

Volpe Working Group – August 17, 2017

Meeting focus: Discussion of MIT zoning proposal, zoning strategies

Background information:

- K2 development projections and outcomes
- FAR context
- Height limits comparison
- Open space comparison
- Comparison of VWG planning principles and zoning provisions

Discussion topics:

- How does zoning control development?
 - FAR and GFA (and what's the difference)?
 - Height limits – different approaches
 - Open space – what type, how much, where?
- How does zoning encourage desired outcomes?
 - Requirements/contributions tied to development
 - Incentives – waivers, exemptions, “credit” for desirable elements
 - Development standards to meet public objectives
 - Review process, criteria, guidelines

MIT PUD-7 Volpe Site Zoning Petition

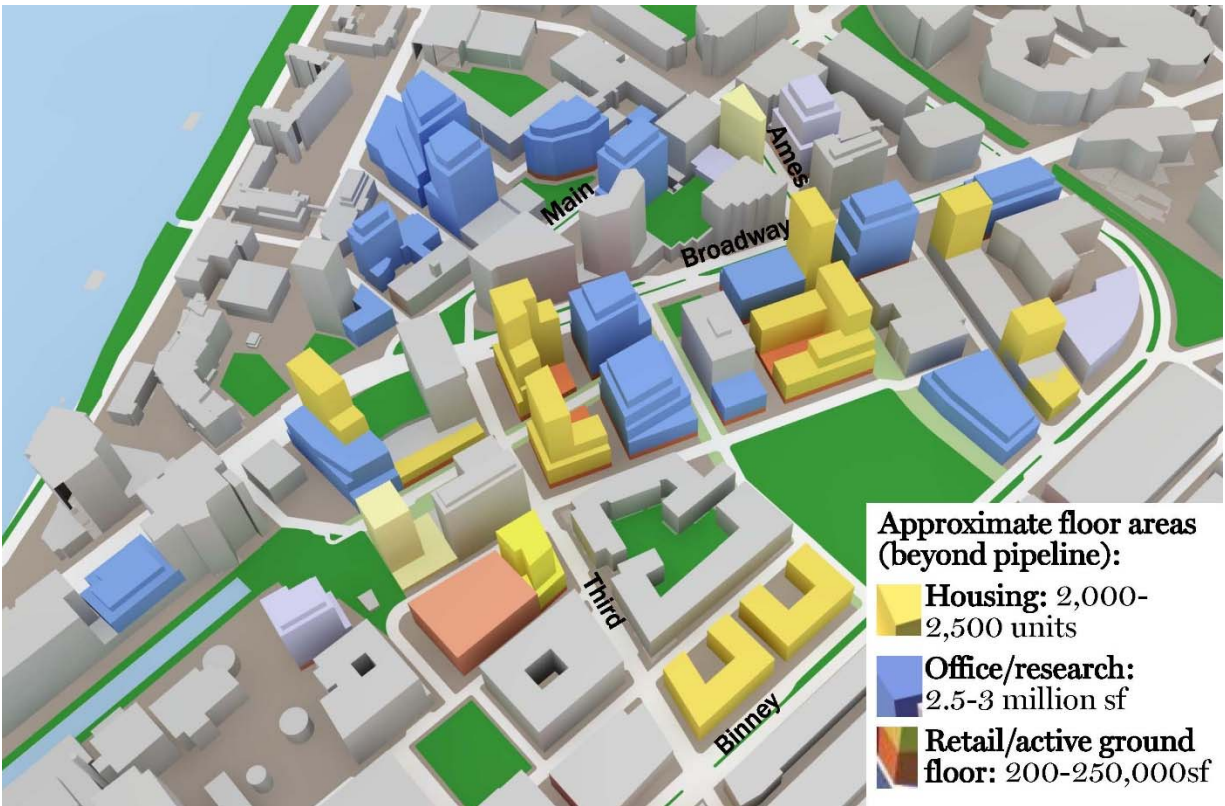
Current/Proposed Zoning Comparison

ALL FIGURES APPROXIMATE	Current Zoning (PUD-KS)	Proposed Zoning (PUD-7)
Maximum FAR	3.0 / 3.9 (with Inclusionary bonus)	5.2 (no Inclusionary bonus)
Parcel Area (approx)	620,000 SF (14.2 acres) *	620,000 SF (14.2 acres) *
Maximum Total GFA (non-exempt)	1,860,000 / 2,420,000 SF	3,220,000 SF
