

**School Building Committee**  
**Wednesday, July 10, 2019**  
**7:00 p.m., Open Session**  
**Hartwell Multipurpose Room**

**Present:** Chris Fasciano, Chair; Kim Bodnar, Vice-Chair; Tim Christenfeld; Buck Creel; Jennifer Glass; Michael Haines; Gina Halsted; Becky McFall; Craig Nicholson; Steven Perlmutter; Peter Sugar; Owen Beenhouwer, liaison, Community Center; Christine Dugan, liaison, Conservation Commission; Ruth ann Hendrickson, liaison, Water Commission; Ed Lang, liaison, Green Energy Committee; John LaMarre, Consigli; Greg McGuirl, Consigli; Shane Nolan, Daedalus; Drashti Dhirwani, SMMA; Andy Oldeman, SMMA; Joel Seeley, SMMA; Jenn Soucy, SMMA.

**Absent:** Sharon Hobbs; Tara Mitchell; Doug Adams, liaison, Historical Commission; Andrew Glass, liaison, Historical Commission; Dan Pereira, liaison, Parks & Recreation Department; Gary Taylor, liaison, Planning Board; Peter von Mertens, liaison, Conservation Commission.

**Also Present:** Rob Ford, Lincoln Public Schools Technology Director; Judith Lawler.

**Welcome and Opening Comments:** Mr. Fasciano thanked the SBC members who participated in the July 4<sup>th</sup> parade.

**Public Comments:** Judith Lawler said she is here to get the latest update.

**Exterior Elevations and Materials Update:** Jennifer Soucy, SMMA, provided an update on the exterior materials/colors for the contrasting brick on the building's exterior and the cement panels proposed for the upper levels of the Reed Gym and the Auditorium. The SBC will be asked to make a decision this evening on these two issues. She said that in response to a request at the last SBC meeting, she had set up sample materials outside so that the Committee could look at them in natural daylight. *The SBC took a field trip outside to review the materials.*

- She showed renderings with different colors of accent brick, noting that the mortar color will be adjusted accordingly.
- In response to a question about how the PV panels will affect the aesthetic on the Brooks end of the building, Ms. Soucy noted that the PV panels will not be very visible on the flat roofs.
- Jennifer Glass asked Ms. Soucy, given that SMMA has been working closely with the designs, whether she and the design team have a preference. Ms. Soucy said that they prefer a darker color for the accent brick (the middle color of the three shown).
  - There was general discussion that this color blends well with the red brick that will be used for most of the building.
- Ms. Soucy noted that per the Committee's request, they have toned down the pallet of the cement panels so that there is less contrast. The panels will have a random pattern featuring different widths and tones.
- Steven Perlmutter expressed his opinion that the checkerboard-like pattern and colors proposed for the second stories of Reed and the Auditorium were out of character and inconsistent with the look and feel of both the school campus and the town.
  - Mr. Perlmutter suggested that the architects consider making the second stories primarily one color (not gray) but with some areas of color, as determined by the architects.
  - Buck Creel said that there are three colors at Hanscom. He said that all three colors, which are part of a more highly contrasting pallet, blend well together when installed.
  - Peter Sugar said that he thinks three colors would be better than two; that two would create too much of a checkerboard effect.

- The SBC provided direction to SMMA to proceed with the darker contrasting brick color that is shown on slide #5 of the presentation (and as identified outside).
- The SBC provided direction to proceed with the cement panels with the least contrast (the right-most color pallet as shown on slide #4 of the presentation).
- Owen Beenhouwer commented that the entrance may be difficult to identify. There was discussion that the walkway and canopy will define the area.

**Review MEP Systems:** Andy Oldeman, SMMA, provided background on the HVAC system, including fan coil unit types/location, rooftop equipment, and emergency power and heat. Features of the system include:

- VRF fan coils with variable volume ventilation.
  - Mr. Christenfeld asked if this system is programmable. Mr. Oldeman said that it is.
- Classroom Layout: Wherever possible, there will be a horizontal fan coil unit hidden in the ceiling, along with a duct system that conditions the air. This will be in most of the building. In some classrooms, a vertical fan unit will be used. In admin areas, there will be a cassette unit that is not ducted — these work in smaller offices where there are not as many people.
  - Mr. Creel asked about summer use of the office areas. The air is conditioned.
- There will be some rooftop equipment. In places where duct work cannot fit in the building, they are finding ways to put it on the roof in the least impactful way.
  - Mr. Creel asked Mr. Oldeman to think about snow buildup over the Kindergarten area. This has been an issue in the past.
  - The roof membrane will cover the outdoor “dog houses” that house equipment.
  - Mr. Christenfeld asked about PV panels on the dog houses. Mr. Seeley said that PV panels will not be installed on them as the dog houses are built with “light construction.”
  - All the duct work is insulated.
  - Mr. Creel wanted to ensure that the connection with Reed will be conditioned.
  - Rob Ford asked about exhaust for the spaces where STEM work will take place - there may be soldering, etc. Mr. Oldeman said that they will look at that those rooms to determine the best solution. He noted that the art room kiln has an independent exhaust system.
- The central part of the building will be powered/heated/cooled so that it can be used as an emergency shelter area.
  - Ruth Ann Hendrickson asked about how many bathrooms are in that space. Ms. Soucy said there are enough bathrooms.
  - Joel Seeley, SMMA, noted that this area will be considered a “warming shelter,” not a FEMA-designated shelter.
    - Mr. Christenfeld wondered about the Town’s emergency needs. We need to make sure this satisfies those requirements.
    - Mr. Seeley said they would follow up.
  - This area is designed to be self-contained, and is what the emergency generator will power.
  - Mr. Ford asked about the network spaces that are outside the zone. Mr. Seeley said that the rest of the building will be freeze-protected; only the central area will be heated/cooled to be comfortably occupied. All life-safety systems will be on emergency power.
- There is an acid neutralization system that is part of the plumbing & fire protection. This will be located near the custodial area. Currently this would service the 7<sup>th</sup> and 8<sup>th</sup> grade science classrooms. Because this is a single story building, the waste goes through the floor and gravity takes it to a pump chamber below this system.
  - Dr. McFall wondered if there might be a combination of operational systems and a waste system that is more contained. Mr. Seeley said that this could be a conversation that might lead to a different, less-massive, solution.
  - There are no fume hoods planned for the science rooms, so there is a limit on they types of chemicals that can be used.

