

MIT VOLPE REDEVELOPMENT PLAN

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Volume 2, Section 1: PUD-7 Requirements

Per Section 13.91.2, within the Master Plan Area, the locations of streets and open spaces, the quantities of proposed land uses, and general building envelopes, locations and heights shall be indicated in sufficient detail that the Planning Board can reasonably assess the impact of the Master Plan and its general consistency with the Master Plan Criteria set forth in Section 13.91.4 and the guidance provided in the PUD-7 Guidelines and Principles. At a minimum, a Development Proposal and subsequent Final Development Plan for a Master Plan Area must contain the components included below.

A. SITE ORGANIZATION AND DEVELOPMENT PLAN

A. Site Organization and Development Plan

Describe how the Master Plan Area is divided into distinct building sites (including any Government Owned Lot), streets, and open spaces and their development characteristics, including potential uses and Gross Floor Area (GFA). The overarching goal of the Project is to create a welcoming, connected innovation environment, establishing a vibrant, diverse, inclusive, mixeduse district that provides opportunities for shared discovery, community and collaboration. It will be a social mixing bowl of people, events and activity.

The Project's proposed highly interconnected and differentiated network of streets and public realm spaces-its streets, squares, parks, and courtsconstitute the plan's fundamental organizing principle. As shown on Figure A2: Development Parcel and Figure A5: Existing Conditions, today the Site is a superblock, with little to no public access and streets that are controlled by several different owners.¹ The Project anticipates breaking down the superblock and developing an urban grid that is continuous with the streets of Kendall Square and with connection points to adjacent developments and uses. The plan creates 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 it will create a more understandable and accessible district for regional visitors.

Key to weaving the Project into the fabric of Cambridge is the establishment of 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 and restore east-west and northsouth connections through the Site, including connections along the Government Owned Lot. This proposed network is shown on **Figures A6** and A7: Site Development Plan – Street Network and Open Space.

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. As the Project is built out and matures, MIT will 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 all permit public use and character.

A new major urban park – Third Street Park – will be located at the most public corner of the

¹ Of note, 303 Third Street owns significant portions of Potter Street and Fifth Street.

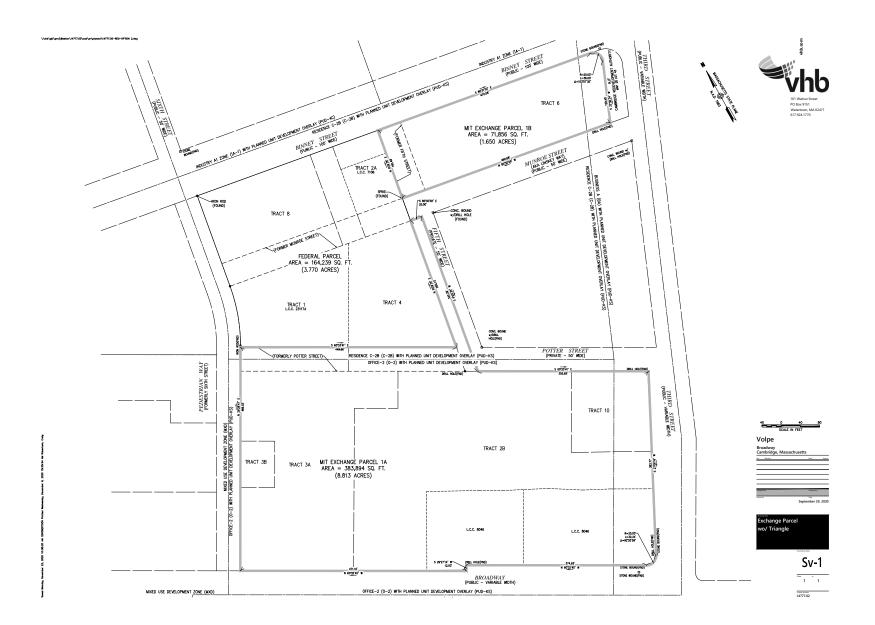
development at the northwest corner of Broadway and Third Street. The inclusion of this park is a direct response to community input. The Third Street Park will be bounded by streets on three sides underlining its public accessibility, and its location at the southeast corner of the Project will maximize its solar exposure. A second significant new park - Sixth Street Park - directly abutting the southerly half of the Loughrey Walkway/Kittie Knox Bike Path, will expand the public nature and activation of this important and well-utilized public walkway. Open space and wide sidewalks will characterize the Fifth Street Promenade - a new multi-modal connection between Broadway and Binney Street. All these spaces will serve as a vital connection between Kendall Square and the greater East Cambridge neighborhood. Not only do these significant open spaces establish a network that permeates the Development Parcel, they are intentionally open along the Development Parcel's perimeter, creating urban green space that is openly shared with neighboring buildings and streets.

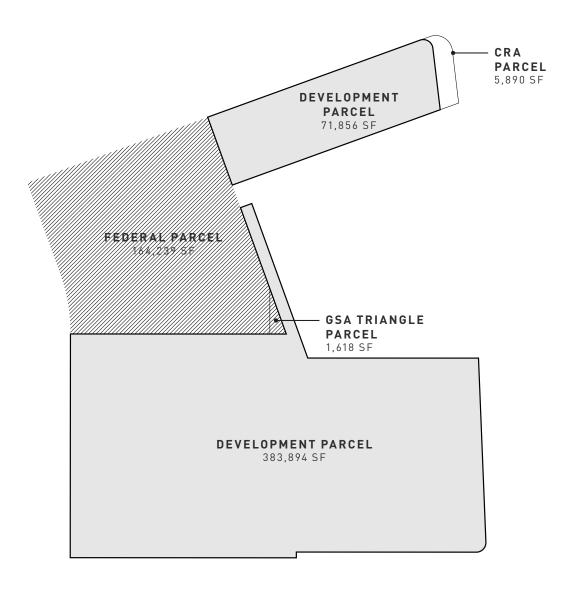
Each building has been carefully sited to allow open space to permeate the larger site. For example, the Project proposes to locate the Community Center at the northwest corner of the Third Street Park, but not fronting on Third Street or Broadway. Locating this community-focused building slightly inboard of the busiest urban corner will draw the public into the heart of the development while using the park as a buffer between the Community Center and the bustle of Broadway and Third Street. Similarly, the government has designed its Government Owned Lot with an art lawn along Fifth Street on which the government intends to permit public use.

Urban Design Principles

It is an extraordinary opportunity within a mature city and neighborhood to develop significant new elements of the public realm that will create inclusive pathways, open spaces and a civic gathering space, all for diverse stakeholders. The Project is planned around several complementary and specific urban design principles for placemaking.

- Continuity start with existing people and places, streets and pathways, surrounding land use, and open space corridors.
- Identity provide a strong visual identity by the continuity in alignment of building facades and the relationships of built form and open space.
- Diversity provide a mix of uses that attract diverse users from the neighborhood and City, from residents, workforce and guests, from science and technology, and from retail, dining and entertainment.





*ALL SQUARE FOOTAGE FIGURES ARE APPROXIMATE



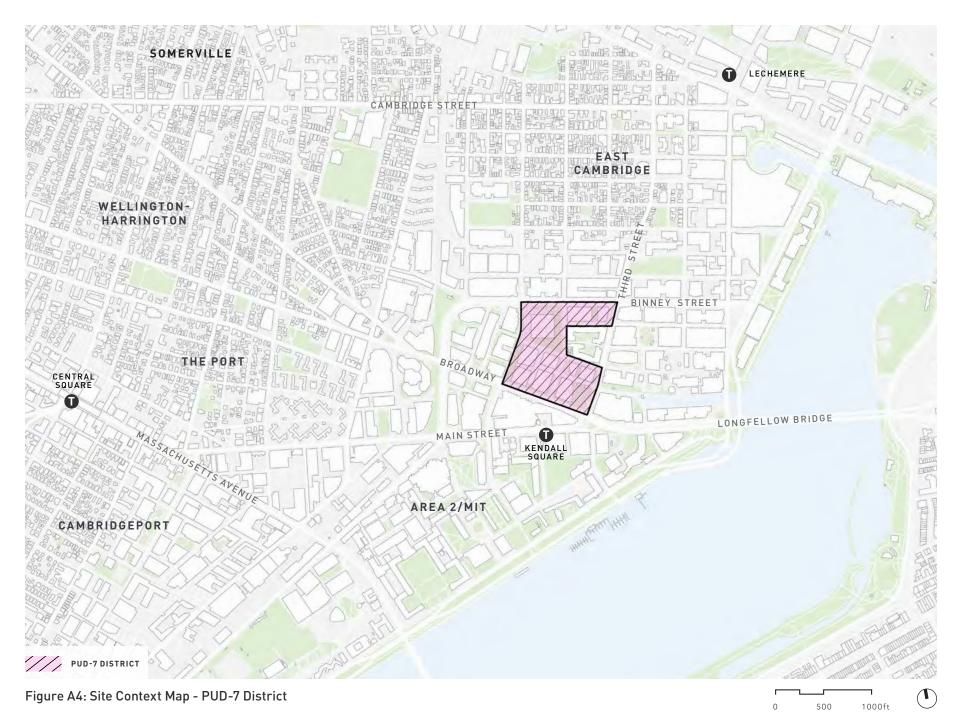
Figure A2: Development Parcel

SECTION 1A. SITE ORGANIZATION AND DEVELOPMENT PLAN





Figure A3: Ownership of Streets



SECTION 1A. SITE ORGANIZATION AND DEVELOPMENT PLAN

- **Proximity** build things close together on the ground, including the Project's open spaces, like rooms and passageways that form a coherent public realm.
- Inclusion make the pedestrian environment and the public-facing uses welcoming by connectivity and permeability to adjoining districts.
- Scale divide the existing block into a grid of small walkable blocks.

Continuity

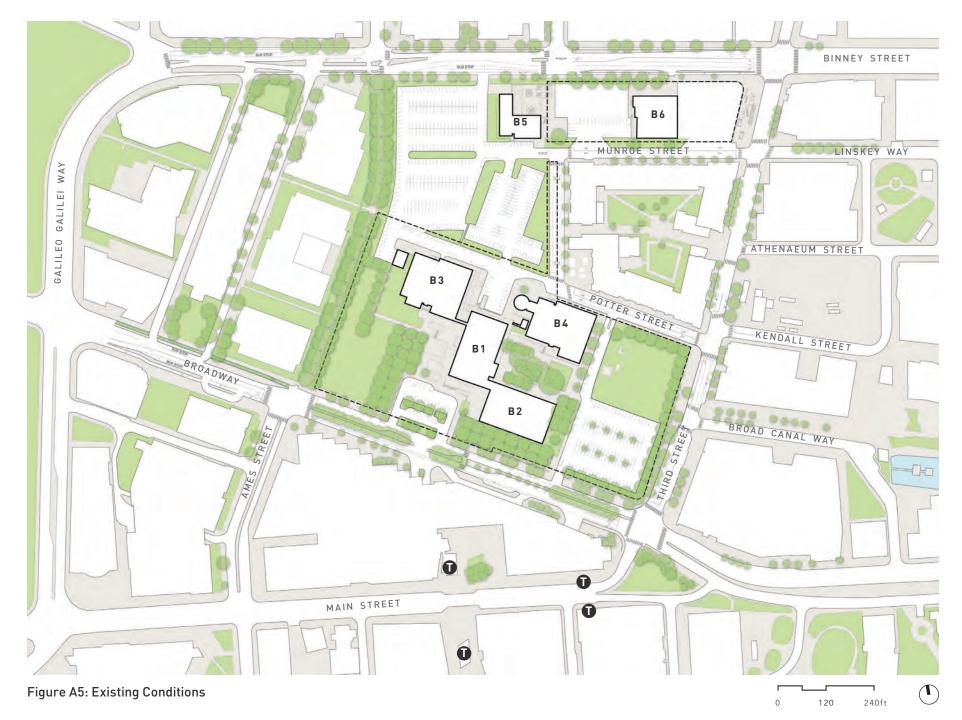
The urban blocks are largely defined by the continuity or extension of existing streets and passageways:

- Fifth Street will now continue from Binney Street to Broadway;
- Potter Street will extend beyond its current configuration to the Loughrey Walkway/Kittie Knox Bike Path; and
- Broad Canal Way will extend from the Broad Canal across Third Street through the Development Parcel to Kendall Way, with a visual anchor at the proposed entertainment venue and further to the Loughrey Walkway/ Kittie Knox Bike Path through a covered passageway.

