To: Planning Board

From: CDD Staff

Date: July 5, 2018

Re: Special Permit PB #338, 36-54 CambridgePark Drive

This memo contains an overview of the proposed project at 36-54 CambridgePark Drive, the special permits being requested, and related comments. Comments from the Traffic, Parking and Transportation Department (TP&T) and Department of Public Works (DPW) are provided in separate memos.

Summary of Proposal

The applicant is proposing to demolish the three existing buildings on a site consisting of four parcels on CambridgePark Drive, to construct a new 8-story building with commercial space in the first floor, 299 residential units on six floors, two levels of structured parking for 187 cars, 328 long-term bicycle parking spaces, 38 short-term bicycle parking spaces, and 1 loading bay. The proposal also includes improvements to the existing private roadway and construction of a play area over the shared boundary with 88 CambridgePark Drive. The project proposes to transfer 128,000 square feet of allowed Gross Floor Area (GFA) from 88 CambridgePark Drive (PB #292) under Transfer of Development Rights (TDR) and will require an amendment to the site plan approved for 88 CambridgePark Drive where the play area and a public bicycle sharing station are proposed.

Requested Special Permit

The site is located in the Office-2A (O-2A) zoning district as well as in Alewife Overlay District 6 (AOD-6). The proposed project is seeking a Project Review Special Permit per Section 19.20 and Special Permits within AOD-6 for FAR per Section 20.95.1, building height per Section 20.95.2.6, waiver of yard requirements per Section 20.95.34, and allowance of retail uses per Section 20.94.1. The application also seeks a reduction of required parking per Section 6.35.1, exceeding allowed curb cut width per Section 6.43.5, and common driveway per Section 6.43.6. Since the project is located within the Flood Plain Overlay District it requires Special Permits per Section 20.73 and seeks a waiver of GFA for above-grade parking facilities per Section 20.97.3. In addition, the project is seeking Special Permits for Transfer of Development Rights (TDR) to increase GFA and dwelling unit density per Sections 21.40 and 20.95.4. The Conservation Commission completed its review and issued an Order of Conditions dated 4/27/2018 for compliance with the Massachusetts Wetlands Protection Act. The applicable special permit findings are summarized on the following pages and applicable sections of the zoning are provided in an appendix.
## Requested Special Permits & Summarized Findings

