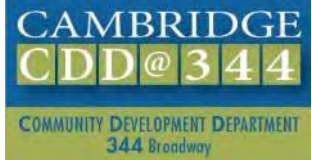


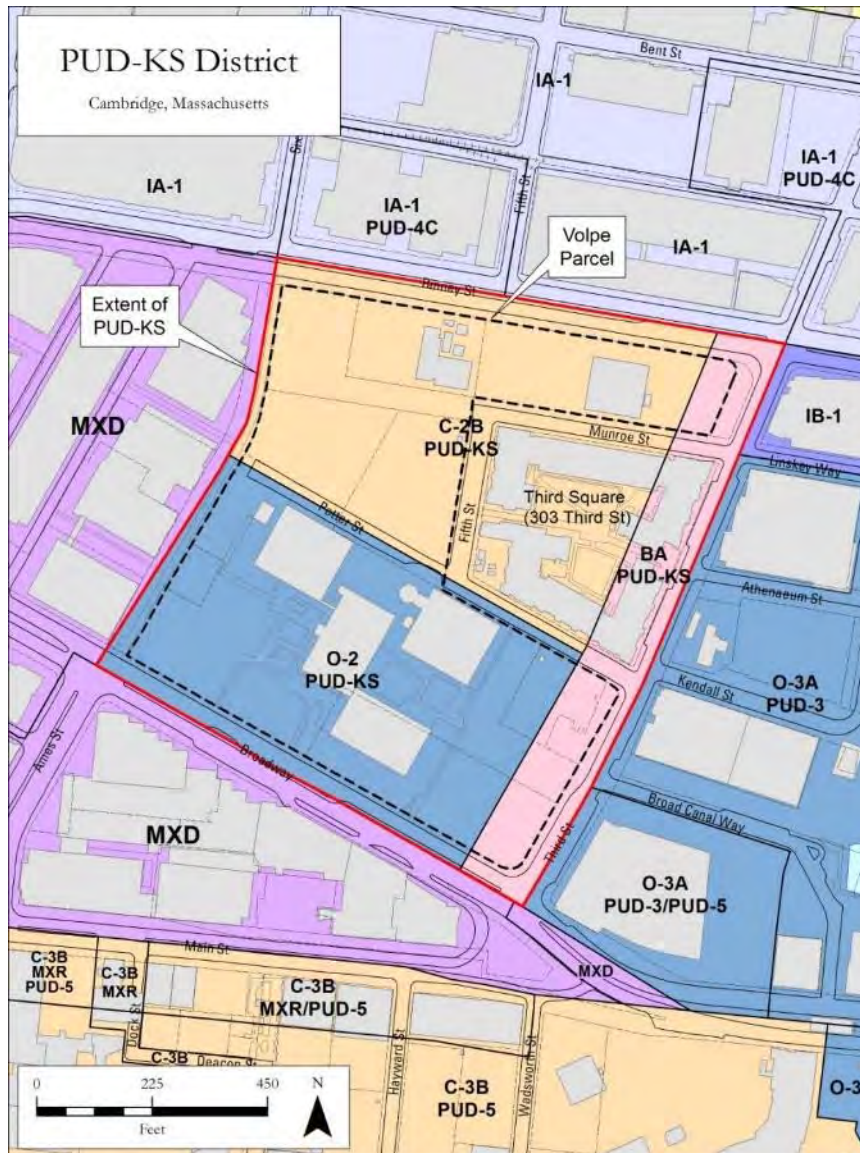
PUD-KS Zoning Proposal Revisions April 7, 2015



Cambridge Planning Board
Community Development Department



Initial Proposal – January, 2015



Retain Current PUD District

- PUD review
- Minimum 40% housing
- Public open space

K2 Recommendations

- Increase development capacity
- Reduced parking
- Active ground floors
- Innovation space
- Middle-income housing incentive
- Enhanced sustainability
- Flexible open space requirement, focus on connections

Government Use

Continuing Study

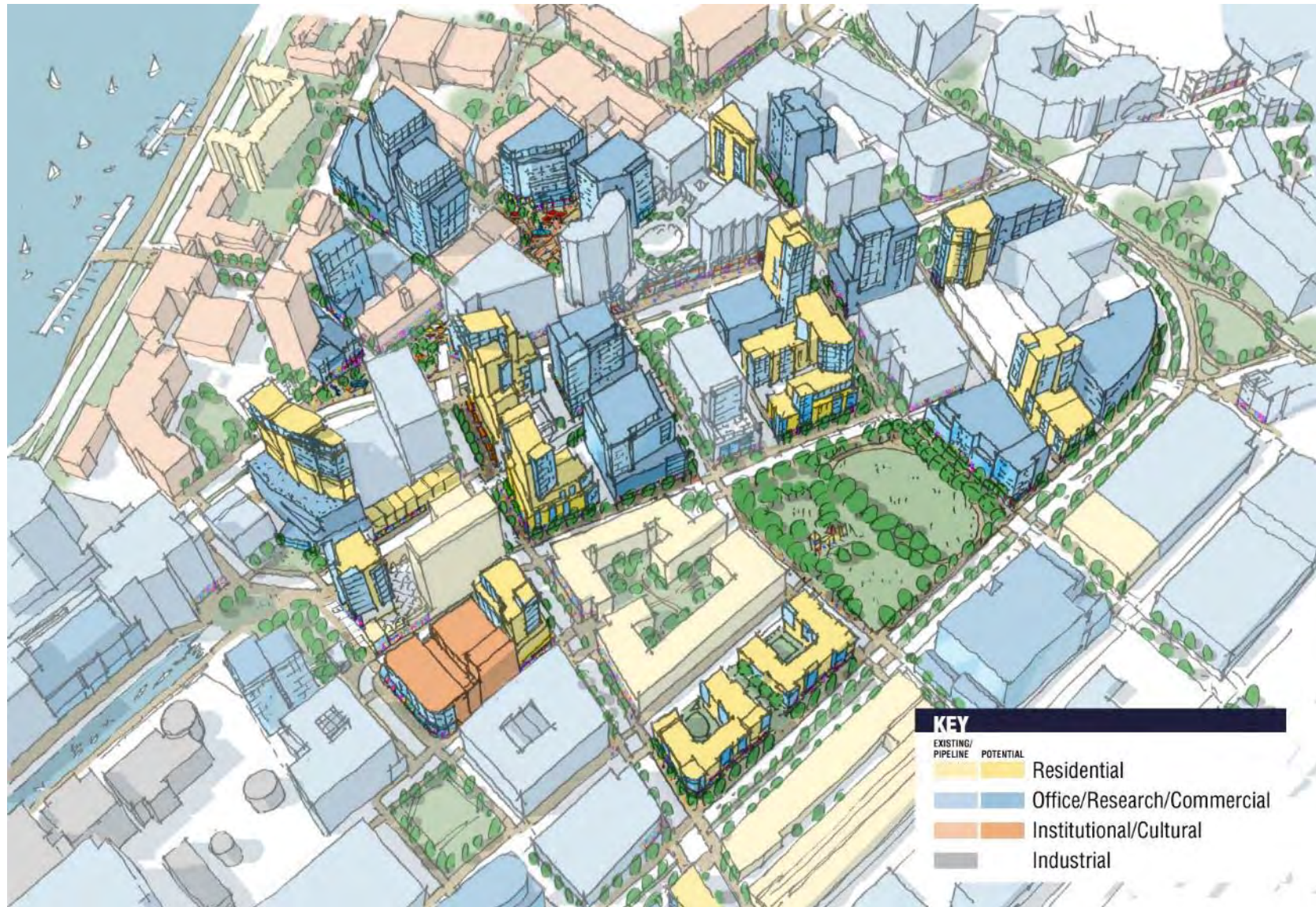
Urban Design and Open Space

- Site planning/review process
- Open space requirements
- Height and urban design criteria

