To: Planning Board
From: Community Development Department (CDD) Staff
Date: August 28, 2020
Re: Srinivasau, et al. (AOD-1) Zoning Petition

Overview

Petitioners: Arvind Srinivasau, et al. (group of at least 10 registered voters)

Petition: To amend Section 20.90 of the Zoning Ordinance to modify the provisions of the existing Alewife Overlay District 1 (AOD-1), also referred to as the Quadrangle Northwest. A proposed new Section 20.95.5 would allow increased building height and Gross Floor Area (GFA) exemptions in AOD-1 by Planning Board special permit, provided that certain conditions are met. Revisions are proposed to the current Section 20.95.11.1, which grants additional Floor Area Ratio (FAR) to projects that include public improvements throughout the Alewife Overlay Districts.

Context: The Petition is substantially similar to a petition filed by David Navia, et al. in September 2019 and heard by the Planning Board on October 22, 2019 and December 17, 2019. The Planning Board did not issue a recommendation but raised several issues for further consideration. The Ordinance Committee of the City Council also held a hearing on October 23, 2019, which it concluded by keeping the Petition in committee without making a recommendation. The petition expired on January 21, 2020 with no action by the City Council. As before, the Petition is being presented by representatives of the development company Cabot, Cabot and Forbes (“CC&F”), an owner of land along Mooney Street in AOD-1.

Summary: The overall concept of the current Petition remains the same as the Navia, et al. petition. Substantive changes have been included following discussions between CC&F representatives and City staff in response to comments made by the Planning Board. Additions include references to the Alewife District Plan, revised standards for flood resilience and for the design and use of ground floor commercial spaces, and Master Plan review provisions.

Report: This memo focuses on the substantive changes in the current Petition as they relate to outstanding issues from the review of the previous petition. Detailed comments on the zoning text are not included, but staff would provide a thorough text review based on the Board’s recommendations. Attached to this memo are the two previous staff memos from the original petition, which contain relevant background information related to the proposal.
Planning Board Comments on the Original (Navia, et al.) Petition

Many Planning Board members were amenable to the original petition in concept, but members expressed some concerns about aspects of the proposal. The following list summarizes some of the outstanding issues raised during hearings on the original petition:

- **Master Plan Review:** The Board asked for a clear and delineated master plan development review process that is explicitly written in the zoning text.

- **Alewife District Plan Conformance:** The Board asked the Petitioners’ representatives to demonstrate that the Alewife District Plan is addressed comprehensively and that the proposed zoning would fully enable the outcomes envisioned by that plan.

- **Light Industrial Uses:** Board members preferred to see that more than 50% of the ground floor be devoted to light industrial uses, since that is a crucial component of the Alewife District Plan.

- **Rooftop Mechanical Equipment:** Board members asked the Petitioners’ representatives to respond to neighborhood concerns about the added height and bulk from mechanical equipment if laboratory uses are proposed with an 85-foot building height.

- **Parking:** The Board asked the Petitioner’s representatives to consider codifying the Alewife District Plan’s recommendations for stricter parking requirements (e.g., no parking minimums, low parking maximums), enhanced transportation demand management (e.g., charging end-users for parking to reduce incentives to drive), improved bus service, and new infrastructure connections.

- **Tree Canopy and Open Space:** Noting the area’s high area of impervious surface and limited tree plantings and open space, the Board asked for clearer expectations for increasing tree canopy, permeable area, and publicly usable open space per the Alewife District Plan recommendations.

- **Analysis of All Properties in the AOD-1 District:** As significant property owners in the district, CC&F has demonstrated how the Petition would impact their development plans; however, the Board asked for an assessment of how other properties in the AOD-1 would be affected.

Staff Discussions

CC&F representatives and City staff have met several times since the December 2019 Planning Board meeting to address comments made by the Board. Staff have reviewed and commented on the substance of the revised Petition, which now includes a master plan development review process, more explicit references to the Alewife District Plan, and stricter provisions for the design and use of ground floor for light industrial spaces. Staff did not provide specific language edits to the Petition, and if the Planning Board were to make a favorable recommendation, staff would suggest that the Board request a careful review of the text by City staff to suggest improvements for clarity and consistency with Cambridge’s established zoning practices.

Staff also had some initial discussions with CC&F about site design issues that would need to be considered more carefully if the zoning were adopted, including open space, street design, and mobility.
Because the Board’s review is currently focused on zoning rather than site design, design comments are not included in this memo. However, staff will be available to discuss any issues or answer any questions from Board members on those topics.

Comments on the Revised Petition

Refer to the table in Appendix 1 for a comparison summarizing the zoning requirements under the current AOD-1 zoning, the Alewife District Plan Recommendations, the Navia, et al. Petition from 2019, and the current zoning Petition.

Special Permit for Additional Height

As with the original petition, this Petition proposes allowing building heights up to 85 feet in AOD-1, by Planning Board Special Permit, for non-residential buildings that receive an FAR increase in exchange for providing a public pedestrian/bicycle crossing of the railroad separating the “Triangle” and “Quadrangle” areas, as allowed by current zoning (Section 20.95.11). The Petition includes explicit language indicating that the lower building height limits in proximity to Residential and Open Space zoning districts would remain in effect by referencing Section 20.95.2(1)a.

As with the original petition, the Petitioner’s representatives provided the rationale that for a viable commercial development to fully utilize the FAR bonus for building such a railroad crossing – which effectively allows an increase in FAR from 1.50 to 1.75 in this district – additional height is needed. Given modern typologies for office/lab buildings, the current non-residential height limit of 55 feet would limit such development to 3 stories, which makes it difficult to achieve an FAR higher than 1.5 when considering site constraints such as open space, setbacks, and circulation. Increasing the allowed height to 85 feet would enable 5-story development with 4 stories of office/lab use above a ground story of light industrial/retail uses.

In addition to providing public improvements per current zoning requirements, the two main special permit criteria for allowing the proposed additional height relate to the design and use of the ground floor and the incorporation of flood resilience measures. Both criteria were included in the original petition, but significantly more detail is provided in the current Petition.

