

PERMANENT BUILDING COMMITTEE  
SCHOOL BUILDING COMMITTEE SUB-COMMITTEE  
MEETING MINUTES



Project:	Clinton Middle School	Project No:	202000640305
Subject:	School Building Committee Meeting	Meeting Date:	10/03/2023
Location:	ZOOM	Time:	6:30 PM
Distribution:	Attendees, Project File	Prepared By:	E. Grijalva
MSBA Module:	4- Schematic Design		

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**Meeting Agenda**

1. Call to Order & Number of Voting Members
2. Previous Topics and Approval of September 19, 2023, MM
3. Invoices and Commitments for Approval
4. Mechanical Systems Discussion and Vote
5. Construction Management @ Risk Subcommittee Selection
6. OIG Application Submission Permission
7. Construction Management @ Risk RFQ Draft Discussion
8. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
9. Public Comment
10. Next Meeting
11. Adjourn

**Name**

**Affiliation**

Steven Meyer*	Superintendent – PBC Member
Chris McGown *	Chair of PBC- Head of DPW
Michael Moran*	PBC Member
Brian Delorey*	PBC Member
Brendan Bailey	School Committee Chair
Brian Farragher	Director of Facilities
Matthew Varakis	School Committee Vice-Chair
Phil Duffy	Director of Community & Econ.
Trip Elmore	DWMP- Project Director
Elias Grijalva	DWMP – Assistant PM
Peter Caruso	LPA A – Project Manager
Sean Brennan	LPA A – Project Architect
Anthony Hardman	Green Engineer
Carrie Havey	Green Engineer
Kevin Seaman	Seaman Engineer
J Blume	Public – Fontaine Bros
Mark Abdella	Public – Fontaine Bros
Josiah Herbert	Public – Shawmut Design
Jeff Cammuso	Public – Shawmut Design

**\*PBC Voting Members**

Item No	Description	Action
17.1	<p><b>Call to Order:</b> 6:36 PM meeting was called to order by PBC Chair, C. McGown with <b>5</b> of <b>7</b> members in attendance.</p>	Record
17.2	<p><b>Previous Topics &amp; Approval of September 19, 2023, Meeting Minutes:</b> A motion to approve the 09/19/2023 meeting minutes was submitted by S. Meyer and seconded by B. Delorey.  <b>Discussion:</b> None.  <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y)  <b>Abstentions:</b> None          All in favor, motion passes, September 19, 2023, meetings are certified as approved.</p>	Record
	<p><b>Invoices and Commitments for Approval</b></p> <p><b><u>Invoice 1: DWMP Invoice #014, for the month of September, in the amount of \$15,000.00</u></b>          A motion was made by S. Meyer and seconded by B. Delorey for the approval of the DWMP September invoice.   <b>Discussion:</b> None.  <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y)  <b>Abstentions:</b> None          All in favor, motion passes to approve DWMP September invoice.</p> <hr/> <p><b><u>LPA A Amendment No.005 Request for Approval, in the amount of \$14,190.00.</u></b>          T. Elmore states this amendment is a result of additional services relative to proving the Traffic Analysis that the MSBA wants us to conduct.           A motion was made by B. Delorey and seconded by S. Meyer for the approval of the LPA A Amendment No.005.   <b>Discussion:</b> None.  <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y)  <b>Abstentions:</b> None          All in favor, motion passes to approve LPA A Amendment No.005.</p> <hr/> <p><b><u>Budget Revision Request (BRR) No.002 Request for Approval in the amount of \$10,465.00</u></b>          T. Elmore explains that this BRR form is to approve moving money within the budget to cover Designer's Amendment No.005. Moving \$10,465.00 from the other category to the Environmental and Site category.           A motion was made by S. Meyer and seconded by M. Moran for the approval of the LPA A Amendment No.005.  <b>Discussion:</b> None.  <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y)  <b>Abstentions:</b> None          All in favor, motion passes to approve Budget Revision Request No.002.</p>	Record

17.4

**Mechanical Systems Discussion and Vote**

Record

S. Brennan introduces the consulting engineers that are present in the meeting; Carrie Havey, Anthony Hardman from the Green Engineer, and Kevin Seam from Seaman Engineering. He then recaps what was discussed in the last meeting as well as provides an Order of Magnitude understanding of the cost to go from the New Stretch Code to the Updated Code. the anticipated lifecycle, and the usable life of these new fixtures.