The important north/south pedestrian connections of the Sixth Street Park and Loughrey Walkway and the "green corridor" of the Fifth Street Promenade and proposed Volpe Art Lawn adjacent to Fifth Street at the US DOT Volpe Exchange Project are continued and enhanced through the Site. Finally, the defining open space at Third Street and Broadway is located and configured as the civic square in Kendall Square – a large urban room that creates a heart for Kendall Square.

Identity

As shown on **Figure A8: Site Development Plan** – **Uses**, the six orthogonal blocks south of Potter Street are the location for three commercial buildings, three residential buildings and the Community Center. The Binney Street parcel is the location for one commercial and one residential building. The building facades respond to a consistent "build-to" datum on the interior of the Development Parcel as well as on the Development Parcel's perimeter streets – Broadway, Third Street and Binney Street. This simple and regular alignment of building facades gives the public realm and open spaces a strong visual identity and legible form as a foundation for the Development Parcel's civic structure.



Diversity

The mix of commercial buildings and residential buildings provide diverse activity throughout the day, week and year. Street-level retail, dining and entertainment will provide a city-wide and regional destination that contributes to the diversity of guests, vitality and authenticity when these tenants and this activity is both locally based and programmed to reflect a world-class innovation cluster.

Proximity

The Project provides a grid of streets and urban street walls that do, in fact, "build things close together on the ground," promoting the walkability and creative collisions that are essential to placemaking in an innovation district. In addition, these block dimensions and building street walls constitute the vertical surfaces that frame open space in three dimensions.

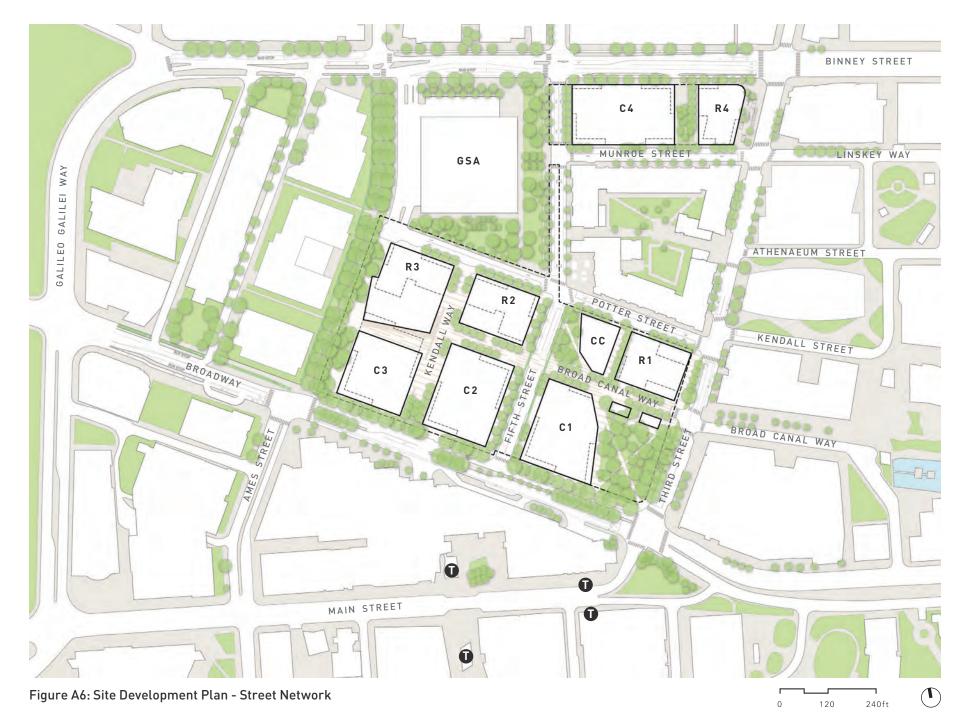
Inclusion

The Project includes a grid of publicly-accessible passageways that connect to public streets and walkways, thereby inviting and welcoming access. The street-level program is dominated by publiclyaccessible uses of retail, dining, entertainment, and other active uses, and the major open spaces are adjacent to public ways; these attributes promote unrestricted and inclusive participation and use by adjoining districts.

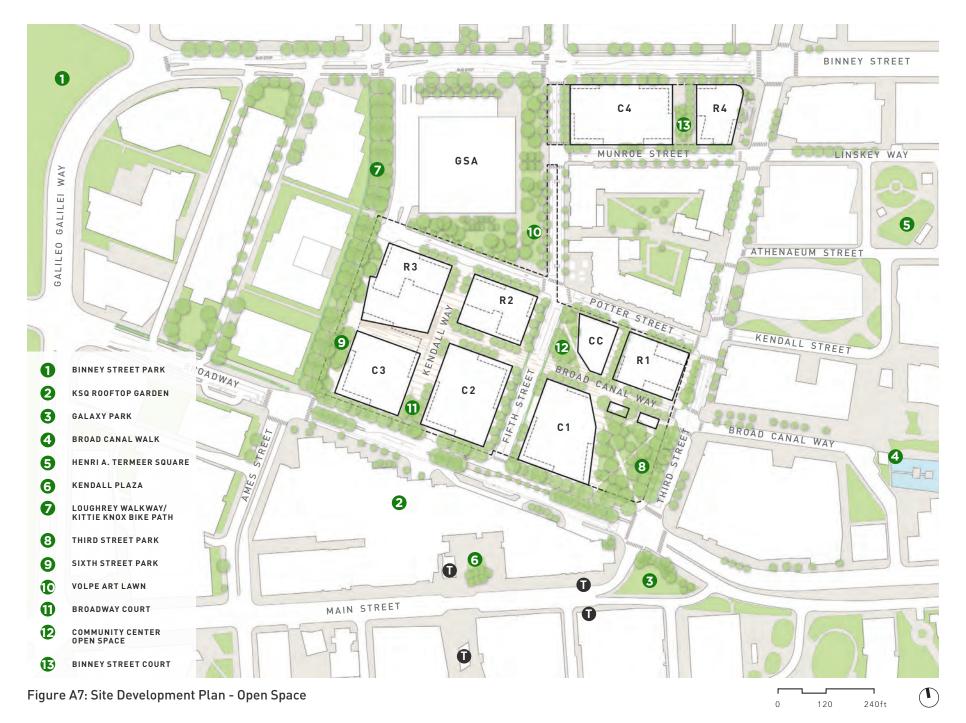
Scale

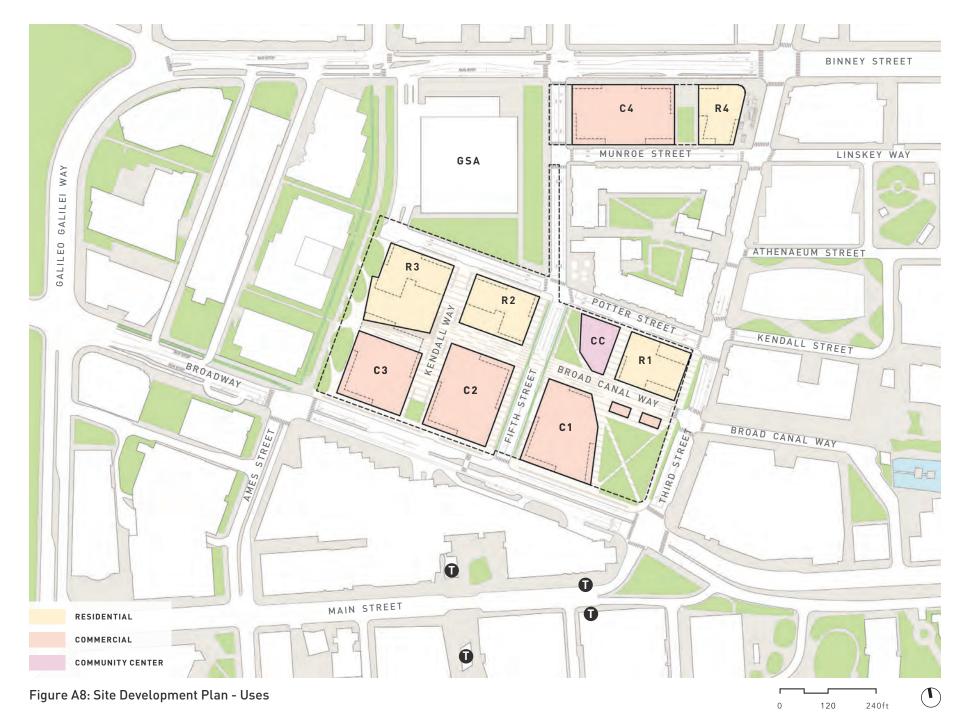
The Project divides the superblock into a grid of small walkable blocks with a network of open spaces connected to the surrounding neighborhood, and continuity of street-level uses along Broad Canal Way, Third Street, Broadway and Binney Street.

By extending Broad Canal Way deep into the Development Parcel as a multi-modal, pedestrianfocused street that can be closed off to vehicular traffic, the Project emphasizes the Broad Canal and increases the sense of connectivity to the Charles River. The introduction of active ground floor uses on four sides of the proposed new buildings, such as retail, entertainment and makerspaces, will energize each block, engage with the surrounding neighborhood, and will 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 part of the East Cambridge neighborhood and an integral piece of the City. Where there is currently an isolated parcel that is not open for public use or access, the Project will reconnect the Site to the City and serve as an extension of the existing fabric, in which the edges between existing neighborhood and new development are



SECTION 1A. SITE ORGANIZATION AND DEVELOPMENT PLAN





SECTION 1A. SITE ORGANIZATION AND DEVELOPMENT PLAN

intentionally blurred.

This Development 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 on a parcel-byparcel basis. **Figure L5: Site Development Plan – Block Plan** shows preliminary parcel boundaries (at the ground level) as currently planned. These parcel boundaries may change as the Project evolves.¹

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

¹ Development Parcel does not include 5,890 sf "CRA Parcel" or 1,618 sf "GSA Triangle Parcel" shown on Figure A2: Development Parcel one or both of which may be added in the future.

B. SITE MASSING PLAN

B. Site Massing Plan

Illustrate the height and massing of building volumes for each proposed building site and include studies of anticipated shadow and wind impacts resulting from building mass. The Project includes nine (9) buildings, including four commercial buildings, four residential buildings and a Community Center. One commercial building and one residential building are planned along Binney Street on the portion of the Site that is north of Munroe Street. The other seven buildings are located south of Potter Street. The commercial buildings south of Potter Street are located along Broadway.

Location of Uses

On the south parcel, three commercial buildings, Buildings C1, C2 and C3 are located on Broadway. These bigger building footprints and larger building masses will address the wide boulevard that is Broadway. Although the most desirable location from a marketability standpoint, commercial buildings are purposely not located at the corner of Third Street and Broadway in order to locate a new park at that corner per community feedback.

