

The Land Use Committee (the “Committee”) held a public hearing on September 25, 2018 and working sessions on November 13, 2018, December 11, 2018, January 15, 2019, March 12, 2019, April 3, 2019, April 30, 2019, and May 14, 2019 on these petitions. This memo reflects additional information received by the Planning Department as of **June 11, 2019**. The next meeting on these petitions is currently scheduled for **July 9, 2019**.

EXECUTIVE SUMMARY

The Land Use Committee has previously discussed the transportation related aspects of the proposed project on January 15th, April 9th, and April 30th. Following the April 9th meeting, City Councilors submitted questions in writing and additional questions were raised at the April 30th meeting. On June 11th, the petitioner submitted a letter (**Attachment A**) proposing several changes to the proposal. This memo addresses the outstanding questions raised since April as well as the transportation-related items in the petitioner’s June 11th letter. The petitioner had initially proposed a series of shuttles within Newton and to/from Cambridge and Boston to mitigate the traffic impacts of the project and had proposed that with this robust shuttle proposal the number of driving trips generated by the project would not exceed 60% of the trips that would be expected for the project based on the Institute of Transportation Engineers trip generation estimates. The remaining trips were expected to be shifted to transit, walking and biking trips. The Planning Department previously recommended holding the petitioner to the resulting maximum number of trips associated with this mode split and allowing for flexibility in how this standard is achieved.

In the June 11th letter, the petitioner proposed modifying the shuttle proposal to focus only on the first/last mile connection to the Green Line. The petitioner stated they will provide a free electric shuttle with service between the project site and the Newton Highlands Green Line Station every 10 minutes for 16 hours per day, seven days a week. While the latest shuttle proposal is more consistent with previous recommendations from the Planning Department to focus on connections to the existing transit stations, it does not include any mechanism for monitoring the success of the shuttle. **Therefore, Planning staff continue to recommend holding the project to a maximum number of driving trips rather than conditioning specific shuttle service. Additionally, Planning staff recommend requiring a set of base TDM measures be implemented at all times. Planning staff are confident that marrying the TDM requirements with payments based on aggressive driving trip maximums, while allowing flexibility for the petitioner to adjust and optimize TDM measures, will result in the maximum possible reduction in driving trips.** Further details regarding how this trip count maximum could be monitored and enforced are included below. Additionally, the petitioner commented on requests to further reduce parking stalls and to limit access to and from the Oak Street driveway. Planning staff supports the petitioner’s proposal for 1,450 stalls with valet service for an additional 200 vehicles. Staff also agrees with the prior assessment by BETA that restricting the Oak Street driveway has negative impacts to Needham Street and does not improve conditions along Oak Street.

Project Update

The petitioner submitted a letter addressed to Chairman Schwartz on June 11th outlining several changes to the project or new proposals. The petitioner is committing to the following:

- 20 units (2.5%) of workforce housing at a range of 80 to 110% area median income (AMI) in addition to 120 units (15%) averaging 65% AMI;
- A minimum of 35% of the units (three buildings) achieving Passive House certification with a goal of 85% of the units overall achieving this certification;
- Undergrounding all utilities in lieu of paying an Inflow and Infiltration (I&I) fee;
- Providing the City a license for the land and \$1 million towards a splash park/skating rink in place of the community building;
- Providing an electric shuttle that is free to residents and the public with service to the Newton Highlands Green Line Station running every 10 minutes, 16 hours a day, seven days a week.

The letter also addresses recent requests to further reduce the parking on site and to consider limiting ingress and egress at the Oak Street driveway. Further analysis of the shuttle and parking aspects of the project can be found below. The Planning Department expects to comment on the remaining proposals from the June 11th letter at a future meeting.

Transportation Demand Management (TDM)

New development proposals typically estimate the number of trips that will be associated with the project once it is complete by using the Institute of Transportation Engineers (ITE) trip generation estimation data. The 10th edition of the *Trip Generation Manual* contains over 170 different categories of land uses studied between 1950 and 2013 in the United States and Canada at suburban and urban standalone sites. The data generally represents the number of trips entering and existing a studied site during a given period compared with an independent variable such as building size, number of units, number of seats, employees, etc. Land use data is aggregated to provide a weighted average rate which can be applied to a known independent variable to obtain the estimated trip generation for a site. The petitioner's initial submittal estimated the number of trips utilizing ITE trip generation rates and then reduced this number by 40%, assuming that their TDM proposal would result in 40% of those total estimated trips being shifted to other modes, such as walking, biking or transit. In other words, the project would only produce 60% of the vehicular trips that would otherwise be expected for a project of this size.

Given the scale of the proposed project and location along Needham Street, Planning Department staff have continually advocated a strong approach to managing transportation with a goal of reducing vehicular trips to mitigate traffic impacts from the project and to align with Citywide goals for climate change. The core component of the petitioner's approach to mitigating traffic has been a shuttle system. Previous proposals for the shuttle system included direct routes to Boston and Cambridge as well as various routes to and from the Green Line, commuter rail and other points within Newton. The Planning Department had questioned the effectiveness of the proposed routes given the infrequent service and previously unknown fare structure and previously recommended focusing on providing first/last mile service to existing MBTA stations, while focusing on the goal of reducing estimated driving trips by 40% and allowing the petitioner flexibility in how that standard is met.

In the June 11th letter, the petitioner has proposed abandoning both its original shuttle proposal and the its previous commitment to reduce the number of driving trips by 40% and instead is focusing on

providing an electric shuttle that is free to residents and the public with service between the proposed Mobility Hub and the Newton Highlands Green Line Station every 10 minutes. The petitioner also states that its “aspirational goal” is to partner with other developments to create a shuttle network that may serve areas such as Founders Park, Wells Avenue, Boston, Cambridge, the Seaport, Longwood and the Newtonville Commuter Rail. Staff believe the Highlands shuttle proposal is the right direction as it focuses on filling in the gaps with existing MBTA service and addresses the first/last mile problem of getting people to and from existing transit. The frequency of service and free fares ensure it will be attractive and easy to use for both residents and tenants of the site as well as nearby neighbors. Staff feel it is important a shuttle also go to a commuter rail station given the dispersed home and work addresses of potential users. It is extremely difficult however to predict how successful the proposed shuttle will ultimately be. Planning staff still strongly recommend focusing on holding the project to the 40% reduction in estimated driving trips while allowing some flexibility for the petitioner in meeting this goal, and committing to a set of TDM measures that are always required. By focusing on the outcome, rather than the method of achieving it we can assure the outcome is met and the tools to achieve this can be adjusted over time as necessary. Also, while the frequent, free shuttle to the Green Line is important, it is likely that more may be required to reduce vehicular trips. Research has shown that the most effective TDM measures are charging for parking, paying people not to drive and substantially subsidizing transit. Monitoring the effectiveness of the TDM strategies and allowing for adjustments is necessary to guarantee success.

The Planning Department recommends conditioning the project to a maximum number of trips based on ITE estimates for trip generation of the proposed onsite uses and requiring compliance with this maximum in perpetuity with mitigation payments required when it is exceeded. This approach is very similar to the what is required in the Parking and Transportation Demand Management Ordinance in Cambridge, which has been in effect since 1998, and is in line with what most nearby municipalities are currently considering. Below is an outline of how this could work:

TDM Requirements:

- Identify a full-time TDM Coordinator for the project
- Limit peak hour trips to no more than 60% of ITE estimates for current level of occupancy and corresponding on-site uses, starting with issuance of the first Certificate of Occupancy.
- Require the petitioner to submit to the Director of Planning and Commissioner of Public Works a TDM Monitoring Report and TDM Work Plan at the end of each reporting period (see below).
- The petitioner may adjust TDM measures as necessary but the TDM Work Plan must always contain the following minimum measures, unless found unnecessary by the Director of Planning:
 - Charge market rates for residential and office parking
 - Charge by the day for employee parking
 - Subsidize MBTA passes at no less than 50% for residents and employees on-site
 - Provide weatherproof secure bicycle parking and showers for employees
 - Provide car share spaces onsite sufficient to meet demand as per car share operator

- Maintain membership in a transportation management association (TMA), such as 128 Business Council

TDM Monitoring:

- Reporting interval periods shall initially occur every six months, starting with issuance of the first Certificate of Occupancy and increase to every year once the project is at least 90% occupied and has demonstrated compliance with the maximum trip cap for two consecutive years. Once full compliance has been demonstrated for five consecutive years the petitioner would only be required to submit monitoring reports and work plans if there is a change to the TDM work plan. The petitioner is responsible for the cost of a peer review consultant as deemed necessary by the Director of Planning when evaluating TDM Monitoring Reports and Work Plans.
- Require continuous permanent trip counting stations at every curb cut location with manual counts done for verification at the end of each reporting period.
- TDM Monitoring Reports shall contain data from the continuous counters for the previous reporting period as well as manual counts done during a typical week. The project will be compliant if there are 15 or fewer days during the previous period where the actual number of peak hour trips for a single day exceeded the maximum.
- With each TDM Monitoring Report the petitioner would also conduct a survey of all residents and tenants achieving at least a 60% response rate. The survey should be based on a sample survey to be provided by the Planning Department. The survey would not be utilized to measure compliance but would provide data for evaluating and adjusting the TDM Work Plan.

TDM Enforcement:

- If the project is found to be out of compliance prior to 90% occupancy, no more than 400 Certificates of Occupancy for residential units will be issued, after which no further building permits or Occupancy permits will be issued until the project has demonstrated compliance.
- Once the project is at least 90% occupied, if the project is found to be out of compliance at the end of the reporting period a Traffic Reduction Incentive Payment (TRIP) will be assessed at a rate of \$55 per car above the maximum trip count up to a maximum cap of two million dollars (\$2,000,000) per year, or ten million dollars (\$10,000,000) total. There will be no payment for the first 15 days that exceed the peak hour total for that day.
 - For example: based on the ITE generation rates for the proposed project with the 40% vehicular trip reduction, the peak hour trips would be 396 in the weekday AM, 487 in the weekday PM, for a total of 883 weekday peak hour trips. The Saturday peak hour trips would be 558. If the actual count on a particular weekday was 400 AM trips and 500 PM trips, for a total of 900 weekday peak hour trips, the project would have exceeded the maximum by 17 trips (900-883 = 17). The payment would then be \$935 for that day (17 x \$55 = \$935). This payment would be calculated for each day during the reporting period where the actual peak hour trips exceeded the trip maximum.
 - If the sum of the total daily payments accrued over the course of the year exceeds \$2,000,000, the maximum payment would be \$2,000,000.

- Any and all TRIP payments shall be placed in a dedicated TDM mitigation fund to be used for transportation and traffic improvements in Upper Falls and Newton Highlands.
- If any TDM Monitoring Report shows the project was not in compliance for the previous reporting period, the TDM Work Plan must be adjusted to the City's satisfaction based on the trip count and survey data.