- Criteria: Design and Use of Ground Floor

To be eligible for the additional height, ground-story uses would be limited to light industry and/or consumer-facing businesses that have a predominant floor-to-floor height of at least 20 feet. The original petition allowed a wider range of ground-story uses and did not specify the exact story height. These changes were made after discussion with CDD staff on how to bring the Petition closer in alignment with the recommendations of the Alewife District Plan, which prioritizes space for businesses that offer low-barrier-to-entry jobs with living wages. A specific recommendation for the Quadrangle is, “[d]esign light industrial buildings with double-height ground floors for fabrication space and appropriate floor plate depths on the upper floors to accommodate commercial uses, such as office and research and development.”
Light industrial businesses often occupy spaces taller than 20 feet, but staff does not recommend an exact height because different types of spaces could be suitable for different businesses. A review of available information found that a 24-foot clear height (or 28-foot floor-to-floor height) is about average for light industrial uses, but there is wide variation. A 20-foot minimum may be sufficient in some cases, but it would be important to review building designs in more detail to determine their suitability for the intended uses. The Board may consider minimum height standards other than 20 feet; in any case, it would be advisable to allow for flexibility in the approval process and to require that the Planning Board make more qualitative design findings to ensure that the desired uses will be accommodated.

The Petition also specifies that the ground story will be “used predominantly” by light industrial uses and/or consumer-facing businesses, though it does not set a minimum area or percentage requirement. For comparison, a previous version of the petition required “at least fifty percent (50%) of the building’s ground floor” be devoted to these uses. The Alewife District Plan recommends devoting the ground story of buildings in the light industrial zone to this category of use, assuming that the lower-value light industrial ground stories will be cross-subsidized by higher rent-generating commercial spaces above (such as offices and laboratories). It is important to ensure that the ground-story space meets the Plan’s objectives in exchange for the additional height, although, in practice, some ground-story space will need to be reserved for entrances/exits, lobbies, circulation, utilities, loading, and other functions serving upper-story uses or the building as a whole. To clarify, the proposed language of the Petition could be amended to require the Planning Board to make a finding that the ground story is exclusively devoted to light industry or consumer-facing businesses as recommended in the Alewife District Plan except to the extent that accessory ground-story spaces are necessary to serve other uses in the building.

- **Criteria: Flood Resilience**

  The Petition requires a building’s ground story finished floor elevation to be at or above the projected 2070, 10-year sea level rise/storm surge flood elevation, provided that the ground floor elevation is not higher than four feet above the mean existing grade. The Petition also allows the height of the building to be increased commensurate with the difference between the ground floor finished floor elevation and the mean existing grade. This provision is consistent with the recommendations of the Alewife District Plan and guidance developed by the Community Development Department (CDD) and the Department of Public Works (DPW) through the City’s Climate Change Preparedness and Resilience planning initiatives. The only additional consideration is that the City’s flood risk planning is an ongoing process, and any development proposal should adhere to the most up-to-date standards promulgated by the City at that time.

**Special Permit Exempting Gross Floor Area (GFA)**

Similar to the original petition, the Petition proposes allowing a GFA exemption for specified uses in AOD-1 by Planning Board special permit. The current Petition would allow the exemption only for
ground-story spaces occupied by light industrial uses and/or consumer-facing businesses that have a predominant floor-to-floor height of at least 20 feet, while the original petition allowed the exemption for a wider range of uses, including local government uses, amenity uses, and collaboration uses. The provisions as currently proposed are more consistent with the Alewife District Plan, which recommends such a GFA exemption to incentivize the creation and preservation of a light industrial district in AOD-1. The proposed exemption is intended to work in tandem with the increase in allowable height to achieve this goal.

Master Plan Development Review Process

At its hearing in October 2019, the Board expressed uncertainty about how the development review process would proceed given CC&F’s stated intent to pursue a phased, multi-site master plan development. In response, Board members asked for the review procedures to be explicitly written into the zoning text. The Petition includes a new section, Section 20.95.52, that creates an AOD-1 Master Plan Special Permit with required plan submissions similar to recent PUD zoning language for areas such as the Volpe site and CambridgeSide. However, because this is not a PUD zoning district, development review would not follow all of the PUD procedures in Article 12.000.

This approach would provide an opportunity to review large-scale site planning issues such as circulation and arrangement of structures and uses through a special permit process and to approve a phased development plan, with individual sites subject to more detailed review over time. This type of permitting also provides a mechanism for public improvements, such as those envisioned in the Alewife District Plan, to be incorporated into the development phasing.

The Petition includes applicability criteria, as well as a list of required application items and specific criteria that the Planning Board would use in its review. CC&F worked with staff to develop the current language and the approach is supported in general, but staff would suggest improving the following elements:

• Include the locations and conceptual designs of streets and open spaces explicitly in the submission requirements, including cross-sections and elements such as paving, plantings, grading, and other major site features;
• Specify that the Phasing Plan should include the timing of the design and construction of all project elements, including buildings, landscapes, streets, and utilities, as well as the timing for completion/conveyance of the associated public infrastructure;
• State more explicitly that general conformance with the recommendations of the Alewife District Plan (referring to Section 20.95.53) is among the criteria for Planning Board approval;
• Authorize the Planning Board to establish parking maximums, in addition to other limitations on approved development through the conditions of a special permit; and
• Explicitly reference improvements to streets and other public spaces within the area of development in the review criteria.
The Master Plan Special Permit would be required for projects that are over three acres and contain three or more new buildings. In effect, this is an optional requirement because the property owner would have the discretion to choose the size and extent of the development parcel for any application. This is not necessarily a concern, because it would likely be advantageous for both the developer and the City to permit the project as a phased development under one special permit. If there is a desire to make the requirement more strict, language could be included similar to that in PUD districts requiring that a development parcel include some minimum percentage of all land under common ownership or control within the district as of the time of rezoning.

The current Petition also adds a provision to the AOD-1 Master Plan Special Permit Review Criteria stating, “[m]aximum height of off-street parking facilities shall not apply.” Structured parking is normally subject to the same height and other dimensional standards as other buildings in a given zoning district, so it is unclear what the intended effect of the proposed change might be.

In the Alewife Overlay Districts, current zoning allows above-grade structured parking to be exempt from FAR limitations (Section 20.97.3). The Alewife District Plan’s approach is to retain the FAR exemption so long as the parking structures are screened from public view by wrapping them with active uses, such as retail, residential, office, or other occupied space. Preliminary plans shown by CC&F follow this recommendation, though it is not a part of the Petition except to the extent that it generally references the Plan. The Alewife District Plan also recommends covering structured parking with a landscaped deck with plantings to minimize the urban heat island effect and reduce stormwater runoff, which is not reflected in the Petition or shown in preliminary plans.