- MSBA revised its funding regarding green incentive points. The 2% that was previously qualified no longer exists. MSBA offered a compliance pathway towards getting an additional 4% points overall.
- New Stretch Mandatory Code:
  - **C402.1.5**- Envelope Backstop, **C402.3**- Rooftop Solar Ready, **C402.5** Air Leakage Testing, **C402.7**- Thermal Bridge Derating, **C403** – Building Mechanical System w/ Energy Recovery, **C404**- Service Water Heating, **C406** Additional Efficiency Measures, **EV Parking**
- The New Stretch Code is an MSBA Requirement, whether the town has adopted it or not and we have to meet a Target Performance Pathway called TEDI. This is the biggest step to meet the New Stretch Code. It's a smaller step to get into the specialized Opt-in Code with all electrified systems.
- Dual Fuel Option requires putting PV on the roof and being electric ready, meaning running conduits and providing space for additional switch gears or panels that you might need to require in the future. You would also have to bring electrical service that would be large enough to surface those future devices.
- PSR Design
  - MSBA Reimbursement: \$81.75M
    - Included 2% Energy Efficiency Incentive Points
- Stretch Mandatory Code
  - MSBA Reimbursement: \$83.25M
    - Includes 2% loss Energy Efficiency Incentive Points
    - + Stretch Code improvements
    - Insulation Increase (to meet TEDI)
    - Triple Panel Window (to meet TEDI)
- Opt-In Code (Stretch code plus the following)
  - MSBA Reimbursement: \$80.25M
    - Includes 4% Energy Efficiency Incentive Points
    - + Stretch Code improvements
  - Path 1
    - All Electric HVAC
    - Electric Domestic Hot Water
    - Electric Cooking Equipment
    - Hybrid fossil electric HVA
    - Full electric infrastructure for future retrofit
    - Solar PV

**S. Brennan** demonstrates a real-life example of data that was collected on gas and electricity usage from The Town of Shrewsbury, who was nice enough to share all their usage, payment terms, and Kw over the past few years. We averaged the numbers out and looked at the consumption for the building heating and what that cost would be in Clinton Dollars. **The biggest question is whether we are going all-electric or trying to keep fossil fuels in the building and what would impact operating costs.**

- Example: Beal Elementary, Shrewsbury MA
  - 142,000 SQF Building
  - Hybrid Fuel Systems
  - Rooftop Package unit with Perimeter fin tube radiation system
    - Estimated Additional Operating cost for Clinton: \$28,000.00

<b>Systems type</b>	<b>Fuel</b>	<b>Service Life</b>
DHW Boilers	Gas	25+/- Years
DHW Boilers	Electric	15+/- Years
Heating Boilers	Gas	25 +/- Years
Air Source Heat	Electric	15+/- Years

T. **Elmore** asks how much PV cost for a building of this size.

A. **Hardman** replies that the rule of thumb is \$3 per watt.

C. **McGown** states we have a project about a mile away that requires solar panels. Is there a way to tie these two projects together where we could use solar to bring the power to this building?

S. **Brennan** states I've never dived that deep into it. What I can say is Beal Elementary School, did this very thing, put in a PV system in their landfill. They voted at the town level to allocate 100% of their coverage for their electrical use. So that building in essence is Net Zero electric based on their local community grid.

C. **Havey** comments you can do offsite PV if it's allocated to this project. I think the broader question is, does that work per the energy code?

A. **Hardman** states he believes off-site is permissible for code.

S. **Brennan** states the PSR estimate did not have PV panels in it. We'll be looking at an estimated \$1.5 million add for a 500 Kw PV system, cost could increase if canopies are added. The existing service to the school is a 2000-amp service.

M. **Moran** asked what the new service would be.

S. **Brennan** confirms the new service would be 4000-amp.

K. **Seaman** states in the PSR Design the VRF systems are in office admin and nursing areas, then for the rest of the building has a mix of air handlers fed by air-source heat pumps for large spaces and chilled water fed style displacement systems with hot water radiation for classrooms. Chilled and hot water would be fed by an air source heat pump chiller/heater. The chiller/heater would make warm enough water to utilize multi-tier fin-tube, coils, or radiant heat. The decision is whether you will with a gas boiler or an electric boiler for supplemental heat.

P. **Duffy** asks if you go all-electric are you limited to only heat pumps for heating? Can you use an electrical lead to generate a hydronic system?