Offsite Improvements

In addition to the TDM plan described above, Planning Staff continues to recommend that the petitioner consider offering a one-time payment into a transportation mitigation fund for improvements in the area. The plan described above includes aggressive goals that go above and beyond the citywide average when it comes to reducing driving, however even if the TDM measures are successful there will continue to be increased delays at intersections in the area. Additionally, TDM measures are primarily successful at changing the behavior of residents and employees, so while visitors to the retailers at the site will hopefully take advantage of alternative methods of transportation, it is unlikely there will be a significant reduction in vehicular use for this group. Therefore, Planning Staff also recommends that the petitioner consider offering a one-time lump sum payment into a transportation mitigation fund that will be used to fund improvements such as those listed in **Attachment B**. This list represents a collaboration between Planning and the Department of Public Works. These mitigations will also further the goals of the Needham Street Area Vision Plan and directly address those elements identified by the community and will help improve pedestrian and bicycle connections along the Greenway and to transit stations, improve signal coordination and prioritization for shuttles and buses on Needham Street, provide traffic calming in nearby neighborhoods, improve the safety and efficiency of nearby intersections, and provide for streetscape enhancements in Upper Falls. Of particular importance is the Transportation Alternatives Analysis as this feasibility study will analyze options for improved and/or faster MBTA transit service in this area. This will help direct where to spend current and future mitigation funds and will give the City the ability to lobby the MBTA for future improvements.

Parking

As discussed at the April Land Use meetings, the project proposed 1,550 parking stalls and BETA agreed that the provision of 800 residential parking stalls would meet the MBTA/MassDOT TOD guidelines of 1.0 space/unit. Regarding the other uses and the remaining 750 stalls:

- the 149 retail stalls (3 per thousand square feet) meets the guideline of 1.5-3.0 per thousand square feet of retail space;
- the relatively few spaces for the medical office and health club uses exceed the guidelines (3.4 and 3.8 per thousand square feet, respectively) but not significantly;
- although the 298 spaces for office parking (1.7 spaces per thousand square feet) would meet the applicable guideline (1.0-2.5 spaces per thousand square feet), that number might nonetheless be a little low, especially if many office employees were to not use transit;
- the combined weekday demand for the commercial (office and retail) use is 796 spaces which

results in a demand of 2.7 vehicles per thousand square feet. This means that if there are more spaces for retail uses these can be used by the office workers.

- The 245 restaurant spaces (6 per thousand square feet) exceed the retail guideline of 1.5-3.0 per thousand square feet. However, that guideline is not restaurant-specific, and this ratio might be acceptable when seen in conjunction with the office parking, especially as those uses likely peak respectively at different times.

In response to requests to further reduce onsite parking as well as concerns that the parking would be insufficient during peak periods in December, the petitioner proposed reducing the number of striped stalls to 1,450 and providing a “valet pad” with space to valet an additional 200 cars, for a total of 1,650 spaces during peak periods. As stated in the June 11th letter, the petitioner has not agreed to a further reduction as they believe this is the right level of parking to both ensure the project is successful and to obtain financing from lenders who tend to be conservative. Planning Department staff agree that the petitioner’s proposal represents a significant reduction for a suburban area while still allowing for some flexibility to meet peak demand during holiday seasons. Further reducing parking runs the risk of sacrificing the success of the project and ability to retain tenants and residents and may push people to rely on Transportation Network Companies (TNCs, i.e. Uber and Lyft), which has the potential to increase the number of trips to and from the site. Planning staff hope the project will attract tenants and residents who are either car-free or car-lite and that the TDM measures will provide attractive alternatives to driving. Residents in particular are likely to still require parking stalls as their vehicles must always be stored onsite, however the goal is for the residents to be able to commute and accomplish other trips much of the time without driving solo. Planning Department staff find the proposed number of parking stalls to be in the right ballpark based on Transit Oriented Development (TOD) guidance. By limiting the project to a maximum number of trips there is assurance that traffic produced by the project would not exceed that level and the focus should be on disincentivizing driving and incentivizing other modes of travel, particularly during peak periods, while allowing enough parking to provide flexibility for residents and tenants.

Planning staff does not believe further reducing the number of parking spaces is appropriate. The number of parking spaces proposed aligns with the proposed maximum trip count, which is based on aggressive TDM measures. Planning staff believe that further reductions in parking will dissuade people from coming to the development altogether, as opposed to further encouraging a shift in modes. Additionally, the placement of parking underground minimized negative impacts on aesthetics, stormwater, heat reduction and usable open space. And the extreme cost of underground parking means the developers motivation to minimize parking as much as is feasibly aligns with the City’s goals of managing traffic impacts.

Oak Street Access

In the June 11th letter, the petitioner responded to a request from Councilors to revisit limiting ingress/egress at the proposed Oak Street driveway. In response to questions from the Committee at the January hearing on transportation, BETA analyzed four alternatives to the Oak Street access proposed by the petitioner:

- Alternative 1: No Access/Egress at Oak Street
- Alternative 2: Exit Only from site onto Oak Street

- Alternative 3: Entrance Only from Oak Street into site
- Alternative 4: No Left Turns allowed to exit site driveway onto Oak Street

BETA concluded that the Needham Street/Oak Street/Christina Drive intersection would be the most impacted as a result of the four alternatives studied and the level of service would be further reduced and the intersection delay would increase at this intersection. Alternative 1 had the most impact and Alternative 4 had the least impact. Removing or restricting access from the Oak Street driveway results in negative impacts on the remaining intersections and would not change the number of vehicles traveling on Oak Street. Vehicles traveling west on Oak Street will still travel on Oak Street but would first need to pass through the already constrained Needham/Oak/Christina intersection. Additionally, the Needham Street Area Vision Plan identifies Needham Street as an isolated roadway and includes goals for converting it to a connected roadway, such as the ongoing/long term action to “create new driving and non-driving connections off of Needham Street as opportunities present themselves”.

The petitioner states in the June 11th letter that in response to neighborhood concerns, the petitioner moved the original driveway location further from the intersection and created a serpentine street leading to and from the driveway to calm traffic and discourage cut throughs. The Planning Department finds the Oak Street access to be critical to not further degrading the service along Needham Street and does not believe restricting access to this driveway will improve traffic conditions along Oak Street. Removing the Oak Street access would not change the number of vehicles traveling through Upper Falls and would only further degrade service along Needham Street. Planning staff is recommending a monetary payment into a transportation mitigation fund with the intent of using a portion of that money for streetscape improvements and traffic improvements and calming in the surrounding neighborhoods (see **Attachment B**).

Outstanding Questions

Following the April 9th and April 30th meetings, many Councilors submitted written questions pertaining to the transportation aspects of the project and the petitioner has submitted responses (**Attachment C**). The Planning Department staff have reviewed the petitioner’s responses and, with its peer reviewer, will be prepared to address any follow up questions and/or concerns with the petitioner’s responses at the hearing.

Additionally, Planning staff has the following responses to other outstanding questions below.

- Some concern has been raised regarding what measures could be taken if the number of parking stalls provided on-site proves insufficient and parking spills over onto neighboring streets and properties. The Planning Department suggests that in the event such a condition does arise, other parking restrictions and/or enforcement efforts, could be implemented for the surrounding residential neighborhoods including a resident permit parking system.
- Regarding the use of the project’s parking facilities by those using them solely to park at the site and utilize the shuttles, Planning staff believe such behavior could be minimized by the imposition of appropriate fees for day-long (i.e., commuter parking) and the petitioner, like many retail and commercial property owners, posting signs limiting parking duration to a reasonable time frame.

- Another question has been whether some of the proposed parking stalls can or should be “banked,” i.e., not built unless they are shown to be needed once the development is completed and occupied. Planning staff sees little opportunity for such an approach since the vast majority of the proposed parking is, as currently envisioned, to be located under buildings on two levels. Since such construction would entail considerable site excavation at the beginning of project’s construction, it is unlikely that the post-occupancy creation of additional subterranean levels would be feasible or desirable. That said, it is conceivable that certain parking spaces (or the areas where they would be located) could be constructed but not utilized for parking purposes. That approach could prove to be a practical way to limit parking at times or an on-going basis with the caveat that some compliance oversight would be required to ensure such stalls were not being utilized.
- Planning staff has been asked as to whether the projected 40% non-auto mode split identified by the petitioner as the basis for its traffic studies is acceptable to the Planning Department. As the Planning Department has previously said, this is a very aggressive goal that is potentially attainable if the petitioner, as it has stated its intent to do so, fully commits to doing whatever is necessary to achieve it and the City implements robust compliance mechanisms to ensure that outcome.
- Regarding the Transportation Alternatives Analysis included in the listing of additional mitigation measures, it is envisioned as a feasibility study of multiple options (with cost projections) for potential transit improvements in Newton, including infrastructure improvements for bus lanes, shuttle service along the Greenway right-of-way, the extension of the MBTA Green Line to Needham, and relocating the MBTA Eliot Station.

ATTACHMENTS

Attachment A	Petitioner’s letter to Gregory R. Schwartz, Chairman, dated June 11, 2019
Attachment B	Summary of proposed off-site improvements
Attachment C	Petitioner’s response to Councilor Questions

VIA HAND DELIVERY

June 11, 2019

Gregory R. Schwartz, Chairman
Land Use Committee
City of Newton
1000 Commonwealth Avenue
Newton, MA 02459
Re: Northland Newton Development (“NND”)

RECEIVED
Newton City Clerk
2019 JUN 11 PM 1:52
Donald A. O'Shea, Clerk
Newton, MA 02459

Dear Chairman Schwartz:

As the NND special permit process enters its 11th month, we continue to digest input from the Land Use Committee hearings, public correspondence, the Planning Department, peer reviewers, community groups, and neighbors. On May 31st, we also received a thoughtful letter from Councilors Downs and Auchincloss.

Northland is in this project for the long term. We have been and are receptive to ideas which improve the development. At the same time, when there are things we cannot do, we owe it to you and to the public to say so clearly. We would like to take this opportunity to provide feedback to what we have heard to date.

These are the issues we would like to address:

Work Force Housing

Northland has met with housing advocates, including Engine 6/Livable Newton, on many occasions. We are grateful that they have repeatedly spoken in favor of NND, prior to our addressing their goals for work force housing. We appreciate their patience.

Northland will commit to 20 units (2.5%) of work force housing at a range of 80 to 110% of Area Median Income (“AMI”) and 120 units (15%) of affordable housing at a blended 65% of AMI¹.

These 140 units of affordable housing represent more than the *total* number of affordable housing units built in Newton since 2003 under the current Inclusionary Zoning Ordinance².

¹ Rents at 80%-110% AMI range from \$2,147 for a one-bedroom apartment to \$2,398 for a two-bedroom apartment. Rents at 65% AMI range from \$1,366 for a one-bedroom apartment to \$1,520 for a two-bedroom apartment.

² Department of Planning and Development memo to the Members of the Zoning and Planning Committee, dated November 9, 2018, Page 8.

Gregory R. Schwartz, Chairman
Land Use Committee
June 11, 2019

Passive House

The May 14th Land Use Committee hearing focused on sustainability, with a particular emphasis on Passive House design/construction. We have retained Steven Winter Associates, the pre-eminent expert in the Passive House field, and have been quickly getting up to speed. We are excited about what we have learned so far. Passive House mitigates environmental impacts by dramatically lowering energy consumption and, as a bonus, improves air quality and comfort for residents. At the hearing, the community was impassioned in its support for prioritizing this cutting-edge sustainability technique. We have met with representatives of Green Newton and we share many of their goals.

At the May 14th hearing, we also heard about a planning template that identifies definitive versus aspirational goals in the context of the Council Order, with the aspirational goals requiring good faith efforts, while retaining flexibility to address market conditions.

