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# CITY OF CAMBRIDGE, MASSACHUSETTS

# PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

## **COVER SHEET**

In accordance with the requirements of the City of Cambridge Zoning Ordinance, the undersigned hereby petitions the Planning Board for one or more Special Permits for the premises indicated below.

Parcel Address(s):	729, 735-737, 745 & 755 Concord Avenue
Base Zoning District(s):	0-1
Overlay Zoning District(s):	AOD - Quadrangle (AOD-Q South)
Applicant Name:	Boylston Properties
Applicant Address:	800 Boylston Street, Suite 1390, Boston, MA 02199
• •	Johanna Schneider, Esq. 617-557-9723  Name Telephone #  jschneider@hembar.com  Email Address  s responsible for seeking all necessary special permits for the project. A granted if it is not specifically requested in the Application.
	permit(s) (with reference to zoning section numbers):
Zoning Section	Requested Special Permit
20.1100.5.5.9.3	Side yard setback waiver
19.20	Project Review Special Permit
22.35.3	Exemption from Green Roof Area requirements
6.44.1.g	Parking spaces within 5 feet of property line
Denote other City of Cam  Board of Zoning Appea	bridge Board/Commission Review Needed:  I (Variances)
Denote applicable Comm	ttee Review and Public Outreach:
☐ Central Square Advisor	y Committee   Harvard Square Advisory Committee   Community Meeting(s)
	2126/25
Signature of Applicant	Date

Project Address: 745 Concord Avenue Date: 2/28/25

Detailed description of Application Materials is included at the end. Additional materials may be required if relevant to the proposal. Planning Board Special Permit Application Instructions are available online: https://www.cambridgema.gov/CDD/zoninganddevelopment/specialpermits

Provide all materials in **electronic draft form** to be reviewed by CDD staff for completeness. **A public hearing will not be scheduled until a complete set of materials is received.** 

Application Checklist (via email)

List of City Departments Receiving Project Materials (via email)

For All Special Permits	Required Submissions (Include a Table of Contents for each Volume)
NARRATIVE VOLUME	Table of Contents
(8.5x11 page size, portrait)	Cover Sheet
	Dimensional Form
Application Forms  Download from CDD website	Ownership Certificate
	Fee Schedule
<b>Project Narrative</b> Pages must include:	Project Overview
	Compliance with Zoning
Project title/address	Compliance with Criteria/ Guidelines Specific to Special Permits Sought
Page number	Compliance with General Special Permit Criteria (Section 10.43)
	☐ Urban Design Objective Narrative (Section 19.30)
	Summary of Community Engagement
GRAPHIC VOLUME	☐ Table of Contents
(11x17 page size, landscape)	Site Locus Map
	Existing Conditions/Context Plan
Project Plans and Illustrations	Proposed Site Plan
Pages must include:	Proposed Floor Plans
• Title	Proposed Roof Plan with Green Roof compliance information
<ul> <li>Date</li> <li>Author</li> <li>Graphic scale</li> <li>North arrow</li> <li>Labeled dimensions</li> </ul>	Proposed Landscaping Plan
	Proposed Elevations
	Parking and Loading Plan with line-of-sight, turning radius & truck size
	Bicycle Parking Plans (1"-10' scale)
	Existing Condition Photographs
	Proposed Perspective Renderings or Photo Simulations
	☑ Proposed Materials and Color Palette

# APPLICATION CHECKLIST

#### **APPENDICES**

Provide each appendix as a separate PDF file for the electronic copy. They can be bound together for the hardcopy.

Other Submissions	Required for	Requires review by	N/A
Transportation Impact Study (TIS) and TP+T Certification	Project Review Special Permit (Section 19.20)	Traffic, Parking and Transportation Dept.	
Parking Analysis	Reduction of Required Parking (6.35.1); certain conversions to residential use (5.28.2, 20.600)	Traffic, Parking and Transportation Dept.	
Tree Study and City Arborist Certification	Project Review Special Permit (19.20); Multifamily Special Permit (4.26); Townhouse Special Permit (11.10)	City Arborist (Dept. of Public Works)	
Sewer Service Infrastructure Narrative	Project Review Special Permit (19.20)	City Engineer (Dept. of Public Works)	
Water Service Infrastructure Narrative	Project Review Special Permit (19.20)	Water Dept.	
Noise Mitigation Narrative	Project Review Special Permit (19.20)	CDD Urban Design	
Shadow Study	Districts requiring shadow impact findings	CDD Urban Design	
☐ Wind Study	Districts requiring wind impact findings	CDD Urban Design	
Flood Plain Documentation	Development in a flood plain (20.70 and 5.25.42, where applicable)	City Engineer (Dept. of Public Works), Conservation Commission	
Green Building Report	Projects subject to Green Building Requirements (22.20)	CDD Zoning	
☐ Green Factor Documentation	Projects subject to Green Factor Standard (22.90)	CDD Zoning	
Flood Resilience Documentation	Projects subject to Flood Resilience Standards (22.80)	Dept. of Public Works	
List any additional materials s	ubmitted (include document titles):		

CITY OF CAMBRIDGE, MA . PLANNING BOARD . SPECIAL PERMIT APPLICATION

#### APPLICATION CHECKLIST

# The Applicant shall provide the following for the final submission: Electronic copy of all application materials certified complete by CDD in digital format (via email) Three (3) original printed Special Permit Application forms with original signatures Ten (10) hard copies of Narrative Volume and Graphic Volume. Four (4) hardcopies of Appendices. Avoid binders, spiral binding, and plastic coversheet. Staples, velo binding or tape binding are preferred. Application fee (by check made to City of Cambridge)

**Project Address:** 745 Concord Avenue **Date:** 2/28/2025

	Existing	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)	48,463± sf	n/a	48,463± sf	
Lot Width (ft)	300± ft	n/a	300± ft	
Total Gross Floor Area (sq ft)	24,344± sf	252,008± sf (max)	232,464± sf	
Residential Base	n/a	193,852± sf (max)	193,852± sf	
Non-Residential Base	24,344± sf	n/a	n/a	
Inclusionary Housing Bonus	n/a	58,156± sf (max)	36,673± sf	
Total Floor Area Ratio	0.5	5.2 (max)	4.8	
Residential Base	n/a	4.0 (max) <sup>1</sup>	4.0	
Non-Residential Base	n/a	1.0 (max) <sup>1</sup>	0	
Inclusionary Housing Bonus	n/a	1.2 (max)	0.8	
Total Dwelling Units	n/a	n/a	236	
Base Units	n/a	189	189	
Inclusionary Bonus Units	n/a	47³	47³	
Base Lot Area / Unit (sq ft)	n/a	n/a	256± sf/u	
Total Lot Area / Unit (sq ft)	n/a	n/a	205± sf/u	
Building Height(s) (ft)	23± ft	145 ft (max)	145 ft	
Front Yard Setback (ft)	3± ft	25 ft	25 ft	
Side Yard Setback (ft) (WEST)	19± ft	BTZ⁴ 16.5 ft	16.5 ft	
Side Yard Setback (ft) (EAST)	15 FT	BTZ⁴ 15.5 ft	15.5 ft	
Rear Yard Setback (ft)	0 FT	15 ft⁵	10 ft	
Open Space (% of Lot Area)	2.3± %	20% (min)	27± %8	
Private Open Space	73± %	n/a	49± %8	
Permeable Open Space	2.2± %	25% (min)	25.03± %8	
Other Open Space (Specify)	27± % (parking)	20% (public) <sup>6</sup> (min)	51± % (public) <sup>8</sup>	
Off-Street Parking Spaces	19	n/a	15 <sup>7</sup>	
Long-term Bicycle Parking Spaces	0	247	248	
Short-term Bicycle Parking Spaces	0	24	24	
Loading Bays	0	n/a	0	

Use space below and/or attached pages for additional notes:

SEE NEXT PAGE FOR FOOTNOTES

Project Address: 745 Concord Avenue Date: 2/28/2025

#### **FOOTNOTES:**

1. Per Section 20.1100.5.1.1 of the City of Cambridge Zoning Ordinance

- 2. Per Section 11.203.5(a) of the City of Cambridge Zoning Ordinance
- 3. Per Section 11.203.2(b) of the City of Cambridge Zoning Ordinance. The total number of Inclusionary Dwelling Units (47) meets the IHP requirement for IHP Net Floor Area, calculated as 20% (34,111± sf) of the total net floor area of dwelling units provided (169,088± sf). See Graphic Volume, p.34 Unit Type & Distribution Tables for additional information.
- 4. "BTZ" designates a Build-to-Zone setback, per Section 20.1100.5.5.2.3 of the City of Cambridge Zoning Ordinance
- 5. Setback is designated as a Side Yard Setback per Section 20.1100.5.5.9.1 of the City of Cambridge Zoning Ordinance
- 6. At least twenty-five (25) percent of the required open space provided on the lot shall be any combination of Public Open Space or Publicly Beneficial Open Space.
- 7. Off-Street Parking count includes four (4) off-street parking spaces adjacent to the one-way drop-off lane.
- 8. Per CDD guidance, public sidewalks along Concord Avenue and Eastern States Road are not included in total proposed open space calculations.

