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# CITY OF CAMBRIDGE

Community Development Department

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To: Planning Board

From: CDD Staff

Date: June 1, 2022

Re: Special Permit **PB-391, 40 Smith Pl (55 Wilson Rd) and 45 Wilson Rd**

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Community Development

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## Overview

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Submission Type:	Special Permit Application
Applicant:	The Davis Companies
Zoning District(s):	Base Office 1 (O-1) and Alewife Overlay District (AOD-4)
Proposal Summary:	Construct a 280,046 square foot four story building for technical office use with future ground floor retail use and a 323-vehicle parking garage below.
Special Permits Requested:	Project Review (19.20); Flood Plain (20.73); Allow retail use (20.94.1); Floor area ratio (FAR) in excess of 1.25 (20.95.1); Public infrastructure FAR bonus (20.95.11); Building height in excess of 35 feet (20.95.2); and Reduction of Yard Requirement - front and side yard (20.95.34)
Other City Permits Needed:	Conservation Commission approval, PTDM Plan approval
Planning Board Action:	Grant or deny requested special permits.
Memo Contents:	CDD Zoning Report & Urban Design Report
Other Staff Reports:	Parking and Transportation Dept. (TP+T), Department of Public Works (DPW), in separate documents.

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Zoning Section	Required Planning Board Findings <i>(Summary - see appendix for zoning text excerpts)</i>
Project Review Special Permit (Section 19.20)	<ul style="list-style-type: none"> <li>• 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.</li> <li>• The project is consistent with the urban design objectives of the City as set forth in Section 19.30.</li> </ul>
Flood Plain Special Permit (Section 20.70)	<ul style="list-style-type: none"> <li>• No encroachment of the floodway or displacement of water retention capacity is allowed unless fully offset.</li> <li>• Flood water systems shall not cause nuisance, hazard or detriment to site or abutters.</li> <li>• Development is consistent with zoning, area plans and guidelines, and applicable laws including Wetlands Protection Act.</li> <li>• Review by the City Engineer and Conservation Commission are required.</li> </ul>
Additional permitted uses to allow retail, increase FAR, additional FAR for public improvement, increase building height, and waiver of front and side yard requirements in Alewife Overlay Districts (Sections 20.94.1, 20.95.1, 20.95.11, 20.95.2, 20.95.34)	<p>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.</p> <p>In any base office or industrial district all uses listed in Section 4.35 - Retail Business and Consumer Service Establishments shall be permitted by special permit from the Planning Board (if not otherwise allowed as of right in the district), subject to the following limitations unless the limitations are specifically waived by the Planning Board upon its finding that the purposes set forth in Section 20.92 above have been met:</p> <ul style="list-style-type: none"> <li>• No individual establishment may exceed 10,000 square feet in area.</li> <li>• The retail use shall be located on the first floor or basement of the building in which it is located.</li> <li>• The total Gross floor Area devoted to retail uses may not exceed 10% of the Gross Floor Area of the buildings constructed or authorized on the lot.</li> </ul> <p>For granting of additional FAR for development that incorporates or provides the following improvements or property interests that are determined to be sufficient to significantly advance the objectives of the Concord-Alewife Plan:</p> <ul style="list-style-type: none"> <li>• Conveyance of fee or easement property interests to the City of Cambridge (in a form acceptable to the City) to permit the future</li> </ul>

Zoning Section	Required Planning Board Findings <i>(Summary - see appendix for zoning text excerpts)</i>
	<p>construction of roadway segments, pedestrian paths, the pedestrian bridge referenced above in Paragraph 1, public parks and other publicly accessible open space and recreation features consistent with the Concord-Alewife Plan, which segment, path, park or open space is identified on the maps entitled Priority Infrastructure Plan and Additional Infrastructure Plan or is otherwise identified by the Planning Board at another location and determined by the Board to be of equal value and consistent with those elements identified on the Map and the objectives set forth in the Plan.</p> <p>For waiver of yard requirements:</p> <ul style="list-style-type: none"> <li>• The objectives of the Concord-Alewife Plan continue to be met.</li> <li>• 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.</li> <li>• 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.</li> </ul>
<p>General Special Permit Criteria (Section 10.43)</p>	<p>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:</p> <p>(a) It appears that requirements of this Ordinance cannot or will not be met, or</p> <p>(b) traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character, or</p> <p>(c) the continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or</p> <p>(d) nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or</p> <p>(e) for other reasons, the proposed use would impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance, and</p> <p>(f) the new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30.</p>



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# CITY OF CAMBRIDGE

Community Development Department

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## Zoning & Development Staff Report

Date: June 1, 2022

Case: PB-391

Location: 40 Smith Pl (55 Wilson Rd) and 45 Wilson Rd

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## Area Planning and Zoning

### *Site Context*

Neighborhood/Area: Alewife Quadrangle Southeast

Development Patterns: The project is located on the corner of Fawcett Street and Smith Place. The project is within the Alewife Overlay Districts. Other recent projects reviewed by the Planning Board in this area include 180 Fawcett Street and 75-109 Smith Place, both technical office and laboratory buildings permitted on sites north of the current proposal.

The existing conditions in this area are dominated by commercial and industrial land uses, with vast expanses of impervious surfaces in the form of parking lots and truck loading areas. A few parcels have transitioned from industrial use to offices, commercial research labs, or recreational uses. On the eastern edge of the Alewife Quad area are several larger multi-unit residential developments and on the western edge it borders the residential Cambridge Highlands neighborhood.

Nearby Features: This area has access to public transit through regional bus service on Concord Avenue, and the site is about a one-mile walk to the Alewife MBTA Station. It is also about a quarter-mile north of Fresh Pond Reservation and located just south of a railway that separates the Alewife Quadrangle area from the Alewife Triangle.

