

School Building Committee
Wednesday, March 27, 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; Sharon Hobbs; Becky McFall; Craig Nicholson; Steven Perlmutter; Peter Sugar; Doug Adams, liaison, Historical Commission; Owen Beenhouwer, liaison, Community Center PPDC; Christine Dugan, liaison, Conservation Commission; Andrew Glass, liaison, Historical Commission; Ruth Ann Hendrickson, liaison, Water Commission; Ian Spencer, liaison, Public Safety; Peter Lukacic, SMMA; Andy Oldeman, SMMA; Joel Seeley, SMMA; Jennifer Soucy, SMMA; Shane Nolan, Daedalus; Christian Riordan, Consigli. Keith Fallon, EwingCole; Katrina Healy, EwingCole; Bill Smarzeweski, EwingCole.

Absent: Chris Dugan, Conservation Liaison; Ed Lang, liaison, Green Energy Committee; Dan Pereira, liaison, Parks & Recreation; John Ritz, liaison, Disabilities Commission; Gary Taylor, liaison, Planning Board; Peter von Mertens, liaison, Conservation Commission.

Also Present: Rob Ford, Lincoln Public Schools Technology Director; Judith Lawler; Staci Montori; Trisha O'Hagan; Tara Mitchell; Andrew Payne; Peter Watkinson.

Welcome and Opening Comments: Mr. Fasciano brought the meeting to order at 7:01pm. He noted that there will be meetings on May 8th and May 22nd.

Public Comments: Tricia O'Hagan asked whether there have been any plans about handling food waste. She wants to make sure there are plans for composting, and that our waste practices are in line 21st century efforts to reduce greenhouse gas emissions. She recommended Black Earth Company, based in Gloucester, which provides food waste pick up. Mothers Out Front has started a conversation with them regarding the possibility of resident waste pick up.

- Becky McFall said that it is mostly an operational consideration, and we would need to understand the operational cost.
- Staci Montori said that the Lexington schools are using this program, and they are doing some fundraising and grant writing to get support. Ms. Montori hopes the kitchen can be "compost ready" even if the operational piece is not immediately in place.

Review Site Plan and Floor Plans: Joel Seeley, SMMA, said their presentation will cover updates on the site, floor plans, and exterior plans.

- Peter Lukacic, SMMA, reviewed the latest thinking about site plan elements. He noted that we are in the refinement phase. The site subcommittee met last Friday, and that conversation is incorporated into this evening's presentation.
- The roadway loop has been refined to allow more field space.
- Parking orientation in both the Smith and Brooks lots may shift depending on the best solar opportunity.
- The modular classrooms will be in the northern portion of the center field, and parking spaces will be included.
- Pathways & Playgrounds: They have refined the safety access road from the CASE drop off to the loading area. The access road will be as far as possible from the wetlands, while still providing enough room to work on the building.
 - Due to the location of the access road, the green playground will need to be dismantled; it is all one piece, and its condition will need to be evaluated. It could be reassembled, or a new one installed.