Conformance with Alewife District Plan

One of the strongest concerns expressed by the Planning Board, as well as by staff and some members of the Ordinance Committee, was whether the original petition followed the recommendations of the Alewife District Plan. The Petition includes a new Section 20.95.53 that explicitly requires the Planning Board to make findings that the development proposal is generally in conformance with the Plan. This new section references the Plan’s objectives, criteria, and guidelines, and calls out certain sections of the Plan, but does not set forth strict requirements that the development proposal must meet.

The Board may find that the approach of referencing the Plan and having the Board make a finding of general conformance provides clear enough guidance for the review of a development proposal while allowing flexibility to make case-by-case determinations. In this case, it would be important to make explicit that each of the special permits proposed in the Petition would only be granted if the Board makes a finding of conformance with the Alewife District Plan.

An alternative approach would be to more explicitly call out relevant recommendations of the Plan, either as review criteria or prescriptive requirements for which the Board could approve modifications during the review process. That approach may promote stronger adherence to the Plan as it is currently formulated but could constrain the Board’s ability to account for unforeseen challenges and adapt to changing circumstances. If the Board prefers this approach, staff would work to develop zoning language that could be included with the Board’s recommendation to Council.
To consider this issue more fully, staff have compiled a list of specific components of the Alewife District Plan that are particularly relevant to this proposal. Some of these sections are cited in the Petition:

- **Land Use Recommendations** (pages 103-107) promote a transition to a moderate-density residential pattern of development in the western part of AOD-1 and in the southwest corner of the Quadrangle, adjacent to the Cambridge Highlands neighborhood, while maintaining light industrial/commercial use elsewhere in the subdistrict. The plan also promotes a “green buffer” on the western edge of the Quadrangle between residential and commercial areas. These recommendations are not addressed in the Petition, and the AOD-1 zoning (current and proposed) could allow outcomes that are inconsistent with this overall land use plan. As a result, the Petition may result in more commercial development than anticipated by the plan.

- **Open Space Recommendations** (pages 112-113) set expectations for the amount, location, and types of open space on a lot and within the district as a whole, including a recommended increase in the minimum Open Space Ratio on a lot from 15% to 20%, guidelines for creating large contiguous open spaces in the interiors of blocks, and standards for shade tree planting along public streets.

- **Urban Form Recommendations** (pages 118-123) set standards for street cross-sections (e.g., sidewalks, elevated walkways at the ground floor level, street tree plantings) and building façades (e.g., building breaks every 200’ or as otherwise appropriate, calibrating building front setbacks to anticipated future street conditions). The Petition mentions the ability to waive existing front yard standards, which is necessary to enable the outcomes recommended in the Plan, but it does not include these recommendations except by referencing the Plan in general.

- **Mobility Recommendations** (pages 128-129) include eliminating minimum parking requirements and setting stricter maximum parking limits, enhanced transportation demand management (e.g., charging end-users for parking to reduce incentives to drive), improved bus service, and new infrastructure connections. The Petition references eliminating parking minimums, which is necessary to achieve the Plan’s objectives, but does not address maximum limits.

- **Climate and Environment Recommendations** (pages 134-143) include strategies for flood resilience as well as increased open space and tree planting as well as investigation of the potential for district energy systems. Although flood resilience is included in the criteria for additional height, these other resilience measures are not explicitly mentioned.

- **Housing Recommendations** (pages 144-147) promote incorporating a diverse range of housing options for different households and lifestyles, including townhouses and multifamily residential buildings; increasing housing affordability by introducing a range of price points; minimizing the impact of new development on adjacent residential neighborhoods; promoting mid-density residential uses and open space to buffer existing residential neighborhoods, such as Cambridge Highlands, from commercial and industrial uses; and encouraging energy efficiency and renewable energy use in new development. These recommendations are not identified in the special permit criteria except by reference to the Plan in general.
• **Economy Recommendations** (page 148-153) focus on balancing the growth of office and laboratory development with light industrial and retail uses to create economic opportunity for a diverse range of businesses, including those that provide low barrier-to-entry jobs, while still creating a local sense of place. The types of businesses envisioned for Alewife include light industrial businesses (e.g., medical equipment manufacturing, furniture fabrication, commercial food production) as well as community-focused businesses that require light industrial space (e.g., athletics, entertainment).

The Petition would also require development proposals seeking an AOD-1 Master Plan Special Permit to contribute to a transportation infrastructure fund equal to $5 per square foot of new commercial GFA, which is a recommendation of the Alewife District Plan. However, the contribution would not be required for projects receiving an FAR bonus for the construction of a pedestrian bridge connection across the railroad right-of-way. This exception creates some confusion around the circumstances and amounts of future contributions, which is also discussed in the following section.

Finally, a set of “Alewife Design Guidelines” have been in development based on the recommendations of the Alewife District Plan. The Planning Board reviewed these guidelines in draft form and provided comments. Although they are not yet finalized, the design guidelines would be an important part of the review process for any future development in the area.

**Additional FAR for Public Improvements**

The Petition also proposes amendments to Paragraph (1) of Section 20.95.11 in current zoning (referred to as “Section 20.95.11.1”), which grants additional FAR to projects in several Alewife Overlay Districts in exchange for public improvements. The height increase and exemption of GFA for ground-floor spaces proposed by the Petition are intended to work in tandem with this current paragraph, which allows an additional 0.25 FAR “bonus” for the lot in exchange for furthering the development of a publicly-accessible pedestrian/bicycle crossing of the rail line between the Quadrangle and Triangle areas.

The proposed changes to Section 20.95.11 were not included in the original petition but were introduced in a revised version in December 2019. It is assumed, but should be clarified, that the Petition would only replace the current Paragraph (1) with amended language and that Paragraph (2) of Section 20.95.11, which allows separate density bonuses for dedication of land for public streets and open space, would remain unchanged by the Petition.

The current zoning specifically allows the FAR bonus for projects that include the construction of the aforementioned rail crossing or incorporate structural elements into a building’s design that would permit future construction, along with the conveyance to the City of property interests that would permit access.

The revised Petition language appears to make two substantive changes, first by allowing the FAR bonus for the conveyance of property interests alone (without construction or integration of the structure into a building), and second by allowing the FAR bonus for “contribution of significant funds and/or services toward the construction, ongoing operation, maintenance, or repair of such a pedestrian bridge connection(s) and/or access thereto.” This provision would allow property owners in AOD-1 to benefit
from the FAR bonus (and, in turn, the increase in height and exemption of certain ground floor spaces) by making financial contributions after a crossing has been constructed; however, it could also be interpreted to authorize the FAR bonus for financial contributions without any actual development of the crossing. There are no specific contribution amounts required to qualify for the bonus. Staff has concerns with this approach because it results in less clarity around what public benefit would be provided in exchange for the FAR bonus, and would suggest retaining the current language or recommending that the City study the issue further.