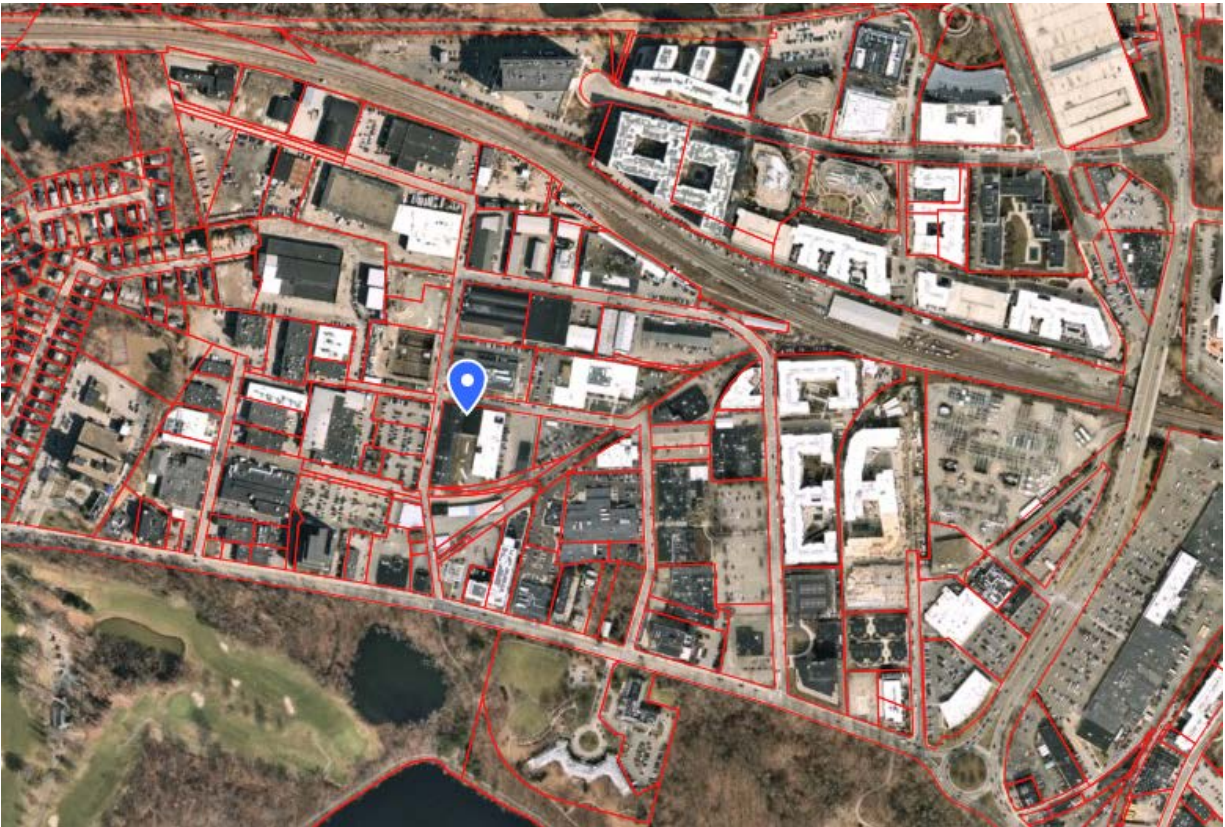


Figure 1. Aerial photograph of the area surrounding 15 Wilson Rd & 40 Smith Pl dated March 23, 2022. (source: Nearmap)

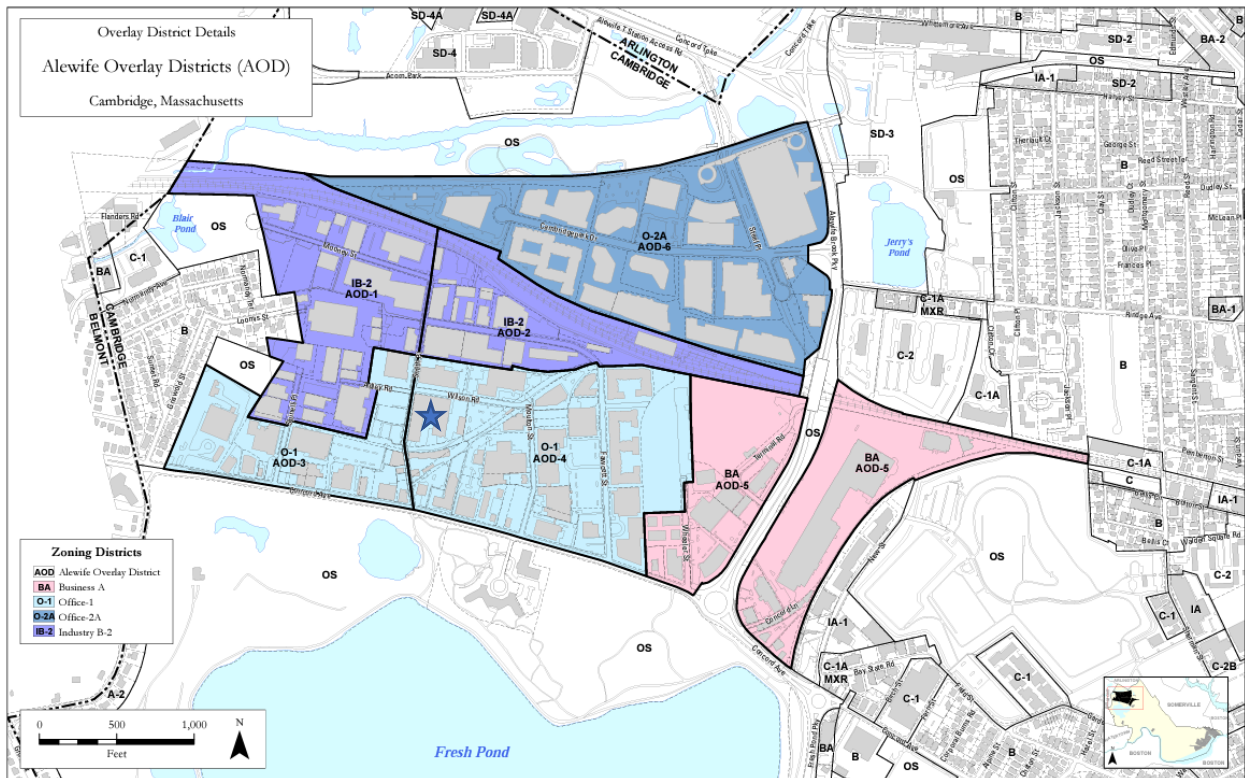


Figure 2. Alewife Overlay Districts and Base Zoning

**Site Zoning**

**NOTE:** A zoning amendment was adopted by the City Council on May 23, 2022 that reads as follows:  
*20.93.5 Development Moratorium. For a period beginning from the date of enactment of this Section 20.93.5 and lasting until December 31, 2023, or until the time of enactment of an amendment to or deletion of this Section 20.93.5, whichever occurs sooner, no permits for the building, renovation, or enlargement of any structures to accommodate a new or enlarged Office or Laboratory Use as listed in Section 4.34 of this Zoning Ordinance shall be issued within the Alewife Overlay Districts 1-5. The purpose of such moratorium is to create and enact amended requirements for the Alewife Overlay Districts in consultation with residents of the Alewife Overlay Districts and surrounding neighborhoods, based on development plans and guidelines published by the City.*

The current application was received and scheduled for a hearing before this zoning amendment was adopted. However, zoning amendments apply to development that has not received a building permit or special permit before the date of publication of the public hearing notice, which was on February 17, 2022 in the case of this moratorium. If Board members have questions about how the enacted moratorium could affect the Board’s action on this case, the Board could request a legal opinion from the City’s Law Department.

**General description:** The underlying base zoning is Office-1 (O-1). The site is also in the Quadrangle Southeast Alewife Overlay District (AOD-4), which modifies the base district zoning regulations. The AOD district generally allows greater density and height than the base zoning by special permit, while imposing additional requirements and design review objectives to advance the City’s planning for the Alewife area.

The base O-1 district and AOD-4 district allow technical office uses by right, among various other residential and commercial uses. The height and density limitations of the underlying zoning districts are summarized below. This more restrictive by-right zoning, which can be more permissive by special permit, was one of the results of the Concord-Alewife Rezoning that followed the 2005 Concord-Alewife Plan.

A small portion of the area is identified as being in the Flood Plain Overlay District, which encompasses areas on the FEMA Flood Insurance Rate Map in Hazard Zones A and AE.

	<b>Base District</b>	<b>Overlay District(s)</b>
<b>District(s):</b>	Office-1 (O-1)	AOD-4
<b>Allowed Uses:</b>	most types of residential dwellings; most institutional uses; offices and laboratories	Additional uses permitted by special permit (if not otherwise allowed as of right in the district): - All retail uses listed in Section 4.35 – Retail Business and Consumer Service Establishments subject to the limitations in 20.94.1 (unless those limitations are specifically waived by the Planning Board).

