

WESTWOOD ELEMENTARY SCHOOLS BUILDING PROJECT COMMITTEE  
Westwood, Massachusetts

**SUSTAINABILITY SUBCOMMITTEE MEETING MINUTES**

**June 8, 2021**

**Attendance and Call to Order**

The meeting, held remotely<sup>1</sup>, was called to order at 10:02am by Chair Maya Plotkin. Also present on the videoconference were: Brian Bayer, John Cummings, Lemma Jn-baptiste, and Anthony Mullin. Ken Aries was absent. Ex-officio member Tom Philbin was also present, while ex-officio member Julie Gervais was absent. John Cianciarulo recorded the minutes.

Tim Bonfatti and Chin Lin of Compass Project Management; and Don Walter, Rob Fitzgerald, and Dave Mentzer of Dore and Whittier were also present.

Mrs. Plotkin recognized the live stream of the meeting which was provided for real-time, public access to the activities of the Sustainability Subcommittee. Members of the public were able to view a live stream of the meeting via the Internet at [www.westwood.k12.ma.us/live](http://www.westwood.k12.ma.us/live).

**Discussion Items**

**Review LEED (Leadership in Energy and Environmental Design) Checklist**

Rob Fitzgerald introduced Erik Ruoff and Michael Munn of The Green Engineer, a sustainability consulting firm. They facilitated discussion on the LEED checklist and certification process.

*Massachusetts School Building Authority (MSBA) Green Schools Requirements*

The MSBA's Green Schools Program provides incentives to a district to increase the energy efficiency and sustainability for new construction and major renovation/addition projects. It is applicable to projects with an MSBA-approved Preferred Schematic Report on or after June 18, 2017.

There is a minimum requirement for all MSBA projects (with no additional reimbursement):

- Achieve a minimum of LEED-Schools v4 "Certified" (40 points); or
- Achieve a minimum of NE-CHPS "Verified" (110 points for new construction or 85 points for addition/renovation); and
- Exceed the Massachusetts Energy base code by 10%.

There is an additional requirement for projects that are pursuing two additional reimbursement points:

- Meet the minimum requirements described above, and the project must exceed the Massachusetts State Energy code by 20%.

The MSBA also requires and pays for the entire cost of building commissioning (systems, envelope, and monitoring) for all MSBA-funded projects.

*LEED for Schools v4*

- The latest, balloted version of the LEED Rating System
  - The bar has been raised significantly from the previous version (v09)
- Version 4.1 has been released in beta forms. Teams can either use v4.0 or v.4.1 paths
- A project must satisfy all prerequisites and earn
  - 40-49 points for Certified (minimum MSBA requirement)
  - 50-59 points for Silver
  - 60-79 for Gold
  - 80+ for Platinum certification

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<sup>1</sup> Remote meeting held in accordance with Executive Order of Massachusetts Governor, March 12, 2020

- Requires Town to commit to LEED Certification agreement with USGBC and share energy and water use data with USGBC for five years post-construction (typically through the EPA's Energy Star Portfolio Manager tool).

#### *LEED Minimum Program Requirement*

- Commit to sharing with USGBC the resulting whole-project water and energy usage data for a five-year period beginning on the date the project accepts LEED certification or typical occupancy, whichever comes first.
- Commitment must carry forward for five years or until the building changes ownership or lessee.

#### *LEED Project Scoreboard*

The scoreboard, which serves as the master tracking document of certification, was presented to the Committee. Categories include:

- General project determination
- Integrative process
- Location and transportation
- Sustainability sites
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality
- Innovation
- Regional authority

There are two review phases as part of the process. Once passed, full certification is achieved.

Tom Philbin asked about electric vehicles. Eversource will reimburse the contractor 100% of the cost for adding chargers to the project. There are a few different incentive programs for electric vehicle charging. Chin Lin expressed concern on the impact to MSBA reimbursement, which will need to be looked into.

