To: Chair Richard Lipof, Land Use Committee

From: Ann Berwick

CC: Mayor Ruthanne Fuller, Jonathan Yeo, Bill Ferguson, Barney Heath, Katie Whewell, Liora

Silkes

Re: Alexandria/275 Grove Street Special Permit

Date: May 17, 2022

As you know the Special Permit for Alexandria Real Estate Equities, Inc. ("Alexandria") for land located at 275 Grove Street in Newton requires Alexandria to complete a feasibility study on the installation of heat pumps (Special Permit Condition #47), as well as a baseline analysis of the performance of the building envelope (Special Permit Condition #48).

Special Permit Condition #47 requires Alexandria to meet with the Director of the Planning Department and the Co-Directors of the Climate and Sustainability Department to discuss the results of its heat pump study, and to present the results to the Land Use Committee. Special Permit Condition #48 requires Alexandria to discuss the results of the building envelope study with the Co-Directors of Climate and Sustainability. Special Permit Condition #48 also requires that "All new scope/elements provided on the project will be upgraded to meet IECC energy requirements," which I interpret to be equivalent to the State's 2018 (i.e., current) Building Energy Stretch Code.

Planning Director Barney Heat, staff of the Planning Department, and I met virtually with representatives of Alexandria on May 13, 2022. (Co-Director Bill Ferguson was ill with Covid, and did not participate in the meeting).

I am happy to join the discussion of the Land Use Committee this evening, so will only briefly review here my conclusions from our conversation and review of relevant documents.

## **Heat Pumps**

I want to point out four issues that emerge from Alexandria's heat pump study and our conversation.

The first is that the study concludes, using 2021 prices, that operating with heat pumps would raise energy costs by 2.2%. This is a relatively small amount and, further, I question how stable this estimate is in light of fluctuating electricity and natural gas prices and events in Ukraine and the rest of Europe.

Second, Alexandria says that they evaluated purchasing 100% renewable electricity, and that it would be unaffordable. However, they said that they would purchase MA Class I Renewable Energy Credits (RECs). Giving this further thought, I am confused about exactly what they mean. What proportion of their electricity use do they plan to match with MA Class I RECs. What is their plan in that regard? This is worth further inquiry.

Third, the heat pump study shows Building 3's entire anticipated gas use to be 122,850 therms per year. A Newton resident with relevant professional engineering expertise pointed out to me that he thinks that that amount of gas usage corresponds only to the domestic hot water and "reheat" portion of building gas use, and significantly understates the total gas use of Building 3. However, in our conversation Alexandria assured me that this is Building 3's entire anticipated gas use. The significance of this is that, if the engineer I spoke with is correct, Building 3 will be among the top ten greenhouse gas emitters in the City. The engineer's reasoning is quite detailed and technical, and I can make it available if you would like. I make this point because it underscores the importance of Alexandria's taking all reasonably feasibly steps to address its GHG emissions from Building 3. Also, of course, the City should be making its decisions in this matter based on accurate information.

Fourth, Alexandria provides estimates of lost rental income associated with inclusion of heat pumps because of a reduction in roof space for tenant equipment. It concedes that it has not evaluated the market for similar space, or tried to evaluate the possible increase in rental income that might come from a tenant's preference for locating in a building that is state of the art from a climate perspective.

## **Building Envelope**

My take-away from our conversation is that Alexandria will in fact do what is necessary to comply with the current stretch code. Because of the changes they are making to the building, this means that the roof will be insulated to current standards.

However, in other respects Alexandria says that they are not adding insulation. Their argument is that the building's envelope represents only a few of the total EUI (energy use intensity) points related to the building's operation (10 out of 200, they said). They said that they are planning to make some improvements over time, as tenants turn over.

They do not plan to add any insulation to the "curtain walls," and declined to address the very large atrium area because, they said, they had agreed to study only Building 3 and had not considered the atrium. They are not planning to replace the atrium or bring it up to current standards.

I am pointing out these issues not because I understand there to be any code violations in what Alexandria is planning to do regarding the building envelope, but because the LUC may want to discuss with them the fact that the level of renovations they are undertaking presents an opportunity to upgrade the building envelope that is unlikely to arise in the foreseeable future.