Three of the residential buildings, Buildings R1, R2 and R3, and the Community Center are sited north of Broad Canal Way fronting along Potter Street, which is more residential in nature. These slenderer structures allow greater daylight penetration to Fifth Street and Volpe Art Walk and complement the adjacent residential use at 303 Third Street.

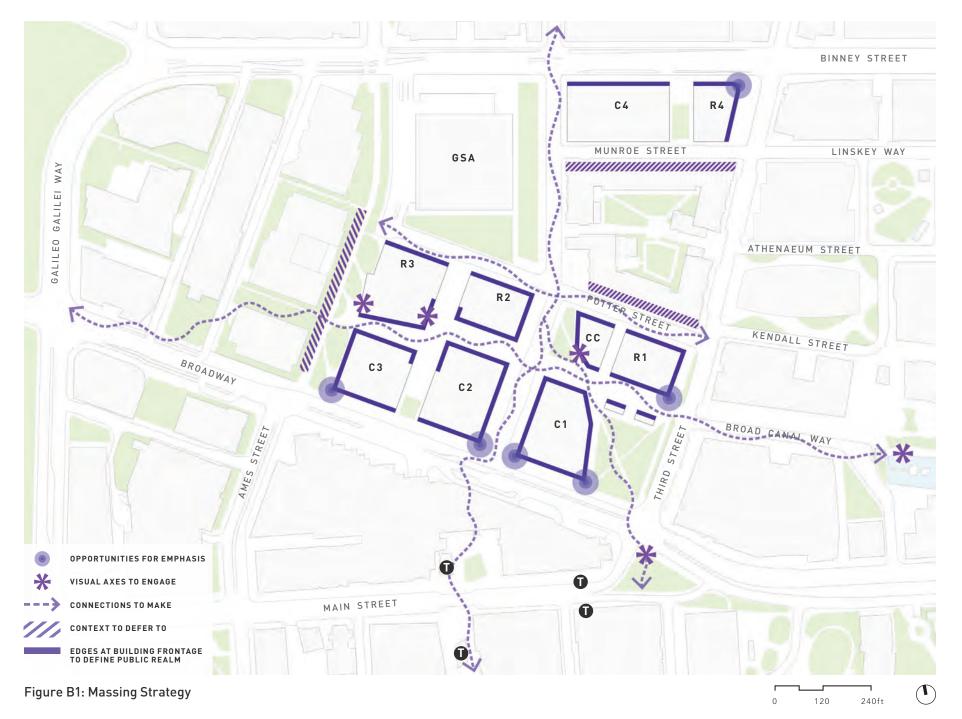
Binney Street has evolved over the last decade as a

mixed-use street with large commercial buildings and a mix of historic renovations to residential and new residential construction. The plan includes one commercial building, Building C4, on the west side of the parcel situated to the north of Munroe Street and one residential building, Building R4, on the east side of such parcel. The heights conform to the PUD-7 Zoning, putting the taller residential building closest to the corner of Third Street and Binney Street.

Massing Strategy

The building masses will be configured to define urban streets and to define urban space. **Figure B1: Massing Strategy** illustrates opportunities for the massing to respond to existing and planned gateways, visual axes, connections, context and public realm. The street wall frontage along Broad Canal Way is aligned block to block to define a special street, 55 feet in width, with direct connection to Broad Canal Way east of Third Street. Similarly, Buildings R1, R2, and R3 along Potter Street are aligned by a build-to line to create a regular urban grid that aligns with 303 Third Street and defines a specific edge to the open space surrounding the US DOT Volpe Exchange Project.

Buildings C1, C2 and C3 reinforce the existing streetwall of Broadway. Building C1 and the Community Center break the grid to announce the special attraction that is the Community Center



SECTION 1B. SITE MASSING PLAN

and to define the diagonal pedestrian path from the intersection of Fifth Street and Potter Street to the intersection of Third Street and Broadway and on to Wadsworth Street leading to the Charles River. Residential Buildings R1, R2 and R3 have smaller footprints with more light and air around the towers and are more suitable for the interior blocks.

The buildings on Binney Street are regular in massing. Building R4 acknowledges the important gateway corner of Third Street and Binney Street. Building C4 is a simple form that maintains the prevailing streetwall and frames the civic space for the US DOT Volpe Exchange Project.

Building Heights

Height will be consistent with that allowed by the PUD-7 Zoning as shown on **Figure B2: PUD-7 Zoning Heights**. Conceptual height distribution of the Project square footage is shown on **Figure B3: Conceptual Project Heights** and are shown in the existing context on the Figure B4: Context Building Heights. The Community Center, located at the corner of Fifth and Potter Streets, will have a height of approximately 40 feet. Project heights may evolve as buildings are designed and reviewed through the Design Review process. Height variety can be achieved by differences in required floor to floor heights for office versus different types of research, by differences in the number of floors between different commercial buildings and specialty floors on different buildings. 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. Additional variation in heights is desirable and will be explored as design progresses as is more specifically set forth in Volume 1. Section 3.C of this document.

Wind and shadow impacts are included in Section K: Environmental Comfort Plan of this filing.



Figure B2: PUD-7 Zoning Heights

120

240ft



Figure B3: Conceptual Project Heights

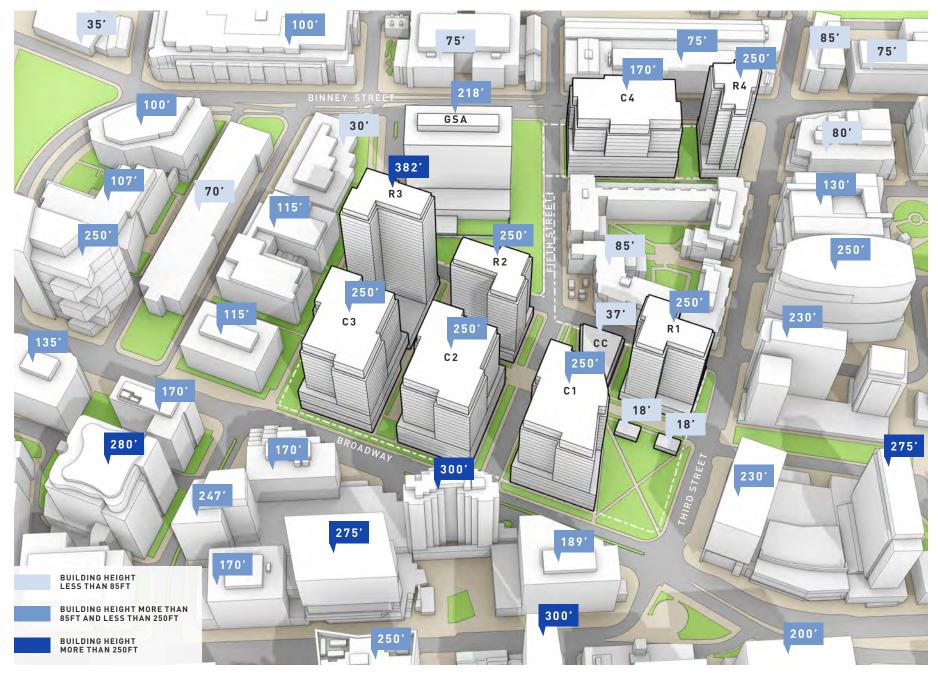


Figure B4: Context Building Heights

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C. PARKING AND LOADING PLAN

C. Parking and Loading Plan

Identify the locations of all parking facilities, bicycle parking facilities and facilities for loading or other vehicular service functions, and the number of spaces proposed at each location.

¹ The parking numbers for the garages may be decreased if parking is located off-site in compliance with Section 13.95.

² The northern portion of the Development Parcel refers to the parcel bounded by Munroe Street, Third Street, Binney Street and Fifth Street (the "North Parcel"). The southern portion of the Development Parcel refers to the parcel bounded by Potter Street, the Loughrey Walkway, Broadway and Third Street (the "South Parcel").

The Figure C1: Vehicular and Bicycle Parking Access Plan shows the locations of primary building entries, access to bicycle and vehicular parking facilities and loading facilities.

There are four below-grade parking entrances, three for the South Parcel and one for the North Parcel:

- one entrance on Broadway at Building C2
- one entrance on Potter Street beneath the Community Center
- a second entrance on Potter Street at Building R3
- one entrance on Munroe Street at Building C4.

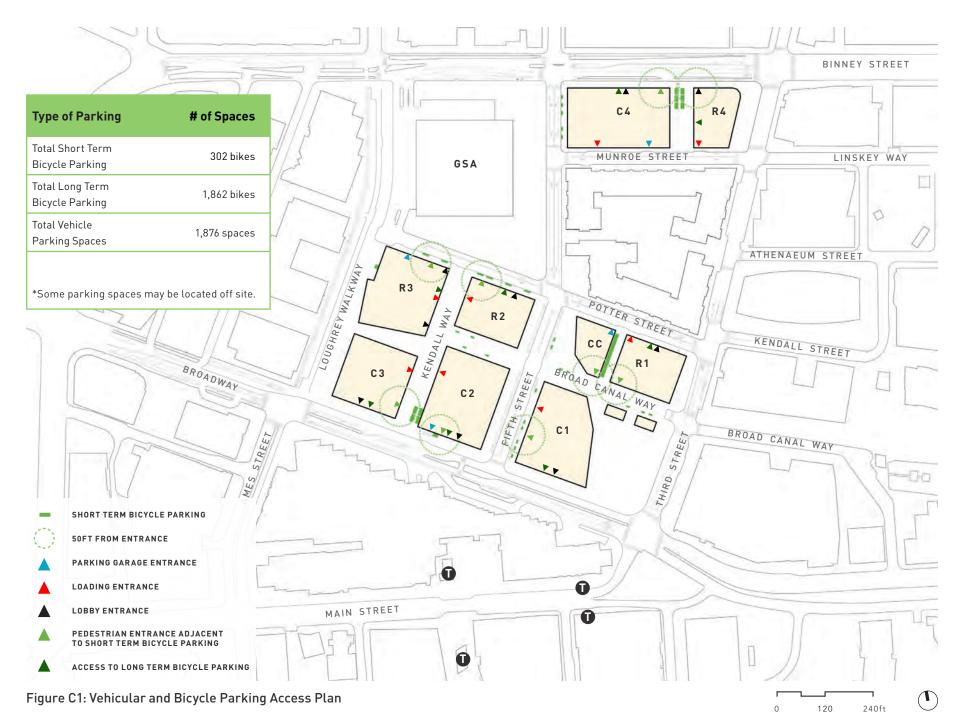
The parking entrance locations are strategically placed with regard to phasing of development and to siphon off vehicular activity on the perimeter of the site, and they minimize unnecessary vehicular circulation on shared streets internal to the Site. Each ramp provides access to a section of the garage that can be built and operated independently of the other sections. At C2, the entrance ramp is located off the south west corner of C2 to preserve the useability of an attractive retail corner adjacent to open space. The ramp on Potter Street is located beneath the Community Center to allow development independent of R1. The ramp at R3 is located to accommodate both turning radii as well as back of house for the entertainment venue. The entrance to parking on C4 is located away from the southeast corner of C4 to maintain flexibility for active use of that frontage.

