



CITY OF CAMBRIDGE

Community Development Department

To: Planning Board

From: CDD Staff

Date: 10/13/2021

Re: Special Permit **PB-383, 330 Third Street and 585 Third Street**

IRAM FAROOQ
Assistant City Manager for
Community Development

SANDRA CLARKE
Deputy Director
Chief of Administration

KHALIL MOGASSABI
Deputy Director
Chief of Planning

Overview

Submission Type:	Special Permit Application
Applicant:	BMR – Third LLC
Zoning District(s):	Office 3A (O-3A); PUD-CDK; PUD-3
Proposal Summary:	Construct a 16-story mixed-use building of 500,000 square feet gross floor area to include laboratory space, office space, art performance center, and indoor-outdoor public space.
Special Permits Requested:	Sections Planned Unit Development Canal District Kendall (13.202); Project Review Special Permit (19.20); Reduction of Green Roofs requirement (22.35.3); and Minor Amendment to existing Planned Unit Development 3 special permit PB-141 (12.37.2).
Other City Permits Needed:	PB-141 PTDM plan amendment
Planning Board Action:	Preliminary determination of approval (with requests for additional information or modification) or disapproval of PUD Development Proposal
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.

Requested Action	Summarized Findings (see appendix for zoning text excerpts)
<p>Preliminary Approval of a PUD Development Proposal (Section 12.35.3)</p>	<p>The PUD Development Proposal:</p> <ul style="list-style-type: none"> • Conforms with general PUD development controls and district development controls • Conforms with adopted policy plans or development guidelines for that portion of the city • Provides benefits to the city which outweigh its adverse effects, considering: <ul style="list-style-type: none"> ○ quality of site design ○ traffic flow and safety ○ adequacy of utilities and other public works ○ impact on existing public facilities ○ potential fiscal impact
<p>PUD-CDK Special Permit Objectives (Section 13.202.4)</p>	<p>(a) Incorporating an Arts and Culture Center that (i) takes into consideration the orientation of the uses, location of building entrances, pedestrian connectivity between such uses and adjacent open space areas, and the ability of such uses to promote diversity and serve all residents of the City of Cambridge, and (ii) creates a facility available for the neighborhood that supports or promotes small arts or theater organizations, independent artists, art co-working opportunities, or partnerships among the foregoing and the local community. Furthermore, the developer of such Arts and Culture Center shall have demonstrated a commitment to establishing an arts and culture operational plan for space within the new building that will be made available for teaching, learning, rehearsing, or idea exchange.</p> <p>(b) Contributing to the diversity of East Cambridge and Kendall Square through encouraging innovative uses, activities, programs, or opportunities that will be publicly accessible such as art galleries or community gathering spaces, and considers or incorporates applicable recommendations from the Mayor’s Arts Task Force Recommendations (2019) (the “Arts Task Force Recommendations”).</p> <p>(c) Enhancing the Third Street corridor by improving the streetscape through visible activity and publicly accessible elements within and adjacent to the ground floor in place of the existing gas regulator/transfer station equipment currently occupying that frontage on the Gas Transfer Station Parcel.</p>

	<p>(d) Providing active ground floors that animate streets and open spaces, and add to the vitality of Kendall Square.</p> <p>(e) Integrating development with new and existing open spaces physically and functionally.</p> <p>(f) Enhancing the pedestrian connections among Termeer Square, the plaza abutting the Broad Canal, the Broad Canal, and Third Street, and creates publicly accessible interior ground floor pathways to such areas.</p> <p>(g) Fostering a spirit of inclusiveness and diversity, particularly in the planning and programming of the publicly accessible ground floor elements, community gathering and other open spaces, to draw users and visitors from across the city.</p> <p>(h) Demonstrating a commitment to seeking high quality, locally-based retail and restaurant owners or operators where such uses are part of the Final Development Plan, and promotes collaboration between any retail component and the Arts and Culture Uses that are part of the Final Development Plan, taking into consideration applicable components of the Arts Task Force Recommendations with respect to the Arts and Culture Uses.</p> <p>(i) Sensitively interfacing with adjacent land uses with respect to use scale, density, setback, bulk, height, landscaping, and screening, while providing integrated pedestrian circulations systems with particularly strong linkages between Broad Canal, Third Street, and Termeer Square. (j) Sensitively managing the massing of the buildings to minimize the impact of shadows, excessive wind, and obstruction of light and views.</p> <p>(k) General consistency with the policy objectives set forth in the (i) Kendall Square Planning Study and Design Guidelines (2013) (the “K2 Study”), (ii) the draft Kendall Square Design Guidelines (the “K2 Design Guidelines”), (iii) the Connect Kendall Square Open Space Plan (the “Kendall Square Open Space Plan”), and (iv) the Volpe Working Group Planning & Design Principles dated July 20, 2017 (the “Volpe Guidelines”), while also taking into account the size, shape, and location of the applicable Development Parcel. The planning studies identified above are collectively herein referred to as the “PUD-CDK Guidelines and Principles”.</p>
--	---

