



# MIT VOLPE REDEVELOPMENT PLAN

## Special Permit Volume 1

Planning Board Number - PB368

February 3, 2021

**Submitted to:**  
City of Cambridge

**Submitted by:**  
Massachusetts Institute of Technology (MIT)





**MITIMCo**  
Owner/ Project Proponent

**Redgate**  
Project Management

**Elkus Manfredi Architects**  
Master-Planning Architect

**Reed Hilderbrand**  
Landscape Architect

**Goulston & Storrs  
Galluccio & Watson**  
Legal

**Graffito SP**  
Retail and Placemaking

**VHB**  
Transportation Engineering

**VHB**  
Civil Engineering

**Atelier Ten**  
Sustainability Consultant

**Buro Happold**  
M/E/P Engineering

**McPhail Associates**  
Geo-Technical/ Geo-Environmental

**Theater Consultants Collaborative  
Webb Management**  
Entertainment Consultant

**RWDI Consulting Engineers**  
Wind Consultant

**VHB**  
Surveyor

**Jensen Hughes**  
Code Consultant

**Acentech**  
Acoustical Engineering

**John Moriarty & Associates**  
PreConstruction Services

**Solomon McCown & Cence**  
Communications

# Table of Contents

## Volume 1: Narrative

### Section 1. Submission Materials ..... 7

A. Application .....	10
B. Dimensional Form .....	12
C. Ownership Certificate .....	14
D. Fee Schedule .....	15
E. Certifications of Receipt of Plans .....	16
F. Legal Descriptions .....	22

### Section 2. Project Description ..... 25

A. Introduction .....	26
B. Existing Conditions and Site Context .....	28
C. Status of Government Use .....	30
D. Statement of Development Concept/ Project Overview .....	30
a. MIT Values	
b. Community Engagement	
c. Project Proposal	
E. Public Benefits and Project Commitments .....	39
F. Development Schedule and Phasing .....	41
G. Future Ownership and Designations .....	42

### Section 3. Consistency with Specific Special Permit Zoning Criteria ..... 55

A. Compliance with General Special Permit Criteria (Article 10.43) .....	56
B. Consistency with General Special Permit Criteria (Article 12.000 Planned Unit Development) .....	59
C. Compliance with Zoning (Article 13.90 Planned Unit Development 7 District) .....	61
D. Compliance with Project Review Special Permit Criteria (Article 19) .....	78

### Section 4. Consistency with Planning Documents ..... 91

1. K2C2 Study (2013) .....	92
2. Volpe Working Group (2017) .....	102
3. Volpe Site Design Guidelines (2017) .....	111

**Volume 2:  
Development Plan**

**Section 1: PUD-7 Requirements**

- A. Site Organization and Development Plan
- B. Site Massing Plan
- C. Parking and Loading Plan
- D. Connectivity Plan
- E. Open Space Plan
- F. Ground Floor Activation Plan
- G. Housing Plan
- H. Phasing Plan
- I. Sustainability Plan
- J. Transportation Plan
- K. Environmental Comfort Plan
- L. Architectural Character Plan

**Section 2: Article 19 Requirements**

- M. Tree Mitigation Plan (Section 19.24.3)
- N. Urban Design Objectives  
(Section 19.24.4)
- O. Infrastructure Plan and Narrative  
(Section 19.24.5 and 19.24.6)
- P. Noise Mitigation (Section 19.24.7)

**Volume 3:  
Appendices**

- A. Planning Board Criteria for TIS
- B. Pedestrian Wind Study
- C. 2070 Flood Elevations
- D. Green Building Report
- E. Preliminary Acoustical Study
- F. Retail Report
- G. Tree Study

**Volume 4:  
Appendices**

- H. Transportation Impact Study

# List of Figures

## Volume 1: Narrative

### Section 2. Project Description

Figure A9: Use Distribution by Building Site . . . . .	33
Figure 1: Locus . . . . .	44
Figure 2: Historical Image of Site . . . . .	45
Figure 3: Third Street Park . . . . .	46
Figure 4: Sixth Street Park . . . . .	47
Figure 5: Community Center . . . . .	48
Figure 6: Broad Canal Way . . . . .	49
Figure 7: Entertainment Venue . . . . .	50
Figure 8: Fifth Street . . . . .	51
Figure 9: Potter Street . . . . .	52
Figure 10: Broadway . . . . .	53
Figure 11: Binney Street . . . . .	54





MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
INVESTMENT MANAGEMENT COMPANY  
One Broadway, 9<sup>th</sup> Floor, Suite 200  
Cambridge, MA 02142  
P: 617-253-4000  
F: 617-258-6676  
www.mitimco.org

February 3, 2020

**VIA HAND DELIVERY**

City of Cambridge  
Office of the Planning Board  
City Hall Annex  
344 Broadway  
Cambridge, Massachusetts 02139

RE: Volpe Exchange Parcel – 55 Broadway – Special Permit Submission

Ladies and Gentlemen:

The Massachusetts Institute of Technology (MIT) is pleased to submit to the Planning Board for review and consideration the enclosed special permit application (with related materials) for the Volpe Exchange Parcel. MIT is seeking approval of a ***PUD-7 Special Permit*** and an ***Article 19 Project Review Special Permit*** for the overall redevelopment of the Volpe Exchange Parcel at 55 Broadway through a single, comprehensive application. We look forward to bringing new life and vitality to the Volpe Exchange Parcel and reintegrating the Volpe site with the Cambridge community in the years to come.



As you are aware, this special permit application follows many years of hard work and collaboration by MIT, the City and the Cambridge community. In addition, it builds on the rezoning for the Volpe Exchange Parcel that was approved in 2017.

The special permit application that is enclosed spans four volumes. The first volume contains the required special permit submission materials, a detailed project description and a thorough explanation of how the project complies with the specific special permit zoning criteria and relevant planning documents. The second volume addresses how the project complies with the PUD-7 requirements as well as additional Article 19 requirements. The third volume includes technical appendices (except the TIS), and the fourth volume includes the Certified Traffic Impact Study (TIS).

Drafts of the special permit submission materials have been reviewed by the Community Development Department, and certain technical reports have been reviewed by the relevant City departments. In an effort to submit a complete and informative set of materials, MIT has also met with neighborhood groups prior to this submission.



MIT appreciates the time and consideration that the Planning Board, the Community Development Department, the City and the Cambridge community have given to this important project to date, and MIT looks forward to more engaging discussions concerning the project in the months ahead.

Thank you.

Sincerely,

MASSACHUSETTS INSTITUTE OF TECHNOLOGY



Seth D. Alexander  
Authorized Signatory,  
President, MIT Investment Management Company

Enclosures



**Intentionally Blank Page**

# 1B. Dimensional Form

DIMENSIONAL FORM				
Project Address:			Application Date:	
	Existing	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)				
Lot Width (ft)				
Total Gross Floor Area (sq ft)				
Residential Base				
Non-Residential Base				
Inclusionary Housing Bonus				
Total Floor Area Ratio				
Residential Base				
Non-Residential Base				
Inclusionary Housing Bonus				
Total Dwelling Units				
Base Units	<i>Please see the project specific Dimensional Form attached behind.</i>			
Inclusionary Bonus Units				
Base Lot Area / Unit (sq ft)				
Total Lot Area / Unit (sq ft)				
Building Height(s) (ft)				
Front Yard Setback (ft)				
Side Yard Setback (ft)				
Side Yard Setback (ft)				
Rear Yard Setback (ft)				
Open Space (% of Lot Area)				
Private Open Space				
Permeable Open Space				
Other Open Space (Specify)				
Off-Street Parking Spaces				
Long-Term Bicycle Parking				
Short-Term Bicycle Parking				
Loading Bays				
<i>Use space below and/or attached pages for additional notes:</i>				
CITY OF CAMBRIDGE, MA • PLANNING BOARD • SPECIAL PERMIT APPLICATION				

	Existing	Max. Allowed	Required	Proposed
<b>Development Parcel (1)</b>				
Lot Area (sf)	455,750	n/a	25,000	455,750
Lot Area (acres)	10.46	n/a	0.57	10.46
Lot Width	n/a	n/a	n/a	n/a
<b>Gross Floor Area (2)</b>				
Government Use (3)	375,000	n/a	n/a	0
Commercial (Lab/Office)(Max) (4)	0	1,589,587	n/a	1,589,587
Innovation Lab/Office (Min) (5)	0	n/a	83,663	83,663
Residential (Min) (6)	0	n/a	1,128,000	1,128,000
Retail/Active Use (7)	0	n/a	Note (7)	18,750
<b>Total GFA</b>	<b>375,000</b>			<b>2,820,000</b>
<b>Exempt Uses</b>				
Retail/Active Use (7)	0	n/a	Note (4)	81,250
Innovation Lab/Office (5)	0	83,663	0	83,663
Community Space (8)	0	n/a	n/a	20,000
<b>Total Exempt Uses</b>	<b>0</b>			<b>184,913</b>
Dwelling Units (approximately)	0	n/a	n/a	1,400
Front Yard Setback	n/a	n/a	0	n/a
Side Yard Setback	n/a	n/a	0	n/a
Rear Yard Setback	n/a	n/a	0	n/a
Open Space, Publicly Beneficial (9), (10)	n/a	n/a	115,406 sf/25%	156,944 sf/34%
Open Space, Permanently Guaranteed (11)	n/a	n/a	87,120 sf	87,120
Vehicular Parking Spaces (12), (13)	570		n/a	1,876
<b>Bicycle Parking</b>				
Long-Term Spaces	n/a	n/a	1,862	1,862
Short-Term Spaces	n/a	n/a	302	302
Loading Bays (14)	n/a	n/a	NOTE (14)	NOTE (14)

(1) Development Parcel does not include 5,890 sf "CRA Parcel" or 1,618 sf "GSA Triangle Parcel" shown on Figure A1: Survey one or both of which may be added in the future.

(2) GFA and long-term bicycle parking spaces differ from the TIS program to the extent that the Hotel GFA has been converted to Residential GFA.

(3) Government uses will be relocated to the Government Owned Lot, located in PUD-7, but not part of the Project Development Parcel.

(4) Includes all Office and Laboratory uses listed in Section 4.34 of the Cambridge Zoning Ordinance ("CZO").

(5) Includes the Innovation Space required per Section 13.96.3 of the CZO, and subject to the GFA exemptions set forth therein.

(6) Includes all uses listed in Section 4.31(g) (Multifamily Dwelling) of the CZO; presently, MIT does not currently plan to include any hotel use [Section 4.31(i)(2)] within the Project, but may add limited hotel use by minor amendment to the development, subject to complying with the requirements of Section 13.93.1(c)(2).

(7) Includes all uses listed in Section 4.35 of the CZO, other than subsection(j); includes exemption and will meet frontage requirement specified in Section 13.96.1(b) (1) of the CZO.

(8) Includes freestanding Community Space meeting the requirements of Section 13.96.5 and is exempt in accordance with Section 13.94(b) of the CZO.

(9) Required Publicly Beneficial Open Space of 115,406 sf reflects the requirement of Section 13.94(a) of the CZO that 25% of the land area of the PUD-7 District, less the Government Owned Parcel, shall be Public Open Space or Publicly Beneficial Open Space. The 156,944 sf is 34.44% of the Development Parcel and 34.00% of the entire PUD-7 land area, less the Government Owned Parcel.

(10) Approximately 1,608 sf of additional Publicly Beneficial Open Space may be located on a the GSA Triangle Parcel (See Note 1, above)

(11) Of the approximately 87,120 sf of Permanently Guaranteed Open Space, approximately 9,968 sf (or 11.44%) is located within the footprint of the Community Space.

(12) Includes both off-street (below grade garage) and on-street parking on new private streets.

(13) Existing parking, related to the Government Use, is reduced from 570 spaces to 318 spaces and has been relocated to Federal Parcel in PUD-7.

(14) Loading bays will be as provided in the forthcoming Design Review submissions per the provisions of Section 13.95.8.

# 1C. Ownership Certificate

## OWNERSHIP CERTIFICATE

Project Address: TBD

Application Date: TBD

This form is to be completed by the property owner, signed, and submitted with the Special Permit Application:

I hereby authorize the following Applicant: Massachusetts Institute of Technology

at the following address: c/o MITMCo, One Broadway, Suite 9-200, Cambridge, MA 02140

to apply for a special permit for: the redevelopment of the Volpe Exchange Parcel

on premises located at: TBD


for which the record title stands in the name of: United States of America

whose address is: 10 Causeway Street, Boston, MA 02030

by a deed duly recorded in the:

Registry of Deeds of County: Middlesex Book: 11152 Page: 461

OR Registry District of the Land Court,  
Certificate No.: \_\_\_\_\_ Book: \_\_\_\_\_ Page: \_\_\_\_\_

  
Signature of Land Owner (If authorized Trustee, Officer or Agent, so identify)

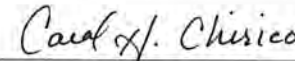
To be completed by Notary Public:

Commonwealth of Massachusetts, County of Suffolk

The above named John Kelly personally appeared before me,

on the month, day and year October 29, 2020 and made oath that the above statement is true.

Notary: Carol H. Chirico



My Commission expires: 11-2-2023



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

# 1D. Fee Schedule

## FEE SCHEDULE

---

**Project Address:** Volpe Exchange Parcel - 55 Broadway    **Application Date:**

---

The Applicant must provide the full fee (by check or money order) with the Special Permit Application. Depending on the nature of the proposed project and the types of Special Permit being sought, the required fee is the larger of the following amounts:

- If the proposed project includes the creation of new or substantially rehabilitated floor area, or a change of use subject to Section 19.20, the fee is ten cents (\$0.10) per square foot of total proposed Gross Floor Area.
- If a Flood Plain Special Permit is being sought as part of the Application, the fee is one thousand dollars (\$1,000.00), unless the amount determined above is greater.
- In any case, the minimum fee is one hundred fifty dollars (\$150.00).

### Fee Calculation

---

New or Substantially Rehabilitated Gross Floor Area (SF):	3,004,913	× \$0.10 =	\$300,491.30
Flood Plain Special Permit	Enter \$1,000.00 if applicable: \$0		
Other Special Permit	Enter \$150.00 if no other fee is applicable: \$150.00		
<b>TOTAL SPECIAL PERMIT FEE</b>	<b>Enter Larger of the Above Amounts: \$300,641.30</b>		

## **1E. Certifications of Receipt of Plans**

Attached are completed Certifications of Receipt of Plans from the City of Cambridge Arborist, the City of Cambridge Traffic, Parking and Transportation Department, the City of Cambridge LEED Specialist and the City of Cambridge Water Department. As is their practice, the City of Cambridge Department of Public Works will submit their Certification of Receipt of Plans following submission of this Application.



## Certifications of Receipt of Plans from the City of Cambridge Arborist

---

**From:** Putnam, Andrew <[aputnam@cambridgema.gov](mailto:aputnam@cambridgema.gov)>

**Sent:** Friday, December 18, 2020 6:03 PM

**To:** Paden, Liza <[lpaden@cambridgema.gov](mailto:lpaden@cambridgema.gov)>

**Cc:** Gary Hilderbrand <[gary@reedhilderbrand.com](mailto:gary@reedhilderbrand.com)>; Joe James <[james@reedhilderbrand.com](mailto:james@reedhilderbrand.com)>; Lavery, Benjamin <[blavery@mitimco.mit.edu](mailto:blavery@mitimco.mit.edu)>; Lefcourt, David <[dlefcourt@cambridgema.gov](mailto:dlefcourt@cambridgema.gov)>; Watkins, Kathy <[kwatkins@cambridgema.gov](mailto:kwatkins@cambridgema.gov)>

**Subject:** Certification of Tree Study for Volpe Site

Hi Liza,

I have reviewed the Tree Study for the project at The Volpe Site and it is complete and meets all the requirements needed for certification by the City Arborist as defined in 8.66.030. The final locations and quantity of Replacement Trees may be adjusted based on recommendations from the Special Permit Process. Any proposed changes to Replacement Trees or the Mitigation amount will be reviewed and approved by Public Works through each subsequent parcel design.

Please let me know if you have any questions.

Thank you,

Andrew Putnam

Superintendent of Urban Forestry & Landscapes  
(617)-349-4888

# Certifications of Receipt of Plans from the City of Cambridge Traffic, Parking and Transportation Department



## CITY OF CAMBRIDGE TRAFFIC, PARKING, + TRANSPORTATION

Joseph E. Barr, Director  
344 Broadway, Suite 202  
Cambridge, MA 02139

November 4, 2020

Selma Mandzo  
VHB Inc.  
99 High Street, 10<sup>th</sup> Floor  
Boston, MA 02110

Michael Owu  
MITIMCo  
238 Main Street, Suite 200  
Cambridge, MA 02142-1012  
Suite 101  
Cambridge, MA 02139

RE: MIT Volpe Exchange Parcel, Transportation Impact Study (TIS)

Dear Selma and Michael:

The Cambridge Traffic, Parking, and Transportation Department (TP+T) received the Transportation Impact Study (TIS) on August 13, 2020 for the approximately 3 million square foot MIT Volpe Exchange Parcel Project. Based on staff review, some corrections were needed, and we sent you a non-certification memo dated September 3, 2020. We received your updated TIS on October 22, 2020, and based on staff review, the TIS is certified as accurate and complete.

We look forward to continuing to work with you on this exciting project. Going forward, key items that will need further work include the final number of automobile parking spaces and parking management, final site plans for the internal roadways and sidewalks layout designs, including future ownership or public easements, bicycle facility designs, and transportation mitigation, including timelines for mitigation.

Thank you for working with us on the TIS and please contact Adam Shulman of my staff at 617-349-4745 if you have any questions or to set up a follow-up meeting.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Barr", written over a horizontal line.

Joseph E. Barr  
Director

Page 1 of 1

TRAFFIC, PARKING, + TRANSPORTATION | JOSEPH E. BARR, DIRECTOR  
344 Broadway, Suite 102, Cambridge, MA 02139  
617-349-4700 | cambridgema.gov/traffic

# Certifications of Receipt of Plans from the City of Cambridge LEED Specialist

## Green Building Requirements

### Volpe Redevelopment Green Building Report-Comments on Special Permit Stage

**Status:** The Community Development Department (CDD) received the final update of the Green Building Report (GBR) for the Special Permit stage of Volpe Planned Urban Development project pursuant to Section 22.25.1 of the Zoning Ordinance on 12/2/2020. The Volpe project, a mixed-use district, would consist of the following (approximately): 1,756,000 sf office/lab; 1,128,000 sf of residential (roughly 1,400 units); 75,000 sf of ground retail; 25,000 sf of entertainment and 20,000 sf Community Center space. The overall master plan would consist of a total gross floor area (GFA) of approximately 2,850,000 square feet on a 10-acre site which also includes a 2.5-acre open space.

CDD staff have reviewed the GBR of the development plan and offer the following Determination, Summary of Compliance and Advisory Comments on the project's sustainability.

**CDD Determination: The documentation provided by the Applicant sufficiently demonstrates compliance with the Green Building Requirements of Section 22.24 at the special permit stage of review. Sustainability Plan for the project will be reviewed and approved in the Final Development Proposal. Separate Green Building Reports for each building will be required during design review of individual buildings.**

**LEED Rating System:** LEED v4 BD+C: Core and Shell for commercial buildings; LEED v4 BD+C: New Construction for residential buildings.

**LEED Project Summary:** This project is subject to the City's Green Building Requirements (Section 22.20, Zoning Ordinance). The Project is currently meeting the minimum requirement by targeting LEED Gold under LEED v4 BD+C: New Construction with 67 projected points for the residential building, and also meeting the minimum requirement by targeting LEED v4 BD+C: Core and Shell Development with 73 projected points for the commercial buildings.

### Summary of Compliance and Comments

#### Green Building Professional Affidavit Certification

- David Manfredi of Elkus Manfredi Architects Ltd. has been identified as the Green Building Professional for the project. The affidavit states that this professional has reviewed all relevant documents for this project and confirm to the best of his/her knowledge that those documents indicate that the project is being designed to achieve the requirements of Section 22.24 under Article 22.20 of the Cambridge Zoning Ordinance.
- A copy of the professional's credential from Green Building Rating Program has been provided.

#### Rating System Checklist and Narrative

- The project is pursuing Integrative Process credit.
- The project is pursuing Enhanced Commissioning credit that includes commissioning process for various building systems and assemblies for residential buildings.
- The project is pursuing Enhanced Commissioning credit that includes monitoring- based commissioning process for various building systems and assemblies as well as commissioning for the building's thermal envelope for commercial buildings.

# Certifications of Receipt of Plans from the City of Cambridge Water Department



CITY OF CAMBRIDGE, MASSACHUSETTS

## PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

### CERTIFICATION OF RECEIPT OF PLANS BY CITY OF CAMBRIDGE WATER DEPARTMENT

City Department/Office: Cambridge Water Department

Project Address: MIT Volpe Exchange Parcel - 55 Broadway (PB368)

Applicant Name: Massachusetts Institute of Technology

For the purpose of fulfilling the requirements of Section 19.20 of the Cambridge Zoning Ordinance, this is to certify that this Department is in receipt of the application documents submitted to the Planning Board for approval of a Project Review Special Permit for the above referenced development project: (a) an application narrative and (b) small format application plans at 11" x 17" or the equivalent. The Department understands that the receipt of these documents does not obligate it to take any action related thereto.

  
Signature of City Department/Office Representative

12/11/20  
Date

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

**Intentionally Blank Page**

# 1F. Legal Descriptions

The Development Parcel for which the requested special permits are being sought is comprised of the following two parcels of land:

## Legal Description – Development Parcel 1A

A certain parcel of land situated northerly of Broadway and westerly of Third Street in the City of Cambridge, in the County of Middlesex and the Commonwealth of Massachusetts bounded and described as follows:

Beginning at a point on the southeasterly corner of the herein described parcel, being monumented by a stone bound; thence

N 60°32'45" W a distance of three hundred seventy four and ninety three hundredths feet (374.93') to a point; thence

S 29°27'14" W a distance of twelve and no hundredths feet (12.00') to a point; thence

N 60°32'45" W a distance of four hundred seventy one and ten hundredths feet (471.10') to a point, the last three (3) courses by Broadway; thence

N 29°28'47" E a distance of four hundred sixty six and three hundredths feet (466.03) by a pedestrian way (Former Sixth Street) to a point; thence

S 60°34'24" E a distance of four hundred forty nine and sixty six hundredths feet (449.66') by that certain parcel of land now or formerly owned by The United States of America (the "Federal Parcel") (former northerly sideline of Potter Street) to a point; thence

N 09°29'35" E a distance of two hundred eighty and thirteen hundredths feet (280.13') by the westerly sideline of Fifth Street to a point; thence

S 80°30'09" E a distance of twenty five and no hundredths feet (25.00') through Fifth Street to a point; thence

S 09°29'35" W a distance of three hundred forty two and thirty nine hundredths feet (342.39') by the centerline of Fifth Street to a point; thence

S 60°33'41" E a distance of three hundred fifty five and sixty five hundredths feet (355.65') by the southerly sideline of Potter Street to a point; thence

S 27°06'16" W a distance of three hundred eighty three and seventy seven hundredths feet (383.77') to a point; thence

Westerly and curving to the right along the arc of a curve having a radius of twenty and no hundredths feet (20.00'), a length of thirty two and twenty four hundredths feet (32.24') to the point of beginning, the last two (2) courses by Third Avenue.