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<th>Summarized Findings <em>(detailed zoning text in appendix)</em></th>
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| **Project Review Special Permit** *(Section 19.20)* | • The project will have no substantial adverse impact on city traffic within the study area, upon review of the traffic impact indicators analyzed in the Transportation Impact Study and mitigation efforts proposed.  
• The project is consistent with the urban design objectives of the City as set forth in Section 19.30. |
| **Increase FAR, increase building height, and waiver of yard requirements in Alewife Overlay Districts** *(Sections 20.95.1, 20.95.2.6, 20.95.34)* | The project promotes the general interests of the larger commercial and residential neighborhood noted in Section 20.92 and is consistent with the goals, objectives and guidelines established in the Concord-Alewife Plan.  
For waiver of yard requirements:  
• The objectives of the Concord-Alewife Plan continue to be met.  
• The stormwater management objectives for the area continue to be met both on the site and as the site may be a part of a larger system for managing stormwater runoff.  
• The reduction or waiver of yard requirements provides for more efficient development of land; encourages or facilitates a more logical pattern of buildings, streets, parks and open space; or enhances the urban, pedestrian character of the area as envisioned in the Concord-Alewife Plan. |
| **Waiver of GFA for parking facilities in a flood plain, modifications to permitted uses in base Office district in Alewife Overlay Districts** *(Section 20.97.3)* | • The facility advances the objective of the Concord-Alewife Plan.  
• A shared facility aids in implementation of effective Transportation Demand Management measures to reduce dependence on the single occupancy automobile.  
• The facility does not diminish the pedestrian–friendly quality the area around it, and consistent with the urban design objective of the Concord-Alewife Plan.  
• The additional bulk of building above grade does not have an unreasonably negative impact on its abutters or the public realm.  
• The extent to which the construction of an above grade parking structure facilitates the creation of at grade soil permeability. |
| **Modifications to permitted uses in base Office district in Alewife Overlay Districts** *(Section 20.94.1)* | For all uses listed in Section 4.35 *(Retail and Consumer Service)*:  
• No individual establishment exceeds 10,000 sq. ft. in area.  
• Retail use is located on the first floor or basement of the building.  
• Total Gross Floor Area of retail uses does not exceed 10% of the total Gross Floor Area of the building.  
The Planning Board may waive above limitations if the project promotes the general interests of the larger commercial and residential neighborhood noted in Section 20.92. |
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| Transfer of GFA under Transfer of Development Rights (TDR) and increase dwelling unit density for additional GFA under TDR in Alewife Overlay Districts (Section 21.40, 20.95.4) | • Reduce the density of development adjacent to the existing residential neighborhood of the Cambridge Highlands.  
• Encourage greater development density closer to public transit and to facilitate infrastructure improvements that will make those transit services more widely available in the Alewife Overlay Districts.  
• Facilitate a more orderly development pattern within the Alewife Overlay Districts, including increasing the opportunities for installation of new circulation pathways for pedestrian, bicycles and vehicles; creation of new public or private open space facilities; and development of new pedestrian connections from the Quadrangle to the Triangle.  
• Make additional land surface available for better stormwater management and increased permeability.  
• Encourage a more attractive pattern of new buildings consistent with the urban design objectives set forth in the Concord-Alewife Plan. |
| Construction in Flood Plain Overlay District (Section 20.73)                              | • No encroachment of the floodway or displacement of water retention capacity is allowed unless fully offset.  
• Flood water systems shall not cause nuisance, hazard or detriment to site or abutters.  
• Development is consistent with zoning, area plans and guidelines, and applicable laws including Wetlands Protection Act.  
• Review by the City Engineer and Conservation Commission are required. |
| Common Driveway (Section 6.43.6)                                                         | Conditioned on mutual easements recorded at the Middlesex County Registry of Deeds. |
| Reduction in required parking (Section 6.35.1)                                            | Lesser amount of parking will not cause excessive congestion, endanger public safety, substantially reduce parking availability for other uses or otherwise adversely impact the neighborhood; or will provide positive environmental or other benefits to the users of the lot and the neighborhood, including assisting in provision of affordable housing units. |
| Exceedance of allowed curb cut width (Section 6.43.5)                                    | Increased curb cut width will facilitate traffic and safety. |
| General special permit criteria (Section 10.43)                                          | Special permits will be normally granted if the zoning requirements are met, unless it is found not to be in the public interest due to one of the criteria enumerated in Section 10.43. |
## Concord-Alewife Plan Goals for Triangle (intended to provide general guidance)

- Encourage more transit-oriented development. Allow higher density and height to take advantage of proximity to Alewife Station.
- Continue to allow commercial development to be focused in this area, while also encouraging housing close to the T station.
- Create a pleasant, walkable connection between Alewife Reservation and Fresh Pond Reservation consistent with the Alewife Reservation Master Plan and the Fresh Pond Master Plan.
- Create public access to the Alewife Reservation from Cambridgepark Drive.
- Reduce auto mode share within the Triangle.
- Improve bicycle and pedestrian connections among the Minuteman Trail, Belmont Path, Linear Park, and a future pathway along the Watertown rail line.
- Improve signage and enhance access to the multiuse trail from Alewife Station.
- Encourage development of additional housing close to Alewife Station while continuing to support commercial development.

