maintain for the GHS maintenance staff.
 - Mr. Stein noted that they have one last step in the due diligence process. They will meet with the Energy Conservation group to see if their suggestions can be incorporated. They also need to meet with Dan Watson's service technicians on the chilled water unit.
 - Mr. Allen asked if, with any of the options, would the controls tie into the existing BMS system. Mr. Banning responded that they would.
 - Ms. Cole asked the difference between hot water coil and radiant heat. Mr. Banning responded that hot water coil is within the air handling equipment on the roof vs. the radiant heat in the slab.

- Mr. Contadino suggested that we move away from fossil fuels. He supported the idea of redundancy and believes that 2 units will have less impact aesthetically than one large unit.
- Mr. Watson pointed out that the cooling tower was recently increased in size in order to handle future needs of the school and should be considered as an option.
- **Silver Petrucelli Update on Landscaping**
 - Mr. Stein presented a few options for landscaping. In all scenarios, the existing pavers will need to be pulled up. The area needs to be regraded. The bus loop sidewalk will need to be reconstructed due to construction. The existing trees should remain.
 - The first solution reflects just cleaning up existing landscaping and adding some new landscaping that is low maintenance.
 - The second solution embellishes the existing landscaping. The area would be enhanced without a big cost.
 - The third solution shows some movable seating and enhanced landscaping.
 - The last option is much more creative with a circular design. This option is more than the original project plan but can be add alternate.
- **Discussion on Landscaping:**
 - Ms. Cowie asked if all of the scenarios fall within the budget. Mr. Stein responded that the first option falls within the budget.
 - Ms. Cowie also stated that the existing grade is not level and should be changed to something more maintenance free and safer. She also asked for cost estimates. Ms. Cowie noted that the PTA could fundraise to pay for items over budget. Mr. Stein noted that the landscaping could be done in several phases.
 - Ms. Downey asked to what extent that we need to decide the landscaping. She also noted that the 3rd option is boxy and likes the idea of a more circular design.
 - Mr. Walko stated that we need to adhere to our project scope. We will take all of the information to the BOE to decide on the add alternates. If we get approval to do the add alternates and we have the money, we can do them, but if we don't, we can go through the process of private funding.
 - Mr. Contadino agreed with Ms Downey on the circular design. He prefers the last design with the creation of the amphitheater.
 - Ms. Cowie pointed out that the students use that outdoor space for lunch and she believes the area should be functional. There are not many other places on campus to have outdoor seating.
 - Ms. Rabin stated that murals are controversial in town and we should consider that if we want to add one to the project.
 - Ms. Moriarty asked about the use of the amphitheater and also noted that the design that brings people closer to the vestibule should be discussed with Mr. Bobkowski and Mr. Mayo from a security perspective.
 - Mr. Mayo stated that he liked all of the designs and believes that the staff would use the amphitheater. He also stated that the town does the maintenance, and

they do not do regular upkeep so he suggests choosing something low maintenance.

- Ms. Cole noted that the neighborhood would appreciate the last option. She also agreed that maintenance has always been an issue and suggested that the high school should have it's own team.
- **Moving Forward:**
 - S&P will put together a cost comparison on the landscaping for the next meeting.
 - Mr. Walko suggested the next meeting should take place on November 17. Mr. Stein agreed and will confirm with Mr. Walko that they have received all the necessary information by then.
- **Approval of Minutes:**

Motion was made by Jake Allen and seconded by Stephanie Cowie to approve the minutes of the October 27th, 2021 meeting. The motion was approved.

The Motion Passed 8-0-0

- **Adjourn:**
 - The meeting was adjourned by Mr. Walko at 9:10 am.

Submitted by Maureen Bonanno on Nov 15th, 2021