# OWNERSHIP CERTIFICATE

Project Address: 729, 735-737, 745 & 75	55 Concord Avenue	Date: February 3,2025
To be completed by the Property Owner:		,
I hereby authorize the following Applicant:	Boylston Properties	
at the following address:		e 1390, Boston, MA 02199
to apply for a special permit for:	project review; side yard; g	reen roof; parking spaces within 5 feet o
on premises located at:	729, 735-737, 745 & 755	Concord Avenue
for which the record title stands in the name of:	Concord Avenue Realty A	
whose address is:	745 Concord Avenue, Car	mbridge, MA 02138
by a deed duly recorded in the:		
Registry of Deeds of County:	Book:	Page:
<b>OR</b> Registry District of the Land Court, Certificate No.:	229470 & 230270 Book:	Page:
Quaite a. Spinili:		Manager/Owner
Signature of Property Owner (If authorized Trust	tee, Officer or Agent, so id	entify)
To be completed by Notary Public:		
Commonwealth of Massachusetts, County of	Middlesex	
The above named Judith A. Spinelli	personally appeared	d before me,
on the month, day and yearFebruary 3, 2025	and made oath that	the above statement is true.
Notary: Fackele M. Rachele M. DePamp  My Commission expires: March 4, 2027	. Silamphil Hilis, Notary	(ie)

**Project Address:** 729, 735-737, 745 & 755 Concord Avenue

Date: 2/26/25

The Applicant must provide the full fee (by check made to City of Cambridge) with the Special Permit Application. The required fee is the larger of the following amounts:

- (a) The fee is ten cents (\$0.10) per square foot of total proposed Gross Floor Area noted in the Dimensional Form.
- (b) The fee is one thousand dollars (\$1,000.00) if Flood Plain Special Permit is sought as part of the Application and the amount determined above is less than \$1000.
- (c) The fee is one hundred fifty dollars (\$150.00) if the above amounts are less than \$150.

#### **Fee Calculation**

(a) Proposed Gross Floor Area (SF) in Dimensional	Form: $\times$ \$0.10 =	× \$0.10 = 23,052.50	
(b) Flood Plain Special Permit fee	:	1000.00	
(c) Minimum Special Permit fee	:	150.00	
SPECIAL PERMIT FEE	Enter Largest of (a), (b), and (c):	23,052.50	

# J.P.Morgan

J.P. MORGAN CHASE BANK, N.A. 1-2/210

# WPM REALTY INC

800 BOYLSTON ST., SUITE 1390 BOSTON, MASSACHUSETTS 02199

2/26/2025

PAY TO THE ORDER OF\_

City of Cambridge

\$ \*\*23,052.50

\_\_DOLLARS

Details on back.

Security

City of Cambridge Planning Board City Hall Annex 344 Broadway

**MEMO** 

Cambridge, MA 02139

2025 Special Permit Application - 729, 735-737, 745

AUTHORIZED SIGNATURE

"00 29 18" #1:0 210000 211:

7584464591

WPM REALTY INC

2918

City of Cambridge

Date 2/26/2025

Type Reference Bill 2025 Special Permit Original Amt. 23,052.50

Balance Due 23,052.50 2/26/2025 Discount

Discount Payment

23,052.50 23,052.50

Check Amount

JP Morgan Checking - 2025 Special Permit Application - 729, 735-737,

23,052.50

#### 745 Concord Avenue – Narrative

# I. Project Overview

Site. The property at 745 Concord Avenue is an approximately 48,463 square foot (sf) lot, bounded by Concord Avenue to the south, Spinelli Place to the west and the 733 Concord Avenue parcel to the north (the "Site"). A City of Cambridge-owned parcel also abuts the Site at the corner of Concord Avenue and Spinelli Place; a vehicular access easement running from Concord to Spinelli follows the diagonal along this City-owned parcel. The Site includes Eastern States Road, a private way that runs from Concord Avenue northward to the parking lot for 725 Concord Avenue. An underground easement for the Little Pond Conduit runs below the Site's eastern side.

Existing Conditions. The Site is currently developed with a 1-1/2 story mixed-use commercial building including office and light manufacturing uses. The remainder of the Site is impervious surface parking. The Site is accessed via three curb cuts: two on Concord Avenue and one on Spinelli Place. The existing building abuts the back of the sidewalk along Concord Avenue without setback.

Proposed Project. The Applicant proposes to replace the existing building and paved parking areas with an approximately 230,525 sf multifamily residential building with 236 units,15 surface parking spaces, and 272 long- and short-term bicycle parking spaces (the "Project"). Consistent with the new Alewife District Zoning, the Project will be approximately 144 feet tall. A combined total of approximately 6,792 sf of publicly accessible open space will be provided along the Site's street frontages, as well as open space for residents in the form of a courtyard, shared building terrace and balconies. Overall, 27% of the Site will be dedicated to open space. Approximately 40 new trees will be planted, and significant new plantings will be installed to support the City's Urban Forestry initiatives. The ground and mezzanine levels of the Project will provide resident amenity spaces with views toward Concord Avenue to activate the street frontage.

The Project provides orchestrated access for pedestrians, bicycles, cars, and service vehicles. The building will be set back 25 feet from Concord Avenue. Widened sidewalks and a public access zone in the new Concord Avenue setback improve the pedestrian experience. The Project will include a reconstructed bicycle lane along Concord Avenue and a new bicycle lane on Spinelli Place. To ensure that deliveries and ride-share drop-offs do not create congestion on Concord Avenue, the Project utilizes the existing right of way running from Concord Avenue to Spinelli Place to create a dedicated drop-off zone. The Project will also provide a service court, accessed from Eastern States Road, with eleven (11) short-term vehicle parking spaces for visitors to the building and space for loading, including moving trucks; an additional four (4) short-term vehicle parking spaces will be provided adjacent to the building's drop-off zone.

## II. Compliance with Zoning

The Site is located within the Office-1 (O-1) Zoning District and the Alewife Overlay District – Quadrangle and is part of the AOD-Q South Height Subdistrict. The Project requires the following waivers, exemptions and special permits:

- Section 20.1100.5.5.9.3 waiver for side yard setback
- Section 22.35.3 exemption to reduce required Green Roof Area
- Section 6.44.1.g special permit for parking spaces within 5' of property line
- Section 19.20 Project Review Special Permit

As a residential use, the Project is not subject to the PTDM Ordinance, Chapter 10.18 of the Cambridge Municipal Code.

#### III. Compliance with Project-Specific Criteria and Guidelines

Compliance with Alewife Design Guidelines

The Project addresses the Alewife Design Guidelines (2023) where applicable through the following measures.

#### 3.1 Sense of Place

- The building frames the public realm by creating streetwalls and framing a central courtyard (1).
- The landscape design reinforces the public realm with planting, street furniture, and composed paved areas (2).
- The building relates to pedestrian scale through unique ground floor façade treatments, additional glazing along sidewalks, and entry canopies and street-facing doorways (3).
- Interior ground floor uses enliven the street by being the most public uses in the project including building amenity spaces, the main lobby and shared work areas (4).
- Streetscapes on all three frontages are upgraded to promote walkability and have been designed in close collaboration with Cambridge DPW (5). Streetscape layouts will be compatible with the future vision of the Alewife District Plan.

#### 3.2 Elements of Design

- Open spaces are shaded via street trees (2).
- The residential building is composed to frame the streets and the city parcel on the corner to help these public spaces feel comfortable (3).

- The building façade has a clear base with unique materials and pedestrian scale; it has a mid-zone with a dropped section of the building mass and a top with a uniquely expressed façade and cornice zone (4).
- The building bulk is broken down through vertical articulations, including balconies and stacks of windows. The façade system is also articulated vertically in the solid panels of the building (5).
- The façade treatments are varied with a blend of materials, additional texture at the ground floor, a variety of textures and shadow lines in the main body of the building and unique expression at the balconies (6).