As part of a holistic discussion of a Council Order, Northland is prepared to commit to Passive House certification for the residences in three buildings (representing 35% of the total). We further aspire to achieve Passive House certification for the residences in another five buildings (representing 85% of total). Northland is also willing to commit to achieve the Gold level of LEED for Neighborhood Development.

These commitments truly place NND at the forefront of sustainability, but they are far from our only sustainability initiatives. NND's integrated live/work/play community will get people out of their cars, will increase walking and biking, will reduce heat island effect, will restore the South Meadow Brook, and will provide recreational areas and open space to sustain the environment and wellness.

Undergrounding of Utilities

We would like to communicate a new positive finding that has the ability to enhance the Needham Street corridor for generations.

For more than two years, we have been working to assess the viability of undergrounding the unsightly utility poles and tangle of lines throughout the corridor. We were originally informed that undergrounding was not possible due to, among other reasons, the space constraints under Needham Street.

We resolved that impasse by agreeing to place the utilities under NND and granting easements to the providers. We have reached an agreement in principle with Eversource, Verizon, Comcast, RCN, and the Newton Fire Department to underground 7,944 linear feet (1.5 miles) of utility lines and remove 77 poles along portions of Needham Street, Oak Street, Christina Street, and Tower Road (see Exhibit A).

Gregory R. Schwartz, Chairman
Land Use Committee
June 11, 2019

We have heard, both from Councilors and from the community, that undergrounding the utilities and improving the streetscape are a necessary part of transforming Needham Street into a true pedestrian and bicycle friendly corridor. We believe that this infrastructure improvement will create significant aesthetic benefits for our neighbors and for this Newton gateway. We hope it will serve as a catalyst for other owners and developers on the street to make similar commitments. This undergrounding process can be timed to integrate with the MASS DOT Needham Street project.

The cost for the undergrounding is estimated at \$10 to \$12 million and will require consents from property owners and permission from the City. Subject to receipt of a mutually acceptable Council Order, Northland is willing to fund the undergrounding as an offset to our sewer inflow and infiltration mitigation (I & I) obligations.

Splash Park/Skating Rink

We have heard a consistent message from the Commissioner of Parks and Recreation and from City and community representatives. The community and the neighborhood would prefer a splash park and skating rink – year-round family friendly amenities – to the proposed community building.

To accommodate this initiative, we are prepared to license to the City a parcel of our land adjacent to the Depot – free of charge – for the operation of a splash park/skating rink and fund the cost of the improvements up to \$1 million³. The community playground will be located adjacent to the splash park/skating rink, on the site of the old community building. This programming change will assure an active Greenway year-round.

Shuttle

The innovative shuttle that we proposed in partnership with the Rt. 128 Business Council is receiving a mixed reaction. Many people are concerned about the lack of precedent comparables to measure the potential success of this initiative. Others have visceral memories of the prior failure of the Nexus Shuttle. More optimistic opponents perceive that the express buses to Boston and Cambridge will cannibalize existing public transportation options or overburden the neighborhood with park and ride commuter parking. The theory of the shuttle was always to focus on “door to door” rather than more traditional “last mile” transit. Based upon this feedback, we have begun to focus on “last mile” coverage to the Newton Highland’s MBTA stop. Historically the “last mile” gap in transportation coverage has been the most difficult to fill.

NND is prepared to simplify its shuttle program and close the “last mile” gap by providing free (to both the public and the residents) round trip service from the Mobility Hub to the Newton Highlands MBTA stop. The electric vehicle (“EV”) T Circulator will provide 10-minute service, 16 hours a day, 7 days a week, which makes NND effectively a transit-oriented development.

³ Operating costs to be borne by the City.

Gregory R. Schwartz, Chairman
Land Use Committee
June 11, 2019

The T Circulator will begin operation upon receipt of a certificate of occupancy for the first building.

At the same time, our aspirational goal is to build a shuttle service network with other partners, including Founders Park and Wells Avenue Office Park, offering additional legs to Boston, Cambridge, the Seaport, Longwood, and the Newtonville Commuter rail. We have been convinced that it is too early to plan and schedule those routes for 2025 in the rapidly changing transportation space, but we will continue to assess the viability of a regional EV shuttle. We would encourage the City Council to advocate for partnership with this potential shuttle system in future special permit review proceedings.

Traffic/Parking/Oak Street Access

NND received a thoughtful letter from Councilors Downs and Auchincloss requesting a further reduction in parking programming, and a limitation on ingress and egress out of the existing Oak Street curb cut.

We honor the sentiments of the letter and we hope that our commitment to develop “away from the car” is evident in our live/work/play master planning, market leading (lowest) suburban parking ratio, and the T Circulator. However, we believe that ITE traffic data does not adequately reflect how NND will, in many ways, mitigate off-site traffic generation. NND offers, for the first time, the neighborhoods of Upper Falls, Newton Highlands, Oak Hill, and Founders Park convenient pedestrian and bicycle access to restaurants, retail services, grocers, jobs, green spaces, dog parks, health facilities, doctors, and community amenities. This is the vision for NND and the newly walkable and bikeable Needham Street corridor.

We are willing to accept the standards of traffic generation enforcement established by precedent of the Council in other projects, such as the recently approved Newton Nexus development up the street. By way of comparison, Newton Nexus generates significantly more evening and Saturday peak hour trip generation per acre than NND, without the open space or amenities of NND.

Northland is sensitive to the concerns of our Upper Falls neighbors. To address those concerns, we moved the existing Oak Street vehicular access 170 feet east to be further away from the village center. We designed a serpentine Pettee Lane with traffic calming measures to ensure that it does not act as a cut-through from Tower Road to Oak Street. We placed our structured parking underground to reduce massing and create greater permeability. We placed our taller buildings in the center of the site to ensure that no shadows would be cast on Upper Falls even on the shortest day of the year. We programmed the Upper Falls Greenway edge with three story buildings to weave into the fabric of the existing neighborhood and will honor our 1,213-foot boundary with the Greenway by restoring the South Meadow Brook and adding a splash park/skating rink, a community playground, and a large and a small dog park. We are proud of this programming, all of which will be designed by one of the nation’s leading architecture firms, SOM.

The rationale for not further reducing parking is based upon professional opinion, financial viability, and industry experience.

1. Peer Review. BETA, the City's peer reviewer, concluded that 1,550 spaces were necessary to satisfy demand during a typical week and 1,596 spaces were required to satisfy demand during the peak December shopping season. Based upon that report and Councilor input, we reduced parking from 1,953 to 1,450, and created a valet program of 200 spaces (total of 1,650 spaces) in order to satisfy holiday peak demand.
2. Construction Lenders. Commercial banks are conservative. While we have successfully made the case to our lenders that this, "lowest in the suburbs" parking ratio IS viable, they will not finance urban parking ratios (0.5 per dwelling unit) in a suburban community.
3. Experience. Northland's 49 years of experience, including that of our most recent mixed-use development in Waltham (The Merc), leads us to conclude that we have pushed the parking ratio to the lowest level that will support effective operations. Moreover, we are sensitive to the possibility that, if we do not provide sufficient parking, the overflow will be into the neighborhood, which is unacceptable to us and to the neighborhood.

The rationale for not restricting ingress and egress out of Oak Street is based upon professional opinion and industry experience.

1. BETA. In response to this specific question, BETA, the City's peer reviewer, concluded that "eliminating or restricting the project access at Oak Street (i) would not change the traffic volumes on Oak Street" (ii) would significantly degrade the level of service at the Oak/Needham/Christina Street intersection and (iii) would place additional burden on Needham Street.
2. Experience. BETA and our traffic consultant, VHB, both concluded that four means of ingress and egress (south, north, and two east) are critical to successful traffic management of this 22.65-acre site. By way of example, The Merc, at one quarter the size of NND, has four means of ingress and egress.

I do want to emphasize that our first inclination is to be accommodating to neighborhood requests and to the requests of Councilors Downs and Auchincloss. However, in the face of the data and the two professional reports, it is not possible in this circumstance.

Finally, we do not agree with one premise in the letter, that our incentive "is to internalize the benefits of more parking." Northland's decision to underground the parking – based on the thoughtful feedback of the LUC, Planning, and the City's peer reviewer, Horsley Witten, – added \$50 million to the NND budget. Since the cost of each underground parking space is approximately \$100,000, we are financially motivated to have the least amount of parking required to operate successfully.

Gregory R. Schwartz, Chairman
Land Use Committee
June 11, 2019

Very truly yours,

A handwritten signature in black ink, appearing to be 'L. Gottesdiener', written in a cursive style.

Lawrence Gottesdiener
Chairman & CEO

cc: City Council
City Clerk
Director of Planning & Development

Exhibit A

Executive Summary

ICO Energy and Engineering, Inc. (ICO) was engaged by Northland Investment Corporation (Northland) to coordinate the development of a plan to relocate overhead utility infrastructure to the underground. The area of work is in proximity to the Northland Newton Development. The limits of the plan affect the existing overhead utility service infrastructure located along the following public thoroughfares: Needham Street, Oak Street, Christina Street, Tower Road and Charlemont Street.

The process assumes that all infrastructure in proximity to the future development may be considered for undergrounding in an effort to improve the aesthetics and enhance the surrounding area. The total distance between all existing utility poles for the entire infrastructure examined is seven thousand nine hundred and forty-four (7,944) feet. A total of seventy-seven (77) utility poles will be removed under this plan.

The relocation effort is significant and will not utilize the Needham Street roadway, being reconstructed by Mass DOT, as there is insufficient space due to congestion by existing underground facilities. The key to the viability of the plan is to route a major portion the utility infrastructure through Northland's private property. The infrastructure on private property will connect at several points with facilities located within the public roadways.


The Needham Street section is exceptionally challenging as there exists overhead infrastructure along both sides of the roadway; whereas Oak Street, Christina Street, Tower Road and Charlemont Street have infrastructure that primarily aligns with one side of the roadway with crossings and taps present. The infrastructure footages of the included sections are as follows:

- Needham Street – 3,095 feet from Oak Street to Tower Road, accounts for both sides
- Oak Street – 1,801 feet from Greenway to Needham Street
- Christina Street – 1,065 feet from Needham Street to just beyond 56 Christina Street.
- Tower Road – 1,277 feet from dead end to Needham Street
- Charlemont Street – 706 feet Needham Street to dead end

Northland engaged ICO in October 2017 and the initial study and conceptual plan was completed in March 2018. ICO performed a thorough equipment inventory to identify and document the affected infrastructure, determine ownership and to capture all pertinent details for incorporation into the conceptual relocation plan. Documentation gathered from MassDOT was utilized to confirm the lack of space availability within Needham Street and the existing underground facilities.

Under the direction and authorization of Northland, ICO engaged all of the affected utility service providers. Work orders have commenced with the utility service providers and numerous meetings/work-sessions have been conducted. Each utility service provider is now focused on developing final designs and budgets to relocate its respective equipment, with contemplation for future growth requirements. Northland has funded all the costs required by the various utilities to analyze their systems, coordinate with one another, prepare engineering designs and to finalize budgets and logistics.

