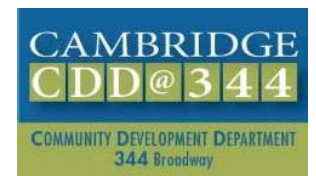


Volpe Site Update June 7, 2017



Presentation to Ordinance Committee
Community Development Department



Attachment: VWG_OrdinanceCmte_20170607_FINAL.pdf (CRT 2017 #38 : Volpe Project)

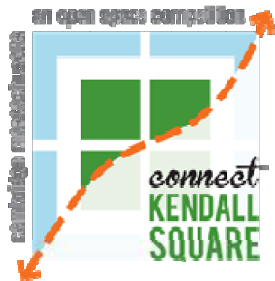
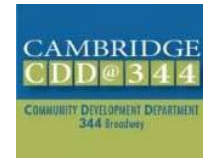


2011-2013
K2 Study Process
ECPT/CBT Kendall Plan

2011

2012

2013



2014-2015
Planning Board PUD-KS
Rezoning Petition
Connect Kendall Square

2014

2015

2014-2016
GSA Developer Selection
Process

2016

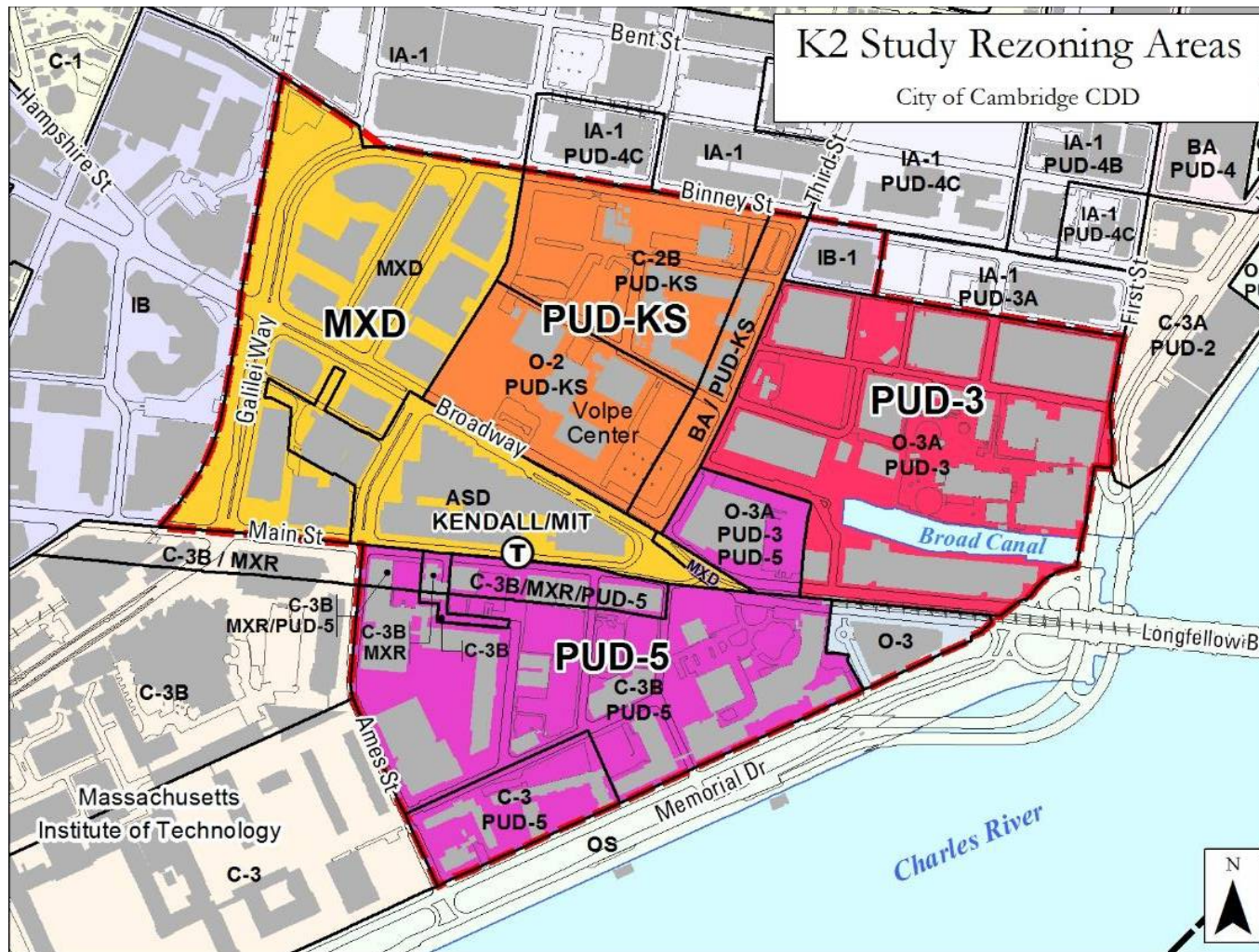
2016-2017
Volpe Working Group

2017

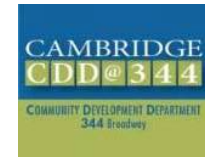
2016-2017
MIT Community Engagement



K2 Rezoning Areas



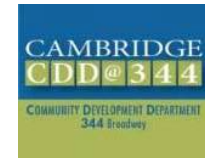
Volpe Working Group



City Council Policy Order, 2/1/2016 "That the City Manager be and hereby is requested to confer with the Assistant City Manager of Community Development with the intention of organizing a Volpe Task Force made up of representatives from abutting neighborhood groups and Kendall Square residents and businesses and to report back to the City Council."

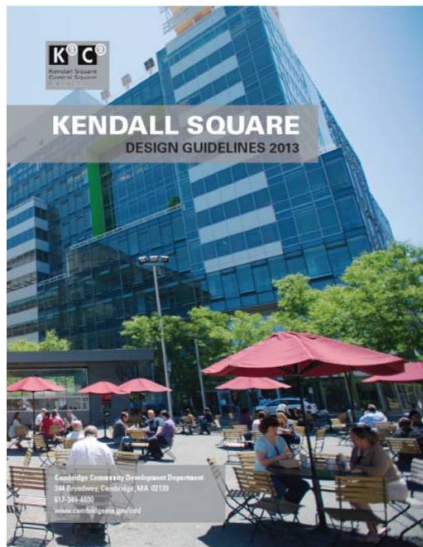
