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# CITY OF CAMBRIDGE

Community Development Department

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To: Planning Board

From: CDD Staff

Date: December 1, 2021

Re: Special Permit **PB-385, 160-180 Fawcett Street**

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## Overview

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Submission Type:	Special Permit Application
Applicant:	CCF Fawcett Street Property, LLC
Zoning District(s):	Industry B-2 (IB-2) and Alewife Overlay District 2 (AOD-2)
Proposal Summary:	Construct a 58,456 square foot four story building for technical office use and a 55-vehicle parking garage below.
Special Permits Requested:	Reduction of required off-street parking spaces (6.35.1); Project Review (19.20); Flood Plain Overlay District Special Permit (20.73); Floor area ratio (FAR) in excess of 1.5 (20.95.1); Building height in excess of 35 feet (20.95.2); Public infrastructure FAR bonus (20.95.22); and Reduction of Green Roofs requirement (22.35.3)
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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Requested Special Permits	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>
Exemption of Required Green Roof Area (Section 20.35.3)	<p>The Planning Board may grant a special permit to reduce the required Green Roof Area, Biosolar Green Roof Area, or Solar Energy System below the area required by Section 22.35.2, provided that each square foot so reduced be compensated by a unit price contribution to the Cambridge Affordable Housing Trust.</p>
Increase FAR, additional FAR for public improvements, and increase building height in Alewife Overlay Districts (Sections 20.95.1, 20.95.11, 20.95.2)	<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. 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> <p>Conveyance of fee or easement property interests to the City of Cambridge (in a form acceptable to the City) to permit the future 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>
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>

<b>Requested Special Permits</b>	<b>Required Planning Board Findings</b> <i>(Summary - see appendix for zoning text excerpts)</i>
Reduction in Minimum Number of Parking Spaces (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.
General Special Permit Criteria (Section 10.43)	<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> <ul style="list-style-type: none"> <li>(a) It appears that requirements of this Ordinance cannot or will not be met, or</li> <li>(b) traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character, or</li> <li>(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</li> <li>(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</li> <li>(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</li> <li>(f) the new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30.</li> </ul>



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# CITY OF CAMBRIDGE

Community Development Department

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Date: 12/1/2021

Zoning Report: **PB-385, 160-180 Fawcett Street**

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## Area Planning and Zoning

### *Site Context*

The proposed project at 160-180 Fawcett Street is for the construction of a four-story technical office and laboratory building of approximately 58,456 square feet to replace an existing two-story wood gymnasium and office building. 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 75-109 Smith Place, another technical office and laboratory building permitted on the street corner southwest 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. 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.



Figure 1. Aerial photograph of the area surrounding 160-180 Fawcett Street dated March 27, 2021. (source: Nearmap)

