

**Capital Improvements Subcommittee Minutes**  
**Wednesday, August 12, 2020**  
**3:00 PM-5:00 PM**  
**Remote via Zoom**

Capital Improvements Subcommittee Members present: Helen Charlupski (Chair), Andreas Liu, Mariah Nobrega, and Barbara Scotto.

Other School Committee Members present: Suzanne Federspiel, Sharon Abramowitz, Susan Wolf Ditkoff, and Jennifer Monopoli.

School Staff present: Mary Ellen Normen, Matt Gillis, and Robin Coyne.

Others present: Senior Director of Programs Meg Maccini, Coordinator of Student Affairs Meaghan Geaney, Kindergarten Teacher and Brookline Educators Union (BEU) Health and Safety Chair Michelle Gorden, Director of Public Buildings Charlie Simmons, and Remote Task Force Member David Gacioch.

**1) Discussion of Facility Issues for Opening of Schools**

Director of Operations Matt Gillis and Director of Public Building Charlie Simmons provided an update on facility issues for opening of schools. The Harvard T.H. Chan School of Public Health has recommended that all indoor rooms should meet at least one of two air ventilation targets through a combination of a) fresh outdoor air, b) recirculated air filtered at MERV 13 level or higher (for rooms with mechanical ventilation), and c) use of portable air cleaners with HEPA filters. Mr. Gillis explained two options: Option 1 - at least 5.0 air changes per hour (ACH) of clear air-with the Healthy Buildings Team defining 4-5 ACH as “good,” 5-6 ACH as “excellent,” and 6+ ACH as “ideal”; or Option 2 - At least 15 liters per second per occupant of clean air, allowing for de-densification of occupancy of rooms that cannot fully meet the ACH-based target as a complimentary ventilation strategy.

Mr. Gillis and Mr. Simmons reviewed the status of all schools, as well as planned modifications (varies depending upon the age, condition, and type of structure/systems/windows). Members requested close review of the Pierce School, given its unique configuration. Mr. Simmons noted that Pierce School has duct work at every level, and that air flow appears to be fairly consistent throughout the building. Dr. Joseph Allen of the Harvard T.H. Chan School of Public Health has offered to work with Mr. Gillis and Mr. Simmons on the methodology for measuring ventilation. It was noted that the buildings already meet or exceed building and safety codes. These additional measures will improve air ventilation in the schools to a level that exceeds most homes and buildings. Mr. Simmons’s goal is to complete modifications by September 16, 2020, but there could be delays as issues arise while the work is being completed. The ventilation levels would still need to be verified once work is completed. It was noted that opening windows, when possible, will also help with ventilation. Window repair cost estimates are being prepared this week. In response to a question, Mr. Simmons commented that his understanding is that use of air conditioning will not impact ventilation levels.

Mr. Gillis reported that 100 air cleaners with HEPA filters have already been delivered. He will be hearing back shortly on procurement of an additional 500 units. The estimated cost for checking air flow is \$3,000 per building; \$48,000 total. Members requested a flow chart showing the status of work done and planned at each school to meet ventilation targets.

Ms. Normen provided an update on funds available for COVID related expenses. The School Committee has already approved funding for tents, air filters, and furniture. Ms. Normen will be checking with the Deputy Town Administrator on whether there might be any additional sources of funding.

The Subcommittee discussed and unanimously approved (by roll call) a motion (Ms. Charlupski moved and Ms. Scotto seconded) to recommend that the School Committee authorize the expenditure of \$9,000 for air flow testing at Runkle School, Lawrence School, and the Physical Education (Tappan Street) buildings. Mr. Gillis then clarified that his recommendation is that the Subcommittee/School Committee support all of the items on Attachment A at this time, except for the additional utility costs (which are very early estimates), in order to prepare the buildings for occupancy.

On a motion of Ms. Charlupski, seconded by Dr. Liu, the Capital Improvements Subcommittee voted unanimously (by roll call) to recommend that the School Committee authorize the Director of Public Buildings to move forward on all items included on Attachment A (includes some building modifications for nurses'/isolation spaces, touchless water fountains, and air flow equipment and testing; does not include the additional utility costs) at a total cost not to exceed \$465,751.

It was noted that per the Public Schools of Brookline Policy, the School Committee would need to vote to accept any donations to help fund any of this work.

Members suggested that there be consideration of the best way to spread out in-person students across the buildings/spaces that meet the district's ventilation standards.

Coordinator of Student Affairs Meaghan Geaney provided an update on student enrollment. Kindergarten enrollment is down from last year, but not dramatically so. The district will continue to monitor enrollments. There may be an increase once the district finalizes reopening plans.

Mr. Gillis provide an update on the procurement of tents. The district can rent 40 tents for \$27,000 (would be additional cost for 20 weighted barrels). The price to purchase 40 tents is approximately \$330,000, which is 22 percent more than the rental. The district can start the procurement process to rent the tents and then decide later to purchase. Mr. Gillis will report back on the procurement at the next Capital Improvements Subcommittee meeting. He will find out when the district needs to make a decision on renting vs purchasing the tents.

Ms. Charlupski expressed her appreciation to the Parks and Recreation Commission and Director of Parks and Open Space Erin Chute Gallentine for their willingness to work with the district on possible locations for tents adjacent to schools (may include park space and tennis and basketball courts). Subcommittee members suggested that bathroom access and parking be considered as staff assess possible locations for tents.