The complete set of findings for issuance of a special permit to be made at the public hearing on Final Development Plan are summarized below:

Requested Special Permits	Required Planning Board Findings <i>(Summary - see appendix for zoning text excerpts)</i>
Approval of a PUD Final Development Plan (Section 12.36.4)	The PUD Final Development Plan: <ul style="list-style-type: none"> • Continues to conform to the criteria for approval of a Development Proposal. • Contains revisions to the Development Proposal in response to the Preliminary Determination.
Special Permit to Reduce Green Roof Area (Section 22.35.3)	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.
Project Review Special Permit (Section 19.20)	The project is consistent with the urban design objectives of the City as set forth in Section 19.30 (see appendix).
Minor Amendment to PB-141 (Section 12.37.2)	The proposed change does not alter the concept of the PUD in terms of density, floor area ratio, land usage, height, provision of open space, or the physical relationship of elements of the development.
General Special Permit Criteria (Section 10.43)	Special permits will be normally granted if the zoning requirements are met, unless it is found not to be in the public interest due to one of the criteria enumerated in Section 10.43: <ol style="list-style-type: none"> (a) It appears that requirements of this Ordinance cannot or will not be met, or (b) traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character, or (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 (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 (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 (f) the new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30.



CITY OF CAMBRIDGE

Community Development Department

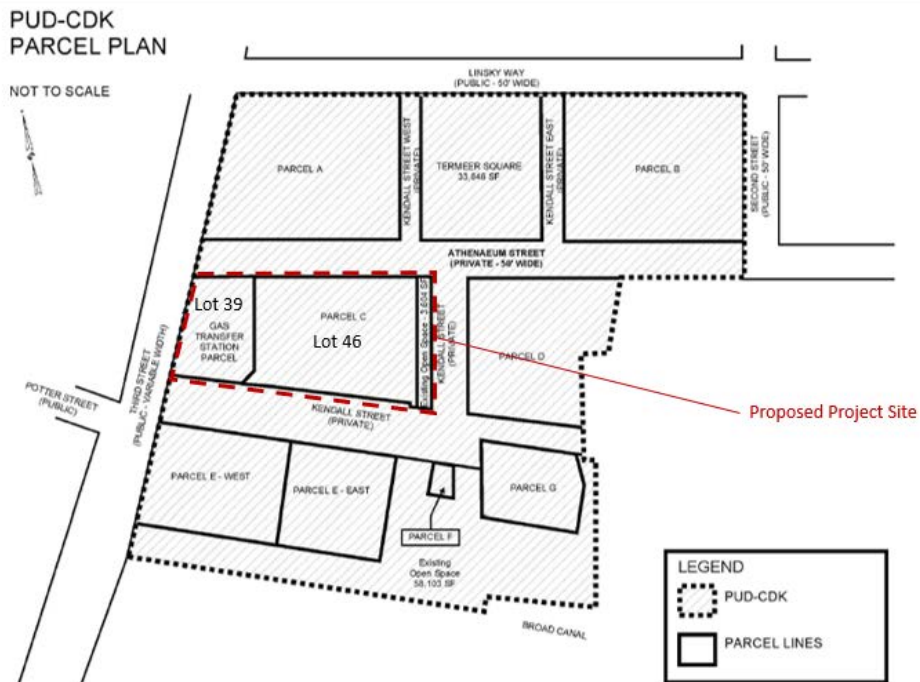
Date: 10/13/2021

Zoning Report: **PB-383, 330 Third Street and 585 Third Street**

Area Planning and Zoning

Site Context

The proposed project at 585 Third Street includes two parcels on the east side of Third Street, between Kendall Street and Athenaeum Street (Block 14, Lots 39 and 46). Lot 39 currently contains an Eversource Gas Transfer Station (GTS) along Third Street; Lot 46 (referred to as "Parcel C") is currently vacant and was formerly owned by the Constellation Center. Parcel C is part of Cambridge Research Park (PB-141), a Planned Unit Development (PUD) which was first approved by the Planning Board in 1999. The PB-141 development included approximately seven (7) buildings and 1.3 million square feet of total gross floor area (GFA), split among commercial office/lab uses, residential uses, and retail uses. Today, most of the development and associated open space/public improvements are built, with the exception of Parcel C, which was permitted for 85,000 square feet of theater and other retail uses that were not developed.