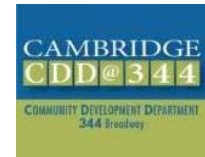
The purpose of the Volpe Working Group is to discuss and develop an urban design framework and set of planning principles to provide guidance to potential developers about the City's priorities and expectations for the site.

Volpe Working Group – Members

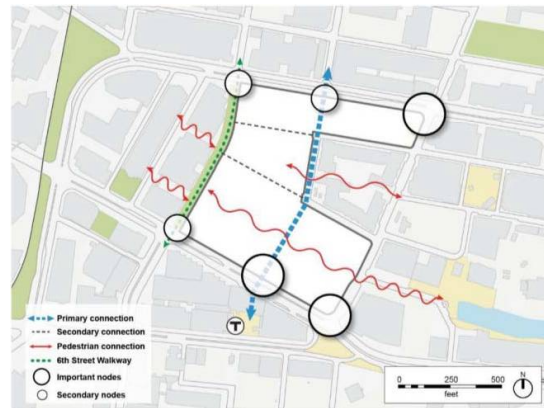


Peter Crawley	Resident, East Cambridge, ECPT Representative
Gerald O'Leary	Resident, East Cambridge/Kendall Square
Esther Hanig	Resident, The Port
Steven LaMaster	Resident, Wellington-Harrington
Chris Barr	Business Representative (Biogen)
Brian Dacey	Business Representative (Cambridge Innovation Ctr.)
Kathy Born	Cambridge Redevelopment Authority
Hugh Russell	Cambridge Planning Board
Erik Thorkildsen	Michael Dennis Associates, Urban Design Consultant

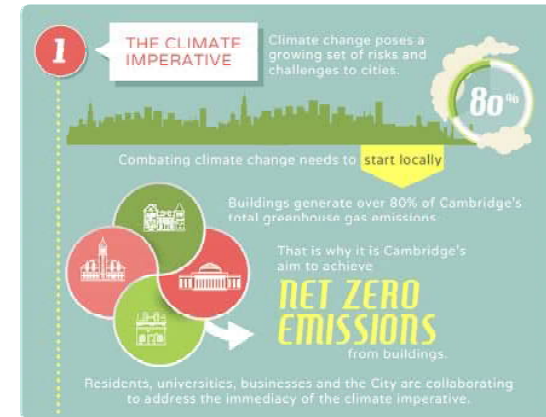
Volpe Working Group – Background



Kendall Square Study and Design Guidelines



PUD-KS Urban Design Framework



Net Zero Action Plan



ECPT/CBT Urban Design Plan



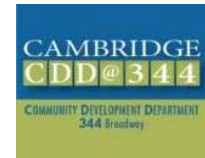
Connect Kendall Square Framework Plan (Richard Burck Associates)