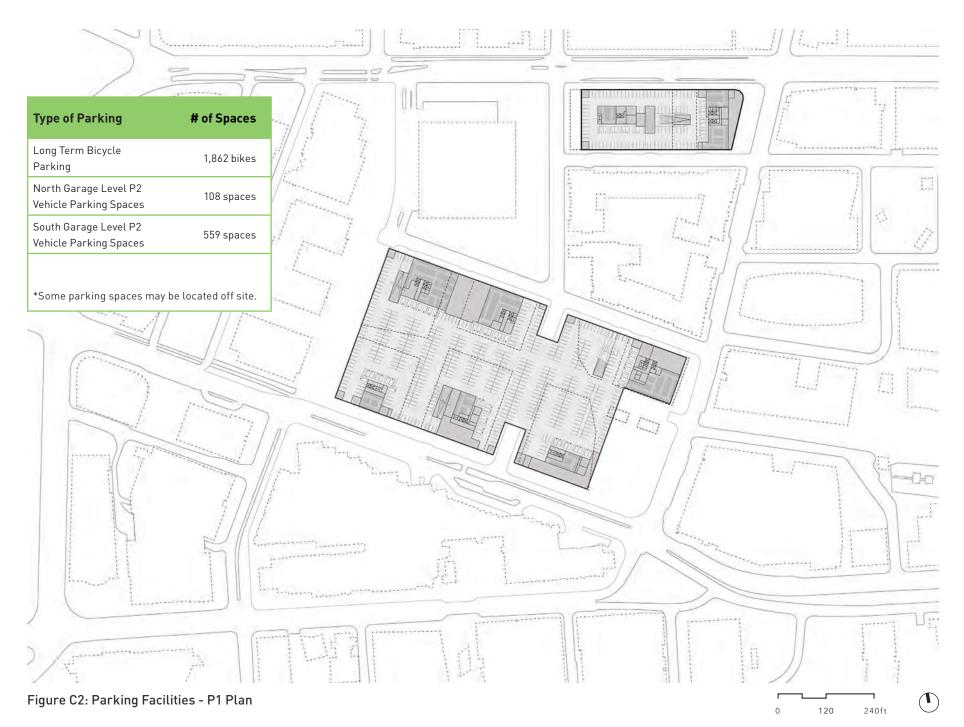
Presently, the entire 14-acre Site (including the Government Owned Parcel and the MIT Exchange Parcel(s)) contains 570 parking spaces that are used by the federal government. When constructed, the Project will be serviced by approximately 1,876 parking spaces with on-site parking primarily located within two separate below-grade parking garages.¹ The parking spaces associated with the government use will be reduced from 570 to 318 and will be relocated to the US DOT Volpe Exchange Project.

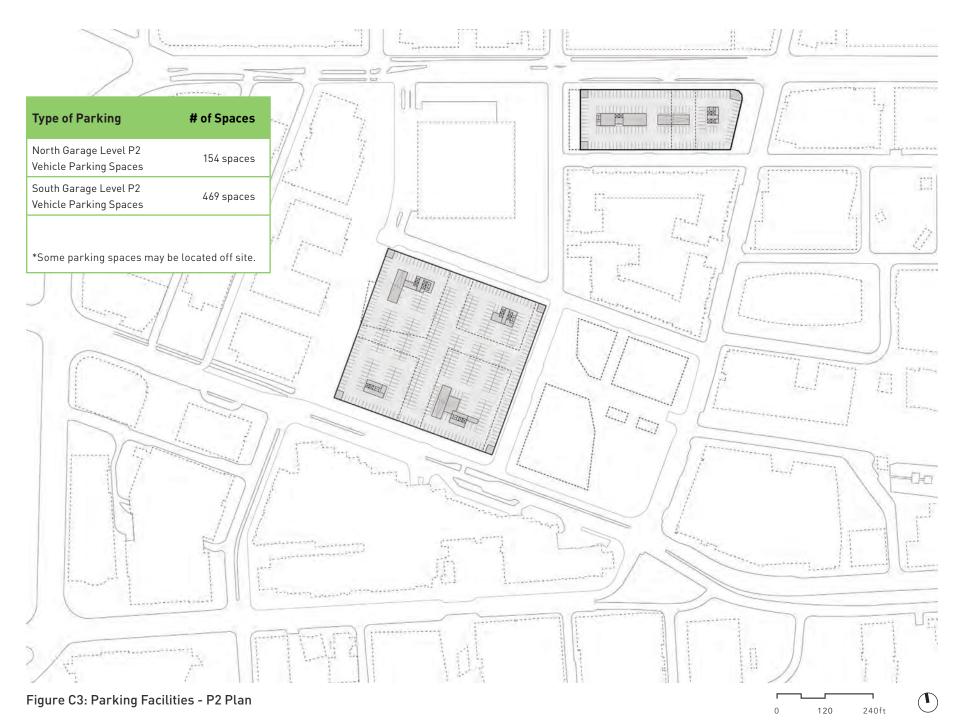
As proposed, the Project will be serviced by two separate below-grade parking structures, located in the northern (419 spaces) and southern (1,457 spaces) portions of the Development Parcel 2 (**Figures C2 – C4**).² The parking and service entries are located to maximize the activation of the Development Parcel while mitigating impacts. Parking and loading is kept off of Broad Canal Way and parking is kept off of Kendall Way, both of which are intended to be extensions of the publicly-accessible parks and open spaces on the Development Parcel. The south garage includes three separate garage entries that are located on Potter Street (two entries) and Broadway (one entry) to facilitate traffic distribution entering and exiting the Site. The north garage includes one garage entry located on Munroe Street. Loading facilities for Buildings C4 and R4 are located on Munroe Street. Loading facilities serving each building south of Potter Street will be defined during the Design Review process.

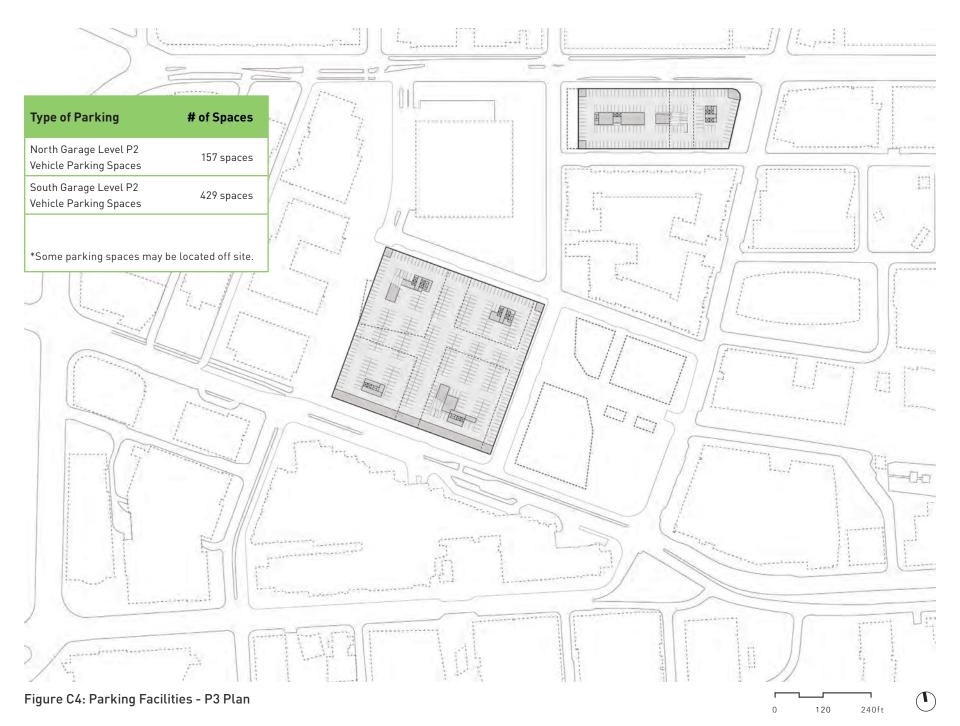
Limited on-street parking and drop off areas will be allowed as shown on **Figure D12: Vehicular Plan – Curb Utilization** (in Section D: Connectivity Plan) to support retailers and provide access to those who, due to age or ability, may be unable to walk or bike. The proposed plan can potentially accommodate up to 75 on-street spaces for shortterm vehicle parking or active curb uses (not including Binney Street, Third Street or Broadway). The proponent will make final adjustments at the Design Review process for each building/open space. The combined number of vehicle parking spaces in the Project below grade garages and short term on street will not exceed the proposed 1,876 limit.

The approximately 1,862 long-term bicycle parking spaces will be distributed across the P1 level of the two parking garages and each building will include access to bicycle storage. There will also be 302 short-term bicycle parking spaces located near buildings' primary entries consistent with Article 6.100 of the CZO but concentrated in centralized facilities behind the Community Center and in pocket parks along Broadway and Binney Street to the extent possible.









SECTION 1C. PARKING AND LOADING PLAN

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D. CONNECTIVITY PLAN

D. Connectivity Plan

Illustrate all pedestrian, bicycle and vehicular circulation routes within the Master Plan Area, their connections to nearby public circulation routes and destinations outside the Master Plan Area, and approximate locations of access and egress points on each building and parking facility within the Master Plan Area. The Project provides the opportunity to create or complete pedestrian, bicycle and vehicular connections between and 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.

Figure D1: Illustrative Connections Plan and Figure D2: Connections to Surrounding Context Plan show how the basic site organization of the Project will complete 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.

As shown on the Figure D4: Pedestrian Connectivity Plan – Existing Conditions, the Project's immediate surroundings are characterized by small blocks and permeability. However, the existing Site is currently a superblock with little or no public access and acts as a barrier to pedestrian movement. Figure D5: Pedestrian Connectivity Plan – Proposed illustrates how the Project will create a Fifth Street connection that will include generous sidewalks on both sides and provide access for pedestrians from Binney Street through to the Marriott hotel, Kendall Square and the Kendall/MIT MBTA Station as shown on Figure

D3: Connections to Transit Routes.

The proposed Project streets must meet the needs of all kinds of users, including bicyclists, pedestrians and vehicles, as they perform daily activities appropriate to an urban context including recreational strolling, walking to/from lunch or striding to/from public transit; bicycling for transportation, pleasure or exercise; and dropping off/picking up users of the Community Center or office. retail and restaurant workers all while maintaining the Project goals of vibrancy, connectivity and inclusivity. The streets will be fully integrated with the existing surrounding streets and with the City's 2015 Bike Plan. The City has proposed separated bike facilities along Binney Street and is developing plans for similar facilities on Third Street and Broadway, all of which provide connections to the regional bike network. Broadway and Binney Street provide connection to the Kittie Knox Bike Path. MIT will continue to collaborate with the City on improvements to the surrounding streets so that final plans can be incorporated into the site design.

Of the internal Project streets, Broad Canal Way and Potter Street are shared streets with low vehicle volumes as described below. They are not, however, identical.