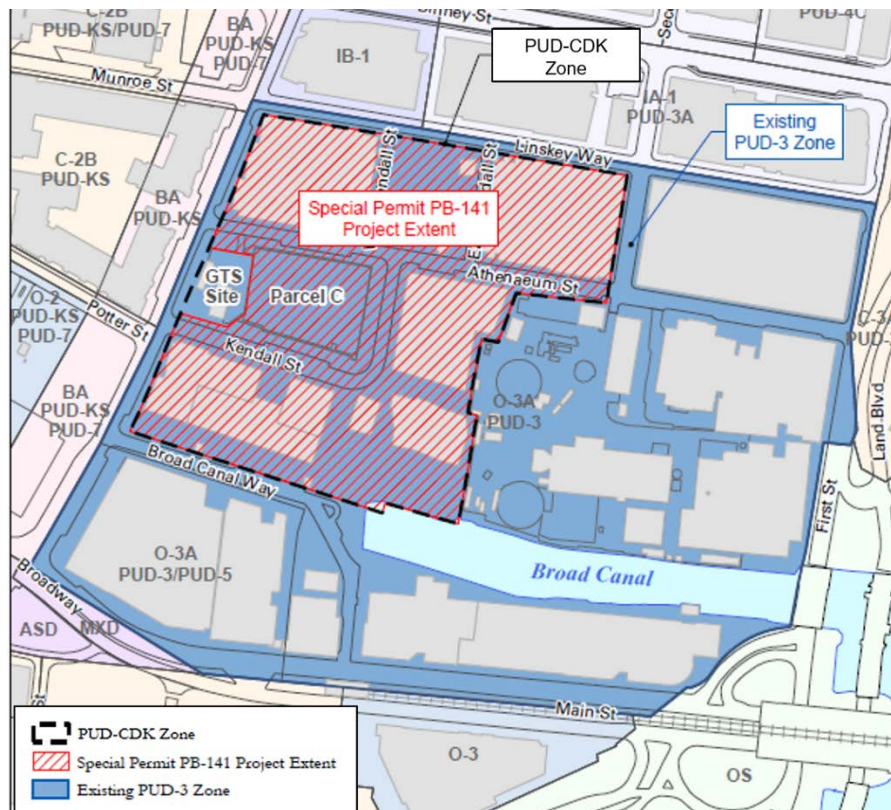


Source: Modified from 585 Third Street Special Permit Application, Volume I, Figure 1

Site Zoning

The underlying base zoning is Office 3-A. The PUD-3 overlay district, adopted in 1978, is the basis for the PB-141 PUD and some other development in the surrounding area.

In December 2020, the Planning Board positively recommended, and the City Council adopted, [a new overlay zoning district](#) for the site, called Planned Unit Development: Canal District Kendall (PUD-CDK). The PUD-CDK district overlaps the western portion of the existing PUD-3 district and includes the PB-141 development parcel (including the vacant Parcel C) in addition to the GTS site along Third Street. The current Applicant had petitioned the City Council to adopt this new zoning,



Source: Cambridge Community Development Department

The PUD-CDK zoning allows for the development of up to 525,000 square feet of additional GFA on a Development Parcel consisting of at least 45,000 square feet of land area and containing at least seventy-five (75) feet of linear frontage along Third Street. Such development must contain an Arts and Culture Center of at least 30,000 square feet (not counted as part of the 525,000 square-foot maximum) in addition to meeting other requirements set forth in the zoning (discussed further in this memo) and in the special permit criteria (attached to this memo).

The zoning also incorporates a [Letter of Commitment \(dated December 21, 2020\)](#) from the owner that commits to providing additional public benefits, including the following commitments related to future development on the site:

- Reasonable efforts to relocate the GTS facility off of Third Street.
- Providing approximately 10,000 square feet of additional “Public Space” within the project in addition to landscaped open space outside the building footprint.

- Hosting an annual “Winter Market” on-site.
- Not constructing any new parking.
- Eliminating on-site fossil fuel fired equipment as feasible.
- Not exceeding 85 feet in building height within 10 feet of the Third Street lot line.

Overview of the PUD-CDK Review and Approval Process

A Development Proposal in the PUD-CDK District is required to include the following plan components:

- Site Development;
- Building & Massing;
- Parking & Loading;
- Connectivity;
- Street and Public Improvements;
- Open Space;
- Ground Floor & Activation;
- Sustainability & Resiliency;
- Transportation;
- Arts & Culture;
- Local Retail;

At the first public hearing on a PUD proposal, the Planning Board’s action is to make a Preliminary Determination based on whether the Development Proposal generally conforms with the zoning and the City’s policies and plans for the area.

- A positive Preliminary Determination means that the Applicant may proceed with the submission of a Final Development Plan. The Preliminary Determination should include any requested additional information, further refinements, or changes to be incorporated into the Final Development Plan.
- A negative Preliminary Determination constitutes denial of the PUD special permit.

Should a positive Preliminary Determination be made and a Final Development Plan submitted, the Planning Board will hold a second public hearing and can make a final decision to grant or deny the PUD special permit along with any other requested special permits.

- Note that phased PUDs with multiple building sites often involve a review process in which the Final Development Plan is approved at a site plan level, with a future design review process for individual building sites and open spaces. However, in cases where the Final Development Plan contains only a single building site, the Planning Board’s approval of the Final Development Plan will often include approval of the building design as well.