- The CASE drop-off area will have a small plaza area that can be a play area, and will also function as a turnaround for vans. There are currently four vans that drop off students.
 - Tim Christenfeld asked about the logistics of end-of-day pick up in that area. In the morning, the vans arrive singly, but in the afternoon, the vans arrive at the same time, so loading may be slow. Dr. McFall said that they will have to work with the drivers.
- Peter Sugar said that a resident at Town Meeting had asked him about the part of the Brooks parking lot that was built to be flooded for skating. Buck Creel said that the school has not maintained that area as a skating rink for a long time, and it will not be part of the project. Mr. Lukacic noted that under canopies, the area will not be open for skating, and the ice would not melt well.
- Steven Perlmutter asked about the location of the staging areas. Mr. Seeley said that during phase one, the staging will be in the Brooks parking lot. In phase 2, the staging will be in the Smith parking lot. The parking near the modulares will partially compensate for the spots unavailable during construction.
 - Kim Bodnar asked about the number of classrooms in the modulares, noting that the most recent plan looks much more compact. Mr. Creel said that SMMA came up with a really good configuration. It will allow the smaller playing field over the septic field to be used.
 - Mr. Perlmutter asked about access to ball fields, and wanted to make sure that Dan Pereira is part of the planning. He is.
- Salvaged Items:
 - Dedication Bricks: It is proposed that the dedication bricks in the back of Smith that were installed as a fundraising effort for the green playground will be relocated to the walkway in front of Smith. They will be more visible to the public than they currently are, and there should be space to expand the bricks to allow for future fundraising efforts.
 - Mr. Perlmutter said that the bricks were part of a campaign to raise money for the playground. He noted that the playground is named for Jackie Lenth, and she gave a tremendous organizational effort to get the playground built. He hopes that something could be done to retain the spirit of that effort. Mr. Lukacic said that the structure will need to be assessed for safety, given its age. Dr. McFall noted that the fundraising bricks will remain and be in a visible location.
 - Owen Beenhouwer said that bricks are difficult for strollers, and those with mobility issues. Mr. Lukacic said that that is why they chose to put them on a secondary pathway.
 - Granite Benches: There are two in front of the Brooks Gym that will be relocated to the pathway in front of Brooks. There is one behind Smith that could be relocated or remain in place.
 - Butterfly: Two possible locations, one in front of Smith, and one in the main courtyard area.
- Tree Plantings: Mr. Lukacic showed a diagram of the existing building with all existing trees, a diagram of the proposed building and trees to remain/be removed; a diagram of trees to remain, and new ones to be planted; and finally, the proposed building with all trees. He said that they are planning to plant deciduous trees, and that they will continue to work on the types and locations.
 - Peter Watkinson noted that we want trees near the building to be smaller so that they don't interfere with the PV panels. We want as much roof exposure as possible. Mr. Lukacic said that this was being considered in the planting plan.
 - Mr. Creel said we should be sure to use native species such as red bud, service berry, etc.
 - Mr. Seeley said that they will provide SunPower, the proposed PPA provider, with the mature tree heights.
 - Kim Bodnar said that the site group talked about heightened protection for the trees that we are trying to save.

- Site Lighting:
 - Pedestrian lighting is 12' to 14' feet high and located along the main walkway. The fixtures are “dark skies” compliant, LED lights.
 - Area lighting is about 20' to 22' feet high that is used to illuminate parking, the delivery area, and some key intersections. The parking lot lighting will probably be part of the PV canopy.
 - We can scale back the amount of lighting, but it must comply with safety/accessibility requirements.
- Courtyard Development: Mr. Lukacic said they are starting to refine the central courtyards, including the extent and patterning of paving. The final architecture will determine the courtyard details. He turned the presentation over to Keith Fallon, EwingCole.

Exterior Elevations: Mr. Fallon said that they are continuing to work closely with SMMA. Last time we looked at accent color brick and the rules for its use. We also looked at the extent and coloration of the canopy and how to address solar glare on the east and west faces. There was also discussion about the hardscape in relation to the building exterior. EwingCole and SMMA continue to work on the details.