Said parcel contains 383,894 square feet or 8.813 acres more or less.

### Legal Description – Development Parcel 1B

A certain parcel of land situated southerly of Binney Street and westerly of Third Street in the City of Cambridge, in the County of Middlesex and the Commonwealth of Massachusetts bounded and described as follows:

Beginning at a point on the southeasterly corner of the herein described parcel, being monumented by a drill hole; thence

N 80°30'09" W	a distance of four hundred sixty and sixty eight hundredths feet (460.68') by the northerly sideline of Munroe Street to a point; thence
N 09°29'35" E	a distance of one hundred fifty and forty nine hundredths feet (150.49') to a point, the last two (2) courses by the westerly sideline of former Fifth Street; thence
S 80°31'02" E	a distance of four hundred seventy and fifty eight hundredths feet (470.58') by the southerly sideline of Binney Street to a point; thence
Southeasterly	and curving to the right along the arc of a curve having a radius of twenty and no hundredths feet (20.00'), a length of thirty six and no hundredths feet (36.00') to a point; thence
S 22°36'34" W	a distance of one hundred twenty nine and forty five hundredths feet (129.45') to a the point of beginning, last two (2) courses by land now or formerly owned by the Cambridge Redevelopment Authority.

Said parcel contains 71,856 square feet or 1.650 acres more or less.

The Development Parcel described above is comprised of portions of land located at 55 Broadway (33 Broadway, Tax ID 44-71; 2 Potter Street, Tax ID 29-39; 20 Potter Street, Tax ID 29-49; 156 Linsky Way, Tax ID 29-48; Sixth Street (unnumbered), Tax ID 29-45; 220 Binney Street, Tax ID 28-44; 160 Sixth Street, Tax ID 28-26; and 182 Binney Street, Tax ID 28-39) in Cambridge, Middlesex County, Commonwealth of Massachusetts, in which fee simple title thereto is vested in The United States of America by virtue of the following:

- Deed dated June 13, 1966, and filed with the Middlesex South District of Land Court as Document No. 433534 on Certificate of Title No. 121141;
- Deed dated July 29, 1966, recorded with the Middlesex South District Registry of Deeds in Book 11177, Page 165 and filed as Document No. 435270 on Certificate of Title No. 121644;
- Deed dated June 29, 1966, recorded with the Middlesex South District Registry of Deeds in Book 11152, Page 461 and filed as Document No. 434243 on Certificate of Title No. 121352;
- Deed dated February 21, 1968, recorded with the Middlesex South District Registry of Deeds in Book 11485, Page 330;
- Deed dated June 27, 1968, recorded with the Middlesex South District Registry of Deeds in Book 11536, Page 430;
- Deed dated January 31, 1969, recorded with the Middlesex South District Registry of Deeds in Book 11663, Page 300;
- Deed dated February 13, 1969, recorded with the Middlesex South District Registry of Deeds in Book 11672, Page 624;
- Deed dated September 23, 1969, recorded with the Middlesex South District Registry of Deeds in Book 11743, Page 100;
- Deed dated July 7, 1976, recorded with the Middlesex South District Registry of Deeds in Book 13011, Page 258; and
- Deed dated September 30, 1980, recorded with the Middlesex South District Registry of Deeds in Book 17656, Page 8.

**Intentionally Blank Page**





## 2. Project Description

### A. Introduction

Kendall Square is the global gold standard innovation district, a community where ideas and inventions are shared and tested. As a hub of learning and developing science and technology, the opportunity for creative cross-disciplinary work is amplified. However, the innovation that defines this area has historically occurred in government offices, private labs and academic classrooms with little visibility and access to the general public.

Due to its location, the proposed redevelopment of the majority of the current site of the Volpe National Transportation Systems Center (as further described herein, the “Project”) provides a unique opportunity to strengthen Kendall Square and create a new connection to the surrounding residential neighborhoods. The Project provides a mix of residential, office, lab, retail and cultural uses to promote new opportunities for shared discovery, community and collaboration.

For decades, MIT has worked with City leaders and the community to make Kendall a more diverse mixed-use district. The Project, as an interconnected mixed-use development, is intended to be an inclusive and equitable urban environment that nurtures, inspires and links arts and science, as well as people and events. In order to meet this intent, the Project is designed to

include an array of workplaces, residences, retail, restaurants, arts and entertainment, recreation and active open space where people of all ages, abilities, incomes and backgrounds can live and feel welcome.

The Project’s proposed layout of walkable streets, active ground floors and vibrant open spaces creates a pedestrian-oriented experience that fosters face-to-face interaction. These amenities are designed to increase the frequency of interactions, build connections and bridge cultural differences.

Diverse housing options, consumer services, recreational amenities and multicultural programming are intended to draw a broad range of residents to the Project. This engagement of varying demographic groups will also provide opportunities for institutions and businesses to reach new audiences.

At least 40% of the non-exempt GFA included in the Project is devoted to residential use. This equates to approximately 1,400 units of new housing located throughout the four residential buildings. Twenty percent (20%) of the net residential unit square footage of each building will be designated as affordable. The Project also includes 20 middle-income units that will be affordable to eligible renters with incomes of 80% to 120% of the Area Median Income. The Project will include three-

bedroom units to encourage families to live in the district. In addition, 5% of the net square footage of the net residential unit square footage is devoted to Innovation Units, defined as 350 to 450 SF, to further assist with affordability and diversity of housing on the site. MIT will work with the City's Housing Division to determine the distribution of inclusionary housing, middle-income, and Innovation Units.

The ground floors of the Project, including retail, restaurant, arts and entertainment and recreational uses, will provide the infrastructure needed to make Kendall Square a vibrant and unique destination for all of Cambridge and the Greater Boston area. To support its objectives of inclusivity and equity, MIT is creating an intentional outreach and input process to continue partnering with existing and future retailers to prioritize local concepts and expand minority leasing opportunities.

A significant feature of the Project is the proposed Community Center, which will be designed and programmed in collaboration with, and for the benefit of, the community. The Community Center will be accessible to all residents of the Project as well as the greater Kendall Square area and the city of Cambridge as a whole. The Community Center is intended to foster chance encounters between residents, office workers, lab workers and academics that increase the exchange of

information and ideas within our community. The MIT-sponsored Job Connector is a key feature of the Community Center as it provides an opportunity to connect community members with employment opportunities in innovation industries and other economic sectors. The Job Connector opened in 2019 in The Port neighborhood in Cambridge and will be relocated to the Community Center upon its completion.

The Project includes a number of other uses, including retail, restaurant and entertainment uses, that are intended to promote interaction between local residents, employees and visitors to the Project and surrounding area. A state-of-the-art entertainment venue will anchor the Project and enable visitors to experience events that are supported by the latest in sound and lighting technology. Along Broad Canal Way, tenants featuring hybrid entertainment/retail experiences may host smaller events, exhibits and installations that highlight, or are supported by, advances in technology. In addition, technology-enabled installations may be included in the Project's approximately 3.5 acres of Publicly Beneficial Open Space.

By including Innovation Space as part of the ground floor uses and displaying technological advancements as part of the entertainment and retail uses, the Project will build upon recent developments in Kendall Square, including the

relocated MIT Museum, that are intentionally designed to put innovation on display for all to experience. This visibility will increase access to ideas and concepts to those who do not work with them every day. In turn, this access will facilitate participation by a broader segment of the public in the creation of future technological breakthroughs.

The desired interactions and access to the innovative nature of Kendall Square will be realized primarily through the design and programming of the lower floors. As envisioned, the Project will include over 160,000 SF of Innovation Space that may be used for small business incubators and entrepreneurs. Final building programming will create opportunities to make this innovative work visible and amplify creative cross-disciplinary interfaces.

The Project will incorporate the newest innovations in urban living, particularly those related to sustainability, retail and transportation. The Project will include an innovative blackwater treatment facility, the first of this scale in New England, that will support the recycling of 250,000 gallons of water per day and the four residential buildings will be designed as all-electric as a means of charting this development's net zero future. The Project also provides an opportunity for green roofs and photovoltaics on the roof of the Community Center. Experimental retail and restaurants will be encouraged. The Project is designed to adapt to

future innovations in transportation technologies that are currently unforeseen.

This Master Plan provides a framework of site organization, massing, programming and impacts of the Project. Specific building and park designs will be presented to the Planning Board as part of the Design Review process. MIT will continue to work with the community on issues of open space design, community center programming, inclusivity, housing equity and employment readiness training.

MIT is planning the Project in a holistic way to ensure strong connectivity and vibrancy with a focus on inclusion. The project team is hosting a series of community workshops that began in late 2020 and will continue into 2021 on the Community Center, open space, retail, housing and employment to gather input on how best to create a truly equitable and inclusive environment.

## **B. Existing Conditions and Site Context**

The existing Volpe National Transportation Systems Center is located on an approximately 14-acre site in East Cambridge (the "Site"). The Site is generally bounded by Broadway to the south, Third Street to the east, Binney Street to the north and the Sixth Street/Loughrey Walkway ("Loughrey Walkway") /Kittie Knox Bike Path to the west. The existing property currently contains 6 buildings

totaling approximately 375,000 gross square feet. The existing facility also contains 2 large surface parking lots with 570 parking spaces and some landscaping. As a federal government facility, the existing site is fenced off from the surrounding area and unauthorized access is prohibited.

In 2014, the United States General Services Administration (the “GSA”) solicited proposals for redevelopment of approximately 10 acres of the Site (as further described herein, such 10-acre +/- parcel, the “Development Parcel”)<sup>1</sup> in exchange for the construction of a new federal facility on the remaining approximately four acres of the Site (the “Government Owned Lot”). The GSA selected MIT as the developer in late 2016.

The Project is designed to support and promote the ongoing transition of Kendall Square from primarily office and lab space with limited ground floor use to a vibrant and active district that features a mix of residential, retail, office and lab space, all within close proximity to local research institutions that are part of the MIT community. In recent years, MIT has completed or is constructing approximately 100,000 SF of ground floor retail and active use space along Main Street, Broadway and Broad Canal Way, including the first grocery store in Kendall Square, Brothers Marketplace, at One Broadway. MIT also built academic admissions space and approximately 450 graduate student units immediately adjacent to the MBTA Kendall

Square Red Line station and will deliver 300 multifamily housing units (including 54 affordable units, 9 middle-income units and 36 Innovation Units) at 165 Main Street in mid-2022. Kendall Center, the Foundry, the proposed arts center at the Canal District, and the relocated MIT Museum currently under construction in the heart of Kendall will continue the process of connecting the Project’s active ground floor spaces to the larger community.

In recognition of the ongoing transformation in Kendall Square, the City of Cambridge (the “City”) initiated a planning process to explore how the Site could become more accessible, user-friendly and tax-paying. The City and the community, including MIT, worked in collaboration to develop and build upon the 2013 Kendall Square (K2) Planning Study and Design Guidelines. In 2015, the Planning Board submitted two separate zoning amendments to the existing PUD-KS Overlay District to the City Council in June and December, respectively, but the Council chose not to ordain them. In 2016, the City appointed the Volpe Working Group which developed planning and urban design principles for the Site. This work culminated in the 2017 establishment of the PUD-7 Overlay District, the Volpe Working Group Planning and Design Principles and Volpe Site Design Guidelines, all of which guide this development proposal.

---

<sup>1</sup> For the purposes of this Application, the Development Parcel is the land area depicted on the plan entitled “Development Plan” and as indicated on the Dimensional Table measures 455,750. The Applicant, in filing this Application, would like to reserve the right to increase the size of the Development Parcel by adding either one or both of the abutting GSA Triangle Parcel, which is depicted on the Development Plan, and contains 1,618 square feet, and the CRA parcel abutting the northeast corner of the Development Parcel, measuring approximately 5,890 square feet, by minor amendment to any PUD Final Development Plan Special Permit granted by the Planning Board.

### **C. Status of Government Use**

In 2017, MIT entered into an agreement to purchase the Development Parcel, which is currently tax-exempt, from the federal government for \$750 million. Under the terms of the agreement, MIT is obligated to construct a new state-of-the-art, secure and consolidated building to replace the existing Volpe National Transportation Systems Center (the “US DOT Volpe Exchange Project”), prior to MIT acquiring and developing the Development Parcel.

The US DOT Volpe Exchange Project includes a new 400,000 SF office building located on an approximately four-acre parcel situated at the corner of Loughrey Walkway and Binney Street. The new facility consolidates the operation of six existing buildings and surface parking lots into a single, efficient structure with underground parking and over 100 bicycle parking spaces. The new facility is designed to be approximately 217 feet in height and incorporates an enclosed, architecturally-integrated mechanical penthouse to minimize visual and noise pollution. It is designed to meet LEED Gold v.4 standards, with a prioritization on sustainability, and is oriented to maximize energy efficiency. The landscape plan for the area surrounding the new facility features over 100 new diverse native species trees at grade with a 40% increase in caliper inches, and an art piece designed by Maya Lin integrated into the landscape

on the east side of the Government Owned Lot. The federal government currently contemplates that this landscape will be an art lawn that is open to the public.

MIT commenced site utility work in connection with the US DOT Volpe Exchange Project in October 2018. In June 2019, MIT mobilized for site preparation and building construction began in September 2019. The US DOT Volpe Exchange Project is expected to be completed in late 2023.

### **D. Statement of Development Concept/Project Overview**

#### **a. MIT Volpe Values**

The Project will be developed with the following priorities in design:

- Racial Equity and Inclusion
- Diverse Housing Opportunities
- Innovative Science and Research Space
- Publicly Beneficial Open Space
- Retail and Active Uses on the Ground Floors
- Sustainability and Resiliency

As MIT plans the Project, it understands that it is doing so in a time of heightened awareness to racial

injustice and inequity. As an institution of higher learning and thought leadership, MIT is listening to the community to learn and understand, evaluate opportunities, and apply new insights to all that MIT undertakes. The work to engage the community around issues of race, equity and inclusion will be intentional and ongoing.

Since its inception in 2016, the Project's planning efforts have been informed not only by learning from prior experiences, but also a sharpened focus on equity and diversity. While the Project reflects this focus, MIT is continuing to look for opportunities to more fully integrate these values into affordable housing, the Community Center, retail, employment opportunities and open space. Alongside the Cambridge community, MIT will closely examine the role and mission of the Community Center, including the Job Connector, and its connection to sustainability, open space, innovation and commercial activities. The Project's housing will be carefully programmed to increase racial equity and inclusion.

The Community Center will be an integral part of the Project. The goal is to develop a place that will bring together people from nearby neighborhoods and the broader Cambridge community for fun, connection, and growth in a positive and active environment. Programming for the Community Center will continue to evolve to meet the needs of the City's residents. The 2017 program for

the Community Center included a pool and a basketball court, as well as community spaces. Now, three and a half years later, MIT is revisiting the Community Center program and seeking input from the Cambridge community through public workshops to ensure the programming meets the identified needs of the community.

## **b. Community Engagement**

During the PUD-7 zoning process, MIT held dozens of meetings with neighborhood groups, residents, abutters, City Councillors, business groups, and other interested parties. In developing an initial vision for the Project, MIT worked with the community, City staff, the Volpe Working Group, and the Co-Chairs of the City Council Ordinance Committee to develop planning principles, design principles, and design guidelines. That process – which defined what is most important about this development – resulted in four redevelopment options. Each option included four research/office buildings and four residential buildings as well a Community Center and 2.5 acres of publicly-beneficial open space.

MIT intends to build on its experiences with the Kendall Square Initiative to identify and implement uses that create and promote a sense of community among residents and employees of the Project and surrounding area, to provide a welcoming and inviting environment to all,

and to include amenities and programming that catalyze synergies and collaboration at the Project and beyond. To accomplish these outcomes and the Project's goals of belonging, inclusion and activation, MIT will encourage and promote community member involvement in meaningful ways to hear their thoughts, concerns, aspirations and ideas and then work to convert that input into executable outcomes for the Project.

Prior to filing this Application, MIT held a well-attended community meeting on October 21, 2020, met with the East Cambridge Planning Team ("ECPT") on October 28, 2020, provided notice to the Cambridge City Council on November 2, 2020, met with the Cambridge Redevelopment Authority ("CRA") on October 23, 2020 and presented to a Joint Meeting of the Bicycle, Pedestrian and Transit Committees on November 18, 2020.

Immediately following the public meeting presenting the Volpe masterplan, MIT met with several of the condominium owners at 303 Third Street to hear their thoughts and concerns related to the masterplan. Their concerns with the masterplan focused primarily on the location and height of the R1 residential building, the location of the open space proposed at Third Street and Broadway, and the location and height of the Community Center, all relating to the impact on their individual units across Potter Street. Additionally, MIT met with Equity Residential, the owner of the

303 and 385 Third Street rental apartment units, to hear their opinions and concerns with the masterplan. MIT will continue to meet with Equity Residential and the eleven condominium owners at 303 Third Street to understand their concerns.

MIT acknowledges race and equity as issues in a community that has such a diverse demographic mix. Through workshops begun in 2020 and continuing into 2021, MIT has begun engaging directly with the community to solicit recommendations for equity based outcomes to inform project design and will report back on workshop findings.

- Housing: MIT looking to seek input to address equity across all demographics particularly tenants of color and lower income families in the Housing equity community workshop.
- Retail: MIT will engage minority and local retailers that have faced barriers to entry and the challenges to success in retail equity workshops. MIT wants to hear from folks who understand exactly the challenges and help address those barriers with specific outcome based recommendations.
- Open/Active/Community Space: In the Community Center equity workshops MIT is learning much about how the community, particularly communities of color and other



demographics not central to Kendall, view and experience public spaces . As MIT moves on from the Community center equity workshops they will transition to open space to ensure program and design of publicly accessible open spaces are founded in race and inclusion principals. MIT will engage a diverse

demographic mix to develop open space outcomes to address inequities and racism.

**c. Project Proposal**

The mixed-use project will include nine buildings with uses as follows:

<b>Figure A9: Use Distribution by Building Site</b>				
	<b>Residential SF</b>	<b>Commercial SF</b>	<b>Retail/Active Use SF</b>	<b>Total SF</b>
<b>R1</b>	261,000		11,000	272,000
<b>R2</b>	259,000		12,000	271,000
<b>R3</b>	386,000		25,000 (Venue)	441,000
<b>R4</b>	222,000		10,000	232,000
<b>C1</b>		447,700	20,000	467,700
<b>C2</b>		476,700	15,000	491,700
<b>C3</b>		467,100	7,000	474,113
<b>C4</b>		365,400		365,400
<b>CC</b>			20,000	20,000
<b>Total SF</b>	<b>1,128,000</b>	<b>1,756,913</b>	<b>120,000</b>	<b>3,004,913</b>
<b>Exempt Innovation</b>		(82,663)		
<b>Exempt Retail/ Active</b>			(81,250)	
<b>Exempt Community</b>			(20,000)	
<b>Total GFA</b>	<b>1,128,000</b>	<b>1,673,250</b>	<b>18,750</b>	<b>2,820,000</b>

## Connectivity and Active Streets

The Project is designed to replace the existing layout of the Government Owned Lot, which isolates the Development Parcel from the nearby neighborhoods, with a layout that will reconnect it to the surrounding areas. By reconnecting to the East Cambridge community, the Project has the potential to become a unique cultural district centered around arts, innovation, and community. Important to this effort is the establishment of new streets and pedestrian corridors that will knit Kendall Square to the surrounding neighborhoods as follows:

- **Fifth Street (Extension)** will be a boulevard extending from Binney Street to connect to Broadway. Fifth Street will be a green promenade with wide sidewalks, serving as the primary north/south connector through the site that aligns with crosswalk to Kendall Center and MBTA Redline headhouses. It will be anchored by the Community Center with edges equally shared between retail and non-retail active uses.
- **Broad Canal Way (Extension)** will be a unique, curbsless street with limited, managed traffic to prioritize pedestrian and bicyclist use. The street will be lined with storefronts of various sizes and uses, with activity that spills out onto the street to create a vibrant corridor unlike any other in Cambridge. Broad Canal Way will be anchored by an entertainment venue to the west and Broad Canal to the east.
- **Third** – Fifth Connector will be a pedestrian-centric diagonal path connecting the heart of the Project to the heart of Kendall, anchored by open space and the Community Center.
- **Broadway** – The northern edge of Broadway will be activated through public realm beautification and ground floor uses and retail in concert with adjacent anchors.
- **Kendall Way** – Kendall Way will be a plaza-like space that prioritizes cyclist and pedestrian activity while providing occasional, managed service vehicle access. It will not look or feel like a conventional street: it is imagined to be a curb-less, continuously paved space that can be closed to vehicle traffic and enlivened by programmed events related to the entertainment venue or other active uses. Special lighting and temporary staging will enliven this space at night. Kendall Way will be designed for bicycle and pedestrian safety, and will provide an important connection for these users through to Broadway. The lower portion of Kendall Way will include a pocket park with both outdoor seating and ample bicycle parking.

### **Retail and Ground Floor Activation**

Leveraging Kendall Square’s identity as the global gold-standard “innovation district” to attract both hyper-local partners and global retailers, the ground floor activation plan will integrate the best of Cambridge with the best of the wider world. The retail and ground floor activation plan also includes plans to install neighborhood amenities to expand on the grocery store and pharmacy provided through MIT’s Kendall Square Initiative.

- Ground-floor uses will reflect the elements celebrating the historic themes of Kendall Square and MIT: Innovation, open sourcing, dynamism and evolution.
- Uses will include amenities that support the East Cambridge residential community and are missing or underrepresented today.
- The retail strategy will build upon MIT’s track record of partnering with local, independent retail and restaurant operators by lowering the economic barriers to entry to create a place of belonging and equity.
- Ground floor spaces will be tenanted using strategies that attract and cultivate cutting-edge retail and food and beverage establishments that embrace the newest technologies and invent new concepts.
- Retail and ground floor spaces will all be

built with second and third generation uses in mind, weaved into merchandizing plans for short- and long-term lease/license terms that encourage experimentation and innovation.