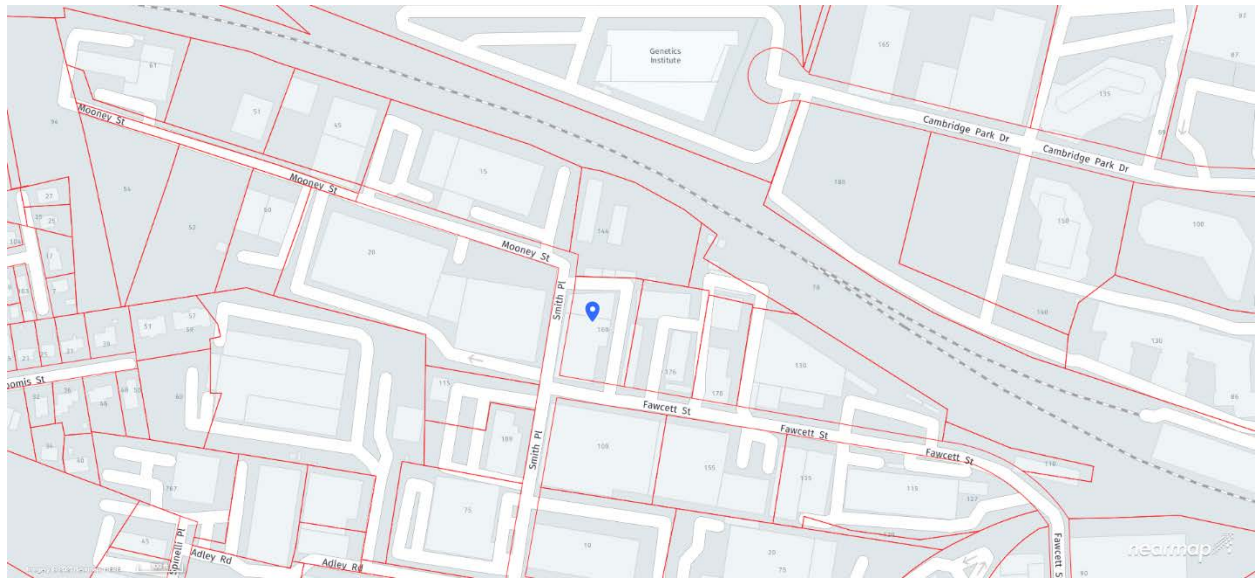


Figure 2 Road map of the area surrounding 160-180 Fawcett Street. (source: Nearmap)

### Site Zoning

The underlying base zoning is Industry B-2 (IB-2). The site is also in the Quadrangle Northeast Alewife Overlay District (AOD-2), 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 IB-2 district and AOD-2 district allow technical office use by right, among various other residential and commercial uses (with residential dwellings requiring a Planning Board special permit in IB-2). 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.

	<b>IB-2 / AOD-2 District</b>
Maximum Floor Area Ratio (FAR)	0.75 as-of-right (base) 1.50 by special permit (AOD)
Maximum Height	35’ as-of-right (base) 70’ non-residential by special permit (AOD)
Minimum Yard in Feet	Front: 15’ as-of-right (base) Side: 0’ as-of-right (base) Rear: 0’ as-of-right (base)
Minimum Ratio of Private Open Space to Lot Area	None as-of-right (base) 15% min. open space and 25% permeable area (AOD)

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. However, the applicant

provided a determination by the Conservation Commission that the project is outside the flood plain based on a more detailed site analysis.

### ***Area Plans and Studies***

#### *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 new 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. Cool Factor information was shared with CC&F in May and advisory request was made in conjunction with these early discussions.
- 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 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 any 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.

Although the zoning recommendations of the Alewife District Plan are not yet adopted, the City Council has been discussing them actively and staff anticipates further discussion in the near future on what changes the Council would like to pursue.

## **Comments on Proposal**

### ***Overview***

In general, the proposal is for an allowed use that conforms to the FAR and height requirements allowable by special permit under the AOD zoning. It is seeking special permits for reduction of required green roof area, reduction of required parking spaces, and a flood plain special permit. Within the constraints of current zoning, the design attempts to incorporate many of the components that are recommended in the Alewife District Plan, particularly through improvements to the public streetscape that promote pedestrian and bicycle use.

### ***Consistency with Planning and Zoning***

The Applicant has been meeting with staff from CDD, TP+T, and DPW to discuss this proposal in the context of the Alewife District Plan goals.

The following summarizes some key zoning points and outstanding issues related to this proposal. The full set of Alewife District Plan zoning recommendations are presented on [pages 156-163 of the Alewife District Plan report](#).

### ***Height, Density, and Use***

The proposal is built to the height limits of current zoning. 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.

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 as 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.

The proposed use, technical office and laboratory, is allowed as-of-right in the district. Along Smith Place, the Alewife District Plan encourages the promotion of more active uses, including retail and/or industrial uses that have a public-facing component. Although the current proposal shows two smaller

spaces along the Smith Place frontage, they are identified only as “future tenant” and it is not clear whether they would be technical office uses or could potentially accommodate a more active use.

#### *Open Space, Permeability, and Public Improvements*

According to the plan, the project exceeds the open space requirements of the AOD, meeting a ratio of 36.9% of the lot where 15% is required. It also exceeds the permeable area requirement of 25% with a proposed 30.2% of the lot shown as permeable. 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. The permeable area also includes space that is above a below-grade parking garage, which would not be permeable. Some additional review may be needed to determine whether those areas would be able to meet the definition of permeable area. If 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.