Housing and Economic Considerations

- Affordability requirements
- Other housing goals

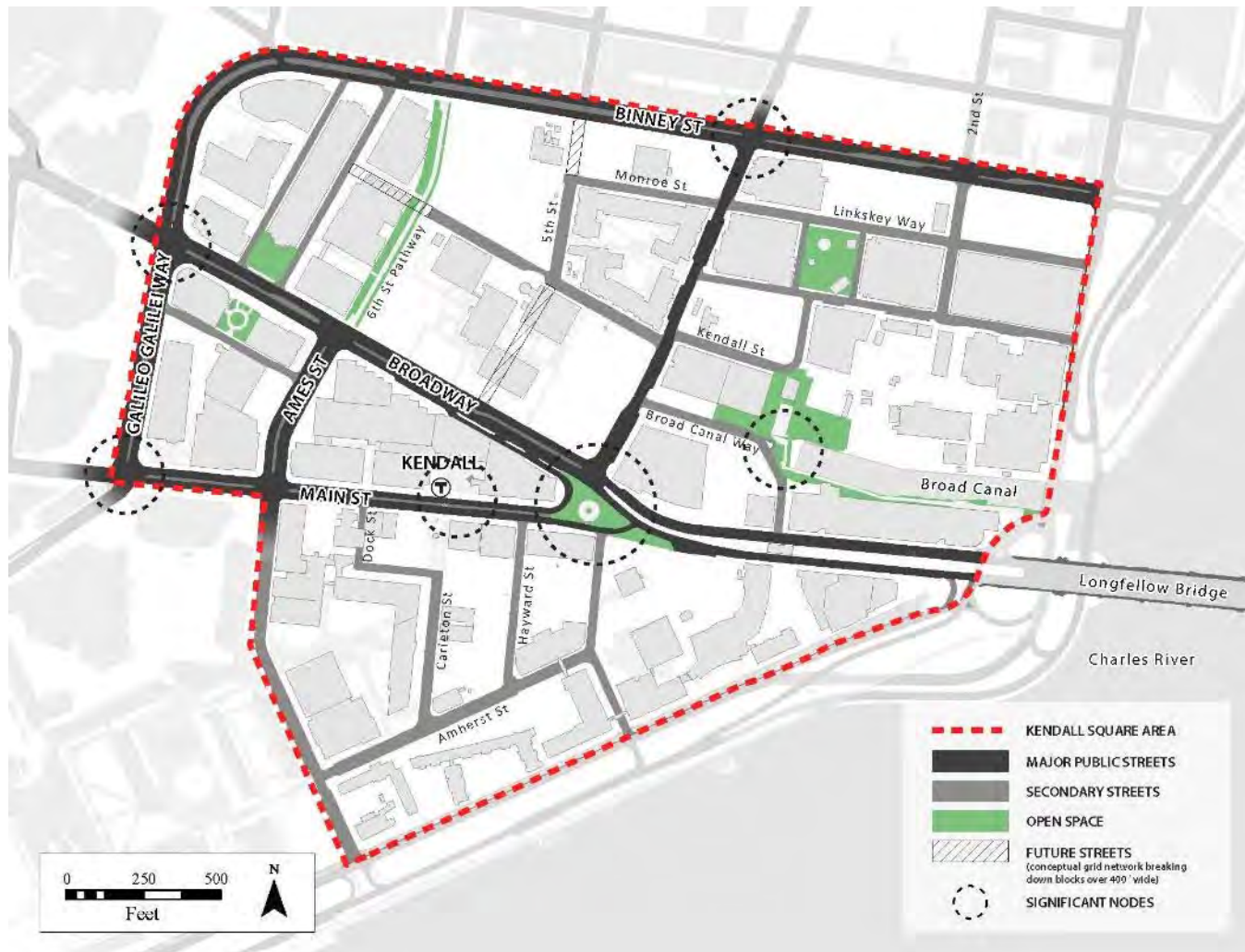
K2 – Conceptual Planning Vision



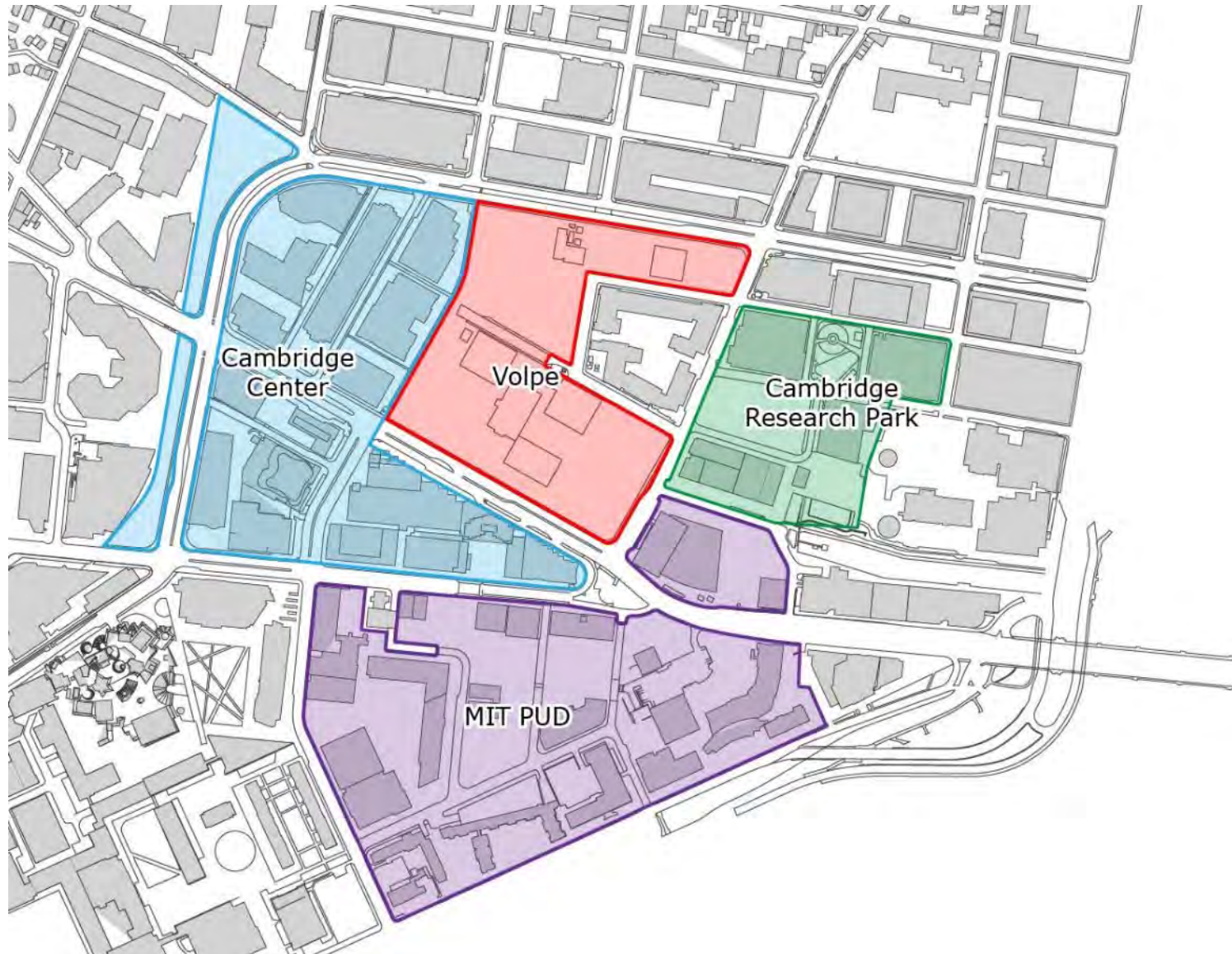
K2 – Conceptual Planning Vision



K2 – Conceptual Planning Vision



K2 Planning Context



PUD considerations



PUD considerations

PUD-3 Zoning

- Aggregate FAR
- Height limits
- 15% minimum open space
- Parking
- Review criteria



