Agenda

1. Introduction  
   Michael Owu

2. Path to Volpe  
   Sarah Gallop

3. Zoning and Commitments  
   Anthony Galluccio

4. Volpe Context  
   Michael Owu

5. Site Organization and Massing  
   David Manfredi

6. Open Space  
   Gary Hilderbrand

7. Activation  
   Kristen Keefe

8. Requests for Community Input  
   Roosevelt Smith

9. Q&A
MIT Volpe Redevelopment Project Team

REED-HILDERBRAND

vhb

BUROHAPPOLD ENGINEERING

G&W GALLUCCIO & WATSON, LLP

Webb Mgmt

ELKUS | MANFREDI ARCHITECTS

MITIMCo

REDGATE

McPHAIL ASSOCIATES, LLC

atelier ten

Theatre Consultants Collaborative

goulston&storrs

GRAFFITO
Path to Volpe
Path to Volpe: MIT’s Kendall Square Planning

- **2008**
  Exploratory and brainstorming meetings with City Councillors, City staff, Planning Board, Historical Commission and community members

- **2010 - 2012**
  Multiple community meetings and open houses
  MIT Faculty Taskforce on Community Engagement
  Graduate Student Housing Working Group report

- **2013**
  K2 Final Report published
  Kendall Square PUD-5 Zoning passed

- **2016**
  PUD-5 Final Development Plan approved
Path to Volpe: MIT's Kendall Square Project
Path to Volpe: Volpe Zoning

- **2014**
  PUD-KS Proposal developed with discussions at Planning Board

- **2015**
  - PUD-KS Petition Filed
  - Planning Board Public Hearings
  - Volpe Site Community Outreach
  - PUD-KS Refiled
  - Petition Hearings

- **2016**
  The City appoints the Volpe Working Group to develop planning and urban design principles

- **2017**
  PUD-7 Zoning Amendment passed
MIT in the Community
MIT in the Community
Job training should be provided to ensure that Cambridge residents can benefit from, and be a part of, the innovation economy in Kendall Square.

The Job Connector by MIT is a free workforce development hub for Cambridge residents. Connect with us to explore opportunities for job readiness, skill training, internships, apprenticeships, and to get a read on the changing career landscape in Cambridge.
2017 Community Center Program

Recreational Lap Pool
Flex Fitness Space
Job Connector
Flexible Court
Values for a Connected Innovation Community

Retail + Active Ground Floors

Sustainability + Resilience

Racial Equity + Inclusion

Science + Research

Open Space

Housing
Zoning and Commitments
• The PUD-7 zoning district was ordained October 23, 2017.
• Purpose is to create a vibrant mixed-use district.
• Zoning requires that the Planning Board shall grant a PUD Special Permit approving the final development plan for a master plan area.
• Pre-application conference required with the City Council or Ordinance Committee as well as the Planning Board to discuss the site plan before application is filed. We are before the Planning Board on 10-27-20.
Development parcel of at least 5 acres may be designated as master plan area for PUD Special Permit approval with:

- Site Development Plan
- Site Massing Plan
- Parking and Loading Plan
- Connectivity Plan
- Open Space Plan
- Ground Floor Activation Plan
- Housing Plan
- Phasing Plan
- Sustainability Plan
- Transportation Plan
- Environmental Comfort Plan
- Architectural Character Plan
Volpe Zoning: District Dimensional Regulations/Gross Floor Area (GFA)

- **Maximum GFA** is 3,250,000 sf, includes 400,000 sf for new GSA building.
- Gross Floor Area exemptions:
  - Active space up to a max of 5% of the GFA
  - 50% of innovation space to a max of 5% of non-residential GFA
  - Private decks and balconies up to 8% of Building GFA
  - Community center if it is free standing
- **40%** of permitted GFA shall be devoted to **residential** use.
- A minimum of 20% subject to Inclusionary Housing requirements (approximately 280 affordable units out of a total of 1,400 units).