<b>Max. Building Height</b>	35'	70' for non-residential uses by special permit
<b>Max. FAR/GFA</b>	0.75	1.5 for non-residential uses by special permit*  *Additional FAR beyond 1.5 may be granted for Public Improvements reviewed as part of the Planning Board's Special Permit review per section 20.95.11
<b>Required Setbacks</b>	Front: (Height + Length) / 4  Side: (Height + Length) / 5  Rear: (Height + Length) / 4	Front: 15'  Side: May be waived by special permit*  Rear: N/A  * In the case of a corner lot abutting two streets, all remaining lot sides <i>not</i> abutting streets shall be subject to side yard requirements.
<b>Required Open Space (Minimum Ratio of Private Open Space to Lot Area)</b>	15%	15% minimum open space 25% permeable open space*  * Permeable Area requirement may be reduced as of right with certification to the Superintendent by the City Engineer.



## ***Development Plans and Guidelines***

### *Alewife District Plan (2019)*

This site is within the area of the recent Alewife District Plan, which was part of the “Envision Cambridge” comprehensive planning process. That process involved CDD staff, planning and urban design consultants Utile, and an “Alewife Working Group” of community stakeholders, as well as input from the larger community. The plan is an update to the previous plan for that area, the Concord-Alewife Plan, completed in 2005. The final [Alewife District Plan report](#) was published in October 2019.

The Alewife District Plan expresses the following community vision for the future: “Alewife is a sustainable, resilient, mixed-used district with convenient and safe connections within the neighborhood and to the rest of the city along with amenities that support interaction and social ties among its residents.” The following Areawide Goals support this vision:

- **Build a Cohesive Mixed-Use District.** Transform Alewife into a fully functioning urban neighborhood with a broad range of uses and a variety of public places that provide opportunities for social connection and interaction.
- **Integrate Alewife with the Rest of Cambridge.** Better integrate the district physically and socially with the surrounding neighborhoods and the rest of the city for a greater sense of community.
- **Promote Economic Opportunity.** Support commercial and light industrial development that provide high-wage, low barrier-to-entry jobs.
- **Create a District Resilient to the Impacts of Climate Change.** Ensure that new development and existing neighborhoods, community resources, and critical infrastructure are prepared for climate change and resilient to its impacts.
- **Enhance the Public Realm.** Create an active, resilient urban form that promotes activity on the street.
- **Encourage Sustainable Modes of Transportation.** Promote walking, biking, and transit use and reduce the growth in vehicle miles traveled.
- **Create a Continuous Open Space & Recreation Network.** Increase the quantity, quality, and diversity of open spaces across the Alewife district and create an interconnected recreation network.

The Alewife District Plan also lists the following specific goals for the Quadrangle area:

- Preserve and enhance light industrial businesses, and community-focused businesses that require light industrial space, that provide good-paying, low-barrier-to-entry jobs.
- Create a significant new linear open space and smaller open spaces internal to blocks.
- Create a “Main Street” on Wilson Road with active ground-floor uses, including showrooms or retail space for light industrial uses.
- Create a connected network of streets and pathways.
- Encourage a variety of housing types including townhouse and live-work units.
- Maintain the stability and character of the Cambridge Highlands neighborhood.
- Encourage small-scale neighborhood supporting retail on Concord Avenue and Smith Place.



Most of the goals of the Alewife District Plan are shared with the Concord-Alewife planning study, and the more recent plan recommends 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 Alewife District Plan recommends urban design approaches to optimize these objectives, such as by partially elevating ground floors above future projected flood elevations (up to 4 feet above grade where necessary) and including elevated walkways at the edges of buildings to more seamlessly connect the private and public realms.

Another key issue identified in the Alewife District Plan, building on the Concord-Alewife Plan, is that future growth in Alewife, particularly commercial growth, will require significant shifts in mobility patterns given the existing traffic congestion, lack of street connectivity, and auto-oriented development patterns in the area. The plan recommends progressive mobility strategies to improve street networks and pedestrian/bicycle connections, promote sustainable modes of transportation, and reduce dependency on automobile travel, including the following:

- Strict maximum limitations on off-street parking with no minimum requirements.
- Enhanced parking and transportation demand management programs to meet specific goals for reducing single-occupancy vehicle (SOV) trips.
- New infrastructure to promote walking and bicycling.
- Improved transit services.

The recommendations of the Alewife Plan also include urban design measures to promote a more pedestrian-oriented character, including the following (which are discussed more in the accompanying urban design memo):

- Limiting unbroken building facades longer than 200 feet to promote a more consistent pattern of block sizes.
- Encouraging widened sidewalks with tree plantings.
- Providing new street connections in order to limit curb cuts and consolidate vehicular drives.
- Creating a consistent urban streetwall.

### *Resilience Planning*

Also relevant to the planning for this area is the City's ongoing Climate Change Preparedness and Resiliency (CCPR) or "Resilient Cambridge" planning effort, which was closely coordinated with the Alewife planning process. The Resilient Cambridge plan was developed in response to climate change threats, including increased heat as well as flooding from precipitation, sea level rise and storm surge.

One component of this larger effort was the work of the Climate Resilience Zoning Task Force, which completed its work in 2020 with near-term recommendations to incorporate standards for resilience into new development. The recommendations include:

- Requiring 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 anticipated flood elevations are developed and promulgated by the City based on climate

models and available using the Cambridge FloodViewer online platform. Developers work with DPW to understand and design to the appropriate standards.

- Using a “Cool Factor” scoring methodology to assess the combined cooling effect of various site design strategies such as tree preservation, new tree plantings, other planted areas such as shrubs and turf, green roofs, structural shade canopies, and materials with high solar reflectivity. Projects would meet minimum performance standards that are calibrated to the open space requirements of the district.
- For buildings subject to development review, incorporating passive design strategies that are resilient to disruptions that might occur due to extreme weather events such as heat and flooding that might affect building systems and utilities.

### *Infrastructure*

The Concord-Alewife Plan and the more recent Alewife District Plan both identify desired infrastructure improvements to serve public goals. One major piece of infrastructure is a planned bicycle and pedestrian crossing of the railroad line from Fawcett Street in the Quadrangle to Cambridgepark Drive in the Triangle, which has been incorporated into the review of sites that abut the railroad. Fawcett Street and Wilson Road are planned to extend to Spinelli Place; Fawcett Street, Wilson Road and Smith Place are proposed to be upgraded with grade-separated bicycle lanes with additional elevated walkways and safe crosswalks at intersections and mid-block crossings with special attention towards streets carrying large trucks.

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 Alewife District Plan has recommended retaining and strengthening these types of incentives. The Alewife District Plan also recommends a linear open space connection from the bend in Fawcett Street (the anticipated site of a pedestrian/bicycle bridge landing) to Smith Place, along a former railroad spur that is now mostly in private ownership.

The Alewife District Plan also recommends contributions at a rate of \$5.00 per square foot of new commercial development to provide some of the support necessary to enable this public infrastructure.