Review Process

- Mix of uses w/ housing + retail
- Urban street network
- Open space (22%)
w/programming, activation
- Architectural standards and
ongoing design review
- Phasing plan

Revised Proposal

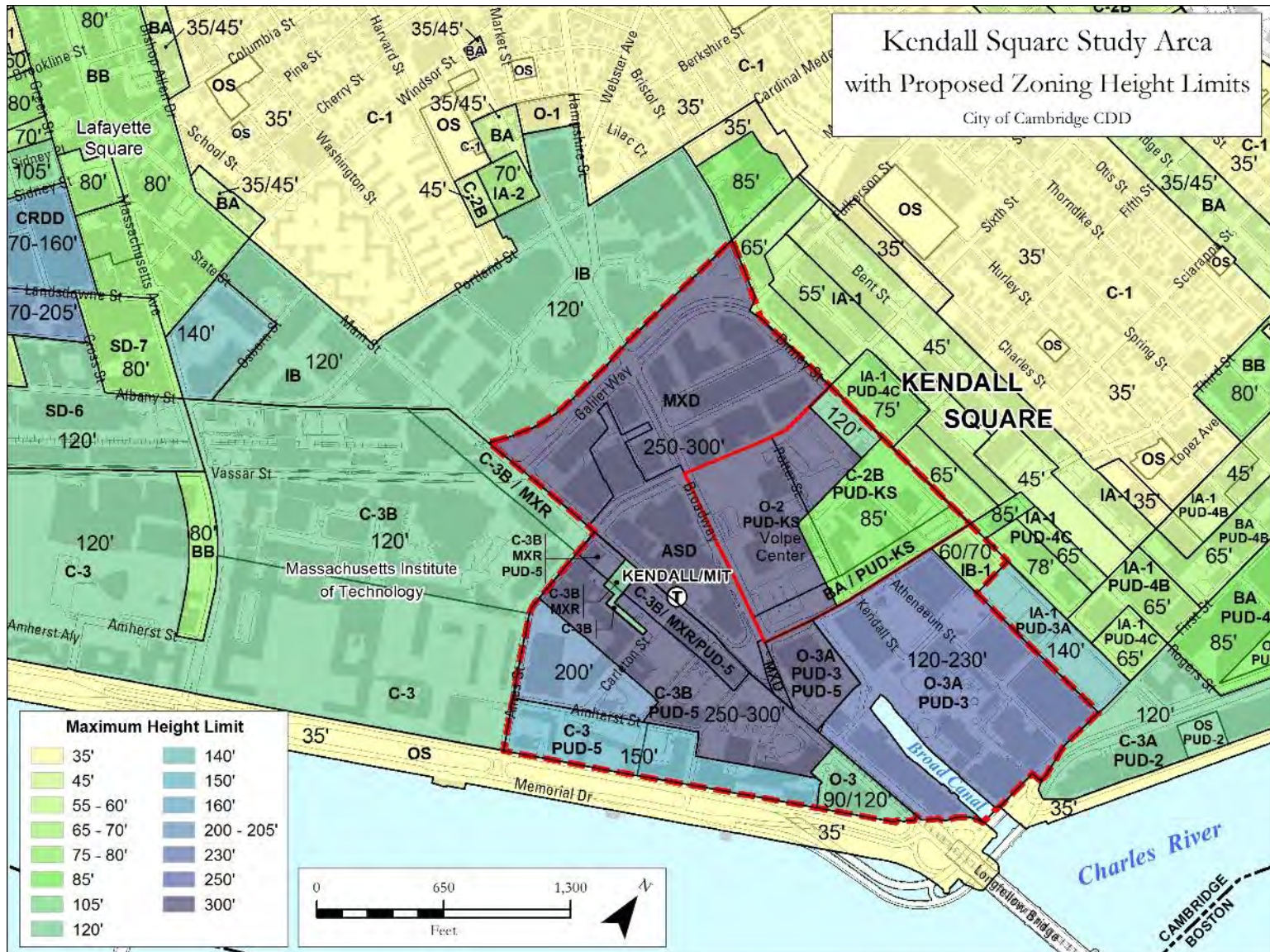
Detailed Master Plan Requirements

- Site planning
- Height + massing
- Parking + loading
- Connectivity
- Open space
- Housing
- Phasing

Review Criteria

- Use mix
- Housing diversity
- Permeability
- Mitigating height impact
- High-quality open space + connections
- Strong street edge + ground floors
- Architectural diversity
- K2 Design Guidelines
- **Supplementary Site Planning Guidelines**

Height



Open Space



What's Important?

- Size
- Accessibility
- Relationship to buildings
- Connections
- Design
- Programming

Open Space



What Can Zoning Do?

- Size - minimum
- Accessibility – legal stds
 - Relationship to buildings
 - Connections
 - Design
 - Programming
 - **Criteria + guidelines**

Open Space

	Current Zoning	Revised Proposal
Size	Two numbers: 42% (6.0 acres) Min. TOTAL 7.5 acres (53%) Min. PUBLIC	One number: 40% (5.7 acres) Min. <i>Includes Public, Federal, other publicly accessible spaces</i>
Character	Contiguous park NW corner of site	Pathways + connections Parks + gathering places Government outdoor space <i>Other spaces in small amounts: shared streets, public roof space</i>
Flexibility	Can reduce amount to facilitate redevelopment of a Federal lot	Can approve modifications to strict definitions

Federal Open Space



Boston (Moakley Courthouse)



Washington, DC



Seattle



Chicago

Conceptual Site Layout Studies

Study looked at:

- Proposed requirements
 - GFA (at full anticipated buildout)
 - Minimum open space
 - Maximum height
- Possible streets, connections + pathways
- Different arrangements of open space
 - *“Inspired” by Connect Kendall Square*
- Possible building sites
- Options for building heights and massing
 - Consideration of K2 guidelines

Study did NOT include:

- Building design, articulation
- Quality of connections and open space
- Economic considerations

Conceptual Site Layout Studies



Conceptual Site Layout Studies



- 6+ acres total open space
- Distribution of spaces
- Heights nearly maximized
- Some building separation

Conceptual illustration only – not a development plan

Conceptual Site Layout Studies



- 6+ acres total open space
- One large space
- Heights maximized
- Little building separation

Conceptual illustration only – not a development plan

Conceptual Site Layout Studies



- 6+ acres total open space
- One large space with some smaller
- Heights nearly maximized
- Some building separation