Figure D1: Illustrative Connections Plan

Broad Canal Way

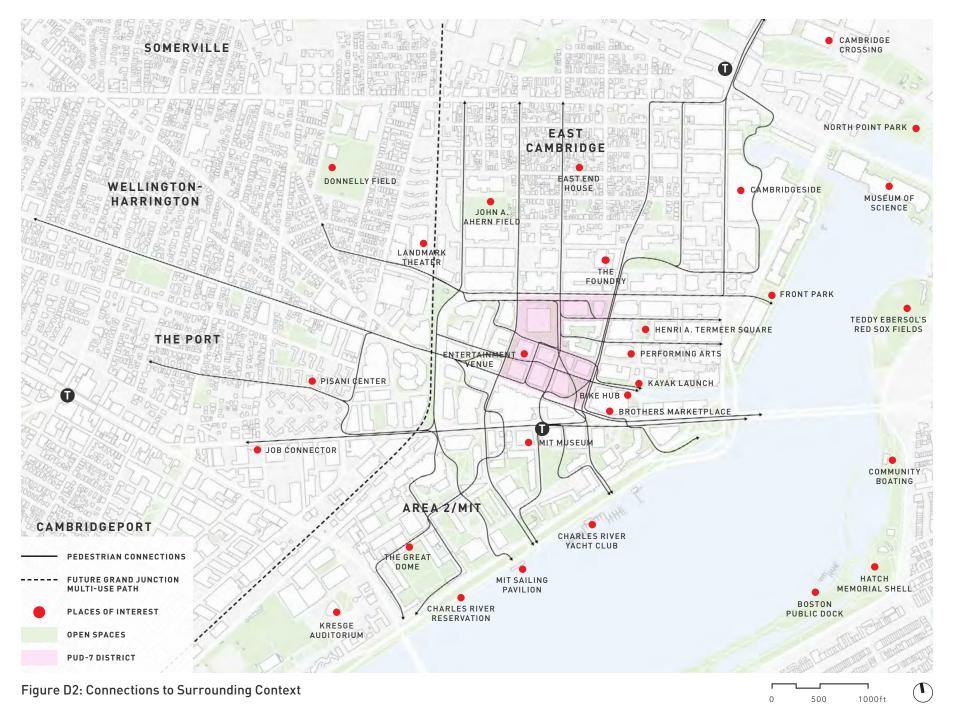
Broad Canal Way is a pedestrian-scaled street at the center of the Project that serves to connect to and bring the existing activity along Broad Canal Way east of Third Street into and through the Project site. Broad Canal Way is envisioned to be a curbless street that will utilize high quality streetscape materials, textures and signage to quide pedestrians, bicycles and vehicles along the way. It is a street akin to what we might find in classic European communities where pedestrians and bicycles are given priority, easily able to cross from side to side as they make their way to local retailers lining each side. This is a welcoming, social street, full of vibrancy and bustling with activity. An entertainment venue will be prominently located at the west end of the street, a visual anchor that acts as a magnet to draw people east-to-west. A 170-foot-long piazza adjacent to the entertainment venue will allow pedestrians and bicyclists to connect through to Loughrey Walkway and Kittie Knox Bike Path and beyond into the MXD district. The entertainment venue and piazza will also be a beacon from the west, inviting pedestrians and bicyclists into the vibrancy of Broad Canal Way and its amenities, including the Community Center.

Broad Canal Way will be unlike any other shared street in Cambridge; it will be not only identifiable, but iconic. It will be characterized by many entrances to ground floor retail and will not include garage or service entries. While pedestrians and bicycles will be given priority on this shared, curbless street, the design also accommodates limited vehicular traffic, on-street parking and drop off areas to support retail and its viability. Parallel parking exists along the entirety of the street, which is threshold to creating a strong retail and pedestrian environment. In addition, on-street parking and drop off areas will provide access to those who, due to age or ability, may be unable to walk or bike. The Project is estimating approximately 20 vehicles in the AM and PM peak hours, indicating that this street can more than support bicycle pedestrian and vehicular access simultaneously.

Potter Street

Potter Street is also envisioned as a "shared street," but it will take on a decidedly different character. It will be characterized by residential buildings and their entrances and related public amenities and active uses on the ground floors on the south side. The uses will complement the 303 Third residential building and the US DOT Volpe Exchange Project open space on the north side. The Community Center will also be an important presence along this street at the corner of Fifth Street. Potter Street will terminate at the connection to Loughrey Way and the Kittie Knox Bike Path.

With an estimated future peak hour volume of



approximately 300-400 vehicles, the street will be primarily serving the adjacent land use activity. In line with the Bicycle Network Vision as referenced in the 2015 Cambridge Bicycle Plan, the Project will maintain Potter Street as a low-traffic-volume/ low-speed street. As described in MassDOT's Separated Bike Lane Planning and Design Guide (Page 12, Section 2.4.1), on streets where operating speeds are below 25 mph and traffic volumes are below 6,000 vehicles per day, such as Potter Street, separated bike lanes are generally not necessary and most bicyclists are comfortable sharing the road with motor vehicles. Similarly, FHWA's Bikeway Selection Guide (Figure 9: Preferred Bikeway Type) indicates that a "shared lane" is an appropriate treatment for a low speed/low volume street. A shared lane/sharrow condition can be found on nearby Amherst Street and Wadsworth Street, both of which carry much higher vehicle volumes than Potter Street.

Fifth Street

Fifth Street will reestablish this neighborhood connection between Binney and Broadway. It will be characterized by the US DOT Volpe Exchange Project's wide sidewalks, open space and Art Lawn on its west side between Binney and Potter Street. The Project will continue the wide sidewalks on the west side between Potter and Broadway to foster the feeling of a promenade. The plan includes separated bike facilities on Fifth Street between Potter Street and Broadway which will be completely consistent with City standards as to be indistinguishable from surrounding public streets.

Kendall Way

Kendall Way will be a plaza-like space that prioritizes cyclist and pedestrian activity and allows for occasional managed building service access, without looking like a conventional street. It will be designed to ensure bicyclist and pedestrian safety at all times, but this space 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 would make this space very engaging for evening activities. Kendall Way allows for pedestrian and bicycle connection to Broadway and offers a pocket park with bicycle parking and opportunities for outdoor seating.

The surrounding area has a significant network of existing and planned bicycle routes as shown on Figure D6: 2015 Cambridge Bicycle Network Vision and Figure D7: Bicycle Connectivity Plan – Existing Conditions. As shown on Figure D8: Bicycle Connectivity Plan – Proposed, the Project will extend that network into the Development Parcel with access on all Project streets including separated bicycle lanes on Fifth Street south of

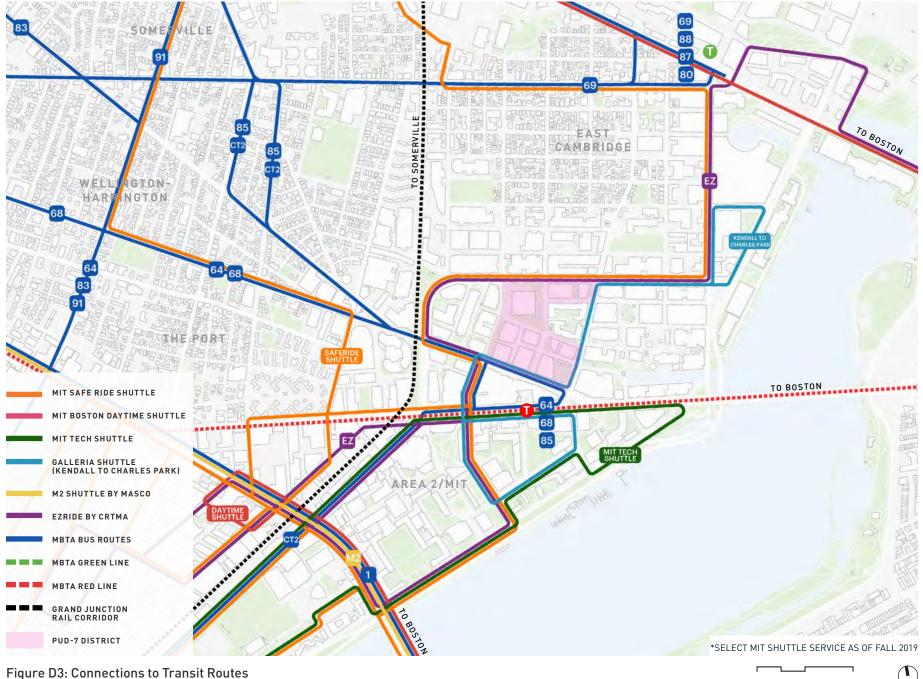
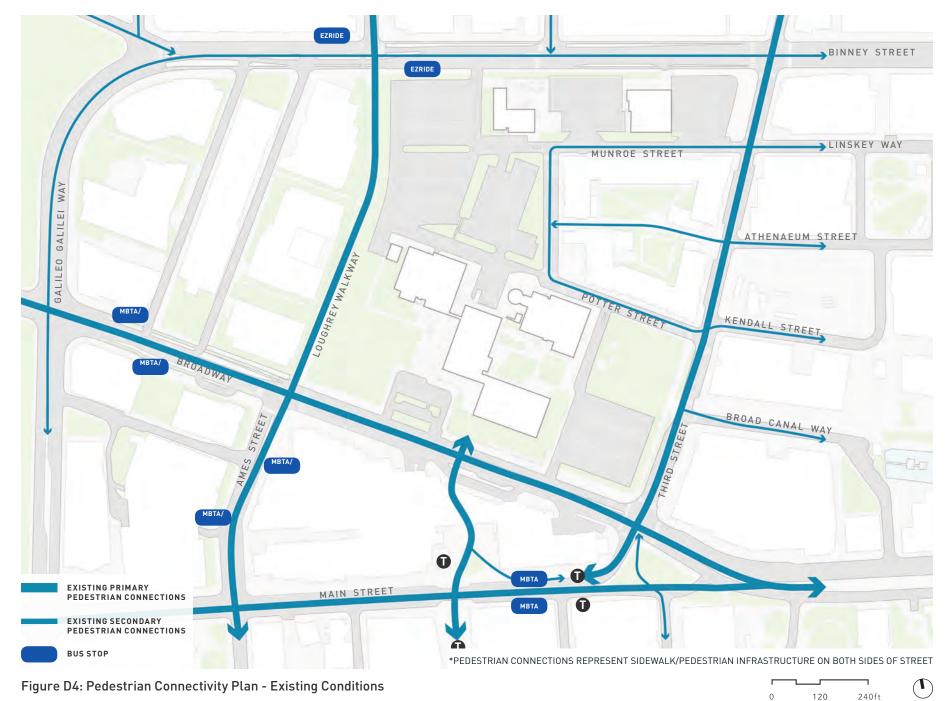


Figure D3: Connections to Transit Routes

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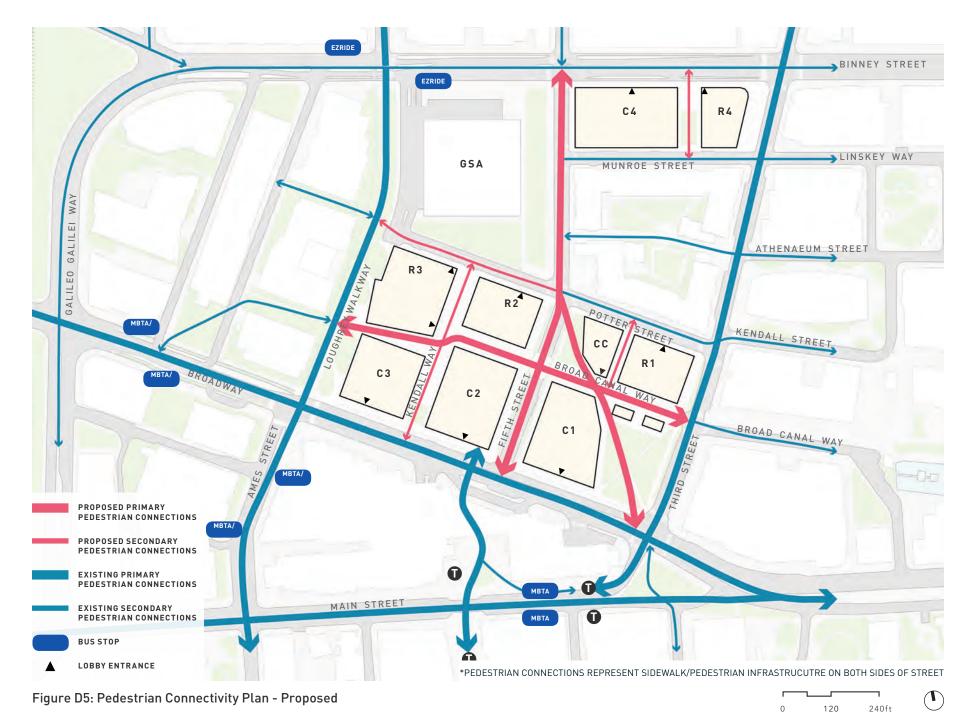
500

1000ft



120

0



Potter Street. Broad Canal Way will be designed as a shared street with low vehicular volume where bicycles will be able to utilize the entire street width. Short-term bicycle parking facilities will be accessed from multiple directions and a new BlueBike Station is preliminarily proposed along Broadway at the new Third Street Park. Bicycle access facilities are shown on the **Project Street** Sections (Figures D13-D19).