## Concord-Alewife Design Guidelines – Areawide & Triangle (intended to provide general guidance)

- Break up large blocks into smaller blocks, of sizes similar to those in surrounding Cambridge neighborhoods.
- Vary the design of individual buildings to create an architecturally diverse district.
- Street level facades should include active uses such as frequent residential entrances with setbacks for stoops and porches; neighborhood-serving retail including shops, restaurants, cafes; services for public or commercial offices; and community spaces.
- Encourage awnings/ canopies to provide shelter and enliven ground-floor façades.
- Design residential buildings with individual units and front doors facing streets, including row-house units on the lower levels of multifamily residences.
- Design residential development to include a range of units of various sizes and with various numbers of bedrooms, including three or more bedrooms, with the overall goal of providing dwelling units for families with school age children.
- Utilize low impact development principles in building and site design.
- Use site design that preserves future rights-of-way identified in the Circulation Concept Plan.
- Improve existing streets to meet City standards, including streetscape improvements.
- Strengthen bicycle and pedestrian links to adjacent areas. Provide links that strengthen physical and visual connections to open space resources.
- Screen service areas from major streets.
- Parking below-grade is preferred. If above-grade parking is provided, it should be designed so that it is not visible from nearby residential neighborhoods, public streets and pathways; line structured parking with active uses (shops, cafes, lobbies) along important public ways.
- Design and locate lighting and signage in support of the district’s pedestrian-friendly quality.
- Use site design to minimize shadows on other buildings or on public streets, open spaces, parks, and plazas.
- Create a pedestrian-friendly environment along Cambridgepark Drive.
- Provide small setbacks (5 to 15 feet) from the right-of-way for café seating, benches, or small open spaces.
- Provide pedestrian links that strengthen physical connections to Alewife Reservation
- Create building height / façade setbacks between 85’ and 105’.
- Site new development to preserve right-of-way for future crossing of the railroad tracks to connect the Triangle and Quadrangle.
Area Planning and Zoning

The base zoning for the site is Office-2A (O-2A), which allows office and residential uses by right. The base zoning is modified by the Alewife Overlay District (AOD) zoning, which augments the base district zoning regulations in a way that allows greater density and more flexible dimensional requirements by special permit while imposing additional requirements and standards to respond to the unique issues identified in the Alewife area. It also allows ground-floor retail uses by special permit, with limitations. This zoning regime of a more restrictive by-right zoning, which can be more permissive by special permit, was one of the results of the Concord-Alewife Rezoning that was recommended in the 2006 Concord-Alewife Planning Study (see below).

As with much of the Alewife area, part of the site is located within the Flood Plain Overlay District, which encompasses areas designated as Flood Hazard Zones A and AE on the Middlesex County Flood Insurance Rate Maps (FIRMs) issued by the Federal Emergency Management Agency (FEMA). Projects within this district require a Planning Board special permit, and must provide technical documentation to be reviewed by the City Engineer demonstrating that the site’s ability to store and discharge flood waters will not be impacted.

Concord-Alewife Plan

The planning goals that underlie the current zoning in the area were established in the Concord-Alewife Planning Study, completed in 2006. In deciding special permits pursuant to the Alewife Overlay District (AOD) zoning, the key consideration for the Board will be the degree to which the proposal conforms to the Concord-Alewife plan.

The 36-54 Cambridgepark Drive site lies within the interior of the “Triangle” (classified on the Zoning Map as the “AOD-6” subdistrict), which includes the area north of the Fitchburg rail line and south of the Alewife Brook Reservation, which has mostly transitioned from industrial use to a mix of office, commercial research labs, and housing. This area has good access to public transit through the Red Line and regional bus service. The area is currently experiencing a considerable amount of multi-family housing production, mostly through redevelopment of surface parking lots or low-scale commercial buildings. There have also been recent renovation and improvement projects to the larger-scale office and R&D buildings that were developed in the 1980s and 1990s.

Envision Alewife and Climate Change Preparedness and Resiliency (CCPR) Plan

This site is also within the study area of the “Envision Alewife” plan, which is an early phase of the “Envision Cambridge” comprehensive plan that seeks to update the planning work done through the Concord-Alewife study. The process has involved CDD staff, planning and urban design consultants Utile, and an “Alewife Working Group” of community stakeholders. From 2016 to present, there have been 15 working group meetings and three public meetings. A final report is expected to be completed later this year.

The key objective that has emerged through this process is to create an identity and sense of place for the whole Alewife District 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, in particular the challenges of 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.

Many of the goals of the Envision Alewife process are shared with the Concord-Alewife planning study. However, the Envision Alewife study has taken a closer look at some key issues to recommend more specific measures that will help achieve those goals. For example, as redevelopment has occurred in the area, it has been difficult to create active, pedestrian-friendly ground floors due to the need to elevate buildings to protect from future flood risks. The Envision Alewife process has recommended urban design approaches that aim to optimize both of these objectives while continuing to promote the area’s transition from a more suburban pattern of development to a more walkable, mixed-use environment.

The Envision Alewife process has also identified some more targeted land use strategies for particular areas. For example, it identifies part of the “Quadrangle” area as one of the last remaining districts in the city that accommodates certain types of light industrial uses, and recommends measures to support the continuation of such uses in that area. In the “Triangle” area, the general strategy is to promote mixed-use, transit-oriented development, similar to the Concord-Alewife plan, but with more emphasis on improving pedestrian/bicycle connections and promoting retail and other street-activating uses on CambridgePark Drive.