Utility Infrastructure Key

 Existing overhead lines
to be relocated underground



Northland Transportation Off-Site Mitigation Funds
 (shown in 2021 dollars)

Type	Description	Notes	Cost
Bike/Ped	Extend Greenway to New. Highlands	Design and construct extension of existing Greenway bicycle and pedestrian path to Newton Highlands. The likely plan extends the current path in its current form to Curtis Street. The path then becomes a 2 way PBL or sidepath on the north side of Curtis and west side of Winchester, before connecting under Rt 9 to a bicycle boulevard/neighborway on Floral Street.	\$1,234,545
Bike/Ped	Extend Greenway to Eliot Station	Design and construct Greenway spur to Eliot Station. The likely plan creates a path through either the DPW yard or Eversource property, then creates a bicycle boulevard/neighborway on Frances Street, Margaret Road and Suban Place. Plan requires improving both sides of access to the pedestrian overpass over Rt 9.	\$560,509
Bike/Ped	Oak/Christina St ped bridge study	Feasibility study of creating public pedestrian and bicycle route over pedestrian bridge at 27 Christina Street with an eye towards extending public access via a path parallel to Needham Street to Industrial Place and Tower Road.	\$70,000
Complete Streets	Upper Falls Village Enhancement Project	Design for Upper Falls village enhancement project to improve roads, sidewalks, lighting and signals in Upper Falls Commercial area at Oak and Christina	\$550,000
Traffic	Provide Traffic Management System	Creation of a traffic management system to enable City transportation staff to remotely collect, review and react to traffic conditions in real time. Includes closed circuit video equipment, roadside count stations, computer work station for office and staffing.	\$630,000
Traffic	Install New Signal Equipment	Upgrade Chestnut/Rt 9 traffic signal equipment with associated improvements to signal timing	\$600,000
Traffic	Upgrade Signal Equipment	Upgrade Chestnut/Oak/Eliot signal equipment and make any necessary improvements to signal timing	\$450,000
Traffic	Study and Install Traffic Calming	Plan, design and implement traffic calming on Chestnut Street. Analyze and prioritize streets for improvements based on vehicle speeds, crash history, pedestrian trip generation rates and traffic volumes. Design and implement improvements including geometric changes, installation of RRFB equipment, speed humps and/or other approved techniques to increase safety and reduce speeds.	\$150,000
Traffic	Study and Install Traffic Calming	Plan, design and implement traffic calming on Upper Falls roadways. Analyze and prioritize streets for improvements based on vehicle speeds, crash history, pedestrian trip generation rates and traffic volumes. Design and implement improvements including geometric changes, installation of RRFB equipment, speed humps and/or other approved techniques to increase safety and reduce speeds.	\$150,000
Traffic	Provide Signal Coordination	Coordinate timing of signals Rt 9 / Winchester and Centre/Walnut	\$120,000
Traffic	Install TSP Upgrades	Design and install upgrades to Needham St signals to enable transit signal priority for MBTA buses and/or approved shared vehicles/shuttles. Design changes to signal timing. Install equipment.	\$77,000
Traffic	Study - Road Safety Audit	Conduct road safety audit on Centre/Walnut	\$75,000
Traffic	Study - Traffic operations	Review traffic operations for Newton Highlands MBTA including reviewing pedestrian and bicycle safety access and concerns, shuttle bus drop off/pick up, general passenger pick up and drop off. Make recommendations as per study.	\$30,000
Traffic	Study - traffic queue	Review traffic queuing and operations at Oak/Needham and recommend improvements.	\$30,000
Traffic	Study - emergency vehicle access	Study emergency vehicle access to Needham Street via Mechanic St	\$15,000
Transit/Shuttle	Transportation Alternatives Analysis, overarching transit improvement study	Feasibility study of improved/faster transit for Upper Falls of multiple options: 1. Infrastructure improvements @ Winchester for bus lane, 2. Greenway shuttle, 3. Green line extension to Needham, with new stop @ Greenway, 4. Move Eliot Station to CVS @ Rt 9. Study should include cost estimates and potential timeline, key stakeholders, as well as comparative advantages and disadvantages of each option.	\$275,000
TOTAL			\$1,865,055

Consolidated List of Councilor Questions and Responses

Councilor Susan S. Albright

1. Have you road tested your drive times at rush hour - actually by driving the route?

Response:

128 Business Council has road tested each and every stop-to-stop timing several times throughout the route planning process, beginning in 2017 and then again, each time a major change has been made to the planned routing. One of 128BC's shuttle vendors also road tested the routes on our behalf using an actual shuttle in order to test the differences in timing between using a standard-sized car and a 32-passenger bus. 128 Business Council also compared (and re-compared at approximately 6-month intervals) their results against Google's traffic data, as well as their 32 years of operations experience more generally.

The schedule tables shown on p. 2, p. 4, and p. 6 of the slides from Monica G. Tibbits-Nutt's statement before the LUC on 4/9/19 (attached – Exhibit G) reflect 128 Business Council's most up-to-date assessment of all of this data. We therefore consider these schedules to be accurate and achievable based upon today's traffic conditions. However, all routes will be retimed in the months leading up to commencement of shuttle service.

2. Newton is about to discuss city and citizens Climate Action Plans and we are trying to reduce the greenhouse gas emissions. The shuttles are positive and negative. Positive because it is ride share negative because it operates on gas. To be good citizens you should try to use electric vehicles. Can you?

Response:

We agree. Unfortunately, electric buses are not viable for most shuttle systems at this time. 32-passenger buses such as the ones we will employ must be charged at more frequent intervals than must an electric car and would require charging at irregular intervals when sitting in dense traffic. The Commonwealth currently lacks the electric charging infrastructure to use electric vehicles on longer trips (such as the Boston and Cambridge Express routes), and frequent charging would also reduce service frequency and prevent schedule reliability on the shorter Newton Local route. It is our hope that alternate fuel vehicles will become more viable in time. 128 Business Council is well-apprised of state and national standards and projections in this regard and will make fleet upgrade recommendations as they become feasible.

3. Have you thought about on-demand local service on Needham St that would at least go to Newton Center and back? You can use those wonderful 8-seater electric golf carts like the ones in Key Biscayne (and I guess also in Aspen).

Response:

We believe that there are many options to expand shared transit service, and we are particularly interested in the opportunity to expand the Newton circulator route. However, we must first establish the success of our three core routes before exploring other options.

On-demand routing was actually something we discussed in depth at the very beginning of the planning phase. However, 128 Business Council has recommended (and we have followed this

recommendation) that on-demand models be explored as an option for future expansion, rather than as a backbone of the service. In terms of building daily ridership, the problem with on-demand routing is that, from a daily commute (rather than single trip) perspective, it is not predictable. Shuttle availability, pick-up times, and on-board duration would vary from day to day, making on-demand routing an unreliable solution for riders who are commuting to and from work, or for other repetitive, time-sensitive trips. More in general, 128BC has yet to see a model anywhere in the nation for an on-demand public transportation service that has proven itself successful in terms of financial viability or in terms of meeting rider needs.

That said, 128BC has been actively exploring options for using on-demand solutions for expanding or altering the schedule for off-peak and less frequent trips.

4. With respect to the parking garage - can you use a system like the one at the Natick mall which not only tells you what level has the spaces but by red and green lights tells you where the vacant spaces are. It feels like - if you run at full capacity often because of reducing parking - a system of lights could really help - and make it more believable that it could work.

Response:

Technology such as the system in the Natick Mall has changed the dynamics of garage parking operations, significantly improving efficiency and customer convenience. Smart garage technology will continue to evolve rapidly with tracking applications, vehicle integration, and data analytics. NND will employ the latest technology, which will be more effective than current systems being used by the Natick Mall.

5. Beta mentioned certain tracker (which i guess was mentioned by Leon based on where this appears in my notes). Have you considered using this tracker? why? why not?

Response:

We are not aware of a specific tracker recommended by Beta. However, Beta made recommendations for signal coordination and signal priority capability along the Needham Street corridor in conjunction with the MassDOT improvements. These improvements will be coordinated with the City and funded through a mitigation fund established for NND.

6. have you studied how waze would affect traffic in the neighborhoods around needham st? Can we do anything to help this problem - if it is a problem?

Response:

Commuter cut-through traffic has been a challenge to Needham Street and other feeder roads to Route 9 long before the use of GPS traffic tracking software. The problem will continue to get worse without greater reliance on alternate transit modes. This is what NND is committed to accomplishing with a concrete goal of reducing single occupancy vehicle trip generation. NND's traffic impact and access study has captured peak traffic volumes that reflect technology-aided traffic behavior, and these results have been incorporated into our planning and mitigation.

7. What examples can you provide that ridership will appear - this is a subset of another question i had - will you let people from upper falls use the shuttle?

Response:

Yes, the shuttles will be fully open to the public. Members of Upper Falls, and in fact, all members of the public, are invited and encouraged to use the shuttles and take advantage of the convenience. We expect that they will, particularly the environmentally conscious millennials and the empty nesters.

As for examples that we can point to in order to confirm that ridership will appear: As Monica Tibbits-Nutt stated: "There is no other system like this in the United States. We have looked, we have asked, we have called. No one has built anything of this scale." As such, there are no examples to point to as a true comparison to the NND Shuttle System. That said, 128 Business Council has 32 years of experience building ridership among suburban populations with high rates of single-occupancy vehicle dependency. They currently have successful routes running throughout Waltham, Bedford, Lexington, and Needham. However, these routes are different from what is being proposed here for two major reasons:

(1) Almost all of 128BC's current public routes are either built primarily for a work commuter population or primarily for a residential population. This means that they've had to build ridership without guaranteeing the possibility of car-free living, without the ability to have the shuttles 'multitask' across trip types, and without the ability to expand service beyond extended commuting hours. The fact that NND's Shuttle System will operate out of a mixed-use site, provide two-directional trips, and continue service beyond normal commuting hours means that building ridership should actually be easier than it has been with 128BC's current shuttles—all of which have been successful for the length of their operation.

(2) All of 128BC's current public routes are shared routes co-financed by a group of organizations who "opt in" each year. As a result, the specific routing may vary from year to year as participants join or drop out. In contrast, the shuttle system proposed here is the result of a major commitment by one entity in perpetuity—meaning that public riders can count on routes only changing thanks to established rider need (or an established the lack thereof). Again, this means that building (and maintaining) ridership should be easier than it has been with 128BC's preexisting shuttles.

Moreover, the fare structure is cheaper than parking in Boston/Cambridge and cheaper-to-comparable to the MBTA service into Boston/Cambridge, yet offers much more comfortable and amenitized service.

8. What percent do you think will both live and work on the same site? Leon's presentation had a large number - was that correct?

Response:

Mr. Schwartz's information was dated, based upon the prior programming of NND, and error filled. It is difficult to accurately predict the number of NND residents that will also work at NND. However, we estimate that 20% to 25% of residents will work in the office building, in co-working space, or the stores and restaurants. This will include Larry Gottesdiener and other Northland personnel. This estimate, though, is not scientific.

9. Leon's chart on the number of cars by category added up to more than 1550 spaces - which was explained by shared parking which i get across office and retail. What about the number of cars across residential and office/retail - is 1550 the right number? Should it be 50 cars bigger? Happy to hear that 1550 is the right number i just need a better explanation.

Response:

In order to bridge the divide between parking minimalist and parking maximalists, we have developed a creative response that should appeal to both. The revision will reduce striped spaces to 1450. This will be the parking count in the ordinary course. That reduction will also free up a 200-space valet pod which will create the excess capacity to accommodate the peak holiday season. This plan is responsive to the marketplace (peak demand) and our commitment to reducing single occupancy vehicles (lowered number of parking spaces).