### *Recurring Issues*

Although many of the objectives in the Alewife District Plan can be achieved under current zoning limitations, some objectives of the Alewife District Plan have proven to be more difficult to achieve. In reviewing this and other projects, it has been the aim of staff to achieve the goals of the Alewife District Plan to the greatest extent possible given the current limitations. The following are three of the most substantial issues:

- The Alewife District Plan recommends raising the maximum height for non-residential uses to 85 feet to accommodate high-bay industrial and retail space at the ground floor, which would be exempt from FAR limitations. With the current height limit of 70 feet, it is more difficult to accommodate such areas without displacing the allowable FAR for other uses.

- The construction of elevated walkways connecting the sidewalk to uses at the ground floors of buildings is constrained by the current zoning requirement that front yards must be green area open space and must be at grade; however, the building can be designed creatively to incorporate some elevated areas and allow for this type of feature to be added in the future.
- It is difficult to achieve the recommended maximum off-street parking ratios because they are less than the minimum requirements under current zoning, and can only be reduced further if the Applicant seeks a special permit for such a reduction.

The full set of Alewife District Plan zoning recommendations are presented on [pages 156-163 of the Alewife District Plan report](#). Although the zoning recommendations of the Alewife District Plan are not yet adopted, the City Council has adopted a development moratorium with the aim of developing and adopting changes to the Alewife District zoning, as described earlier in this memo. A working group is being formed to undertake this process.

## Comments on Proposal

### Overview

The proposed project at 15 Wilson Road includes the construction of a four-story, approximately 280,046 square-foot technical office and laboratory building, with a ground floor restaurant use (also noted as “retail” on some of the plan drawings). This project is proposed by the Davis Companies, which owns several adjacent sites and is currently constructing the 75-101 Smith Place project previously approved by the Planning Board. The project includes 323 vehicle parking spaces in a two-story below grade garage, which would include 50 spaces dedicated for existing uses at 10 Wilson Road, 15 Wilson Road, and 26 Smith Place. The plan includes landscaped outdoor space and a portion of the multi-use path and linear park shown in several Alewife planning studies.

The proposal would demolish and replace an existing warehouse and office building of approximately 63,500 square feet and surface parking for 149 vehicles. The existing site is entirely paved.

As presented, the building additionally includes four fully enclosed truck loading bays, interior long term bicycle parking, a covered parking entrance ramp located outside of the building envelope, and a paved roadway connection on the southern portion of the site intended to satisfy an access easement for an adjacent property that is active through 2028. The proposed ground floor retail is shown in relationship to proposed open space along the eastern façade. The proposed green space on the northeastern corner of the site overlaps with those portions of the site identified as within the Flood Hazard Overlay District.

In addition to the proposed inclusion of a public multi-use path and open space, the Applicant is proposing the widening of existing sidewalks to better align with the street sections proposed in the Alewife District Plan and with other City requirements for streetscape design. Included in the application are plans for buffers, protected bike lanes, tree zones, sidewalks, and provisions for elevated walkways.

The applicant is seeking a Project Review Special Permit pursuant to Section 19.20, a Flood Plain Special Permit pursuant to the provisions of Section 20.70, and, pursuant to the provisions of the Alewife Overlay District, a Special Permit for the following: increased FAR and height within the AOD requirements, reduction of yard setback requirements, approval of a Retail Business and Consumer Service Establishment Use, and additional Public Benefit FAR for the creation of a public multi-use path and additional streetscape infrastructure.

### Proposed Uses

The Application proposes the following uses on the site:

Proposed Uses	Location/Size	Allowed/Special Permit?
4.34.f - Technical office for research and development, laboratory & research facility subject to the restrictions in Section 4.21.m.	Predominant use on all Stories Above Grade	Allowed by right; however, there is currently a moratorium on new buildings or enlargements of office and laboratory space.

4.35.f.1-5 – Restaurant, Bar, Craft Beverage Establishment, Food Stand or Kiosk, and Food Hall	Ground story northeast corner of the building; approximately 9,725 sf.	Uses allowed by special permit.
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Technical office and laboratory use is allowed as-of-right in the district, subject to the current moratorium provisions. The base Office-1 district requires a special permit for some retail or consumer service establishments, and the AOD zoning allows retail to be approved by special permit from the Planning Board. The proposal satisfies the requirements found in section 20.94.1, that: no individual establishment may exceed 10,000 sf in area; the retail use shall be located on the first floor or basement of the building in which it is located; and the total GFA devoted to retail uses may not exceed 10%.

Along Smith Place, the Alewife District Plan encourages the promotion of more active uses, including commercial and retail uses that have a public-facing component. Along Wilson Road, the plan encourages a “main street” that supports small scale retail. The current proposal shows one larger retail space at the northeast corner along the Wilson Road frontage and the linear open space and pathway, identified as a restaurant use. Staff have consulted the applicant on the location of ground floor retail relative to corner of Smith Place and Wilson Road. Please refer to the Urban Design memo for additional details.

Staff encourages the Planning Board to identify the full range of permitted retail or consumer service establishments when granting a special permit, to avoid return trips to the Planning Board if a new use is tenanted in the future.

***Proposed Dimensions***

The Application proposes the following dimensions for development on the site:

Dimension	Proposal	Relief Sought?
Gross Floor Area (GFA)	280,046 sf	Special permits to allow additional FAR in AOD, as well as additional FAR for Public Benefits (see below).
Floor Area Ratio (FAR)	1.58	Maximum FAR in base zoning is 0.75, Planning Board may approve up to 1.5 in AOD-4 by special permit. Additional FAR is a bonus of 44,206 SF for proposed conveyance of space for public use, which needs Planning Board approval.
Height and Stories	69’ 7”; 4 stories (not including mechanical penthouse)	Maximum height in base zoning is 35’, Planning Board may approve up to 70’ in AOD-4 by special permit
Setbacks	Front Yard: 25’ Front Yard: 25’ 1” Side Yard: Varies	Special permit for reduction in side and front yards. Planning Board may approve any reduction in side

		yard, but the front yard may not be reduced less than 15’.
Open Space	<p>Open Space: 22%                      Permeable Open Space: 36,820 sf or 22%*</p> <p>* This calculation does not include the 44,206 sf to be conveyed via an easement to the City for the construction of a multi-use path.</p>	<p>Minimum open space 15%.                      Permeable area to be reduced from 25% as of right per section 20.96.1 if stormwater requirements are met.</p>

In general, the proposal conforms to FAR, height, and setback requirements allowable by special permit under existing AOD zoning. These special permits may be granted by the Planning Board if they are found to be supportive of area plans, as described above in more detail. The Applicant has made additional efforts to align with the Alewife District Plan and has been meeting with staff from CDD, TP+T, and DPW to discuss this proposal in the context of the Alewife District Plan goals.

*Height*

The proposal is built to 69’ 7”, which is just below the existing height limit of 70’ allowed in AOD-4 by special permit. The ground story is elevated to meet the City’s projected flood levels, and while the Alewife District Plan recommends allowing a compensating height increase, that is not allowed under current zoning.

This project is located within an area identified in the Alewife District Plan as the “Quadrangle Mixed-Use Zone.” This zone does not require or encourage high bay light industrial uses at the ground floor. It instead encourages active ground floor space along Smith Place and Wilson Road, active commercial uses along Smith Place, and a mix of commercial and residential at the current allowed density. Height increases, as well as FAR use exemptions, are recommended by the Alewife District Plan to accommodate active ground floor uses, but are not included under current zoning.