# 3.3 Pedestrian Friendly Streets

- The ground floor is activated with the building lobby and shared amenities and has three additional entries besides the main entry and bicycle entry (1).
- The ground floor activity has extensive glazing and full height windows (2).
- Canopies are provided at the two entrances on Concord Avenue (3).
- All streets are shaded with continuous street trees (4).
- Sidewalks are programmed with benches, bike racks at building entries, street trees and lighting at building entries (5).

#### 3.4 Parks and Squares

• Not applicable as the Project creates no park or square, but the Applicant notes that it is interested in entering an agreement with the city to improve with new landscaping within the City-owned parcel located at the corner of Concord Avenue and Spinelli Place.

# 3.5 Sustainability and Resilience

- The building protects occupants from flooding by being located above the floodplain (1).
- Urban heat island is mitigated through extensive trees and planting, and high albedo paving and roofing (2).
- A variety of vegetation is selected in conjunction with Cambridge DPW to support ecological diversity (3).
- The building is energy efficient, all electric and will meet Passive House standards (4).
- Stormwater will be treated, stored, and infiltrated on site and will meet the City of Cambridge standards for stormwater management (5).

# 3.6 Large Development Sites

- Not applicable as the Project is a single building.
- 4.1 Urban Blocks and Public Realm
- The Project breaks the bulk of the building into smaller elements along Concord Avenue and frames a courtyard to further articulate the mass along this frontage (5).

- The long façade along Concord Avenue includes a courtyard and separate building elements with different materials to reduce apparent bulk (6).
- Open spaces near the building are typically to the south of the building, minimizing shadow impacts (7).

#### 4.2 Frame the Public Realm

- The building fronts on Concord Avenue. Facades follow required setbacks and build-to-zone lines (1).
- The building frames a private courtyard, provides a backdrop to the public open space at the corner of Concord and Spinelli (2).
- The building creates a streetwall for Concord Avenue (3).
- Building facades typically emphasize a single primary plane (4).
- Building facades are all more than a minimum of 3 stories (5).
- The street walls read as continuous in order to define the streets they face (6).
- A portion of the building steps back two stories below the top to break down the top floors of the building. This is at a higher level due to the Concord/Fresh Pond frontage (7).
- Residential floors have a variety of balconies and openings for visual interest (9).

#### 4.3 Articulate the Public Realm

- The building frames the three abutting streets as well as the small public open space on the corner of Spinelli. It also frames a courtyard facing Concord Avenue. Its façade articulation includes repetitive window patterns with unique motifs, including stacked balconies and the projecting element at the corner with contrasting materials (1).
- The building incorporates exceptional elements including the central courtyard facing Concord Avenue and the projecting element with roof terrace at the corner of Concord and Spinelli in a unique material (2).
- The building includes a 25-foot setback from Concord Avenue to create publicly accessible open space which includes a new seating area and tree / understory plantings between the two primary entrances. The primary residential courtyard also faces the street on Concord (3).
- The building creates facades in the two build-to-zone areas on Spinelli and Eastern States. The Eastern States façade holds the corner at Concord Avenue. The Spinelli façade follows the city parcel setback at the corner of Concord and seeks to emphasize this public space through a unique form and material (4).
- The building reaches the full zoning height due to its location along Concord Avenue and as a backdrop to Fresh Pond (5).

#### 4.4 Sustainable and Resilient Site Design

• Permeable and vegetated areas both surpass the underlying zoning minimum requirements (1, 3).

- The majority of the pavement on site has a higher SRI value of at least 35 or higher. Darker pavement accents are scattered throughout to avoid continuous hot spots. The majority of parking will either be under cover of the overhang or shaded by the building for extended portions of the day. (4)
- Stormwater will be absorbed by planting and permeable surfaces where they exist; impermeable area and building roof stormwater will be treated and routed to underground stormwater holding and infiltration tanks (5, 6, 7).
- Site planting will be located to shade sidewalks, bike lanes and the 25-foot setback zone along Concord Avenue (9).
- The plant palette is a combination of native and naturalized non-invasive species. A variety of trees were selected from the City of Cambridge DPW's Tree species list. Understory plant material has been selected for lower water usage, salt tolerance and adaptability to the rigors of an urban environment. A variety of flowering shrubs and perennials are included that will help support native pollinator species. None of the species selected should have any issues in regard to anticipated changes to a warmer or more variable climate (10).

#### 4.5 Entries and Access

#### Pedestrian Entrances

- Entrances are located at both primary corners of Concord Avenue with the perpendicular streets of Spinelli Place and Eastern States Road (1, 2). The entrances near Spinelli Place are also proximate to the bus stop and crosswalk across Concord Avenue (4).

  Vehicular Entrances and Drop Off
- The driveway providing easement access adjacent to the Concord and Spinelli corner has been designed to be one-way, keep vehicular width to a minimum, be oriented perpendicular to the streets, and be paved to emphasize pedestrian access to encourage safety (2, 3).
- Curb cuts will be kept to a minimum and greatly reduced from existing conditions (4).
- The short-term parking is located to the rear of the building off the side street of Eastern States Road (1).
- The drop-off area is located off of the existing access easement and will be positioned under the building to minimize its impact on the street. This location also encourages safety by avoiding drop off along Concord Avenue (7). Loading, Service Areas and Surface Parking
- The loading area is located to the rear of the building off the side street of Eastern States Road. This is the least impactful location given the site having frontage on three streets. The size of the loading area is kept to a minimum while still allowing tenant move-ins to be off of the street. (1, 3).
- Short term parking is also located in this zone to minimize visibility from more active streets (5).

• No security fences or gates are included and fencing to screen mechanical equipment will be kept to the rear of the building and will be of appearance grade materials (6, 7).

# 4.6 Utilities and Mechanical / Electrical / Data Equipment

- Electrical transformers and equipment will all be located inside the building. Most mechanical equipment will be within the building or on the roof, with the exception of limited mechanical condensers which will be located at grade to the rear of the building and screened with planting and fencing (1, 2, 3).
- The electrical transformer room will face Spinelli Place, not Concord Avenue and will have architectural grade finishes and doors (4, 5).
- All utilities will be located above the floodplain (6, 7, 8, 9).
- New utility lines will be underground and routed to minimize conflicts with planting (10, 11).

# 4.7 Emergency Services and Access During Flood Events

• The building is located above the floodplain and is not impacted by flood events.

# 5.1 Building Elements

The Pedestrian Zone

- The building locates residential communal activities including a coworking area on the ground floor with direct visibility to the pedestrian zone (1).
- The pedestrian frontage creates visual interest by including entrance canopies, increased glazing, a planted courtyard and a range of materials including terra cotta masonry (2).
- Ground floor adaptation strategies for floodplain elevation are not required in this location.

#### The Streetwall

- All of the streetwall façade is within the Build to Zone where property lines allow (1).
- The block corner at Eastern States Road is within the setback (2).
- The Spinelli corner responds to property line setback to a public open space and creates a focal point with its change in material and location on the corner entrance to the district (5, 6).
- The cornice line of the building is articulated with additional detail (7).
- Vents through the façade are concealed by integrated perforated metalwork (8).
   Towers and Upper Floors
- The taller portion of the building is shaped to step back from the street and present narrow vertical rectangular forms as streetwall (1, 4, 6).
- A portion of the building is stepped down and articulated in different materials to break the mass, create a focal point, and reduce the footprint of the top floors (2, 3, 5).

Building Top – Mechanical equipment is set back to minimize visibility from nearby streets. Exhaust flues are set back the farthest to mitigate visual impact. Roofs and Terraces – Roofing will be high albedo roofing where not occupied. The lower terrace roof will have planting and amenity space areas. The upper roof will be fully occupied by mechanical equipment, façade maintenance and required access zones.

Connectors and Bridges - N/A.

# 5.2 Building Massing

- All of the streetwall façade is within the Build to Zone where property lines allow (1).
- A forecourt along Concord Avenue breaks up the long façade (4).
- The building shape along Concord is organized so streetwall facades are narrow and vertical and located at lot corners as focal points and vertical emphasis (5, 6).

#### 5.3 Building Materials

- Materials in the pedestrian zone at the base of the building will be masonry terra cotta (2).
- Upper floor materials are metal panel with punched windows; the metal panel is articulated in a variety of folded scales to relate to the texture of the terra cotta; surfaces of the metal panel will include matte finishes and other techniques to help it appear more similar to masonry or precast. Colors will be warm and light (7, 8).
- Fasteners will be concealed (9).
- Glazing will be windows with clear glass, no curtainwall or spandrels (4, 5, 6).