Exempt Active Use and Community Space GFA	70,000 SF	70,000-140,000 SF (est., not strictly limited)
Exempt Innovation GFA	N/A	85,000 SF (up to 5% of office)
Max. Total GFA (incl. exempt)	1,930,000 / 2,500,000 SF	3,375,000-3,445,000 SF (est.)

GFA and FAR Components by Use

ALL FIGURES APPROXIMATE	Gross Floor Area	Component FAR
Government GFA/FAR (non-exempt)	400,000 SF	0.64
Maximum Commercial GFA/FAR	1,690,000 SF	2.73
Minimum Residential GFA/FAR (allowed hotel/motel component)	1,130,000 SF (up to 250,000 SF)	1.82 (up to 0.40)
Total GFA/FAR (non-exempt)	3,220,000 SF	5.2

K2 Advisory Committee Development Scenario (2012)



K2 Study Zoning Recommendations (2012) – Resulting Development

	MIT (PUD-5)	MXD District	Volpe (PUD-KS)**	TOTAL
Office/Research	Max. 1.0 million SF	Max. 600,000 SF	Max. 1.5 million SF	3.1 million SF
Residential	Min. 240,000 SF	Min. 400,000 SF	Min. 1.3 million SF	1.9 million SF
Retail/Active	TBD	TBD	TBD	TBD
TOTALS	1.2 million SF (+ retail/exempt)	1.0 million SF (+ retail/exempt)	2.8 million SF (+ retail/exempt)	5.0 million SF (+ retail/exempt)

** Figures based on 4.0 base FAR and counting inclusionary bonus for housing

Current Status of Permitted/Planned Development (2017)