The Petition would also expand the set of Alewife Overlay Districts in which a pedestrian/bicycle rail crossing could be located to include the Quadrangle Northwest District. Both the previous Concord-Alewife plan and the more recent Alewife District Plan envision a bridge further east in the Quadrangle, which would benefit more of the area. At hearings on the original petition, Board members and the Ordinance Committee debated the usefulness of a bridge in the Quadrangle Northwest District, given its distance from the Alewife T station and the eastern portions of the Quadrangle. It was noted that a bridge in the Quadrangle Northwest District does not preclude the construction of a second crossing further east. Section 20.95.11 would remain in effect as an incentive for other property owners to contribute to an additional crossing further to the east.

**Concluding Considerations**

The Petition, in its revised form, better reflects the recommendations of the Alewife District Plan by tying the increase in allowed height and density to the intended outcomes in the “Quadrangle Light Industrial” area, by setting forth a more detailed review and approval process, and by explicitly referencing the Plan as part of the review and approval criteria. The following is a summary of overarching issues for the Board to consider in forming its recommendation:

- What are the advantages of recommending an immediate zoning change focused on this Alewife subdistrict, compared to the alternative of a more comprehensive re-zoning that would encompass the entire Alewife area and incorporate more of the Alewife District Plan’s recommendations but likely take more time?

- How exactly should the Alewife District Plan be integrated into the zoning and development process? The proposed approach references the Plan in general and specific sections of the Plan as part of the criteria for review and approval, which would give the most latitude to the Planning Board to interpret the Plan in relation to a detailed proposal. Would it be preferable to more explicitly reference individual Plan recommendations (as discussed further in the memo above), or to include more prescriptive requirements?

- Does the Board support applying the proposed incentives for commercial development throughout the AOD-1 district, given that the Alewife District Plan recommends that a portion of that district transition to predominantly residential use in the future?

- Are the proposed amendments to the current FAR bonus for a pedestrian/bicycle rail crossing sufficiently clear and supportive of the City’s objectives? Is there a potential for unintended consequences elsewhere in the Alewife Overlay Districts as a result of these changes?
Continuing Revisions

If the Board recommends adoption of the Petition, in addition to any recommended substantive changes, staff suggests that the Board explicitly instruct City staff to review the text and suggest editing improvements for clarity and consistency with Cambridge’s established zoning practices.
Appendix 1

Comparison of Current AOD-1 Zoning with the Alewife District Plan and the Petition

|--------------------|---------------|---------------------------------------|-----------------------------|----------------------------------|
| Maximum FAR (note comparison in underline) | • 1.50 for all uses  
• 1.75 with construction of a publicly accessible ped/bike connection across railroad  
• Bonus for conveyance of roadway segments, pedestrian paths, public parks, other public space | • 1.50 for all uses  
• 1.75 with construction of a publicly accessible ped/bike connection across railroad  
• Bonus for conveyance of roadway segments, pedestrian paths, public parks, other public space | • 1.50 for all uses  
• 1.75 with construction of a publicly accessible ped/bike connection across railroad  
• Bonus for conveyance of roadway segments, pedestrian paths, public parks, other public space | • 1.50 for all uses  
• 1.75 with construction, conveyance of property interests, or financial contributions toward a publicly accessible ped/bike connection across railroad  
• Bonus for conveyance of roadway segments, pedestrian paths, public parks, other public space |
| Uses Eligible for GFA Exemption (note comparison in underline) | • Above-ground structured parking  
• Light industrial uses and certain consumer-facing businesses at ground story | • Above-ground structured parking (with additional design criteria)  
• Range of ground-story uses including existing AOD tenants, “Amenity Uses” (day care, retail, recreation), “Collaboration Uses” (co-working office, product development, fabrication and testing, artist studios, maker spaces), uses providing low-barrier-to-entry jobs, community spaces | • Above-ground structured parking  
• Local government uses  
• Range of ground-story uses including existing AOD tenants, “Amenity Uses” (day care, retail, recreation), “Collaboration Uses” (co-working office, product development, fabrication and testing, artist studios, maker spaces), uses providing low-barrier-to-entry jobs, community spaces | • Above-ground structured parking  
• Light industrial uses and/or consumer-facing business at ground story with a predominant floor-to-floor height of at least 20' |
### Maximum Height (see map)

- **Current AOD-1**
  - 55’ – non-residential uses
  - 65’ – residential or local government
  - Up to 80’ – residential use with additional FAR for public improvements
  - Reduced to 35’ within 100’ of Residence or Open Space district
  - Reduced to 45’ from 100-200’ of Residence or Open Space district

- **Alewife District Plan Recommendations**
  - 85’ – all uses
  - Reduced to 35’ within 100 linear feet of a residential or open space district
  - Reduced to 45’ between 100-200 linear feet of a residential or open space district
  - Compensating height increase to elevate ground story to 2070 “protect” flood elevation, but no more than 4 feet

- **Navia, et al. Zoning Petition**
  - 55’ – non-residential uses
  - 65’ – residential or local government
  - Up to 80’ – residential use with additional FAR for public improvement
  - Up to 85’ – non-residential if utilizing additional FAR for public improvements (with special permit criteria)
  - Reduced to 35’ within 100’ of Residence or Open Space district
  - Reduced to 45’ from 100-200’ of Residence or Open Space district
  - Compensating height increase to elevate ground story to 2070 “protect” flood elevation, but no more than 4 feet

- **Srinivasau, et al. Zoning Petition**
  - 55’ – non-residential uses
  - 65’ – residential or local government
  - Up to 80’ – residential use with additional FAR for public improvements
  - Up to 85’ – non-residential if utilizing additional FAR for public improvements (with special permit criteria)
  - Reduced to 35’ within 100’ of Residence or Open Space district
  - Reduced to 45’ from 100-200’ of Residence or Open Space district
  - Compensating height increase to elevate ground story to 2070 “protect” flood elevation, but no more than 4 feet

### Minimum Open Space

- **Current AOD-1**
  - 15% Open Space
  - 25% Permeable Area (can be reduced by meeting stormwater performance standard)

- **Alewife District Plan Recommendations**
  - 20% Open Space
  - 25% Permeable Area

- **Navia, et al. Zoning Petition**
  - 15% Open Space
  - 25% Permeable Area (can be reduced by meeting stormwater performance standard)