Members stressed the importance of communication/collaboration with the Advisory Committee's Capital Subcommittee.

The next meeting of the Capital Improvements Subcommittee will take place on Monday, August 24, 2020, at 2:00 PM.

The meeting adjourned at 5:00 PM.

## SCHOOLS

9/2/2020 12:42

Estiamted Costs for CV19 modifications

	Location Type	Primary Ventilation Source	Average Room Size CF
<b>Schools</b>			
Baldwin	A	MUA EF	9000
Driscoll	A	MAU EF	9000
Lynch	A	MUA EF	9000
Pierce Primary	A	Room Ventilators	9000
Old Lincoln	B	PTAC, Gen Exhaust	9000
Heath	B	UV Gen Exhaust	9000
Pierce	B	AHU RAHU	9000
UAB	B	H&V and MUA and Exhaust	9000
Baker	B	AHU RTU	9000
Clark Rd	C	UV Gen Exhaust	
CCS	C	HRU	9000
High School	C	HRU	9000
Lawrence	C	HRU	9000
New Lincoln	C	AHU, MUA, EF	9000
Phys ED	C	H&V Units	
Runkle	C	HRU	9000

**CFMs****air changes****Improvements Needed****Operational  
Changes**

			Install Ventilation	Run 24/7
			Run UV 24/7. Adjust OA Minimum	Run 24/7
			Evaluate Existing	Run 24/7
			Adjust Schedule And OA	Run 24/7
			Open Windows	Run 18/5 M-F
			Adjust Schedule And OA	Run 18/5 M-F
			Adjust Schedule And OA	Run 18/5 M-F
			Adjust Schedule And OA	Run 18/5 M-F
600			Program Controllers to Increase OA 100%	Run 18/5 M-F
			Repair OA/Dampers	Run 12/5 M-F
520	31200	4.0	Adjust Schedule	Run 12/5 M-F
			Adjust Schedule	Run 12/5 M-F
			Adjust Schedule	Run 12/5 M-F
525	31500	3.5	Adjust Schedule And OA	Run 12/5 M-F
			Adjust Schedule And OA	Run 12/5 M-F
			Adjust Schedule And OA	Run 12/5 M-F

Room modifications/Nurse Covid Rooms	Touchless Water Fountains	Estimted Electricity increase	Estimated Electricity added expense	Estimated Natrual gas increase
	\$ 750	35%	\$ 1,769	20%
\$ 3,500	\$ 1,500	35%	\$ 18,900	20%
\$ 3,500	\$ 1,000	35%	\$ 1,575	20%
	\$ 350	35%	\$ 11,817	20%
	\$ 750	15%	\$ 8,550	15%
	\$ 1,500	15%	\$ 8,700	15%
	\$ 2,000	15%	\$ 10,129	15%
	\$ 1,500	15%	\$ 14,700	15%
	\$ 2,000	15%	\$ 13,273	15%
	\$ 500	10%	\$ 24,000	10%
	\$ -	10%	\$ 18,500	10%
\$ 4,000	\$ 3,000	10%	\$ 32,200	10%
\$ 5,300	\$ 2,000	10%	\$ 11,500	10%
\$ 5,500	\$ 1,500	10%	\$ 11,000	10%
	\$ 1,000	10%	\$ 2,600	10%
	\$ 500	10%	\$ 12,800	10%
<b>\$ 21,800</b>	<b>\$ 19,850</b>	<b>Total:</b>	<b>\$ 202,011</b>	<b>Total:</b>
Covid Modifications SUBTOTAL	\$ 41,650		Utilities SUBTOTAL	\$ 301,762

Estimated Natural Gas added expense	Air balancing/adjust pulleys	EMS Programming	Air flow testing	Air Filter Maintenance change to 4x/yr MERV 13
\$ 2,720			\$ 3,000	\$ 358
\$ 13,600			\$ 3,000	\$ 2,910
\$ 2,000			\$ 3,000	\$ 333
\$ 5,372			\$ 3,000	\$ 2,785
\$ 7,200		\$ 3,000	\$ 3,000	\$ 2,651
\$ 6,900		\$ 3,200	\$ 3,000	\$ 2,560
\$ 8,059		\$ 3,200	\$ 3,000	\$ 5,408
\$ 7,050	\$ 3,000	\$ 3,200	\$ 3,000	\$ 1,304
\$ 10,050		\$ 1,200	\$ 3,000	\$ 3,483
\$ 4,000			\$ 3,000	\$ 2,966
\$ 4,800			\$ 3,000	\$ 4,614
\$ 9,250		\$ 1,200	\$ 3,000	\$ 7,560
\$ 4,600			\$ 3,000	\$ 3,228
\$ 3,550	\$ 3,000	\$ 3,200	\$ 3,000	\$ 2,654
\$ 6,300		\$ 3,200	\$ 3,000	\$ 2,427
\$ 4,300	\$ 3,000	\$ 3,200	\$ 3,000	\$ 3,260
<b>\$ 99,751</b>	<b>\$ 9,000</b>	<b>\$ 24,600</b>	<b>\$ 48,000</b>	<b>\$ 48,501</b>
	HVAC SUBTOTAL			
	COLUMNS P-AD			\$ 424,101





Pneumatics Temperature Controls	COMMENTS
	PORTABLE UNITS IN ALL CLASSROOMS
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\$ 20,000	
\$ 20,000.00	

\$ 767,513