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 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. Because the elevated walkway is paved and above-grade, it would need to be reviewed more carefully to determine whether it satisfies these provisions. As noted earlier in this memo, 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.

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.

Driveways to access parking and loading do not count as a public benefit. This portion of the public benefit calculation may need to be revised.

#### *Transportation*

The proposal includes 53 parking spaces, 14 long-term bicycle parking spaces, 8 short-term bicycle parking spaces, and one loading bay. The number of parking spaces is less than the minimum required ratio in current zoning, which would require 56 spaces, and therefore a reduction is being sought. However, the maximum ratios recommended in the Alewife District Plan would result in only up to 46 spaces, which would require the applicant to seek a further reduction. The proposed bicycle parking spaces exceed the minimum requirements, and the one loading bay meets the minimum requirement for the proposed use.

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. Issuance of the PTDM plan approval is necessary prior to the City granting permits.

Additional comments are provided in the TP+T memo.

#### *Green Roof Requirements*

The project shows 2,720 sq. ft. of rooftop space reserved for anticipated future tenant mechanical equipment. Future tenant mechanical equipment space is not listed as an exempt use when calculating whether 80% of the building's roof is devoted to Green Roof Area, Biosolar Green Roof Area, or Solar Energy Systems.

The total area of the roof is 20,258 sq. ft. The roof plan shows that 11,905 sq. ft. is devoted to mechanical equipment space that is exempt from the 80% green roof calculation. Providing 6682.4 sq. ft. of green roof area would satisfy the 80% green roof requirement. The applicant is instead providing 4,506 sq. ft. of green area. They therefore are seeking a special permit to reduce the required green roof area by 2176.4 sq. ft. and to make a unit price contribution to the Cambridge Affordable Housing Trust, as outlined in zoning ordinance section 22.35.3.

#### *Flood Plain Special Permit*

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. Additional information is provided in the memo from DPW.

#### **Conditions**

If the Planning Board decides to grant the requested special permits, the following standard set of conditions should be incorporated, in addition to those recommended in the Urban Design section of this memo and in the accompanying memos from TP+T and DPW:

- The development must proceed in conformance with the plans and application documents reviewed and approved by the Planning Board. CDD will review all applications for building permits and certificates of occupancy to certify that they are in conformance with the Planning Board's approval.
- The development will be subject to continuing design review by City staff. The Urban Design section of this memo, and the memos from TP+T and DPW, highlight aspects of the development that will be subject to greater scrutiny before issuing a building permit.
- The proposed use is technical office for research and development (Section 4.34.f in the Table of Use Regulations). To facilitate flexibility in the future use of the building, and to support the

Alewife District Plan goals, staff recommends that the Planning Board also authorize any Retail or Consumer Service Establishment in Section 4.35 of the Zoning Ordinance that is permitted in the underlying zoning district.

- The increase in density would be conditioned on the City’s design approval and eventual acceptance of an easement for the section of the site that would be used as a portion of the public street.
- The project will continue to be subject to the Green Building Requirements in Section 22.20 of the Zoning Ordinance.
- Before issuance of a building permit, the permittee will provide a final roof plan illustrating which areas of the building contain Green Roof Area for the purpose of compliance with the Green Roof Requirement in Section 22.35 of the Zoning Ordinance, and will provide a cash payment to the Affordable Housing Trust to compensate for the difference in required Green Roof Area and provided Green Roof Area in accordance with Section 22.35.
- The project will be subject to the Incentive Zoning Requirements in Section 11.202 and will provide a contribution to the Cambridge Affordable Housing Trust in accordance with that Section.
- If it does not meet the permeable area requirements in the Alewife Zoning Districts, certification will be required by the City Engineer that the applicable stormwater management standards are being met.



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# CITY OF CAMBRIDGE

Community Development Department

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Date: December 1, 2021

Urban Design Report: **PB-385, 180 Fawcett Street**

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## **Executive Summary:**

The building's location on the site and basic massing follows the recommendations of the Alewife District Plan and the Design Guidelines.