Comments on PB-383 Development Proposal

Overall

The Development Proposal remains essentially the same as the development concept presented by the Petitioner during the zoning discussions that took place in 2020. In general, the Development Proposal responds positively to several of the area planning goals that were discussed during that process:

- Facilitating the relocation of the Eversource GTS away from Third Street, thereby allowing for a more active street edge, consistent streetwall, and streetscape improvements along Third Street.
- Creating an arts and cultural center on the vacant Parcel C.
- Creating new open spaces (both interior and exterior) which help to strengthen the network of open spaces in the area.

General Conformance with PUD-CDK Zoning Requirements

The following table provides an overview of PUD-CDK zoning requirements alongside the proposed Project. Further below is a discussion of particular aspects of the Development Proposal that are relevant to the planning and zoning for the site.

Zoning Element	PUD-CDK Requirement	Proposed	Compliant? (Y/N)
Permitted Uses	Office & Laboratory, Multifamily, Hotel/Motel, Retail/Consumer Service, Arts & Culture Uses	Office & Laboratory, Retail/Consumer Service, Arts & Culture Uses	Y
Total GFA	525,000 SF max.	500,000 SF	Y
Arts & Culture Uses GFA	30,000 SF required and excluded from max. GFA	30,000 SF	Y
Maximum Building Height	250' max.	250'	Y
Open Space	20% min.	23%	Y
Off-street Parking	No minimum; Maximum per 13.205.2.2	No new spaces proposed; 460 spaces proposed to be utilized in existing off-site facility	Y
Off-street Loading Bays	4 minimum per Article 6; waivers by PB approval	6	Y
Bicycle Parking	Per Article 6.100; 113 long-term and 65 short-term required	136 long-term and 66 short-term	Y

Interior Public Space

The Development Proposal includes 15,000 square feet of interior public space along the Kendall Street side of the ground story. The interior public space is purposefully designed to be flexible in order to

accommodate a range of activities and events. During non-event times, the space is shown with a grab-n-go-style café near the Third Street entrance, and some seating arrangements throughout the corridor leading to the east side of the building. During event times, flexible furniture arrangements allow for the installation of elements such as market stalls, pop-up galleries, and art exhibits.

Because the public space occupies a smaller portion of the building's Third Street frontage, with the majority of frontage occupied by commercial tenant space, an important consideration is how the space can be designed and programmed to let the public know from the street that the space is available. This could be accomplished through building design (e.g., reducing the size of the office/lab tenant lobby and increasing the public space presence along Third Street), signage, landscaping, and/or lighting. For programming, regular and/or rotating art exhibits or other activities can help create a purpose for visiting.

In further considering the interior public space, the Board could request additional information about the following:

- What additional public amenities (e.g., public restrooms, free public wi-fi) will be included in the interior public space that can help to support a welcoming public atmosphere.
- Will there be any limitations or stipulations on the public's access and use of the space, and will public access be guaranteed through a legal mechanism (and if so, what will be the process)? How will any rules on public access and use be made clear to the public?
- Information related to planned frequency of events and/or programming of the interior public space, and what other activities might be utilized to help draw visitors during non-event times.
- It will be helpful for the Planning Board to understand and approve the full range of retail and other uses that might be anticipated in that space, to avoid the need for the Planning Board to make case-by-case determinations when different uses are proposed.
- It is not entirely clear from the submitted plans whether the proposed Winter Garden is part of the interior public commons or the theater space. Staff would recommend that the Applicant clarify this as part of the Final Development Plan submission.

Arts & Culture Center

. The second and third floors of the eastern edge of the building hold an approximately 30,000 square foot theater space, with seating for 385 patrons, together with support spaces such as rehearsal space, studios, meeting, and storage areas.

The Development Plan illustrates various indoor and outdoor configurations of this space during more regular, everyday use as well as during smaller events and larger events. A transparent glass façade serves as the backdrop of these spaces relative to Kendall Street.

In considering the functionality and programming of these spaces, the Board may wish to seek additional information on the following:

- How the design of the space relates to the planned functions and what effects that might have on surrounding areas – for example, the lighting and acoustics considerations required for theatrical performances.

- How large, programmed events at the theater will be managed to support the safe interaction between pedestrians and vehicles along Kendall Street.
- How elements such as deliveries, loading and other needs for the arts and cultural center will be managed alongside regular service functions of the commercial office/lab use.

Traffic & Transportation

The Development Plan commits to constructing no new off-street parking for the Project, which meets the PUD-CDK zoning requirements and aligns with the City’s overall commitment to reducing personal automobile use in the Kendall Square area.

The PUD-CDK District currently contains below-grade parking garages that were developed as part of the PB-141 PUD to provide accessory parking for that development as well as additional commercial parking spaces (the current application does not specify the existing number of spaces, but the PB-141 special permit authorizes a maximum of 2,238 spaces, of which a maximum of 1,585 spaces may be accessory to the PB-141 development). Excess spaces in the existing garage are proposed to serve the new development. No minimum parking is required, and the maximum accessory parking ratio for proposed office/laboratory uses would be 0.8 spaces per 1,000 square feet. To accommodate anticipated off-street parking needs for tenants and visitors to the Arts and Culture Center, the applicant also plans to take advantage of shared parking opportunities at existing facilities within the PUD-CDK district, including the below-grade garage.