- **Srinivasau, et al. Zoning Petition**
  - 15% Open Space
  - 25% Permeable Area (can be reduced by meeting stormwater performance standard)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setbacks</strong></td>
<td></td>
<td>Front – May be reduced by Planning Board to min. 15’, must be green area</td>
<td>Front – Establish “build-to” lines according to desired street cross-sections in plan</td>
<td>Front – May be reduced by Planning Board to min. 15’, must be green area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sides – May be waived by Planning Board</td>
<td>Side – None within 65’ of front lot line; 15’ minimum otherwise</td>
<td>Sides – May be waived by Planning Board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rear – May be waived by Planning Board</td>
<td>Rear – Intended to be green area</td>
<td>Rear – May be waived by Planning Board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25’ abutting Residential or Open Space district; must be green or permeable</td>
<td>Rear – Intended to be green area</td>
<td>25’ abutting Residential or Open Space district; must be green or permeable</td>
</tr>
<tr>
<td><strong>Required Parking</strong></td>
<td>Per base zoning:</td>
<td>Residential – 1.0 space/unit min. (no max.)</td>
<td>Residential – 0.25-0.75 space/unit</td>
<td>Per base zoning</td>
</tr>
<tr>
<td>(Minimum-Maximum)</td>
<td></td>
<td>Office – about 1.0-2.5 space/1,000 SF (varies by type and base district)</td>
<td>Office – 1.1 space/1,000 SF max. (no min.)</td>
<td>Master Plan approval process allows flexibility for reduced minimums</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lab – about 0.8-1.9 space/1,000 SF (varies by base district)</td>
<td>Lab – 0.8 space/1,000 SF max. (no min.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retail – varies by type and base district</td>
<td>Retail – 1.5 space/1,000 SF max. (no min.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industrial – 0.5 space/1,000 SF min. (no max.)</td>
<td>Industrial – 0.5 space/1,000 SF max. (no min.)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2

List of Maps Prepared by CDD

Alewife Overlay Districts (Map prepared by Brendan Monroe on August 10, 2020)

Building Height Limits Under Existing Zoning (Map prepared by Brendan Monroe on August 10, 2020)

Building Height Limits Proposed for AOD-1 – Srinivasau, et al. Petition (Map prepared by Brendan Monroe on August 24, 2020)
Building Height Limits Under Existing Zoning
Cambridge, Massachusetts

Map prepared by Brendan Monroe on August 10, 2020. CDD GIS C:\Projects\Zoning\Petitions\Srinivasau\AODZonesHeightsCurrent.mxd
Building Height Limits
Proposed for AOD-1
Srinivasau, et al. Petition
Cambridge, Massachusetts

The color scale represents the highest possible building heights allowed under current and proposed zoning. Please note that a special permit may be required to build to the limit in certain areas.

- The petition would allow a compensating height increase of up to four feet for buildings that are elevated for flood protection.
- Height limits that vary by type of use are labeled with a slash. For example, 35/45' indicates a 35-foot limit for non-residential buildings, and a 45-foot limit for residential buildings.
- Height labels separated by a hyphen (e.g., 120-230') indicate areas where the maximum allowed height is increased when certain conditions are met, such as under a special permit.
- This map represents a broad summary of detailed zoning requirements. Please refer to the Zoning Ordinance and the above-referenced zoning petition for full information on the types and sizes of buildings allowed, and for the exact locations of height limit boundaries.

Maximum Height Limit
- 35'
- 40'
- 50'
- 60'
- 70'
- 80'
- 85'
- 90'
- 105'
- 125'

Parkway Overlay height limits are not incorporated into the color scheme.
Appendix 3

List of Prior CDD Memos to the Planning Board Re: Alewife Quadrangle Northwest Overlay District Zoning Petition

Memo dated October 17, 2019

Memo dated December 10, 2019
To: Planning Board  
From: Community Development Department (CDD) Staff  
Date: October 17, 2019  
Re: Alewife Quadrangle Northwest Overlay District Zoning Petition  

Overview  
This zoning petition by David Navia, et al., would amend Section 20.90 to create a new section that modifies the existing Alewife Overlay District 1 (AOD-1), also referred to as the Quadrangle Northwest. This new Section 20.95.5 “Additional Quadrangle Northwest District modifications” would allow, upon granting of a special permit from the Planning Board, increased building height to a maximum of 85 feet and exemption of certain building floor area from Gross Floor Area (GFA) calculations provided that certain conditions are met. The stated intent of the new section is “to encourage landowners to retain existing Alewife Overlay District tenants, to attract similar tenants and other Amenity Uses to the Alewife area, to encourage the creation of space for Collaboration Uses, and to facilitate the provision of Local Government facilities.”  

The petition is being presented by representatives of the development company Cabot, Cabot and Forbes (“CCF”), which controls a large area of land in the district on both sides of Mooney Street. However, CCF is not the only property owner within the affected area. CCF has told CDD staff that the petitioners are Cambridge residents who use recreational facilities in AOD-1.  

Current Zoning  
The Alewife Quadrangle Northwest District (AOD-1) is one of six Alewife Overlay Districts (see map). The underlying base zoning in AOD-1 is Industry B-2 (IB-2), which generally allows light manufacturing, office, and some institutional uses as-of-right, and residential and educational uses by special permit from the Board of Zoning Appeal (BZA). The dimensional standards in IB-2 promote low-density development, with a maximum FAR of 0.75 and a maximum height of 35 feet. While there is a required 15-foot front yard setback, there is no open space requirement.  

The Alewife Overlay Districts are intended to allow a greater range of uses, with higher development densities and building heights, by special permit from the Planning Board if the development is found to be consistent with the planning and urban design objectives for the area. The special permit process allows greater flexibility in some development standards, such as setbacks, but requires greater amounts of open space and permeable area. There are also provisions for transfer of development rights (TDR) and incentives for public improvements such as roadways and pedestrian/bicycle connections. The planning and urban design objectives underlying the AOD zoning were established in the 2006 Concord Alewife Planning Study, described further below.
Proposed Zoning

The petition proposes adding a new section that modifies the dimensional regulations for non-residential buildings in AOD-1 by increasing the allowed height and exempting certain uses from the calculation of gross floor area (GFA) limitations. The table below summarizes the current overlay district limitations and the changes proposed by the petition. Maps are attached for reference, along with the full Alewife Overlay Districts zoning text.