The sitework, however, could do more to integrate the building with the public realm and to follow the city's recommendations for canopy trees and for bicycle paths and sidewalks:

- Adhere more closely to the Alewife District Plan for the elevated walkways and their continuation at grade as pedestrian zones, including dimensions, sections, and planting.
- More fully document the changes that will be needed to transition from the "Day One" site plan to the long-term street sections envisioned by the Alewife District Plan.
- Provide additional street trees if possible, and review the feasibility of trees over the garage at the edge of the elevated walkway on Smith Place and on the site's eastern setback.
- Revise the configurations of pedestrian and bicycle paths at the southwest corner of the site with staff with reference to the city's standards for intersections.
- Revise the permeable area calculations to account for the proposed underground garage and to respond to the city's recommendations for paving materials.

Adjustments to the architecture would also advance the building's contribution to the public realm:

- Design the first-floor spaces to better accommodate street activating uses.
- Reduce the visual and pedestrian circulation impacts of the loading and garage entrances.
- Give the rooftop mechanical screening a more integral relationship to the facades below.
- Reduce the width of the lobby's frontage.

In addition, further improvements to the project's energy performance and/or reductions to its embodied carbon could be considered.

## **Introduction:**

The Alewife District Plan envisions the transformation of the Alewife Quadrangle from a light industrial area dominated by treeless surface parking lots and deteriorating low-scale buildings to a mixed-use area with office, laboratory, and residential buildings, organized by a coherent pattern of urban blocks, streets and open spaces, and activated by ground level active uses. As individual parcels are developed, the Alewife District Plan will create greater vehicular, pedestrian, and bicycle connectivity with new streets, adequate sidewalks, separated bicycle lanes, street trees, and parallel parking. First floors are to be raised above the anticipated 2070 flood level and designed to accommodate light industrial spaces or retail in identified locations. They are to be accessed from elevated, continuous, and publicly accessible walkways along major streets, with appropriate steps and ramps up from grade level sidewalks.

### **Site Design:**

#### As recommended by the Alewife District Plan and Design Guidelines:

- The building's compact massing, aligned along the recommended build-to-lines, sets a precedent for the redevelopment of its block.
- Street curbs are located according to street alignments and sections recommended for Smith Place and Fawcett Street, and bicycle lanes are provided.
- The five existing street trees on Smith Place are in good condition and are proposed to be retained. In addition, new trees are proposed on all four sides of the site.
- Because of the existing trees on Smith Place, the proposed bicycle lane is not located next to the curb as recommended in the Alewife District Plan. It is instead located next to the pedestrian sidewalk, which seems within the spirit of the Plan.
- The building's first floor is at 22.5' CCB, above the currently anticipated 2070 100-year flood level, and approximately 2 feet above typical site grade.
- Electrical equipment is inside the building and above flood level.
- No surface parking is provided; parking is entirely in a basement garage.
- The building's transformer is elevated above 2070 flood level and located inside the building.

#### Further development of the following elements could bring the project into greater accord with the Alewife District Plan and Guidelines:

- Elevated walkways in the Smith Place and Fawcett Street frontages, and the continuity of the walkway zone for the full widths of the frontages.
- Street and sideyard trees.
- Pedestrian paving.
- Permeable site area.
- Sidewalks and bicycle lanes in the southwest corner of the site.

#### Specific recommendations for site design:

- To provide pedestrian amenity and access to retail or other publicly accessible first floor spaces, the ADP recommends that on Fawcett Street and on the portion of Smith Place south of Fawcett Street, 12 foot wide walkways be provided along building facades. They are to be flush with first floors, sheltered by canopies, continuous between adjoining buildings. Steps and ramps up to the elevated walkways are recommended to occur within the 12-foot-wide zone. Ground level sidewalks are intended to be relatively narrow, placing the emphasis on the elevated walkways and the intended retail uses along them. To enhance the potential future connection across the tracks to the Triangle, and to promote the continuation of first floor street activating retail uses along the full length of Smith Place, staff recommends that an elevated sidewalk be provided along the proposed building's west façade.
- In accord with these recommendations, consideration should be given to revising the sections of the sidewalks and elevated walkways closer to their configuration in the Alewife District Plan:
  - Widen the elevated walkways.
  - Reduce the grade level sidewalk widths.
  - On Smith Place, provide a vertical kneewall between the elevated walkway and the grade level sidewalk, instead of the proposed sloped berm. Doing so would provide additional soil for planting along the edge of the elevated walkway along Smith Place (over the parking garage), bring the elevated walkway and the grade level sidewalk together to reduce the sense of a landscape buffer between those on the elevated