Conceptual illustration only – not a development plan

Conceptual Site Layout Studies



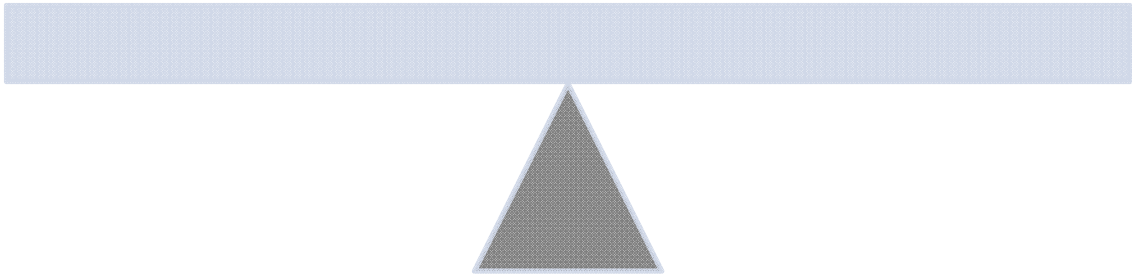
- 5½ acres total open space (ground level)
- A few smaller spaces
- Lower, more varied heights
- Some building separation

Conceptual illustration only – not a development plan

Economic Considerations

Costs

Value



Economic Considerations

Costs

Construction

- Demolition, site preparation
- Buildings
- Structured parking
- Financing

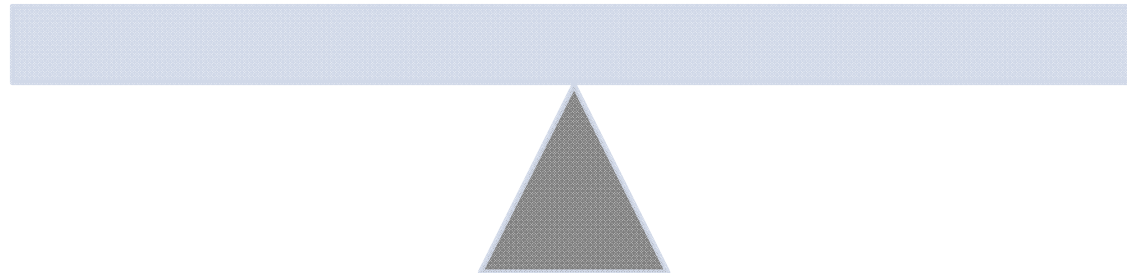
City Requirements

- Affordable housing
- Open space
- Innovation Space
- Retail
- Sustainable design (LEED, &c.)
- Incentive zoning payments
- Kendall Fund payments

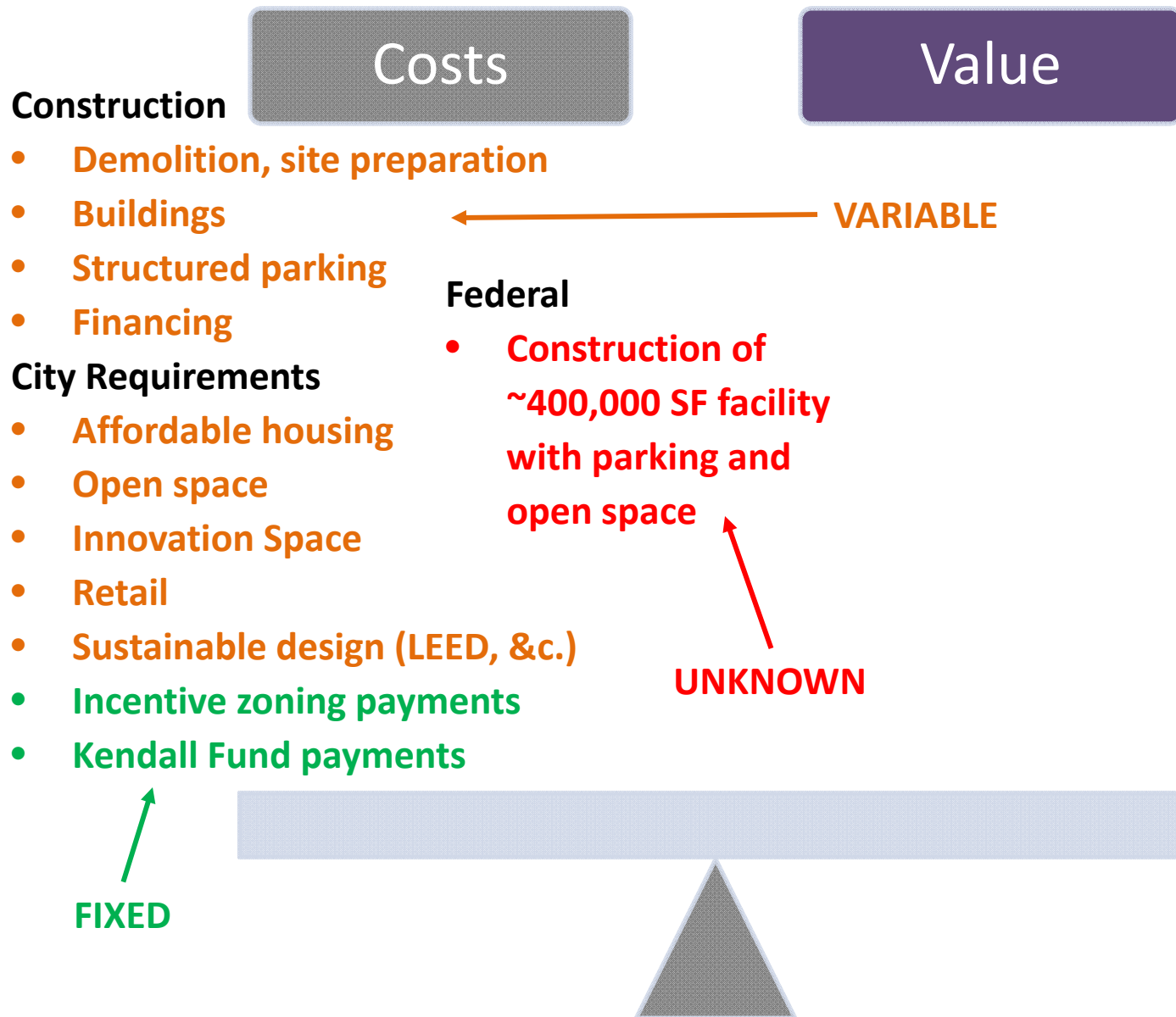
Federal

- Construction of ~400,000 SF facility with parking and open space

Value



Economic Considerations



Economic Considerations

Costs

Construction

- Demolition, site preparation
- Buildings
- Structured parking
- Financing

City Requirements

- Affordable housing
- Open space
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- Retail
- Sustainable design (LEED, &c.)
- Incentive zoning payments
- Kendall Fund payments

Federal

- Construction of ~400,000 SF facility with parking and open space

Value

Estimates for Kendall Square

Lab: \$120-175 per SF

Office: \$55-95 per SF

Housing: \$55-75 per SF

Includes:

- *construction costs*
- *financing*
- *below-grade parking*
- *inclusionary housing (current)*