While no new parking is being created, the use of existing parking facilities as part of Cambridge Research Park’s previous Planning Board Approval (PB-141) requires that the approved PTDM plan for PB-141 be updated to reflect this change. The Applicant is currently working with staff on an approved PTDM plan amendment.

Six loading bays are provided at the north side of the building’s ground story, exceeding the minimum zoning requirement of four bays. Bicycle parking is provided in conformance with zoning requirements, with long-term spaces in a basement-level room accessed via a central elevator and hallway, and short-term spaces provided around the site.

The Applicant submitted a Transportation Impact Study (TIS) which was certified complete on August 4, 2021. The Applicant is continuing to work with TP+T staff on a recommended set of transportation mitigation measures that help to offset any transportation-related impacts created by the Development Plan.

Additional comments on the transportation aspects of the proposal are provided in the memo from TP+T.

Sustainability

New buildings constructed within the PUD-CDK district must comply with the Green Building Requirements set forth in Section 22.20 of the Zoning Ordinance, as well as the Sustainability section of the PUD-CDK zoning set forth in 13.206.2.

In addition to the requirements of Section 22.20, the Development Plan must include the following sustainability elements:

- Evaluate the potential for implementation of net zero ready measures and on-site energy generation
- Evaluate the feasibility for connecting the proposed building to the existing district steam energy system
- Explore opportunities for potable water use reductions and the ability to enhance indigenous plantings in and around the site
- Comply with the Cambridge Building Energy Use Disclosure Ordinance, Chapter 8.67 of the Municipal Code
- Provide building occupants with access to daylight and enhance the visual and thermal comfort of people living within the PUD-CDK district
- Encourage multimodal transportation and provide facilities for cyclists and alternative energy vehicles
- Incorporate the most up-to-date standards to address projected future flooding impacts
- Incorporate measures to reduce urban heat island effects and identify areas within the site to act as cooling areas.

The Development Proposal has committed to several of these goals. Most notably, the Project has committed to relying on the district energy (steam) system as the primary heating source, rather than systems that consume fossil fuels on-site, which is an important element of the City’s Net Zero planning. Further, the Project is targeting LEED Gold Certification through enhanced sustainability features such as a rainwater capture and reuse system, reductions in embodied carbon through integrated design, and use of the ground floor public as a refuge space during extreme heat events.

In working alongside staff from CDD’s Environmental and Transportation Planning Division, further information could be provided to better understand proposed sustainability strategies identified in the Development Proposal:

- More information related to the proposed building’s anticipated embodied carbon and opportunities for reducing its impact.
- More detail on how the LEED Gold standard will be achieved, given the LEED chart included in the Sustainability Narrative contains unknowns.
- Opportunities to increase daylight penetration within the building.
- Information related to building acoustics and planned mitigation measures for the proposed rooftop mechanical equipment.

Comments on PB-141 Amendment

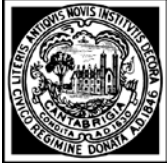
Concurrently with the application for a new PUD-CDK special permit, the applicant is seeking a minor amendment to the existing PUD-3 Special Permit (PB-141). The effect of the proposed minor amendment would be to effectively “carve out” Parcel C from PB-141 while clarifying that the other, completed development sites within the remaining PB-141 Development Parcel would remain subject to the approvals and conditions previously granted through PB-141.

The need for such an amendment was anticipated at the time of the 2020 zoning amendment and language to enable such an amendment was included in the PUD-CDK zoning (see below). The practical benefit of this change is to avoid future confusion about which special permit conditions apply to which sites within the district.

The findings for a PUD Minor Amendment are summarized below:

Requested Actions	Summarized Findings (see appendix for zoning text excerpts)
Minor Amendment to PUD Special Permit (Section 12.37.2)	The proposed amendment to the PUD do not alter the concept of the PUD in terms of density, floor area ratio, land usage, height, provision of open space, or the physical relationship of elements of the development.
Special Provisions for Minor Amendment in PUD-CDK District (Section 13.206.1)	Upon approving a Final Development Plan pursuant to the provisions of the PUD- CDK District, the Planning Board may concurrently approve modifications to previously issued special permits as Minor Amendments if the Board finds that such modifications are for the purpose of clarifying the applicability of previously issued and newly issued special permits and do not constitute major amendments, as that term is defined by Section 12.37.3, to the previously issued special permit(s).

The requested minor amendment should be adopted only at the time of Final Development Plan approval for the new development, when any new special permit conditions will be established. In addition to other questions the Board may have related to the existing development, staff will continue working with the applicant to determine what (if any) conditions contained within PB-141 may need to be modified to clarify their relationship to any new special permit conditions.