The Alewife Working Group, at its most recent meeting, discussed a set of zoning recommendations intended to further the objectives of the study process. Further below, various aspects of the project are compared to the zoning recommendations that have emerged. A presentation of the Envision Alewife zoning recommendations (from May 10, 2018) can be downloaded from the Envision Cambridge web page, envision.cambridgema.gov.

Also relevant to the planning for this area is the City’s ongoing Climate Change Preparedness and Resiliency (CCPR) effort, which has been closely coordinated with the work of Envision Alewife. The CCPR plan is being developed as a practical guide for the City to implement specific strategies in response to climate change threats, including increased heat as well as flooding from precipitation, sea level rise and storm surge. The plan focuses on four different themes: A Prepared Community, Adapted Buildings, Resilient Infrastructure, and Resilient Ecosystems.

Given the unique characteristics of the Alewife area, an early-phase “Alewife Preparedness Plan” and “Alewife Preparedness Handbook” were developed. The recommendations of this plan have been integrated into the Envision Alewife process with the goal of producing a comprehensive set of zoning recommendations. For example, with regard to flood elevation, the plan recommends that new
buildings “build” or “protect” to the projected 2070 10-year flood elevation, and are designed to “recover” from the projected 2070 100-year flood elevation.

The Alewife Preparedness Handbook can also be viewed online from the CDD web page.

Infrastructure

The Concord-Alewife and Envision Alewife plans both identify desired infrastructure improvements to serve public goals. One major piece of infrastructure is a planned crossing of the railroad line from CambridgePark Drive in the Triangle to Fawcett Street in the Quadrangle, which has been incorporated into the review of sites that abut the railroad. Other desired infrastructure improvements particular to the Triangle include enhanced bicycle and pedestrian connections to Alewife Brook Reservation and the Shopping Center district along Alewife Brook Parkway. Both plans also identify public open space as a goal, both to serve community-gathering functions and to assist in stormwater management. The AOD zoning provides mechanisms by which development rights and requirements can be shifted, pooled and transferred flexibly across sites to enable these public improvements, and the Envision Alewife process has recommended retaining and strengthening these types of incentives.

Urban Design

One of the main urban design objectives of both the Concord-Alewife and Envision Alewife studies is to create a coherent character and a sense of place with a built fabric and streetscape that enhances the bicycle and pedestrian environment. Key urban design considerations include fostering a pedestrian-friendly environment and vibrant public realm by creating active streets and outdoor gathering spaces, and reinforcing connections to nearby open spaces.

Current Zoning Petition

The site of this proposal, along with most other sites in this area of the city, is affected by the Douglas Brown, et al., Zoning Petition. The Planning Board discussed that petition at its meeting on June 26, 2018. Because the petition has been advertised, this project would become subject to those new requirements if they are adopted by the City Council. This report reviews the proposal in relation to current zoning and planning. Additional information would be needed to determine whether the proposal conforms to all of the new standards proposed in that petition and how it would be affected if it were required to conform.

Proposed Project

In general, the proposal to develop housing on this site supports the citywide planning goal of adding to the housing supply as well as the area-specific goals of transitioning from auto-oriented uses and sites dominated by paved parking into more compact, pedestrian/bicycle-oriented mixed-use development with improved open space and infrastructure to better manage flood water and other environmental impacts. The proposal also supports the evolving mix of uses in the area.

The scale of the proposal, in terms of height and density, applies the limitations allowed by special permit in the AOD-6 district while adding the transfer of 128,000 square feet GFA from 88
CambridgePark Drive to create 128 of the 299 units proposed at this site, which is also allowed by special permit. When 88 Cambridgepark Drive was approved by the Board in 2014, it had a lower scale and density than what the district would otherwise allow. One purpose of the TDR provisions in the zoning for Alewife is to allow density and height to be shifted from sites that are further from transit to sites that are closer to transit. This proposal meets that objective, though both the donating and receiving sites are relatively close to the MBTA station. Another purpose is to provide opportunities for circulation and open space by allocating density across sites in a more flexible way.