#### *Items for Owner Direction*

- Electric vehicle (EV) charging stations
  - The project currently includes two dual-port electric vehicle charging stations; a sufficient minimum for the associated LEED credit to provide 2% of total parking with EV charging
  - Trend is towards providing more EV charging to meet the growing demand as electric vehicles become more prevalent.
    - Newer LEED v4.1 requirements (project is not required to meet) increase the minimum to 5% of total parking. Boston is requiring EV charging for 25% of total parking, and Cambridge may soon follow.

The Committee deliberated on whether or not to provide additional EV charging capacity. Maya will consult district administration to gauge the district's need. John Cummings recommended installing more than the current project plan as it will be a valuable community benefit.

- Demand Response
  - Demand Response programs are utility incentive programs for customers to reduce energy consumption during high – or peak – demand events. By reducing consumption, demand resources can help ensure enough electricity is available to cost-effectively maintain grid reliability.
  - The environmental benefit to both designing for and enrolling in a demand response program is to support the electrical grid from needing to turn to Peaking power plants – or “peaker plants” – to meet anticipated demand.
  - The design team will be looking into a potential approach to meeting a demand response event. Should a feasible path exist, and the Town is interested in enrolling in a demand response program for the project, the next step would be to engage Eversource for additional details and program participation requirements.

Chin Lin stated that there will not be much capacity to shed if designed correctly and that this should be a low priority item.

### PV (Photovoltaic) Analysis Options

A schematic study of rooftop PV layout was shown

#### *Power Purchasing Agreement (PPA) vs. Purchase*

- Purchase 500 kWh array at \$1M±
  - 20-year loan with an annual cost of \$55k±
  - 20-year savings: \$1.71M (\$85k/year)
    - Net of \$40k/year, then \$85k/year, after year 20 (assumes operation and maintenance costs, insurance, and system removal/recycling in 20 years)
  - Considerations
    - Requires upfront capital
    - All savings go to the school district
    - School district can sell panels at the end of the term
- Power Purchasing Agreement for 500 kWh array with no upfront costs
  - 20-year savings: \$1.13M (\$57k/year) (assumes a fixed rate PPA of \$0.068/kWh, avoided utility cost of \$0.14/kWh. Eversource commercial rate of \$0.14/kWh, rising 2% annually.)
  - Considerations
    - No upfront capital costs
    - Savings go to the Developer, along with tax credits
    - School district pays a reduced electricity bill at fixed rate
    - School district can buy panels at the end of the term

These considerations are based upon the following assumptions:

- Roof can support 500 kWh array
- All numbers shown are approximate, ball park, preliminary numbers based upon a set of assumptions
- Savings noted are according to Solect Energy of Hopkinton, Mass.

Chin Lin advised that unless there are other sources of funding, this might run into issues with the MSBA. At best, it can be done as a bid-alternate. At this time, the budget does not permit purchasing the PV panels outright. The only choice for the project to consider, then, is PPA.

Maya Plotkin agreed that zero upfront cost is the best option. Tom Philbin stated that there is also a hybrid option, allowing for buyout after five years when tax credits expire.

Dave Mentzer shared that Needham funded their PV panels outside of the building project, unassociated from the MSBA.

Chin Lin recommended that the issue be postponed until the project funding agreement is complete, and then a determination may be made on how best to move forward.

John Cummings requested that no proprietary products be used, as specialty items are a hassle to have repaired.

Tony Mullin asked why the daylight metric is pending assessment. Erik Ruoff responded that it is a challenging credit in the way that it is written. The building is being designed to maximize daylight.

### **New Business**

There was no new business.

### **Adjournment**

**MOTION** made by Lemma Jn-baptiste to adjourn the meeting. John Cummings seconded.

### **Roll-Call Vote:**

Mr. Aries: Absent

Mr. Bayer: **Yes**

Mr. Cummings: **Yes**

Mrs. Jn-baptiste: **Yes**

Mrs. Plotkin: **Yes**

Mr. Mullin: **Yes**

**Vote: 5-0-0.**

**Result: Approved**

The meeting adjourned at 11:08am.

### **Documents and Exhibits Used at Meeting**

- Memo from J. Cianciarulo to Sustainability Subcommittee regarding LEED checklist, dated June 4, 2021
- Slideshow presentation from The Green Engineer, dated June 8, 2021