*Density*

The proposal is generally built to the district density limits, but is seeking a slight density increase which is allowable as a “bonus” for the conveyance of land to the City to be used for the first section of a planned linear open space and multi-use pathway, and for part of the public street. This mechanism in zoning is intended to promote the transformation of the public realm to a more pedestrian and bicycle-oriented condition, per the goals of both the Concord-Alewife Plan and the Alewife District Plan. It is an important tool in the broader strategy of increasing public space in Alewife, where most land is in private ownership.

*Setbacks*

The current zoning allows flexibility in setbacks, provided at least a 15-foot front yard is provided. As noted above, the applicant’s design team has engaged with city staff to align the building with the streetscape dimensions depicted in the Alewife District Plan.

Section 20.95.32.1 of the Zoning Ordinance further requires that the area between the principal wall plane of a building and a street shall consist entirely of Green Area or Permeable Open Space that is primarily at grade along the entire length of the lot, excluding access drives leading to vehicle parking facilities. The definitions of Green Area and Permeable Open Space do make some allowance for limited paved walkways.

This is an area where creative design may be needed to meet the zoning requirements while advancing the design outcomes of the Alewife District Plan, which promotes elevated walkways along the Wilson Road and Smith Place frontages. The applicant has been working earnestly with zoning and urban design staff to explore solutions, and staff believes the design details can be refined and finalized as part of continuing review by staff. Refer to the Urban Design memo for additional considerations on the elevated walkways.

*Open Space, Permeability, and Public Improvements*

The project exceeds the open space requirements of the AOD, meeting a ratio of 22% of the lot area where a minimum 15% is required. The lot does not exceed the permeable area requirement of 25% with a proposed 22% of the lot shown as permeable. It is not clear if land included in these calculations is land intended for public improvements in the form of open space, grade separated bicycle lanes, and sidewalks that would be conveyed to the City of Cambridge in accordance with Section 20.95.11.2. Some additional review may be needed to determine whether those areas would be able to meet the definition of permeable area. When a proposal does not meet the 25% requirement, the AOD zoning allows a reduction if the City’s stormwater management requirements are met through other means, which could include green roofs.

For the areas that are proposed to be incorporated into the public street, Section 20.99 of the zoning ordinance allows for the “subdivision” of lots to be conveyed to the City of Cambridge (including by easement), notwithstanding any other any limitation in applicable base or overlay districts with regard to required yards or other dimensional, open space, or other regulatory requirement or limitation. This provision would apply to the proposed cycle track and sidewalk but not to the elevated walkway because the City of Cambridge has not expressed interest in acquiring an easement over that portion of the site.

***Proposed Parking, Bicycle Parking, and Loading***

The Application proposes the following:

Off-Street Parking Spaces <i>(includes below)</i>	324 – all below grade
<i>Deeded from 10 Wilson</i>	40
<i>Deeded from 26 Smith</i>	10
Bicycle Parking Spaces	88 long term / 20 short term
Loading Bays	4



The number of parking spaces is greater than the minimum required ratio in current zoning, and also in excess of the maximum 0.8 spaces per 1,000 square feet GFA parking ratio recommended in the Alewife District Plan. Approximately 273 spaces are included for the new development (approximately 0.97 ratio) and 50 other spaces are reserved for other nearby projects. The number of provided bicycle parking spaces and loading bays exceed the minimum requirements. Additional comments are provided in the TP+T memo.

The project has completed a Transportation Impact Study (TIS) and staff have made recommendations in the accompanying TP+T memo. The proposal also requires a PTDM Plan, which includes programmatic measures to achieve specific reductions in single-occupancy vehicle mode shares. Staff issued a final PTDM Plan approval with conditions, which is included in the Board materials. While the Application proposes construction and conveyance of a public multi-use path segment, it does not propose funding contributions to area-wide transportation and infrastructure improvements per the Alewife District Plan.

### ***Other Zoning Requirements***

- **Project Review Special Permit:** As new construction greater than 50,000 sf in a base Office-1 zoning district, this project triggers a Project Review Special Permit, which requires the Planning Board to make transportation impact findings and impose appropriate mitigation, and to assess the proposal's general conformance with the Citywide Urban Design Objectives. Please refer to memos from TP+T and Urban Design for comments on these topics.
- **Flood Plain Special Permit:** The northeast portion of the project site is located within the City of Cambridge Flood Plain Overlay District and includes portions of FEMA map zone AE. The Flood Plain Special Permit requirements in Section 20.70 of the Zoning Ordinance largely parallel the requirements of the Wetlands Protection Act, which is overseen in Cambridge by the Conservation Commission, requiring compensatory storage for any development that impacts the volume of the flood plain. The Planning Board relies mostly on documentation from the Conservation Commission and the City Engineer to determine if the requirements are met. The project was approved by the Conservation Commission at their March 4, 2022 meeting with a forthcoming Order of Conditions to be issued.
- **Green Roof Requirements:** The roof area for the mechanical penthouse, the area surrounding the penthouse above the occupied 4<sup>th</sup> floor, and the area for future tenant mechanical equipment encompasses an area of 41,551 sf. This area excludes space for maintenance and walkway zones. To satisfy the 80% green roof area requirement, the applicant must provide 33,241 sf of green space. The applicant has indicated that they satisfy this requirement and are therefore not seeking a special permit from the Planning Board. Staff are not clear of the proposed green roof square footage area based on the submitted drawings and are requesting additional information from the applicant to ensure compliance with the Ordinance.
- **Green Building Requirements (GBR):** The proposal is subject to the requirements of Section 22.20. The documentation provided by the Applicant was determined to be adequate to demonstrate compliance with the GBR applicable at the Special Permit stage of review. The

project is expected to achieve LEED Gold certification with 61 points. Staff included the following advisory comments in the GBR certification:

- Provide material information updates on list of proposed/selected materials/products information, specifically their Environmental Product Declarations (EPDs) and which have resulted from using Life Cycle Assessment (LCA) tools i.e., Tally and or EC3.
- Provide information on roof materials and site/hardscape surfaces specifically about solar reflectance information SR/SRI that is relevant to reducing heat island effect.
- Incentive Zoning: Because the project exceeds 30,000 square feet of new construction, it is required to make a funding contribution to the Affordable Housing Trust per the requirements of Section 11.202.

### ***Community Engagement***

According to the application materials, the Applicant hosted one “Virtual Open House” via Zoom on Wednesday, February 16, 2022 at 6:00 pm. Invitations were sent to abutting property owners and two neighborhood groups; a complete list of invitees is attached to the application. The application summarizes questions and comments that were made but does not indicate how many attendees were present.