It should be noted that Mr. Schwartz's lay parking analysis was inaccurate, ignored the concept of shared parking, and inflated the number of employees on-site. Beta, on the other hand conducted a professional analysis and concluded that Northland got the parking just about right. However, the complementary nature of the uses allows extra daytime office parking to spill over into vacated residential parking during the weekday and retail parking to spill over into vacated office parking in the evenings and on weekends. Shared parking is a widely accepted concept in the real estate industry and our plan is aligned with generally accepted metrics endorsed by national trade organizations such as the Urban Land Institute and the Institute of Transportation Engineers.

10. One more on the parking garage - I know that in December you will be above planned occupancy - but how often will you be close to maximum capacity in an average day/month?

Response:

Parking demand will be greater during the weekday than on the weekend. At peak times during the week, the garage will operate at 97% to 98% occupancy. On weekends, peak demand will reach 86% to 88%. The additional parking program referenced above will provide expanded capacity to efficiently manage event-related or seasonal surges.

Councilor Marc C. Laredo

1. What is the source of the base numbers for current traffic counts on Needham Street being used by the developer and when and how the information was gathered?

Response:

The traffic counts were conducted in May 2017 and October 2017. The May 2017 traffic counts were conducted for the Functional Design Report for MassDOT's reconstruction project of Needham Street and were used by NND to be consistent with the roadway reconstruction project. Locations not included in the roadway reconstruction project were counted in October 2017. These counts are consistent with the MassDOT TIA guidelines. All turning movement counts were conducted with cameras and all daily automatic traffic recorder (ATR) counts were conducted with tubes across the roadway. The base counts for all locations were included in the Appendix to the TIA filed in October 2018.

2. Do the current base numbers being used by the developer include traffic counts for a fully occupied Marshall's plaza and Piano building? If so, what are the actual traffic counts today given that much of the site is unoccupied?

Response:

The traffic counts were conducted in May and October 2017, at the time Northland filed an Environmental Notification Form for this project under MEPA and reflect the occupancy rates at those times. Marshall's Plaza was at 92% occupancy at the time of the traffic counts, while the office space was mostly empty, and the former manufacturing space was completely empty.

Traffic counts have not been taken since May and October 2017. However, measuring traffic at this time does not accurately characterize the traffic impact of NND, as space has been purposely left vacant because of our special permit application and could be re-tenanted at any time if we elected. The future "No Build" scenario in the traffic impact study assumed the existing office space would be fully occupied in the future without the project and therefore the "No Build" analyses includes traffic generated by the office. As of April 2019, Marshall Plaza remains 87% occupied.

3. Using current traffic counts as they exist today with the site essentially empty, what will the total traffic increase be if the project is fully built as proposed?

Response:

The projected weekday morning peak hour volume would be 396 vehicles, the weekday evening peak hour volume would be 487 vehicles and the Saturday midday peak hour volume would be 558 vehicles. This data is presented in Table 8 of VHB's March 28 Expanded Revised Building Program Traffic Generation Memorandum, which shows the projected peak hour traffic generation under the "Robust Shuttle" mode share without existing vehicle trips.

4. Have there been traffic increases due to the opening of the grocery store, the Nexus site, and any other recent developments and, if so, have those numbers been included in the current base numbers the developer is using? If not, why not and what are those numbers?

Response:

The Planning Department has not made us aware of any post development traffic assessment data for the Nexus development, including the grocery store. Traffic projections for recently completed projects were incorporated into the future No-Build and Build traffic assessments for NND in accordance with standard MassDOT TIA guidelines.

5. Have the addition of the buses been included in traffic counts as projected on Needham Street? If so, how are the buses being counted – as the equivalent of a single car or multiple cars (and if the latter, how many) and why is that particular standard being used?

Response:

While not called out specifically, traffic projections for the project were based on standard methodology includes all vehicle types, so the expected activity is essentially covered. As outlined in the 128 BC shuttle plan, the peak hour of operations will see 4 shuttles entering the site and 5 shuttles leaving the site during the weekday morning peak hour. The same is true during the weekday evening peak hour period where 4 shuttles will enter and 5 will exit over the course of the peak hour. This amount of activity is not significant. No adjustments were made or included in the traffic projections that replace multiple vehicles with buses.

6. What are the planning department's specific proposals for remedies in a Council order if the developer's projections on bus usage are incorrect and there is more traffic than anticipated?

Response:

[Note – this is a question directed to the Planning Department to respond. The Planning Department's specific proposal outlined in its April 5th memo is to require Northland to return to the City Council to amend the special permit and establish alternative mitigation strategies if it has not met the performance goal for two consecutive years and there continues to be no improvement.]

Northland is committed to doing what is necessary to achieve the performance goal recommended by the Planning Staff, if actual vehicle trips exceed the goal for a sustained period, then further measures would be implemented to reduce vehicle trips, including: additional MBTA and shuttle incentives; modification of shuttle routes, schedule, or capacity; improved marketing and community awareness; or introduction of additional transit options.

7. How does the planning department envision that post-construction travel to and from the site be determined (I very much doubt that there could be any survey that tracks the travel practices of all residents)?

Response:

Post-development traffic monitoring will be conducted annually that will include formal traffic counts at each site driveway during peak hours. Additional data will be collected from shuttle

riders, residents and office workers through surveys. While the surveys may not provide exact travel data of everyone within NND, they will be effective in identifying transit use patterns and preferences.

8. Is the developer willing to commit to the bus service at the proposed levels in perpetuity and, if so, how will pricing be determined? If there is not that commitment, what assurances will we have about alternate transit in the future and how will that be enforced?

Response:

Northland will comply with the performance goal recommended by the Planning Department in perpetuity. The goal can be achieved “regardless of what tools, systems and/or approaches implemented by the petitioner”, as the Department stated in its April 5 memo. While the shuttle is an integral part of the plan today, the tools, including the shuttle, may shift in the future as transportation trends change. “The transportation field is rapidly changing and evolving and there will likely be more tools available as this project progresses” according to the Planning Department memo.

Regarding shuttle fares, please see p. 9 of the slides from Monica G. Tibbits-Nutt’s statement before the LUC on 4/9/19 (attached - Exhibit G). If the program were put into effect today, the rates would be \$2.50 per ride on the Newton Local (serving Newton Highlands and Newtonville) and \$7.00 per ride on the Boston and Cambridge express routes, which is competitive with MBTA services while providing a superior rider experience (greater predictability, comfortable seats, WIFI, real-time shuttle tracking, in-app pay options, etc.). The pricing will change from time to time to reflect changes in the market and to stay on-scale with MBTA service.

9. What specific measures is the planning department proposing to ensure that if parking is limited on site it does not spill over onto neighboring streets?

Response:

[Note: This is a question directed to the Planning Department to respond]

Northland is not aware of any specific proposals for parking restrictions on neighborhood streets. We will put in place a provision in residential leases to restrict parking on neighborhood streets and void incentives for violators. However, the most effective means of controlling spill-over parking is to impose a neighborhood resident parking sticker program for the time period outside the November 15th to April 15th winter parking ban.

10. Have any shadow studies been done on the proposed buildings on site?

Response:

An updated shadow study is shown on Exhibit E. Based on the revised program of NND and the fact that the height is concentrated in the center of the site and 232 feet from the west property line, no shadows are cast on any buildings in the Upper Falls beyond 9:00 am on the winter solstice, the most impactful period.

11. Why is having 40% of residents using alternative transit an acceptable number to the planning department?

Response:

Transportation is changing and there are underlying trends shifting away from traditional commuting relating to the target cohorts for NND, millennials, empty-nesters and seniors. These include greater corporate opportunities for remote officing and working from home, more prevalent use of alternate transit modes as part of a growing green consciousness, and a greater desire for live/work/play experiences.

12. What are the specific reasons that the planning department is willing to rely on the transit-oriented development calculations in assessing this project when it is not near transit? Is it solely the proposed bus service or are there other factors that are being relied upon? Has any other project in Newton or elsewhere in eastern Massachusetts applied transit-oriented standards in this manner?

Response:

[Note: this is a question directed to the Planning department to respond]

The breadth of service of the NND Shuttle System will provide an equal or better-quality TOD experience than typical suburban TOD developments. Unlike other developments that may rely on a single mode of public transit, NND will offer both door-to-workplace transit service and 20-minute frequency service to both commuter rail and T service. For instance, The NND Shuttle System will provide transit to downtown Boston, The Seaport, Kendall Square and Central Square within 60 minutes or less during peak commuting times and will also provide convenient and timely transit access for commuters traveling to the LMA, Boston Landing, Fenway and Back Bay.

Several factors enable NND to achieve a higher concentration of alternate transit use. The mix of residential, retail and office within NND and the immediate neighborhood allows greater reliance on pedestrian and bike travel, supported by the connections to Greenway, a network of bike paths, and on-site bike storage and bike-share. The shuttle program will provide reliable door-to-workplace commuting options as well as 20-minute frequency access to the T system.

13. If the planning department will be doing post-construction review and enforcement, who will be doing that work and what will be the cost to the city?

Response:

The post development monitoring and reporting will be provided by a qualified engineering firm engaged and paid for by Northland. The City will bear no cost.

Councilor Alison M. Leary

1. Can we include other conveniences, like making it easy to pay with apps and integrating your payment options with the T's automated fare collection system upgrades that are coming soon?

Response:

The NND Shuttle System will offer a wide variety of conveniences, both in keeping with 128 Business Council's current fleet and surpassing it. This will include mobile in-app payment options, real-time shuttle tracking on desktop and mobile, real-time shuttle alerts, comfortable seating, in-seat mobile device charging, reading-optimized lighting, and WIFI. Based upon Ms. Tibbits-Nutt's deep experience in the field and resulting from her combined duties at 128 Business Council, the MBTA, and MassDOT, the shuttle system is proactively designed to "fill in the gaps" and complement MBTA service rather than compete with it.

As for AFC 2.0, specifically: The completion timeline for this project currently extends into 2021, but 128 Business Council will be ready to integrate their operations with these and other MBTA technological upgrades as soon as those options become available.

2. One way to attract ridership is to reduce fares. Would that be something that could be considered?

Response:

If necessary, yes, we would reduce fares to ensure robust ridership.

However, the fare structure recommended by 128 Business Council and accepted by Northland (see p. 9 of the slides from Monica G. Tibbits-Nutt's statement before the LUC on 4/9/19, attached Exhibit G) are competitive with current MBTA fares, while still allowing for a superior rider experience (greater predictability, comfortable seats, WIFI, real-time shuttle tracking, in-app pay options, etc.). As a point of reference, 128 Business Council has studied the effects of fare raises on ridership and has not found that measure increases reduced shuttle participation among most populations, as long as the fares are within range of other public transportation options. That said, shuttle riders and non-riders alike will be surveyed regularly as part of the Project's metrics commitment, and the effects and perceptions of shuttle fares can be included in this surveying. If fares emerge as a barrier to ridership, they will absolutely be adjusted. We will also provide financial incentives that will further reduce transit costs for riders, including multi-ride shuttle passes and T discounts.

3. Could we consider incentivizing residents who choose not to pay for a parking spot a reduced shuttle service fare and/or offer free shuttle service for the first year?