CITY OF CAMBRIDGE

Community Development Department

Date: 10/13/2021

Urban Design Report: **PB-383, 330 Third Street and 585 Third Street**

Urban Design Comments

As mentioned in the Zoning and Development Report, guidance for urban design review is found in the K2 Design Plan and Guidelines (2013), Kendall Square Open Space Plan and the Volpe Guidelines. These planning studies and design guidelines are collectively referred to as the “PUD-CDK Guidelines and Principles”.

Broadly, these Guidelines seek to create consistently high-quality public environments, and to ensure that development contributes to the character and vitality of the surrounding community. More specifically, the Guidelines aim to create a positive, mixed-use district where tall buildings with large floorplates can be good neighbors to public spaces, smaller existing buildings, and adjacent residential neighborhoods. Given these aims, the guidelines focus on sensitively managing the impacts of bulk and height, and animating major streets and public spaces through active ground floors. The public realm is recognized as a critical link between the growing innovation industries in Kendall Square and the surrounding community. The Guidelines recommend that the public realm feel inviting and connected, and reflect both the innovative character of activities that happen within buildings and the open space needs of the existing and emerging community.

Overall Urban Design Concept

The proposed project will transform the site from an unappealing Gas Transfer Station (GTS) and partially vacant parcel to a dense urban block with linear parklike spaces that draw the community into the site and complement the Cambridge Research Park open space network. Redevelopment with a building of a scale that is consistent with the developing character of Kendall Square will create major improvements to the Third Street streetscape and pedestrian experience. The creation of an Arts and Cultural Center is also unprecedented in the City and an incredibly valuable community asset.

Given the unique, community oriented program, the project has been designed to create a landmark. The proposed building is bound by streets on all four sides and is designed as a series of stacked, curved boxes that step back from surrounding streets. The building presents an opportunity to increase the spatial definition and programmatic activation of the surrounding streets. The new public spaces, both within the building and to the east and south, will transform the site: providing interior and exterior public space for gathering, events, and passive uses.

Since this is the first public hearing for the PUD Development Proposal, these comments focus primarily on the role of the building in defining and activating streets and open spaces, and suggests areas for further study and additional information that should be provided for the next hearing.

Built Form

Massing and Siting

As defined in the Design Guidelines, buildings in Kendall Square should engage the public and create well-defined streetwalls that frame streets and public spaces, and limit the sense of height at street

level. Buildings should also be designed to minimize monolithic massing, to breakdown the scale of large floorplates and avoid repetitive façade design.

The tapered ends of the building respond to the Design Guidelines, and strong streetwalls that reach contextually appropriate heights of around 100 feet on Third Street and 110 feet on Kendall Street East are achieved. However, the long sides of the building are curved and setback, which means that a traditional, rectilinear street edge is not achieved, and spatial cohesiveness is not as strong as it could be.

The box-like volumes above the streetwall zone are well set back on Kendall Street East; however, the setback of each is only 10 feet from Third Street. The Design Guidelines recommend 15 feet setbacks with flexibility possible when there is a ground floor setback as in this case. Additionally, these volumes appear relatively bulky, are not consistently set back from the side streets, and do not have the slender proportions recommended in the Design Guidelines. The project also treats each street façade equally rather than as major and minor streets with differing setbacks and characteristics. The minimum building separation distance for when the building reaches a height of more than 200 feet in height is exceeded in relation to the Watermark Building.

While the project does not meet all of the relevant massing and streetwall Design Guidelines, as is customary the guidelines are not intended to impose strict limitations on building form. Creative design solutions or measures may be utilized to achieve the same urban design goals at the discretion of the Planning Board, and especially in the interest of enhancing architectural diversity.

In considering whether the proposal meets the intent of these Design Guidelines, the Board may wish to consider the following:

- That the individual circumstances of this site and project may warrant an alternative approach: -
 - In this case, this is a unique building program with significant public benefits and is in many ways an infill development site.
 - The site is surrounded by streets on all four sides, which makes complying with all of the upper-level setbacks difficult.
 - While the curved sides and setbacks on Atheneum Street and Kendall Street South detach the building from its context, the setback on Kendall Street enables the public open space to have a visual presence on Third Street, and connections with Termeer Square, which are urban design goals. Additionally, the setback on Atheneum Street is also in part a result of a site constraint, which would otherwise result in an odd-looking, chamfered corner.

Architectural character

The façade system, with its vision glass and shadow box substrate, which is delicately covered by a system of fluted metal pilasters that represent a theater curtain, is a captivating design concept. The renderings of the building, particularly those taken at dusk, are very appealing and the subtly curved corners appear to soften the building's relationship with its neighbors.

However, there is little differentiation in the treatment of the facades, other than where the pilastered, metal panel system intersects or rises. Such an approach is inconsistent with the Design Guidelines, which encourage building design to respond to the differing characteristics of streets, squares, and parks, and avoid repetitive facades.