Given the volume of bicycle activity we anticipate in, around and through the site, MIT proposes two extra-large (23-dock) BlueBike stations in addition to over 2,000 Project short- and long-term bicycle parking spaces.

As shown on Figures D9-D11, the vehicular movements at the Project are designed to restore access from Binney Street to Broadway via Fifth Street and provide appropriate access to the building activities and Project amenities. Broad Canal Way is designed as an active pedestrian and bicyclist spine with vehicular activity primarily associated with drop-off and pick-up associated with ground-level activation, including the Community Center. To further reduce speeds, Broad Canal Way has been designed as two one-way segments, westbound from Third Street to Fifth Street and eastbound from Kendall Way to Fifth Street. Although parking and curb use will be determined during Design Review, the Figure D12: Vehicular Plan – Curb Use shows preliminary locations for both on-street parking and active curbs to support the active uses at the Project.

Broadway

Broadway's boulevard configuration and limited activity on the south side makes it a challenging street to activate. The Project will extend new retail frontage along each building parcel on Broadway's north side. 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. The porches, raised approximately 18 inches above sidewalk level, will help define clear zones for diners and pedestrians while allowing them to be a part of and observe one another's activities.

MIT will continue to work with the City, the Cambridge Redevelopment Authority (CRA) and adjacent landowners to develop the appropriate cross section for Broadway between Third Street and Ames Street with a focus on improving connectivity and safety for pedestrians and bicyclists.

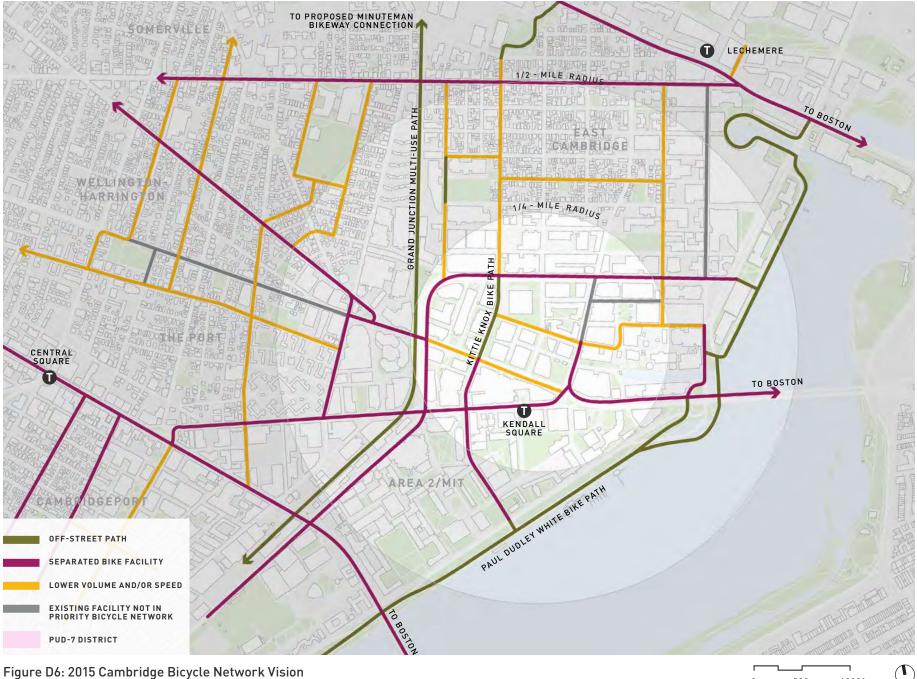
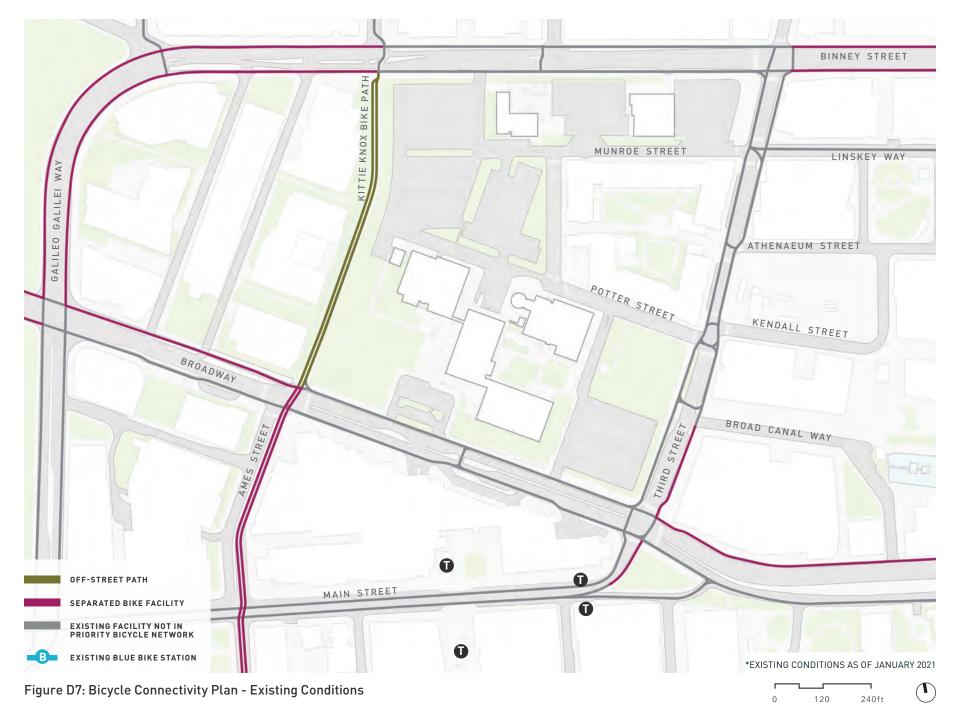


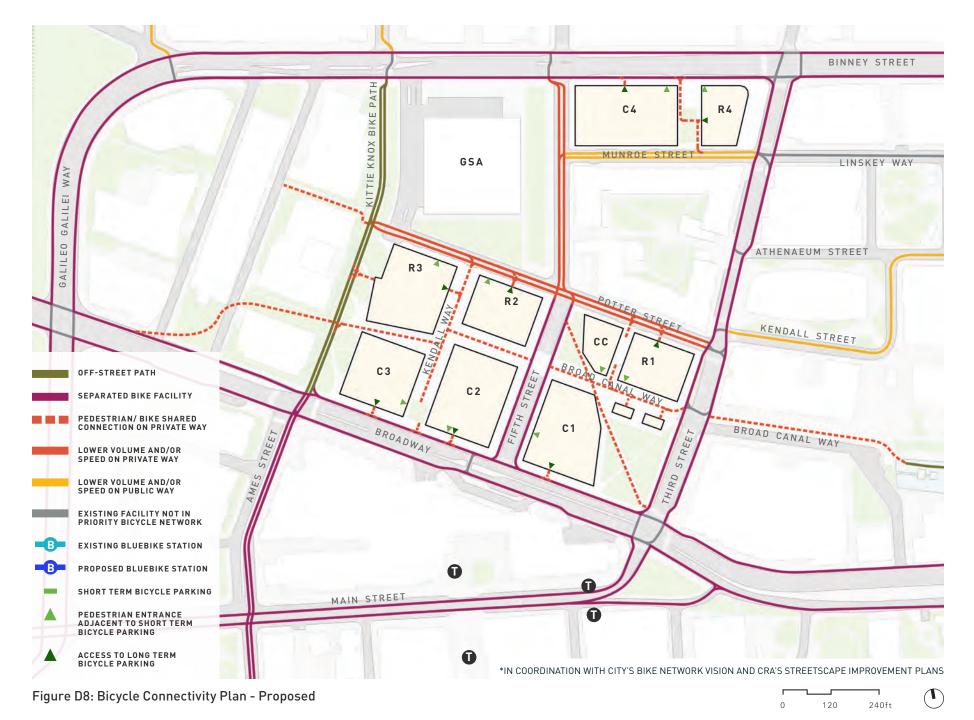
Figure D6: 2015 Cambridge Bicycle Network Vision

0

500

1000ft





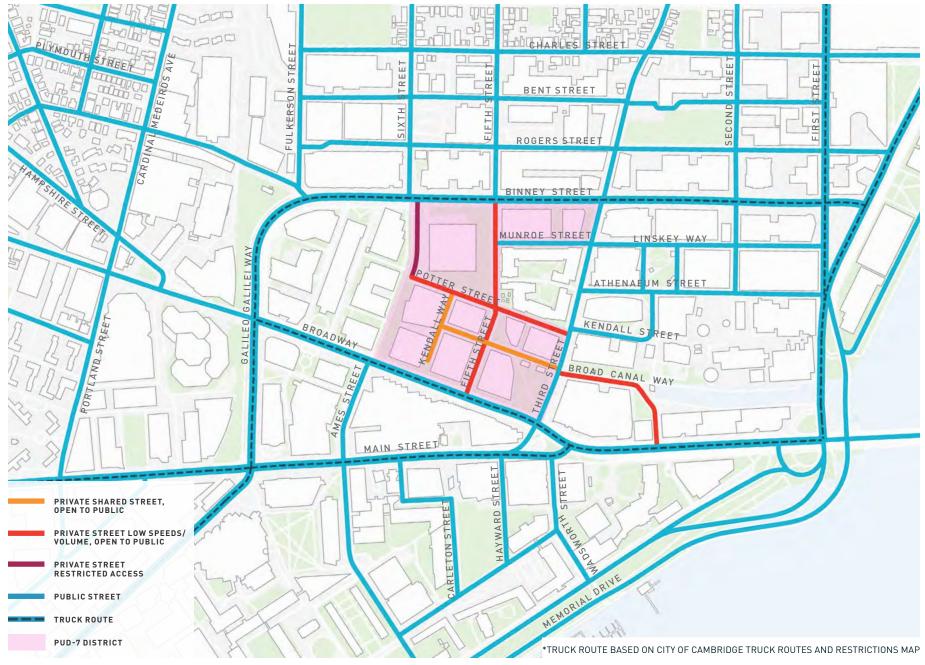


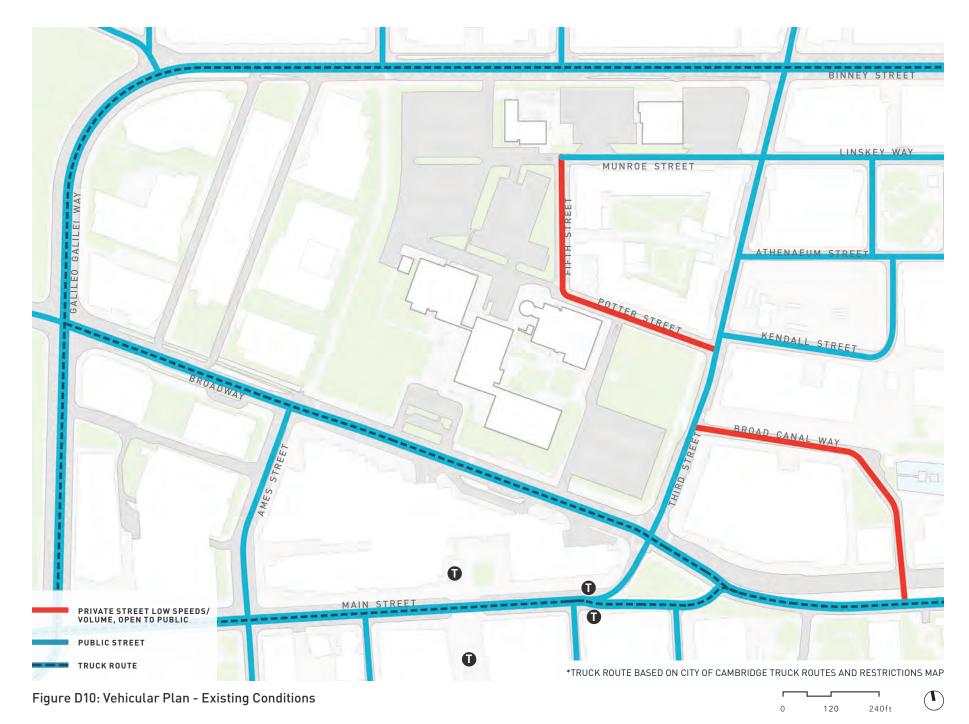
Figure D9: Connections to Vehicular Routes