The AOD-6 district allows, by special permit, relief from the “formula” requirements in base zoning, which often require greater separation between the building and the public realm, to favor a more urbanistic pattern of development. However, the front yard setback can only be reduced to a minimum of 15 feet from the lot line (or can be less, if the base zoning has a lower requirement) and must consist of green area or permeable open space. The proposal includes a range of setbacks, with the most generous setback on the west side to create pedestrian space along the shared driveway (discussed below). The project exceeds the open space requirements of the district, providing 24.12% where 15% is required, but does not meet the permeable area requirement by providing 21.59%, where 25% is required. The permeable area requirement may be reduced as-of-right (without requiring special permit approval) if the City’s stormwater management standards for the Alewife area are met. Conformance with these standards will require certification by DPW.

The project has completed a Transportation Impact Study (TIS) and proposes public access improvements, transportation demand management (TDM) programs, and other measures to discourage additional automobile trips and encourage a more walkable, bike-friendly, and transit-oriented neighborhood. It also proposes a reduction from the required off-street parking ratio of one space per dwelling unit, which is typical of other residences in the area and supports planning goals to reduce automobile dependence. These topics are discussed in more detail in the TP&T memo.

The Flood Plain Overlay District zoning requires technical review by the City Engineer and the Cambridge Conservation Commission to ensure that the development will not diminish the site’s ability to accommodate the retention and flow of flood water. Approval is also conditioned on compliance with the Wetlands Protection Act, pursuant to which an Order of Conditions has been issued by the Conservation Commission. Per zoning requirements, the Applicant has provided an engineering report along with the Order of Conditions. Like other developments in the Flood Plain Overlay District, the project is designed with parking above-grade, which is generally discouraged citywide, but is permitted (and allowed to be exempt from FAR and GFA limitations) in cases where flood risk is a factor. The applicant has submitted information demonstrating that the proposal meets the criteria for such an exemption. An additional factor in granting relief is that the project is minimizing the extent of parking provided.

The proposed retail use on the first floor of the building is consistent with the planning goals for the district, supports the existing residential and office uses in the area, and activates the street façade on Cambridgspark Drive. The application materials confirm that the total gross floor area for retail uses is less than 10% of the total gross floor area of the building. Zoning also requires that each establishment be no more than 10,000 square feet. This would be the first building to have continuous retail along its
entire Cambridgepark Drive frontage, and would complement the ground-floor retail uses recently permitted by the Planning Board across from the site at 35 CambridgePark Drive and 125 CambridgePark Drive. It will be helpful to learn more about the Applicant’s strategy to market that retail space.

_Envision Alewife Zoning Recommendations_

While this site is controlled by current zoning, including the current criteria for special permit approval, it is worthwhile to consider the zoning recommendations that have been discussed through the Envision Alewife process and how the proposal relates to those recommendations. The following is a brief summary.

- **Flood Protection:** Design buildings to protect from projected 2070 10-year (10% annual probability) flood event, and to recover from projected 2070 100-year (1% annual probability) flood event. *(Alewife areawide standard based on CCPR planning)*
  
  This standard is met by locating the ground floor (with retail and parking uses) above the 10-year 2070 elevation and locating residential units and vital utility systems above the 100-year 2070 elevation. The application notes that the ground floor garage space could accommodate flood barriers, for which the engineering details should be reviewed. All recovery and mitigation strategies will be subject to DPW review, in addition to other measures designed to meet current standards for stormwater management, utility service, and compensatory flood storage.

- **Heat Island Mitigation:** Design buildings to use green or white roofs, and employ landscaping and tree planting to mitigate urban heat island effect. *(Alewife areawide standard based on CCPR planning)*
  
  The proposal includes a white roof across most of the roof area, except where there are open landscaped courtyards on the building’s third floor to serve as residential amenity space. Landscaping at the ground level occurs mostly around the edges of the building, with sidewalk tree plantings along the three sides of the site that front the public street or pedestrian-accessible shared driveways. The trees are spaced about 25 feet apart (a standard spacing of 20-30 feet has been discussed in the Envision Alewife process). It is not clear from the materials what size and type of trees will be planted, which should be reviewed to determine the expected tree canopy.