- walkway and on the sidewalk, and contribute to the definition of the sidewalk as significant public space.
- Consider recessing the Bluebike station more deeply into the elevated walkway on Smith Place.
- On Fawcett Street, continue the pedestrian zone of the walkway at grade across the loading dock and garage driveways, so as to meet the future elevated walkway zone on the adjoining parcel to the east, if/when that is constructed.
- Select species of trees and other plantings in accord with the soil volume available for them. Verify the soil volume available to the proposed trees at the edge of the proposed Smith Place elevated walkway.
- Additional street trees could be considered on Smith Place and Fawcett Street, and additional trees in the narrow east setback.
- Adjustments should be made to the proposed paving. Note that these will change the site's percent permeable site area.
  - The bike lanes should be permeable asphalt.
  - The buffer zones on the sides of the bike lane should be scored concrete, not permeable pavers.
  - The area between the buffer zones and the elevated walkway should be concrete (with a contrasting scoring pattern), also not permeable.
  - It would be preferable if the bike lane was 6' wide and the buffer zones 1 ½', instead of the 5' lane with 2' buffers shown in the application.
  - The tree zone along the Smith Place curb can be permeable (note that it is in the public right-of-way, not within the site).
  - The site areas above the underground garage should not be counted as permeable.
- The arrangement of the bicycle lanes, pedestrian sidewalks, and curb cuts in the southwestern corner of the site differs from the city's recommendations for intersections, and should be coordinated with city staff.
- The north and east side yards are very narrow; the Alewife District Plan's intent to provide open space in the interiors of blocks could be considered.
- The graphic portion of the application shows the "Day One" site design. The Traffic Impact Statement includes diagrams of the full realization of the street design recommended by the Alewife District Plan. There should be additional coordination with city staff on the details of the design, and on the possibility of bringing the day-one design closer to the long-term goal.
- Means to prevent floodwater from entering the parking garage should be investigated.
- More clarity on architectural lighting (e.g: exterior soffit downlights or façade lighting) if any, would be helpful.

### **Building Design:**

#### ***Massing***

The building is conceived as two parallel rectilinear volumes, oriented north/south, reinforcing Smith Place as primary and Fawcett Street as secondary. In accord with this street hierarchy, the lobby entry is on Smith Place and the parking and loading entries are on Fawcett Street.

#### As recommended by the Alewife District Plan and Design Guidelines:

- The building's format relates to the building types recommended in the Alewife District Plan for Mixed use Industrial or commercial buildings.
- The massing of the second and third floors reinforces the adjoining streets.

- A small courtyard is provided at the building's entry, breaking up the length of the west façade.

Further development of the following elements of the building's massing could bring the project into greater accord with the Alewife District Plan and Guidelines:

- The undercut first floor on Smith Place and Fawcett Street.
- Height of the building's Fawcett Street massing.
- Size of the building's footprint.

Specific recommendations for building massing:

- The undercut first floor on Smith Place, in conjunction with the elevated walkway and the berm, removes the first-floor tenant spaces from the sidewalk, reducing their contribution to the public realm. Consider reducing the depth to which the first floor is recessed behind the second and third floor facades.
- The undercut first floor on the west half of the Fawcett Street façade gives undue emphasis to the loading and garage entries in the east half of that façade. Consider adjusting the massing along Fawcett Street to deemphasize the garage and loading dock entrances.
- The undercut first floor on the west half of the Fawcett Street façade gives undue emphasis to the loading and garage entries in the east half of that façade. Consideration could be given to:
  - Extending the fourth floor farther south to increase the scale of the building on Fawcett Street, and perhaps a part of a strategy to increase open space on the site.
  - Providing a trellis at fourth floor level at the building's southwest corner, both as a tenant amenity off the deck and also to give additional definition to the streets at this important corner.
- Consideration could be given to reducing the building's footprint.