## Special Permit Conditions

If the Board decides to grant the special permit, the following list summarizes the general categories of conditions recommended for this development based on the requested special permits:

1. **Approved Development:** Authorized development would need to conform with the submitted application materials. An Approved Dimensional Form would be attached as an Appendix.
  - In this case, the approved GFA would be conditioned on the conveyance of approximately 44,206 square feet of land for public use as depicted in the plans. Design of the public improvements would be certified at the building permit stage and an agreement for conveyance would need to be approved by the City at the certificate of occupancy stage.
  - As with other proposal in Alewife, staff recommends that the Planning Board approve further reductions in parking, to the extent permissible by zoning at the time, without requiring an amendment to the special permit. This would not be true of future increases in parking, which would require amending the special permit.
2. **Permitted Uses:** The special permit would authorize a specified range of uses, including technical office for research and development. The special permit would also authorize the proposed restaurant use as shown in the plans. In the future, uses that are allowed by zoning but not authorized by the special permit would require Planning Board approval, and uses that are limited by the Zoning Ordinance (e.g., requiring a separate special permit from the Planning Board or BZA) would need to seek the necessary relief.
  - In this case, staff would advise the Planning Board to consider what future retail or consumer establishments should be permitted at the ground story to avoid the need for future amendments.
3. **Design Review:** CDD staff would review and approve design details at the construction documents phase, prior to issuance of a building permit, to certify that the plans conform to the Planning Board's approval. Board members may cite specific areas of focus for detailed review, based on the Urban Design Report and Board discussion. The continuing design review process would require a façade mock-up on or near the site for Board members and staff to review material selections before installation.
4. **Infrastructure:** Work being done on City property would be subject to review and approval by appropriate City departments, including DPW, TP+T and CDD. The special permit would also be conditioned on certification by DPW that the following infrastructure standards are met:
  - Stormwater management, including mitigation requirements for stormwater inflow and infiltration from the sewer system. In this case, certification of stormwater management requirements in the Alewife Overlay Districts will be required if the permeable area is less than 25% of lot area.
  - Tree management for both public and significant private trees, per the applicable provisions of the Cambridge Tree Protection Ordinance.

5. Transportation: Transportation mitigation measures, as recommended in the TP+T memo, would be included as conditions. The special permit would be conditioned on ongoing compliance with the Parking and Transportation Demand Management Plan requirements.
6. Sustainability: Development will be subject to the Green Building Requirements in Section 22.20, which will be reviewed again by CDD staff at the building permit and certificate of occupancy stages. CDD would also review for compliance with Green Roof Requirements in Section 22.35.
7. Resilience: As recommended in the DPW memo, a Site Action Plan is recommended to allow for future building adaptation to flooding risks associated with climate change, to be reviewed and approved by DPW and the Cambridge Fire Department at the building permit stage and made operational upon occupancy.
8. Housing: Development will be subject to Incentive Zoning requirements, which will be certified by the CDD Housing staff at the building permit and certificate of occupancy stages.
9. Construction Management Program: Per Section 18.20, staff would recommend a Construction Management Program be provided and approved by TP+T, DPW, and other applicable City departments before issuance of a building permit. This program would also include a community outreach program designating a point of contact to provide information to the public during the construction process and notification panels posted on the site with project information.



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# CITY OF CAMBRIDGE

Community Development Department

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## Urban Design Staff Report

Date: June 2, 2022

Case: PB-391

Location: 40 Smith Pl (55 Wilson Rd) and 45 Wilson Rd

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## Urban Design Comments

### Overview:

The 40 Smith Place project consists of a four-floor technical office and lab building with ground floor retail use, located at the intersection of Smith Place and Wilson Road in the Alewife Quadrangle. The project will provide public benefits including the construction of a linear park with a multipurpose trail along the site's diagonal southeastern border and the installation of sidewalks, bicycle lanes, and street trees on the adjoining portions of Wilson Road and Smith Place. and the provision of publicly accessible walkways elevated above anticipated flood levels.

Together with the recently approved projects at 75 Smith Place and 180 Fawcett Street, the 40 Smith Place project will further the transformation of the Quadrangle from a district dominated by low-rise industrial buildings and surface parking lots into a mixed-use district with office, laboratory, retail, and residential uses, organized by a network of tree lined streets and other green open spaces.

### Relevant design goals, objectives, and guidelines:

The Alewife District Plan (2019) and the associated Alewife Design Guidelines (2019) set out a vision of Alewife as a cohesive, sustainable, and resilient mixed-use district, connected to the rest of the city, and supporting interaction and social ties among its residents. The Plan and Guidelines envision a district composed of urban blocks that frame and define coherent and pedestrian and bicycle friendly streets and green open spaces; with streets defined by street trees and streetwall facades.

The Alewife District Plan recommends alignments and sections for Smith Place and Wilson Road. These delineate curb locations, bicycle lanes, the alignment of street trees, sidewalk widths, elevated walkways to give access to first floor lobbies and active uses elevated above anticipated flood levels, and the locations of streetwall façades. In addition, the Plan recommends the creation of a three-acre linear park and multiuse trail on the site of the former diagonal rail spur that ran through the Quadrangle.

The proposed project responds positively to these recommendations, reconstructing the adjoining portions of Smith Place and Wilson Road with street trees, sidewalks, and separated bike lanes, providing streetwall facades, creating zones for the elevated walkways, and constructing the portion of

the linear park that lies within the site’s southeast boundary. All parking will be in an underground garage, leaving ample areas available for new trees and other plantings.

The application materials reflect staff suggestions regarding building siting, massing, and site design. In meetings with staff following the Planning Board submittal, additional changes were discussed to further improve the project’s benefits to the public realm and its responses to the recommendations of the Alewife District Plan while remaining in compliance with existing zoning.

### **Siting and Massing**

The triangular shape of the site, and the fact that all three of its sides have a public role, pose challenges to the design of the building and its site. In response, the proposed building is L-shaped: its two wings front onto Smith Place and Wilson Road and embrace a courtyard/plaza facing the linear park on its south side. A recess on the Wilson façade creates a shallow forecourt that marks the lobby entry and breaks up the length of the façade. The naturalistically/romantically designed stormwater management and compensatory flood storage areas are located in the low-lying eastern tip of the site. Building service is at the southwestern end of the site, accessed from Smith Place. Detailed comments follow.

### **Open Space and the Public Realm**

#### Landscape design

The project’s construction of the portion of the linear park and its multiuse trail is greatly appreciated.

1. Staff will be happy to work with the designers on details of the linear park and the multiuse path: dimensions, materials, lighting, wayfinding, plantings, benches and other amenities, public art, etc.
2. Consideration should be given to emphasizing the civic character of the multiuse path and its importance as a connective route by a more consistent arrangement of the trees along its borders.
3. To minimize the impact of the service yard on the park and the multiuse trail, consideration should be given to providing additional planting and other forms of screening, and to reducing the size of the paved area if possible.

The adjoining property to the south currently has an easement (expiring in 2028) for use of and access to a triangular area located within the southeastern border of the 40 Smith Place property. The project proposes to relocate the access route from its current north/south path through the site to a curvilinear permeable driveway entered from the new building’s service yard. A paved area just east of the triangular easement will serve truck turning movements. Once the easement expires, the triangular area and the turning area will be converted to green space and the permeable drive will be terminated before it crosses the multiuse path, but will continue to serve the service needs of the retail space proposed at the east end of the building.

4. To eliminate the need for the driveway once the easement expires, consideration should be given to providing deliveries to the retail space from Wilson Road or from the building’s main loading dock.

The landscape design of the open space south of the building is more or less homogenous. With the exception of a paved plaza at the south end of the building's lobby and an elevated terrace along the south side of the building's east wing, it is characterized by gently sloping topography and evenly distributed trees in a generally random arrangement. It is crossed by the new access drive to the easement and a curvilinear pedestrian path that roughly parallels the diagonal multiuse path. The nonhierarchical character of the landscape design – merging the plaza and the linear park - seems likely to create a sense that the users of the linear park and multiuse path are intruding into the private realm of the building and its occupants.