<table>
<thead>
<tr>
<th>Zoning Limitations</th>
<th>Current AOD-1</th>
<th>Proposed AOD-1</th>
</tr>
</thead>
</table>
| **Maximum FAR**    | • 1.50 for all uses  
• 1.75 with construction of a publicly accessible pedestrian bridge connection across the railroad  
(+ additional FAR for conveyance of roadway segments, pedestrian paths, public parks or other public space) | • 1.50 for all uses  
• 1.75 with construction of a publicly accessible pedestrian bridge connection across the railroad  
(+ additional FAR for conveyance of roadway segments, pedestrian paths, public parks or other public space) |
| **Uses Eligible for GFA Exemption** | • Above-ground structured parking  
• Local government uses  
• Range of ground-floor non-residential uses including existing AOD tenants, “Amenity Uses” (such as day care, retail and recreation use types), “Collaboration Uses” (such as co-working office, product development, fabrication and testing, artist studios and maker spaces), uses providing low-barrier-to-entry jobs, and community spaces | • Above-ground structured parking  
• Local government uses  
• Range of ground-floor non-residential uses including existing AOD tenants, “Amenity Uses” (such as day care, retail and recreation use types), “Collaboration Uses” (such as co-working office, product development, fabrication and testing, artist studios and maker spaces), uses providing low-barrier-to-entry jobs, and community spaces |
| **Maximum Height (see map)** | • 55’ – non-residential uses  
• 65’ – residential or local government  
• Up to 80’ – residential use with additional FAR for public improvements  
• Reduced to 35’ within 100’ of Residence or Open Space district  
• Reduced to 45’ from 100-200’ of Residence or Open Space district | • 55’ – non-residential uses  
• 65’ – residential or local government  
• Up to 80’ – residential use with additional FAR for public improvement  
• Up to 85’ – non-residential use with additional FAR for public improvements, criteria for ground floors, and flood resilience *(Unclear if petition would maintain height buffers from Residence and Open Space districts; CCF has indicated that the intent is to maintain those buffers)* |
| **Minimum Open Space** | • 15% Open Space  
• 25% Permeable Area (can be reduced by meeting stormwater performance standard) | • 15% Open Space  
• 25% Permeable Area (can be reduced by meeting stormwater performance standard) |
Area Planning

The area of the petition has been the subject of multiple planning efforts. The current zoning was informed by and makes reference to the Concord Alewife Planning Study completed in 2005. However, a more recent study process for Alewife conducted as part of the Envision Cambridge comprehensive plan has refined some of the thinking for the future of this area.

Concord-Alewife Planning Study

The Concord-Alewife study divided the Alewife area into the “Triangle” along CambridgePark Drive, north of the Fitchburg Rail line, and the “Quadrangle” between the rail line and Fresh Pond Reservation. The Quadrangle was further divided into a “Shopping Center” district along Alewife Brook Parkway and four geographic quadrants covering the largely commercial/industrial area between the retail district and the Cambridge Highlands residential neighborhood. The Concord-Alewife plan envisioned the entire area transitioning to a mix of housing and commercial uses over time. In the Quadrangle in particular, the Concord-Alewife planning goals encourage the addition of housing, with a transition from lower-density development near the Cambridge Highlands neighborhood to medium-density development further to the east.

Other goals of the Concord-Alewife plan included managing traffic demand by supporting walking, bicycling and public transportation as alternative modes of transportation, promoting stormwater management, supporting neighborhood-focused retail near Alewife Brook Parkway, and allowing the retention of light industrial uses in areas near the active railroad line. A major urban design objective was to transition the area from an automobile-oriented character to a more pedestrian- and bicycle-friendly environment by activating streets, creating outdoor gathering spaces, and reinforcing connections to nearby open spaces.

The Concord-Alewife plan also identified desired infrastructure improvements to serve public goals, including a pedestrian/bicycle connection from the Quadrangle to the Alewife MBTA station, roadway connections to allow more flexible east-west travel without relying on Concord Avenue, enhanced bicycle and pedestrian connections throughout the area, and public open space to serve community-gathering functions in addition to stormwater management. As discussed earlier, the zoning provides development bonuses for providing key public infrastructure identified in the plan.

Since the completion of the Concord-Alewife Planning Study, much of the area has begun to transition from a predominantly commercial character to a greater mix of uses, particularly through the development of a large amount of multifamily housing in the Triangle, eastern Quadrangle, and other nearby areas. The total effect of this increase in housing is yet to be determined, since much of it is newly completed or is still under construction. More recently, the market for development has favored commercial laboratory and technical office space, which has been created through both new construction and the rehabilitation of existing commercial space. However, so far there has been little development in the section of the Quadrangle west of Smith Place and east of the Highlands neighborhood.
Envision Cambridge / Alewife Plan

As part of the Envision Cambridge comprehensive planning process, from 2016 to 2018, CDD staff and consultants engaged the public, including an Alewife Working Group made up of community stakeholders, to develop an updated set of planning goals and recommendations for the area. The key goal that emerged through this process was the creation of an identity and sense of place for the whole area in the following ways:

- Better integrate the district with the rest of the city through new walking and biking paths, streets, and open spaces;
- Ensure that both new development and existing infrastructure, neighborhoods, and community resources are prepared for climate change, particularly the impacts from flooding and heat;
- Encourage forms of development, a mix of uses, and a range of improvements that will facilitate and encourage walking, biking, and transit use and reduce the growth of vehicular trips;
- Ensure that new development benefits the adjacent residential neighborhoods by introducing new amenities and services and creating neighborhood destinations.

The more recent Alewife planning process shares many of the overall objectives of the Concord-Alewife planning study, such as transitioning from an automobile-oriented environment to one that encourages more pedestrian activity and sustainable modes of transportation. The Alewife Working Group continued to endorse key infrastructure improvements (e.g. a pedestrian/bicycle railroad crossing), enhanced bicycle and pedestrian connections to Alewife Brook Reservation and the retail district along Alewife Brook Parkway, and public open space; it also recommended retaining and strengthening zoning incentives that would promote such improvements.

In addition, the Alewife Working Group highlighted some issues and recommended some approaches that refine and expand upon the Concord-Alewife plan. For instance, the Alewife Working Group focused on the intersection between urban design and the projected impacts of climate change, based on the City’s Climate Change Vulnerability Assessment (CCVA), and recommended urban design approaches that aim to promote the area’s transition to a more pedestrian-friendly, mixed-use environment while still protecting against future flooding and reducing urban heat island effects. These strategies include elevating buildings while maintaining a pedestrian-accessible ground floor using elevated walkways, as well as continuous tree plantings and shade canopies along street frontages and more contiguous planted open space in the interiors of blocks. These approaches continue to be refined by the ongoing work of the City’s Climate Change Preparedness and Resilience (CCPR) planning and the Climate Resilience Zoning Task Force (CRZTF). Some approaches for this particular area are outlined in the Alewife Preparedness Handbook.