Kendall Square Mobility Task Force (CDD/MassDOT)

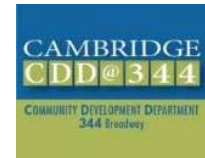
Ordinance Committee – June 7, 2017

Volpe Working Group – Meetings



October 20, 2016	Introduction to the working group
December 1, 2016	Public open space & placemaking
January 5, 2017	Discussion of ground floors & programming
March 2, 2017	MIT presentation, draft principles
April 6, 2017	Principles of public space
April 13, 2017	Principles of built form & design
May 3, 2017	Principles of sustainability, transportation, housing
May 10, 2017	Principles of built form & design (cont'd)
May 25, 2017	Synthesis/discussion of principles
June 8, 2017	Refinement of principles
June 22, 2017	Review of zoning & design guidelines

Volpe Working Group – Principles



Vision

A Place that Makes Connections

Principles
(categories)

Civic Life
Permeability
Activation
Inclusiveness
Comfort
Sustainability
Urban Character

Ordinance Committee – June 7, 2017

A Place that Makes Connections

A **Nexus** - the site will bring diverse people, ideas, & functions together:

- A place that invites in and connects a wide variety of people and neighborhoods
- Diverse functions – residential, research, office, retail, recreation, collaboration, meeting
- Innovation, business community, people of Cambridge
- Nature and the regional landscape
- Daytime, evenings, and weekends
- The site will be a hub linking the surrounding districts and neighborhoods – through its spaces, its architecture, and its functions.
- Community, culture, and nature

A **Crossroads** – linked to the surrounding districts and neighborhoods

- Inviting to residents, workers, and visitors
- Active during daytime, evenings, and weekends



5

Create public places that support community and symbolize community



9

Room-like public open space – street, park, courtyard, passage, and square – is the vessel for community.



Ground Level Life: shopping, eating, playing, gathering, meeting, talking, exhibiting, demonstrating – is the glue.



The site's system of streets and paths will be designed to make the site permeable to the surrounding neighborhoods. They will engage existing paths and extend them through the site, reinforce bordering streets, and engage the 6th street walkway.

15

The network of streets and paths will break up the current superblock into smaller, pedestrian friendly blocks.

The site's public open spaces will interconnect with other key spaces in the Kendall area.



Key urban intersection points and nodes of activity: Thoughtfully inviting transitions and entrances to the site will link it to the surrounding districts and neighborhoods



The streets that border the site, particularly Broadway and Binney streets, are currently barriers to the site. They should become connectors: zippers linking the site to the adjoining districts.

The site should provide a strong street edge on Broadway and Third Street, and incorporate continuous ground floor retail, to create a memorable "Main Street" experience. Augment and wherever possible preserve existing street trees along these frontages. The improvements to the Volpe site's sides of the bordering streets will sponsor new development and infill on the opposite sides, capitalizing on opportunities created by existing gaps in their street walls and ground floor retail. Suggest changes to street crossings and traffic control to make pedestrian crossings easy and safe.

Connect the site's paths and open spaces to the 6th Street Walkway. and to the Cambridge Center District.

Seamlessly connect the new Volpe Building's site to adjoining public open space.

- 18 The new Volpe Building and its site will 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.

- Security barriers should be incorporated as part of the overall site plan concept.
- The new Volpe Building should take advantage of opportunities for public outreach, both in the design of the building and its sitework - displays of the Transportation Department's work incorporated into gardens and open spaces, views into public interior spaces within the building.
- Surface paving should be minimized
- Service needs should be handled unobtrusively.



Boston's Moakley Federal Courthouse: Security barriers are subtle, and part of the overall design concept.

Create public open spaces that serve a wide range of programmatic functions

20 Uses and functions of particular importance include:

- Quiet contemplation of nature
- impromptu recreation
- outdoor dining and picnicking
- Farmer's markets
- Food trucks and carts
- Play areas for toddlers and children
- Public gatherings and demonstrations
- Skating
- Flexible indoor/outdoor spaces for public events



Housing options will cater to a wide demographic range

The range of unit types will address the growing need for family housing.

- A considerable portion of the units should be two and three bedroom.
- Integrate amenities and consideration of adjacencies to support family life.