### **Entertainment/Tech Experience**

The Project will be a place where innovation and the arts are integrated with live music, art installations, and participatory performance.

- An entertainment venue located at the west end of Broad Canal Way and along Loughrey Walkway will anchor the Project, and will include approximately 600 seats or 1,200 people (if standing room only.) The facility will be designed to include advanced lighting and technology in order to support traditional, cutting-edge and experimental events, shows, performances and other activities. These may include weekly performance series, concerts, film screenings, private events and festivals.
- Space for tech-based entertainment/retail hybrids could be accommodated along Broad Canal Way where smaller events, exhibits and installations that highlight or are supported by advances in technology can be showcased and experienced. These may include collaborations with the MIT Media Lab, virtual reality/augmented reality games and activities, a maker gallery, technology-based

events and lectures, and pop-up exhibits.

### **Public Parks**

The Project will include approximately 3.5 acres of publicly-beneficial open space, 40% more than the 2.5 acres required by zoning, where the community can gather, relax and recreate. The open space will be designed with a range of seating conditions and amenities to encourage people to gather with friends and colleagues, in both large and small groups, with both sun and shade alternatives. It will be a place for daily uses such as hanging out and eating as well as for larger festivals and celebrations.

The Project will include two significant new public parks:

- **Third Street Park:** The Project's largest and most visible addition to the public realm is located at the corner of Third Street and Broadway—which, along with its connection to Main Street, makes it one of the city's most important confluences. It is directly related to the existing Kendall Square plaza and also incorporates the extension of Broad Canal Way, already a successful pedestrian-centric street to the east of Third Street. There is a strong focus on the diagonal connection from the corner towards the proposed Community Center and then on to the Fifth Street

Promenade along the US DOT Volpe Exchange Project. Overall, this approximately one-acre space (including the pedestrian-focused Broad Canal Way) offers the best opportunity for Kendall Square to have a sizable civic space. This space offers an opportunity for public events of significant size, including markets, festivals, celebrations, and other community activities that can be enjoyed by all Cambridge residents and visitors.

It will contain large lawns, paved gathering spaces, and comfortable shaded areas beneath existing mature trees and newly planted species. Retail kiosks for local, active and innovative food and beverage will be located along Broad Canal Way and/or Broadway. Because the new park is framed by existing city streets and public ways already heavily used by commuters and neighbors, it will be welcoming and inclusive for all. All these qualities put the heart of the "Square" in Kendall Square and creates a grand entrance into the balance of the site.

- **Sixth Street Park:** In its existing condition, the Loughrey Walkway and the Kittie Knox Bike Path provide a vital connection from East Cambridge to the Charles River and for those commuting by foot or bicycle for the so-called "last mile" stretch between home and public transit. Although the applicable zoning

regulations require a ten-foot offset from the easterly property line of the Loughrey Walkway as a protective measure for the existing mature oak trees, the proposed Sixth Street Park substantially expands the tree protection offset from the existing walkway. A variety of community recreation spaces and active areas may be included in the expanded tree protection offset area. While not yet programmed, this open space could support a dog park, playground, exercise space, and outdoor dining related to the proposed entertainment venue. The park connects with Broad Canal Way to the east via a wide pedestrian and bicycle passage adjacent to the entertainment venue.

### **Community Center**

The approximately 20,000 SF Community Center will be an inclusive and welcoming space for all employees and residents of the Project and the surrounding community designed to encourage all to interact, play, exercise, learn and come together in one place to encourage chance encounters and collaboration across user groups. Programming for the Community Center will include both indoor and outdoor activities. MIT will engage the greater community on the design and programming to ensure that the Community Center includes flexible spaces that meet the needs of the community.

### **Living Lab for Future Transportation Technology**

MIT is a leader in transportation technology and innovation and will use the Project to showcase the future of mobility and transportation. The Project plans to accommodate the latest and future innovations in mobility and transportation such as:

- Bicycle and automobile smart parking technology;
- Digital transit information screens and wayfinding;
- Vehicle electrification;
- Last-Mile Transportation (autonomous deliveries, autonomous shuttles, drones, bike share, and on-demand mobility); and
- Innovations in infrastructure (digital curbs, dynamic crosswalks and enhanced crosswalks).

Transportation technology and innovation is at the forefront of reducing reliance on personal vehicles, encouraging the use of public transportation, and enhancing the pedestrian and bicyclist experience. Anticipating a decline in privately-owned personal vehicle use in the future, the Project's garages are designed with flat floors and structural column grids that allow for conversion to other uses.

### **Leader in Sustainability**

Sustainability is a foundational component of the Project. MIT intends for the Project's design to be an example of how to successfully implement sustainability principles.

There are several key strategies that establish the Project as an exemplar of sustainable master plan design. First, as currently designed, the Project includes a large urban district-scale blackwater treatment plant to reuse all eligible building water on-site. Additionally, MIT intends for the residential buildings (40% of the Project's GFA and approximately 1,400 units) to be all-electric, and therefore, will have zero on-site emissions to support a net-zero carbon future. The Project also establishes a pathway for getting to all-electric commercial buildings and will evaluate each building against this pathway as it approaches the design review phase.

Among other sustainability design elements, all buildings will be LEED Gold certifiable. In addition to sustainability design elements, the Project includes resiliency design elements such as raising the finished grade of the entire 10-acre site to the 2070 100-year flood elevation.

Together, these exemplary strategies distinguish the Project from regional peers and build upon sustainable commitments for site, transit, resiliency and healthy building design.

### **Mixed-Income Residential Community of Approximately 1,400 Units**

At least 40% of the GFA included in the Project, roughly 1 MSF, is devoted to residential use. This equates to approximately 1,400 units of new housing located throughout the four residential buildings. Twenty percent (20%) of the net residential unit square footage of each building will be designated as affordable. The Project also includes 20 middle-income units that will be affordable to eligible renters with incomes of 80% to 120% of the Area Median Income. The Project will include three-bedroom units to encourage families to live in the District. In addition, 5% of the net square footage of the net residential unit square footage is devoted to Innovation Units, defined as 350 to 450 SF, to further assist with affordability and diversity of housing on the site. MIT will work with the City's Housing Division to determine the distribution of inclusionary housing, middle-income, and Innovation Units.

MIT is committed to the creation of a residential community that is diverse in many ways. The Project's design and programming of the open space, retail and the Community Center are intended to appeal to a people of all ages, races, genders, and family structures that reflects Cambridge's wide diversity.

## **E. Public Benefits and Project Commitments**

In addition to the Project related benefits of new road connections, approximately 3.5 acres of publicly-beneficial open space, approximately 1,400 units of housing and the Community Center, MIT has made the following financial commitments:

- Approximately \$36 million to the Affordable Housing Trust for commercial linkage payments;
- Approximately \$8.5 million for transit improvements to reduce vehicular traffic;
- Approximately \$8.5 million to the Community Fund to be distributed to Cambridge non-profits; and
- Approximately \$23 million in new taxes annually once the Project is built out.

At the time of the adoption of PUD-7, MIT made significant commitments to improving transportation, housing and equity in Cambridge. MIT has advanced many of these commitments more quickly than required and is including the following as part of the Project:

- **Grand Junction Multiuse Path:** On November 6, 2017, shortly following the passage of PUD-7 zoning, MIT contributed \$500,000 toward the development of design of the Grand Junction

Path. The City (through CDD) commenced design work on the path in January 2019, has advanced through the concept design phase and at the end of December 2020 released 25% design drawings for review. IMIT prepared a draft easement agreement to preserve public access permanently to the portions of the pathway located on MIT's land. In September, 2019, MIT submitted this draft easement agreement to the City Solicitor for review and is awaiting review and comment. Within thirty (30) days of the completion of the design of the Grand Junction Path and the City's receipt of all rights, consents and/or approvals necessary to construct the Grand Junction Path, MIT will, at MIT's option, either (i) deliver to the City \$8.0 million for the design and construction of the Grand Junction Path, or (ii) commence construction of the portion of the Grand Junction Path located on the MIT Property and diligently pursue such construction to completion.

- **Community Space:** This Project includes a proposal for a Community Center. MIT will form a Community Space Advisory Committee to review and make recommendations to MIT concerning the design and programming of the Community Space. Per the zoning commitment, MIT deposited \$500,000 into escrow in October 2018. MIT will pay additional

amounts, as needed from time-to-time, totaling up to \$500,000 in the aggregate for planning and design costs, and MIT will provide an amount equal to \$22,000,000, less the cost of any planning and design costs paid in connection with the community space, on or before the date that MIT (or its nominee) acquires title to the majority of the PUD-7 District.

- **Graduate Student Housing:** MIT has completed the construction of Building 4 of MIT's South of Main Project in Kendall Square containing over 450 furnished studio, one-bedroom, and two-bedroom units (253 net new apartments) and MIT graduate students began living in the building in November 2020. MIT filed an application for a Project Review Special Permit with the Planning Board on December 17, 2020, to create approximately 690 graduate student housing beds on the West Campus. In addition, MIT converted 150 beds to graduate student use, the majority being in the housing at 70 Amherst Street.
- **Job Connector:** In April 2019, MIT opened the Job Connector at 792 Main Street in The Port neighborhood. The Job Connector is a free workforce development hub that connects Cambridge residents with job readiness and training programs that promote access to the city's innovation economy. The Job Connector

has hosted four programs, organized two job fairs, and participated in over 350 interactions with 275 clients since its inception. Through collaborations with local partners, the Job Connector hosted an apprenticeship training program with Building Pathways, an IT skills training course with Just-A-Start, and organized a three-part unemployment webinar with the City of Cambridge's Department of Human Service Programs. A new five-week career pathways program for 18-26 year old residents was recently launched in partnership with My Brother's Keeper, and several other initiatives are in planning for 2021. MIT has provided funding well in excess of the \$125,000 required annually.

- **Middle Income:** The Project includes 20 middle-income units restricted to eligible households earning between 80% and 120% of Area Median Income.
- **Innovation Housing:** The Project includes a provision that 5% of the net floor area of the minimum required housing will be Residential Innovation Housing Units, which will be 350 to 450 SF in size and will include a covenant that the tenants of 30 of these units will not apply for a Cambridge Resident Parking Permit.
- **Open Space and Retail Advisory Committee:** MIT will establish an advisory committee to



provide input on the programming of activities in the open spaces and the types of retailers for the retail spaces in PUD-7. This advisory committee is not required to be formed until six months prior to substantial completion of the first building. However, MIT intends to officially form the Committee during the design of the first building or open space. Prior to forming the Committee officially, MIT will seek input from a wide cross-section of community members through its public process associated with the Final Development Plan Special Permit.

- **Community Event Programming:** In 2017, MIT began hosting the Volpe Block Party as a fun, annual community engagement event. The event has successfully brought together more than 1,000 people to listen to live music, engage in family-friendly activities and enjoy food from local Cambridge restaurants – all for free. In 2020, due to public health concerns, the Volpe Block Party pivoted to a primarily virtual event, however the tradition of handing out free ice cream to all attendees continued in a COVID-safe way at various Cambridge parks and community centers. The Volpe Block Party will continue on an annual basis as a fun way for MIT to engage with the community. It has and will continue to include local and minority vendors and is on track to spend in excess of the \$300,000 required in

the Commitment Letter before MIT acquires the Development Parcel.

- **Real Estate Taxes:** Except for the Community Center, it is anticipated that all of the buildings proposed in the Project will be taxable, resulting in approximately \$23 million in new annual tax revenue for the City.
- **Innovation Arts Program:** MIT will establish an arts program that includes outdoor exhibits and recognizes innovation and entrepreneurship in the Kendall Square area. This arts program is not required to be established until 30 days after the first certificate of occupancy. In the meantime, MIT will seek to incorporate the arts program into its planning of open and public spaces.

## F. Development Schedule and Phasing

MIT expects to construct the Project over a 10- to 15-year period. The exact sequence will be determined based on market conditions, zoning requirements and the requirements of the overall development. MIT may choose to pursue more than one building simultaneously or in sequential fashion. That said, the Project is complex and there are a number of foundational principles that will guide phasing decisions as the Project moves forward:

- The intent is to deliver a large garage at the

southern end of the Site that will be built in phases along with the buildings above. In the finished condition, the garage will function as a single garage with shared entrances and below-grade continuity.

- Because development along Binney Street (Buildings R4 and C4) is separated from the balance of the Development Parcel, these buildings could be built independently without significant implications on the other phases and will have their own below-grade parking structure.
- Open space and public realm improvements within each phase will be constructed in conjunction with the construction of the buildings within each phase.
- Both below-grade parking garages will be constructed sufficiently to support the commercial and residential buildings in each phase. However, MIT may choose to construct the entire southern garage at one time in order to maximize construction efficiencies.

The Project was conceived in a manner such that the build-out of one phase can limit interdependencies on other phases, and will satisfy all parking, infrastructure, stormwater management, and blackwater removal requirements on a phase-by-phase basis. Given

the complexity of the Development Parcel and the number of interdependent systems, there may be periods between phases when systems don't function as intended when the Project is complete. MIT will work in a transparent manner to mitigate any possible impacts this may create. The phasing of all buildings will comply with Section 13.93.1(c)3 of the Cambridge Zoning Ordinance to ensure delivery of housing units prior to the completion of the commercial buildings .

## **G. Future Ownership and Financing Plan**

### **Present and Future Ownership and Leasing**

As referenced above, the GSA currently owns the Site, and MIT has the right to acquire the Development Parcel pursuant to an Exchange Agreement between the parties. Once acquired, MIT intends to develop the Project and hold ownership interest of the same for the long term, whether directly or through affiliates and subsidiaries, while leasing significant portions of the space to third-party users and occupants.

### **Financing Plan**

To date, MIT has funded all predevelopment costs. Predevelopment costs include the entitlement process, master planning, architectural, engineering, marketing and administrative expenditures.

MIT plans to develop the Project in phases according to market conditions, and may fund project construction through a combination of equity, debt, construction financing, infrastructure financing, and joint venture capital. MIT intends to fund the construction costs on a phase-by-phase basis.

MIT may place construction and/or permanent financing on each building as necessary.

The total project costs, including predevelopment and construction, is estimated to be \$3.6 billion.



Figure 1: Locus



Figure 2: Historical Image of Site - 1960s Construction of Volpe National Transportation Systems Center



Visualization by Design Distill

Figure 3: Third Street Park



Visualization by Design Distill

Figure 4: Sixth Street Park



Visualization by Design Distill

Figure 5: Community Center





Visualization by Interface Multimedia

INTERFACE

Figure 6: Broad Canal Way



Figure 7: Entertainment Venue



Visualization by InterPlace Multimedia

INTERFACE

Figure 8: Fifth Street



Visualization by Interface Multimedia

INTERFACE

Figure 9: Potter Street



Visualization by Interface Multimedia

INTERFACE

Figure 10: Broadway



Figure 11: Binney Street



### 3. Consistency with Specific Special Permit Criteria

- A. *Compliance with General Special Permit Criteria (Article 10.43)*
- B. *Consistency with General Special Permit Criteria (Article 12.000 Planned Unit Development)*
- C. *Compliance with Zoning (Article 13.90 Planned Unit Development 7 District)*
- D. *Compliance with Project Review Special Permit Criteria (Article 19)*

#### **A. Compliance with General Special Permit Criteria (Section 10.43)**

Special permits will normally be granted where specific provisions of the CZO are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause 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, or**

The Project described in this Application and for which the Special Permit is sought is designed to meet all the requirements of the CZO. This Section demonstrates compliance with the CZO, particularly with respect to Section 10.43 General Special Permit Criteria, Section 12.35.3 General PUD Development Proposal Criteria, Section 13.91.4 PUD-7 Special Permit Criteria and Section 19.25 Article 19 Project Review Special Permit Criteria.

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

MIT has prepared, and the City has certified, a detailed Transportation Impact Study (“TIS”) that addresses issues of traffic generation and patterns. Generally, the trip generation and

traffic patterns associated with the Project are consistent with those assumed as part of the planning and rezoning for the Kendall Square area, and they will not cause additional congestion, hazard or substantial change in the 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, or**

The continued operation of or future development of adjacent uses as permitted in the CZO will not be adversely impacted by the nature of the proposed uses included as part of the Project.

The Project’s proposed mix of residential, commercial, retail, active and entertainment uses is consistent with the existing and planned uses in the Kendall Square area and the Project proposes to add vitality to the neighborhood and streetscape and improve connections to and between these uses.

In an effort to be consistent with the existing and planned uses in Kendall Square and improve connectivity, certain uses included in the Project are located immediately adjacent to similar existing uses. For example, the adjacent uses to the east include two residential buildings at 303 Third Street and 350 Third Street. The Project has located



residential uses nearest to these two buildings in order to strengthen the area as a residential district. Immediately to the west and south is the “MXD District”, which is characterized by high-density commercial buildings. To integrate with the existing built environment and development patterns, Building R1 is located along the existing commercial corridor of Third Street that includes buildings of varying heights, including some that are very tall. The Project has located the low-rise Community Center adjacent to 303 Third Street to extend the planned open space and create a centrally located community benefit. Third Street Park will be located at the corner of Third Street and Broadway and will be a significant new public open space for the residents of 303 Third Street and 350 Third Street, as well as residents from the neighborhoods of Cambridge, to enjoy. The Project has located its high-density commercial buildings along Broadway as an extension of the existing uses in the MXD District. To the north is existing commercial development along Binney Street with the East Cambridge residential neighborhood beyond. Along Binney Street, the Project locates one mixed-use commercial building, of size and scale consistent with others along the corridor, and one residential building to reflect the transitional nature of this street.

The Project also includes a significant street and open space network that is designed to support

and enhance the operation of adjacent uses by providing improved pedestrian and vehicle access. The Project is designed to replace the existing layout of the Volpe National Transportation Systems Center, which isolates the Site from the surrounding neighborhoods, with a layout that will reconnect it to the surrounding areas. By reconnecting with the East Cambridge community, the Project has the potential to become a unique cultural district centered around arts, innovation, and community.

The Project’s proposed streetway, pedestrian, and open space networks will build new connections and enhance existing connections among the neighborhoods of East Cambridge, Wellington-Harrington, The Port, MIT and Kendall Square. These networks also maximize the integration of pedestrians, cyclists, workers, residents and neighbors within these neighborhoods, and will create a more understandable and accessible district for visitors.

**(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**

The Project will not create a nuisance or hazard to the detriment of the health, safety and/or welfare of the occupants of the proposed uses within the Project or the citizens of the City. Rather,

the Project will enhance the experience of all. The Project will feature a Community Center at its heart that will be a location for recreation and other types of programming and activities for Cambridge residents. Also, the additional residents, employees, workers and visitors to the Project will activate the retail and commercial uses in both the Project as well as existing retail in Kendall Square and along Third Street.

The open space located throughout the Project will provide gathering spaces for users of the Project as well as the community at-large. The retail spaces, restaurants, entertainment venue and other publicly-accessible spaces located on the first floors of the new buildings will be an amenity to the users of the Project and members of the community and will further activate the open space.

**(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**

The Project will not impair the integrity of the district or any adjoining district, or otherwise derogate from the intent of the CZO.

The Project is located within the PUD-7 Overlay District. It's proposed mix of residential, commercial, retail, active and entertainment uses

is consistent with the existing and planned uses in the district and adjoining districts. Immediate adjacent uses to the east include two residential buildings at 303 Third Street and 350 Third Street. The Project has located residential uses nearest to these two buildings in order to strengthen the area as a residential district. Immediately to the west and south is the "MXD District", which is characterized by high-density commercial buildings. Building R1 is located along the commercial corridor of Third Street that includes buildings of varying heights including some that are very tall. The Project has located its high-density commercial buildings along Broadway as an extension of the existing uses in the MXD District. To the north is existing commercial development along Binney Street with the East Cambridge residential neighborhood beyond. Along Binney Street, the Project locates one mixed-use commercial building, of size and scale consistent with others along the corridor, and one residential building to reflect the transitional nature of this street.

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

The Project is consistent with the Urban Design Objectives set forth in Section 19.30 as described in Volume I, Section 3(D) of this filing.

**B. Compliance with General PUD Development Proposal Criteria (12.35.3)**

Approval of a Development Proposal shall be granted only upon determination of the Planning Board that the Development Proposal satisfies the criteria set forth in Section 12.35.3 of the CZO. As detailed below, the Project's PUD-7 Development Proposal submitted herewith in Volume II complies with all such required criteria. The Project's PUD-7 Development Proposal:

**(a) Conforms with the General Development Controls set forth in Section 12.50, and the development controls set forth for the specific PUD district in which the project is located:**

The Project complies with the General Development Controls set forth in Section 12.50, including minimum development parcel size. All new roadways, utilities/public works and open areas will be designed and constructed consistent with applicable laws and criteria established by the City, and all uses will conform to applicable federal, state and local laws and regulations regarding the environment.

**(b) Conforms with adopted policy plans or development guidelines for the portion of the city in which the PUD district is located:**

As described in detail in Volume I, Section 3 (C) of this filing, the Project will be generally consistent

with the policy objectives set forth in the PUD-7 Guidelines and Principles.

**(c) Provides benefits to the city which outweigh its adverse effects; in making this determination the Planning Board shall consider the following:**

- 1. Quality of site design, including integration of a variety of land uses, building types, and densities; preservation of natural features; compatibility with adjacent land uses; provision and type of open space; provision of other amenities designed to benefit the general public:**

The Project includes a significant street and open space network that is designed to support and enhance the operation of adjacent uses by providing improved pedestrian, cyclist and vehicle access. The Project is designed to replace the existing layout of the Volpe National Transportation Systems Center, which isolates the Site from the surrounding neighborhoods, with a layout that will reconnect it to the surrounding areas. By reconnecting with the East Cambridge community, the Project has the potential to become a unique cultural district centered around arts, innovation, and community.

The Project will include two new public parks. The Sixth Street Park will extend the pedestrian and bicyclist functions of the Loughrey Walkway/Kittie

Knox Bike Path by creating a new linear park lined with recreational uses. Third Street Park will be located at the corner of Third Street and Broadway and will be a significant new public open space for the neighborhoods of Cambridge. The Project has located the low-rise Community Center at the corner of Broad Canal Way and Fifth Street to extend the open space and create a centrally located community benefit.