Response:

Residents that commit to living car-free at NND will be offered a free annual T pass and a shuttle discount.

4. I would explore reducing onsite parking even further if the goal is to truly market this project as a TOD.

Response:

We worked very diligently to reduce the number of parking spaces at NND down to 1,550, the lowest parking ratio of any existing development in the Greater Boston suburbs (a level that maximizes shared parking and yet provides a base number satisfactory to finance and lease NND).

That being said, we have prepared and submitted a revised plan that we hope will appeal to both parking minimalists and parking maximalists. The new plan reduces striped spaces from 1,550 to 1,450 AND creates a 200-car valet pod (total of 1,650) that will accommodate overflow in the peak holiday season.

This plan is responsive to the marketplace (peak demand) and our commitment to reducing single occupancy vehicles (lowered number of parking spaces). We agree that any further reduction of parking should be done in concert with parking restrictions or resident parking policy on neighborhood streets. We will include a lease provision to restrict parking on neighborhood streets and void incentives for violators. However, that may be difficult to enforce without a neighborhood resident parking sticker program (although the City of Newton winter parking ban will resolve the issue from November 15th to April 15th each year).

Follow Up Questions (4/17.19 via N Khan):

1. I am not clear how the shared parking program will work. I understand the basic concepts of shared uses, but the details are murky. I also know the City's shared parking program is not faring well at all. I would like more information.

Response:

In order to bridge the divide between parking minimalist and parking maximalists, we have developed a creative response that should appeal to both. The revision will reduce striped spaces to 1,450. This will be the parking count in the ordinary course. That will also free up a 200-space valet pod which will create the excess capacity to accommodate the peak holiday season. This plan is responsive to the marketplace (peak demand) and our commitment to reducing single occupancy vehicles (lowered number of parking spaces). That being said, we have tried to communicate how it works very clearly in our revised submission. The City's shared parking program is informal and voluntary. NND's is neither. Please see attached Exhibit B shared parking analysis

2. Peter describes the transportation management plan as "radically aggressive". While it is robust, I am not convinced that it is aggressive enough. Peter mentions the financing may be jeopardy if they lower parking too much, but transportation is transforming before our eyes, and if they have a commitment to getting people out of their cars and into shuttles then I believe they can reduce parking even further. I also believe there a lot of people ready to live car free and families who can function well with one vehicle who would love to live in Newton.

Response:

We completely agree and that is why we programmed the lowest parking ratios of any existing development in the Greater Boston suburbs why we have reduced striped parking even further, and (in part) why we placed the parking underground (if it is underutilized, at least it will not be an above grade multi-level eyesore for decades to come – as will be the case for many “comparable” developments). While we agree on the future, we will still need the buy-in of the construction lender and the Commercial and retail tenants in the present. It is our professional opinion that current NND parking programming pushes them as hard as they will accept.

3. The Upper Falls Greenway ends at National Lumber. Is the plan to connect to the Newton Highland's Green Line? If so, I would like more information about this plan.

Response:

Northland has not dug in on the access issues behind National Lumber. We are committed to make every effort to help create this critical link.

4. 800 units is a lot, but I am concerned if the project size drops too much it will could jeopardize the robust shuttle bus service. We could very well end up with a smaller project that could end up causing even more traffic.

Response:

800 units represents the lowest density of all the comparable Newton developments, including Avalon Newton Highlands, Avalon Chestnut Hill, Washington Place, Austin Street, Village Falls Condominiums and Chestnut Hill Towers. NND's 22.6 acres comprises three large individual parcels, 156 Oak Street, 55 Tower Road, and Marshalls Plaza, which could each be a development project in their own right, with access onto only one street. We have worked patiently over 40 years to assemble the three parcels, and it is this assemblage that allows for the permeability, connectivity, and open space of NND's landmark design.

Further, Northland has nearly 50 years of national experience, and we have never seen a mixed used development with 43% open space, nor have we ever witnessed NND's level of neighborhood permeability including the fact that NND is accessible on all four sides by parks.

Regarding smaller programming, it is the 677 market rate units that provide the financial underpinning to fund the Shuttle, create 9.8 acres of open space, place 900 parking spaces underground, and build the community amenities.

Please see Exhibit F for a comparison of density.

Councilor Andreae Downs

1. She sees that in the ENR DOT recommended “banking” some spaces, i.e. there could be spaces built and not programmed for use and then used when necessary. It is a workaround – and it could allow us to have 2 numbers out there and get where we need to be

Response:

We agree.

In order to bridge the divide between parking minimalist and parking maximalists, we have developed a creative response that should appeal to both. The revision will reduce striped spaces to 1450. This will be the parking count in the ordinary course. That will also free up a 200-space valet pod which will create the excess capacity to accommodate the peak holiday season. This plan is responsive to the marketplace (peak demand) and our commitment to reducing single occupancy vehicles (lowered number of parking spaces).

2. She wants the shadow study

Response:

Attached for your review is an updated shadow study (Exhibit E) for NND based on the revised programming we presented at the March LUC hearing. We are pleased to note that, based upon the revised programming of NND 2.0, no shadows attach to ANY Upper Falls buildings beyond 9:00 am on the winter solstice.

3. She is struggling with why density is good. She gets the green argument, and she thinks density is good, but she’s not sure why.

Response:

On the merits of density, we firmly believe density is critical to enlivening NND’s streets and open spaces to create a sense of place. NND will be the heart of activity along the corridor and the N-Squared District and will achieve the over-arching goals of the Needham Street Vision Plan, most importantly the vision for land use. We cannot achieve this with lower density. We have put our parking underground to create a more desirable pedestrian environment. We have dedicated 43% of development to open space, and are providing a dedicated community building, a playground and several large green spaces for public benefit. Density is the financial engine necessary to provide these critical place-making ingredients. Finally, it enables us to add critically needed housing inventory to the City, including 123 affordable housing units and a dedicated building designed to allow seniors to age in-place.

128 Business Council’s contribution: Higher density can be good for both environmental and social justice reasons. Beginning with the social justice reasons, the Greater Boston Area is experiencing a major housing crisis, and the deleterious effects of this crisis fall disproportionately upon those without the means to pay “whatever it takes” to find convenient housing. We cannot increase housing stock within the Greater Boston Area itself without increasing residential density. This ends up being closely related to the environmental reason, since those with less financial means must move to further-flung locations and/or to areas with poor-to-no alternative transportation options, and therefore end up dependent upon single-occupancy vehicles. Higher-density developments (if they contain a diverse mix of multi-use tenants, which this development is definitely designed to do) further promote

environmental goals by not only counteracting suburban expansion but also reducing local trips thanks to a wider range of destinations being located within walking or biking range.

Follow Up Questions (4/17.19 via N Khan):

1. One of the mitigation measures mentioned initially was a connection of the Greenway spur to Christina Street and help negotiating the eventual connection to the Needham side of the Charles River, and parks and pathways there. Is that still part of the discussion?

Response:

The potential Greenway spur that would connect the Upper Falls Greenway to the myriad of recreational opportunities across the Charles river for pedestrians and bicyclists of Newton was an important motivation in our decision to acquire 56 Christina Street. It is only due to our patient assemblage and thoughtful design that this spur is possible. We are 100% committed to try to make that connection a reality.

2. Another transportation enhancement—building a better-than-average bus shelter with benches and real-time bus arrival information—has been floated for the stop on the northbound side of Needham Street. Can that be added to the developer’s mitigation mix?

Response:

Northland intends to build a state-of-the-art bus shelter on northbound side of Needham Street, integrated with the Mobility Hub so that commuters can have comfortable options on both sides of the street, while waiting for the MBTA Route 59 bus.

3. Whom is the Oak Street entrance/exit meant to serve? Can traffic there be restricted to that population?

Response:

The four means of ingress/egress currently programmed are required to adequately operate NND. The Oak Street curb cut, which currently exists (and would handle an order of magnitude more traffic in the “as of right” build scenario) is essential to minimize impact on key intersections along the corridor. Beta thoroughly studied alternatives for the Oak Street entrance and arrived at the same conclusion.

4. If not, can the Oak Street entrance/exit be trialed at full build out and closed to some or all traffic in the event that neighbors’ fears of Oak/Chestnut/Eliot street gridlock prove correct?

Response:

The four means of ingress/egress currently programmed are required to adequately operate NND. The Oak Street entrance is essential to minimize impact on key intersections along the corridor. Beta thoroughly studied alternatives for the Oak Street entrance and arrived at the same conclusion.

5. What is the Transportation Alternatives Analysis and what will it allow Newton to do?

Response:

The Transportation Alternatives Analysis is proposed by the Planning Department to study the feasibility of improved or faster MBTA service and to identify future priorities. The Planning Department can respond to the specifics of the analysis.

6. How many peak hour trips are we talking about total?

Response:

The Planning Department recommended a performance goal be established for limiting NND trip generation based upon the "Robust Shuttle" model mode share projection in VHB's traffic impact study, which assumes 60% vehicle usage and 40% other usage (including transit) by residents and office workers during the weekday morning and evening peak hour. Based on the updated traffic projections reviewed and accepted by the City's peer reviewer, the goal would be set at 396 total vehicle trips in the weekday morning peak hour and 487 total vehicle trips in the weekday evening peak hour. If actual vehicle trips exceed this amount for a sustained period, then further measures would be implemented to reduce vehicle trips, including additional MBTA and shuttle incentives, modification of shuttle routes or capacity, or improved marketing and awareness, or introduction of additional transit options. Northland agrees with the performance goal for NND and will abide by the requirement as long as the special permit is in effect

7. Can the parking be "banked," that is, not built unless shown to be needed as the project is completed?

Response:

Thank you for this suggestion. We have prepared and submitted a revised parking program and operations plan that we hope will bridge the divide between the parking minimalists and the parking maximalists. Please see Exhibit B for the revised parking plan. This plan is responsive to the marketplace (peak demand) and our commitment to reducing single occupancy vehicles (lowered number of parking spaces).

8. I have heard that real-time trip counts are possible and can be set up to be monitored remotely and transparently. Can we require this to ensure project trip generation remains below target, particularly for rush hour(s)?

Response:

Continuous and real-time traffic counting devices are typically built into traffic signal systems. Since NND trip generation data must be recorded at all driveways, having continuous count/real-time count at only one location will not be productive in measuring overall site-generated traffic. Traffic counts will be conducted by Northland's traffic engineer at each NND driveway during the peak hours each year to determine the level of NND trip generation as part of its compliance obligation.

Councilor Deborah J. Crossley

4.17.19 via N Khan

1. Which buildings, uses and public outdoor spaces would come on line first, second, etcetera?

Response:

NND will not be phased. It will be financed and built as one project. The actual development of the buildings will be sequenced to efficiently manage construction and allow for orderly lease-up of the apartments. Based on our current planning, the first sequence of construction will include blocks 5 and 6, and buildings 2, 3, and 7. Also included with the first sequence will be the renovation of 156 Oak Street and the construction of the Village Green, the Community Park & Playground, the Community Building, the Mill Park, the Mobility Park, and the restoration of South Meadow Brook. The second sequence will include Buildings 4, 8, the townhouses, and the Oak Street Park. The first sequence will comprise 498 units and the second sequence will include 302 units.