As the project advances, Staff suggest exploration of the following:

- Consideration of additional distinctions between the primary front and rear facades, and the more subdued side façades. Such techniques to consider include changes in plane, material, color, size and format of fenestration, etc.
- Provision of revised elevations with dimensions (e.g. floor heights) and sharper drawing images.
- Provision of additional perspective renderings looking down the side streets and from farther vantage points.

Materials, colors, and details

The proposed materials seem appropriate for the context and building type. A colorful gradient treatment is proposed for the metal panel skin, although it is not clearly or consistently shown in the project renderings. While the gradient treatment is visually interesting and a nice way to call attention to the building and its more public functions, the actual colors are ambiguous in the Application materials, and in some instances appear a little too vibrant.

Staff suggest the following:

- Provision of a materials color palette with photographs of each exterior material included, and specifications for all materials and potential colors, including Glass Visible Light Transmittance and Reflectance.
- That the gradient treatment be more clearly shown in the renderings and specified on the elevations.
- Further study of colors that are more subdued and earthy to better fit with the neighborhood context.
- Review of the selected color gradient via a mini, visual mock-up with actual material samples provided.

Ground floor design, activation and uses

Activation/programming and uses

As mentioned in the Zoning and Development Report, the centerpiece of the ground floor program is a 15,000 square foot interior public space along Kendall Street South that wraps around to the east and culminates in a double height Winter Garden. The interior public space makes up nearly 50 percent of the ground floor area and also has frontage on Third Street. However, the tenant lobby does occupy more than half of the Third Street frontage. Lobbies for office, and research and developments uses, are discouraged from occupying extensive ground floor frontage. The Design Guidelines recommend that 75 percent of the street frontage on Third Street should be occupied by retail uses. It is recognized by staff that retail in the area is struggling, so that requirement is not considered appropriate to impose. Opportunities to visually and physically expand the interior public space, and celebrate its publicness and presence on Third Street should be considered.

Potential design ideas to explore as the project advances include:

- Clarification of the need for the egress stair that separates the lobby and retail space. If that stair can be accommodated elsewhere, additional ground floor frontage space could be dedicated to the Public Commons.
- The interface between the lobby and Public Commons should be carefully studied to determine what will achieve the most welcoming and friendly design. Whether the interface should be solid, or transparent, or a combination, should be considered.
- While it appears that there are restroom facilities available to the public, it would be helpful if the Applicant clarified that in their Application materials.

- Other public amenities, such as free public wi-fi, charging stations, water bottle filling stations, etc., for the indoor and outdoor public environments should also be considered.
- Careful consideration of wayfinding, signage, landscaping, and lighting.

Design

As this is a building surrounded by streets on all four sides, the ground floor frontage is extensive. The double height winter garden space will be a visually stunning feature, especially when the south façade opens up to the proposed open space on Kendall Street West. The ground floor is setback farther from Third Street than its neighbors, and while the lab lobby is relatively small in terms of recent projects, due to the narrowness of the Third Street frontage, it does appear visually excessive.

The Application materials indicate that the ground floor façades will be highly permeable and designed to reduce the distinction between exterior and interior space. The idea of extending the effective public realm indoors and revealing indoor activity to the street is very much in line with the Design Guidelines.

To more fully capitalize on these ideas, further study of the following is suggested:

- Use of nano walls / operable windows and doors on the south façade, so that a seamless connection with the open space can be created.
- To celebrate and highlight the Public Commons on Third Street, a truly double height space should be considered. While it does look like that, the fact that there is a lab hovering above the main public entry point diminishes the welcoming aspects of the space. Additionally, a double height space would help differentiate the interior public space from the lobby and give it more prominence.
- Provision of ground floor design details, such as glass specification and details of the glass wall system (e.g. storefront, curtain wall or structural glass). Use of structural glass would be viewed favorably by staff as it is a frameless assembly.
- Provision of zoomed in/focused elevations of the ground floor façades details.

Mechanicals

There are several locations for mechanical spaces: mid-building spaces and a mechanicals penthouse. Given the varied nature of the building program such spaces seem appropriate; however, the penthouse has a height of 40 feet, which seems high when combined with the exposed lab stacks.

As the project advances, it is recommended that the Applicant:

- Clarify whether the rooftop mechanicals have been right-sized for the building. Often mechanical penthouses are oversized when future tenants are unknown, which contributes to bulk concerns.
- Provide improved screening for the exposed lab stacks, or demonstrate that they will not be visible in longer range views of the building and provide technical justification for their exposure.

Loading and Back of House

While it is acknowledged that loading and service areas are critical building functions, they should be located and designed to support walkability and minimize dead zones. Loading and back of house functions for the project are proposed to be located on Athenaeum Street, which seems appropriate given that it is a minor street and already operates as a service alley. However, the proposed loading and service area is approximately 180 feet wide, which far exceeds the 30 feet maximum width for loading and 20 feet maximum length of blank wall recommended in the Design Guidelines.