To ensure that the public park and path feel fully public, a more assertive distinction between the plaza immediately associated with the building and the public path should be considered, using means such as planting and low terrace walls to create a sense of threshold between them, and at the same time by creating a more direct and legible connection across that threshold. In other words, the plaza and the linear park and its path could be conceived more as distinct areas of the site, with their own character, and with free passage between them mediated by a threshold.

#### Grade-level Sidewalks

The Alewife District Plan recommends a 5-foot-wide sidewalk and a 5-foot-wide tree zone.

5. To provide a more accommodating pedestrian realm, consideration should be given to reducing the tree planting zone to 4 feet wide and to increasing the sidewalk width to 6 feet or slightly more.

#### Elevated Walkways

The Alewife District Plan recommends that the buildings' first floors be elevated to protect from anticipated 2070 10-year flood levels, and that in the Quadrangle, accessible, elevated walkways be provided along Wilson Road and Smith Place to give access to lobbies and other public-facing ground floor uses such as retail. The design of the elevated walkways is constrained by the current zoning requirements that yards in front of the building's principal front wall plane must be permeable open space and generally at grade.

The project establishes an elevated 12-foot-wide zone along Smith Place and Wilson Road, approximately 2 to 2 ½ feet above the grade level sidewalks. Portions are paved to create the elevated walkway recommended by the Alewife District Plan; elsewhere it is planted. A set of ramps and steps ascends to the level of the elevated walkway at the lobby entrance on Wilson Road, and also near the north end of the Smith Place frontage. See the Building Design section below for further discussion of the elevated walkways.

#### Loading and Parking

Parking is entirely in a two-level underground garage, accessed by a roofed free-standing ramp at the east end of the site.



6. To allow the building volume to address the linear park with its romantically landscaped stormwater area, and the proposed retail space at the east end of the building to directly connect to it, consideration should be given to relocating the parking ramp into the building.

The building's loading docks are located at the south end of the west wing; the service yard is located between the building and the linear park and accessed from Smith Place.

7. Given the truck turning movements provided, the paved service yard seems excessively large, and consideration should be given to eliminating or reducing the paved area nearest the public path.
8. The yard should be well screened from the linear park by plantings and fences.

After the neighboring property's easement expires, the curvilinear drive proposed to provide access to the triangular area is proposed to be shortened, but to remain in use to facilitate deliveries to the retail space at the east end of the building.

9. Alternate means of serving the retail space should be considered, including from Wilson Road, or from the building's main loading docks.

## **Building Design**

### Architectural Character

Similar to the Davis Company's building at 75 Smith Place, the expressed structural grid and curtainwall infill of 40 Smith Place's upper floor facades reflect a modern industrial heritage. Its proportions, mullion patterns, and spandrel system are modulated on the different facades to break up the overall scale of the building. Most of the ground floor is highly glazed. Exceptional elements, such as the recessed lobby entrance on Wilson Road and balconies at the south end of the west wing add visual interest.

### Building Massing

Due to the rectilinear form of the building's east and west wings, their southeast corners confront the diagonal linear park.

10. Staff recognizes that the pragmatics of lab bay layouts favor rectangular floorplates, but other recent projects have adjusted their floor plates in response to oddly shaped sites. Consideration should be given to angling the end facades of the two wings to create a more sympathetic/supportive relationship between the diagonal park and the adjoining building facades. Even relatively slight adjustments of the building geometry would improve the fit of the building with its triangular site.

As a semipublic/semiprivate area serving entry to the building's lobby from the south, the plaza in the angle between the two wings may benefit from clearer spatial definition.

11. Consideration could be given to pulling the eastern portion of the east wing's south façade slightly farther south than its western portion, creating a shoulder at the east end of the plaza to give it clearer definition.

The mechanical penthouse is set back from the facades of the upper floors by 25 or more feet, but is tall in comparison to the building's occupied floors. The perspectives show shallow recesses into the penthouse's volume above the north and south ends of the lobby, but these are not present on the plans.

12. Consideration should be given to reducing the height of the penthouse if possible, and to breaking up its length by changes in plane or materials/colors.

#### Ground Floor Design and Uses

Tenant spaces, the building lobby, and back-of-house spaces dominate the ground floor. With a 20-foot floor-to-floor dimension, it is suitable for retail use. Retail space is indicated at the east end of the building, facing the linear park and the space between the building and the separate parking garage ramp. The loading dock bays are sufficiently deep to accommodate the full lengths of the design size trucks. The transformer and switchgear are located inside the building.

13. As Smith Place will become a more significant street as redevelopment occurs, consideration should be given to providing retail space at the building's northwest corner, or at least making provisions for future retail in this location.
14. To eliminate the garage ramp's visual impact on the naturalistically designed stormwater/flood storage area at the eastern tip of the site and on the linear park, and to give the retail space a direct relationship to this appealing area, consideration should be given to moving the ramp inside the building's volume, where it would be less visually obtrusive.

#### Elevated Walkways

12-foot-wide elevated zones are proposed along the building's Smith Place and Wilson Road facades. They are supported by 2- to 2 ½-foot tall retaining walls along the inner edges of the grade level sidewalks, and located according to the street sections proposed in the Alewife District Plan. Portions of the elevated zones are paved to serve as the elevated walkways recommended by the Plan; other portions are not paved and simply serve as planters.

15. To connect the building entrances on Wilson Road and Smith Place and potential retail space between them facing the intersection, consideration should be given to providing a paved elevated walkway at the building's northwest corner, extending to the Wilson Road and Smith Place entrances, with ramps and steps located and designed to invite pedestrians up to it.

The façades of the upper floors above the elevated walkway zones are cantilevered forward, overhanging roughly the inner 2/3 of the elevated zones; the outer 1/3 of the elevated zones extend beyond the principal front wall plane into the building's front yard.

16. To provide additional shelter for users of the elevated walkways and to suggest a more direct relationship between the elevated walkway and the grade level sidewalk, consideration should be given to extending projecting canopies over the full width of the elevated walkway zone, as indicated in the Alewife District Plan.

In accord with zoning's requirement that the front yard between the sidewalk and the principal front wall plane be permeable, the southern portion of the elevated zone on Smith Place is planted rather than paved.

17. Consideration should be given to instead bringing the building façade in this area forward to the western face of the 12-foot elevated sidewalk zone, thereby putting the paved, elevated walkway in the northern portion of the Smith Place frontage behind the principal front façade plane and so bringing it into accord with current zoning. If the eastern side of the south wing was also moved west so as to maintain the building's overall gross floor area, this would have the benefit of slightly enlarging the south plaza and linear park.

The plans indicate a planting zone on the northern edge of the Wilson Road elevated walkway.

18. As planting in this location will tend to separate occupants of the walkway and first floor interior spaces from the sidewalk, consideration could be given to instead using permeable pavers in this location and providing a narrow strip of planting at sidewalk level, along the elevated walkway's retaining wall.