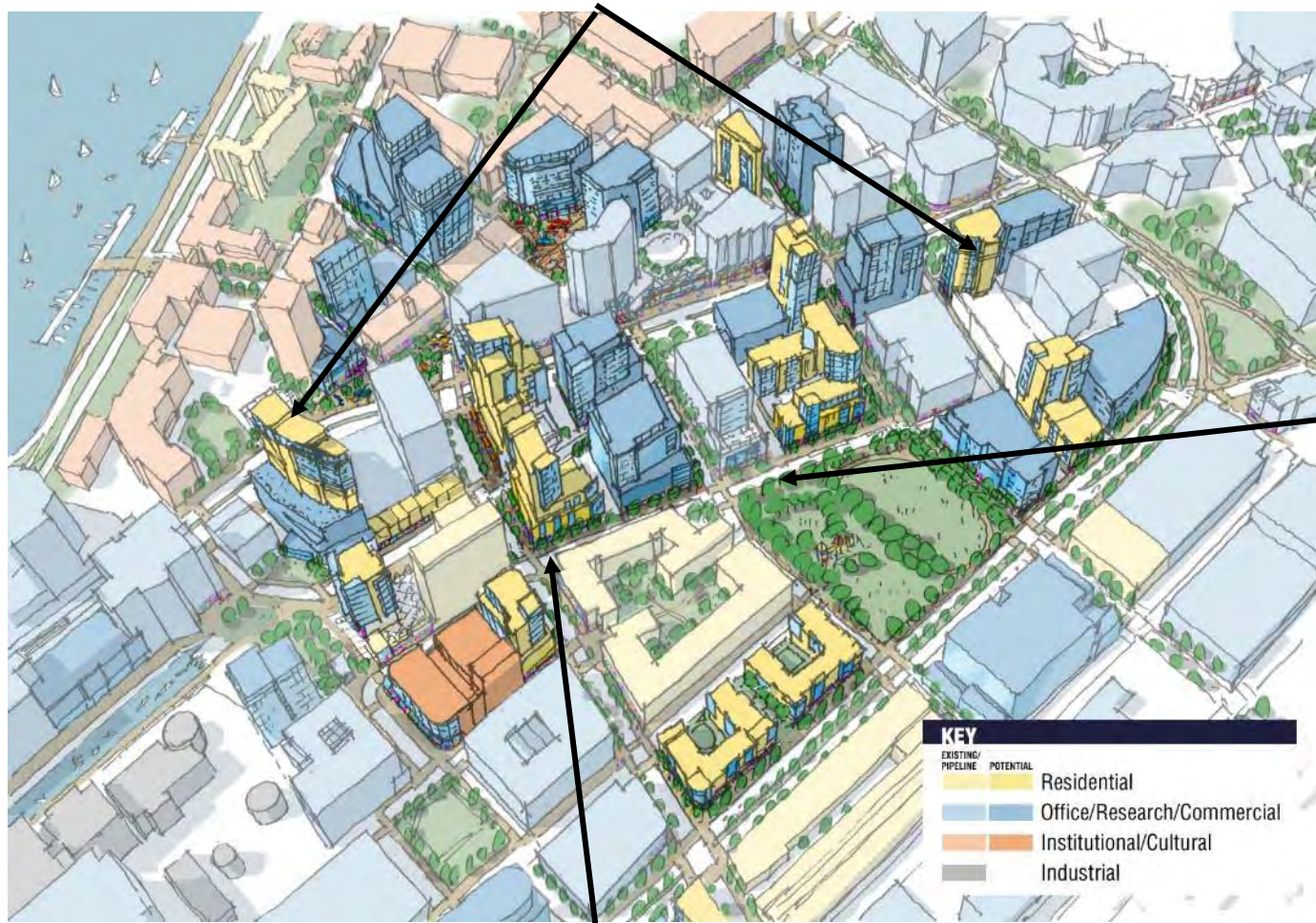
Does not include:

- *land costs*
- *demolition, site prep*

Source: HR&A Advisors analysis for Cambridge Redevelopment Authority, 3/16/15.