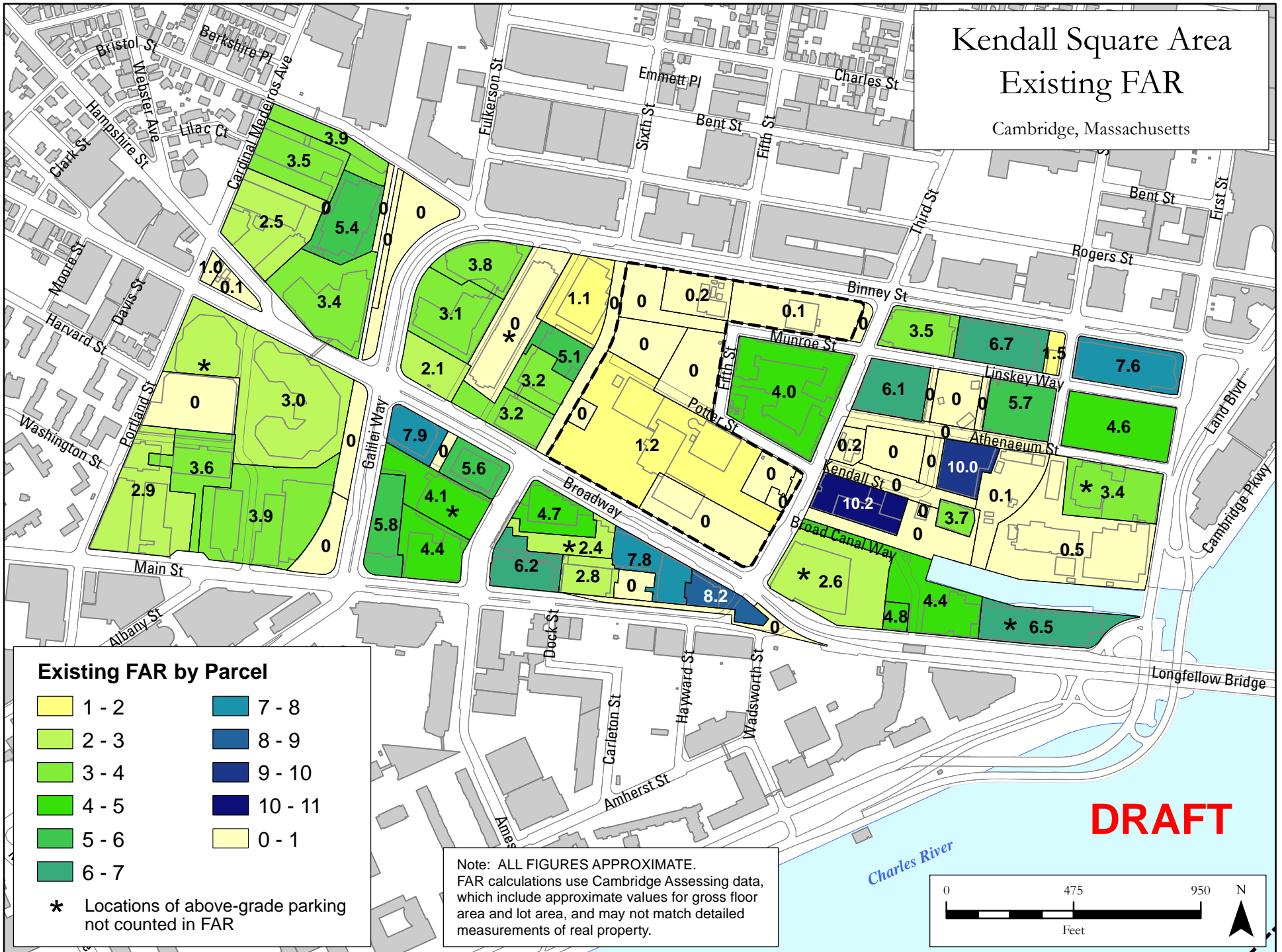
	MIT (Permitted)	MXD (Permitted)	Volpe (Proposed)	TOTAL
Office/Research	900,000 SF	600,000 SF	Max. 1.7 million SF	3.2 million SF
Residential <i>+Student Housing</i>	315,000 SF <i>+166,000 SF</i>	400,000 SF	Min. 1.1 million SF	1.8 million SF <i>+166,000 SF</i>
Retail/Active	123,000 SF	19,000 SF	~70,000-140,000 SF	212,000-282,000 SF
TOTALS	1.5 million SF	1.0 million SF	2.9 million SF	5.4 million SF