- Mr. Fallon said that he would be presenting updated slides of the exterior elevations, with the exception of those for the second stories of the Donaldson Auditorium and Reed Gym.
- Mr. Fallon said there have been minor adjustments to the floor plan to ensure it works programatically. They are talking with the educational team about transparency between rooms and public spaces.
- They are continuing to look at placement of the doors to the east courtyard.
- The planted buffer between the courtyard and the building is gone because of maintenance concerns.
- Color pallet choices: Mr. Fallon showed four color combinations of materials to consider. There are six materials to consider: roofing; main brick color (red to match current brick as closely as possible); accent brick color (different warm gray options); perforated stainless steel solar screening panel; canopy edges (gray options); underside of canopies (wood look phenolic panels).
 - Ms. Bodnar asked about the perforated screening, as she thought we were continuing to look both at the louvered and perforated options for the solar shielding. There was general agreement among SBC members that when three screening options were shown at the February 27th meeting, one was eliminated, but the SBC wanted to further consider both louvers and the perforated system.
 - Mr. Fallon and Mr. Seeley believed there had been a stronger preference for the perforated system, and that is what was used for the Design Development pricing set.
 - Mr. Fallon said that he remembered that there was concern about the “climability” of the louvers.
 - Jennifer Glass said that her sense was that the committee wanted to understand the impact of the louvers versus the perforated system on the interior of the Learning Commons. Mr. Seeley said that they would have to come back with that information.
 - Mr. Fallon said that they did explore images that might work for a perforated system, e.g. the look of a birch forest. An image can be sourced and put onto the panel system. There may be an opportunity to do this on the canopies, as well.
 - Craig Nicholson asked whether on a horizontal surface we would look at a tree canopy as a pattern.
 - Michael Haines asked about internal shading options. Bill Smarzeweski, EwingCole, said that having the system on the outside prevents intense heat from entering the building.
- Windows: The organization of the windows, operability, and configuration are being developed. At the eave and gutters there is a white element that references the existing architecture.
- Mr. Creel asked about dark roof shingles and heat load. Mr. Seeley said the pitched roofs are mostly covered with PV panels, leaving very little visible roof space. Also, the level of insulation will

help with the solar load. Ms. Soucy clarified that the flat roofs would be covered with white roofing material to reduce solar load.

- Horizontal Datum: The canopies and top sills of windows are lined up, and the datum is emphasized by a line of recessed bricks. There was general agreement that this was a nice detail.
- Mr. Fallon showed a series of images to give a sense of the how the building is developing. They are continuing to work with the site plan.
- Doug Adams suggested that the framework of the canopies and the framing of the windows be similar. He also thought the window jamb extensions being suggested were an interesting detail.
- Mr. Watkinson wondered how the question of the louvers vs. the perforation would occur. Ms. Bodnar asked about timing, and pricing. Mr. Seeley said that the pricing set is with the perforations. They will need to come back with information about louvers.
- Mr. Perlmutter asked about the windows in the Smith Gym; they will continue to be translucent.
- Mr. Fallon showed an image of the circulation pattern, and how it will be experienced in three dimensions. How does it feel to move from one space to another? How do we use transparency? He showed a series of interior images.
- Showed an organizational plan of the media center and some interior views.
- Mr. Fallon also showed ideas about the renovation of the current library to become the dining commons. The committee expressed that the transformation of the library into the dining commons looks great.
- Ms. Glass said that there had been a lot of conversation about details this evening, and that overall the development of design is really exciting and will make the experience of being in the school unlike anything we currently have.

Review HVAC System: Andy Oldeman, SMMA, presented an update on the HVAC system. He presented some major topics with which they are wrestling:

- Energy recovery units: rooftop units will be ducted down into the building. In a number of areas, there is not enough room for the ductwork inside the building. They are trying, for cost and efficiency, to get as much into the building as possible. Some roof mounted ductwork will be needed; rooftop “doghouses” will protect the ductwork and provide a surface for PV panels.
- Piping faces the same issue.
- Classroom VRF approaches: ducted horizontal fan coil units may not work everywhere, e.g. in the Brooks classrooms with the existing roof beams. There are also vertical fan coil units which can be used, and they will require some kind of boxing out.
- Reed Gym Solar Wall: SMMA spoke with the company, about the piping, etc. needed to install a solar wall and tie it into the building management system. The payback would be 8 plus years. The main difficulty would be the competition with the energy recovery units, and it is unclear how much thermal energy we would gain. Mr. Oldeman thinks this project might not be the best application of this technology.
 - Mr. Christenfeld said that the MEP committee discussed this technology, that the value seems limited for the cost, and that they recommend against installation of the solar wall.