Housing Priorities – K2 Study

~1,000 new units in rest of area

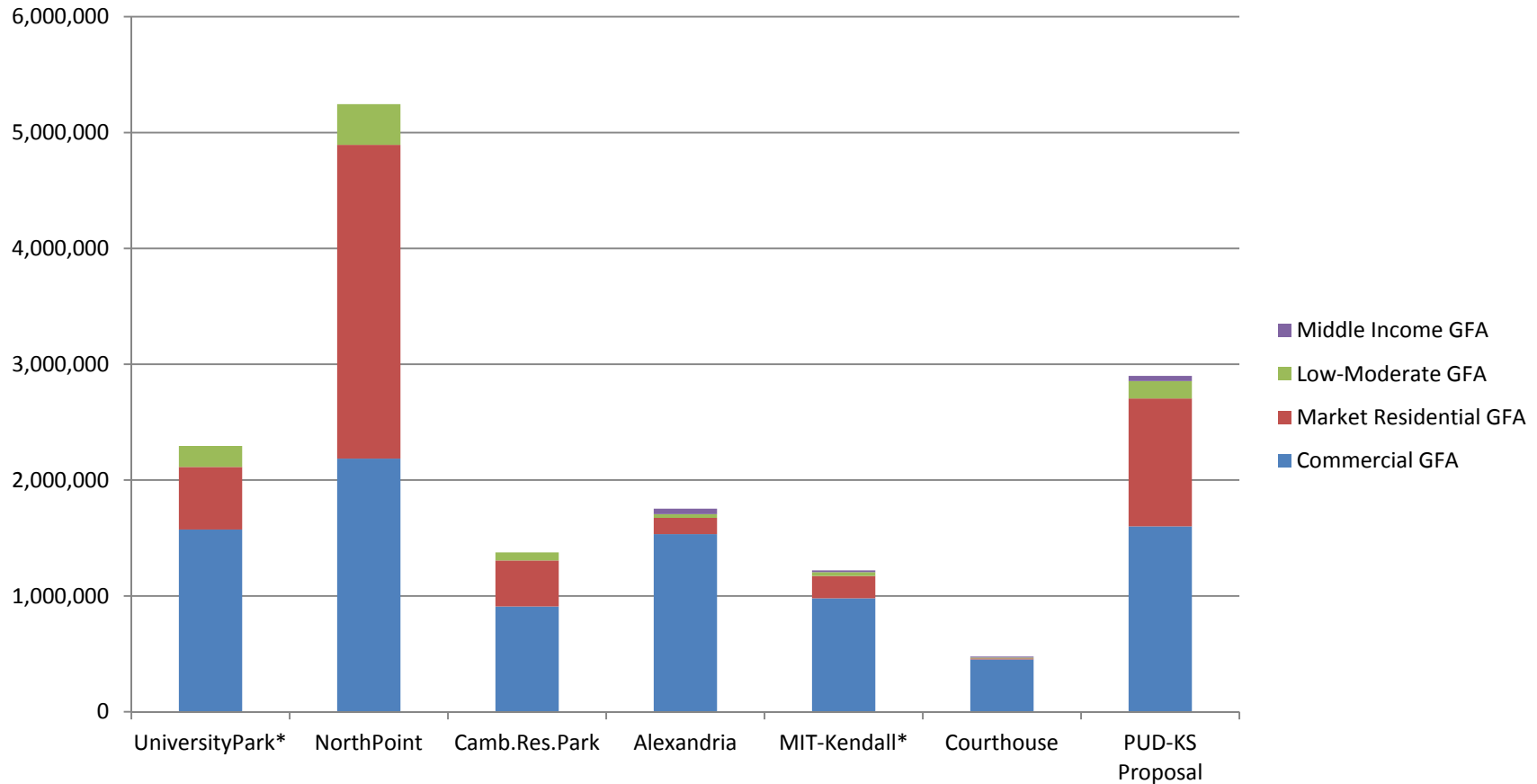


**1,000+ units on
Volpe Site**

~1,000 units existing

Affordable Housing: Mixed-Use Projects

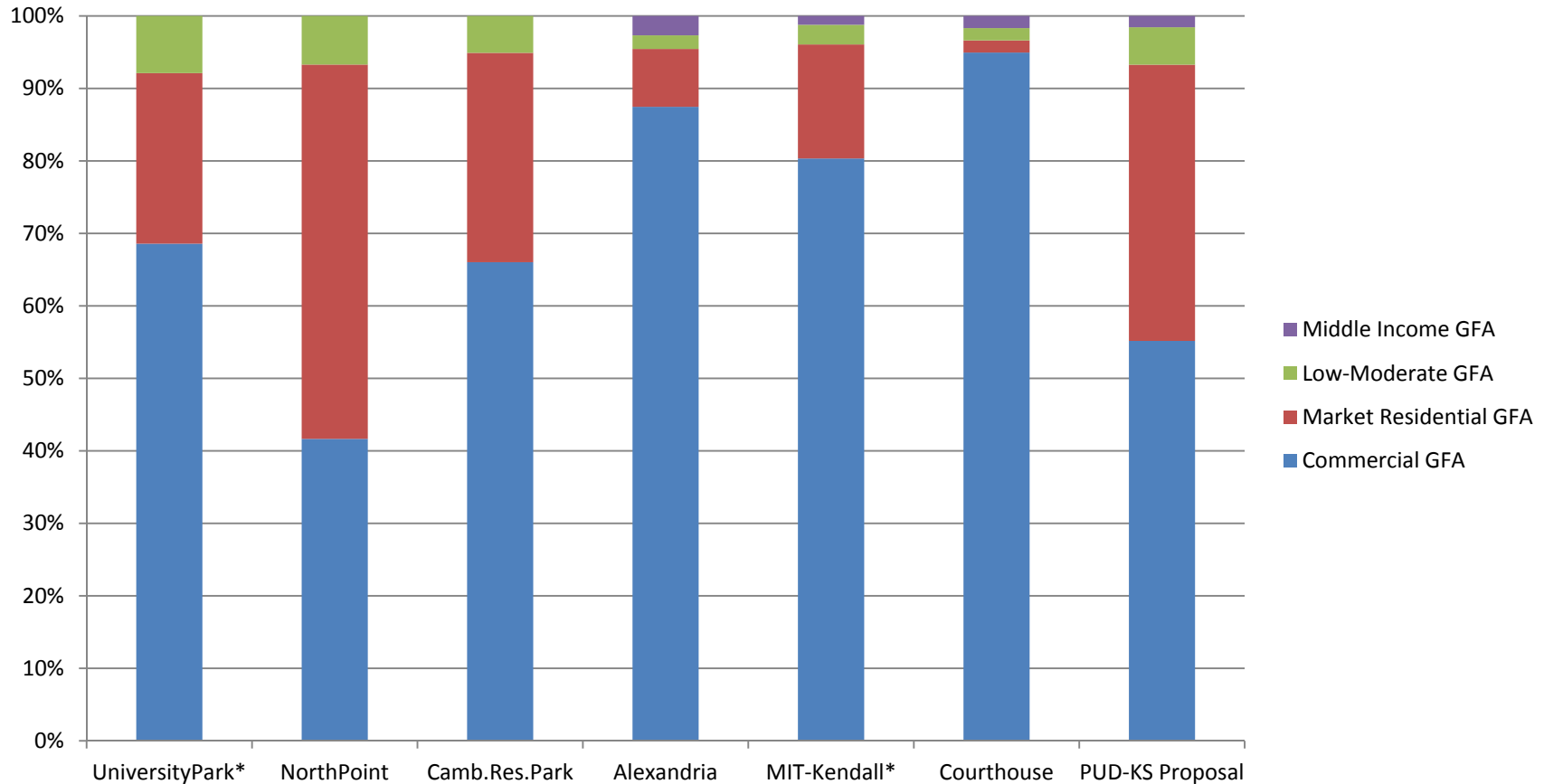
Examples



** University Park figures are estimates, and do not include 300 Mass Ave and associated agreements. MIT-Kendall figures based on zoning proposal; development plan not yet approved. **ALL FIGURES APPROXIMATE.***

Affordable Housing: Mixed-Use Projects

Examples



* *University Park figures are estimates, and do not include 300 Mass Ave and associated agreements. MIT-Kendall figures based on zoning proposal; development plan not yet approved. **ALL FIGURES APPROXIMATE.***