## 5.4 Architectural Character

Scale and Detail

- The primary façade articulation uses folded panels for depth and horizontal projecting lines to create shadow. Balcony stacks create further interest and color variety (1).
- Additional detail is included at the pedestrian zone with terra cotta masonry and entry canopies. Building corners include balconies or material changes. The projecting element at the Spinelli and Concord corner includes additional detail and a unique silhouette due to the unique geometry of the property lines (2). Fenestration
- The windows integrate with the metal panel system for a syncopated reading of façade texture (1, 2).
- Windows are operable and varied in scale (2, 3).

#### 5.5 Resilient Design

• The building and all critical mechanical, electrical and communications infrastructure is elevated above the long-term flood elevation (1, 4).

- The building envelope is designed to meet Passive House standards and is highly efficient and includes operable windows (5).
- Systems are all electric and highly efficient (6).
- Roof surfaces are highly reflective and paving materials are light-colored (10).

# 5.6 Building Types – Residential Buildings

- The building streetwall frames the adjacent streets and the scale is modulated to respond to the different street types and frontages (1, 3).
- A courtyard opens to Concord Avenue to mitigate the scale of this façade (4).
- Floor plates are generally narrow for good light access into units (5).
- Some units include balconies to modulate the façade and a primary communal terrace is located on the lower primary volume of the building (7).
- The building lobby is located directly on Concord Avenue (8).
- Façade articulation includes multiple techniques to mediate scale including double height bays, stacks of recessed balconies, and a tall ground floor with high ceilinged entries (9).
- Detail within the façade includes panel texture and corrugation, balcony railings and ground floor terra cotta masonry (10).
- Ground floor glazing open to the street where there are interior amenity spaces will be over 50% glazing (11).

# 6.1 Site Design, Resilience and Sustainability

- The site design includes planting and trees as well as permeable paving to mitigate stormwater and heat island impacts (1).
- The Project also stores excess stormwater to mitigate runoff (2).
- The primary courtyard includes sunlight, a view of the sky and protection from wind (4). Both the primary courtyard and public seatback zone along Concord include seating and shade from trees (5).
- The proponent is committed to pursuing public art opportunities at the Project (6).

#### 6.2 Environmental Comfort

Cool Spaces – Canopy trees are located along the public setback on Concord and in the primary courtyard (1).

Lighting – Lighting will illuminate pedestrian paths for safety but at a level no higher than required. There will be no uplighting and luminaires will be 3000K or warmer in temperature (4).

Noise – Mechanical equipment will predominantly be located on the high roof and well set back from the roof edge to mitigate any noise trespass. Limited equipment will be located on the ground to the rear of the building and shielded by a fence for visual and acoustic separation.

Shadow, Glare and Wind – The primary building shadows are cast to the north on an industrial building; streets to the other three sides minimize shadow impact on neighbors.

#### 6.3 Urban Forest

- The Site contains no existing trees, but new trees will be planted along the streetscape and in the courtyard (1, 2, 4).
- Tree species have been selected to align with the Cambridge Department of Public Works Tree Species List. Species are varied throughout the site to provide a diverse tree canopy in support of the city's Urban Forestry initiatives. Trees will be installed and maintained to the Department of Public Works standards (3, 6).
- Street trees will be planted in large continuous beds filled with well-draining nutrient rich planting medium (5).

## 6.4 Character and Uses

The public open space along Concord Avenue is 25 feet wide in addition to the sidewalk zone. This linear path lends itself to a diverse array of seating, bicycle parking and building entry zones. The secondary building entry leads to a shared workspace for residents and will help activate the open space.

# 6.5 Universal Access and Design

- The Site is flat and all open space zones are accessible. Building entrances will be clearly marked with wayfinding (1).
- Accessible parking is located directly adjacent to the rear building entrance with all other short-term parking (2).
- The building lobby incorporates visitor seating for easy "visitability" (3).
- Benches and outdoor seating will have backs and provide zones for wheelchairs to join in seating groups (9).

#### 6.6 Streets and Paths

- Streetscape zones of sidewalk, bike lane, street trees, curbs and planting have been designed in consultation with CDD staff and Cambridge Department of Public Works in order to meet the goals for each street type the project fronts (1, 2, 3, 5).
- Sidewalk zones connect directly to building entrances (4).
- Utilities are underground and coordinated to the extent practical with street tree placement for tree health (7).
- Paving will be light colored with materials in general having a SRI of 35 or higher (11).
- A low wall and fence delineate the front private courtyard from the sidewalk public zone (13).

#### 6.7 Parks - N/A

## 6.8 Squares and Plazas - N/A

# 6.9 Privately Owned Public Spaces

The 25-foot setback zone from Concord Avenue will be a privately owned public space. It is open to the public at all hours and is indistinguishable from the regular public sidewalk zone. This zone will be part of a continuous boulevard setback along Concord Avenue as the district is developed over the years.

# 6.10 Entry Courtyards – not applicable to Project

# 6.11 Private Courtyards

- The front zone and includes a low wall and fence to delineate this edge and define the courtyard is a private open space for use by Project residents. It incorporates permeable areas and uses light colored paving (1).
- It is part of the overall Project stormwater management system and includes trees where not in conflict with the stormwater management (2, 3).
- The front edge of the courtyard borders with the public sidewalk (6).

#### 6.12 Public Art

• The proponent is committed to incorporating public art into the Project.

## Conformance with Alewife District Plan

The Project responds to key recommendations of the 2019 Alewife District Plan as follows:

- By introducing dense housing, the Project encourages future mixed-use development to support a growing concentration of residents.
- The Project establishes an infrastructure to encourage walking and biking by improving its immediate streetscapes with pedestrian and bike-friendly features.

Open space recommendations include creating a network of high-quality open spaces.

- The Project will enhance an existing open space on the adjacent City-owned parcel.
- The Project fulfills the recommendation to connect open spaces with walking and biking paths along the street frontages.
- Tree plantings are located to meet current day-one conditions along Eastern States Road and Spinelli Place while adhering to guidelines that enable the future vision of the Alewife District Plan.

#### Urban Form

- The Project responds to the Urban Form recommendations by creating street edges along each of the streets it fronts. It breaks down the large block scale along Concord Avenue by articulating the building façade in height and material as well as creating a mid-block court.
- The main entry is located on the primary street, Concord Avenue. Parking and loading are consolidated to the rear of the Site along the future tertiary road.
   Onsite surface parking is minimized and screened from the public way.
- The building has multiple entrances and includes building amenities at the ground floor to create active uses.
- Material changes and jogs in the massing break down the visual bulk of the building.
- The Project will incorporate public art.
- The building promotes energy efficiency by complying with Passive House certification requirements. These design standards also help the building be resilient to extreme heat.
- The Project prepares for future flooding by being elevated above the 2070 flood elevation.
- The Project will install continuous shade trees along abutting streets. Permeable surfaces are maximized.
- The site design works to frame Concord Avenue as an urban boulevard through the line of street trees, generous setback with usable open space and a courtyard facing the street.

#### Mobility recommendations are fulfilled as follows:

- The building edges are designed to link the interiors to the public way through broad access walkways and generous glazing to reveal interior activity.
- Street trees buffer sidewalks from vehicular streets. Utility lines will all be underground.
- Bicycle lanes are upgraded and separated from vehicular streets.
- The Project will maintain the existing Bluebike station (located on the adjacent City-owned parcel).
- The project creates a Transportation Demand Management Plan and uses shared parking with other developments.
- The street frontages are designed to meet the Quadrangle Street type guidelines.
- The project accommodates an upgraded MBTA bus stop serving the westbound side of Concord Avenue.

The following measures are intended to meet the Climate and Environment recommendations.

• The building and utilities are all located above the 2070 floodplain.

- The building will be all electric and will minimize energy demands through Passive House standards to align with net zero goals.
- Roof areas that are not planted will be high albedo (reflective) roofs.
- The site design will maximize pervious and planted areas to mitigate heat island impacts and stormwater impacts.
- Site paving will be light colored and shaded by trees where possible.
- Stormwater runoff will be stored and treated to minimize impact on city sewer systems.

The Project fulfills housing recommendations by adding 236 housing units to the district, including 48 affordable units.