S. **Brennan** replies that we could do Geothermal.

	<p><b>K. Seaman</b> states as far as electric resistance heat, you're limited to how much of that you can use such as a cabinet heater, it would also be expensive.</p> <p><b>A. Hardman</b> talks about the incentives between air sources and geothermal.</p> <p><b>T. Elmore</b> talks about Lexington Hasting School's Geothermal system.</p> <p><b>M. Moran</b> asked what the cost was and what was the outcome as far as electric usage.</p> <p><b>T. Elmore</b> states the Green Engineer did a study on the payback. Geothermal costs about 2.5 million for roughly a building of this size and there was never a payback.</p> <p><b>S. Meyer</b> comments that I think if we were building a system that was primarily future-proof, it would make sense to go full electrification.</p> <p>A motion was made by <b>S. Meyer</b> and seconded by <b>M. Ward</b> to pursue full electrification.</p> <p><b>Discussion:</b></p> <p><b>M. Moran</b> comments there are too many variables with electrification. 67% of electricity generated in Massachusetts is by gas.</p> <p><b>C. McGown</b> comments it might be the case today, but I doubt it will be in 5-10 years.</p> <p><b>A. Hardman</b> states if you go hybrid, we're still doing all the infrastructure for a fully electric building, so we are duplicating cost.</p> <p><b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Ward (Y), C. McGown (Y)</p> <p><b>Abstentions:</b> M. Moran</p> <p>All in favor, motion passes to proceed with full electric mechanical systems.</p>	
17.5	<p><b><u>Construction Management @ Risk Subcommittee Selection</u></b></p> <p>T. Elmore recaps the outcome of the last PBC Meeting. The Town voted to go CM @ Risk as the Construction Delivery Method for this project. One of the components of this process is selecting a CM @ Risk subcommittee.</p> <p><b>CM @ Risk Subcommittee</b></p> <ul style="list-style-type: none"> <li>• Owners Project Manager (OPM) Representative – Trip Elmore – Project Director</li> <li>• Designer Presentative – Eric Moore – Senior Project Architect</li> <li>• <b>Town of Clinton</b> <ul style="list-style-type: none"> <li>○ <b>S. Meyer</b></li> <li>○ <b>M.Moran</b></li> </ul> </li> </ul> <p><b>Discussion:</b> None</p>	Record

17.6	<p><b><u>OIG Application Submission Permission :</u></b></p> <p>T. Elmore states that we would like Procurement to review the OIG Application if possible because we are submitting the application under the Town of Clinton.</p> <p>A motion was made by S. Meyer and seconded by M. Moran to approve the OIG Application pending final review by M. Ward.</p> <p><b>Discussion:</b> None <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), M. Ward (Y), C. McGown (Y) <b>Abstentions:</b> None All in favor, motion passes to approve the OIG Application pending final review.</p>	Record
17.7	<p><b><u>Construction Management @ Risk RFQ Draft Discussion</u></b></p> <p>T. Elmore comments that we have drafted a standard Request for Qualification (RFQ) that was shared prior to this meeting. From a procurement standpoint, we would have to advertise this once we are authorized to put the RFQ on the street.</p> <p>We would like to release the RFQ by next Wednesday, October 11, 2023, so it would need to go into the Central Register by Thursday, October 5<sup>th</sup>, and we would also need to put out a local ad as well as put an ad on COMMBUYS.</p> <p>M. Ward comments to get an ad in the local paper for next week, we would have to submit an ad this Friday by Noon. I can do COMMBUYS once I have the general information.</p> <ul style="list-style-type: none"><li>• Prepare and Advertise the RFQ: <b>October 05, 2023</b></li><li>• RFQ Issue Date: <b>October 11, 2023</b></li><li>• RFQ Deadline: <b>November 02, 2023</b></li></ul> <p>A motion was made by B. Delorey and seconded by M. Moran to issue all the publications according to the schedule that was discussed.</p> <p><b>Discussion:</b> <b>M. Moran</b> asked if this is enough time for CMs to submit their qualifications by November 2<sup>nd</sup>. <b>T. Elmore</b> confirms this is sufficient time. <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), M. Ward (Y), C. McGown (Y) <b>Abstentions:</b> None All in favor, motion passes to approve issuing the publications.</p>	Record

17.8	<p><b>Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:</b>          T. Elmore mentions that LPA A received preliminary survey information on the easement location from their surveyor. Within the next couple of days, we will receive the final survey that can be forwarded to National Grid.  <b>Discussion:</b> None</p>	Record
17.9	<p><b>Public Comment:</b>  <b>Discussion:</b> None</p>	Record
17.10	<p><b>Next Meeting:</b>          10.17.2023 – CMS Building Committee Remote @ 6:30 PM – In-Person @ Clinton Middle School          11.14.2023 – CMS Building Committee Remote @6:30 PM – Location TBD          12.19.2023 – CMS Building Committee Remote @6:30PM – Location:TBD  <b>Discussion:</b> None</p>	Record
17.11	<p><b>Adjourn:</b> 8:16 PM a motion was made by S. Meyer and seconded by M. Moran to adjourn the meeting.  <b>Discussion:</b> None.  <b>Roll Call Vote:</b> B. Delorey(Y) S. Meyer (Y), M. Moran (Y), M. Ward (Y), C. McGown (Y)  <b>Abstentions:</b> None          All in favor, the meeting is adjourned.</p>	Record

Sincerely,  
 DORE + WHITTIER

Elias Grijalva  
 Assistant Project Manager  
 Cc: Attendees, File

The above is my summation of our meeting. Please contact me for incorporation into these minutes if you have any additions and/or corrections.