The Project's proposed mix of residential, commercial, retail, active and entertainment uses is consistent with the existing and planned uses in the Kendall Square area and the Project proposes to improve connections to and between these uses.

Consistent with the existing and planned uses in Kendall Square and in an effort to improve connectivity, certain uses included in the Project are located immediately adjacent to similar existing uses. For example, immediate adjacent uses to the east include two residential buildings at 303 Third Street and 350 Third Street. The Project has located residential uses nearest to these two buildings in order to strengthen the area as a residential district. Immediately to the west and south is the "MXD District", which is characterized by high-density commercial buildings. Building R1 is located along the commercial corridor of Third Street that includes buildings of varying heights including some that are very tall. To the north is existing commercial development along

Binney Street with the East Cambridge residential neighborhood beyond. Along Binney Street, the Project locates one mixed-use commercial building, of size and scale consistent with others along the corridor, and one residential building to reflect the transitional nature of this street. The Project has located its high-density commercial buildings along Broadway as an extension of the existing uses in the MXD District.

The Project's proposed streetway, pedestrian, and open space networks will build new connections and enhance existing connections among the neighborhoods of East Cambridge, Wellington-Harrington, The Port, MIT and Kendall Square. These networks also maximize the integration of pedestrians, cyclists, workers, residents and neighbors within these neighborhoods, and will create a more understandable and accessible district for visitors.

## **2. Traffic flow and safety;**

The proponent submitted a Traffic Impact Study ("TIS") to the City of Cambridge on October 22, 2020, that addresses issues of traffic flow and safety. The City of Cambridge certified the TIS on November 5, 2020.

## **3. Adequacy of utilities and other public works;**

As detailed in Volume II, Section O, Infrastructure Plan, City utilities are generally adequate to support

the Project. The Project will include sustainable measures, including district blackwater systems, which will reduce impact to the City's water and sewer systems. Specific infrastructure improvements and services may be required to be undertaken by the Project in coordination with the City.

**4. Impact on existing public facilities within the city; and**

The Project will have a limited impact on public facilities within the City. The proposed buildings will be constructed from newer materials and will meet the life/safety codes in effect at the time of building construction, including sprinkler systems and other life/safety enhancements as appropriate. There will be approximately 1,400 residential units which, consistent with City planning, will include a diversity of unit types and sizes. However, it is not anticipated that there will be a significant impact on the Cambridge Public Schools.

**5. Potential fiscal impact**

The Project is expected to have a significant positive fiscal impact on the City. The Project will create new, productive uses in Kendall Square/East Cambridge and will substantially increase the value of the commercial properties, thereby substantially increasing the taxable value of the properties to the City and the addition of approximately \$23 million

in net new tax revenue paid to the City annually. It is expected that construction of the Project will create approximately 8,000 construction jobs over its duration and approximately 4,500 new, permanent jobs in the City of Cambridge. Additionally, the new residential and commercial buildings and the uses therein will attract new workers and residents to Cambridge.

**C. Compliance with PUD-7 Zoning and Special Permit Criteria (13.90 et seq.)<sup>1</sup>**

An approved Final Development Plan for a Master Plan area must satisfy the criteria set forth in Section 13.91.4 and must also otherwise comply with the requirements and limitations set forth in the PUD-7 Zoning. As detailed below, the Project complies with all such required Special Permit criteria as well as the PUD-7 Zoning.

**Compliance with Special Permit Criteria (13.91.4)**

As more specifically detailed below, the Project satisfies the Special Permit criteria set forth in Section 13.91.4:

- 1. Providing a mix of commercial, including research and technology, and residential uses, with particular emphasis on ground-floor retail along portions of Third Street and Broadway, to encourage activity throughout**

---

<sup>1</sup>For the purposes hereof, references to the "PUD-7 Zoning" shall be a reference to Section 13.90 et seq.

**the day and evening.**

Where the Site is currently an isolated parcel that is not open to public use or access, the Project will include a diverse mix of uses, including residential, lab and office, retail and community. While there will be a particular effort to activate Third Street and Broadway, the introduction of active ground floor uses, including retail, entertainment and Innovation Space, on multiple sides of each new building will energize each block and connect the Project to the surrounding neighborhood.

**2. For residential uses, incorporating a diversity of dwelling unit sizes that are appealing and accessible to a variety of users, including families with children and households from a variety of socioeconomic backgrounds.**

Housing will be a significant component of this Project. Pursuant to Section 13.93.1(b)(i), forty percent (40%) of the total permitted GFA, or approximately 1 MSF, included in the Project will be devoted to residential use. This equates to approximately 1,400 units of new housing located throughout the four residential buildings. Twenty percent (20%) of the net residential unit square footage of each building will be designated as affordable. The Project also includes 20 middle-income units that will be affordable to eligible renters with incomes of 80% to 120% of the Area Median Income. The Project will include three-

bedroom units to encourage families to live in the district. In addition, 5% of the net square footage of the net residential unit square footage is devoted to Innovation Units, defined as 350 to 450 SF, to further assist with affordability and diversity of housing on the site. MIT will work with the City's Housing Division to determine the distribution of inclusionary housing, middle-income, and Innovation Units.

MIT is committed to the creation of a residential community that is diverse in many ways. MIT will endeavor to design and program its open space, retail and Community Center to support the residential units' appeal to people of all ages, races, genders, and family structures that is reflective of Cambridge's diversity.

**3. Breaking up large blocks to increase permeability and create a fine-grained network of connections that seamlessly integrates the PUD-7 District with the surrounding urban fabric of Kendall Square and the East Cambridge, Wellington-Harrington and Port neighborhoods.**

The overarching goal of the Project is to establish a vibrant, diverse, inclusive, mixed-use district that creates a welcoming environment, provides opportunities for shared discovery, community and collaboration, and connects the Project to the surrounding neighborhoods. The Project provides

a mix of residential, office, lab, retail and cultural uses that are intended to help achieve the Project's overarching goals.

The Project is designed to replace the existing layout of the Volpe National Transportation Systems Center, which isolates the site from the surrounding neighborhoods, with a layout that will reconnect it to the surrounding areas. By reconnecting with the East Cambridge community, the Project has the potential to become a unique cultural district centered around arts, innovation, and community.

The Project builds or completes connections among the neighborhoods of East Cambridge, Wellington-Harrington, The Port, MIT and Kendall Square. It maximizes permeability for pedestrians, cyclists, workers, residents and neighbors, and will create a more understandable and accessible district for regional visitors.

Key to weaving the Project into the fabric of Cambridge is a diverse, connected network of open spaces, strategically located to draw the public into and through what will be a new swatch of that fabric. This is combined with a set of proposed streets that break down the scale of the block by restoring east-west and north-south connections through the Site.

**4. Sensitively interfacing with adjacent land uses with respect to use, scale, density, setback, bulk, height, landscaping and screening, while providing integrated pedestrian circulation systems with particularly strong linkages to the Broad Canal, riverfront, Grand Junction Corridor, other public spaces within Kendall Square, and the East Cambridge, Wellington-Harrington and Port neighborhoods.**

In an effort to be consistent with the existing and planned uses in Kendall Square and improve connectivity, certain uses included in the Project are located immediately adjacent to similar existing uses. For example, the adjacent uses to the east include two residential buildings at 303 Third Street and 350 Third Street. The Project has located residential uses nearest to these two buildings in order to strengthen the area as a residential district. Immediately to the west and south is the "MXD District", which is characterized by high-density commercial buildings. To integrate with the existing built environment and development patterns, Building R1 is located along the existing commercial corridor of Third Street that includes buildings of varying heights, including some that are very tall. The Project has located the low-rise Community Center adjacent to 303 Third Street to extend the planned open space and create a centrally located community benefit. Third Street

Park will be located at the corner of Third Street and Broadway and will be a significant new public open space for the residents of 303 Third Street and 350 Third Street, as well as residents from the neighborhoods of Cambridge, to enjoy. The Project has located its high-density commercial buildings along Broadway as an extension of the existing uses in the MXD District. To the north is existing commercial development along Binney Street with the East Cambridge residential neighborhood beyond. Along Binney Street, the Project locates one mixed-use commercial building, of size and scale consistent with others along the corridor, and one residential building to reflect the transitional nature of this street.

The Project builds or completes pedestrian, bicycle and vehicular connections among the neighborhoods of East Cambridge, Wellington-Harrington, The Port, MIT and Kendall Square. It maximizes permeability and enhances access to transit for pedestrians, cyclists, workers, residents and neighbors.

The basic site organization of the Project completes connections between the East Cambridge community to the north with Kendall Square and the Charles River to the south and enhances the connections between The Port and Central Square to the west with the amenities and recreation along the Broad Canal. The Project's immediate surroundings are characterized by small blocks

and permeability. This remediates the existing condition of the property on which the Volpe National Transportation Systems Center is located, which is a large block with little or no public access and acts as a barrier to pedestrian movement.

The Project will create a Fifth Street connection that includes generous sidewalks on both sides and provides access to pedestrians from Binney Street through to the public access point at the Marriott Hotel to Kendall Square and the MBTA Red Line. The Project also extends the existing Broad Canal Way across Third Street to the Sixth Street Park and through the MXD property to Ames Street and beyond. Broad Canal Way is designed as a shared street with low vehicular volume to benefit the pedestrian experience of the adjacent ground floor active use and open space activities. Vehicular access ends at Kendall Way, providing a transition to a pedestrian and bicycle passage to the Sixth Street Park. An important pedestrian connection is also made between Fifth Street past the Community Center and the Third Street Park to the corner of Broadway and Third Street. The Project is anticipated to increase pedestrian volume along Broadway as residents access the open spaces, amenities and the Community Center from The Port and Central Square. A generous Sixth Street Park, Kendall Way and Fifth Street all provide new points of permeability for pedestrians and cyclists from the west.



5. **Sensitively managing the height and bulk of new buildings to a) reduce the impact of shadows, excessive wind, and obstruction of light and views, with specific consideration given to residential buildings and public spaces; b) reduce detrimental environmental impacts such as excessive ground coverage, diminution of open space, and monotonous development; c) provide an appropriate scale at interfaces with adjoining lower scale uses, such as proposed and existing buildings and open spaces in the vicinity; d) not otherwise diminish the health and safety of the area around the development parcel; and e) establish a defined urban character at a “streetwall” height that is distinct from taller “tower” elements of buildings, in accordance with the goals set forth in the PUD-7 Guidelines and Principles.**

The Project will break what is currently an impermeable superblock into an urban grid that continues the streets of Kendall Square and with connection points to adjacent developments and uses. This street grid will maximize permeability for pedestrians and cyclists, while providing limited, managed vehicular access for cars. The new street grid will create blocks conducive for urban development at this scale. The Project also creates two significant new open spaces. Buildings will be held nearly 50 feet from the westerly property

line in order to create the linear Sixth Street Park adjacent to the Loughrey Walkway/Kittie Knox Bike Path. The most valuable development location on the corner of Third and Broadway will be dedicated to a new public Third Street Park. These two public spaces will be complemented with a low-scale Community Center at the corner of Fifth Street and Broad Canal Way to provide an open space network that will reduce and manage the negative impacts of wind, shadow, obstruction of lights and views both on the public open spaces and to adjacent residential buildings. The buildings will be designed to relate to the existing streetwalls and proposed open spaces and streets.

6. **Creating an integrated network of high-quality streets and open spaces, including significant space for public gatherings and recreation, that serves the surrounding communities as well as the development on the site by encouraging and fostering a sense of community, civic engagement, social interaction, economic development, and environmental sustainability.**

Key to weaving the Project into the fabric of Cambridge is a diverse, connected network of open spaces, strategically located to draw the public into and through what will be a new swatch of that fabric. This is combined with a set of proposed streets that break down the scale of the block by restoring east-west and north-south connections

through the Site.

The streets are designed to enhance public life in Kendall Square by providing a continuous and welcoming public realm that is shaded, comfortable, safe, and lively—during the day and into the night. The streets, courts, and squares will support a wide range of outdoor uses, and they will be enlivened by pedestrian-oriented retail and active uses located in the ground floors of the surrounding buildings. These spaces will create a varied, yet continuous public realm that gives the district permeability, porosity, strong view corridors, and a palpable and unique identity for Kendall Square. All streets are designed to support high-performance street tree installation in order to ensure the presence of a long-term urban canopy such that as the Project is built out and matures, MIT will be able to attain or exceed the City's goals for a continuous tree canopy on its streets and within its open spaces. The Project's streets, squares, and parks will be for public use and take on public character.

The Project will create two significant new publicly-accessible parks as well as streetscapes that are flexible and extend the vibrancy of the open spaces through the Site and into the adjacent neighborhoods. The design of the new parks will be finalized during this Special Permit process and design details will be developed in conjunction with the community through community workshops.

Each of the two new parks will be reviewed by the City through subsequent Design Review.

The Project will include approximately 3.5 acres of new publicly-beneficial open space including two acres of open space permanently guaranteed for public use by means of a recorded covenant, easement, conservation restriction or similar legal instrument as required by Section 13.94 (d).

**7. Integrating development with open space physically and functionally by means of building orientation, active frontages, location of building entrances, pedestrian linkages between major activity centers, and similar techniques in accordance with the objectives set forth in the PUD-7 Guidelines and Principles.**

With ground floor activation along multiple sides of each building, the retail will complement the parks, sidewalks and streets to create a range of gathering spaces that foster community and allow for new and enhanced social and economic opportunities. This activation also provides the necessary flexibility to site complementary uses next to each other to create synergies and to support the zoning framework to foster diverse retail.

The Community Center, entertainment venue, and other arts and cultural uses will help to create a

fully-integrated place with a range of experiences that naturally bring together diverse audiences. The Community Center and its adjacent open space will be designed as a place for friends and neighbors to come together for recreation, relaxation and recharging. The immediately surrounding retail could have complementary uses, such as an ice cream shop, bakery, pizza shop and the like, in effect creating a mini neighborhood hub right in the middle of the Project. The entertainment venue will be an active anchor that is visible from Third Street and Broadway, drawing people into the site from both the east and the west. Kendall Way will provide a foreshore for spill out activities associated with the venue.

These spaces are designed to accommodate a variety of programs - from daily, passive activities like eating lunch or playing a game of chess on a weekday afternoon, to a weekend farmers' and/or artisans' market that takes advantage of the variety of the open spaces, to a full-scale festival that incorporates the retailers, parks and ability to close down streets.

The retail mix of the future will be inventive and familiar, accessible and interesting. It will offer a variety of price points and experiences while blending the innovative and the every day. This Project is an incredible opportunity to build upon MIT's values of diversity, equity and inclusion and strategies for achievement will be developed in

concert with the community during community workshops.

**8. Providing a strong street edge on major public streets, including Broadway and Third Street as well as new street connections through the district, to create a memorable “main street” experience.**

The Project will be designed to create a memorable “main street” experience along the existing and new major streets. The streets created and improved as part of the Project will be maintained as private ways and will be integrated with the City's existing roadway network. A plan showing the proposed ownership of existing and proposed streets in and around the Project is included as **Figure A3: Ownership of Streets**, Street Ownership. Of note, MIT does not and will not own some significant portions of Potter and Fifth Streets. In addition, MIT would like to maintain the ability to close portions of Broad Canal Way (Extension) to enable community festivals, street fairs and other large events. For these reasons, Fifth Street, Potter Street and Broad Canal Way are proposed to be private streets open to the public. Changes in the surrounding public streets (Binney, Third and Broadway) that result from a CRA/City-led process will be considered as part of the overall mitigation for the Project. If, and as applicable, the design and construction of streets will comply with City ordinances and standards.

There is significant opportunity to improve the public experience on Broadway by including active retail on much of its north side length. Building floor plates will be raised in response to the City's flood risk guidelines, resulting in the opportunity for the Broadway buildings to have elevated porches that provide compelling retail premises, particularly for food and beverage uses, with heightened sight lines, robust outdoor seating and display areas. These porches, raised approximately 18 inches above sidewalk level, will help define clear zones for diners and pedestrians without creating a barrier between the two. Third Street frontage will include one residential building with retail on the ground floor to extend the vibrant Third Street retail corridor before opening up to a new "public square" at the proposed Third Street Park.

The Project will build upon the success of Broad Canal Way in recent years in activating the district and providing access to the Charles River. The Project will extend the ground floor retail and other active uses to the west from the Canal District to the nearby MXD District with a focus on vibrant storefronts and diverse offerings for food and beverage.

Locating residential entries along Potter Street will transform it into a two sided residential street which will be an attractive connection to the Community Center, the Fifth Street promenade, the Sixth Street Park and the Loughrey Walkway

for pedestrians and bicyclists.

**9. Providing active ground floors that animate streets and open spaces, and add to the vitality of Kendall Square.**

The Project is designed to enhance the public pedestrian usage of the sidewalks and create a sense of continuity by providing an interesting and active presence at street level. Over the last 20 years, Kendall Square has transformed from an industrial area to one with successful ground floor amenity and service retail along Third Street, Main Street and Binney Street, as well as along One Broadway, Broad Canal Way and Kendall Street east of Third Street. In addition, there are a number of planned cultural facilities in the area, including the Foundry and the MIT Museum, that will add additional texture to the resident and visitor experiences. The ground floor and public realm at the Project is an opportunity to further advance this vision. MIT will build upon this activation by creating a ground floor environment that is inclusive, innovative, extends hours of operation and supports local and independent concepts to create a destination that resonates with the Cambridge community.

**10. Fostering a spirit of inclusiveness and diversity particularly in the planning and programming of Open Space, Active Space, Innovation Space, and Community Space**

**(in accordance with the requirements set forth below) to draw users and visitors from across the city.**

The Project's planning efforts have been informed not only by learning from prior experiences, but also a sharpened focus on equity and diversity. While the Project reflects this focus, MIT is continuing to look for opportunities to more fully integrate these values into affordable housing, the Community Center, retail, employment opportunities and open space. Alongside the Cambridge community, MIT will closely examine the role and mission of the Community Center, including the Job Connector, and its connection to sustainability, open space, innovation and commercial activities. The Project's housing will be carefully programmed to increase racial equity and inclusion.

MIT is planning the Project in a holistic way to ensure strong connectivity and vibrancy with a focus on inclusion. The project team will host a series of community workshops in late 2020 into 2021 regarding the community center, open space, retail, housing and employment to gather input on how best to create a truly equitable and inclusive environment.

**11. Enhancing the architectural diversity and aesthetic qualities of the PUD-7 District to harness the spirit of innovation and creativity in Kendall Square and reinforces a Cambridge**

**sense of place.**

The Project will be designed to human scale by means of building envelope, material selection, public accessibility at lower levels, massing stepbacks, fenestration patterns and construction details. They will also be specific to context, climate and orientation.

For each use, the Project will include a range of different building types, with differing styles, colors and materials. The buildings have also been situated and designed to enhance the community and public spaces. For example, active ground floor uses, including retail, entertainment and Innovation Space, will be located on multiple sides of the proposed new buildings. This will enhance the diversity of spaces within each of the buildings, as well as the relationship between each of the buildings, the public realm, and the surrounding neighborhood.

This master plan provides a framework for site organization, massing, programming and impacts of the Project. MIT will continue to work with the community on open space design, community center programming, inclusivity, housing equity and employment readiness training.

The architectural character will support these objectives by:

- providing diversity and variety within a

community of buildings;

- relating to human scale and address scale at the pedestrian, building and district level; and
- responding to surrounding context off site.

Additional details demonstrating the Project's architectural diversity and aesthetic qualities will be established in the Project's Design Guidelines to be approved in connection with the Special Permit process.

**12. Promoting best practices for environmental sustainability in district-wide planning and in establishing design objectives for individual buildings and sites, in accordance with the City's ongoing planning efforts, including the Net Zero Action Plan, and Climate Change Preparedness and Resiliency Plan.**

Environmental sustainability is a foundational component of the Project and MIT will be a leader in sustainability in this Project. There are several key strategies that establish the Project as an exemplar of sustainable master plan design. As mentioned previously, the Project will include a large urban district-scale blackwater treatment plant to reuse all eligible building water on-site. Additionally, MIT intends for the residential buildings (40% of the development, approximately 1,400 units) to be all-electric, and therefore, will have zero on-site emissions to support a net-zero carbon future. The

Project also establishes a pathway for getting to all-electric commercial buildings and will evaluate each building against this pathway as it approaches the design review phase.

Among other sustainability design elements, all buildings will be LEED Gold certifiable. In addition to sustainability design elements, the Project includes resiliency design elements such as raising the finished grade of the entire Development Parcel to the 2070 100-year flood elevation.

Collectively, these exemplary strategies distinguish the Project from regional peers and build on sustainable commitments for site, transit, resiliency, and healthy building design.

**13. Demonstrating a commitment to implementing a Transportation Demand Management and Mitigation Program consistent with the reduced parking mandated in this PUD zoning and the capacity limitations of the transportation network that serves the Kendall Square area, including roadways and public transportation systems. In approving a Final Development Plan, the Planning Board shall refer to Article 18.000 and Section 19.20 of this Zoning Ordinance, applicable PUD-7 Guidelines and Principles, and other City transportation planning efforts (including the Kendall Square Mobility Task Force) and may require measures to be linked**

**to milestones, thresholds or performance standards connected to the scale and pace of development within the PUD.**

MIT will support a program of transportation demand management (TDM) actions to reduce automobile trips generated by the Project. The goal of the Project's TDM plan is to reduce the use of SOVs by encouraging carpooling and vanpooling, bicycling, walking, and increased use of the area's public transportation system by employees and visitors. MIT submitted a draft TDM plan to the City on January 20, 2021. MIT will work with tenants of the new buildings to join the Charles River Transportation Management Association and implement effective TDM strategies that will be incorporated in a PTDM Plan to be approved by the City's PTDM Officer.

In 2019, the Kendall Square Association in partnership with the City of Cambridge and the Cambridge Redevelopment Authority released the Transport Kendall Report: Actions to Transform Mobility. This report builds on the work of the Kendall Square Mobility Task Force and outlines priority transportation projects for the Kendall Square area. The focus areas include the Grand Junction, MBTA Red Line, and Bus Service. As part of the PUD-7 Zoning, MIT has committed to \$8.5 million transportation improvements in Kendall Square, which may be used for KSMTF priorities at the City's discretion, and another \$8.5 million

for design and construction of the Grand Junction Path.

Changes in the surrounding public streets (Binney, Third and Broadway) that result from a CRA/City-led process will be considered as part of the overall mitigation for the Project.