The Project supports economic goals by bringing new residents to the neighborhood to support existing businesses and encourage the establishment of new retail and service providers in the Alewife District through the expansion of the local customer base.

# IV. Compliance with Special Permit Criteria

The Project requires special permits, waivers and/or exemptions from the following provisions of the Cambridge Zoning Ordinance (CZO):

- Section 20.1100.5.5.9.3 waiver for side yard setback
- Section 22.35.3 exemption to reduce required Green Roof Area
- Section 6.44.1.g special permit for parking spaces within 5' of property line
- Section 19.20 Project Review Special Permit

#### 20.1100.5.5.9.1 - Side Yard Setback

Section 20.1100.5.5.9.1 of the CZO provides that there shall be no minimum side yard setback within the first sixty-five feet (65') of the front of the lot, measured from the rear edge of the build-to zone to the rear lot line and that the minimum side yard setback thereafter shall be fifteen (15) feet. The Project proposes a 10-foot continuous side yard setback.

Pursuant to 20.1100.5.5.9.3, the Planning Board may waive this requirement where the open space requirements of Section 20.1100.5.4 are met. The Project complies with the open space requirements of Section 20.1100.5.4, such that a waiver may be granted.

#### Section 22.35.3 – Green Roof Area

Pursuant to CZO Section 22.35, buildings over 25,000 GSF are required to devote 80% of the roof area to green roof space, biosolar green roof, or solar energy systems. The Project will provide 600 SF of green roof area on the partial low roof at level 10 of the building, such that it is expected to comply with these requirements. Per 22.35.2(a)(4), areas not intended for human occupancy, including areas occupied by air conditioning equipment and ventilators, are excluded from the roof area considered. 100% of the main roof at level 12 is covered by 228 individual heat pump condensers for the dwelling units, as well as heat pump condensers and energy recovery ventilators for common spaces. This mechanical equipment, in addition to the area required for free air and maintenance, along with the Green Roof Area installed at level 10, leave no remaining feasible Green Roof Area.

Section 22.35.3 provides that the Planning Board may grant a special permit to reduce the required Green Roof Area 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. Because the rooftop mechanical design will continue to be refined as Project plans progress, and in light of the limited area to provide any additional green roof area, in an abundance of caution, the Applicant is prospectively seeking a Planning Board exemption pursuant to Section 22.35.3 in the event that the Project is ultimately unable to satisfy the 80% roof area requirement of 22.35.2. The Applicant will make the required unit price contribution to the Cambridge Affordable Housing Trust in the event that the Project falls short of full compliance with the Green Roof requirements.

# Section 6.44.1.g - Setbacks for On-Grade Parking Facilities.

Per CZO Section 6.44.1.b, on-grade open parking spaces may not be located within five (5) feet of any side or rear property line. Section 6.44.1.g provides that the Board of Zoning Appeal may grant a special permit for the modification of the requirements of 6.44.1.b if site specific factors favor such modification; pursuant to Section 10.45, this relief may be granted by the Planning Board in the instant case.

There are five surface parking spaces, provided as part of the proposed auto court off Eastern States Road that directly abut the property line. The Project overall provides extremely limited parking, but offers a small number of temporary parking spaces for service vehicles, building maintenance personnel and contractors, and occasional needs of building residents, including for short-term loading/unloading, visitors, home health aides and the like. The location of these spaces in the auto court to the rear of the Site allows robust landscape plantings along the Project's frontages and is therefore the most logical and beneficial place to site them. Further, the spaces directly abut a row of surface parking spaces on the adjacent 733 Concord Avenue property. The foregoing site factors favor the requested modification.

## Section 10.43 - General Special Permit Criteria

Pursuant to CZO Section 10.43, special permits will normally be granted where specific provisions of the Ordinance are met, except where the particulars of the location or use, not generally true of the district or the uses permitted in it, would cause the granting of such permit to be to the detriment of the public interest because:

(a) It appears that requirements of this Ordinance cannot or will not be met.

With the requested zoning relief, the Project will meet all requirements of the Ordinance.

(b) Traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character.

The Project takes a mindfully progressive approach to parking, providing only fifteen (15) short-term vehicular parking spaces on site, while offering a robust Transportation Demand Management (TDM) program to reduce future residents' dependency on single occupancy vehicles.

As set forth in the TIS, the Project is expected to generate 46 new vehicle trips during the weekday morning peak hour and 53 new vehicle trips during the weekday evening peak hour. Approximately 5% of the peak hour trips are expected to use the on-site drop-off/pick-up lane, resulting in 1 to 2 vehicle trips during peak hours.

The analysis indicates that the Project will not significantly impact the operating conditions at key signalized intersections within the study area. While vehicle delays at signalized intersections are projected to increase slightly during peak hours, the level of service (LOS) at these intersections is expected to remain unchanged. Vehicle queuing at the signalized intersections was shown to increase by up to 1 vehicle as a result of the addition of Project-related traffic.

For the unsignalized intersection studied, the Project is expected to result in a maximum increase of 1 vehicle in the queue and a delay increase of up to up to 2 seconds during both the morning and evening peak hours.

The Project's traffic impacts were also evaluated against the City's five traffic impact indicators, which serve as a measurement framework for the Project's effect on local traffic. Out of the 81 metrics analyzed, 8 do not meet the City's standards. However, all five indicators already are exceeded under Existing conditions, without the Project.

In summary, while the Project will generate additional trips during peak hours, its overall impact on the roadway network and intersection operations will be minimal. The anticipated increases in delay times and vehicle volumes remain within acceptable limits, ensuring that the Project does not significantly degrade traffic conditions in the study area.

Currently, the Site is accessed by three existing curb cuts – one 38-foot curb cut on Spinelli Place and two on Concord Avenue (29 feet and 45 feet). The Project will eliminate the curb cut closest to Eastern States Road, such that access to the rear of the Site will be exclusively through Eastern States Road. The Project will narrow the existing Concord Avenue curb cut closer to Spinelli Place from 29 feet to 12 feet. The existing curb cut on Spinelli Place will be narrowed to 12 feet in width. The Project leverages an existing vehicular right of way that connects Concord Avenue to Spinelli Place to create a dedicated drop-off zone within the Site so as to eliminate congestion on Concord Avenue.

Changes in grade at the vehicular entry from Concord Avenue slow incoming traffic to protect cyclists and pedestrians from cars entering the site. Bollards and flush curbs clearly delineate the one-way vehicular path of travel along the right of way from Concord Avenue toward Spinelli Place. Variations in unit pavers color and size help define pedestrian only vs. shared vehicular use areas while maintaining the appearance of a continuous entry plaza.

Based on the foregoing, the Project is not anticipated to generate traffic or patterns of access or egress that would cause congestion, hazard or a substantial change in established neighborhood character.

(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.

The surrounding neighborhood is a mixture of primarily office, light industrial and life science uses, with the Fayerweather School located across Spinelli Place to the northwest. In 2023, the City of Cambridge adopted new Alewife District zoning for the Quadrangle, which allows multifamily residential use on this Site by right. The Project will be wholly compatible with existing adjacent uses. Although the Project seeks a special permit to reduce the required side yard at the northern edge of the Site from 15 feet to 10 feet, the proposed dimension still provides an ample buffer between the Project and any future redevelopment of the abutting lot to the rear of the Site.

(d) Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupants of the proposed use or the citizens of the City.

The proposed multifamily residential development will not create any nuisance or hazard to the detriment of the health, safety, or welfare of Project occupants or other residents of Cambridge. The Applicant has significant experience developing successful multifamily residential projects across the greater Boston area and will bring that expertise to create a first-class, professionally managed residential apartment community. In addition, the Project will provide numerous public realm improvements that will increase the safety of bicyclists and pedestrians, particularly on Concord Avenue.

(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.

The Project is consistent with the stated purposes of the recently adopted Alewife Overlay District – Quadrangle zoning, as articulated in CZO Section 20.1100.2.2.1, creating a new multifamily residential building to support the creation of a mixed use-environment (CZO Section 20.1100.2.2.1(a)); providing a range of pedestrian realm and bicycle infrastructure improvements and taking a progressive approach to parking and TDM (CZO Section 20.1100.2.2.1(b)); and adding significant new plantings and open space as well as meeting all requirements of the City's Resilient Cambridge Handbook (CZO Section 20.1100.2.2.1(d)).

(f) The new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30.

As set forth below, the Project is consistent with the Urban Design Objectives set forth in Section 19.30.