- **Other CCPR Recommendations.**
  
  While specific CCPR measures continue to be studied, the “Climate Change Preparedness and Resilience Narrative” section of the Application responds to other measures outlined in the “Alewife Preparedness Handbook,” including the designation of the second floor amenity space to function as a “resilience hub” and “cooling center” and the creation of an emergency management plan to be reviewed by DPW. The applicant also commits to engage a Resiliency Planner to develop a neighborhood resilience plan for the entire Triangle area, where the applicant controls multiple sites. This is a proactive approach that aligns with the overall CCPR strategy of working with large landowners to participate in resiliency planning for the unique needs of their areas. The details of these planning efforts should be discussed further with CDD and DPW staff.
• **Transportation and Parking:** Require residential parking at a minimum of 0.25 space per unit and maximum of 0.75 space per unit, while requiring enhanced Transportation Demand Management (TDM) programs to reduce drive-alone mode shares. *(Alewife areawide standard)*

The project is proposing a parking ratio of approximately 0.62 space per unit, which is within the recommended range and comparable to the parking demand observed in other residential developments in the area, as discussed in the memo from TP&T. A TDM program will be developed in consultation with TP&T.

• **Building Massing:** Promote continuous frontage on public streets, but break up building lengths of longer than 200 feet by creating gaps at least 40 feet wide and deep. *(Alewife areawide standard)*

The proposed building frontage along Cambridgepark Drive, which is the only public street frontage of the project, is approximately 170 feet. Along the side, where the building abuts the private shared driveway designed to promote pedestrian and bicycle use, the length is about 311 feet and contains an approximately 50-foot wide break to accommodate a courtyard on the third floor and above. It is yet to be determined how the proposed Envision Alewife zoning recommendations will be applied in cases where private driveways serve a connective function similar to a street.

• **Setbacks:** Establish “build-to” lines in order to promote an active street frontage, while locating green open space to the rear of buildings. *(Alewife areawide standard – applied according to the conditions of the particular street)*

The Envision Alewife standards attempt to establish a consistent condition for the streetscape as a whole, considering the building façade, landscaping, sidewalks, and roadway as part of an entire composition. However, current the zoning continues to impose a front setback of 15 feet. Within these constraints, the proposed building uses varying setback dimensions to support the retail functions along Cambridgepark Drive to the north, an improved connector for pedestrians, bicycles, and vehicles to the west, a play area and bicycle sharing station to the south where it faces the neighboring residential building, and green space to the east side, the only side that does not front a public way or private drive, abutting a surface parking area on the neighboring site.

• **Parking Structures:** Where parking is located above grade – particularly where it is exempt from GFA calculations – it should be screened from public streets with active building uses to a depth of 40 feet. *(Alewife areawide standard – applied according to the conditions of the particular street)*

The Cambridgepark Drive side of the proposed building is fronted by retail along its entire length, to a depth of 40 feet. Along the shared driveway to the west, most of the area is fronted by lobby/amenity space or bicycle parking, which zoning treats as distinct from vehicular parking, to a depth of about 40 feet or more. The only vehicular use is the entry/exit for the garage and loading area. Only the south side has above-grade parking abutting the shared driveway, but it is enclosed and set back behind the proposed play area and bicycle sharing station. No surface parking is provided, except some parallel spaces on the shared driveway intended for retail patrons, which is encouraged in the planning for this area.
• **Overall Zoning Strategies for the “Triangle”:** Maintain the mixed-use character of the area, promote retail and active space on Cambridgepark Drive, allow retail uses as-of-right. *(District-specific strategies)*

The proposed building continues the area’s ongoing evolution from an office-dominated area to a mixed-use district. Among the larger-scale buildings along Cambridgepark Drive, this proposal would result in six residential buildings and six office/lab buildings. The proposed building would be the first to provide retail space along its entire Cambridgepark Drive frontage. Some other aspects of the proposal that support the overall Envision Alewife goals for the Triangle include the redesign of the shared driveway into a pedestrian/bicycle amenity, which enhances the pedestrian/bicycle network in the area, and the inclusion of a children’s play space, which serves a traditional neighborhood function that is currently not present in the area.

**Urban Design**

As noted above, this development proposal makes positive contributions to the City’s overall planning objectives and those of the Alewife area by expanding Cambridge’s housing inventory on a site that benefits from the Alewife MBTA station’s transportation connections. From a broader urban design perspective, it contributes to the transformation of the Alewife Triangle from a district of isolated commercial buildings served by access roads into a district of mixed-use buildings that address pedestrian-friendly streets.