### ***Facades***

As recommended by the Alewife District Plan and Design Guidelines:

- The first-floor facades are transparently glazed.
- The building provides streetwall facades on Smith Place and Fawcett Street. They express a pattern of structural bays, and have distinct bases, middles, and tops. Detail and relief provide visual interest.
- The western volume, facing Smith Place, has an appealing combination of fenestration, projecting vertical and horizontal metal fins, diagonal bracing, wood-look spandrel panels, and a wood soffit above the undercut first floor, which continues as a trellis at the lobby entrance. The eastern volume, facing the neighboring parcel, has a less expressive metal panel rain screen façade system and punched windows. The contrast between the two different façade systems accords with the building's emphasis on Smith Place as the more important street.
- Screening conceals rooftop mechanical equipment.

Areas where changes could be made to bring the site design into greater accord with the Alewife District Plan and Design Guidelines:

- Canopies should be provided over the elevated walkway zones.
- Doors should be provided to first floor spaces directly from the elevated walkways.
- The loading and parking garage entries should be deemphasized.
- The penthouse screen wall could be better integrated into the façade design.



Specific recommendations for facades:

- The differences between the facades as depicted in the perspectives and the elevations should be resolved. Discrepancies include the joint pattern in the building’s panel clad eastern element and its relationship to the window openings, and the expression of the garage and loading dock doors.
- Provide the “Potential Future Tenant Entrances” from the elevated walkway/portico to the first-floor tenant space in the initial construction.
- Consideration could be given to extending the wood soffits at the undercut first floors on Smith Place and Fawcett Street further out to function as trellises over the elevated walkway zones, and to further enrich the first-floor facades.
- The continuous projecting trellis across the full width of the Fawcett Street façade in earlier versions of the design did much to relate the building’s eastern and western volumes, to emphasize the continuity to the zone of the elevated walkway across the facade, and to reduce the visual impact of the loading and garage entrances. Consideration should be given to reinstating it.
- The diagonal bracing system on the Smith Place façade adds welcome detail. Care should be taken with its details, the dimensions of its members, and its connections to the rectilinear projecting frames to ensure that it appears to be an integral part of the design.
- Control of interior light by devices such as shades and timers should be considered to prevent light trespass.
- On the second and third floors of the Fawcett Street, consideration could be given to creating a deeper reveal between the curtain wall X-braced portion of the façade on the left and the punched window portion on the right.
- Note that the spacing of the structural columns on the Smith Place façade does not correlate with the increments of the X-braced façade. This independence may potentially add visual interest to the façade, but it raises the question of whether future tenant partitions are likely to be positioned relative to the façade or to the column grid.
- Exterior sun shading could be considered, particularly at the highly glazed fourth floor facades.
- Operable windows could be considered to increase ventilation options.
- The facades of the fourth-floor tenant space are entirely glazed on south, west, and north. Consideration could be given to providing exterior sun shading devices.
- The use of perforated screening to enclose rooftop mechanical equipment seems appropriate and visually interesting. Consideration could be given to making the screen wall façade a more integral part of the façade design by eliminating the gap at the screening’s bottom edge.

**Building Plans:**

As recommended by the Alewife District Plan and Design Guidelines:

- The building’s basic format sets a precedent for the development of its urban block: it is aligned according to proposed build-to lines, and retail uses can potentially be accommodated on the first floor.

Areas where changes could be made to bring the site design into greater accord with the Alewife District Plan and Guidelines:

- The width of the lobby’s frontage.
- The design of the “Future Tenant” spaces on the first floor.
- The bicycle parking room.
- Loading dock dimensions.

- The extent of the fourth floor.
- Location of Rooftop mechanical equipment.