# V. Compliance with Project Review Special Permit Criteria

Section 19.25 of the CZO provides that in granting a Project Review Special Permit under Section 19.20, the Planning Board must make certain Traffic Impact and Urban Design Findings. These are each discussed below.

# Section 19.25.1 - Traffic Impact Findings

Per Section 19.25.1, where a Traffic Study is required as set forth in Section 19.24 (3), the Planning Board shall grant a special permit only if it finds that the project will have no substantial adverse impact on city traffic within the study area as analyzed in the Traffic Study. Substantial adverse impact on city traffic shall be measured by reference to the traffic impact indicators set forth in Section 19.25.11: (1) Project vehicle trip generation weekdays and weekends for a twenty-four hour period and A. M. and P.M. peak vehicle trips generated; (2) Change in level of service at identified signalized intersections; (3)

Increased volume of trips on residential streets; (4) Increase of length of vehicle queues at identified signalized intersections; and (5) Lack of sufficient pedestrian and bicycle facilities.

Section 10 of the Traffic Study (TIS), which has been certified by TP&T and is submitted herewith, provides a detailed analysis of the Project's impacts in reference to the specified indicators. See also Section III, above. Each criterion was analyzed in accordance with the Cambridge "Guidelines for Presenting Information to the Planning Board", approved on November 27, 2001, and revised in 2004, which establish 81 measurements in connection with the five indicators. As set forth in the TIS, of the 81 measurements, 8 Project measurements do not satisfy the City standards; however, these are not met under existing conditions without the Project. Overall, the Project is not expected to have a substantial adverse impact on city traffic. The TIS finds that the Project can be accommodated within the existing area infrastructure and on the roadway network with minimal effects.

# Section 6.31(a) - Off-street Parking

Pursuant to Section 6.31(a), projects subject to Article 19 (Project Review Special Permit) are required to provide a written report as part of the public record and permitting process detailing the number of proposed parking and loading spaces, and how that number was determined, including any surveys, parking demand studies or other research that was conducted. A parking analysis was conducted and is included in the TIS (Section 9), which has been certified by TP&T and is submitted herewith.

# Section 19.25.2 - Urban Design Findings

Section 19.30 of the CZO sets forth guidance on the City's policies with regard to the form and character desirable for new development. The Project responds to the Cambridge Urban Design Objectives as outlined below.

- A. New Projects should be responsive to the existing or anticipated pattern of development. (CZO 19.31) Indicators include:
  - (1) Heights and setbacks provide suitable transition to abutting or nearby residential zoning districts that are generally developed to low scale residential uses.

The immediate area surrounding the Site is developed for commercial and/or industrial uses, with the nearest residential uses located approximately 300 feet away. The Project fully complies with all height and setback requirements of the recently adopted Alewife Overlay – Quadrangle zoning.

(2) New buildings are designed and oriented on the lot so as to be consistent with the established streetscape on those streets on which the project lot abuts. Streetscape is meant to refer to the pattern of building setbacks and heights in relationship to public streets.

The existing context does not have an established streetscape. However, the Alewife District Plan establishes building setbacks and heights relative to streets to which the Project conforms. As required by CZO Section 21.1100.5.5.2.2, the building is set back twenty-five (25) feet from Concord Avenue to form a consistent street wall for future development. The building has been sited to conform to the Build to Zone setbacks for Spinelli Place and the future Eastern States Road.

The building is twelve (12) stories and approximately 144 feet tall. Relief to the façade is provided by a lower, 10-story, approximately 125-foot tall, projecting bay at the corner of Concord Avenue and Spinelli Place. Further relief includes balconies and zones in the façade of different materials matching this lower height.

(3) In mixed-use projects, uses are to be located carefully to respect the context, e.g., retail should front onto a street, new housing should relate to any adjacent existing residential use, etc.

The Project is not mixed-use, nor are there any adjacent residential uses. However, shared residential amenity spaces are located at grade to activate the Concord Avenue street frontage.

(4) Where relevant, historical context is respected, e.g., special consideration should be given to buildings on the site or neighboring buildings that are preferably preserved.

There are no known historic buildings or structures on the Site or adjacent to the Site.

- B. Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings. (CZO 19.32) Indicators include:
  - (1) Ground floors, particularly where they face public streets, public parks, and publicly accessible pathways, consist of spaces that are actively inhabited by people, such as retail stores, consumer service businesses, and restaurants where they are allowed, or general office, educational or residential uses and building lobbies. Windows and doors that typically serve such inhabited spaces are encouraged to be a prominent aspect of the relevant building facades. Where a mix of activities are accommodated in a building, the more active uses are encouraged facing public streets, parks, and pathways. In commercial districts, such active space consists of retail and consumer service stores and building lobbies that are oriented toward the street and encourage pedestrian activity on the sidewalk. However, in all cases such ground floor spaces should be

occupied by uses (a) permitted in the zoning district within which the building is located, (b) consistent with the general character of the environment within which the structure is located, and (c) compatible with the principal use for which the building is designed.

The Project's ground floor includes a lobby with full-height glazing that opens directly onto Concord Avenue. Additional amenity spaces wrap the ground-floor courtyard facing Concord Avenue, with active resident amenity uses both internal to the building and in the private courtyard. A shared residential workspace and lounge area will occupy the ground floor on the corner of Concord Avenue and Eastern States Road to encourage regular occupancy and activation.

(2) Covered parking on the lower floors of a building and on-grade open parking, particularly where located in front of a building, is discouraged where a building faces a public street or public park, and publicly accessible pathways.

The short-term parking and loading area is located at the rear of the building, away from the primary streets. The covered passageway from Concord Avenue to Spinelli Place will be designed as a shared pedestrian and vehicular zone for short-term parking, rideshare pickup/drop-off, and delivery only.

(3) Ground floors should be generally 25-50% transparent. The greatest amounts of glass would be expected for retail uses with lesser amounts for office, institutional or residential use.

Street-facing ground floor areas of the Project are at least 35% transparent.

(4) Entries to buildings are located so as to ensure safe pedestrian movement across streets, encourage walking as a preferred mode of travel within the city and to encourage the use of public transit for employment and other trips. Relating building entries as directly as possible to crosswalks and to pathways that lead to bus stops and transit stations is encouraged; siting buildings on a lot and developing site plans that reinforce expected pedestrian pathways over the lot and through the district is also encouraged.

The main building entrance is located as close to the Concord Avenue and Spinelli Place corner as possible to provide the most direct access to the crosswalk at this corner, which leads to the bus stop at the eastbound lane of Concord Avenue. An easily accessed secondary entrance at the Eastern States Road end of the building provides more direct access for pedestrians heading east along Concord Avenue.

(5) Pedestrians and bicyclists are able to access the site safely and conveniently; bicyclists should have secure weatherproof storage facilities conveniently located on-

site. If bicycle parking is provided in a garage, special attention must be paid to providing safe access to the facilities from the outside.

The primary bicycle storage room is on the ground floor and has direct access to the building lobby. The bike room has a dedicated entrance from the rear service court, allowing bicycles safe and direct access separate from pedestrians. The service court and bicycle room entrance will be well lit, including a lighted pathway to Eastern States Road, which immediately links to bicycle paths on Concord Avenue. Short-term visitor bicycle racks are located proximate to every building entrance to allow for safe and convenient access by Project visitors.

(6) Alternate means of serving policy objective 19.32 through special building design, siting, or site design can be anticipated where the building form or use is distinctive such as freestanding parking structures, large institutional buildings such as churches and auditoriums, freestanding service buildings, power plants, athletic facilities, manufacturing plants, etc.

This is not applicable to the Project.

- C. The Building and site design should mitigate adverse environmental impacts of a development upon its neighbors. (CZO 19.33) Indicators include:
  - (1) Mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors. Consideration is given to the size, complexity and appearance of the equipment, its proximity to residential areas, and its impact on the existing streetscape and skyline. The extent to which screening can bring order, lessen negative visual impacts, and enhance the overall appearance of the equipment should be taken into account. More specifically:
    - (a) Reasonable attempts have been made to avoid exposing rooftop mechanical equipment to public view from city streets. Among the techniques that might be considered are the inclusion of screens or a parapet around the roof of the building to shield low ducts and other equipment on the roof from view.
    - (b) Treatment of the mechanical equipment (including design and massing of screening devices as well as exposed mechanical elements) that relates well to the overall design, massing, scale and character of the building.
    - (c) Placement of mechanical equipment in enclosed locations within the building (if it does not violate the Flood Resilience Standards in Section 22.80), which reduces the bulk of elements located on the roof; however, at-grade locations external to the building should not be viewed as desirable alternatives and should be visually and acoustically screened with fencing and/or landscape features wherever they are necessary.