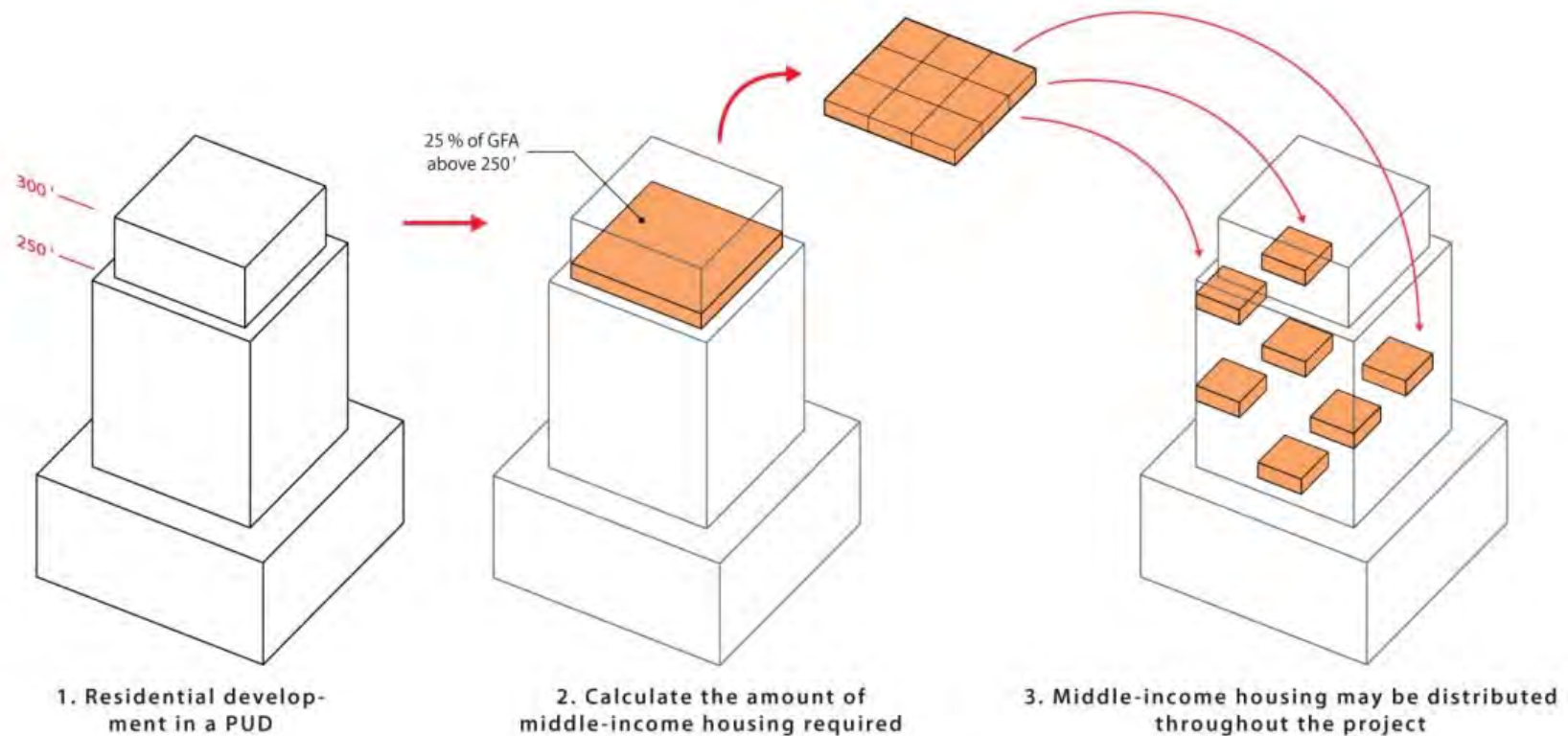
Affordable Housing: PUD-KS Proposal

	Current Citywide Zoning + PUD-KS Proposal	Recommended Citywide Changes
Total housing required by base zoning	992,000 SF (ca. 900-1,000 units)	992,000 SF (ca. 900-1,000 units)
Affordable housing (low-moderate)	149,000 SF (ca. 140-150 units)	<i>TBD – Study to be completed 2015</i>
Middle-income housing (per height incentive)	0 – 60,000 SF (ca. 0-60 units)	<i>TBD – Study to be completed 2015</i>
Total housing with inclusionary bonus	1,290,000 SF (ca. 1,200-1,300 units)	<i>TBD – Study to be completed 2015</i>
Commercial development subject to incentive zoning	1,488,000 SF	1,488,000 SF
Total required incentive zoning contributions to Affordable Hsg.	\$6.8 million	\$14.9 – 17.9 million

Assuming maximum buildout on Volpe parcel. ALL FIGURES APPROXIMATE.

Affordable Housing: PUD-KS Proposal

Middle-Income/Height Incentive: Equivalent of 25% of GFA between 250 and 300 feet (residential) set aside for households earning 80%-120% AMI



Housing: Other Goals

Variety of Unit Types

- Micro-units
- Family-sized units

Livability

- Orientation to open space
- Storage, amenities

PUD-KS: Summary of Modifications

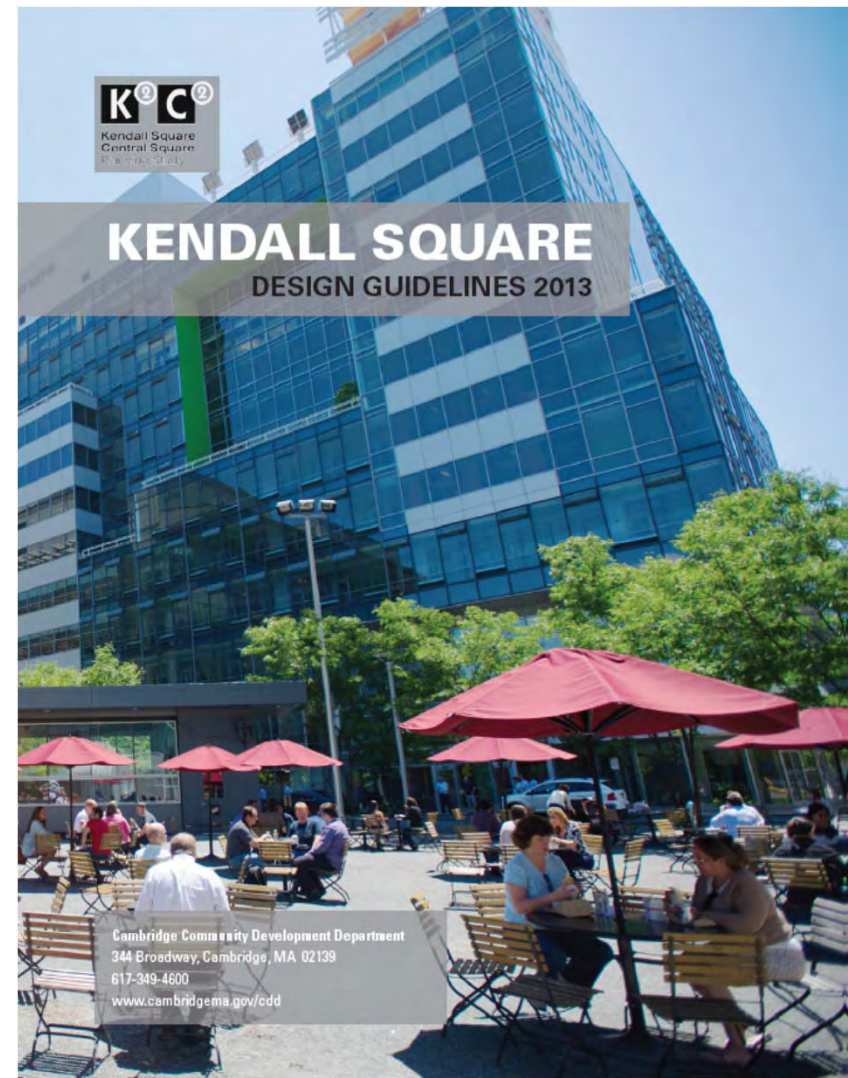
Zoning Provision	Modifications to Initial Proposal
Purpose	<ul style="list-style-type: none"> • Minor revisions for consistency with planning goals
PUD Proposal Requirements	<ul style="list-style-type: none"> • Required elements of Master Plan Area Development Proposal • Master Plan review/approval criteria
Height Review Criteria for Buildings above 125 feet	<ul style="list-style-type: none"> • Modifications for consistency with K2 Design Guidelines
Open Space Requirements	<ul style="list-style-type: none"> • 40% minimum (5.7 acres on Volpe) • Criteria for types, accessibility, review and approval
Housing	<ul style="list-style-type: none"> • Mix of housing types, amenities (Housing Plan review/approval) • 3-bedroom units (5% baseline minimum)

PUD-KS Design Guidelines

- Comprehensive built form guidance exists
- Need urban design vision, and site planning & design guidelines for PUD-KS
- Guide future urban structure and arrangement of connections, open space & buildings
- Expand upon the proposed modifications to the zoning text

Themes

1. Vision
2. Height and massing
3. Connectivity
4. Open space



Vision

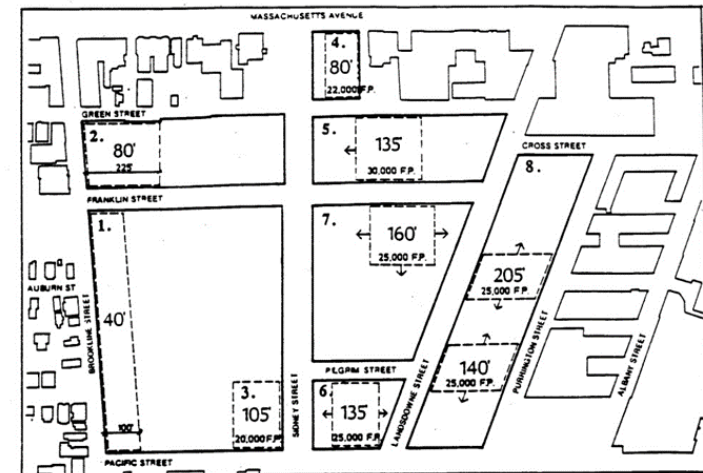
- An **accessible, diverse** and **unique** place that **integrates** the district **seamlessly** into the **surrounding urban fabric** of Kendall Square and the Eastern Cambridge neighborhoods.
- A place that is defined by **high quality sustainable architecture, urban design** and **open space** with an **enduring sense of place** that celebrates Kendall Square's spirit of **innovation** and **creativity**.