In the following ways, the project is in accord with many of the urban design goals of the Concord Alewife plan and with those of the ongoing Envision Alewife plan:

• The project’s site plan and architectural design will improve the pedestrian experience on Cambridgepark Drive by adding street trees and other plantings, benches and other street furniture, creating an architectural streetwall at a scale appropriate to the width of the street, and by incorporating ground level retail directly accessible from the public sidewalk.

• By setting back the west façade of the building and cooperating with the owners of 100 Cambridgepark Drive, what is currently a series of parallel access roads will be transformed into a shared drive that will accommodate pedestrian and bicycle travel, parallel parking spaces for retail patrons and visitors, and tree plantings.

• On the south side, the setback from the property line provides a generous area dedicated to a children’s play area, seating and plantings that will enhance the residential character of that portion of the district.

• Above-grade vehicular parking is screened from view by retail, the building’s lobby, bicycle parking, and residential uses on the building’s street and shared drive frontages.

• The building’s loading and service docks are internal to the building, hidden from public view by doors.

Regarding the specifics of the design approach, staff offers comments in the following areas:
Scale and Massing

The building’s mass is articulated into different components to reduce the sense of bulk on its most public facades. The north façade, facing Cambridgepark Drive, consists of a buff brick component, parallel to the street, and a grey component whose western end is angled to match the angle of the neighboring building to the west and the angled western portion of Cambridgepark Drive. The upper portion of the western façade, facing the shared driveway on the west side of the site, is divided into three separate wings by a deep courtyard and a shallow recess. The south façade is articulated by changes in material and plane. As the design is refined, the following improvements should be considered:

- On the north façade, consider further breaking up the mass of the grey siding component to enable it to relate more strongly to the building and street to the west, while enabling the north façade’s buff brick component to more effectively define the streetwall.

- On the west façade, consider creating a more varied pedestrian experience along the two lower floors, where it has the longest continuous frontage. Possibilities include differentiating the portion directly below the northern courtyard by changes in massing or materials, reducing the symmetry of the southern two buff-colored wings by changing the vertical location or vertical length of the framed projecting element on the corner of the west façade’s central wing, or modulating the façade more assertively by changing the plane of the wall within the three framed projecting elements on the corners of the buff-colored wings.

Ground Floor Design and Uses

Staff appreciates the architect’s attention to creating pedestrian friendly street frontage at Cambridgepark Drive and the shared driveway on the west side of the site. The design incorporates multiple building entrances and active uses along the sidewalks, a high percentage of the ground floor façade is glazed, and the lower two floors are differentiated from those above by materials and fenestration to create a two-story scale. To further enrich the building’s pedestrian frontage zone, increase its continuity, and provide shelter from the elements, the following design improvements should be considered:

- Revise the open trellis canopies to provide weather protection, and making them more continuous along the building’s north and west facades.

- Review the use of the black porcelain ceramic tile/stone at the ground and second floors and consider a somewhat lighter colored cladding.

- Consider the provision of climbing vines on the lower two floors of the building’s east façade where blank facades are visible on the eastern side of the building.

Architectural Character

The architects have employed a variety of techniques to enrich the building’s appearance with architectural detail and by combining different materials. While staff is supportive of the proposed design, there are perhaps further design refinements that would help to create a more visually
rewarding pedestrian environment. The following suggestions would provide more detail and play of shadows on the facades, and offer views into interior spaces:

- The use of metal balcony railings instead of glass to add detail and give these features more visual presence from the street level.

- The provision of additional balconies in the recessed dark portions of the west and south façades, and at all floors in the northernmost three window bays of the east façade.

- Use clear, uncolored glass with high transparency and low reflectivity. The provision of clear, non-reflective, low-iron glass is especially encouraged for the retail along Cambridgepark Drive.

**Site Layout and Landscape Design**

The landscape design details should be further advanced to create a more pleasant, accommodating, and connective public realm. Areas of potential improvement include:

- Continuing the pedestrian paving material across the driveways on the west side of the building.

- Simplifying the design of paving, plantings, and landscape features along Cambridgepark Drive and at the northwest corner of the site, and giving the pedestrian zone more east/west continuity.

- Creating a more direct connection with the crosswalk extending from the northwest corner of 88 Cambridgepark Drive to the end of the new sidewalk along the west side of the building.