FIGURES REPRESENT NET NEW DEVELOPMENT FROM 2012 EXISTING/PERMITTED

ALL FIGURES APPROXIMATE

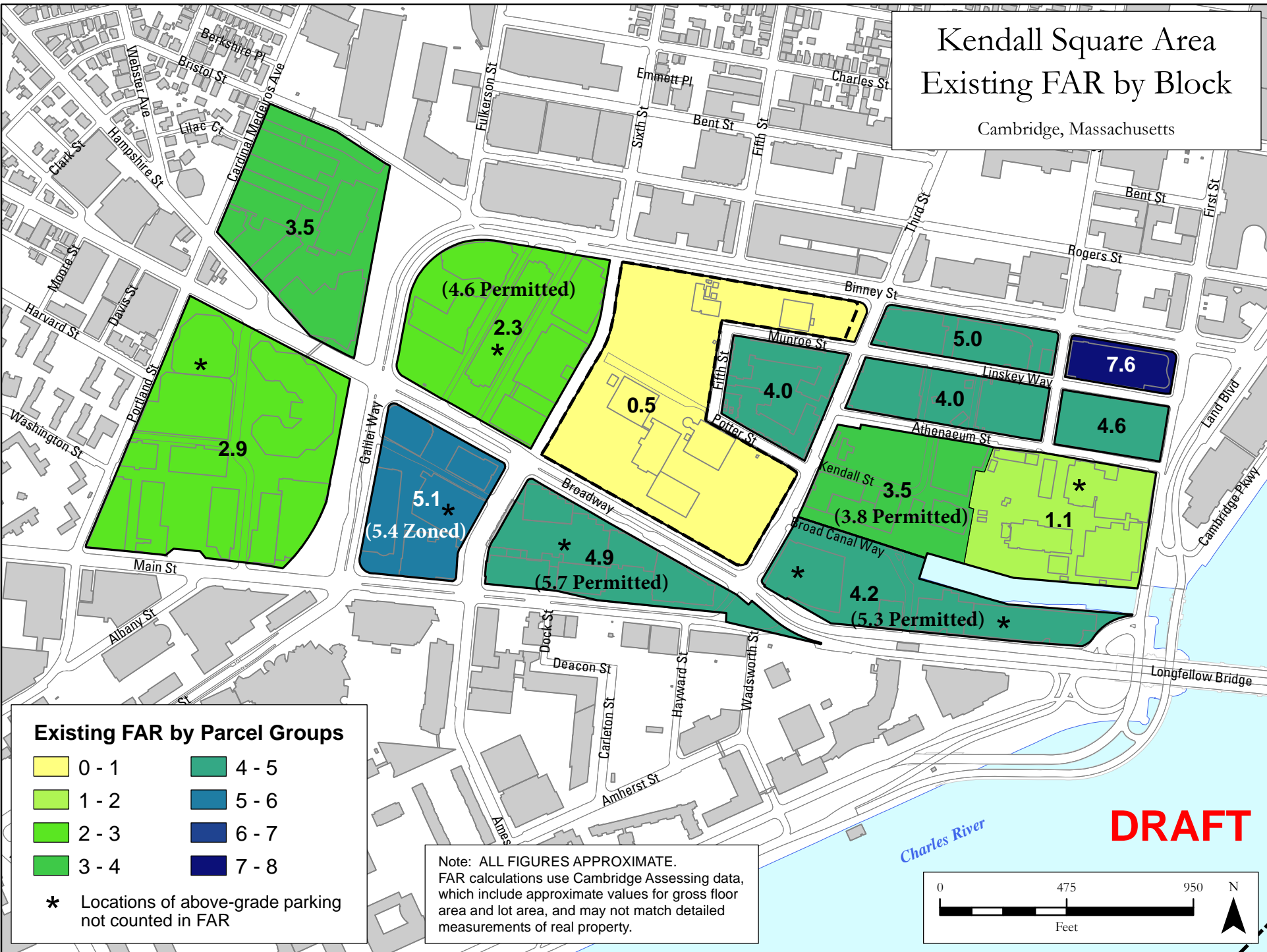
Kendall Square Area Existing FAR

Cambridge, Massachusetts



Kendall Square Area Existing FAR by Block

Cambridge, Massachusetts



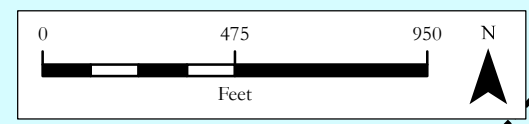
Existing FAR by Parcel Groups