- Ms. Hendrickson asked about the art room. There are clay traps in the sinks that will be used for washing brushes, paint pots, etc.
- Electrical system: Many outlets in the building will be part of a plug load control system that is programmable based on occupancy and time. Drashti Dhirwani, SMMA, Sustainability, gave an overview.
- Ms. Dhirwani said that equipment can draw energy even when not in use (vampire loads), so the system is designed to turn off most of the outlets.
  - The outlets can be controlled by circuit, which are controlled by the facilities team.
  - Plug load is a huge component of energy use, and educating users (faculty, students, community) on how to operate in a net zero environment will be crucial.
  - Dr. McFall asked if these kinds of controls have been used in other projects. They have.
  - Ms. Soucy said they will work with Dr. McFall and Mr. Ford to identify outlets that should be/not be part of the controlled system.
  - Mr. Creel said that down the road there will be a discussion about where the outlets are located.
  - Mr. Ford wondered whether some of the “non-controlled” outlets could be on a separate timed schedule? For example, charging carts don’t need to charge all night. This is something that can be explored.

**Review LEED Scorecard:** Everything that was previously identified on the LEED checklist is being pursued. Mr. Seeley reminded the Committee that the building will be LEED ready, although the project is not pursuing official LEED certification.

- Ms. Glass recalled that being LEED ready under LEED v4 brings the building to a much higher standard than under previous versions of LEED.
- SMMA is starting to meet with SunPower about the design of the PV system.
- Michael Haines, Facilities Manager, said that he had asked SMMA for one more MEP meeting. Mr. Oldeman agreed. There will be one meeting for HVAC, and one for electrical and plumbing.

**Updated Monthly Budget and Site Permitting Update:** Shane Nolan, Daedalus, provided an update.

- Consigli and J&J received a building permit for the modular classrooms.
- This week Consigli has done some survey work. Over the next couple of weeks, construction fencing and tree protection will be installed.
- There will be a construction meeting on July 11<sup>th</sup>.
- The modular classrooms will be installed by the end of the year.
- Pre-qualification of Trade Sub Contractors will be completed in the fall.
- Construction bid documents will be complete by the end of the year. The SBC will review and approve the Guaranteed Maximum Price in March 2020.
- Mr. Sugar asked if there could be another column on the Monthly Budget Report that shows what was spent in the prior month so that it is easy to identify the changes. Mr. Nolan agreed to add this for the next report.
- Craig Nicholson asked whether the modulares will be need to be heated during the winter. They will need to be protected from freezing.
- Mr. Fasciano asked about the July 24<sup>th</sup> meeting. Mr. Seeley said that it is not necessary. The next meetings will be on August 14<sup>th</sup> and August 28<sup>th</sup>.

**Outreach Update:** Ms. Bodnar said that Outreach will meet tomorrow (Thursday) at 10:15 in the Hartwell multipurpose room. Ms. Glass reported that she is working on updating the website and thanked Mr. Ford for his assistance.

**Educational Working Group Update:** none

**OPR/MEP/GEC Incentive Working Group Update:** Mr. Haines will organize the next meeting. Mr. Creel said that Kimberly Cullinane, from MassSave, has sent a report to Mr. Creel that he will distribute to the Committee. Her report is focused on energy savings, and will show a different, and more conservative, EUI for the building.

**Construction Logistics Working Group Update:** The group is meeting tomorrow (Thursday) morning.

**Solar Working Group Update:** Mr. Christenfeld said that a Letter of Intent was signed with SunPower. It says, essentially, that the town is fronting the money for the interconnection application, and are guaranteeing that we will cover this amount. SunPower has agreed to provide support to the design team. The next step is to engage in the official dialog with Eversource about the kind of arrangement we will have, leading to a Power Purchase Agreement price. The timing is still in flux. Mr. Seeley said that they are working on setting up a meeting with SunPower, and that SunPower will identify their team members for the project. Mr. Creel said that the application to Eversource will specify that we want the PV grid to be "behind the meter." Ms. Bodnar asked if the group is happy with the rate of progress. Mr. Creel said that it is slower than desired, but it's progressing.

**Site Subcommittee Update:** none

**Approve Minutes from June 19<sup>th</sup> Meeting:** Mr. Nicholson made a motion to approve the June 19<sup>th</sup> minutes as presented. Mr. Creel seconded the motion, and the minutes were approved unanimously.

**Discussion of other Topics:** none

**Adjournment:** Mr. Sugar made a motion to adjourn. The motion was seconded by Mr. Nicholson, and the meeting was adjourned at 8:51pm.

Minutes respectfully submitted by Jennifer Glass