Particularly relevant to this zoning petition, the Alewife Working Group envisioned a more targeted land use strategy for industrial portions of the Quadrangle, which it identified as one of the last remaining districts in the city that accommodates certain types of light industrial uses. Light industrial businesses and community-based businesses that use light industrial space were prioritized in the planning process because they often pay relatively high wages with lower barriers to entry (such as minimum educational...
requirements), provide lower cost space, offer unique retail experiences, and preserve and expand the types of businesses that currently call Alewife home. Legacy businesses, such as Iggy’s Bread of the World, Gymnastics Academy of Boston, Central Rock Gym, Longleaf Lumber, and Anderson McQuaid, serve vital community functions as retailers, employers, amenity-providers, and community gathering spaces.

While the Concord-Alewife plan anticipated an eventual transition to housing, the more recent plan supports commercial development with light industrial space in the ground floors, which would require taller floor-to-ceiling spaces on ground floors and thus greater flexibility in total allowed commercial building heights. Such an approach would also require density incentives since the ground-floor uses would produce less revenue than new commercial office or laboratory space.

The Quadrangle is served by a busy regional roadway network, and the current Alewife plan recognizes that other modes of transportation will need to be increasingly relied upon as the area transforms. Because the shift to a more commercial development pattern raises concerns about additional traffic generation, the Alewife Working Group studied present and future transportation conditions to recommend new approaches to managing transportation such as limiting parking creation and promoting greater use of transportation demand management (TDM) programs in addition to building infrastructure for non-automobile modes of travel.

A final report from the Alewife component of the Envision Cambridge process is expected to be available in the near future. However, zoning recommendations developed through that process (as presented in May, 2018) can be downloaded from the Envision Cambridge web page, envision.cambridgema.gov.

Comments on Zoning Petition

The CCF team is knowledgeable about the recommendations of the Alewife Working Group and has incorporated aspects of the zoning recommendations from that process into the present zoning petition. The petition aligns with the Alewife Working Group’s recommendations in the following ways:

- **Building Heights.** The increase in allowed height to 85’ for commercial uses is consistent with the recommendations of the Alewife planning process, though the planning process stressed the importance of aggressive transportation policy and infrastructure improvements accompanying new commercial growth (detailed further below). This height increase is intended to enable the construction of commercial buildings with appropriately-scaled space for light industrial uses at the ground floor. The petition includes “greater floor-to-ceiling height than the average of the upper floors” as a criterion for approval but does not specify a height. The petition would only allow a height increase for projects utilizing a development bonus for key public infrastructure; this constraint promotes an important public planning objective but was not specifically recommended in the Alewife planning process.

- **Exemption for Ground-Floor Uses.** The Alewife planning process recommended exempting ground-floor spaces that are occupied by light industrial uses or similar businesses providing good-paying, low-barrier-to-entry jobs from the calculation of gross floor area (GFA) limitations. The GFA exemption and additional height allowance recommended in the Alewife planning process is intended to enable developers to provide these spaces without reducing the capacity for more
profitable commercial uses, such as offices and labs. The types of businesses envisioned for Alewife during the planning process include light industrial businesses (e.g., manufacturers of bikes, medical equipment, furniture, catering food companies) as well as community-focused businesses that require light industrial space (such as the existing tenants Gymnastics Academy of Boston and Central Rock Gym). To promote activation of the streetscape, the Alewife planning process encouraged these uses to include retail or “showroom” functions similar to what some existing businesses currently do. The petition proposes exempting a more expansive range of uses, which could result in more retail or similar community-serving establishments and fewer true light industrial businesses. There may be a rationale for incentivizing some additional uses; however, the range of uses that are eligible for such an exemption should be carefully considered and the basis for the Planning Board’s approval should be made as clear as possible.

The following topic is addressed in the petition, but not in as much detail as in the Alewife zoning recommendations:

- **Flood Resilience.** The petition includes a criterion that buildings be “Flood Resilient,” defined as “designed for the projected 2070, 100-year precipitation-driven flood elevation.” In principle, this is similar to the Alewife zoning recommendations for the Quadrangle except that the flood elevation datum should be based on projected sea level rise and storm surge, which is generally higher than precipitation-driven flooding. More specifically, the recommended Alewife zoning standard is to protect (in most cases, elevate) the most flood-sensitive uses (e.g., residential units, critical building systems) from the 10% probability (10-year) flood and to design all buildings to recover from the 1% probability (100-year) flood by using flood-resistant materials, temporary barriers, and other measures. To maintain a pedestrian-friendly relationship with the street, ground floors would be elevated to the 10% probability (10-year) flood elevation and no higher than 4 feet above grade; other protective measures would be used above that height when necessary. If not included in the petition, these specific standards would be applied through development review. However, it may be advisable not to create definitions of “Flood Resilient” particular to this area if they might cause confusion with other standards applied more broadly.

The Alewife zoning recommendations include the following topics that are not addressed in the petition:

- **Parking and Transportation.** To limit traffic growth, the Alewife zoning recommendations include maximum limits on off-street parking ratios (for instance, 1.1 space per 1,000 square feet of office and 0.8 space per 1,000 square feet of laboratory) and the removal of minimums except for residential use (minimum 0.25 space per unit, maximum 0.75 space per unit). The recommendations also include enhanced transportation demand management (TDM) measures, which have proven effective elsewhere in the city where there has been growth in employment, and funding contributions for new commercial uses (at a rate of $5 per square foot) to support public improvements toward transportation infrastructure and programs.

- **Urban Design / Built Form.** The recent planning for Alewife emphasizes creating a unique streetscape character, which relies in part on prescriptive “build-to” front setback lines to establish street widths that include adequate space for vehicles, bicycles, and pedestrians as well as street tree plantings and similar features. Recommended standards also include elevated streets or 12-
foot-wide elevated walkways fronting the ground floors of buildings, shade canopies covering sidewalks and public walkways to ensure pedestrian accessibility and comfort, maximum building lengths of 200 feet along street frontages, and screening above-grade structured parking with occupied building spaces. The petition does not include these standards, but if the zoning were adopted, these standards could be applied through the Planning Board’s development review and approval process.