2. Will the shuttle be a fully operational system at that [C of O first 400 Units] point?

Response:

The NND Shuttle System (meaning all three of the routes shown in the slides from Monica G. Tibbits-Nutt's statement before the LUC on 4/9/19, attached Exhibit G, and running on the complete schedules shown on the included time tables) will start with 100% service once NND has received a certificate of occupancy for 400 units. We will hit this point in the first sequence of construction. The shuttle program will be an integral part of our marketing program – meaning that we believe that many tenants will move to the development because of the shuttle options – so it is essential that it be operational in this first sequence.

3. I see that some opinions we are seeing in letters from the public, try to relate the intensity of use proposed for this site to others they can see - particularly Avalon at Newton Highlands and Chestnut Hill. I believe both of those projects have more square foot of building relative to site area, and far less usable open space relative to the amount of building on each sites, although Avalon at Newton Highlands may be more comparable to Northland. I believe that both Austin Street and Washington Place were permitted with a higher proportion of building area to open space a well. It would be helpful if the Planning Department could verify the numbers.

Response:

800 units represents the lowest density of all the comparable Newton developments, including Avalon Highlands, Avalon Chestnut Hill, Washington Place, Austin Street, Village Falls Condominiums and Chestnut Hill Towers. None of the comparables in Newton or in Greater Boston, for that matter, have anything resembling 43% open space. 43% sets a new standard.

NND's 22.6 acres comprises three large individual parcels, 156 Oak Street, 55 Tower Road, and Marshalls Plaza, which could each be a development project in their own right, each with access onto only one street. We have worked patiently over 40 years to assemble the three parcels, and it is this assemblage that allows for the permeability, connectivity, and open space of NND's landmark design.

It is also important to recognize the type of density. For example, Newton Highland's unit mix is comprised of 67.3% two- and three-bedroom apartments (which generally generate more traffic, requires more parking, and attracts more families), whereas NND's unit mix is comprised of 40% two-bedroom apartments and 5% three-bedroom apartments.

Further, we have never seen, anywhere in the country, the permeability of NND, particularly for pedestrians and bicyclists, given that NND is accessible on all four sides by parks (a design which we have never seen).

Please see Exhibit F for a comparison of density.

4. I also heard at the meeting that the intersection of the Avalon Bay drive and Needham Street works at a level of service **LoS A**. There are 294 units there on less than eight acres, and now the Nexus lot is connected directly to Avalon, providing another egress from their site. **It would be helpful if the Planning Department would confirm this data.**

Response:

Planning Department to Respond

5. I understand that given the investments made so far - two layers of underground parking, more open space, a subsidized shuttle serve, and more we'll hear about with stormwater management, affordability and building design... that there is proposed a cap on other mitigation spending of five million. This is related to the list of investments we'd like to make in alternative transit options including a 275K comprehensive feasibility study including a look at a Greenline extension, accessible access to the Elliot and Highlands T stops, extending the bikeway to Needham over the Christina bridge, etcetera. Some of these ideas have been kicking around for a few years. **Can the Planning Department help us understand what each of these projects would entail, where they stand - and identify the challenges to achieving each one.**

Response:

Planning Department to respond. Northland is passionately interested in ALL of these initiatives, Green line extension, Elliot/Highland T access, Christina Bridge access, etc. We would very much welcome an update and status report.

6. Finally, the public comment went so late that the committee did not have a chance to hold a constructive conversation the same night. Although we are invited to put forward our questions in this forum, it would be more helpful - given how managed transit is critical to the success of the project - if we could have a conversation in committee to make sure we all understand the intricacies of this very new approach to transit. It would be my **preference to hold such a meeting completely separately** from the final design, stormwater and sustainability meeting coming up in May.

Response:

Our understanding is that time has been set aside for April 30 without public comment. After the issues involving the last LUC hearing, Northland will need to confirm that any public comment will be in writing not in session.

Councilor Maria Scibelli Greenberg

1. Regarding proposed shuttles- Will there be an age restriction for shuttle use? Can students use them? Will stops to the Library, YMCA, NewCAL senior center and Boys and Girls Club be included?

Response:

The NND Shuttle System will be open to all, including students.

In the future, the Newton Local could be expanded or included in a broader system that would include the YMCA, the new senior center, the Boys and Girls Club and others. However, we are first going to establish the success of the initial four destinations included in our initial three routes before contemplating expansion. As an aside, the specific stops in any future expansion can be informed by the surveying of shuttle riders and local non-riders in order to determine demand.

2. The number of announced affordable units is still listed at 123, I would like that increased to 145 as the Planning dept recommended to follow our proposed IZ ordinance.

Response:

Northland may have made a mistake in agreeing to make changes worth tens of millions of dollars so early, particularly the undergrounding of parking. This may have given the false impression that the development could afford more concessions. NND is now on the cusp of financial viability. Upon a final Order of Conditions meeting, we will be prepared to address incremental increases in mitigation.

3. In the planning memo dated April 9th BETA analyzed the 4 alternatives for Oak street access and recommend that removing or restricting access from Oak would result in negative impacts on the remaining intersections. Planning also agreed. However, is Alternative #4 "where No left turns allowed to exit site driveway onto Oak" still a consideration? It would make practical sense that left turns would cause delays in traffic flow.

Response:

Following Beta's analysis and recommendation, no restrictions will be placed on ingress and egress at the Oak Street entrance.

Councilor David Kalis questions:

1. If the key issue surrounding traffic on Needham St is the high rate of (70%) pass through traffic, what can we do in the short run and long run to reduce this traffic?

Response:

Commuter cut-through traffic has been a challenge to Needham Street and other feeder roads to Route 9 long before the use of GPS traffic tracking software. The problem will continue to get worse without greater reliance on alternate transit modes. This is what NND is committed to accomplishing with a concrete goal of reducing single occupancy vehicle trip generation.

2. Given the long list of mitigation that has been listed and the potential tremendous costs of these, has there been discussion with the developer and to what extent are they on board?

Response:

Thank you for understanding our extraordinary commitment to newton. We are very proud of our plans for NND that honor this once in a life time opportunity. Northland is fully committed to NND and will begin the development immediately upon obtaining permits. We plan to move our corporate headquarters to the historic Saco Pettee Mill.

3. A second traffic study was done by Ward 8 constituents who hired TEPP LC. One of their key findings was a need for a city-wide traffic study that incorporate not only Northland, but other developments that are in process. Have you seen this report? What are we doing to address this key finding? How can we better understand the complete nature of potential buildout vs one off developments?

Response:

Planning Department to Respond

4. Auto ownership in Needham and Newton has been high at 1.5+ cars per HH for some time (since 2010) indicating a low probability of people using transit. How realistic is it to expect new tenants to own just one car?

Response:

This statistic reflects predominantly single-family households and therefore is not indicative of the targeted population of NND.

Northland is totally committed to reducing automobile reliance at NND by providing the lowest parking ratio of any existing development in the suburbs, offering both door-to-workplace and 20-minute last mile frequency shuttle service, and agreeing to an aggressive performance goal for trip generation reduction. In addition, parking will be charged separately and will be expensive. And further, millennials are increasingly gravitating away from car ownership.

Finally, 128 Business Council has established and run successful shuttle routes for three decades in Waltham, Bedford, Lexington, and Needham – communities that have similarly high rates of car ownership. The combination of the introduction of viable alternative transportation options, route planning and monitoring by a team of dedicated professionals, in-house public outreach and consistent marketing, and shifting generational attitudes can both (a) invite new residents

open to relying on alternative transportation, and (b) produce a shift in behavior among some preexisting residents.

5. Given people can find lower priced housing and more convenient mass transit in Cambridge, Somerville or Medford, why would people move to Newton and then take a shuttle? Do we really need a shuttle to Cambridge?

Response:

The NND Cambridge shuttle not only serves residents commuting to Cambridge, it also serves Cambridge residents that work at NND. The Cambridge shuttle will provide door-to-door express service to Kendall Square and Central Square in comfort with WIFI service and dependable scheduling. If, after time, it is determined that the Cambridge route is not building ridership, then a route adjustment would be considered.

It is also worth noting that the stock of lower-priced housing in Cambridge, Somerville, and Medford is rapidly disappearing.

6. Given the location of the Northland project, it appears perfect for someone who works on 128. Why are there no plans for shuttle to businesses on 128?

Response:

We believe NND will appeal to professionals working along Route 128 as well as in Newton, Boston, Cambridge, LMA and Brookline.

Based on the available data sets (including traffic data, mode usage data, public transportation ridership, older commuter surveys, and 128 Business Council's more recent in-house origin/destination surveying), possible northbound destinations along Route 128 lack the origin/destination clustering needed to build a route. What this means is that, while there may be a lot of commuters currently traveling between Newton and destinations along Route 128, not enough of them are starting and stopping in adjoining locations.

However, as the NND Shuttle System manifests, it's likely that there will be opportunities to integrate our service into a broader network that would serve Route 128 office parks. The specific stops for future expansions can be informed both by (a) the surveying of shuttle riders and local non-riders in order to determine demand, and (b) the development of other new shuttle routes that might be connected to ours, which is in keeping with 128BC's historical operating model.

7. I have docketed an item to understand the add a lane impact on the City of Newton. It appears that traffic has increased in some areas and may be flat in others. In theory, what mitigation can actually be done post final work that makes a difference in traffic? Will we have the same issues with Northland - that once it is built, mitigation measures can only do so much?

Response:

Northland's commitment to a performance goal for limiting trip generation is unique and forward-looking. We will be able to monitor the success of our shuttle and then make modifications if results are not satisfactory. We will employ a variety of tools to help insure success. But the tool that would probably be most supportive of NND and most effective in animating the shuttles, would be a dedicated bus/shuttle lane.

Councilor Chris Markiewicz Questions:

Note: I understand that not all of these questions affect the granting of a permit, but they may be relevant to conditions included in the Council order or provide context to understand the requirements that the petitioner must address in order to sustain a viable project/investment

Housing:

1. We recently heard testimony (from a demographic expert consultant hired by our schools) that mixed age residential complexes are not for the most part attractive to the over-55 population. Do you have data that supports the opposite conclusion? Is it locally based?

Response:

The information from the demographer regarding mixed age residential was anecdotal, personal, non-New England, and not fact based. I would defer to the experts at the Council of Aging that have the complete opposite view.

Timeline:

2. I understand the timeframe from start to a full build out will be 5 years or more. Is this correct?

Response:

Please see attached Exhibit H for 5 Year Development Schedule

3. Given the timeframe, and understanding that plans can change for several reasons, including economic conditions, can specify which buildings/facilities will be delivered in specific years or at least group them into tranches with target dates? Noting any significant dependencies that could affect this would be appreciated

Response:

Northland is not phasing the project. Northland is investing only internal equity, which it has in hand. Given our long-term view, we have no intention of changing plans in light of near-term market changes or dislocation.

Our only condition precedent to breaking ground is closing a construction loan. Given our national reputation, the fact that we have borrower channel status with FNMA and a Freddie Mac Select Sponsor and have kept our lenders apprised of our progress, we expect to close the construction financing this year (assuming we get the permits in a timely fashion).

Please see attached Exhibit H for 5 Year Development Schedule

Transportation/Traffic

4. You have an objective of getting 40% of residents to use one of the 4 shuttles (daily?) to commute. Does this imply that there would be a pro-rata decrease in the number of cars parked onsite considering each unit's planned/traditional estimate of parking need?