**Residential Phasing**

- Non-residential development must not exceed 60% of permitted GFA until substantial construction activity of a significant portion of the required residential GFA has commenced.
- Full completion of all non-residential GFA shall not be allowed before substantial construction has commenced on all residential buildings.
Volpe Zoning: Height

Baseline maximum building height: 250 ft

North of Munroe: 170 - 250 ft
- Maximum height for non-residential buildings is 170 ft

South of Potter: 250 - 500 ft
- Floor plates must be less than 15,000 sf on buildings above 250 ft
- Floor plates above 250 ft cannot occupy more than 10% of land area
- Only residential can go above 300 ft
- One residential building may be above 350 ft, but less than 500 ft
Volpe Zoning: Open Space Requirements

- Minimum of 25% of total land area will be Publicly Beneficial Open Space.
- Must include at least 2 acres of Open Space that is permanently guaranteed for public use.
- Requires a 10 ft buffer along Loughrey Walkway.
- Freestanding community center counts as Publicly Beneficial Open Space.
Parking Maximums:

- **Office:** 0.8 spaces per 1,000 sf of GFA
- **Lab and Technical Offices:** 0.8 spaces per 1,000 sf of GFA
- **Residential:** 0.75 spaces per dwelling unit
- **Retail:** 0.5 spaces per 1,000 sf of retail
- **Hotel:** 1 space per 4 sleeping rooms

Development Proposal will include a shared parking study to find opportunities to reduce the total number of spaces.
• At least 65% of interior ground floors that are within a minimum depth of 20 ft from a Principal Front Wall Plane directly fronting Broadway or Third Street shall be Active Space.

• At least 25% of required Active Space shall be devoted to Independent Retail Operators (do not own and operate more than 10 retail locations in Massachusetts), each occupying no more than 3,000 sf.
- All buildings LEED Gold or better.
- Integrated design approach must incorporate best practices in:
  - Energy and emissions
  - Urban site and landscaping
  - Cool roofs
  - Monitoring
Required Financial Contributions

- Commercial linkage requirements that would generate approximately $36 million ($20.10 psf) to the Affordable Housing Trust
- Contribution of $10 psf of non-residential GFA
  - 50% to transit improvements
  - 50% to community fund

Per Zoning, current plan estimates total cash contributions to exceed $53 million

- $36M to Affordable Housing Trust
- $8.5M for Transit Improvements
- $8.5M to Community Fund For Non-Profits
Student Housing
950 new graduate student beds

Middle Income Housing
20 middle income units (80% -120% AMI)

Innovation Housing
5% of dwelling unit net floor area
Volpe Commitment Letter

Community Center
$22 million on design and construction of a Community Center and a $3.5 million dollar endowment for programming

Grand Junction Multi-Use Path
$8.5 million to support the Grand Junction Path

Job Connector
To be initiated within 18 months of zoning. Zoning required $125k annually and $1.5 million when community center opens

Additional Commitments
Related to advisory roles, event planning, protecting tax contributions and arts programs in Kendall Square
Volpe Context
New DOT Federal Facility

- **October 2018**
  Commenced utility site work

- **September 2019**
  Commenced construction of new building

- **December 2023**
  Target completion of new building
Four Options from PUD Zoning
The Volpe Site should be a welcoming and lively mixed-use district, and a place of innovation, possibility, and creation.
Site Circulation

Physical Changes

- 5th Street to connect Binney to Broadway while prohibiting traffic on 5th through neighborhoods to the north
- Extend Broad Canal Way to link Loughrey Walkway and Kittie Knox Bike Path to the Broad Canal and Charles River
- Proposed signalized intersection at Potter and Third

Interconnectivity - Bike Lanes, Pedestrian Crossings

- PRIMARY VEHICLE ACCESS ROUTES
- SECONDARY VEHICLE ACCESS
- SHARED ACCESS
- PEDESTRIAN AND/OR BIKE ONLY
**Tree Mitigation Strategy**

- Integration/preservation of street and open space trees
- Tree removals will be offset by significant quantities of new trees planted on the Volpe property
- 82 net new trees
- Future canopy will be diverse and resilient with long-term benefits in terms of carbon sequestration, stormwater management and air quality
- Additional mitigation will be achieved through off-site tree planting and/or payment into a tree fund

**Development Plan Removals**

+/- 132 Trees

**Maximize Volpe Property Planting**

+/- 214 Trees

**New Trees**

+82

**Carbon Sequestered**

- Stormwater Benefit

- Air Quality
Leadership in Sustainability

Integrated Pathways

- Efficiency, electrification, and path to net zero carbon
- Exemplary on-site water treatment and resiliency approach
- Design for the future of transportation
- A sustainable community
Zero Emissions Residential Buildings
Largest all electric residential development in the region with zero on-site emissions from fossil fuels

100% Water Reuse
On-site blackwater treatment to reuse all non-lab sanitary flow
Buildings should consist of up to four different, but integrated zones: the pedestrian frontage zone, the streetwall, the tower, and the building top.