- (d) Tall elements, such as chimneys and air exhaust stacks, which are typically carried above screening devices for functioning reasons, are carefully designed as features of the building, thus creating interest on the skyline.
- (e) All aspects of the mechanical equipment have been designed with attention to their visual impact on adjacent areas, particularly with regard to residential neighborhoods and views and vistas.

On the roof above the 12<sup>th</sup> floor, mechanical equipment, including air handlers, heat exchanging condensers and a code required emergency generator, will be located so that the tallest elements are near the center of the roof to minimize visual impact. *Mechanical* condensers located in the rear yard of the building will be sited toward the center of the lot, away from streets, and screened by an 8-foot high enclosure, as recommended by Acentech, the Project's acoustical consultant. Electrical transformers will be located within an enclosed room in the building. All other pumps and equipment will be within the building. The Site is above the floodplain elevation for this neighborhood, making feasible these ground-level mechanical installations.

(2) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors, e.g., the use of trash compactors or containment of all trash storage and handling within a building is encouraged.

The building includes a trash chute leading to an enclosed, conditioned room on the ground floor that contains compactors and storage for multiple trash bins.

(3) Loading docks that are located and designed to minimize impacts (visual and operational) on neighbors.

The Project's service court is located at the side of the lot, off Eastern States Road, a private way owned by the Applicant. This is the most private corner of the Site, with the least impact on neighbors. The primary function of this area is short-term visitor parking and a staging area for the move-ins and move-outs of the building residents. Plantings and fencing will be utilized to provide visual buffering of this area from Eastern States Road and the abutting property to the side.

(4) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.

The Site is fully impervious in the existing condition, including buildings and asphalt-paved parking lots. Currently, all runoff flows directly into a separate storm sewer system adjacent to the Site. The Project's proposed stormwater management system has been designed to comply with the City of Cambridge and the MADEP Stormwater Management standards. The stormwater runoff from the Project will be collected in a combination of roof drains, area/landscape drains, and trench drains.

The stormwater collected will be treated, retained, and infiltrated utilizing subsurface stormwater systems, which retain a portion of the stormwater to reduce the peak rate of stormwater in the City's stormwater system. The proposed on-site stormwater management system is expected to improve water quality, reduce runoff volume, and control peak runoff rates compared to existing conditions.

(5) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of stormwater runoff compared to pre-development conditions.

Landscaped areas are designed to maximize pervious areas to the extent practicable. The planted landscape area on grade, combined with new pervious paving, will comprise approximately 25.5% of the Site. Allowing stormwater to infiltrate directly into the ground will significantly improve the existing, fully impervious Site.

(6) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that would have a significant impact on the use and enjoyment of adjacent open space and shadows that might impact the operation of a Registered Solar Energy System as defined in Section 22.80 of this Zoning Ordinance.

The Site and building are oriented east to west, meaning the narrower profile of the building will cast longer morning and evening shadows. With Spinelli Place to the west and Eastern States Road to the east, much of the building shadow will fall onto streets rather than onto neighboring lots. Please see Graphic Volume for shadow studies.

(7) Changes in grade across the lot are designed in ways that minimize the need for structural retaining walls close to property lines.

The Site is predominantly flat. No structural retaining walls are proposed near property lines.

(8) Building scale and wall treatment, including the provision of windows, are sensitive to existing residential uses on adjacent lots.

There are no existing residential uses on adjacent lots. The Project is voluntarily providing a 10-foot setback from the property line abutting 733 Concord Avenue (none is required by zoning) to accommodate any future redevelopment on that site.

(9) Outdoor lighting is designed to provide minimum lighting and necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.

The Project's outdoor lighting will provide sufficient illumination for safety, ensuring adequate visibility without causing unnecessary light pollution. This approach

prioritizes preserving night vision and creating a comfortable environment while minimizing the adverse effects of excessive artificial light on the surrounding area.

Building entrances will include downward facing and shielded lighting to provide safe travel from adjacent sidewalks. The vehicular passage near Spinelli Place will be lit for safety and designed to prevent light from spilling onto the adjacent City-owned parcel. The service court will include low-level shielded lighting for the safety of bicycle access and visitor parking; lights will not be mounted on the building and cast outward. Lighting in the at-grade courtyard will be located as low as possible to light paths and gathering spaces but not spill out to the public sidewalk and street. Lighting of the eleventh-floor roof deck will be located low, such that light sources will not be visible from public streets and sidewalks.

(10) The creation of a Tree Protection Plan that identifies important trees on the site, encourages their protection, or provides for adequate replacement of trees lost to development on the site.

The Site currently has no trees. The proposed Project includes a double row of street trees along Concord Avenue, street trees on Spinelli Place and Eastern States Road, and additional trees in the 25-foot setback zone on Concord Avenue.

- D. Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system. (CZO 19.34) Indicators include:
  - (1) The building and site design are designed to make use of water-conserving plumbing and minimize the amount of stormwater run-off through the use of best management practices for stormwater management.

Plumbing fixtures in the apartments will be "Water Sense" rated fixtures for low flow.

The proposed stormwater management system has been designed to comply with the City of Cambridge standards and the MADEP Stormwater Management Standards. The stormwater runoff from the Project will be collected by a combination of roof drains, area/landscape drains, and trench drains and then treated, retained, and infiltrated utilizing subsurface stormwater systems. The proposed on-site stormwater management system is expected to improve water quality, reduce runoff volume, and control peak runoff rates compared to existing conditions.

(2) The capacity and condition of drinking water and wastewater infrastructure systems are shown to be adequate, or the steps necessary to bring them up to an acceptable level are identified.

Based on discussions with the City of Cambridge Water Department, there are no expected water capacity issues near the Site. Before the final design and building permit filing, this will be confirmed by hydrant flow testing in coordination with the Water Department.

(3) Buildings are designed to use natural resources and energy resources efficiently in construction, maintenance, and long-term operation of the building, including supporting mechanical systems that reduce the need for mechanical equipment generally and its location on the roof of a building specifically. The buildings are sited on the lot to allow construction on adjacent lots to do the same. Exceeding the Green Building Requirements set forth in Section 22.20 of this Zoning Ordinance and other evolving environmentally sustainable standards is encouraged.

The Project is designed to be a high-performance building and is pursuing Passive House Certification. The buildings will use energy efficient, all-electric systems to eliminate the need for fossil fuels on site for regular building function. The mechanical systems will be smaller in size than in typical, non-high-performance buildings, resulting in a reduced need for mechanical equipment. The building materials will be selected for durability and will need to be replaced less frequently than in typical buildings. The Project has separately submitted a filing pursuant to Article 22 and incorporates by reference that submission.

- E. New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically. (CZO 19.35) Indicators include:
  - (1) New educational institutional construction that is focused within the existing campuses.

Not applicable.

(2) Where institutional construction occurs in commercial areas, retail, consumer service enterprises, and other uses that are accessible to the general public are provided at the ground (or lower) floors of buildings. Where such uses are not suitable for programmatic reasons, institutional uses that encourage active pedestrian traffic to and from the site.

Not applicable.

(3) In large, multiple-building non-institutional developments, a mix of uses, including publicly accessible retail activity, is provided where such uses are permitted and where the mix of uses extends the period of time the area remains active throughout the day.

Not applicable.

(4) Historic structures and environments are preserved.

Not applicable.

(5) Preservation or provision of facilities for start-up companies and appropriately scaled manufacturing activities that provide a wide diversity of employment paths for Cambridge residents as a component of the development; however, activities heavily dependent on trucking for supply and distribution are not encouraged.

Not applicable.

- F. Expansion of the inventory of housing in the city is encouraged. (CZO 19.36) Indicators include:
  - (1) Housing is a component of any large, multiple building commercial development. Where such development abuts residential zoning districts substantially developed to low-scale residential uses, placement of housing within the development such that it acts as a transition/buffer between uses within and without the development.

Not applicable.

(2) Where housing is constructed, providing affordable units exceeding that mandated by the Ordinance. Targeting larger family-sized middle-income units is encouraged.

The Project provides 48 affordable units, including seven 3-bedroom units, in accordance with the requirements of Section 11.203 of the CZO.

- G. Enhancement and expansion of open space amenities in the city should be incorporated into the new development in the city. (CZO 19.37) Indicators include:
  - (1) On large-parcel commercial developments, publicly beneficial open space is provided.