25

Provide a safe and comfortable environment

The site's open spaces will place a priority on physical and psychological comfort. They will provide:

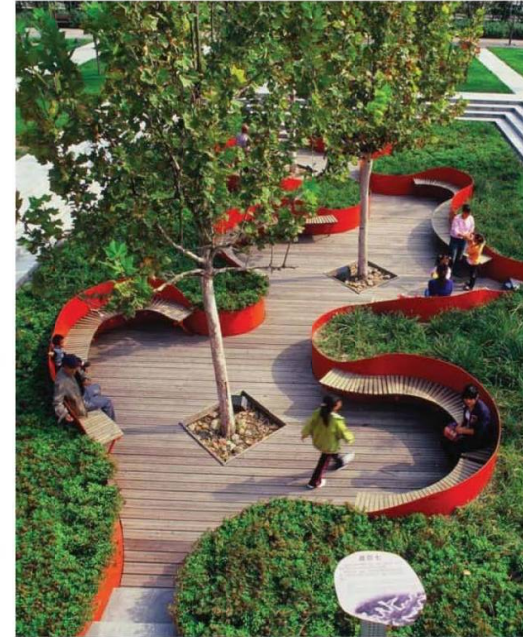
- Sunlight and warmth,
- A view of the sky
- Shade
- Protection from wind and inclement weather.
- Trees and water features will moderate their microclimates.
- Movable furniture, things to do, and year round uses will create to come to the spaces and opportunities to linger. “
- Eyes on the space” and lighting will create a sense of safety.

Public open spaces are to be unaffected by noise (for example from mechanical equipment) light pollution, and building equipment such as transformers and emergency generators.

Public spaces will range in scale from grand to intimate, offering niches for individuals, small groups, and large gatherings. Large spaces will

be framed by “occupiable edges” - not only adjoining retail space and residential buildings, but also deep landscaped borders containing smaller scaled seating areas, enlivening the space with activity and providing places from which one can overlook the larger space.

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.

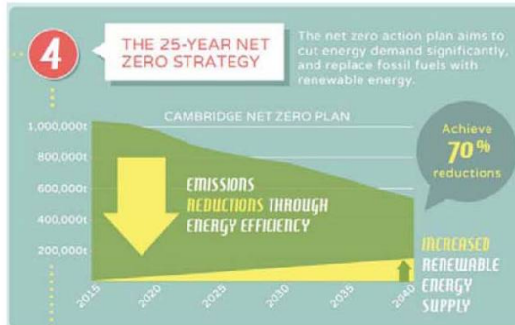


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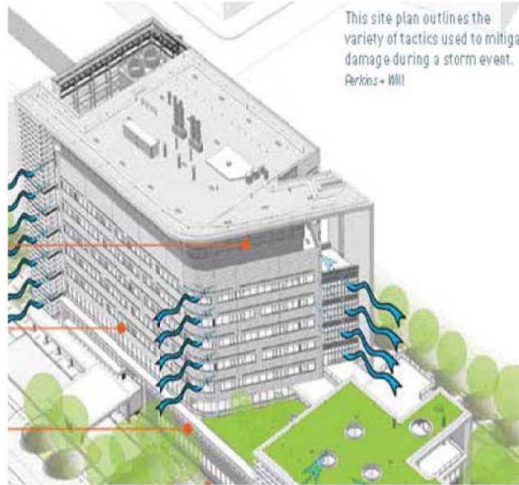
Site Resiliency Strategies

- Manage stormwater through natural systems
- Utilize trees and vegetation to mitigate urban heat island effect



Net Zero Strategies

- Provide efficient energy delivery at a district level (e.g., shared solar, microgrids, cogeneration, utilizing existing steam network)
- Utilize energy-efficient building envelopes
- Optimize solar orientation in site layout and "solar ready" design
- Create "Pathways" to adapt to a future without use of non-renewable energy



Resilient Building Strategies

- Protect critical building systems (elevate above predicted flood levels, waterproof)
- Maintain back-up life safety and comfort systems
- Ensure occupant safety and comfort during a flood event (e.g., operable windows)
- Facilitate recovery after flood events



Sustainable Transportation Strategies

- Manage parking supply to discourage driving where unnecessary and use resources efficiently
- Remove subsidies for driving and promoting incentives for alternative modes
- Support regional transit system
- Enhance connections to walking and bicycling networks
- Coordinate bus/shuttle services to maximize efficiency and benefit