***In addition to satisfying the special permit criteria of Section 13.91.4, the Project also otherwise complies with the limitations and requirements of the PUD-7 zoning, as more particularly set forth below:***

**13.92 Uses Allowed in the PUD-7 District**

The Project will contain the uses that are compliant with the uses permitted in Section 13.92 of the CZO. Specifically, the uses in Buildings R1, R2, R3 and R4 will contain multi-family residential use consistent with the uses listed in Section 4.31.g, and, potentially, a limited amount of hotel use consistent with the uses listed in Section 4.31.i.2. Buildings C1, C2, C3 and C4 will contain office and laboratory uses consistent with the uses set forth in Section 4.34. All of the proposed buildings will contain first floor active uses including retail and/or restaurant uses consistent with the provisions of the Section 4.35 of the CZO. Finally, the Community Center will contain uses that are consistent with the uses set forth in Section 4.33.e.2.

### 13.93 District Dimensional Regulations<sup>1</sup>

The new buildings, once constructed, will not cause the GFA in PUD-7 to exceed 2,820,000 SF (which excludes the GFA of the US DOT Volpe Exchange Project)<sup>2</sup>.

As set forth more particularly on the Dimensional Form, the proposed buildings will contain a total of 3,004,900 SF of aggregate GFA (before application of specifically permitted exemptions):

- Building C1 will contain approximately 467,700 SF of GFA;
- Building C2 will contain approximately 491,700 SF of GFA;
- Building C3 will contain approximately 474,100 SF of GFA;
- Building C4 will contain approximately 365,400 SF of GFA;
- Building R1 will contain approximately 272,000 SF of GFA;
- Building R2 will contain approximately 271,000 SF of GFA;
- Building R3 will contain approximately 411,000 SF of GFA;
- Building R4 will contain approximately 232,000 SF of GFA; and

- Community Center will contain approximately 20,000 SF of GFA.

The above total floor area of the Project is subject to a number of exemptions as specified below, including approximately 83,663 SF of Innovation Lab/Office Space, approximately 81,250 SF of Active Space, and 20,000 SF of Community Space. With these exclusions, the adjusted total proposed GFA for the Project will measure approximately 2,820,000 SF.

- **Retail/Active Use Exemption.** The Dimensional Table indicates that the Project will contain approximately 100,000 SF of GFA associated with retail and active use space. MIT has made the conservative assumption that approximately 82% of that retail and active use space will be exempt from GFA as those spaces will meet the space limitations set forth in Section 13.96.1. This exemption assumes the 25,000 SF entertainment venue situated adjacent to Broad Canal Way and the Sixth Street Park is consistent with the purposes and objectives of the PUD-7 Zoning and the PUD-7 Guidelines and Principles and, therefore, is also subject to the exemption. The total exemption that MIT has applied to the Project for retail and active use space measures 81,250 SF. This exemption is well below the maximum exemption that MIT could apply to retail and active use space of 161,000

---

<sup>1</sup> As the Project is a phased project that will take place over a period of years, the Applicant acknowledges that certain aspects of the development may change from time to time based on a number of key considerations, including the market demands, which could impact the height and massing of the buildings. In order to maintain flexibility in the overall Development Plan, the Applicant desires to allow for increases in GFA and height of a building by up to 10% by the Planning Board (and a corresponding decrease in size and massing to other buildings) during the individual building design review process and that changes that increase a building's height and/or GFA by more than 10% shall be permitted by a minor amendment granted by the Planning Board.

<sup>2</sup> This aggregate GFA limitation assumes that the parcel owned by the Cambridge Redevelopment Authority identified in Section 13.93.1(a) is not part of the Development Parcel. In the event that such parcel is later added to the Development Parcel, MIT reserves the right to include an additional 30,000 SF of GFA to the overall development plan.



SF (i.e., 5% of the total 3,220,000 SF GFA) allowed in the PUD-7 District.

- **Innovation Office Space Exemption.** Pursuant to Section 13.93.1(b)(3), the Project exempts 83,663 SF of Innovation Office Space. As indicated in the Dimensional Table, the Project will include 167,326 SF of Innovation Office Space (totaling 10% of the office and laboratory GFA of the Project). The above-referenced Section allows for an exemption of up to 50% of the planned Innovation Office Space up to a maximum of 5% of the non-residential GFA permitted within the PUD-7 District. As the non-residential and non-exempt GFA of the Project totals 1,692,000 SF, the total allowable exemption would total 84,600 SF. As a result, the exemption of 83,663 SF complies with the provisions of the PUD-7 Zoning.
- **Community Space Exemption.** Pursuant to Section 13.93.1(b)(5), the Community Center satisfies the requirements of Section 13.96.5 for Community Space (as indicated more specifically in this Section) and, as a result, the 20,000 SF attributable to the Community Center is exempt from the overall GFA limitation.

### **13.93.1(c) Required Residential Development**

As indicated above, the GFA of the Project after the application of permissible exemptions totals 2,820,000 SF. The Project contains multi-family GFA totaling 1,128,000 SF, which equals 40% of the total non-exempt GFA contained in the development, thereby satisfying the requirements of Section 13.93.1(c). Presently, MIT does not plan to include any hotel use within the Project, but MIT does desire to maintain the flexibility to include limited hotel use in the future by minor amendment to the development, subject to complying with the requirements of Section 13.93.1(c)(2).

As indicated elsewhere in the filing, the Project will contain Affordable Units equal to 20% of all of the Net Dwelling Unit Area of the Project consistent with the requirements of Section 13.93.1(c)(4) and Section 11.203.

Finally, as otherwise set forth in this Application and in the Development Plan, MIT will develop the residential uses on a schedule that meets the objectives of the PUD-7 Zoning and will otherwise meet the phasing requirements and limitations of Section 13.93.1(c)(3).

### **13.93.2 Minimum Development Parcel Size**

As indicated on the plan entitled **Figure A2: Development Parcel** and on the Dimensional Table, the Project contains a single Development Parcel containing 455,750 SF in two non-contiguous parcels of real estate, which is permitted by Section 13.93.2(b). This lot area exceeds the minimum 25,000 SF lot size required for Development Parcels in the PUD-7.

### **13.93.4 Maximum Building Height**

As indicated on **Figure B3: Conceptual Project Heights**, the heights of the buildings in the Project comply with the maximum building height limitations set forth in Section 13.93.4(a)-(c). Specifically, Buildings R1, R2, C1, C2 and C3 have proposed heights of 250 feet, consistent with the provisions and limitations of Section 13.93.4(a). Additionally, Building C4, which is situated on the northern portion of the Site, is limited to 170 feet in height, consistent with the commercial building height limitation for that portion of the PUD-7 District set forth in Section 13.93.4(b). Building R4, which is a mixed-use residential building, has a height of 250 feet, which is permitted under Section 13.93.4(b) and the floor plates meet the 15,000 SF limitation for the portions of said building exceeding 170 feet in height. Finally, Building R3 has a proposed height of 382 feet. As a residential

building situated south of Potter Street, Building R3 may exceed 300 feet in height, and measure up to 500 feet in height, pursuant to Section 13.93.4(c) (1) and (3). Building R3 has also been planned so that the floor plates above 250 feet do not exceed 15,000 SF in size in full compliance with Section 13.93.4(c)(2). Additional variation in heights is desirable and may be explored through the Design Review process, as noted above.

### **13.93.5 Other Dimensional Requirements**

As indicated throughout this Application and on **Figure E7: Sixth Street Park Conceptual Programming – Idea 1** and **Figure E8: Sixth Street Park Conceptual Programming – Idea 2**, Buildings C3 and R3 are set back approximately 50 feet from the existing Loughrey Walkway, which is in excess of the 10 feet required in Section 13.93.5.

### **13.94 Open Space**

As noted on the Dimensional Table and on **Figure E3: Open Space Plan - Publicly-Beneficial Open Space**, the Project contains approximately 156,944 SF of Publicly-Beneficial Open Space. Section 13.94(a) requires that the Project contain a minimum of 115,406 SF of Publicly Beneficial Open Space, which equals 25% of the total land area in PUD-7 (455,570 SF) which includes the CRA Parcel (5,889 SF)<sup>1</sup>. In addition, as indicated on **Figure E4: Open Space Plan – Permanently Guaranteed**

---

<sup>1</sup> Section 13.94(a) requires that the Site contain Publicly Beneficial Open Space that equals at least 25% of the land area of the properties in the PUD-7 District less the lot area of the Government Owned Lot.

**Open Space**, the Project will contain two acres of Permanently Guaranteed Open Space as required by Section 13.94(d). A portion of the Publicly-Beneficial Open Space and the Permanently Guaranteed Open Space is comprised of the free-standing Community Center as permitted by Section 13.94(b). All of the Permanently Guaranteed Open Space will be privately owned and maintained, but will be permanently guaranteed for public use by means of a recorded covenant, easement, conservation restriction or similar legal instrument.

### **13.95 Parking and Loading Requirements**

As indicated in the TIS and this Application, the Project will comply fully with the Parking Requirements of the PUD-7. The total parking for the Project, based on a shared parking arrangement, will contain 1,876 parking spaces, which is based on the use breakdown described in the TIS. Based on the mix of uses proposed for the Project, the Project could contain up to 2,300 accessory parking spaces. As a result, the Project complies with the maximum parking limitations of Section 13.95.4.

Limited on-street parking and drop off areas will be allowed to support retailers and provide access to those who, due to age or ability, may be unable to walk or bike to the Project. The proposed plan can potentially accommodate up to 75 on-street

spaces for short-term vehicle parking or active curb uses (not including Binney Street, Third Street or Broadway). MIT will make final adjustments at the Design Review phase for each building/open space. The combined number of vehicle parking spaces, including the Project's short-term on-street parking and below-grade garages, will not exceed the proposed 1,876.

Based on the above and the shared parking arrangement, MIT will seek the Planning Board's approval in the Final Development Plan for the Project of a waiver of the minimum parking requirements of the CZO and the shared parking arrangement as permitted pursuant to Section 13.95.3.

In addition, consistent with the requirements of Section 13.96.5(a), most of the Project's parking will be located in two underground garages: one situated north of Munroe Street containing approximately 420 spaces and one situated south of Potter Street containing approximately 1,456 spaces, as indicated on **Figure C2: Parking Facilities – P1 Plan**, **Figure C3: Parking Facilities – P2 Plan** and **Figure C4: Parking Facilities – P3 Plan**. The Project is designed to accommodate short-term parking or active curb spaces on the surface, distributed throughout the Site, to service retail and other ground-floor uses. Short-term street parking spaces provided will be subtracted from the amount provided in the below grade

garages.

### **13.95.8 Loading**

The Final Development Plan will specify the loading facilities serving each building within the Project as required by Section 13.95.8.

### **13.95.9 Bicycle Parking**

The Project will provide long-term and short-term bicycle parking both in amount and in location as is required by Section 6.100. **Figure C1: Vehicular and Bicycle Parking Access Plan** indicates that there will be 1,862 long-term bicycle parking spaces and 302 short-term bicycle spaces. As indicated below, based on the distribution of the uses in the Project, the amount of bicycle parking provided in the Project satisfies the minimum parking requirements set forth in Section 6.100.

## **13.96 Special Requirements, Conditions and Standards Applicable to Certain Development Authorized by the Planning Board in the PUD-7 District**

### **13.96.1 Active Uses and Pedestrian Activity**

As indicated by **Figure F2: Ground Floor Activation – Proposed** and **Figures F3 and F4 Conceptual Activation Plans**, the Project will contain

significant retail and active use space on the first floors of the buildings for uses set forth in Sections 13.92.4 and 13.96.1. All of the Active Space will be accessible by one or more entrance(s) providing direct access from sidewalks or open space and will not require passage through any non-Active Space. As indicated on the above-referenced plans, the building frontages directly abutting Broadway, Third Street and Binney Street will contain Active Space totaling more than 65% of the building frontage for each building and have a depth in each instance in excess of 20 feet, consistent with the requirements for minimum Active Space contained in Section 13.96.1(b). Additionally, the retail spaces are designed so as to ensure that the Project will provide at least 25% of the Required Active Use, as defined in Section 13.96.1(b)(1), for Independent Retail Operators that occupy no more than 3,000 SF of floor area as required by Section 13.96.1(b)(2) (provided grocery, market or pharmacy uses of up to 10,000 SF may be included).

Finally, as required by Section 13.96.1(d), MIT has retained an employee on staff that has substantial retail experience in urban markets and has been instrumental in attracting retailers to Kendall Square in connection with the build-out and lease up of the Kendall Square Initiative. MIT has also hired Graffito SP as a retail consultant as indicated by the tenancing and programming recommendation letter submitted with this Application. Based

on the above, MIT has fully complied with the requirements of Section 13.96.1(d).

### **13.96.2 Rooftop Mechanical Equipment Noise Mitigation**

The buildings and the rooftop mechanical equipment used in connection with the use and operation of the buildings will be sized, installed and operated utilizing best available and feasible practices. MIT will comply with the requirements of Section 13.96.2(a) and (b) at the times required for such filings to be submitted to the City during the development. Prior to obtaining a certificate of occupancy for each new commercial building, MIT will submit an acoustical report prepared by a professional acoustical engineer to confirm that the noise or vibration emanating from the equipment situated on the rooftops of such buildings will comply with the requirements of both the MassDEP noise policy (310 CMR 7.10) and the City's Noise Control Ordinance (Chapter 8.16 of the Cambridge, Massachusetts Municipal Code), . In addition, prior to obtaining a building permit to add any new equipment having a capacity greater than five horsepower to the rooftop of any building, MIT will submit a narrative report with appropriate field measurements, prepared by a professional acoustical engineer in order to demonstrate that there will be continued compliance with all applicable noise requirements.

### **13.96.3 Innovation Space**

The Project complies with the requirements of Section 13.96.3(a)(1) as it will contain 167,326 SF of Innovation Office Space, which totals 10% of the non-exempt office and laboratory GFA of the Project. This is more than twice the minimum amount of Innovation Office Space required by PUD-7 Zoning. MIT will ensure that the Innovation Office Space satisfies the requirements of Sections 13.96.3(a)(2) and 13.96.3(b)(1)-(4) as it develops and leases up the same.

### **13.96.4 Sustainability**

As indicated in the Sustainability narrative included with this Application and as stated elsewhere herein, MIT has designed the buildings to comply with the provisions of Section 22.20. The Project employs a comprehensive approach to achieve sustainability that involves international best practices in establishing a new benchmark in urban sustainable development, community, and innovative solutions to local and regional environmental design issues. MIT is committed to adopting the next generation of sustainable building benchmarking.

As required by Section 13.96.4(a), MIT will design the buildings in the Project to incorporate an integrated design approach and incorporate best practices for meeting sustainability in the following areas: Energy and Emissions, Steam; Urban Site

and Landscaping; Water Management; Cool Roofs; and Monitoring.

### **13.96.5 Community Space**

The Project's 20,000 SF Community Center satisfies the requirements of Section 13.96.5. This important space will be programmed for public recreation, social services and educational programs and will serve the residents of the neighborhoods of East Cambridge, Wellington-Harrington and The Port as well as the broader Cambridge community. The Community Center will complement other public and community services available (or that will be available) at the Foundry, East End House and others.

### **13.96.6 Funding Contributions**

In compliance with the provisions of 13.96.6(a), the Applicant will contribute funds to the Kendall Square Fund prior to the issuance of Certificates of Occupancy for each building containing non-exempt non-residential GFA at a rate equal to \$10.00 per square foot of such non-exempt non-residential GFA contained in such building. Any amounts paid to the City pursuant to Section 13.96.6(a), shall be allocated equally by the City between transportation improvements and services that benefit the Kendall Square neighborhood and residents in adjacent neighborhoods and for the Community Benefits Fund.

In addition, MIT will pay such amounts as are required under Section 11.202 for any building or portion thereof within the Project that qualifies as an Incentive Project, as required by Section 13.96.6(b).

### **13.98 Letter of Commitment**

As more specifically set forth in Section 2.E of this Application, MIT has complied with all of the requirements of the Letter of Commitment dated October 23, 2017.

### **D. Compliance with Article 19 Project Review Special Permit Criteria (Section 19.25)**

Section 19.25 provides that the Planning Board must make certain findings in order to grant a Project Review Special Permit under Section 19.20, which findings ensure that new construction or changes of use in existing buildings are consistent with the City's urban design objectives and do not impose substantial adverse impacts on City traffic. As shown by the following analysis, the Project is consistent with the City's urban design objectives and does not impose substantial adverse impacts on City traffic. In granting a special permit under Article 19.20, the Planning Board shall make the following findings:

**19.25.1 – Traffic Impact Findings. Where a Traffic Study is required as set forth in Section 19.24(3) above the Planning Board shall grant the 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 below. In areas where the Planning Board determines that area-specific traffic guidelines have been established in the Ordinance, the Board recognizes written agreements between project proponents and the City dealing with transportation mitigation strategies.**

Based on the TIS analysis, the Project has been evaluated within the context of the Planning Board Criteria to determine if the Project has any adverse transportation impacts. Exceeding one or more the Criteria is indicative of a potentially adverse impact on the City's transportation network. However, the Planning Board may consider mitigation efforts, their anticipated effectiveness, and other information that identifies a reduction in adverse transportation impacts.

The Planning Board Criteria consider the Project's vehicular trip generation, impact to intersection level of service and queuing, as well as increase of volume on residential streets. In addition, pedestrian and bicycle conditions are considered. A

discussion of the Criteria set forth by the Planning Board is presented in the final section of the TIS, and the Planning Board Criteria Performance Summary is presented below.

The Project has an estimated 113 exceedances out of 653 data entries. The top three groups of exceedances pertain to trip generation, pedestrian impacts, and vehicular level of service impacts. A summary of the proposed mitigation is provided in Section 16 of the TIS.

**19.25.11 - Traffic Impact Indicators. In determining whether a proposal has substantial adverse impacts on city traffic, the Planning Board shall apply the following indicators. When one or more of the indicators is exceeded, it will be indicative of potentially substantial adverse impact on city traffic. In making its findings, however, the Planning Board shall consider the mitigation efforts proposed, their anticipated effectiveness, and other supplemental information that identifies circumstances or actions that will result in a reduction in adverse traffic impacts. Such efforts and actions may include, but are not limited to, transportation demand management plans; roadway, bicycle and pedestrian facilities improvements; measures to reduce traffic on residential streets; and measures undertaken to improve safety for pedestrians and vehicles, particularly at intersections identified in the**

**Traffic Study as having a history of high crash rates. The indicators are: (1) Project vehicle trip generation weekdays and weekends for a 24-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. The precise numerical values that will be deemed to indicate potentially substantial adverse impact for each of these indicators shall be adopted from time to time by the Planning Board in consultation with the TPTD, published and made available to all applicants.**

MIT will support a program of transportation demand management (TDM) actions to reduce automobile trips generated by the Project. The goal of the Project's TDM plan is to reduce the use of SOVs by encouraging carpooling and vanpooling, bicycling, walking, and increased use of the area's public transportation system by employees and visitors. MIT submitted a draft TDM plan to the City on January 20, 2021. MIT will work with tenants of the new buildings to join the Charles River Transportation Management Association and implement effective TDM strategies that will be incorporated in a PTDM Plan to be approved by the City's PTDM Officer.

MIT is committing to the following transportation mitigation measures to support the Project:

- Construction of Fifth Street between Binney Street and Broadway;
- Redesign and signalization of the intersection of Third Street at Potter Street;
- Construction of an exclusive left-turn lane in the eastbound direction at the intersection of Broadway and Green Garage in order to facilitate left turns into the Project, directly to the below-grade parking entrance at Building C2. This left-turn pocket would allow project trips to enter the Project at the perimeter, and thereby limit circulation and impacts to the intersection of Broadway and Third Street;
- Installation of two (2) BlueBike Stations, preliminarily proposed to be located along Broadway at the new Third Street Park and at the Community Center; and
- Development of a Parking and Transportation Demand Management (PTDM) Plan.

MIT will continue to work with TP&T to finalize the list of appropriate transportation mitigation measures, including separated bicycle facilities adjacent to the Site.



**19.25.2 Urban Design Findings. The Planning Board shall grant the special permit only if it finds that the project is consistent with the urban design objectives of the city as set forth in Section 19.30. In making that determination the Board may be guided by or make reference to urban design guidelines or planning reports that may have been developed for specific areas of the city and shall apply the standards herein contained in a reasonable manner to nonprofit religious and educational organizations in light of the special circumstances applicable to nonprofit religious and educational activities.**

**a. 19.31 – New projects should be responsive to the existing or anticipated pattern of development.**

The overarching goal of the Project is to create a welcoming, connected innovation environment, establishing a vibrant, diverse, inclusive, mixed-use district that provides opportunities for shared discovery, community and collaboration.

The Project is conceived as an interconnected whole made up of streets, parks, urban plazas and passageways which together constitute the civic framework of the site and connect the site to the surrounding neighborhoods. Integral to weaving the Project into the fabric of Cambridge is a diverse, connected network of open spaces, strategically located to draw the public into and

through what will be a new swatch of that fabric. Where there is currently an isolated parcel, there will be an extension of the existing fabric, in which the edges between existing neighborhoods and new development are intentionally blurred.

Key to establishing connectivity to both the existing network of streets and to the scale of the surrounding neighborhood is the idea of breaking up the larger block of the existing Site. By introducing Fifth Street to connect Broadway to Binney Street, the plan re-establishes both a pedestrian scale and an urban pathway that has not existed for 50 years. By extending Broad Canal Way deeply into the site as a multi-modal, pedestrian-focused street, the Project gives emphasis to the Broad Canal and increases the sense of connectivity to the Charles River.

The components of streets provide opportunities to support local businesses through retail frontage and spillover, while creating spaces for relaxation and gathering and weaving the urban circulation network through the fabric of the city.

In an effort to be consistent with the existing and planned uses in Kendall Square and improve connectivity, certain uses included in the Project are located immediately adjacent to similar existing uses. For example, the adjacent uses to the east include two residential buildings at 303 Third Street and 350 Third Street. The Project has located

residential uses nearest to these two buildings in order to strengthen the area as a residential district. Immediately to the west and south is the “MXD District”, which is characterized by high-density commercial buildings. To integrate with the existing built environment and development patterns, Building R1 is located along the existing commercial corridor of Third Street that includes buildings of varying heights, including some that are very tall. The Project has located the low-rise Community Center adjacent to 303 Third Street to extend the planned open space and create a centrally located community benefit. Third Street Park will be located at the corner of Third Street and Broadway and will be a significant new public open space for the residents of 303 Third Street and 350 Third Street, as well as residents from the neighborhoods of Cambridge, to enjoy. The Project has located its high-density commercial buildings along Broadway as an extension of the existing uses in the MXD District. To the north is existing commercial development along Binney Street with the East Cambridge residential neighborhood beyond. Along Binney Street, the Project locates one mixed-use commercial building, of size and scale consistent with others along the corridor, and one residential building to reflect the transitional nature of this street.