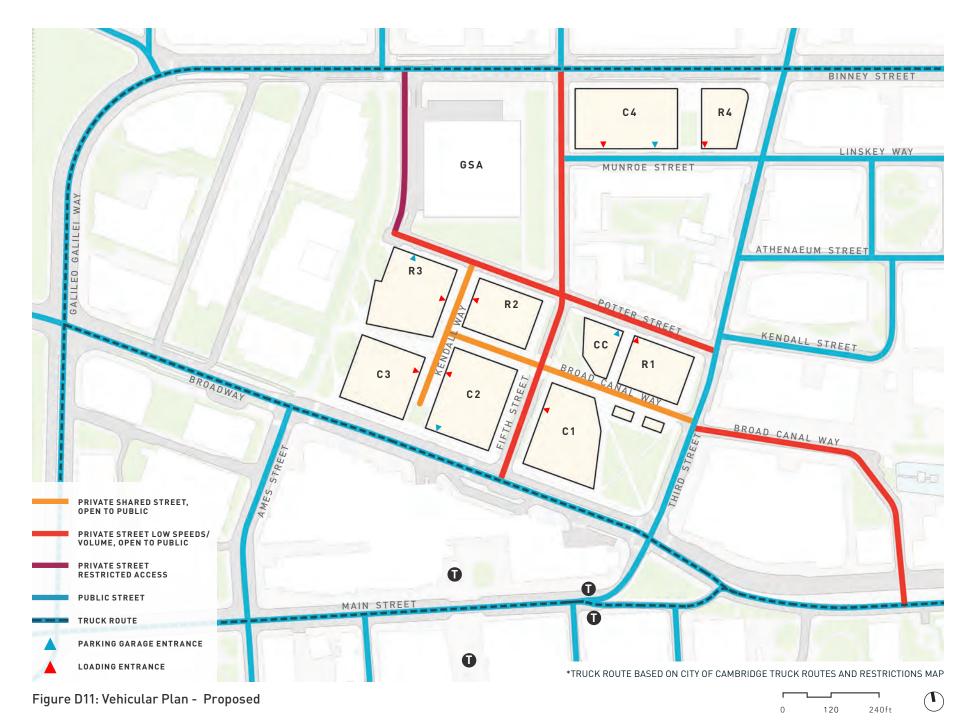
52 MIT VOLPE REDEVELOPMENT PLAN - SPECIAL PERMIT VOLUME 2

SECTION 1D. CONNECTIVITY PLAN

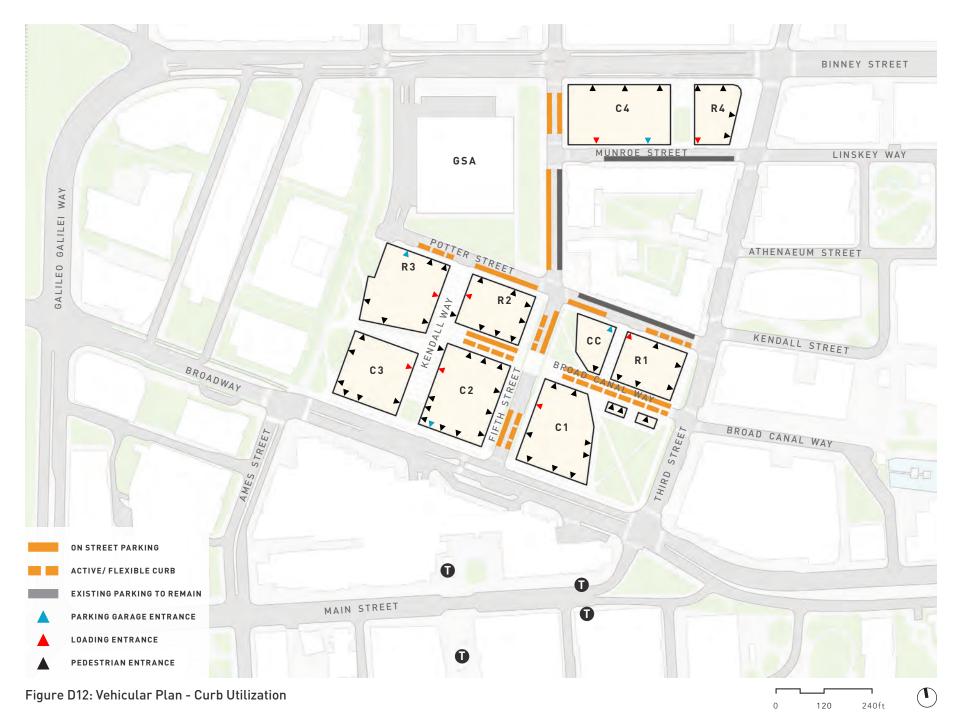
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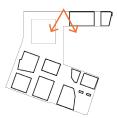


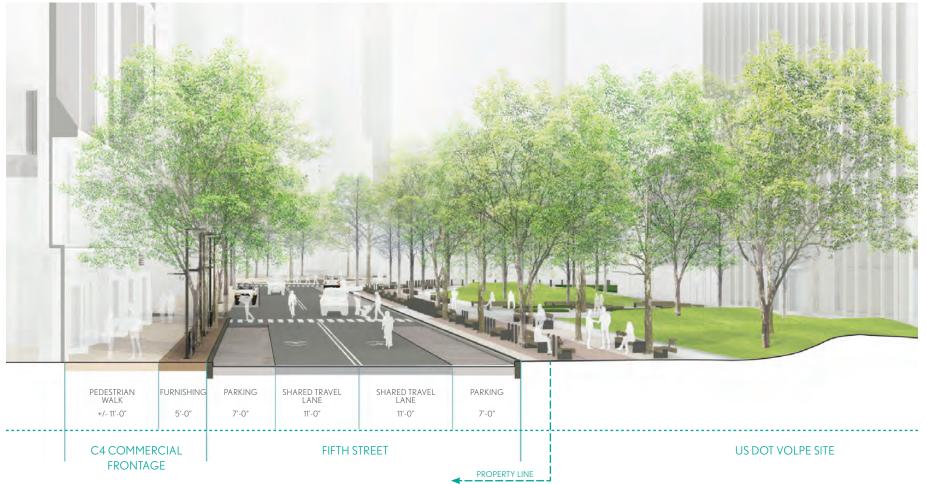
SECTION 1D. CONNECTIVITY PLAN



54 MIT VOLPE REDEVELOPMENT PLAN - SPECIAL PERMIT VOLUME 2







*DIMENSIONS ARE APPROXIMATE

0 5 10ft

Figure D13: Street Section - Fifth Street at Binney



*DIMENSIONS ARE APPROXIMATE

Figure D14: Street Section - Fifth Street South of Potter



Figure D15: Street Section - Broad Canal Way East

*DIMENSIONS ARE APPROXIMATE

10ft





SECTION 1D. CONNECTIVITY PLAN

5

0



PEDESTRIAN WALK +/- 10'-0"	FURNISHING 5'-0"	ACTIVE CURB 7'-0"	SHARED TRAVEL LANE 11'-0"	PARKING 7'-0"	FURNISHING 5'-0"	PEDESTRIAN WALK +/- 10'-0"	
C2 COMMERCIAL FRONTAGE		BROAD CANAL WAY [SHARED USE]			R2 COMMERCIAL FRONTAGE		

*DIMENSIONS ARE APPROXIMATE

0 3.5 7ft

Figure D16: Street Section - Broad Canal Way West

A STATE OF THE OWNER OF THE OWNER



	C.						
PEDESTRIAN WALK +/- 10'-0"	FURNISHING 5'-0"	FLEXIBLE ACTIVE CURB 7'-0"	SHARED TRAVEL LANE 11'-0"	FLEXIBLE PARKING LANE 7'-0"	FURNISHING 5'-0"	PEDESTRIAN WALK +/- 10'-0"	
C2 COMMERCIAL FRONTAGE		BROAD CANAL WAY [SHARED USE]			R2 COMMERCIAL FRONTAGE		

Figure D17: Street Section - Broad Canal Way West Alternative Layout

*DIMENSIONS ARE APPROXIMATE



60 MIT VOLPE REDEVELOPMENT PLAN - SPECIAL PERMIT VOLUME 2



*DIMENSIONS ARE APPROXIMATE

8ft

4

Figure D18: Street Section - Kendall Way





*DIMENSIONS ARE APPROXIMATE

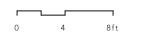


Figure D19: Street Section - Potter Street

E. OPEN SPACE PLAN

E. Open Space Plan

Illustrate and quantify the areas of all proposed open space and the ownership and designation of each area, specifically delineating open space required in Section 13.94 and the portions of such open space that will be permanently guaranteed for public use, as well as descriptions of major design elements and themes to be incorporated into each space and the types of uses and activities that could be accommodated in each space including areas that will be designated for programmed uses such as spill-out dining and performance space. As shown on Figure E1: Conceptual Open Space Plan, 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 (Figure E2: Open Space Typologies). The location and dimensions of the new parks will be finalized during this Special Permit process and design details will be developed in conjunction with the community through a robust public process. Each of the two new parks will be reviewed by the City through subsequent Design Review.

The Project will contain approximately 3.5 acres of new Publicly-Beneficial Open Space (**Figure E3: Open Space Plan – 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) (**Figure E4: Open Space Plan – Permanently Guaranteed for Public Use**).

Third Street Park — A Significant New Open Space in the Heart of Kendall Square

Third Street Park will be located at the most visible intersection in Kendall Square, on the northwest corner of Broadway and Third Street. Although this location would be ideal for commercial development, MIT has reserved this area for a highly-visible public park in direct response to community input. Third Street Park will be bounded by Broadway along the south, Third Street on the east, and the extension of Broad Canal Way on the north. Placement along these streets underlines the park's public accessibility, and its corner location maximizes solar exposure. It will directly relate to the existing Kendall Square plaza/Galaxy Park and incorporate an extension of Broad Canal Way, already a successful pedestriancentric street to the east of Third Street. The park's organization gives significant emphasis to a broad diagonal walk that draws pedestrians to and from the very heart of the proposed development, linking with Fifth Street and the proposed Community Center.