Since the project is very large with a complex program some flexibility is warranted; however, to help mitigate the impact of the loading, back of house functions and very wide curb cut, Staff suggest further consideration of the following:

- Potential introduction of occupied ground level spaces with windows between loading/ servicing areas wherever possible to help diminish their impact.
- Use of architectural doors designed to complement the overall façade composition. Doors should be recessed and closed when loading/servicing bays are not in use.
- Other creative solutions such as artwork, environmental graphics, plantings, changes in hardscape materials, etc.
- Provision of more detailed street-level elevations of the ground floor and a perspective rendering looking down Athenaeum Street towards the loading docks.

Public realm improvements

According to the Design Guidelines, open space in the area should include a range of unique experiences including different levels of interaction, gathering and community events, recreational opportunities, nature, water, public art, and history. The design of open space should also create a pedestrian friendly environment and interconnected open space network. These broad goals appear to be met with the expansive open space connections provided along the south and east sides of the building, which can accommodate large events and various programming opportunities. To enliven these spaces, the landscape design strategy is focused on a series of concentric oval shapes that appear in design of the paving, planting beds, and site furnishings. A water feature is also proposed.

As the project advances, staff suggest further study of the following:

- While the oval planting beds create visual interest, some further study is recommended to determine if they might create physical buffers that further separate the building from the public realm. This is particularly a concern at the corner of Third Street and Kendall Street South where the primary public access to the Public Commons is provided.
- As the Design Guidelines emphasize streetwalls, building setbacks exceeding 10 feet and used exclusively for ornamental landscaping are not encouraged. Therefore, it is recommended that there be greater emphasis placed on each of the landscape/open space zones in terms of their character, public amenities, integration of public art and play for both children and adults. Strategic insertions of public arts programming and/or interactive play elements, can foster a sense of playfulness, exploration, and draw people into the site.
- Landscape plans for the building terraces should also be provided.

Bicycle Parking

Bicycle parking appears to be well placed and integrated into the landscape design of the open space areas adjoining the building. Two BlueBikes Stations are proposed as part of the project. The station to be sited at the top of the South Plaza, abutting Broad Canal, has the potential to be visually prominent given the openness of that plaza. As such, Staff suggest further study of:

- Additional landscaping (low in height, e.g., hedges, grasses, or planters) being installed around the station, so that it is not the dominant visual feature/backdrop to the plaza. If that is not possible given the garage below, alternative approaches of integrating the station into the design of the plaza should be considered.

Environmental Comfort

Urban heat island effect

The proposed landscape provides a good balance between new plantings and hardscape. Additionally, the building's terraces will be landscaped. As the design advances, opportunities for additional

vegetation should be considered for its moderating effects on microclimate, the shade it provides, its aesthetic value, and for the spatial definition and intimate scale it can provide.

Wind

While there are no dangerous conditions expected, the Pedestrian Wind Study notes that higher than desired winds speeds are expected annually at the two entrances, near the south-western corner of the building and the southeast and east seating areas. These undesirable conditions appear to be mitigated once the Volpe site is fully built-out; however, some further study should be undertaken now to determine if any interim measures can be provided to enhance these key public spaces whilst that redevelopment occurs.

As the project advances, Staff suggest that the following be considered:

- Providing more protection from wind, such as additional canopy trees, pedestrian scaled structures, and additional building setbacks.
- In consideration of additional mitigation measures, the project should not rely on wind screens
- Inclusion of seasonal mean speed figures in the Final Development Plan to help staff gain a more comprehensive understanding of the wind issues.

Shadows

Shadow impacts on public open spaces are most noticeable during the Spring and Fall Equinoxes when new shadows will reach the Third Square Apartments Courtyard and Termeer Square. The buildings stepped form on its east façade does appear to help mitigate some of these shadow impacts; however, it is important to note that Termeer Square will be in complete shadow at 3:00PM on the Equinoxes.

Noise

According to the Noise Study, the project complies with Cambridge Noise Ordinance. It would be helpful if some additional information was provided to satisfy concerns about future tenant mechanical equipment being located near residential uses.

- Specifics about how the equipment should be designed, selected, located, and acoustically-screened to protect neighbors from noise impacts should be provided.

Lighting

Given the proximity of residential buildings to the west and south, managing light spill at night is an important design issue. Staff suggest further study of the following as the project advances:

- Minimizing night-time lighting and light spill by such means as utilizing automated blinds, dynamic glazing, careful design and placement of interior light fixtures, etc.
- Provision of a night rendering to help understand the visual impacts of the interior lighting.

Continuing Review

In addition to the materials identified above, Staff recommends that the following supplementary design materials be included in the Final Development Plan:

- Incorporation of a more comprehensive response to the Design Guidelines in the Narrative.
- Additional renderings of the project from further away from the view point of a pedestrian, and a key plan for each rendering submitted.
- Floor Plans with key dimensions, such as setbacks and architectural modulations.