Built Form will address four zones to humanize the urban environment

- 38 In an urban area of the density of construction projected for the site, buildings can be conceived in four horizontal different zones. Each has different characteristics, and different responsibilities in defining and articulating public space:
- Pedestrian Zone - creates an active and permeable ground level. A wide range of strategies in relation to the public realm of the sidewalk is expected and encouraged, differing shop fronts, differing widths and designs – changeability. The pedestrian frontage is to be primarily transparent and permeable.
 - Street Wall - frames the space of the street or square, enlivens the pedestrian experience, and mediates between the scale of the pedestrian and the entire building. It is to maintain sufficient unity to coherently define the street or open space the façade addresses, while potentially capitalizing on significant visual axes by differentiating the façade, emphasizing significant corners or “targets” on facades that receive visual axes.
 - Tower - defines space at a large scale. Verticality and expressive design creates landmarks and punctuates the skyline. Towers are to generally be slender, repetitive vertically, and to maintain vertical emphasis and continuity. They will conform to system of step-backs.
 - Top – accommodates building mechanical systems and potentially symbolizes the building or district



Pedestrian Zone



Street Wall

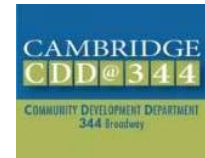


Tower



Top

Volpe Working Group – Continued



- Refinement and finalization of principles
- Review/discussion of zoning proposal
- Refinement of urban design guidelines



vol pe pl anning study

Cambridge, Massachusetts

june 07, 2017

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REED+HILDERBRAND

ELKUS | MANFREDI
ARCHITECTS



scheme 1



scheme 2



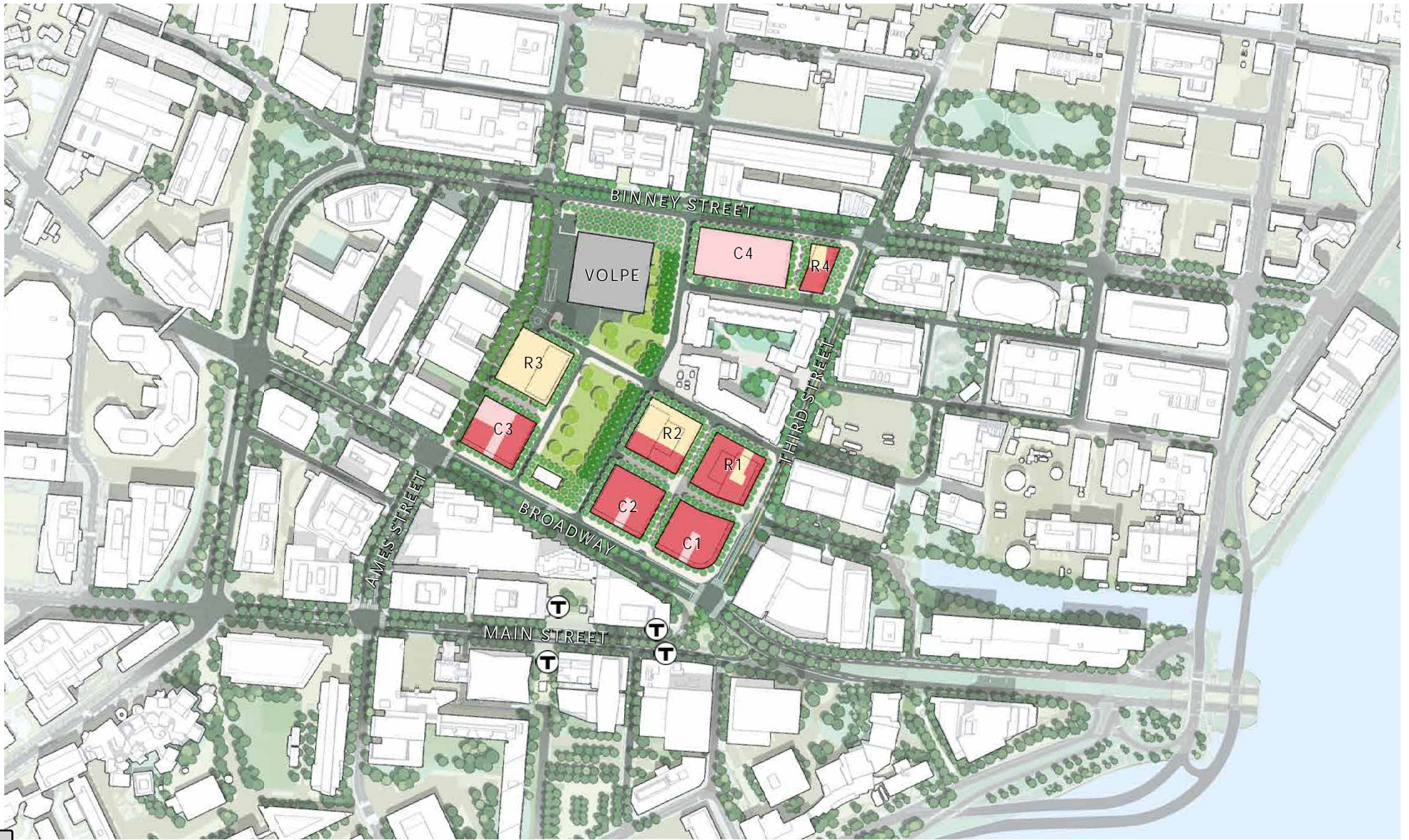
scheme 2a



scheme 3

- IN PROGRESS -

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Scheme 1 - site plan

- IN PROGRESS -

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Attachment: 17_0607 Volpe Options.pdf (CRT 2017 #38 : Volpe Project)