Response:

We expect 40% to use alternative transportation, including the shuttle, the T (free annual T passes), the commuter rail (shuttle access), walking, and biking (and soon presumably scootering). Those numbers are factored into our parking count.

Just an additional clarification: There are three planned routes (the Newton Local serving Newton Highlands and Newtonville, the Boston Express, and the Cambridge Express), but there will be 8 dedicated shuttles needed to achieve the planned frequencies for these routes. See the slides from Monica G. Tibbits-Nutt's statement before the LUC on 4/9/19 (attached Exhibit G), esp. p. 8.

5. How will you remediate the situation if this 40% objective is not reached? My understanding of these types of arrangements is that the likelihood of success is often evident early on in the implementation. What kind of timeline(s) do you have to measure whether the objective is being achieved? How will you measure and report?

Response:

As outlined in the in the April 5th planning department memo, we have agreed to commit to a metric of performance regardless of method or resource used to achieve that goal using a basket of TDM measures, outlined in the TDM Workplan Exhibit H.

6. The price of one or more of the shuttles was shown at \$7 per ride. Are there plans for subsidies, volume or other discounts? For some shuttles, \$14 round trip plus additional costs for the next leg of transportation could be more than many can bear, even those who can pay 3k a month for rent. For others, the net difference in cost for driving may not be enough to motivate them to abandon the convenience (for the most part) of using a car.

Response:

See p. 9 of the slides from Monica G. Tibbits-Nutt's statement before the LUC on 4/9/19 (attached Exhibit G) for the proposed fare structure. The Newton Local is set at \$2.50, while the Boston Express and Cambridge Express are set at \$7.00. These rates are set to be competitive with the MBTA, with the latter comparable to the cost of the Commuter Rail, although the two express routes may prove more 'express' than either the Commuter Rail or the Green Line.

Yes, there are plans for multi-ride passes that will reduce the per-ride cost, as well as other forms of potential subsidies.

We anticipate there being two distinct audiences for the Boston and Cambridge Express routes:

(1) Riders who are living a car-free or shared-car lifestyle, for whom the shuttles are an opportunity to avoid using TNCs (like Uber and Lyft) and who will appreciate the more dependable and more direct service as compared to other public transportation options.

(2) Riders who do own a car but are making the choice to take the shuttle for the sake of comfort and reduced hassle. 128 Business Council has found through both anecdotal and survey research that many drivers do not actually view driving their single-occupancy vehicles

as convenient. In fact, they have an established ridership on their preexisting routes of commuters who own vehicles but self-report that they prefer taking a shuttle, because it allows them to reclaim the time they would have spent driving (since they can work or engage in entertainment on the shuttle), reduce stress, and avoid the hassle of parking. These potential benefits will be a major part of the shuttle system's marketing.

7. Can you make all shuttles electric and require any ride share that is allowed on the property to be electric?

Response:

Unfortunately, electric buses are not viable for most shuttle systems at this time. 32-passenger buses such as the ones we will employ must be charged at more frequent intervals than must an electric car and would require charging at irregular intervals when sitting in dense traffic. The Commonwealth currently lacks the electric charging infrastructure to use electric vehicles on longer trips (such as the Boston and Cambridge Express routes), and frequent charging would also reduce service frequency and prevent schedule reliability on the shorter Newton Local route. It is our hope that alternate fuel vehicles will become more viable in time. 128 Business Council is well-apprised of state and national standards and projections in this regard and will make fleet upgrade recommendations as they become feasible.

Finances:

8. Can you provide an estimate of what the rental rates will be for both market and affordable rate units?

Response:

We do not yet know the market rate pricing and we are 5 years out. Attached (Exhibit J) is a schedule of typical affordable rents, income levels, and a comparison of salaries for teachers, police, and fire professionals in newton.

9. Can you provide an estimate/range for the rental of office space?

Response:

The office space will be best in class. Our consultant is currently contemplating mid 40s per square foot. We believe it will be substantially higher. Northland will take approximately 25% of the mill space for our headquarters.

10. Is there a minimum amount of residential units and total square footage below which the project is financially unattractive to investors and financiers of the project? I do understand that this may not be something you wish to disclose in any detail, and I appreciate the reasons for that, but my intention is to balance the scale of this which concerns many due to the unknowns regarding impacts on traffic and other factors, it would be helpful to have some sense here.

Response:

Northland does not take investors in our development projects. The funds are internal. As noted above, Northland made a massive concession early in the process to place 1,054 parking spaces underground. That was the recommendation of the peer reviewer and planning and we agree. It will set up NND as a national model of permeability and connectivity and open space. That change along with the open space, the seven fully programmed parks, the community building, the community playground, the mobility hub, the shuttle, the all age friendly building, the I and I contribution, the traffic contribution and the school contribution leaves us at the threshold of financial viability.

11. Do you have plans to securitize this property (e.g. a REIT) ?

Response:

No. Northland has never sold a development and we are certainly not going to sell or securitize this crown jewel in our home town.

12. While I hear from many sources that we need housing and more of it everywhere, I also have been hearing from some local landlords of smaller (multifamily) properties that they can't rent their units. Are you aware of this and although anecdotal, does this reflect a move towards the type of complex you are planning to create or is the rental market in Newton showing signs of softening?

Response:

Northland owns and operates more than 25,000 units throughout the country. The market is Stable and firm, at 95% occupancy. That anecdotal information does not match our experience.

Other:

1. Will you commit to meet on a regular basis (your representative, not a resident designee) with the neighborhood association(s) to review status of implementation of the various programs that will benefit or issues that are negatively impacting the local neighborhood and seen as being caused by Northland either during construction or after completion? Can you explain how you would have to be accountable to address true adverse conditions cited by the association rather than just acknowledging them without being able to address them in a satisfactory manner. (not trying to be flip, just want to see how this is considered and understanding that our inspections dept. has some authority here as well)

Response:

Yes. We have attended hundreds of meetings and met thousands of residents. I believe that all would agree (residents such as Jack Neville specifically) that even when we disagree, we are respectful, honest and direct. We want to be a great neighbor. We believe NND will knit Upper Falls, Newton Highlands, and Oak Hill back together in the most amazing and beautiful way. We know change is hard. But we believe when residents see the fruits of our labors, they will enjoy them immensely.

We anticipate owing NND for ever (whatever that actually means) and will meet our neighbors, listen to them and respond in a constructive way, if at all possible.

Chief Planner Jen Caira Questions:

Documents to be provided:

1. Information on new shuttle route and numbers of total seats during peak hours
2. Revised shared parking plan
3. Additional peak parking demand information for December
4. Updated traffic generation numbers
5. Historic Shuttle data from other 128 Business Council services or routes– ideally case study of an existing development that is being served by their shuttles; ridership trends on services provided over the last three years; provide examples of how they have adjusted services in response to demand at the companies they serve.
6. Annual (or phased?) TDM work plans from first occupancy through full occupancy. This should be as detailed an outline as possible at this point.

Updated 4.19.2019 From J Caira: (Redundancies omitted)

7. Provide mode share and internal capture trip generation adjustment calculations; this should be as detailed as possible and should serve as an example of how changes in mode share will be reported to the Planning staff.
8. Approach, as detailed as possible, on managing TNC operations (see attached link on how Uber plans to enter the shuttle bus market.) <https://www.geekwire.com/2019/uber-sees-rapid-adoption-new-bus-service-recruits-high-capacity-vehicles-team-seattle/>
9. Approach to conducting the annual transportation surveys: methodology; sample size; how will they ensure a representative sample; what kind of tabulations will they run; how will it be administered; sample questionnaire.

Responses to Councilor questions, including:

10. Will there be age restrictions on the shuttles?
11. Where will the shuttles stop? Will they (should they) stop at places like the library, YMCA, Boys and Girls Club, Senior Center, etc.?
12. How are the shuttles counted in the trip generation?
13. What will the pricing be for the shuttles and what control will there be over time?
14. How will the shuttle system be phased?
15. What will the travel time be for shuttles during rush hour?
16. Can electric shuttles be utilized?
17. How will the parking garages be designed and operated to improve efficiency (red and green lights over available spaces, etc.)?
18. What will be the impact of Waze on the neighborhoods?
19. How did they come up with ridership numbers? What examples show the riders will come?
20. What percentage of people are expected to live and work on site?
21. How will the surveys be administered and what sort of data is expected?

VHB's Responses to the comments received on April 3, 2019, from BETA Group:

Trip Generation Comment

1. In Table 2 – Project Trip Generation – ITE Unadjusted Vehicle Trips, the weekday morning peak hour unadjusted vehicle trips is shown as 668 trips. BETA has calculated the number of unadjusted vehicle trips in the weekday morning peak hour to be 592 trips. Please confirm and recalculate Build Condition vehicle trips.

Response:

VHB rechecked the calculations for the Build Conditions unadjusted weekday morning vehicle trips and has confirmed that number to be 668 vehicle trips. The unadjusted vehicle trips are based on the ITE land use code regression equations for each proposed land use. The ITE trip generation worksheets for each land use are included in the Attachments to this memorandum.

2. Please provide the mode share and internal capture trip generation adjustment calculations.

Response:

The mode share and internal capture trip generation adjustment calculations are included in the Attachments to this memorandum.

3. In Table 8 – Project-Generated Peak-Hour Vehicle Trips by Use – Build Condition with Robust Shuttle Service, the vehicle trip numbers under the residential, office, retail, and pass-by columns are not correct. They are the same numbers shown in Table 6 – Project-Generated Peak-Hour Vehicle Trips by Use – Build Conditions with Existing Mode Share. The numbers in this table should be updated.

Response:

Table 8 has been updated with the correct numbers for residential, office, retail, and pass-by vehicle trips based on the Robust Shuttle service scenario and is provided below:

Parking

1. Please provide the shared-parking calculations by hour for both weekday and weekend.

Response:

The shared-parking calculations for both weekday and weekend for the month of December are included in the Attachments to this memorandum.

The following is a summary comparing the proposed project parking spaces by use with the MBTA/MassDOT Transit-Oriented Development Policies and Guidelines.

- The 800 residential spaces (1 space/unit) meet the MBTA/MassDOT TOD guideline of 0.75-1.5 spaces/unit.
- The 149 retail spaces (3 spaces/KSF) meets the guideline of 1.5-3.0/KSF.
- The 245 restaurant spaces (6.1 spaces/KSF) exceed the retail guideline of 1.5-3.0/KSF. However, the guidelines do not break out restaurants.

- The 51 medical office spaces (3.4 spaces/KSF) exceed the office guideline of between 1.0 and 2.5 spaces/KSF. However, medical office parking demand is typically higher than general office use.
- The 38 health club spaces (3.8 spaces/KSF) exceed the retail guideline of 1.5-3.0/KSF, but not significantly so and they are relatively few spaces.
- The office use has 298 spaces with a rate of 1.7 spaces/KSF, which meet the guidelines between 1.0 and 2.5 spaces/KSF.
- The proposed 1,550 parking spaces will meet demand, except for the peak December shopping season (1,596 vehicles). The option to use a portion of the residential spaces for shared-parking, if needed, appears reasonable.
- Overall, the proposed 1,550 parking spaces appear adequate to accommodate parking demand for the mix of land uses in a shared-parking operation.