Tower frontage should be set back 8 - 10 ft from the streetwall. Building Tops should be stepped back a minimum of 5 ft from the plane of the tower façade.

50 - 80% of tower frontage should be set back 8 - 10 ft from the streetwall.

On towers greater than 100 ft in horizontal length, create vertical zones, differentiated by changes in plane of at least 8 ft.
Site Organization and Massing
From 2017 to Today

**EXAMPLE 4**

**PROPOSED PLAN**
Fully-Integrated Public Realm

A range of open spaces offer places for community gathering, play, socializing, and respite, in inclusive, diverse and attractive settings.
Broad Canal Way
Site Massing

Plan prioritizes:
- Connectivity to surrounding land uses, existing open space, streets and pathways and networks
- Location, usability, flexibility, and attractiveness of open space
- Adjacency and continuity with existing and planned active public realm
- Environmental impact, view corridors, site permeability, solar exposure of open space
- Maximum long-term tree canopy
Zoning Program

1,692,000 sf
Commercial (60% GFA)

1,128,000 sf
Residential (40% GFA)

95,000 sf
Retail, dining, entertainment, and the arts

> 2.5 acres
Open space
Open Space
Thoroughly Connected Network

The Volpe Redevelopment is organized and given identity by the form and activity of its many civic open spaces — its streets, squares, and parks.
Third Street Park Scale Comparisons

Third Street Park
Approx. 1.0 Acre

New Riverside Park
0.7 Acre

Post Office Square
Approx. 1.5 Acre

Front Park
Approx. 1.0 Acre

Winthrop Square
Approx. 0.3 Acre
6th Street Park
Ideas for a New 6th Street Park

- Dog Park
- Water Feature
- Hammock Grove
- Play Mounds
Ideas for a New 6th Street Park

- Play Space
- Game Grove
- Play Lawn
- Basketball Court
Activation
Activation Goals

Volpe’s ground floors will be anchored by:

- Programmed and Activated Open Spaces
- Recreation, Community, Arts and Creative Enterprise Spaces
- Interesting, Accessible and Inventive Retail
Various venues for gathering, the arts, entertainment, recreation, innovation, inventive retail, creating an inclusive place that fosters community and opens social and economic opportunities.
Recreation, Community, Arts & Creative Enterprise
Open Space Activation

WEEKDAY LUNCH
(APPROX. 230 PEOPLE)

WEEKEND MARKET
(APPROX. 450 PEOPLE)

COMMUNITY FESTIVAL
(APPROX. 1,055 PEOPLE)
Programmed and Activated Spaces
Street Level as Part of Public Realm

- Green Space
- Maker Space
- Food
- Shops
- Community Space
- Family-Friendly Food
- Entertainment Venue
- Diner
- Bookstore
- Food
- Bike Shop
- Technology
- Civic Gathering
Community Zoom Charettes

- Open Space Design and Programming
- Community Center Programming
- Retail Diversity
- Housing Equity
- Job Equity

Details and presentation at [https://volpe.mit.edu](https://volpe.mit.edu)
Public Benefits

- Approximately 1,400 units of housing, including approximately 280 affordable units and 20 middle income units
- $25.5 million for design and construction of an on-site community center and endowment to support operations and ensure ongoing affordability
- Over 2 acres of permanently guaranteed public open space
- Active ground floors with retail including independent and small retail
- Job Connector open at 792 Main Street in The Port neighborhood, including $1.5 million operations fund
- Approximately $36 million to the Affordable Housing Trust for commercial linkage payment ($20.10 psf)
- $8.5 million for transit improvements to reduce vehicular traffic
- $8.5 million to community fund to be distributed to Cambridge non-profits
- Convey rights and contribute $8.5 million for design and construction of the Grand Junction path
- $1 million for innovation arts program to recognize innovation and entrepreneurship in Kendall Square
- Approximately $23 million annually in taxes when built-out on a currently tax-exempt site