Scheme 1 - massing and height

- IN PROGRESS -

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Attachment: 17_0607 Volpe Options.pdf (CRT 2017 #38 : Volpe Project)



Scheme 1 - aerial view

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Attachment: 17_0607 Volpe Options.pdf (CRT 2017 #38 : Volpe Project)



Scheme 1 - street level view

- IN PROGRESS -

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Scheme 1 - street level view

- IN PROGRESS -

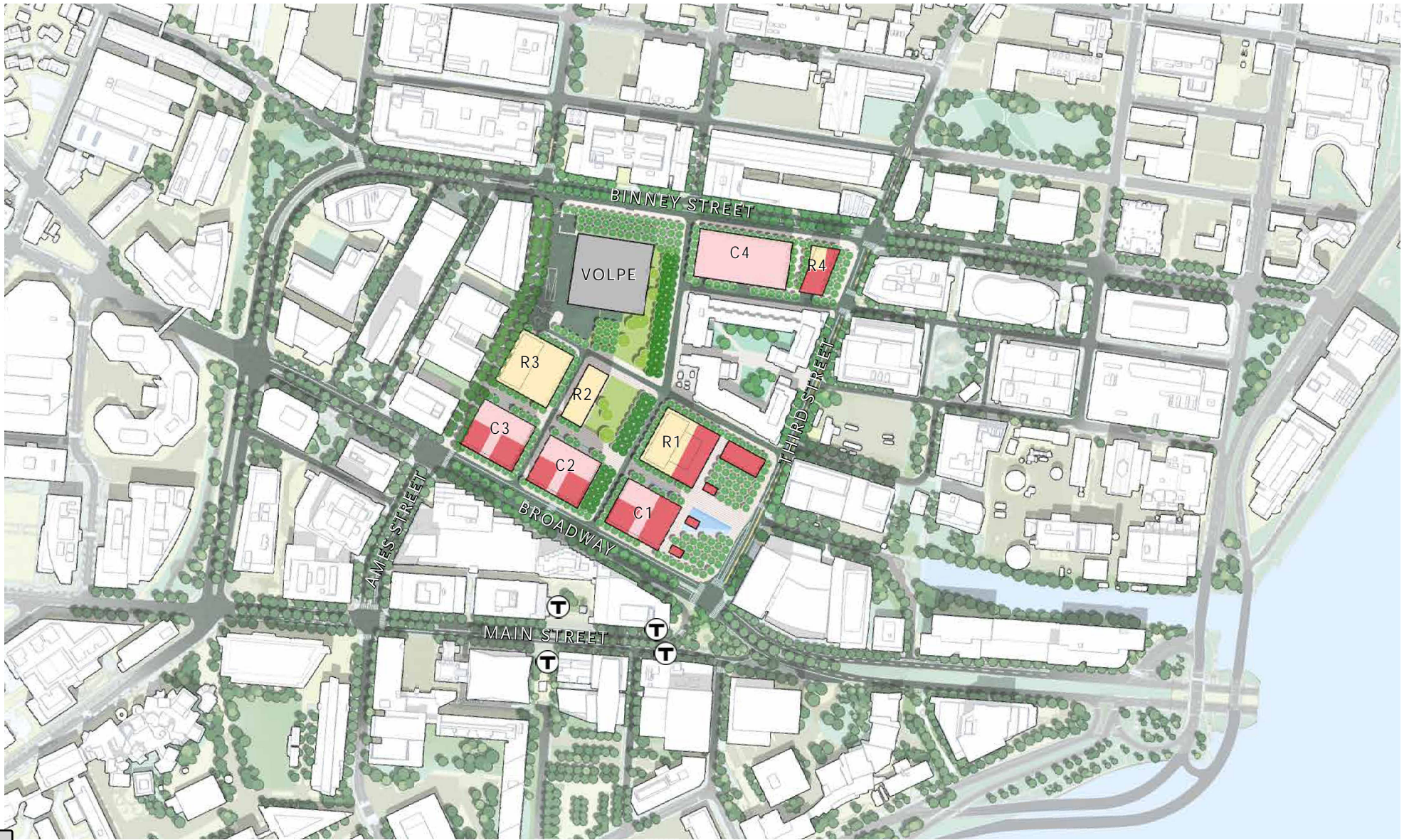
volpe planning study | june 07, 2017 | mitimco | reed hilderbrand | elkus manfredi architects