**b. 19.32 – Development should be pedestrian and bicycle friendly, with a positive**

**relationship to its surroundings.**

The Project will embrace the unique opportunity to knit the City together by providing north-south connections from the East Cambridge neighborhood to Kendall Square, and east-west connections to the Charles River. Sidewalks will be provided along the entire site with safe pedestrian crossings at all internal and adjacent intersections.

The Project proposes to locate primary building entries along major streets (Broadway, Binney and Potter Streets) with service access provided from secondary streets. Largely transparent, active places will be located at the ground floor (including retail, restaurants, and other active uses), infusing significant street-level activity throughout the site. This active ground floor will contribute to the vibrancy of the district and foster a sense of security throughout the day and into the night.

Pedestrian circulation paths will follow sidewalks and crosswalks and lead to general entry locations for the proposed buildings. Significant planned pedestrian connections include those crossing Binney Street to the adjacent neighborhood, multiple connections across Third Street to the existing retail and commercial buildings, and connections on the south, crossing Broadway to Main Street and MIT’s South of Main campus as well as to the four Kendall/MIT MBTA Red Line headhouses. The pedestrian link through

the Marriott hotel will remain and at-grade connections to it strengthened. On the west side of the Project, the Loughrey Walkway will remain an important pedestrian pathway along the edge of the site.

Bicycle pathways through and around the site will connect to the East Cambridge bike network and will establish connections to public transit lines and to Boston and Somerville. A combination of current and planned bike facilities – including bike lanes, cycle tracks and multi-use paths – will facilitate these connections. Secondary streets internal to the site will utilize shared vehicular and bicycle lanes. Buildings will house indoor bicycle storage in compliance with City requirements and short-term outdoor bike parking areas will be located throughout the Project. The placement of outdoor bike racks will meet zoning requirements regarding distance from entries and offsets from other racks. Existing BlueBike Stations will be supplemented by two additional, new BlueBike docking stations, preliminarily proposed to be located along Broadway at the new Third Street Park and near the Community Center.

The Project is planned to include two underground garages: a north garage between Binney and Munroe Streets and a south garage between Potter Street and Broadway. Parking entrances are limited to four points within the Project (excluding the New Volpe Center), helping to reduce cross-

circulation between pedestrians and vehicles. One garage entrance on Munroe Street is planned for the north garage and two garage entrances on Potter Street, and one garage entrance on Broadway are proposed for the south garage. The opportunity exists to introduce limited active curbs and on-street parking along the proposed new streets, though locations have not been finalized. On-street parking currently exists as either public (Munroe Street) or private (west and south sides of 303 Third Residences). The Project does not propose to eliminate any of those existing on-street spaces.

**c. 19.33 - The building and site design should mitigate adverse environmental impacts of a development upon its neighbors.**

Overarching Project goals include the desire to increase connectivity between the Site and the surrounding city and to improve the quality, vibrancy, diversity and inclusiveness of the public realm through a network of open space. At the same time, future development must minimize adverse impacts on environmental comfort. The following describes strategies to minimize or mitigate any potentially adverse impacts of the Project.

Project buildings will be designed to meet the requirements of the CityNoise Control Ordinance (General Ordinance No. 8.16). Primary elements

that contribute to sound generation within an urban development project include mechanical equipment noise, building service and loading activities, and construction activities.

The future design of individual buildings will locate major mechanical equipment within enclosed roof-top mechanical penthouses and lower level mechanical service rooms, and appropriate sound attenuation measures will be incorporated to minimize the acoustic impact of this equipment.

Loading and service areas are planned to be located off-street, at ground-level, internal to building footprints. Loading bays will not impinge upon adjacent sidewalk and roadway rights-of-way and service traffic will be managed to avoid adverse impact on local traffic circulation.

Construction activities associated with the individual buildings and site infrastructure (underground utilities, roadways, and public realm landscape and hardscape features) will temporarily create an increase in noise levels emanating from the Project. Those activities that are likely to generate the highest levels of construction noise include demolition, excavation and foundations. Primary noise-generating construction activities will be limited to daytime hours. The various construction projects (both building- and infrastructure-related) will develop a series of mitigation measures in collaboration

with City officials.

The shadow study evaluates shadow impacts at the specific annual markers of 9:00 am, 12:00 pm and 3:00 pm on the Spring / Fall Equinox and on the Summer Solstice. The net new shadow falls on both public realm ground plane and on rooftops. Based on the shadow studies, the Project will create a degree of net new shadow consistent with an urban development project of this magnitude. Significantly, the shadow study supports the placement of a major civic park at the corner of Third Street and Broadway. In addition to being the most public corner of the Development Parcel, existing urban form and solar orientation combine to maximize the hours of direct sunlight on a public park at this location.

Urban street, sidewalk, pathway and landscape site lighting is critical to providing a sense of comfort, safety and security. A consistent, cohesive approach to illumination and fixture selection will contribute to the connectivity of the open space network within the public realm. Similarly, the interior illumination of active retail, dining and entertainment venues will increase transparency into those public uses, blur the edge between indoor and outdoor space, and heighten the sense of security and community identity well into the evening. Future building and site design must address these positive attributes while also mitigating light spill, avoiding light pollution, and

conforming to applicable night-sky ordinances.

A quantitative pedestrian-level wind study of the Project build-out was conducted by RWDI utilizing wind-tunnel analysis. The assessment focused on critical pedestrian areas, including building entrances and public sidewalks. Wind tunnel analysis of the proposed building massing and landscaping indicated that wind conditions at grade-level on and around the Site are generally predicted to be similar to the existing wind conditions and suitable for the intended uses.

The analysis included approximately 150 receptor locations. On an annual basis, no dangerous mean wind speeds were detected at any location and wind speeds rated comfortable for sitting, standing or walking are expected at all locations with the exception of a few building corners. Wind speeds at most building entrances are expected to be comfortable for sitting or standing on an annual basis, which is suitable for the intended use. Wind speeds near the entrance of Building C3 are expected to be uncomfortable, which is considered higher than desired for the intended use. This issue can be mitigated through design strategies including canopies or structures or by locating entrances further from the building corners or recessing them into building façades.

Wind speeds are predicted to meet the effective gust criterion on an annual basis, with the exception

of the southwest corner of the US DOT Volpe Exchange Project near the service area. Seasonal exceedance of effective gust criteria is predicted at a few building corners during the winter. Minor revisions to the massing of the building corners can mitigate this effect.

Urban heat island effects are to be mitigated with a hybrid approach. All new buildings will employ high albedo, green roof, blue roof, or solar panels, as applicable, to reflect heat and mitigate urban heat island effects in accordance with PUD-7 Zoning. Site hardscape materials will be chosen for high SR/SRI values and permeability attributes. Outdoor spaces with vegetation such as canopy trees, pergolas, trellises, green walls, and other measures will be considered as means to reduce urban heat gain.

A development proposal of the scale envisioned by the Project will inevitably have an impact on the existing urban tree inventory. While extensive measures will be taken to ensure the integration and preservation of healthy, mature existing trees (particularly within the new Third Street Park and the existing Loughrey Walkway), the planned streets, open spaces and buildings will require the removal of approximately 132 existing trees. These removals will be offset by the planting of approximately 214 new trees as part of the Project, resulting in a net gain of 82 trees on the property itself. The future tree canopy will be diverse and

resilient, and will provide long-term advantages in terms of greater carbon sequestration, stormwater management and air quality.

To respond to climate change and prepare for projected increases in precipitation, the Project embraces resilient design strategies including elevating mission-critical equipment, residential units, and all building ground floors above the projected 2070 100-year flood elevation; incorporating stormwater mitigation strategies; and providing standby power for mission critical equipment.

**d. 19.34 – Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system.**

An integrative sustainable design process will be utilized in future building design to ensure that best practices are employed in the design of exterior envelopes, building energy- and water-use systems, site planting, and site stormwater management systems.

As required under the PUD-7 Zoning, all proposed buildings within the Project must achieve at least LEED Gold certification. Construction practices and materials, interior and exterior lighting design, and daylight maximization will all contribute to the achievement of LEED Gold certification.

The Project has been master planned to maximize energy efficiency and support a path for a net-zero carbon future. The focus throughout the design process for individual buildings will be to drive down projected emissions, both in the manufacture of construction elements and in the long-term operation of the buildings. Residential buildings (40% of the development) will be all-electric, generating zero on-site emissions from fossil fuel, and commercial buildings will be designed with a path to electrification that would integrate with the long-term vision for a low-carbon power grid. Load sharing between complementary building programs will be explored to maximize heat exchange and optimize energy performance across the greater development site. Furthermore, the proposed on-site rooftop photovoltaic (PV) arrays, supplemented by procurement of off-site renewable energy, can offset the Project's electricity use.

The Project will include one of only three blackwater treatment systems in New England, enabling 100% of all eligible building water to be treated and re-used on site, thereby reducing water demands and removing up to 250,000 gallons per day from the City's sanitary sewer system. The collection, treatment, and reuse of all available greywater and blackwater in three phased district blackwater treatment plants will minimize potable water consumption, improve self-sufficiency of the

district, and mitigate the impact of the Project on regional sewer systems.

To respond to the changing climate and prepare for projected increases in precipitation, the Project will embrace resilient design strategies including elevating mission-critical equipment, residential units, and all building ground floors above the projected 2070 100-year flood elevation; incorporating stormwater mitigation strategies; and providing standby power for mission critical equipment. To minimize risks associated with projected temperature increases, the Project will aim to reduce urban heat island effect through high-albedo roofing and paving, and minimize cooling loads by insulating and shading building facades.

**e. 19.35 – New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.**

The introduction of active ground floor uses on multiple sides of the proposed new buildings, such as retail, entertainment and maker spaces, will energize each block, engage with the surrounding neighborhood and be specific to Kendall Square and East Cambridge. By planning for a diverse mix of residential, lab and office, retail and community uses, the Project will become an integral part of the community.

The Project is consistent with the Special Requirements of Section 13.96.3 which requires an area equal to at least 5% of the office space contained within major new office buildings as Innovation Space, either within the development or in the vicinity, and subject to the area and lease duration limitations set forth in the PUD-7 Zoning. MIT has committed to the inclusion of substantial innovation space dedicated to small business incubators and entrepreneurs, which will encourage local residents to participate in the local innovation economy and foster the cross-disciplinary interaction that has made Kendall Square famous.

The inclusion of approximately 100,000 SF of largely transparent, active places of public accommodation, located at ground level (including retail, restaurants, and other active uses) will infuse significant street-level activity throughout the site and serve to blur the boundary between inside and outside, thereby energizing both. Ground floor retail and active uses are an integral component of the Project. They will contribute to the vibrancy and inclusiveness of the district, will foster a sense of security throughout the day and into the night, and will provide venues for both planned and serendipitous social and intellectual interaction to occur. By focusing on small, local, independent retail businesses, the sense of community and of connectivity to greater

Cambridge will be amplified.

**f. 19.36 – Expansion of the inventory of housing in the city is encouraged.**

Consistent with the PUD-7 Zoning, at least 40% of the GFA included in the Project is devoted to residential use. This equates to approximately 1,400 units of new housing located throughout the four residential buildings. Twenty percent (20%) of the net residential unit square footage of each building will be designated as affordable. The Project also includes 20 middle-income units that will be affordable to eligible renters with incomes of 80% to 120% of the Area Median Income. The Project will include three-bedroom units to encourage families to live in the district. In addition, 5% of the net square footage of the net residential unit square footage is devoted to Innovation Units, defined as 350 to 450 SF, to further assist with affordability and diversity of housing on the site. MIT will work with the City's Housing Division to determine the distribution of inclusionary housing, middle-income, and Innovation Units.

The location of residential parcels between Potter Street and Broad Canal Way and at the corner of Binney and Third Streets will establish relationships of use and scale to neighboring residential buildings, most importantly the 303 Third Street residences.

In terms of scale, urban presence and adjacency to proposed green space, housing will have a major impact within the Project. The inclusion of affordable and middle-income housing will ensure that the residential nature of the Project will relate to an appropriately broad cross-section of the Cambridge population.

**g. 19.37 – Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.**

The Project's highly interconnected and differentiated network of public realm spaces—streets, squares, parks, and courts—constitute the Project's fundamental organizing principle. It maximizes permeability for pedestrians, cyclists, workers, residents and neighbors. It emphasizes both solar exposure and the development of a long-term urban tree canopy throughout.

In direct response to community input, the Third Street Park, a major urban park, will be located at the most public corner of the Project—with streets on three sides, thereby underlining its public accessibility and its location at the southeast corner to maximize its solar exposure. Linear open spaces at the Sixth Street Park, the Fifth Street Promenade and Volpe Art Lawn (proposed as part of the US DOT Volpe Exchange Project)<sup>1</sup> will connect Binney Street to Broadway and East

---

<sup>1</sup> The federal government has proposed that the Volpe Art Lawn will be open to the public. However, although MIT is planning to complement this space, it is important to note that MIT will not control the Volpe Art Lawn or any other space within the Government Owned Land.



Cambridge to Kendall Square. This series of significant open spaces establishes a network that permeates the Site while being intentionally open along the perimeter – at Third Street Park, at Sixth Street Park and at Volpe Art Lawn – thereby creating urban green space that is openly shared with neighboring buildings and streets.

The streets, courts, and squares will support a wide range of outdoor uses, and they will be enlivened by pedestrian-oriented functions located in the ground floors of the surrounding buildings. For example:

- **Third Street Park** will promote communal gathering and individual respite from the activity of the surrounding city. The space is to be designed for flexibility and resiliency, adaptable to the changing needs of future generations while promoting environmental stewardship. Flexible in nature, the space will accommodate large gatherings while still feeling comfortable for smaller groups.
- **Sixth Street Park** is to expand the tree-lined allée of the Loughrey Walkway to create an enhanced park that will host a varied set of recreation and casual leisure spaces that serve the nearby neighborhoods and broader community. It will be designed for programmed activities to serve the needs of the community, such as children’s play spaces, a dog run, or

passive respite.

- The **Broad Canal Way extension** will create a vibrant, pedestrian-oriented destination. Canopy trees and catenary lighting will provide a ceiling for the street, bringing the scale down to pedestrian life. The multi-modal nature of Broad Canal Way will be integral to Third Street Park. As a paved, pedestrian-focused zone immediately south of the retail frontage of Building R1, it will act as both terrace and promenade, blurring the edge between inside and outside.

These spaces will create a varied yet continuous public realm that gives the Project permeability, porosity, strong view corridors, and a palpable and unique place identity. The Project’s streets, squares, and parks will be wholly public in use and character.

**Intentionally Blank Page**



## 4. Consistency with Planning Documents

In the Introductory paragraph to Section 13.91 of the PUD-7 Zoning, the CZO states that:

*“Development should be generally consistent with the policy objectives set forth in the then current Kendall Square (“K2”) Planning Study and Design Guidelines (2013), The Planning and Design Principles established by the City’s Volpe Working Group (2017) and Volpe Site Design Guidelines (2017), collectively, the “PUD-7 Guidelines and Principles.”*

This Section documents the consistency between the Project, as described in this Application and the related graphics, and those documents the PUD-7 Guidelines and Principles. The consistency of the Project with each constituent document comprising the PUD-7 Guidelines is taken, in turn, below.

### 1. Kendall Square Planning Study and Design Guidelines (2013)

As set forth in the Kendall Square Final Report (2013), the vision of the Kendall Square Planning Study was to create “[a] dynamic public realm connecting diverse choices for living, working, learning, and playing to inspire continued success of Cambridge’s sustainable, globally-significant innovation community.” The Final Report indicated that in order to realize that vision, developments in Kendall Square should further the following four goals:

Goal 1: Nurture Kendall’s Innovation Culture;

Goal 2: Create Great Places;

Goal 3: Promote Environmental Sustainability; and

Goal 4: Mix Living, Working, Learning and Playing.

The Project will continue on the successful implementation of these goals in the PUD-7 District by creating a destination for shared discovery, community, and collaboration. The Project promises a diverse, inclusive, and equitable urban environment that connects arts and science, that nurtures and inspires, and that connects people and events.

In addition, the Kendall Square Final Report provided specific recommendations for zoning, transportation and infrastructure. The specific ways in which the Project will implement measures to reach the stated goals and address the above recommendations are set forth below.

#### A. Nurture Kendall’s innovation culture

*Find ways to expand opportunities for Kendall Square’s knowledge economy to continue to grow by fostering the existing creative interaction and through creating a livable, sustainable, mixed-use environment.*

The Project’s proposed mix of uses, including retail and restaurant, community space, lab, office and residential, the network of open spaces and the

continuity of the local street pattern will all serve to increase connectivity within Kendall Square and East Cambridge.

**Recognize that all aspects of the vision for Kendall Square need to work together if the innovation culture is to realize its full potential.**

Multiple components of the Project will work in concert to foster the success and growth of the innovation ecosystem of Kendall Square. Among these are the urban permeability of the street and block network as it connects to the fabric of nearby neighborhoods; the mix of research, office, residential, retail, and community uses that will enliven the district at all hours and encourage connectivity outside of the immediate site; and the inclusion of community space, the Job Connector, and public open space which will all enable the Project to become integral to Kendall Square and Cambridge.

**Retain and expand incubator spaces for entrepreneurs.**

The proposal is consistent with the PUD-7 Zoning requirements contained in of Section 13.96.3, which require a minimum area of Innovation Space equal to at least 5% of the aggregate office and laboratory space contained within new buildings, either within the Project or within 1.5 miles of the Site, and subject to the area and lease duration

limitations set forth in Section 13.96.3(b). MIT has committed to the inclusion of substantial Innovation Space dedicated to small business incubators and entrepreneurs, which will encourage the cross-disciplinary interaction that has made Kendall Square famous.

**B. Create great places**

*Improve [the] existing public realm of the Square and create new open spaces and recreational facilities in tandem with future developments to create [a] comprehensive public realm.*

The varied size, scale, and type of open spaces distributed throughout the Project will provide an intentional mix of civic experiences - from busy urban streets, to wide tree-lined streets, to the dense tree canopy of a linear urban passageway, to the perimeter landscape of the US DOT Volpe Exchange Project, to public parks. The variety of these urban space types will contribute to the permeability and urbanity of East Cambridge. They will encourage residents, neighbors, and visitors to linger, relax, recreate, and to simply enjoy walking through an urban setting.

**Engage buildings and streets to create lively public places.**

The Project relies on two fundamental tenets to enliven its streets and public places. First, buildings will largely be built to the urban

build-to line, establishing a continuous streetwall that connects the Site to the surrounding neighborhood. Second, the inclusion of 100,000 SF of largely transparent, active places of public accommodation, mostly located at street-level (including retail, restaurants, and other active uses) will serve to blur the boundary between inside and outside, thereby energizing both.

**Enhance connections to the Charles River, especially at Broad Canal.**

The Project breaks up the existing unwelcoming and inaccessible block, creating pedestrian, cyclist, and vehicular passage through the Site. The extension of Fifth Street from Broadway to Binney Street links the East Cambridge neighborhoods to the north and west through the Site and to the open space south of Main Street and through to the River. The extension of Broad Canal Way to Loughrey Walkway and Kittie Knox Bike Path links pedestrians and bicycles east to the Charles River, one of the most important visual and recreational assets in the city.

**Reintegrate Kendall/MIT station entries more effectively into their urban context.**

The two primary Kendall/MIT MBTA Station entrances will be extensively renovated in connection with Boston Properties' MXD development (the north entry) and by MIT (the

south entry) in order to update the entrance to the station immediately adjacent to the open space recently opened by MIT as part its Kendall Square Initiative, both of which are outside of the scope of this Project.

**Develop wayfinding strategy to help orient people to the Square and its surroundings.**

While specific graphic wayfinding strategies are typically developed much later in the design of a project of this scope, the street and open space network has been very carefully calibrated to connect to existing, understood street patterns and to provide frequent views to recognizable local streets, landmarks, and urban nodes in order to contribute positively to a sense of place and a sense of location.

**Support open space needs of a growing district.**

The Project's highly interconnected and differentiated public realm is designed to support a wide range of outdoor uses. Enlivened by the ground floor of the buildings, and enhanced by inclusive public programming, the open space shall be wholly welcoming in use and character.

### **C. Promote environmental sustainability**

*Acknowledge and build upon Kendall Square's potential as a compact, transit-oriented development in order to create [an] environmentally-sustainable district.*

The proximity of the Project to the Kendall/MIT MBTA Station will naturally promote transit-oriented development. The amount of green open space proposed will contribute significantly to environmental considerations such as shade and storm water management. The Project will achieve leadership in sustainability through a number of strategies including zero on-site emissions from fossil fuels in the residential buildings.

#### **Incorporate significant sustainability elements through land use planning approach.**

The inherent density of the Project and its close proximity to the Kendall/MIT MBTA Station jointly establish an intelligent, sustainable land use planning approach. The amount of landscaped open space proposed within the Project will move it past smart land use planning to effective environmental stewardship.

#### **Continue to require green design for buildings and site design.**

All buildings within the Project will achieve a minimum of LEED Gold certification. An integrative

sustainable design process will be utilized to ensure that best practices will be employed in the design of exterior envelopes, building energy- and water-use systems, site planting, and site storm water management systems. Construction practices and materials, interior and exterior lighting design, and daylight maximization will all contribute to the achievement of LEED Gold certification. In terms of water conservation strategies, the Project will include one of only three blackwater treatment systems in New England, enabling 100% of all eligible building water to be treated and re-used on site – thereby preventing approximately 250,000 gallons of wastewater per day from flowing into the City's sanitary sewer system.

#### **Go beyond existing approaches to more sustainable design.**

There are several key strategies that establish the Project as an exemplar of sustainable design. First, the Project includes a significant urban district-scale blackwater treatment plant to reuse all eligible building water on site. Second, the construction of all-electric residential buildings (approximately 40% of the development GFA) will have zero on-site emissions from fossil fuels to support a net-zero carbon future. Third, the Project also establishes a pathway for getting to all-electric commercial buildings and will evaluate each building against this pathway as it approaches the design review phase.