- **Heat Resilience.** The topic of climate change resilience is not just limited to flooding but also includes development strategies that will reduce urban heat island effects, which include shading, vegetation, and use of high-solar-reflectivity materials (such as “white roofs”). In addition to increased shade tree plantings, the Alewife recommendations include measures to promote increased green and permeable open space, including more contiguous green space in the interior of blocks. These strategies continue to be studied and refined through the aforementioned CCPR and CRZTF processes.

Overall, the key principle in both the current AOD zoning and the Alewife zoning recommendations from the Envision Cambridge process is that to access the additional height, density, and development bonuses available under the overlay zoning, the area planning objectives must be met as a whole.
Map prepared by Brendan Monroe on October 9, 2019. CDD GIS C:\Projects\Zoning\Petitions\AOD-1_2019AODZonesLocus.mxd
Building Height Limits
Under Existing Zoning
Alewife Overlay Districts
Cambridge, Massachusetts

Map prepared by Brendan Monroe on October 10, 2019. CDD GIS C:\Projects\Zoning\Petitions\AOD-1_2019AODZonesHeights.mxd
To: Planning Board  
From: Community Development Department (CDD) Staff  
Date: December 10, 2019  
Re: Alewife Quadrangle Northwest Overlay District Zoning Petition  

Update  

On October 22, 2019, the Planning Board (“the Board”) held a hearing on the zoning petition (“the Petition”) by David Navia, et al., to amend Section 20.90 of the Zoning Ordinance to create a new section that modifies the existing Alewife Overlay District 1 (AOD-1), also referred to as the Quadrangle Northwest. After reviewing the Petition, the Planning Board requested the following information from the developer Cabot, Cabot and Forbes (“CC&F”) who presented on behalf of the petitioner:

- Comparison of the current zoning petition to the recommendations outlined in the Alewife District Plan;
- Evaluation of the impact of the current Petition on all parcels in the Alewife Overlay District 1 (Quadrangle Northwest);
- Explanation of how assurances will be made that the proposed uses will benefit the public over time in the ways presented.

The Board continued the hearing and did not make a recommendation on the Petition. The Ordinance Committee of the City Council also held a hearing, on October 23, 2019, which it concluded by keeping the Petition in committee without making a recommendation. The petition will expire on January 21, 2020 unless it is refiled.

Since these two public hearings, staff from CDD, the Department of Public Works, and the Traffic, Parking, and Transportation Department have met with CC&F to discuss the Board’s comments and other issues related to the Petition. A brief summary of the issues that were discussed is provided on the following pages.

The hearing on this Petition will be continued at the December 17, 2019 Planning Board meeting so that CC&F can provide a response to the Board’s comments. The hearing will follow a brief presentation by CDD staff on the Alewife District Plan, which can be viewed in its entirety online here (with zoning recommendations on pages 155-163): https://www.cambridgema.gov/CDD/News/2019/10/~/media/E2335363BFA149E29C6BE57727A09872.ashx.
Key Issues in Alewife Planning

As the Planning Board noted, one of the key issues for staff is how the current proposal aligns with the recommendations of the Alewife District Plan, not just in its specifics but in its intended outcomes. The proposal follows the recommendations of the Alewife Plan in terms of allowed height and density, but the Alewife Plan articulates other goals that are intended to be incorporated into the zoning for the area. The following is a summary of some of the more crucial issues that are relevant to the current petition.

- **Economic Opportunity.** A central goal of the Alewife District Plan is to preserve and expand space for businesses that offer low-barrier-to-entry jobs with living wages, specifically light industrial businesses or community-focused businesses that require light industrial space, such as commercial recreation, athletics and fitness, and arts establishments. Other potential uses that support these economic goals might include job training or collaborative industrial workspace. The Alewife zoning recommendations would require any commercial development to include ground-floor spaces with higher ceilings for such uses. The rationale for an increased height limit of 85’ and exemption of the ground floor industrial space from FAR calculations was to allow high rent-generating commercial spaces on the upper floors (such as office/lab) to cross-subsidize the light industrial space at the ground floor. It is crucial that new buildings have the necessary ground-floor heights and other design features to meet the needs of these types of uses so that they are not made infeasible, and zoning incentives should be reserved for businesses that meet these broader goals. In terms of more conventional retail, while some convenience retail might be beneficial to residents, the focus of the Alewife Plan is to create better connectivity to retail nodes that already exist to serve a broader area.

- **Transportation and Parking.** The Alewife Plan looked carefully at the potential transportation impacts of commercial growth. A transportation analysis identified that, without aggressive mobility strategies, the land use mix proposed for the Alewife area would negatively impact traffic congestion compared to development under current zoning. As such, the Alewife plan recommends critical policy changes and infrastructure improvements to reduce the percentage of drive-alone commuters. These include aggressive parking requirements (e.g., low parking maximums), enhanced transportation demand management (e.g., charging end-users for parking to reduce incentives to drive), improved bus service, and new infrastructure connections. Staff agrees that a pedestrian/bicycle bridge in this location would contribute toward achieving this goal; the Alewife Plan recommends a contribution of $5 per square foot of new commercial development to support public infrastructure improvements including a pedestrian/bicycle railroad crossing. However, improved infrastructure would need to accompany the full set of other strategies identified in the plan.

- **Urban Design.** The Alewife Plan recognizes the importance of a strong urban design vision given how much the character of the Quadrangle is expected to change. Although some flexibility might be accommodated through the Planning Board review process, specific recommendations such as calibrating building front setbacks to anticipated future street conditions and limiting building
lengths to establish a more urban pattern of blocks need to be clearly articulated so that future developments fit into the overall pattern that is envisioned by the plan.

- **Resilience.** In addition to addressing flood resilience, which is noted in the petition, the Alewife Plan identifies urban heat island impacts as a concern given the current conditions of the Quadrangle. Strategies for increased open space and tree planting are recommended, with other strategies being developed as the City’s resilience planning efforts are ongoing. The plan also recommends investigating district energy systems that can provide energy to buildings in a specific area more efficiently and resiliently.

- **Development Review.** An issue that is not explicitly discussed in the Alewife Plan recommendations, but has been brought to mind by the current proposal, is how the development review process might be better defined to meet the plan’s goals. The current AOD-1 zoning petition anticipates a phased, multi-site master plan on Mooney Street, similar to a PUD (although the current zoning for the area does not specify procedures for PUD review and permitting). This approach provides a good opportunity to review large-scale site planning issues such as circulation and arrangement of uses in a way that is not practical in typical project review, and can more effectively advance the goals of the Alewife Plan. It might be helpful if the zoning established some expectations for how such large-scale development plans would be reviewed, such as requiring alternative site plans to be presented at a schematic level before proceeding to more detailed site and building design.