Scheme 1 - street level view

- IN PROGRESS -

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Scheme 2 - site plan

- IN PROGRESS -

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Scheme 2 - massing and height

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Scheme 2 - aerial view

- IN PROGRESS -

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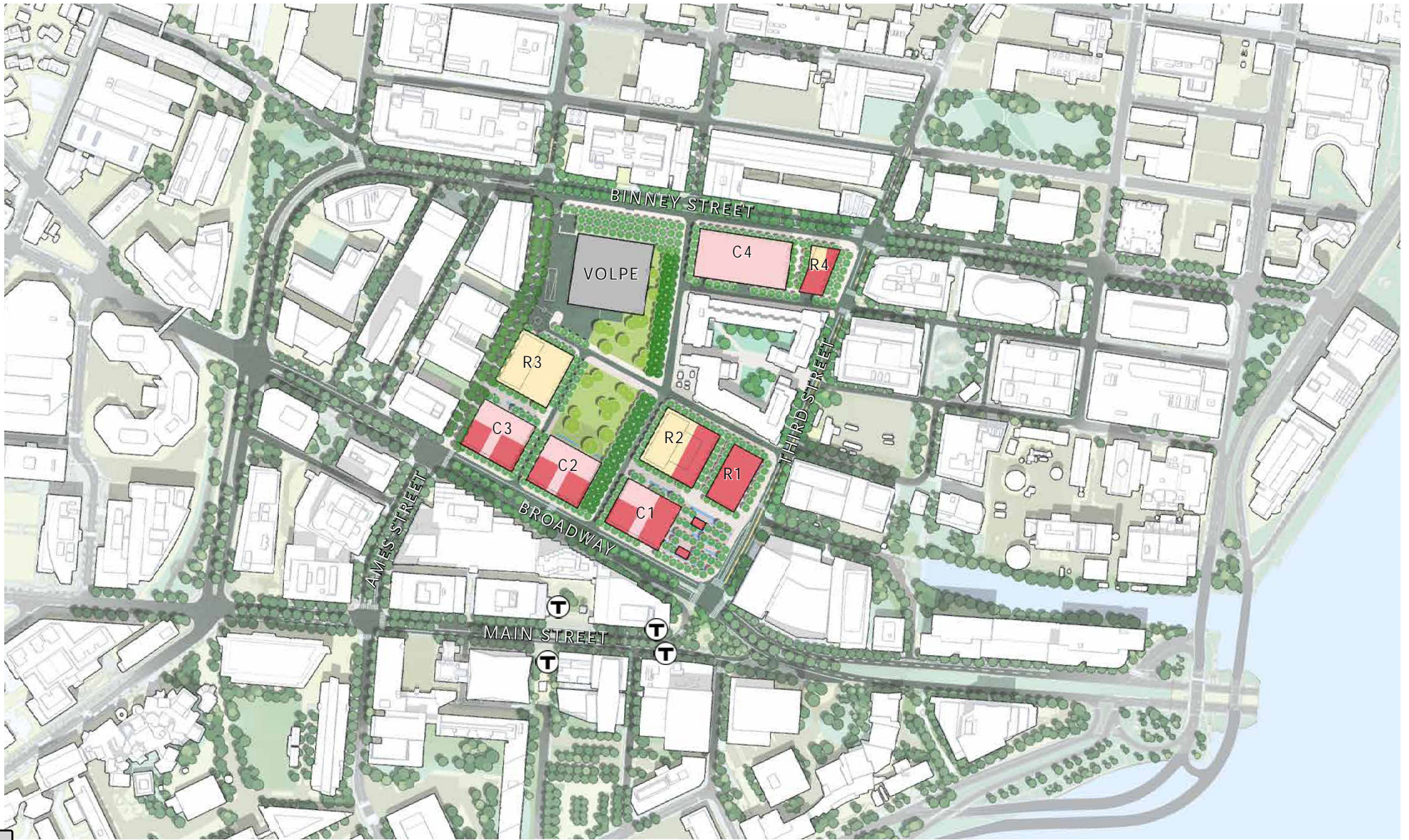
Attachment: 17_0607 Volpe Options.pdf (CRT 2017 #38 : Volpe Project)