Review Updated Monthly Budget: Shane Nolan, Daedalus, reported the following:

- Consigli received two proposals for modulars. They are expecting the final pricing along for the modulars along with the Design Development (DD) cost estimates.
- The DD documents went out for estimation to three separate cost estimators.
- The Commissioning Agent is reviewing the DD set.
- SMMA is continuing to meet with Lincoln committees.
- SMMA and Consigli walked through the school today to review work to be done during April vacation and in the summer.
- On Thursday and Friday, Geotechnical Engineers will be on site.

- Gina Halsted asked if it will be possible to get the cost estimates ahead of the next meeting. Mr. Nolan said that the draft numbers will be coming in just before the next SBC meeting on April 10th. The final, reconciled estimates will be presented on April 24th. Additional meetings on May 8 and May 22 will be used for value engineering, as needed.
- There are a couple of early bid packages:
 - Ceiling removal and MEP verification, mid May/early June.
 - Modularity, review in April; award contract in June.
- Mr. Nolan reported that there had been minor changes to the budgets; no concerns currently.
- Mr. Nolan said that the SBC needs to discuss and approve a process for approving change orders when items are time sensitive.
 - Mr. Nolan presented a memo containing a plan that allows the OPM to approve changes up to \$10K, and Dr. McFall and Mr. Creel to approve changes up to \$25K.
 - Mr. Perlmutter asked how we approve change orders and stay on budget. Mr. Nolan said that Daedalus keeps track on a weekly basis, and noted that we are carrying two contingency line items. Mr. Perlmutter wanted to understand what happens if, in a later phase, we discover that we are running out of room in the budget. Mr. Seeley said they keep track of project progress vs. contingency spending. Mr. Nolan said that most of the risk is up front when we start opening up the building. Mr. Creel noted that the changes after that initial phase are small. He also noted that he, Mr. Haines, and Rob Ford will be looking at issues on a continuous basis.
 - Mr. Nicholson asked if these dollar levels are typical of a school project. Mr. Nolan said that they are.
 - Mr. Creel and Dr. McFall will be part of the weekly logistics meetings, so they will be fully aware of potential changes.

MOVED: Mr. Nicholson moved that we adopt as presented; seconded by Ms. Glass. The motion was approved unanimously.

Outreach: Ms. Bodnar reported that Outreach will meet at 11:00am on Thursday in the Hartwell Multipurpose Room.

Educational Working Group Update: SMMA will meet on Monday with Dr. McFall, the administrative team, and Detective Ian Spencer about additional security items.

OPR/MEP/GEC Incentive Working Group Update: Mr. Seeley said they met on March 20th to review the systems. As noted earlier, the group does not recommend installation of a “solar wall” on the Reed Gym.

Construction Logistics Working Group Update: They will get final pricing for the modularity soon. Consigli will start to present construction logistics at the April 10th and 24th meetings.

Solar Working Group Update: The group met last week, and will meet April 3rd at 7:30am. They are still working on the contract with Sun Power. They are getting input from Town Counsel, and hope to wrap up by mid April.

- Mr. Perlmutter asked whether there will be panels on the Smith Gym, Reed Gym, etc. The initial plan is based on the Solar Design Associates plan, and there is additional refinement to come.

Site Subcommittee Update: Ms. Bodnar said the group will meet on April 22nd in the Hartwell multipurpose room.

Site Permitting Update: SMMA provided an updated schedule that separates the permitting process for the modularity from the permitting schedule for the rest of the school. There is a need to expedite the site permitting for the modularity by the summer in order to begin preparations and start installation in the fall.

Minutes: Mr. Sugar made a motion to approve the minutes from March 13th. Ms. Bodnar seconded the motion. Mr. Sugar noted that on page 3, in reference to Judith Lawler's vote at the Historical Commission meeting, the word "rescued" should be changed to "recused." The minutes were approved unanimously as amended.

Discussion of other Topics: none

Adjournment: Mr. Christenfeld made a motion to adjourn which was seconded by Mr. Nicholson. The meeting was adjourned at 9:15pm.

Minutes respectfully submitted by Jennifer Glass