In addition, the Project design strives to enhance community engagement by activating the street-level with community services and publicly-accessible open space. In addition to sustainability design elements, the Project includes resiliency design elements such as raising the finished grade of the entire Development Parcel to the 2070 100-year flood elevation. Collectively, these exemplary strategies distinguish the Project from regional peers and build upon sustainable commitments for site, transit, resiliency, and healthy building design.

#### **Create K2 EcoDistrict through public-private partnership**

MIT remains engaged in the Kendall Square Association Ecodistrict Committee which was initiated in 2016 to continue the work of the City's prior EcoDistrict research. The committee is a learning community which provides a forum to collaborate and enhance knowledge and skills in the sustainability realm. Committee work to date includes programming on various sustainability subjects and collaboration with City staff in workshops such as BEUDO and energy rebate programs. MIT's sustainability awareness and engagement is informed by participation in this learning community as well as ongoing external/community education efforts on the collective benefits of sustainability.

#### **D. Mix living, working, learning playing**

*Focus density and intensity around transit to continue the positive mix of uses in Kendall Square, while minimizing development pressures on nearby neighborhoods.*

A diverse mix of retail, residential, commercial, community, and recreational use will extend the activity, security, and urban vibrancy of both the immediate Site and the broader community throughout the day, week, and year.

#### **Encourage a significant presence of housing integrated with other uses.**

Consistent with PUD-7 Zoning, 40% of the proposed non-exempt GFA will be for residential use, providing approximately 1,400 new residential units, of which 20% of the net residential unit square footage will be affordable dwelling units and 5% will be Innovation Housing units. Twenty of the residential units will be middle-income units that will be affordable to eligible renters with incomes of 80% to 120% of the Area Median Income. The Project will include three-bedroom units to encourage families to live in the district. In terms of scale, urban presence, and adjacency to proposed green space, housing will have a major impact within the overall development. The Inclusionary Housing provisions will ensure that the residential nature of the Project will relate to an appropriately broad cross-section of the



Cambridge population.

**Create room for research and technology businesses to locate and grow.**

The Project accommodates commercial buildings that will meet the needs of current and future laboratory research and technology-focused businesses. In addition to furthering the innovative ethos of Kendall Square, the inclusion of substantial innovation space dedicated to small business incubators and entrepreneurs will encourage the cross-disciplinary interaction that has made Kendall Square famous.

**Add retail to create active ground floors and animate the streetscape.**

Ground floor retail and active uses are an integral component of the Project. They will contribute to the inclusivity and vibrancy of the district, foster a sense of security across many hours of the day and into the night, and provide venues for both planned and serendipitous social and intellectual interaction to occur. By focusing on small, local, independent retail businesses, the sense of community and of connectivity to greater Cambridge will be intensified. The commitment to provide 100,000 SF of active places of public accommodation at ground level will infuse significant street-level activity throughout the Project and attract a broad range of users to the district.

**E. Recommendations for Zoning**

As more specifically set forth in Section 3 of this Application, the Project conforms to PUD-7 Zoning. The PUD-7 Zoning was adopted in 2017, following the adoption of the Kendall Square Final Report and, as noted above, requires general consistency with the general objectives of the Kendall Square Final Report.

**Building Design Standards**

As more specifically indicated in Section 3 of this Application, the Project conforms to the specific PUD-7 Zoning requirements and the general zoning recommendations contained in the Kendall Square Final Report, including:

The incorporation of active ground floors;

- Ground floor retail activation, in particular along Broadway, Third Street and Broad Canal Way;
- Building heights of up to approximately 250 feet for commercial buildings on the southern area of the site and 170 feet on the northern area of the site;
- Building heights of up to approximately 250 feet for residential buildings, with residential height increases to greater than 350 feet but less than 500 feet at a maximum of one building up to 500 feet within the southern area of the

Project, all as further defined within Section 13.93.4; and

- Zoning envelope setbacks and upper floorplate size limitations that are generally consistent with the Volpe Design Guidelines, adopted in 2017 and discussed below.

### **Project Review and Design Guidelines**

This Application presents the Project at the Master Plan level in conformance with PUD-7 Zoning. The buildings and open spaces will be subject to further Design Review. The buildings and open spaces will be designed in conformance with the Design Guidelines that will be approved as part of the Final Development Plan Special Permit.

### **Parking**

MIT is committed in supporting the City's goal of lowering single occupant vehicle (SOV) trips to/from the Cambridge area by not overbuilding parking and by taking advantage of exceptional transit and walking/biking options around the Project. As requested in the City's Traffic, Parking and Transportation Department (TP&T) Scoping Determination for the TIS, three different methodologies for parking supply/demand analysis were explored: parking supply per PUD-7 Zoning, parking demand by employee density, and a shared parking demand analysis.

The concept of shared parking recognizes that peaking for different land uses occurs at different times. Instead of building parking to support each individual land use's peak demand, the Project supplies enough parking to support the entire site's peak parking demand, assuming that each land use will draw from a common parking supply.

Taking into consideration the shared parking approach for the Project, MIT is projecting a parking demand of up to 1,876 parking spaces, where up to 2,300 spaces would be permitted in support of the uses planned for the Project based on the parking maximums set forth in Section 13.95.4, which maximums are consistent with the maximums set forth in the Kendall Square Final Report.

The full parking analysis can be found in the Project's Transportation Impact Study (TIS) certified by the City and included here in Volume 4.

### **Sustainability**

Consistent with City zoning and sustainability initiatives, the Project is designed in accordance with Section 13.96.4 and will satisfy the requirements of Article 22.000.

As required under the PUD-7 Zoning, the buildings shall achieve a minimum of LEED Gold certification. As a part of the Project's master planning process, MIT is exploring district energy heating and cooling systems as well as individual building and

site-level energy conservation measures. The district system analysis includes the evaluation of potential on-site energy generation within the PUD-7 District.

In addition, MIT continues to enthusiastically engage in the City's numerous ongoing sustainability initiatives such as the City's Net Zero Action Plan. The Project's approach to energy is consistent with the goals and objectives of the City.

As an active and engaged member in City committees and initiatives, MIT is committed to exceeding local energy standards by incorporating a whole system, integrated approach and to continually revise and reevaluate design strategies to stay at the forefront of technical developments and improve environmental performance. Energy efficiency and resource conservation are at the heart of the sustainability framework developed for the Project and will remain a focus for MIT moving forward.

### **Housing**

At least 40% of the GFA included in the Project is devoted to residential use. This equates to approximately 1,400 units of new housing located throughout the four residential buildings. Twenty percent (20%) of the net residential unit square footage of each building will be designated as affordable. The Project also includes 20 middle-

income units that will be affordable to eligible renters with incomes of 80% to 120% of the Area Median Income. The Project will include three-bedroom units to encourage families to live in the district. In addition, 5% of the net square footage of the net residential unit square footage is devoted to Innovation Units, defined as 350 to 450 SF, to further assist with affordability and diversity of housing on the site. MIT will work with the City's Housing Division to determine the distribution of inclusionary housing, middle-income, and Innovation Units.

### **Community Investments**

In addition to the Project-related benefits of new road connections, approximately 3.5 acres of publicly-beneficial open space, approximately 1,400 units of housing and the Community Center, MIT has made the following financial commitments:

- Approximately \$36 million to the Affordable Housing Trust for commercial linkage payments;
- Approximately \$8.5 million for transit improvements to reduce vehicular traffic;
- Approximately \$8.5 million to the Community Fund to be distributed to Cambridge non-profits; and
- Approximately \$23 million in new taxes

annually once the project is built out.

At the time of the adoption of PUD-7 Zoning, MIT also made significant additional commitments to improving transportation, housing and equity in Cambridge.

#### **Startup Innovation Space**

The Project will contain over 160,000 SF of Innovation Office Space, which totals 10% of the non-exempt office and laboratory GFA of the Project. This is more than twice the minimum amount of Innovation Office Space required by zoning. MIT will ensure that the Innovation Office Space satisfies the requirements of Sections 13.96.3(a)(2) and 13.96.3(b)(1)-(4) as it develops and leases up the same.

#### **F. Recommendations for Transportation**

MIT is committing to the following transportation mitigation measures to support the Project:

- Construction of Fifth Street between Binney Street and Broadway;
- Redesign and signalization of the intersection of Third Street at Potter Street;
- Construction of an exclusive left-turn lane in the eastbound direction at the intersection of Broadway and Green Garage in order to facilitate left turns into the Project, directly to

the below-grade parking entrance at Building C2. This left-turn pocket would allow project trips to enter the Project at the perimeter, and thereby limit circulation and impacts to the intersection of Broadway and Third Street;

- Installation of two (2) BlueBike Stations, preliminarily proposed to be located along Broadway at the new Third Street Park and at the Community Center; and
- Development of a Parking and Transportation Demand Management (PTDM) Plan.

MIT will continue to work with TP&T to finalize the list of appropriate transportation mitigation measures, including separated bicycle facilities adjacent to the Site.

#### **Enhanced TDM: Priority Recommendations for Reducing Drive-Along Rates**

MIT will support a program of transportation demand management (TDM) actions to reduce automobile trips generated by the Project. The goal of the Project's TDM plan is to reduce the use of SOVs by encouraging carpooling and vanpooling, bicycling, walking, and increased use of the area's public transportation system by employees and visitors. MIT submitted a final TDM plan to the City on January 20, 2021.

MIT will work with tenants of the new buildings to

join the Charles River Transportation Management Association and implement effective TDM strategies that will be incorporated in a PTDM Plan to be approved by the City's PTDM Officer.

### **Parking Strategies**

Due to the long buildout time of the Project, no detailed parking management system can be proposed at this time; however, the intent is to manage both garages with state-of-the-art access technology.

Tenants of the office/R&D and retail/active uses will be provided with a fixed number of passes. If the garage reaches capacity for either user group, the gate system will alert the driver that they are not permitted to park in the garage. Market parking rates will be charged for users and determined at a later date. Residential parking will be leased separately from each residential unit.

It is anticipated that a number of short-term on-street parking spaces will be made available as part of the construction of Fifth Street between Potter Street and Broadway. Additionally, flexible curb space is being proposed on Broadway between Ames Street and Third Street, Fifth Street between Potter Street and Broadway, and on Broad Canal Way between Kendall Way and Third Street in order to provide space for transportation network companies ("TNCs") to drop off/pick up

passengers and for short-term loading. The exact location of such zones and appropriate signage will be coordinated with TP&T at a later date.

### **Better Vehicular Traffic Management**

MIT is committing to the following transportation mitigation measures to support the Project:

- Construction of Fifth Street between Binney Street and Broadway;
- Redesign and signalization of the intersection of Third Street at Potter Street; and
- Construction of an exclusive left-turn lane in the eastbound direction at the intersection of Broadway and Green Garage in order to facilitate left turns into the Project, directly to the below-grade parking entrance at Building C2. This left-turn pocket would allow project trips to enter the Project at the perimeter, and thereby limit circulation and impacts to the intersection of Broadway and Third Street.

### **Enhance Pedestrian and Bicycle Pathway Network**

The Project aims to provide a once in a lifetime opportunity to bring the community together by providing north-south connections from nearby neighborhoods to the Kendall/MIT MBTA Station, and east-west connections to the Charles River. Sidewalks will be provided throughout the Site

with safe pedestrian crossings at all internal and adjacent intersections.

The Project includes separated bicycle facilities through the Site on Fifth Street between Potter Street and Broadway, and MIT is coordinating with TP&T on additional facilities on adjacent streets.

### **Enhancing Transit Options**

As stated in the October 23, 2017 Commitment Letter that accompanied the ordination of the PUD-7 Zoning, MIT will provide \$8.5 million for the design and construction of the Grand Junction multi-use path as well as conveyance of access rights along MIT property to enable its construction.

Additionally, as stated in PUD-7 Zoning, 50% of any Kendall Square Fund contribution (approximately \$8.5 million) shall be allocated for transit improvements and services to benefit the Kendall Square district and residents in adjacent neighborhoods not already required by the City's PTDM Ordinance.

## **2. Volpe Working Group – Planning & Design Principles (July 20, 2017)**

The Volpe Working Group adopted overarching principles for the purposes of furthering the goals of creating:

- A unique place that is memorable, delightful,

comfortable, inviting, and sociable;

- A center of gravity, the heart of Kendall Square, an “exclamation point” for Cambridge, and a home for community events and gatherings; and
- A place that is organized and given identity by the form and activity of its civic spaces – its streets, squares, and parks.

The Project will create a destination for shared discovery, community, and collaboration. The mixed-use development promises a diverse, inclusive, and equitable urban environment that connects arts and science, that nurtures and inspires, and that connects people and events. In its planning, MIT has embraced the Volpe Working Group's Planning and Design Principles as indicated more specifically below.

### **A. Planning Principles**

A successful urban development plan equally celebrates buildings and urban open space. Buildings in which people live, work, and play should be graceful, elegant, and welcoming in themselves, and should contribute to the grace, elegance, and welcome of the streets, squares, plazas, and parks whose edges they define.

### **Civic Life**

*Create beautiful, legible, varied, and welcoming public places that support and symbolize community, bring together a diverse range of demographic groups, as well as attract community members and visitors to share in the unique experience of Kendall Square.*

The varied size, scale, and type of open spaces distributed throughout the Project will provide an intentional mix of civic experiences - from busy urban streets, to wide tree-lined streets, to the dense tree canopy of a linear urban passageway, to the perimeter landscape of the New Volpe Center, to public parks. The variety of these urban spaces will contribute to the permeability and urbanity of East Cambridge. They will encourage residents, neighbors, and visitors to linger, relax, recreate, and to simply enjoy walking through an urban setting.

### **Connectivity & Permeability**

*Make the Volpe site an integral part of the urban fabric of Cambridge and an interconnected piece of the existing network of public spaces, buildings, and neighborhoods.*

By establishing a block size and street pattern that is responsive to the existing street grid, the Project will weave seamlessly into the urban fabric of Cambridge. Street widths, open spaces, building scale and the mix of residential and commercial

uses will all serve to connect future development to the communities of East Cambridge, Wellington-Harrington, The Port, and MIT to the Kendall Square MBTA Station, public amenities, the Broad Canal, open space, and the waterfront.

Through this Project, MIT is committed to identifying and removing barriers to participation so that everyone can exercise the right to fair and respectful access to economic, social, and cultural opportunities, paving the way for equitable outcomes.

### **Activation**

*Provide a mix of commercial, residential, retail, recreational and other uses that are engaging and flexible, supporting an active public realm throughout the day, week, and year.*

The proposed extent and location of approximately 3.5 acres of publicly-beneficial open space, combined with significant retail and active use areas targeted toward small, local businesses and the combination of commercial and residential buildings will all serve to activate the Site by providing enjoyment, recreation, and security to residents, neighbors, and visitors throughout the day, week and year. Various venues for gathering, the arts, entertainment, recreation, and innovation will create a place that fosters community and creates new social and economic opportunities.

A range of open spaces will offer places for year-round gathering, play, socializing, and respite in inclusive, diverse, and attractive settings.

### **Inclusiveness**

*Optimize the built environment to make the site attractive and welcoming to people of all ages and backgrounds, with a particular focus on families with children and nearby residents who are at risk of being excluded from the innovation economy.*

Diverse housing options, consumer services, recreational amenities, multicultural programming, and engagement among different demographic groups will draw a broad range of community members and provide opportunities for companies and others in the innovation economy to reach out and provide benefits to the broader public.

Multiple aspects of the Project contribute to the principle of inclusiveness. These include the construction of approximately 1,400 new residential units (including approximately 20% affordable housing units, 20 middle-income units, and approximately 5% Innovation Housing units); the provision of significant ground floor retail space targeted at small, local, and minority-owned businesses; and the introduction of a street grid that, by virtue of its block size and alignment with nearby neighborhood streets, will be woven into

the city fabric. In addition, MIT's Jobs Connector program is already creating pathways for local residents to participate in Kendall Square's innovation economy.

### **Comfort**

*Make spaces that feel friendly and inviting at the pedestrian scale so that residents, employees, and visitors will feel welcome.*

Comfort comes in many forms: from the safety of walking through a community lit up by retail shops and restaurants and by the extended day created by a mix of commercial and residential occupants, to a park bench in the sun, to a shady street to walk along. The mix of uses and variety of landscaped spaces and street types proposed will all extend a sense of welcome to residents, neighbors, and visitors.

Public pathways, recreational spaces, and gathering areas will range in scale from intimate to grand, offering niches for individuals, small groups, and large gatherings. In addition to outdoor open spaces, covered interior spaces will contribute to the quality and liveliness of the public realm, and will connect to adjoining open spaces.

Multiple design elements will contribute to environmental comfort. The Project mitigates the urban heat island effect by eliminating hundreds of surface parking spaces and locating the majority



of the new parking below-grade. Building massing and landscape planting will create comfortable wind conditions at street level. More than 200 new trees will be planted; the canopy from these trees will further temper the pedestrian environment.

### **Sustainability**

*Develop the site to be an example of how the city will evolve and sustain itself into the future, particularly by mitigating and adapting to climate change.*

MIT commits to designing all Project buildings to achieve LEED Gold certification. An integrative sustainable design process will be utilized to ensure that best practices will be employed in the design of exterior envelopes, building energy- and water-use systems, plantings, and storm water management systems. Construction practices and materials, interior and exterior lighting design, and daylight maximization will all contribute to the achievement of LEED Gold certification.

Resource conservation, stormwater management, and designing for future climate impacts drive planning level sustainability strategies. Collection, treatment, and reuse of all available greywater and blackwater in a phased district blackwater treatment plant will minimize potable water consumption, improve self-sufficiency of the Project, and mitigate the impact of the development on municipal sewer systems. To respond to the

changing climate and prepare for projected increases in precipitation, the Project will embrace resilient design strategies including elevating mission-critical equipment, residential units, and all building ground floors above the projected 2070 100-year flood elevation; incorporating stormwater mitigation strategies; and providing standby power for mission critical equipment. To minimize risks associated with projected temperature increases, the Project will aim to reduce urban heat island effect through high-albedo roofing and paving, and minimize cooling loads by insulating and shading building facades.

## **B. Design Principles**

Buildings and urban open space jointly define the quality and character of the public realm of cities. They are the specific built manifestation of the planning principles articulated above. The public realm of a city becomes inviting and welcoming when its buildings and open spaces exist in equilibrium, each contributing equally to the definition and charm of the other.

### **Site Design**

*The site's buildings should frame the spaces of the public realm. The spaces and connections established by the site's civic structure are reinforced by the facades, massing, and design of the buildings that frame them.*

The Project's open spaces are all located and planned to engage the greater Kendall Square and East Cambridge community. Significant green spaces will lead people into and through the Site, taking advantage of both sun and shade. Building locations and orientations and a human, walkable block size will all frame the open spaces and extend the invitation to the public to enjoy the green space network.

The Conceptual Activation Plans for South of Potter Street and North of Potter Street illustrate this simple planning principle: primary pedestrian building entrances address major east/west streets – Broadway (for commercial entrances) and Potter Street (for residential entrances) and Binney Street (for both commercial and residential) and for seven of the eight major building footprints, service access is located on a perpendicular street or opposite street – Kendall Way, Fifth Street or Munroe Street. The only exception is Building R1 where the pedestrian entrance and service access are both located on Potter Street. This strategy will minimize truck activity on Broad Canal Way, which will have numerous entrances for retail establishments and other Active Uses.

### **Open Space Types**

*The open spaces that constitute the site's public realm should invite a variety of people and activities to the site by offering a wide variety of possibilities for use*

*and enjoyment.*

Varied in size and character, the Project's parks, squares, courts, and plazas provide opportunities for active and passive use for a diverse population. A new one-acre park at the northwest corner of Third Street and Broadway provides for the flexible use for large gatherings while its periphery is supported by active retail and food and beverage. Smaller courts and passages create more intimate gathering places for smaller groups and individuals. These varied open spaces are distributed throughout the Site, located to take advantage of adjacencies and create a highly-connected network that draws people into and through the Site.

The Project's open spaces will be mixing zones for diverse social activity. Importantly, all of the open spaces are adjacent to publicly accessible pedestrian sidewalks and streets, making them open and accessible to all. Research on successful urban spaces reveals several consistent characteristics of welcoming, inclusive places:

- **Accessibility** – The Project's primary open spaces, Third Street Park and Sixth Street Park, are connected to adjacent networks of open space and pedestrian connectors; they are visible from public ways and have immediate access to public transit. and The Project also has active edges of retail and restaurants at

Third Street Park and innovation spaces at Sixth Street Park;

- **Comfort** – The Project’s open space will create comfortable places to sit, together or alone, to eat, work or play;
- **Sociability** – The Project has multiple open and free venues that will invite the public to meet, dwell, and interact with friends, colleagues and strangers;
- **Usability** – The Project’s open spaces will provide venues for activity, e.g., play adjacent to the Community Center, dining adjacent to Building C1 and the kiosks, collaboration adjacent to Building C3 at Sixth Street Park.

#### **Landscape Design**

*The landscape design of the site’s open spaces should create an inviting, active, comfortable, safe, and useful public realm.*

The Project’s public realm is entirely open and accessible to all. Paved plazas, terraces and courts define places of greater social activity, while planted areas of lawns, groundcovers and trees create quieter areas of respite. The Third Street Park retains existing mature oak trees, optimizes solar exposure, and connects to the active street edges. The Sixth Street Park takes advantage of the active pedestrian corridor of Loughrey

Walkway, while providing opportunities for active and passive play for the community.

#### **Volpe Transportation Center**

*The new Volpe Building and its site should be designed as integral parts of the district. The building’s site design is to be as continuous as possible with adjoining public open space while maintaining required security for the Volpe Building.*

The US DOT Volpe Exchange Project is now under construction on the abutting Government Owned Parcel. The US DOT Volpe Exchange Project is oriented to the geometry of Binney Street and, as such, relates to the orientation of proposed buildings in the Project that also front on Binney Street. Its façade articulation addresses zones of pedestrian frontage, streetwall, tower, and top, and its perimeter landscape zone contributes open space to the greater whole of the site while meeting GSA security requirements.

While the US DOT Volpe Exchange Project and its service areas and parking are highly protected from vehicle intrusions, the Fifth Street sidewalk and the anticipated Volpe Art Walk create a generous promenade and a welcoming environment for pedestrian passage.