Specific recommendations for Plans:

Ground floor design and uses:

- Reduce the width of the lobby's frontage to less than 25 feet, as recommended in the Guidelines.
- The first-floor space at the southwest corner of the building is noted as “Future Tenant” space, and “Potential Future Entrances” are noted near the corner closest to the intersection. In the current design, this space is isolated from the public realm by the lack of doors to the elevated walkway and by its setback from the typical plane of the façade. Consideration should be given to moving its exterior façade out to the plane of the upper floor facades, and to providing the doors suggested by the Alewife Design Guidelines.
- Include provisions for potential future HVAC equipment for first floor retail spaces.
- A long-term bicycle storage room is included; a fully dimensioned plan should be provided for staff review.
- An SU-40 truck is shown at the loading dock, its cab projecting through the 12-foot-wide zone recommended for the continuation of the elevated walkway zone at grade and into the ground level sidewalk zone. Consideration should be given to recessing the loading dock more deeply into the building so that the entire truck fits within the building, and if possible, to reducing the width of the loading dock door.

Fourth Floor, roof, and mechanical:

- As noted above, consideration could be given to enlarging the fourth-floor space to the south. was enlarged to the south.
- The northern edge of the roof at fourth floor level is labeled as “Mechanical Space”. It would be preferable if all mechanical equipment were to fit within the penthouse.

**Sustainability:**

Sustainability: While the project meets the Green Building Requirements, the following comments and recommendations for consideration on how projects might further improve their energy performance or reduce their embodied carbons.

- Recommend using whole building life cycle (LCA) assessment tools including Tally, EC3 and other appropriate tools to demonstrate the Project team’s commitment to reducing embodied carbon and other environmental impacts in the process of selecting alternatives in materials, products, or systems.
- Recommend pursuing LEED credit MR-1, Building Life-Cycle Impact Reduction to demonstrate commitment to reducing embodied carbon.
- Recommend providing updates on the projected building energy performance modeling results including projected Energy use, cost savings, and Greenhouse Gas (GHG) Emissions during or at the end of the project’s design development phase.

**Special Permit Considerations**

The following is a summary of issues that staff recommends for consideration if the Board decides to grant the special permit:

- Specify that the Board approves future improvements to the sitework in accordance with the Alewife District Plan and the TIS's "Envision Proposed Ground Floor Plan," subject to continuing review by staff, without requiring a future amendment to a special permit. In addition, as a condition of a special permit, the Permittee should agree to implement such improvements on its property provided that they are permitted by zoning.
- Specify that all tree plantings should be in full compliance with the City Standards current at the time of plantings and in full accordance with the recommendations of the Urban Forestry Master Plan, including species, caliper, and planting standards.

### **Continuing Review**

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

- Staff will continue to collaborate with the applicant on the optimal realization of the Alewife District Plan's street sections for Fawcett Street and Smith Place within the provisions of existing zoning. These will include detailed coordination with CDD and DPW regarding improvements to Smith Place and Fawcett Street once engineering drawings are available, including street sections and alignments, utilities, bicycle lanes, curb cuts, sidewalks, paving materials, street trees, and other plantings.
- Detailed coordination with CDD and DPW on future construction of elements in the "Future Site Plan" condition provided as figure c.13 in the Traffic Impact Statement, including the elevated walkways and the arrangement of pedestrian and bicycle paths.
- Review of tree species, locations, and planting standards, in coordination with DPW and the recommendations of the Urban Forest Master Plan.
- Coordination with CDD regarding the detailed dimensions, design, and installation of the Public Bicycle Sharing (Bluebikes) Station.
- Review of site lighting, using the standards recommended in the city's Draft Outdoor Lighting Ordinance as guidelines.
- The discreet site lighting in the Smith Place and Fawcett Street frontages will minimize light pollution. The existing streetlights on Smith Place will add general illumination. Verify that the existing streetlight on Fawcett Street, just east of the area depicted in the site plan will provide sufficient lighting for safety on that side of the building.
- Review of all exterior building materials and colors, including joints in the panel systems, details at corners, glazing, window mullions, penthouse screening, roofing system, glass specifications for first floor and upper floors, etc.
- Construction of an exterior wall mockup for staff and Planning Board review, showing all exterior colors and materials, prior to ordering materials.