

July 18, 2019

Newton City Council Committee on Land Use
Newton Planning Board
cc Newton Planning Director Barney Heath

RE: Northland Needham Street project

Dear Councilors and Planning Board members:

The Green Newton Committee on New Building Standards has testified in support of the Northland development as proposed at the June 18 hearing. This letter extends our remarks.

1. Building Design

The Northland Development Team has been meeting with Green Newton's Building Standards Committee regularly to discuss the adoption of Green Newton's four Green Building Principles (<https://www.greennewton.org/advocacy/10655-2/>). Northland and has been receptive to our ideas and suggestions. We believe that Northland improved its green building expertise by sending their architect and sustainability consultant to a Passive House training course and by hiring one of the country's most experienced Passive House consultants to conduct feasibility studies. Then, it committed to certifying three of its multifamily family buildings to the Passive House standard. This means those buildings will be at least 40% more energy efficient than would have likely been built in the absence of that commitment.

Northland is currently in the process of studying the feasibility of Passive House certification for another five buildings in the development. We believe that all eight of these buildings are good candidates for Passive House certification and that certification can be achieved for these buildings at a relatively small incremental cost. We recommend that the Council require that all eight of these buildings achieve Passive House certification as a condition of the Special Permit for this project.

Northland has also committed to another building principle espoused by Green Newton--efficient heat pumps-- throughout the development for heating and cooling, and no gas cooktops in residential units. Electric hot water technology is limited at this time, so Green Newton believes that it's not appropriate to require it for Northland at this time. However, we urge the Council to ask Northland (and all developers) to have a plan for becoming net zero by 2030, including a plan for how a gas hot water system can be replaced when electric hot water technology is more reliable at this scale. This net zero plan should also include plans for how to generate renewables on site and buy additional offsite renewables for electricity it cannot generate on site to offset all energy use by 2030.

Northland has also been responsive to Green Newton's request to minimize the embodied carbon in the construction process. It recognizes that if its buildings use 40% less energy, but it takes 10 years to work off the carbon needed to build the buildings, it won't have helped the climate crisis in a substantial and immediate way. Northland sent their sustainability consultant to an MIT workshop on this issue. It is in the process of learning more about software tools that can help it consider low carbon or carbon sequestering building materials. We encourage the Council to include a requirement in the Council Order that accompanies the Special permit to require Northland (and all other developers) to follow either: 1) the LEED v4.1 Building Life Cycle Impact Reduction, Option #3 for new construction, or the International Living Building Institute recommendation for embodied carbon reduction – see: <https://living-future.org/zero-carbon-certification/#embodied-carbon>. The minimum reduction should be

10% below a comparable typical building. This is a fairly low bar to hit, so we also encourage the Council to require Northland to engage in an iterative process with the Planning department and Council after the approval of the Special Permit to make these buildings as low in embodied energy as can cost effectively be accomplished.

2. Transportation

Traffic is obviously a critical consideration for any development. The Northland site is appropriately addressing transportation. Needham Street will be reconstructed over the next two years by MassDOT as a complete street. The project is one of four LEED-ND sites in Massachusetts in part for this reason.

Transportation demand management (TDM) is critical. Northland's residential market will consist of residents who do not want to depend on driving for all of their transportation needs and don't need more than one parking space. The purpose of the Green Newton's principle on transportation is to minimize the vehicle miles generated by a development. Limiting the amount of parking and providing alternatives to driving are both important ways to do so.

Limiting parking spaces is part of modern planning practice that is well proven. So, if we care about traffic, the number of parking spaces should not be increased from what is proposed by Northland. But it should also not be reduced to the point of making the project infeasible from a market standpoint. The proposed parking ratio follows current good planning practice for sites outside the urban core. The developer has obviously considered its parking plan carefully, and it seems appropriate to us. We do not support an amendment to reduce the amount of parking lower than what is currently being proposed by Northland.

Providing shuttle connections to transit is an accepted component of transportation demand management, and Northland's shuttle system goes far beyond what is usually done to manage traffic demand. Its contractor has a proven record running TDM programs for the 128 business community for many years. In our opinion, Northland's proposal – to provide free, electric-powered shuttle service every 10 minutes to and from the MBTA Green Line, open to all for 16 hours a day – will be effective. It will mitigate traffic and reduce automobile trips. We judge the current proposal to be more effective than the previous one (fee-based shuttles to Cambridge and Boston), and we are impressed that it provides a public good for people who are not tenants of the development. Shuttle trips to commuter rail should be also considered.

The City, the 128 Business Council and the developer are certainly capable of providing a shuttle stop at Newton Highlands station that does not disrupt traffic.

It is not reasonable to restrict all development in Newton until the MBTA performs to its full potential. It is also not productive to debate what constitutes "Transit Oriented Development." Concerns have been raised that the Riverside Line is hopelessly congested and not capable of attracting any more riders. This is not true. We all like to complain about the T, but the D Branch carries approximately 14,000 riders (in both directions) on an average weekday, which is less than a few years ago. Even with full use of the proposed shuttle (as well as the proposed development at Riverside), the increment in ridership can be accommodated. A planning study for increasing Green Line capacity is underway. Capacity will be increased 15% by replacing the current cars with higher capacity double-length cars; they are expected to be ordered in 2021 and deployed on the D and E branches in 2025. Together with MBTA system-wide improvements, capacity will eventually be doubled.

As for any major development, Northland's traffic analysis follows the required Massachusetts protocol. It has been reviewed by the state and by Newton's consultant Beta. This is the appropriate measure of traffic impact. Even though Needham Street is a busy commercial street that experiences peak hour congestion, public decision-making should be based on the accepted traffic methodology. (Our understanding is that in order to be conservative, the traffic analysis does not assume more than a typical mode share for non-automobile trips, which is what the shuttle is designed to do.)

Northland is also committed to providing sufficient charging facilities for its residents' electric vehicles and building in the infrastructure to provide charging stations for many more in the future while they are doing subsurface so that is a small incremental cost to accommodate a majority electric vehicle fleet.

The Committee does favor setting an enforceable metric to measure and limit the amount of vehicle trips generated from Northland. The Planning Department's proposed metric, although simple to track and report, does have negative consequences such as punishing the property for hosting public events and attracting business from outside the development for retail tenants. We look forward to hearing Northland's counterproposal, and urge the Council to establish a better and more reasonable, yet enforceable metric.

3. Scale

Density is green. Density and sufficient scale are necessary for sustainable development because they support non-automobile transportation and provide walkable destinations within the development and adjoining areas. High energy efficiency construction, like Passive House, is more feasible in larger buildings.

There are only a few sites left in Newton that can make a significant contribution to the goals of reducing per capita energy use and transforming the stock of residential and commercial buildings to reduce greenhouse gas impacts. Northland is one of them (along with Riverside). We need to make the most of every opportunity to make progress.

If Green Newton's four principles are embodied by the Northland development, the result will be the most sustainable major construction project in Newton, and maybe in Massachusetts. It will make real progress toward the critical goals of reducing Newton's greenhouse gas footprint and per-capita energy consumption. However, sufficient scale is necessary to make the economics of the development financially feasible. It is in the City's interest to insure that the sustainability features of the development remain viable (as well as the provision of amenities and affordable housing).

We urge the Council to make the most of one of the few major sites that can advance these critical goals and not dilute its potential by reducing the feasibility of these critical elements.

Sincerely,

Green Newton Building Standards Committee

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