0 - 1	4 - 5
1 - 2	5 - 6
2 - 3	6 - 7
3 - 4	7 - 8

* Locations of above-grade parking not counted in FAR

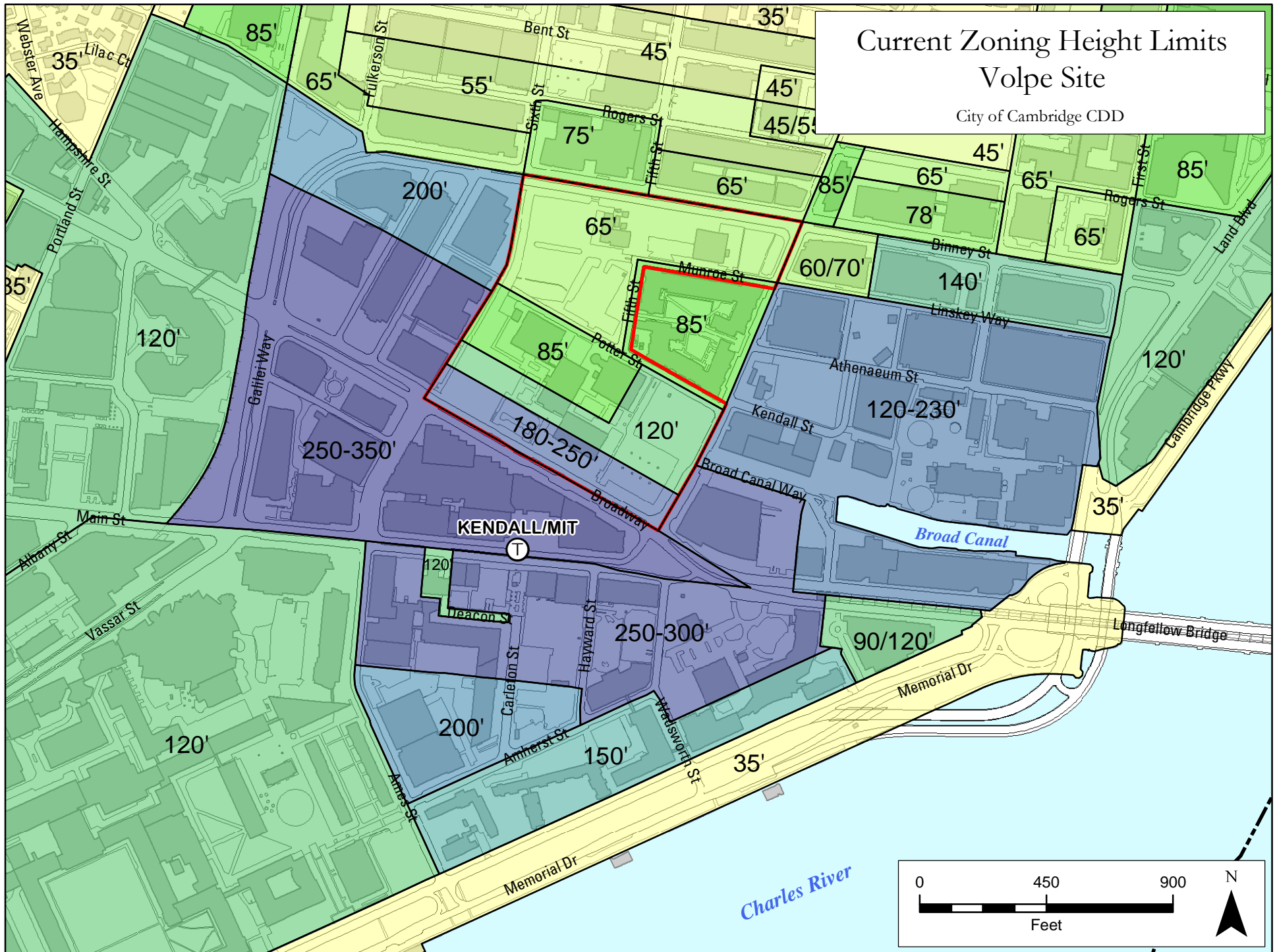
Note: ALL FIGURES APPROXIMATE.
FAR calculations use Cambridge Assessing data, which include approximate values for gross floor area and lot area, and may not match detailed measurements of real property.