#### **Built Form**

*Human-scaled, well-defined streets and public*

*spaces should contribute to the district's overall sense of place.*

The primary design goal of the Project is to create human-scaled streets and open spaces and a district where the built form contributes to an overall sense of place by simple, shared urban design principles. The building design objective is outstanding architecture – both innovative and sustainable and tangibly part of the city. The massing envelopes of each of the eight high-rise buildings proposed are conceived with four horizontal zones:

- Pedestrian frontage
- Streetwall
- Tower
- Building top

All proposed building forms have a stepback between streetwall and tower at an approximate height of 85 feet, and another stepback between tower and building top as required by the Volpe Design Guidelines. Typical stepback dimensions will be at least 10 feet, and will exist at a minimum of 50% of the building perimeter. Penthouses will stepback an additional five feet. Additional stepback dimensions are provided adjacent to 303 Third Street, Loughrey Walkway, and the new Third Street Park. Vertical changes in plane are

provided at all streetwalls that are more than 100 feet uninterrupted in plan.

### **Building Heights & Scale**

*Building scale, massing, and heights should respond to the open spaces of the site and its context.<sup>1</sup>*

Residential buildings R1, R2, and R4 are proposed at heights of approximately 250 feet, although diversity in height is preferred as a design solution and will be pursued during the design process. Located furthest from the proposed Third Street Park, Building R3 is proposed to be the tallest, at approximately 382 feet. Massing configurations for each of the residential buildings differ from each other, but all are compliant with the dimensional requirements of the PUD-7 Zoning. The building volumes have been conceived to provide strong definition of streets and urban edges to primary open spaces at Third and Broadway and at Loughrey Walkway. The buildings observe the vertical definitions of pedestrian zone, streetwall, tower, and top, with stepbacks and vertical separations as required.

Commercial buildings C1, C2, and C3 are each proposed to be approximately 250 feet tall (excluding mechanical penthouses), with stepbacks that are compliant and resulting towers that become increasingly slender and broken down in scale. In addition, the bulk of these larger

---

<sup>1</sup> As the Project is a phased project that will take place over a period of years, MIT acknowledges that certain aspects of the development may change from time to time based on a number of key considerations, including the market demands, which could impact the height and massing of the buildings. In order to maintain flexibility in the overall Development Plan, MIT desires to allow for increases in GFA and height of a building by up to 10% by the Planning Board (and a corresponding decrease in size and massing to other buildings) during the individual building design review process and that changes that increase a building's height and/or GFA by more than 10% shall be permitted by a minor amendment granted by the Planning Board.

commercial buildings is broken down by separate, vertically oriented components.

The massing diagrams shown are diagrams that illustrate the literal allowable massing for each building. 250 feet is the maximum base height for C1, C2, and C3. The maximum height for C4 is 170 feet. The zoning allows for increased height above base on these buildings with reduced floorplates. MIT will endeavor to vary the heights within the zoning limits during the design process and present these for approval during the Design Review for each building. The height for residential buildings will allow for even greater diversity in height with one building as tall as 500 feet and another as tall as 350 feet.

All buildings comply with minimum and maximum streetwall heights. The upper boundary of streetwall is illustrated in all buildings with setbacks of at least 10 feet, which will minimize wind impacts on streets and public spaces.

### **Building Types**

*Residential, community, laboratory, and other building types should reflect their individual uses while contributing to the urban character of the site as a whole.*

Primary uses of buildings include laboratory/office, residential, community, and possibly hotel. All buildings will have active ground floors with

particular emphasis on street-level frontages that face major streets and open spaces. The individual building architecture reflects these specific uses in building metrics like floor-to-floor height, structural bay spacing, and in fenestration patterns and material selection.

### **Residential Buildings**

At least 40% of the GFA included in the Project will be devoted to residential use. This equates to approximately 1,400 units of new housing located throughout the four residential buildings.

Residential building architecture will reflect the more private nature of individual units and residential spaces, emphasizing a lower window-to-wall ratio and a diversity of fenestration patterns.

### **Laboratory/Office Buildings**

Lab buildings have specific metrics that distinguish them as a building type:

- Floor to floor heights of 14'-6" or taller;
- Structural module of 33'-0" on center;
- Minimum floorplates of 25,000 SF; and
- Uniform fenestration patterns reflecting the ever-changing layout of research space within.

These buildings are about innovation and discovery

and are designed to accommodate almost continual change. As envisioned, they will all have active ground floor uses; massing that respects the four divisions of the urban street wall; and footprints that conform to “build-to” requirements. Building materials will connect to the character of Kendall Square and East Cambridge but will also be modern in their use of these materials. Building envelopes will respond to solar orientation with different solar control strategies, solid to void envelope ratios and glazing configurations.

### **Community Center**

The Community Center is proposed to be a freestanding low-rise building located at the heart of the Site, adjoining public open space to invite and encourage use by the community. The architecture, in its size, configuration, and transparency, will reinforce this welcoming approach. It has been intentionally located at the northwest corner of the Third Street Park, relating to the public nature of the park while shielded from the bustle of Broadway and Third Street and serving to draw the public into and through the Project.

While recreational sports activities like basketball and swimming are often enclosed in opaque boxes, the design intent to make the Community Center welcoming will be achieved by visibility into the activity of the building, openness and “openability” of the building envelope, exuberance

of the building architecture, connection to the surrounding landscape, and occupiable outdoor spaces on upper levels. The goal is to design a building that attracts a broad and diverse group of users by the openness of its architecture, the visibility of people and activity, and the sociability of spaces and activities at the building perimeter.

### **Architectural Character**

*Projects should relate to human dimensions and provide a sense of intimacy in all aspects of design from building concept development to construction details. Buildings should be warm and inviting, particularly at the lower levels experienced closely by pedestrians.*

The Project’s buildings will relate to human scale by means of building envelope, material selection, public accessibility at lower levels, massing stepbacks, fenestration patterns and construction details and articulation. They will also be specific to context, climate, and to the orientation of their specific location within the Site. Buildings will be designed to complement Kendall Square’s existing architecture, with design that is innovative and contributory to Kendall Square’s history and tradition.

The architectural character will:

- Provide diversity and variety within a community of buildings;

- Contribute to the definition and beauty of the public realm;
- Relate to human scale and address urban scale at the pedestrian, building, and district levels; and
- Respond to the surrounding context of Kendall Square and East Cambridge.

### **3. Volpe Site – Design Guidelines (October 13, 2017)**

The Volpe Site Design Guidelines have the stated goal of creating “a functionally diverse and animated downtown development: handsome buildings that focus on and enrich the public street and open space system, enlivened by variety and liveliness that articulates the urban pattern.” Consistent with the above goal, this Project will equally celebrate buildings and urban open space. Buildings in which people live, work, and play should be graceful, elegant, and welcoming, and should contribute to the grace, elegance, and welcome of the streets, squares, plazas, and parks whose edges they define. As indicated below, the Project is generally consistent with the stated objectives contained in the Volpe Site Design Guidelines that will be developed as part of this Special Permit process.

#### **A. Open Space and Site Design**

The open spaces of the Project – its streets, squares, and parks – have been located and planned to engage the greater Kendall Square and East Cambridge community. Significant green spaces will lead people into and through the Site, taking advantage of both sun and shade. Building locations and orientations and a human, walkable block size will all frame the open spaces and extend the invitation to the public to enjoy the green space network and adjacent active uses.

##### **General**

*The network of the site’s streets, pathways, squares, parks, and other open spaces should organize the site’s buildings and circulation, and connect the site to the surrounding districts. The combination and interconnection of these different kinds of public spaces will enrich the experience of the site’s residents, users, and visitors.*

*The site’s open spaces should be legible, beautiful, and memorable places, visually and programmatically substantive, and usable and occupiable by the public. In effect, they should be public rooms at the scale of the city.*

*The site’s open spaces should be welcoming and engaging places for public and private use and connection. Landscape and streetscape design, building facades, and the programming of building*

*ground floors should create a beautiful and programmatically rich and continuous pedestrian experience, and emphasize the public nature of the site's open spaces.*

The Project's open space network represents a highly-connected network that links to nearby neighborhoods. The extension of Fifth Street and Broad Canal Way create a more human-scaled block that complements the adjacent neighborhood block structure. The series of squares, parks and courts complete this network and expand Site porosity, bringing together researchers, residents, students, neighbors and visitors.

### **Parks**

*The site should include at least one significant park that will offer a connection to nature and provide opportunities for a range of activities, such as quiet enjoyment, recreation, outdoor dining or picnicking, temporary markets, organized public events, and public gatherings*

*Parks should provide environmental benefits.*

The Sixth Street Park expands the corridor of the Loughrey Walkway and creates an enhanced park that hosts a varied set of recreation and casual leisure spaces that serve the broader community. Loughrey Walkway's existing trees, combined with new tree canopy and other plantings and lawns, offer an attractive public greenspace and a

connection to natural systems.

Building an interconnected open space network in the heart of Kendall Square will produce major environmental benefits for the city's diverse residents and workers. Chief among these is the space to breathe—parks are the lungs of any city, and they literally help clean the air and provide space for healthy outdoor urban life. They improve physical and psychological health by encouraging active lifestyles and fitness, especially in the proposed Sixth Street Park. They help in activation, attracting visitors from other parts of the city and beyond. They produce greater resiliency in their ability to absorb and manage storm runoff and mitigate flooding. Third Street Park will play an active role in storm water treatment and recharge for most of the site. The significant tree cover proposed in both parks, along with the adjoining street tree network, perform important ecosystem services for the city: the urban tree canopy helps capture and filter rainfall, shades and cools the neighborhood, takes up pollutants, helps prevent soil erosion or compaction, and sequesters significant amounts of carbon. These parks are working landscapes.

### **Squares and Plazas**

*The site's squares and plazas should be foci of community life: they should be predominantly pedestrian, enlivened by outdoor dining, temporary*



*markets, outdoor events and performances, and by the retail and community functions in the ground floors of the buildings that frame them.*

The Third Street Park is the Project's largest and most highly visible public realm component. In direct response to community feedback, this park is located at the northwest corner of Third Street and Broadway. The Third Street Park is civic space that creates a welcoming entry into the Project framed by retail and active food and beverage. Flexible in function and programming, Third Street Park contains large lawns, paved gathering spaces and plenty of shade to support gatherings and events of all types. The park connects diagonally across Broad Canal Way to the Community Center and beyond to open space located on the US DOT Volpe Exchange Project, completing an open space network that draws people into and through the Site.

### **Streets**

*The site's streets should be integral parts of the city's street network. They should create an integrated pedestrian circulation system with particularly strong connections to the public way, and between adjacent districts and residential neighborhoods.*

Subdividing the existing superblock through the extension of Broad Canal Way, Potter Street, and Fifth Street establishes a block size and street

pattern that is responsive to the existing street grid. These new streets form a highly integrated network of circulation connecting to the adjacent districts and neighborhoods. The vehicular streets provide comfortable pedestrian accommodation, and are designed to enhance public life in Kendall Square by constituting a continuous and welcoming public realm that is shaded, comfortable, safe, and lively—during the day and into the night, all year long.

### **Universal Access**

*The design of buildings and outdoor spaces (public and private) in and around the site should place special emphasis on universal access.*

The entirety of the public realm is designed to provide universal access to all users. Through the use of pedestrian-oriented curbless streets, the Project prioritizes free mobility throughout the Site. Entrances to buildings are at-grade in most locations, while the elevated porches on Broadway are designed with direct and convenient ramps that provide efficient access for all users.

### **Building Service, Vehicular Access, and Parking**

*Design and locate loading/servicing areas and parking to support the quality of the pedestrian experience.*

The Project proposes to locate primary building entries along major streets (Broadway, Binney

Street and Potter Street) with service access provided from secondary streets. Parking entrances are limited to four points within the nine-building Project, helping to further reduce cross-circulation between pedestrians and vehicles.

No service entrances or parking garage ramps will be located on Broad Canal Way so that the walkability and flexibility of that street is not compromised. Service for Buildings C2, C3, R2 and R1 is located on Kendall Way with loading areas directly opposite each other. The urban design vision for Kendall Way is that of a more multi-purpose street, with primary retail and active spaces at building corners, that transforms at night to a more active music/entertainment alley, a kind of “found” alley of activity.

The loading for Building C1 is located on Fifth Street due to the park frontage on the east, Broad Canal Way on the north and the traffic movements on Broadway to the south. Similarly, the service for Building R1 is located on Potter Street across from the loading at 303 Third Street. Loading for Buildings R4 and C4 is located on Munroe Street.

No loading is located on Broadway, Third Street or Binney Street to avoid conflicts with vehicular traffic as well as bicycle and pedestrian movement on those streets.

### **The New Volpe Building’s Site**

*The landscape design of the new Volpe Building’s site should be as seamlessly continuous with the landscape design of the rest of the site as possible while providing required security for the building.*

The Fifth Street sidewalk and the anticipated Volpe Art Walk with an art installation by Maya Lin will provide a welcoming environment for pedestrian passage. This passage seamlessly extends from Binney Street to Broadway as a shaded promenade.

### **Environmental Comfort**

*Open spaces, and the buildings that frame them, should be designed to minimize undesirable environmental impacts.*

MIT commits to designing all Project buildings to achieve LEED Gold certification. An integrative sustainable design process will be utilized to ensure that best practices will be employed in the design of exterior envelopes, building energy- and water-use systems, plantings, and storm water management systems. Construction practices and materials, interior and exterior lighting design, and daylight maximization will all contribute to the achievement of LEED Gold certification.

The Project’s open spaces have been located and planned to engage the greater Kendall Square and East Cambridge community. Significant green

spaces will lead people into and through the Site, taking advantage of both sun and shade. The network of planted areas will contribute highly to storm water management and mitigate the urban heat island effect. Building locations and orientations and a human, walkable block size will all frame the open spaces and extend the invitation to the public to enjoy the open space network.

Multiple design elements will contribute to environmental comfort. The Project mitigates the urban heat island effect by eliminating hundreds of surface parking spaces and locating the majority of the new parking below-grade. Building massing and landscape planting will create comfortable wind conditions for walking and dining at street level. More than 200 new trees will be planted; the canopy from these trees will further temper the pedestrian environment.

## **B. Built Form**

*Buildings and urban open space jointly define the quality and character of the public realm of cities. They are the specific built manifestation of urban design principles. The public realm of a city becomes inviting and welcoming when its buildings and open spaces exist in equilibrium, each contributing equally to the definition and charm of the other. The framework established by this Project for the massing and articulation of its buildings will reinforce the successful weaving of the Project's buildings and*

*spaces into the fabric of Kendall Square and East Cambridge.*

### **General**

*Architectural form should define urban space. It should enhance the quality and amenity of the public realm and sense of place, create legible and meaningful public places, and reinforce Kendall Square's existing and proposed street and open space patterns.*

*The site's buildings should reinforce the site's varied urban conditions.*

*The site's buildings should respond to a wide range of scales: intimate pedestrian, intermediate streetscape, and long-distance skyline views, and to the scale and use of existing neighboring buildings.*

By establishing a block size and street pattern that is responsive to the existing street grid, the Project will weave seamlessly into the urban fabric of Cambridge. Street widths, open spaces, building scale and the mix of residential and commercial uses will all serve to connect future development to the communities of East Cambridge, Wellington-Harrington, The Port, and MIT to the Kendall Square MBTA Station, neighborhood amenities, the Broad Canal, open space, and the waterfront.

### **Pedestrian Frontage Zone**

*Create a welcoming pedestrian environment by*

*maximizing retail and community functions to directly engage pedestrians, and by minimizing detrimental impacts on the pedestrian experience.*

*Provide shelter and visual interest at the pedestrian scale, and emphasize the horizontal continuity of the public realm.*

*Reduce the distinction between exterior and interior space at the ground level to extend the effective public realm indoors and to reveal indoor activity to the street.*

The Project relies on two fundamental tenets to enliven its streets and public places. First, buildings will largely be built to the urban build-to line, establishing a continuous streetwall that connects the Project to the surrounding neighborhood. Second, the inclusion of 100,000 SF of largely transparent, active places of public accommodation, mostly located at street-level (including retail, restaurants, cultural and other active uses) will serve to blur the boundary between inside and outside, thereby energizing both.

Ground floor retail and active uses are an integral component of the Project. They will contribute to the inclusivity and vitality of the district, foster a sense of security across many hours of the day and into the night, and provide venues for both planned and serendipitous social and intellectual interaction to occur. By focusing on small, local, independent

retail businesses, the sense of community and of connectivity to greater Cambridge will be amplified.

### **Streetwall Zone**

*Building streetwalls should create beautiful and memorable room-like urban places by spatially defining the width and perceptual height of streets and other open spaces.*

Each of the Project's buildings will be built to the build-to line for at least 80% of the length of its façade, defining the urban streetwall up to a height of approximately 85 feet above grade. Floors within this zone may utilize less overall transparency than the retail and entry elements of the pedestrian frontage zone, as they serve to reflect the specific functional use of the overall building and define the urban scale of streets and open spaces.

### **Building Towers**

*Building towers should enhance the quality and amenity of the public realm and a sense of a cohesive place by their form and external appearance. They should be designed to minimize their sense of bulk, and to maintain vertical emphasis and continuity.*

The Project complies with PUD-7 Zoning, which requires building towers to be stepped back from the streetwall zone by a minimum of 10 feet over at least 50% of the horizontal length of the façade,

and to be further broken down into vertically articulated elements by the use of additional plan offsets or reveals wherever the overall horizontal façade length exceeds 100 feet. An additional stepback of five feet at the top of the building tower zone will differentiate the tower from the building top. Each of these massing articulations is intended to enhance the proportional elegance and continuity of the overall building.

#### **Building Tops**

*Building tops should contribute to the district's profile on the skyline and should be designed as expressive architectural elements that appropriately celebrate the building's union with the sky.*

The Project complies with PUD-7 Zoning, which requires building tops, typically mechanical penthouses, to be stepped back from the plane of the building tower zone by at least five feet.

Lab buildings have large mechanical penthouses which can be shaped in a variety of ways to tell a story of this place and create a varied, purposeful skyline for East Cambridge. Examples of this opportunity for shaping include 75 Ames Street, the Stanley Building at the Broad Institute, 100 Binney Street and the Carter Ink Building.

#### **Building Massing**

*Building massing should give spatial definition to*

*the site's streets and squares, and increase the compatibility of tall buildings with existing nearby buildings.*

*Buildings should incorporate a system of setbacks and step-backs, based on the four horizontal zones, to minimize the extent of cast shadows, loss of sky view, and undesirable wind conditions in the adjacent public streets and open spaces, and to create sensitive transitions to neighboring uses, especially to residential buildings, historic structures, and parks. Of particular concern are the Sixth Street Walkway (Loughrey Walkway), open space in the interior of the site and the open space at the intersection of Broadway and Third Street. In addition, the height and bulk of buildings should be configured to minimize the visual dominance of building towers above a 6-8 story base and above nearby low buildings.*

A primary design goal of the Project is to create human-scaled streets and open spaces and a district where the built form contributes to an overall sense of place by simple, shared urban design principles. The massing envelopes of all eight proposed high-rise buildings are conceived with four horizontal zones: pedestrian frontage, streetwall, tower, and building top.

All proposed building forms will utilize setbacks between streetwall and tower at an approximate height of 85 feet, and between tower and building top. Typical setback dimensions will be at least

10 feet, and will exist at a minimum of 50% of the building perimeter. Penthouses will stepback an additional five feet. Additional stepback dimensions are provided adjacent to 303 Third Street, Loughrey Walkway, and the new civic open space at Third Street and Broadway. Vertical changes in plane are provided at all streetwalls that are more than 100 feet uninterrupted in plan.

### **Connectors**

*Upper floor connectors should be considered only in circumstances where tenants need large floorplates that would otherwise result in excessive apparent building mass. Such connectors should be designed to maintain permeability of large floorplate buildings and allow light and views of the sky.*

Upper floor connectors between Buildings C1, C2 and C3 are possible as a means to expand horizontal collaboration among users. They will be subject to subsequent design review before the Planning Board.

### **Community Spaces**

*Community spaces should be designed to be welcoming and inviting to the public.*

The Community Center is proposed to be a freestanding low-rise building located at the heart of the Site, adjoining public open space to invite and encourage use by the community. The architecture,

in its size, configuration, and transparency, will reinforce this welcoming approach.

The Community Center has been intentionally located at the northwest corner of the Third Street Park, relating to the public nature of the Park while shielded from the bustle of Broadway and Third Street and serving to draw the public into and through the Site.

Championed by local stakeholders, this will be a public Community Center – affordability and access are its drivers. Its programmatic intent is to attract a diverse set of users through recreational and other activities to encourage community and informal interactions. The programs will be developed with input received through a series of community workshops that began in December 2020.

The Community Center is the most different building type of the Project's nine buildings. The intent is to use architectural design to make it a welcoming destination for a very inclusive group of users.

The following design criteria will guide the design:

- **Accessibility** – the building will be physically accessible without barriers or points of confrontation; the activities within will be visually accessible; and the building massing, materials and signage will seek to make it

personally accessible. The building envelope will have a high percentage of transparency to make the activities an attraction.

- **Sociability** – both spaces exterior and interior to the building will seek to bring people together by design and programming. Spaces outside, at-grade or on terraces, will be designed and furnished to welcome people without barrier, to be flexible to reconfigure, and to accommodate diverse activities. These spaces will provide the tangible invitation to meet, dwell, and interact with friends and strangers.
- **Comfort** – the design of these spaces, both exterior and interior, will be comfortable in configuration, i.e., open and flexible, to encourage engagement and interaction.
- **Active Programming** – programs for recreation, education, entertainment and connection will be diverse to attract a broad range of users.

#### **Energy Performance and Embodied Energy**

*The site's buildings should be designed to minimize energy use and the embodied energy of their components.*

MIT commits to designing all Project buildings to achieve LEED Gold certification and exceed

minimum Stretch Code performance. An integrative sustainable design process will be utilized to ensure that best practices are employed in the design of exterior envelopes, building energy systems, and construction systems and materials. The focus throughout the design process for individual buildings will be to drive down projected emissions, both in the manufacture of construction elements and in the long-term operation of the buildings.

The Project is designed to maximize energy efficiency and support a path for a net-zero carbon future. Residential buildings will be all-electric, while commercial buildings will be designed with a path to electrification that would integrate with the long-term vision for a low-carbon power grid. Load sharing between complementary building programs will be explored to maximize heat exchange and optimize energy performance of the development. Furthermore, the proposed on-site rooftop photovoltaic (PV) arrays, supplemented by procurement of off-site renewable energy, can offset the Project's electricity use. Electrified residential buildings alongside commercial buildings designed with a path to electrification chart a net-zero carbon future in line with the City's and MIT's long-term goals.

Based on the above, MIT has designed the Project in a manner that is generally consistent with the objectives of the PUD-7 Guidelines and Principles.

**Intentionally Blank Page**