



CITY OF SOMERVILLE, MASSACHUSETTS  
OFFICE OF SUSTAINABILITY AND ENVIRONMENT  
JOSEPH A. CURTATONE  
MAYOR

To: Zoning Board of Appeals

From: Oliver Sellers-Garcia, Director of the Office of Sustainability and Environment

Date: June 19, 2020

RE: 40B #2020-0001, Clarendon Hill

Staff from the Office of Sustainability and Environment have reviewed the Clarendon Hill project application, including the submissions of the Sustainable and Resilient Buildings Questionnaire and the LEED narrative and checklists. Based on information received so far, the Office of Sustainability and Environment (OSE) have the following comments:

- Sustainability Approach - It is very positive to see electrification of heating systems as an integral component to the design and sustainability strategy. As detailed in Somerville Climate Forward, thermal electrification is essential to net-zero emission buildings and it will be transformative to have a project of this size and importance demonstrating the feasibility of widescale efficient electrification. The project also proposes a strategic pathway to achieve net-zero emissions by 2050 by focusing on envelope performance and thermal electrification in preparation for a carbon-free electric grid in the future. This approach is in line with OSE's strategy for achieving net-zero emissions in the building sector by 2050.
- LEED Platinum Waiver - The project is seeking a waiver from the LEED Platinum requirement, proposing to meet LEED Gold standards instead. The project team has provided a LEED checklist and narrative to support its progress towards meeting the LEED Gold standard, however the project team has not provided sufficient evidence as to why the LEED Platinum standard is not achievable. More information is needed to understand what it would take to bring the project to the required LEED Platinum standard. In order to properly evaluate this, the project team should provide an expanded LEED narrative that includes how the 11 possible points might be achieved and why other credits with zero points are not achievable. This information should be specific and should detail whether the points are not achievable due to a technical reason, a financial reason, or another reason. In addition, it appears that there are several credit categories that



have not been pursued that could potentially provide additional points. In order to fully evaluate the waiver request, the team would ideally provide a potential pathway to Platinum with potential cost implications and technical barriers clearly identified. See detailed comments on LEED checklist and narrative below for additional feedback on the LEED approach.

- Passive House Design - Given the information received so far, it is difficult to discern the specifics of the envelope and buildings system designs. Each Sustainable and Resilient Building Questionnaire states that the project team is “evaluating Passive House,” but there is no further documentation of what steps have been followed to evaluate Passive House and if any feasibility studies were undertaken or incentives pursued. The Questionnaires are reporting the same building efficiency and performance metrics for each building. Currently reported R-values look too low to meet Passive House standards. If envelope design has progressed, these numbers should be updated. Furthermore, in the waiver request the project team states, “The project is primarily focused on performance-based metrics related to air tightness and energy usage.” However, we currently do not have enough information to evaluate this request. Passive House design could be one pathway to provide evidence of prioritization of envelope and building performance. If Passive House certification is not being pursued, what Passive House design standards are being pursued by the project?
- Solar PV - The Questionnaires say that solar PV is under review but the LEED narrative says “renewable energy systems to offset 10% of the total building annual energy cost.” The project team should clarify status of on-site renewable energy plans.
- EV Charging - The Office of Sustainability and Environment recommends increasing the percent of EV ready spaces to at least 25% in order to better prepare for future demand. Our team has also done extensive research and planning on EVSE and would be happy to discuss potential opportunities with the project team as their electric vehicle strategy evolves.

#### General comments on LEED Checklist and Narrative

- All prerequisite credits should be included in narrative with description of how the credits will be achieved.
- All potential points should be included in the narrative with description of how the credits might be met and what factors will contribute to the points being achieved or not. This information is particularly important to be able to fully evaluate the LEED Platinum waiver.
- Zoning requires that the project team provide an updated LEED checklist and narrative prior to issuance of the first building permit and the certificate of occupancy. Subsequent narrative should include how compliance is being met, not just stating that the requirement is being met. For example, for the Low -Emitting Materials credit, which two product categories will be used for compliance?
- Are there any credits from LEED v4.1 that may be more favorable for the project than those in v4? Has the team considered using any credits from v4.1? Why or why not?

### Comments on specific credits

- Reduced Parking Footprint is included twice on checklist and Bicycle Facilities are missing. Furthermore, Reduced Parking is counting 2 points when LEED v4 BD+C: New Construction only allows for 1 point.
- Why are no Rainwater Management credits being pursued?
- Enhanced Commissioning:
  - Who will serve as Commissioning Authority? Requirements for Commissioning Authority are not documented in narrative.
  - Option 2: Envelope Commissioning. A high performing envelope has been described as a key element of the sustainability approach for this project. Why are these credits not being pursued?
- Optimize Energy Performance: What is the energy performance target? When was this adopted? Please provide calculations. Also, how might the two potential points in this category be achieved?
- Green Power and Carbon Offset: Please share the green power purchase agreements when executed.
- Demand Response: Confirm details required by utility to participate in demand response program. What will the project do to enable participation?
- Heat Island Reduction: The SRI limits set in LEED are required by Somerville's zoning. Does this open up an additional point?