### Materials, Colors, and Details

The building's facades are generally simply and elegantly designed in the idiom of mid-20<sup>th</sup> century industrial buildings: curtain wall with vertical fins and large window openings within a structural grid. Mullion patterns and deep mullion covers add visual interest, as does the use of shadow boxes rather than spandrel glass. The specifications of the proposed glass: 59% visible light transmittance ("VLT") and 14% visible light reflectance ("VLR"), are good for the glazing of the upper floors.

19. More information should be provided regarding the design and materials of the first-floor facades.
20. A higher VLT would be preferable for the first-floor glazing.
21. To reduce perceived volume of the penthouse, changes of materials could be considered for portions of its enclosure.

### **Bicycle Parking**

A Bluebikes station is provided at the east end of the site's Wilson Road frontage, adjoining the stormwater/flood area. Short-term bicycle parking spaces are provided in the same location, and also in the plaza by the south lobby entrance. Long-term spaces and showers are provided in the first floor, adjacent to the lobby.

22. More fully dimensioned plans should be provided of all the bicycle parking areas.
23. A more direct route from Smith Place to the long-term bike parking room should be considered.

### **Environmental Impacts**

The building does not appear to have negative wind, shadow, or solar glare impacts. The noise mitigation narrative indicates that mechanical noise will be sufficiently controlled.

### **Sustainability**

The existing site is almost entirely occupied by parking lots, driveways, and buildings. The proposed project provides green open space for the linear park, and street trees along Smith Place and Wilson

Road, considerably reducing the site's contribution to the urban heat island effect. The young, existing street trees along Wilson Road and the larger, existing trees in the eastern part of the site are all proposed to be removed for the new building and its sitework. Large areas of green roof are provided at both the main roof and penthouse roof levels. The windows are triple glazed. Floodwater barriers are provided at the garage entry ramp and the loading dock.

24. If possible, it would be preferable to retain some of the existing 12" to 14" caliper trees at the east end of the site, and the young street trees along Wilson if their exact locations can be accommodated in the proposed sidewalk and bike lane layout.
25. Consideration could be given to providing elongated tree planting pits for street trees, or to providing structural soil.
26. Exterior sun shading could be considered for the south-facing fenestration.
27. Consideration should be given to incorporating photovoltaic panels or a biosolar system.

### **Continuing Review**

The following are additional recommendations for ongoing design review by staff if the Board decides to grant the special permit:

1. All exterior materials, colors, and details, including a materials mockup for each building, reviewed by city staff and the Planning Board prior to any exterior materials being ordered. The mockup should include features such as the upper floor and first floor vision glass, mullion systems, metal and ultra high-performance concrete cladding materials, penthouse cladding and screening, etc.
2. Finalization of the boundary of the publicly beneficial easement and its conditions.
3. Plant species, locations, and planting standards.
4. The landscape design of the linear park as civic space: the location of trees and other plantings, lighting, amenities, wayfinding, art, and the route, dimensions, and details of the multiuse trail.
5. Adjustments to the building massing to more directly address the linear park and to improve the conformance of the elevated walkways with existing zoning.
6. Details and dimensions of the elevated walkways, including their extents and their ramps and steps.
7. Dimensions and details of the sidewalks and bicycle lanes.
8. Required clearances, dimensions, and the design of access routes to the short- and long-term bicycle parking spaces and the Bluebikes station.
9. Screening of the service yard.
10. The design and location of the parking garage entrance ramp.
11. Provisions for ground floor retail or other active uses.
12. The design of site lighting to minimize light trespass and of methods for the control of interior lighting.
13. The design of the ground floor facades, including the locations of doors to potential retail spaces, and the loading dock facade.
14. Materials and design of the penthouse walls and screening.

## Green Building Requirements

### 15 Wilson Road Green Building Report – Certification for Special Permit Stage

**Status:** The Community Development Department (CDD) received the Green Building Report (GBR) for the Special Permit stage for 15 Wilson Road. Pursuant to Section 22.25.1 of the Zoning Ordinance, CDD staff have reviewed the project’s GBR and provide the following Determination, Summary of Compliance, and Comments.

**CDD Determination: The documentation provided by the Applicant is adequate and demonstrates compliance with the Green Building Requirements applicable to the Special Permit stage.**

**Project Summary:** This project is subject to the City’s Green Building requirements, which mandate that projects meet the LEED Gold requirements. Based on the documents submitted, the project is expected to achieve LEED Gold certification with 61 points. The project is seeking LEED certification with USGBC under the LEED v4 Building Design + Construction for Core & Shell rating system.

#### Summary of Compliance:

##### Green Building Professional Affidavit Certification

Krysta Levandowski, LEED AP BD+C, has been identified as the Green Building Professional for the project. The affidavit states that this professional has reviewed all relevant documents for this project and confirm to the best of their knowledge that those documents indicate that the project has been planned and designed to meet the LEED requirements of Section 22.24 under Article 22.20 of the Cambridge Zoning Ordinance. The applicant also provided the following relevant information during the design review process:

- As the project moves through design development and construction documents, life cycle assessment tools such as Tally & EC3 will be used to address embodied carbon with an analysis and focus on building envelope, structure, specifically on concrete and structural steel. There will also be a focus on interior finishes.
- The project team will also prioritize building products and materials that are manufactured locally and maximizing pre- and post-consumer recycled content where possible and accounting for LCA and sustainable materials--harvesting and sourcing.
- The project team is also assessing the use of natural refrigerants or with low global warming potential.
- The team will also be considering enhancing the energy and cost performance while reducing carbon emissions through a wholistic approach offered in the LEED pilot credit during the next project phase.

LEED Rating System Checklist, LEED, and Net Zero Narrative

- Rating System: LEED v4 BD+C: New Construction. LEED Baseline standard used is ASHRAE 90.1-2010.
  - Energy cost saving = 10% over the LEED baseline standard (ASHRAE 90.1-2010).
  - Energy use reduction = 10% reduction below the Stretch code baseline (ASHRAE 90.1-2013).
  - Energy use savings = 12% reduction in energy use relative to ASHRAE 90.1-2010 baseline.
  - Site EUI (Stretch Code standards) = 139 kBtu/SF-yr.
  - Source EUI (Stretch Code standards) = 300 kBtu/SF-yr.
  - GHG emissions reduction = 12% reduction.
  - Building Envelope:
    - Window-to-Wall Ratio: 35%
    - Triple-glazing used with U-value of 0.36
  - Indoor Water Use Reduction below LEED Baseline: 40%
  - Outdoor Water Use Reduction below LEED Baseline: 75%
  - LEED categories and their credit points (reported as of 3/16/2022):

○ Integrative Process – 1 point	○ Materials and Resources – 6 points
○ Location and Transportation – 16 points	○ Indoor Environmental Quality – 5 points
○ Sustainable Sites – 7 points	○ Innovation – 5 points
○ Water Efficiency – 8 points	○ Regional Priority – 2 points
○ Energy and Atmosphere – 11 points	
- Total credit points = 61 points**

**Comments:**

1. Staff are expecting to receive additional information from the applicant to confirm LEED credit points awarded in the design and construction review by USGBC as we move to the next project stage.
2. As we move through the process, provide material information updates on list of proposed/selected materials/products information, specifically their EPDs and which have resulted from using LCA tools i.e., Tally and or EC3.
3. Provide information on roof materials and site/hardscape surfaces specifically about solar reflectance information SR/SRI that is relevant to reducing heat island effect.