This approximately one-acre park (including the pedestrian-focused Broad Canal Way) will be a sizable civic space for the neighborhood and the city. As shown on **Figure E5: Third Street Park Conceptual Programming**, it will be a place that can take on different character throughout the day, week and year, where residents, workers, and visitors can relax, recreate and interact and where events of very significant size, including markets, festivals, celebrations and community events, may be programmed. Final design will include a mix of large lawns, paved gathering spaces, and shaded areas with both existing mature trees and newly planted species. Kiosks and pavilions will further activate the space and can also be used



to strengthen the street walls along Third Street or Broadway. The park will be further activated by outdoor food and beverage space along the Building C1 parcel for activation. Because the new park is framed by regular City streets and public ways used constantly by commuters and neighbors, it will be, by its very nature, welcoming and inclusive for all. Collectively, these attributes will give Kendall Square a truly civic "Square" while simultaneously creating a grand entrance into the balance of the Site. This park will become one of the City's very best spaces for urban social mixing and programmed civic life.

Sixth Street Park

Sixth Street Park builds on the long success of two significant commemorative spaces: The Officer William Loughrey Walkway, which honors a Cambridge patrolman who was slain while on duty in 1860, and the recently inaugurated Kittie Knox Bike Path, which honors Cambridge's remarkable young Black bicycle activist of the 1890s. These two spaces figure prominently in the local pedestrian and bicycle networks. Their most notable spatial character is defined by the mature oak trunks and continuous shaded canopy above. While the eastern edge is tightly enclosed by fencing today and PUD-7 Zoning requires a ten foot offset, the proposed Sixth Street Park will extend the space an additional fifty feet—effectively doubling the corridor's current dimension—from Broadway to Potter Street. This ensures preservation of the existing oaks and provides a broad swath of parkland that can be activated with a variety of community recreation spaces.

As shown on the Figures E7 and E8: Sixth Street Park Conceptual Programming, the one-half acre linear park can be organized in several alternative ways, from highly ordered to irregular and soft. Suggested program includes the possibility of children's play space with mounds or water features, outdoor dining or event space related to the proposed entertainment venue, a hammock grove, a dog park, or smaller sports courts. These facilities will welcome both residents and visitors to engage in an active urban lifestyle alongside the linear walkway and bike path. The park connects with Broad Canal Way to the east via a generous piazza that can be utilized as an all-weather extension to park programming and provide pedestrian and bicyclist passage.



SECTION 1E. OPEN SPACE PLAN





WEEKDAY LUNCH (APPROX. 250 PEOPLE)

WEEKEND MARKET

(APPROX. 500 PEOPLE)

COMMUNITY FESTIVAL (APPROX. 1,000 PEOPLE)



*BLUE DOTS IN THE PLAN REPRESENT PEOPLE, SHOWING DISPERSED ACTIVITIES THROUGH THE OPEN SPACE AT DIFFERENT TIMES OF THE DAY AND YEAR

Figure E5: Third Street Park Conceptual Programming



FRONT PARK APPROX. 1.0 ACRE



WINTHROP SQUARE APPROX. 0.3 ACRE



NEW RIVERSIDE PARK APRROX. 0.7 ACRE



POST OFFICE SQUARE APPROX. 1.5 ACRE



THIRD STREET PARK APPROX. 1.0 ACRE



Figure E6: Third Street Park Scale Comparisons



HAMMOCK GROVE



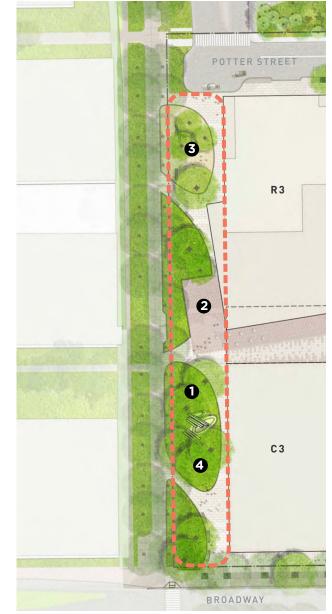
DOG PARK



WATER FEATURE



PLAY MOUNDS



SIXTH STREET PARK APPROX. 0.5 ACRE

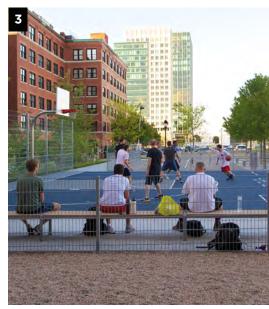


Figure E7: Sixth Street Park Conceptual Programming - Idea 1

SECTION 1E. OPEN SPACE PLAN



CHILDREN'S PLAY SPACE



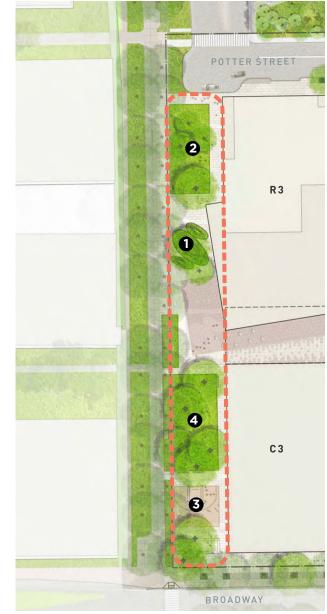
BASKETBALL COURT



GAME GROVE



PLAY LAWN



SIXTH STREET PARK APPROX. 0.5 ACRE



Figure E8: Sixth Street Park Conceptual Programming - Idea 2

An Extended Broad Canal Way

Broad Canal Way is envisioned as a welcoming, social street, full of vibrancy and bustling with activity. An entertainment venue will be prominently located at the west end of the street, a visual anchor that acts as a magnet to draw people east-to-west. It is proposed as a curbless street that will utilize high quality streetscape materials, textures and signage to guide pedestrians, bicycles and vehicles along the way. It is a street akin to what we might find in classic European communities where pedestrians and bicycles are given priority, easily able to cross from side to side as they make their way to local retailers lining each side.

The Project builds upon the success of Broad Canal Way in recent years in activating the neighborhood 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. Beyond a new pedestrian crosswalk on Third Street, Broad Canal Way leads to the corner site of the proposed Community Center. Past the intersection with Fifth Street. the route passes all the way to the proposed Sixth Street Park and the Loughrey Walkway/Kittie Knox Bike Path, dramatically improving connectivity and continuity throughout the Site. The spatial character of Broad Canal Way for these two blocks builds on earlier successes to the east: it will have modest and controlled vehicle traffic with active

curb management, but it is primarily designed for pedestrians and bicyclists through the use of special paving, flush curbing, unique bollards and furnishings, tree canopy and lighting, and retail activation with a focus on vibrant storefronts and diverse offerings for food and beverage. Vehicular movements are one-way toward Fifth Street, resulting in slower speeds in these blocks. There will be times when the street could be closed to vehicular traffic to allow for programmed events in association with community gatherings, festivals, or street fairs.

Community Center Plaza

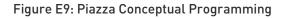
The green square (triangle) at the intersection of Broad Canal Way and Fifth Street is the front door and welcome space for the Community Center. By continuing the diagonal path northwards towards Binney Street, this space creates an active and programmable site at the heart of the Project. It can be a place for shade, play, sculpture, and rest. The Community Center Plaza will be activated with formal and informal community programming but, given its location, can also be integrated into larger events and festivals as a central part of the open space network.



OUTDOOR CAFES



COVERED MARKET





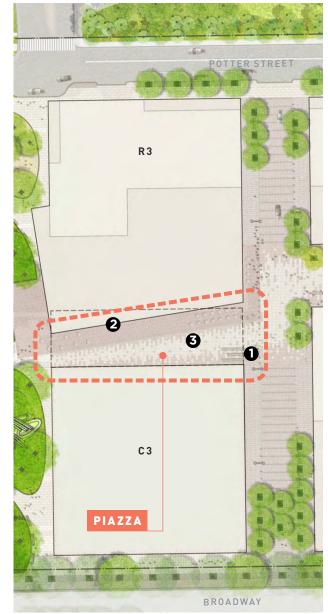
PERFORMANCE



SOCIAL GATHERINGS



PEDESTRIAN/ BIKE SHARED CONNECTION



PIAZZA



Entertainment Plaza, Kendall Way and the Broadway Pocket Park

A proposed 600-seat (1,200-person, if standingroom only) entertainment venue will serve as a beacon to draw people down Broad Canal Way toward the Sixth Street Park. Kendall Way is a new north-south street that predominantly defines the intersection where Broad Canal Way, the entertainment venue and the weather-protected connection to Sixth Street Park meet. This unique location makes it an important nexus for outdoor activities in the public realm, indoor activities at the entertainment venue, and weather-protected activities in the piazza. The piazza, a 170-foot long passageway that will range in width from 30 to 55 feet and extended with light and art, will be nestled between the corners of R2 and C2 and provide an opportunity for year-round, sheltered programming as shown on Figure E9: Piazza **Conceptual Programming.**

Kendall Way will be a plaza-like space that allows for managed building service access without looking like a conventional street. It will be designed to ensure pedestrian safety at all times, but this space is envisioned to be a curbless, continuously paved space that can be closed to vehicle traffic and enlivened by programmed events related to the entertainment venue or other active uses as shown on **Figure E10: Kendall Way Conceptual Programming**. Special lighting and temporary staging would make this space very engaging for evening activities as shown on **Figure E11: Kendall Way Conceptual Art and Lighting**.

The celebratory character of this space will be strengthened by the location of a pocket park along Broadway that prohibits vehicular throughtraffic and welcomes pedestrians and bicycles into the plaza. The proposed Broadway Court makes a break in the proposed continuous street wall on the north side of Broadway and serves as a shaded pocket park at the terminus of Kendall Way. This site provides for sheltered bicycle storage, outdoor dining, and ample seating for casual use. It also serves as a gateway for those walking from the west (The Port) towards the center of the Project and the shops and amenities on Broad Canal Way.

Fifth Street Promenade

The Project extends the "Fifth Street Promenade" begun by the Volpe Art Lawn being built as part of the New Volpe Center. The Volpe Art Lawn is a public art project designed by the artist Maya Lin, including an earthwork titled: 'The Sound We Travel At'. The lawn creates a block-long shaded promenade along Fifth Street between Binney and Potter Streets. While it is part of the Government Owned Parcel and not contained within the Development Parcel, it is fully connective with the rest of the Project's open space network and makes an especially wide tree-lined Fifth Street sidewalk a unique part of the Project's public realm.

South of Potter Street, Fifth Street will be activated with retail spaces on both sides and will include extra wide sidewalks along the west side providing opportunities for gathering and relaxation, including generous commercial frontage for café tables and chairs. The Fifth Street promenade will provide an activated north-south corridor connecting the neighborhood to the north through the Site and to the Kendall Square MBTA Station and beyond to the river. The northern end of Fifth Street informs the tree density and planting pattern of its southern length establishing a continuity of the promenade as it connects Binney Street to Broadway.

Binney Street Court

The proposed Binney Street Court provides shaded breathing space and public passage between Binney and Munroe Streets for residents and visitors. There is ample space here for temporary bicycle storage, outdoor dining, smaller programmed events, and relaxation on the lawn.









- 1. Chop House Row / Seattle, WA
- 2. District Wharf / Washington D.C.
- 3. MIT North Corridor / Cambridge, MA
- 4. Rue Montorgueil / Paris, France
- 5. Durham Convention Center / Durham, NC
- 6. St. Martin's Courtyard / London, UK
- 7. 3 Miami Central / Miami, FL

Figure E10: Kendall Way Conceptual Programming





6 11 POTTER STREE 101 R 3 R 2 KENDALL WAY С3 C 2 -10.8 25 10

KENDALL WAY



BROADWAY

Figure E11: Kendall Way Conceptual Art and Lighting

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