Scheme 2 - street level view

- IN PROGRESS -

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Scheme 2a - site plan

- IN PROGRESS -

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Scheme 2a - massing and height

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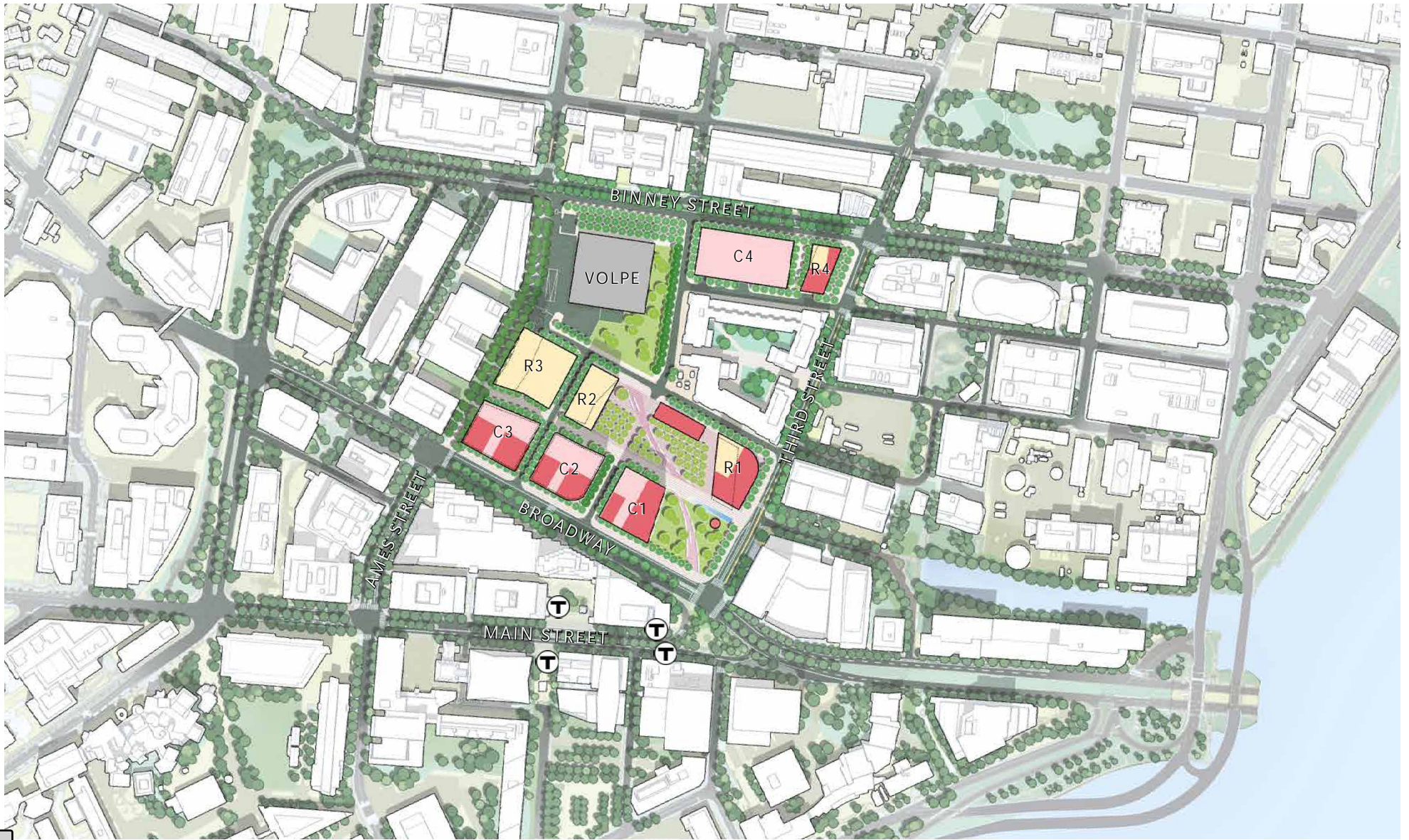


Scheme 2A - aerial view

- IN PROGRESS -

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Attachment: 17_0607 Volpe Options.pdf (CRT 2017 #38 : Volpe Project)



Scheme 3 - site plan

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Scheme 3 - massing and height

- IN PROGRESS -

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Scheme 3 - aerial view

- IN PROGRESS -

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Scheme 3 - street level view

- IN PROGRESS -

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scheme 1



scheme 2



scheme 2a



scheme 3

- IN PROGRESS -

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