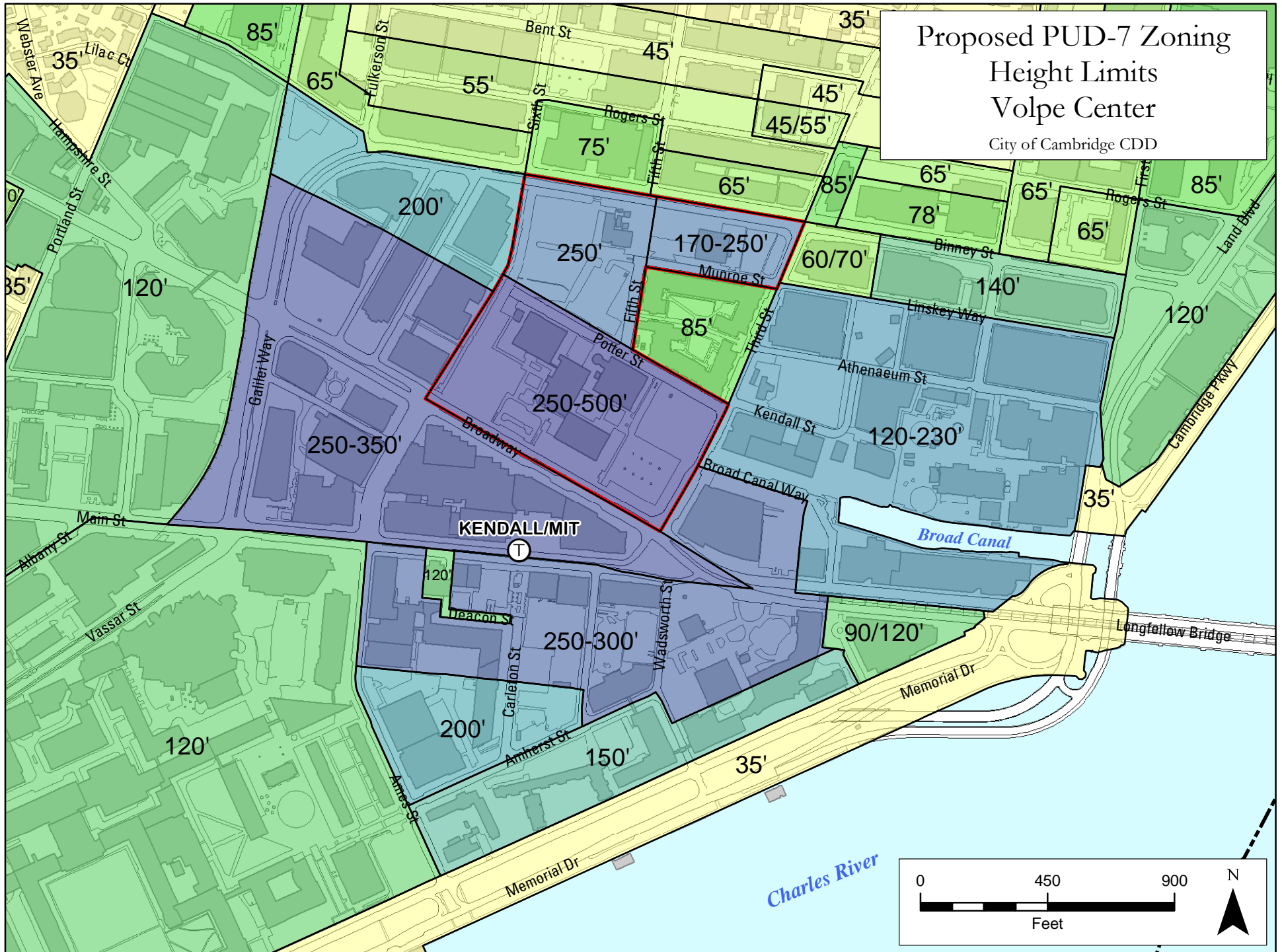
DRAFT



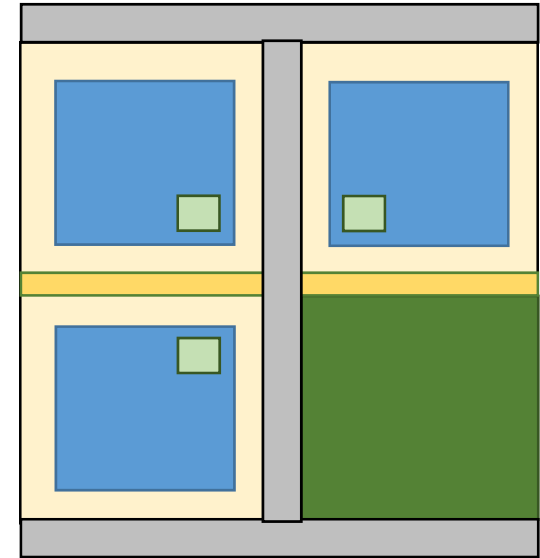
Current Zoning Height Limits Volpe Site

City of Cambridge CDD





Types of Space	Key Characteristics
“Negative Lot Coverage”	Any space not occupied by building, including streets, surface parking, paved areas, green areas.
Street (public or private)	Right-of-way intended for automobile access to lots.
Green area open space	Ground-level, open-air space, excludes streets and parking, generally permeable materials to 3’ minimum depth, no more than 25% hard surfaces.
Permeable open space	Green area open space with permeable material such as vegetation, rocks, pebbles, wood chips, unit pavers; paved pathways no more than 48” in width.
Publicly beneficial open space	Privately owned, but providing public accessibility (if specified) or visual and environmental benefit; includes parks, plazas, lawns, landscaped areas, decorative plantings, active and passive recreational areas, loggias, atriums, arcades, pedestrian ways; NOT streets or parking.
Public open space	Guaranteed for public use through public ownership, easement, covenant or other mechanism; open to the sky, designed for environmental, scenic, or recreation purposes.
Private open space	For enjoyment of residents of a building; includes private yards patios, decks; may include balconies and roof areas to a limited extent.



Redevelopment Area	Permit Yr(s).	Zoning for Open Space	Type of Open Space Provided	Parcel Area (SF)	Provided OS (SF)	Provided OS (%)
Kendall Center (MXD District/KSURP)	1977/2017	Total of 15% publicly accessible in MXD; 100,000 SF public	Part conveyed to City, part owned by CRA, part public by covenant	1,013,000	156,000 *	16%