- Studying whether additional trees could be added by spacing them more closely, adding trees in the setback on the east side of the building, and preserving the existing tree at the northwest corner of the site if possible.

**Mechanicals and Utilities**

Rooftop mechanical equipment appears to be well-organized and sufficiently set back from building facades. Further detailed information regarding the height of the parapet and the size and location of equipment should be provided to verify that the equipment is adequately screened. Like many recent residential projects in Alewife, electrical infrastructure is proposed to be sited on-grade at the rear of the building. Although internal siting of electrical infrastructure is usually preferred, this proposal locates the equipment on the least obtrusive part of the site. To minimize the transformer and switchgear’s impact on the public realm, the following measures should be reviewed:

- Verify that the fences screening the transformers and switchgear are tall enough.

- Consider moving the transformers and switchgear slightly west, so that the switchgear is in line with the corner of the building instead of projecting farther east.

**Sustainability**

This development proposal is subject to the City’s Green Building Requirements in Section 22.00 of the Zoning Ordinance, which requires projects over 50,000 square feet of GFA be designed to LEED Silver, at minimum. The proposal currently exceeds the minimum requirement by targeting LEED Gold, and is
projecting a 15-20% improvement in energy cost savings over the baseline building (ASHRAE 2010). The proposal is also subject to the Massachusetts Stretch Energy Code, which requires projects over 100,000 square feet to demonstrate energy use per square foot at least 10% below the baseline building (ASHRAE 2013), on either a site or source EUI basis. Currently, the documents provided indicate that the project will achieve a 12-15% energy cost reduction compared to the ASHRAE 2013 standard. In addition to the LEED standard, CDD Staff requests that the applicant provide the projected percentage reduction on a site or source EUI basis, as required by the Stretch Code.

The applicant has been informed of available technical and financial incentive packages and programs that can assist in achieving higher levels of building performance to better satisfy the City’s energy goals. CDD Staff strongly recommends continuing assessment of available incentives, and requests updates on their feasibility and applicability as part of the Green Building Review process along with any changes to the building’s design and/or projected building performance targets (e.g. EUI and GHG emissions).

As part of the Net Zero Action Plan, which targets net zero greenhouse gas emissions citywide by 2050, all projects are encouraged to plan for future net zero performance. With the understanding that this may be uneconomical at the current time, developers are requested to provide a technical framework that details possible pathways for transitioning to non-fossil fuel sources as those sources become more feasible to implement in the future. CDD Staff strongly encourages the applicant to consider the possible technical pathways to transition to net zero and to provide an assessment to staff through the Green Building Review process, describing how this project will maximize savings through the current building envelope, HVAC systems, operations, and energy production opportunities, and indicating specific changes that could achieve future net zero emissions (whether or not such changes are feasible at the present time), with special consideration to major energy-influencing factors such as building envelope, HVAC, DHW, lighting, on- and off-site renewables. CDD Staff are available to consult on creating such a narrative.

Per Section 22.00, the Project will be subject to continuing Green Building Review prior to receiving its Building Permit and Certificate of Occupancy.

**Continuing Review**

The following is a summary of issues that staff recommends should be further studied by the Applicant, either in preparing revised materials if the Planning Board continues the hearing to a future date, or as conditions for ongoing design review by staff if the Board decides to grant the special permit:

- Review of all exterior building materials, colors, and details, including a materials mock-up on the site prior to any exterior materials being ordered.
- Review of glass specifications: ground floor glazing, upper floor glazing, balcony railings.
- Review of plant and paving materials.
- Review of exterior lighting.
- Review of noted Climate Change Preparedness & Resiliency items.
- Review of noted items as part of continuing Green Building Review.
- Review of programming and marketing strategies for retail space.
Improvements to the graphic materials should include:

- A graphic scale on all drawings.
- Additional dimensions on site and building plans, particularly for any architectural modulations and building setbacks from the property lines.
- The overall height of the building on the elevations.
- All façade and landscape features depicted on elevations, including through-wall vents, transformers, gas meters, and fences.
- A color/materials palette, keyed to the elevations.
- The dimension of the depth of windows from glass to typical face of wall on the typical façade details.
- An inset key plan to identify the viewpoint of perspectives.
- More detail on the landscape plans, including material notes (species and size), images of specified plants, design of seating, lighting and other features.