Not applicable.

(2) Open space facilities are designed to enhance or expand existing facilities or to expand networks of pedestrian and bicycle movement within the vicinity of the development.

The Project will improve the westbound bicycle lane on Concord Avenue by reconstructing it in a raised condition along the Project frontage, providing a planted buffer at the street curb as well as a newly planted treeway separating it from the new

pedestrian sidewalk. A new raised bike lane will be installed along the Spinelli Place frontage and include a newly planted treeway buffer and sidewalk. A new concrete sidewalk is being implemented along Eastern States Road where none existing previously. There will be a continuous planted tree zone between the sidewalk and back of the roadway curb and a generous planting buffer along the face of the building. Short term bicycle parking will be provided near entrances.

(3) A wider range of open space activities than presently found in the abutting area is provided.

Under existing conditions, there is no useable open space on the Site and, other than the underutilized City-owned parcel at the corner of Spinelli Place and Concord Avenue, there is no open space in the immediately abutting area. The area defined by the new 25' building setback area along Concord Avenue is primarily dedicated to publicly accessible open space. Permeable pavement expands off the sidewalk and winds between curvilinear planter walls with integral bench seating to create an alternate path of travel and areas to gather with various seating opportunities surrounded by lush planting. A second row of canopy trees staggered from the streetscape creates shade and a smaller sense of scale against the building. Various ornamental trees, shrubs and grasses provide seasonal interest and support to native pollinator species. Also included in this setback zone, the building's entry plaza includes seating areas caved out of curbed planting pockets, and short-term bike parking. Paving patterns will be continuous across the plaza and drop-off areas to reinforce a pedestrian first design while integrating the vehicular right of way to Spinelli Place. Bollards will define traffic movement and protect pedestrians while maintaining a continuous open aesthetic.

- H. Development should be resilient to the effects of climate change as anticipated in the Resilient Cambridge plan published by the City. (CZO 19.38) Indicators include:
  - (1) The design has incorporated the most up-to-date projections of climate change impacts over the project's anticipated lifespan, including increases in temperature and precipitation and risk of future flooding.

The Project has incorporated the most up-to-date projections of climate change impacts over its anticipated lifespan. The Site has been evaluated using the latest City of Cambridge "FloodViewer," which indicates that it is not located within an area subject to 2070 1% Precipitation Flooding or within an area subject to 2070 1% Sea Level Rise/Storm Surge Flooding.

The Project will replace a fully impervious site with a high-performance building and significant landscaped area, including more than 40 new trees and numerous other plantings, which will minimize the impact of rising temperatures.

(2) The project is designed to meet or exceed the Flood Resilience Standard in Section 22.80 of this Zoning Ordinance and the Green Factor Standard in Section 22.90 of this Zoning Ordinance. Design strategies may be supplemented by mitigation strategies to manage the effects of flooding and heat where appropriate.

Based on the publicly available Climate Change Vulnerability Assessment (CCVA) and the Cambridge "FloodViewer" 2022, the Project is not within an area that has defined flood elevations during the 10-year and 100-year precipitation events in 2030 and 2070. The Project has been designed so that the building will be above the 2070 10-year and 100-year flood elevation.

As set forth in more detail in the Applicant's submissions pursuant to Article 22 of the CZO, the Project will comply with the Green Factor Standard.

To manage urban heat island effect, the Project will plant over 40 new trees and numerous additional plantings. The landscape design also incorporates high-SRI paving and shaded areas. The building roof will include green roof elements on approximately 80% of the available roof area for such structures. These measures contribute to the overall Project Cool Factor Score and mitigate urban heating. The Project Cool Factor Score is anticipated to exceed 2.75, significantly above the minimum required target of 1.0.

(3) The design uses resilience strategies that have environmental co-benefits. An example is passive building envelope design, which promotes occupant comfort during extreme heat and resilience from power outages due to storms while also reducing energy use and greenhouse gas emissions. Another example is intensive vegetation at grade and on roofs, which provides cooling benefits while improving stormwater management.

The building will be built to Passive House standards and seek Passive House Certification (via PHIUS). Its passive building envelope design will provide resilience from power outages and comfort for building occupants during extreme heat. This design standard will also reduce energy use and greenhouse gas emissions. The Project will significantly increase the amount of vegetation on site, providing cooling and mitigating stormwater impacts.

The building roofs, where not occupied or planted, will be highly reflective to minimize heat island impacts. The upper building roof is significantly covered by mechanical equipment due to the systems being all electric. Additional roof area is unavailable due to clearances for façade maintenance access. The small area remaining for green roofs are impractical due to lack of public access or visibility and difficulty of maintenance/irrigation. It is the judgment of the development and design team that a

high albedo roof achieves an identical outcome. As noted above, pursuant to Section 22.35.3 of the Ordinance, the applicant is requesting that the Planning Board reduce the required amount of green roof area on the Project and proposes to make a unit price contribution to the Cambridge Affordable Housing Trust.

(4) The design takes an integrative approach to climate change resilience that accounts for the existing context and promotes the other design objectives of the area and the City.

The Project is designed for Passive House Certification, which makes the building not only highly efficient and all-electric, but also resilient to temperature fluctuations related to climate change. The Project seeks to reduce reliance on personal automobiles by providing no long-term vehicle parking for residents and a large, easily accessible bicycle storage room on the ground floor of the building.

The landscape design increases site permeability from zero to 25.5% and incorporates trees wherever feasible to help regulate ambient temperature and absorb stormwater. The building will have a cool roof and include rooftop plantings where practicable to help regulate ambient temperatures.

# VI. Summary of Community Engagement

The Applicant has undertaken a number of early community engagement activities in accordance with the CDD Guidelines.

- On August 20, 2024, the Project team participated in a remote meeting with several Cambridge Highlands neighbors. A presentation was shared and participants asked several questions and provided comments regarding the proposal, including site circulation, landscape design, rooftop mechanicals, availability and capacity of public transit to serve the Project and anticipated use of the Fresh Pond Reservation by future residents of the Project and their pets. Neighborhood participants also asked about the programming of the City-owned parcel abutting Concord Avenue and Spinelli Place.
- On September 10, 2024, the Project team hosted an open house at the Site.
  Notice of this meeting was shared with CDD and elected officials, mailed to all
  abutters, and distributed by email through representatives of the Cambridge
  Highlands Neighborhood Association and A Better Cambridge. Approximately six
  neighbors stopped by the open house to view presentation boards describing the
  Project, including proposed massing, design and renderings, and to discuss the

proposal with members of the Project team. In particular, attendees were interested in the landscape design and bicycle accommodations.

- On September 11, 2024, the Project team hosted a virtual community meeting. As with the in-person meeting, notice was shared with CDD and elected officials, mailed to all abutters, and distributed by email through representatives of the Cambridge Highlands Neighborhood Association and A Better Cambridge. Approximately 15 members of the public joined the meeting, at which a presentation was reviewed. The presentation included an initial site analysis, a summary of existing conditions and site context (including photographs), and images showing the proposed massing, site plan, building design, landscape design and renderings. Participants had questions regarding unit mix, shadow impacts, building height, parking, landscaping, noise impacts, resident amenities, traffic, public transit, and construction period impacts. Following the meeting, the Project team shared the presentation with a representative of the Highlands neighborhood and the Project's landscape architect had a follow-up meeting with one neighbor who had a particular interest in the proposed landscape design.
- The Project team has also met with several City councilors to discuss the proposal and with representatives of the Fayerweather School, the owner of West Cambridge Science Park, and Mount Auburn Hospital, which occupies the adjacent property at 725 Concord Avenue.

#### VII. Sewer Service Infrastructure Narrative

See Appendix.

#### VIII. Water Service Infrastructure Narrative

See Appendix.

## IX. Noise Mitigation Narrative

The applicant retained Acentech to prepare a preliminary exterior noise assessment for the Project based on current plans and specifications for mechanical equipment. The assessment concluded that all of the proposed rooftop mechanical equipment will comply with the City of Cambridge noise control ordinance. Based on recommendations from Acentech, an enclosure and muffler for the proposed rooftop emergency generator will be provided to ensure a maximum total noise level of 87 dBA at the standard reference distance of 23 feet. In addition, per Acentech's recommendations, to comply with the commercial zone noise limit of 65 dBA, Project ground-mounted mechanical

equipment will be enclosed by 8-foot fencing; additional perimeter fencing at the Site's rear property line will also be provided.