Height and massing

- **Site Massing Plan**
 - variation and interest in heights
 - sensitively manage height and bulk
 - consider views from public spaces (buildings over 200')
 - identify suitable sites for tall buildings
- **Building Height Criteria (Section 13.13.43) for heights above 125'**
 - shadows, wind, light & views to residential buildings and public spaces
 - mitigation of detrimental environmental impacts (eg. diminution of open space)
 - interfaces with sensitive uses
 - general health and safety of the area

C. BUILDING HEIGHTS



Building heights in University Park are governed by the Cambridge Zoning Ordinance, which provides for a basic building height limitation of seventy feet with a greater building height allowed in limited instances.

The locations of these higher buildings and other factors with respect thereto have not been finally determined. However, some of the possible locations for buildings in excess of seventy feet are those generally indicated in the diagram above. These sites for higher structures related to the major open spaces of University Park are as follows: At the University Park Common, taller structures are contemplated at the space's northern and southern ends. At these locations, taller buildings would help mark the limits of the Common, while reducing the impact of building shadow patterns on the space and its surrounding buildings. Sites along Lansdowne Street and Massachusetts Avenue are also contemplated for taller buildings. In each case, ease of access and distance from the smaller scale building fabric of the

Cambridgeport residential community are important factors in the selection of these locations. In addition, taller structures in the Lansdowne Street area would serve as

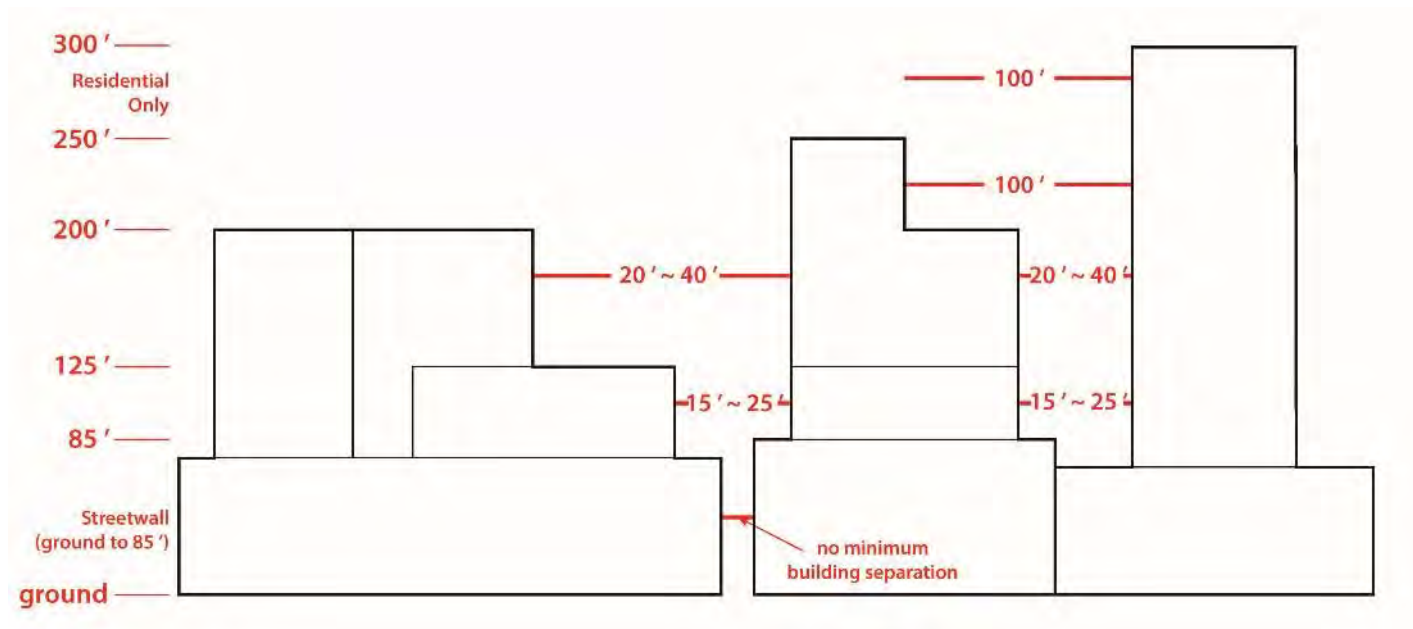
important elements of orientation and identification for those approaching the District from the east and south.

Heights should be modulated from the forty foot limitation along Brookline Street to the seventy foot maximum in the adjacent area so as to avoid an abrupt transition.

As a further elaboration on the intent of the height limitations in the Ordinance, the maximum building height within the District shall be seventy (70) feet with the following exceptions:

1. Within one hundred (100) feet of the easterly sideline of Brookline Street south of Franklin Street the maximum height shall be forty (40) feet.
2. Within two hundred twenty-five (225) feet of the easterly sideline of Brookline Street north of Franklin Street the maximum height shall be eighty (80) feet.

Height and massing



Maximum façade lengths and minimum building separations
(K2 Built Form Design Guidelines)

Connectivity

What do we want to achieve?

- **Highly legible & integrated movement network with connections to all routes**



How can the site best connect with nearby streets, facilities and destinations?



Pedestrian and cyclist friendly approach integrates with the community, and links existing and proposed streets

Example of connecting with existing movement networks



Avoid suburban office style cul-de-sacs, which fails to integrate with the surroundings



An integrated street pattern then forms the basis for strong street enclosure and a positive public realm

Connectivity

How will this be achieved?

- **Connectivity Plan** to define function, character and feel of connections
- Hierarchy of streets & connections
- Good links and movement options through the district



Alleys (Degraives St Melbourne)



Shared Street (Winthrop St)



Major Street (Vassar St)

Connectivity

How will this be achieved?

- Improve connections to Broad Canal
- High quality pedestrian and bicyclist connectivity between all uses in the PUD.



View from Broad Canal to PUD-KS site



Intersection improvements (NACTO Urban Design Guide)

- Raised crossing and curb extensions
- Street trees and bioswales as connecting elements

Connectivity

How will this be achieved?

- Overlooked and lined by active frontages



Open space

What do we want to achieve?

- **A cohesive network of high-quality open spaces and places**



South End garden (K2 Study Background)



Yeuba Buena Park (San Francisco)



Urban Plaza (Lafayette Square)



Park with Interactive Play Structure (Quebec)

Open space

How will this be achieved?

- Significant public gathering space or public park
- Visual and physical connections through the site



SLU Block Party Seattle



Assembly Square, Somerville



Broad Canal



Pathway and visual connection (Connect Kendall Competition - RBA entry)

Open space

- Good solar access, not dominated by buildings, protected from wind, tree plantings.
- Rooftop open space should be connected to adjacent interior space, and directly accessible and visible



Cambridge Center



NYC Highline



Via Verde, Bronx

Open space

- Locate at strategic points in the movement network.
- Strengthen the role of Sixth Street walkway



Street Network (Connect Kendall SiteLab entry)



Point Park



Linear walking and view corridor – Sixth St

Open space

- Enhance Kendall Square's identity and character through wayfinding, public art & sculpture etc.



Sample public art ideas/references (Connect Kendall Competition)



Open space

- Design and program to be flexible, activated and social.
- Day, evening, weekends and year



Temporary Playground Installation (Lawn on D Street– Sasaki & Utile)



Streets as memorable seasonal experiences (Connect Kendall Competition –SiteLab entry)



Arts Programming (Rose Kennedy Greenway – K2 Study)

Open space

- Ensure privately-owned spaces are welcoming to the public.



Active uses and canopy frames open space



Moakley Courthouse, Boston



One Kendall Square