East Cambridge Riverfront PUDs (Aggregate)	1981-1997	15-25% open, PB may reduce if public OS provided or integrated	Public by conveyance to City	1,290,000	251,000 *	19%
University Park (CRDD District)	1987	100,000 SF publicly beneficial	Publicly beneficial, privately owned	1,014,000	107,000	11%
Cambridge Research Park PUD (“Kendall Square”)	1999	15% open, PB may reduce if public OS provided or integrated	Publicly beneficial, privately owned	425,000	96,000	23%
North Point PUD	2003/2016	20% public, green or permeable; 2.5 acre public park	Part to be conveyed to City; part publicly beneficial, privately owned	1,977,000	479,000	24%
Alexandria Center PUD	2010	15% open, at least 2.3 acres conveyed to city	Public by conveyance to City	491,000	112,000	23%
MIT SoMa/NoMa PUDs	2015	Total of 15% publicly beneficial w/in PUD-5 district	Publicly beneficial, privately owned	460,000	126,000	27%

Note: ALL FIGURES APPROXIMATE. Based on area of Development Parcel, which does not include existing streets, but may include new streets created as a component of the development. () For comparison, does not include public roof-level open spaces.*

Volpe Working Group Principles / MIT PUD-7 Zoning Petition

Planning Principle	Petition Elements	Other Zoning Considerations
Civic Life	<ul style="list-style-type: none"> Publicly beneficial open space (3.6 acres, up to 0.7 acres on Federal site) \$15M for community space Criteria for civic engagement in PUD approval 	<ul style="list-style-type: none"> “Civic use plan” in development proposal? Expectations for public/civic space: <ul style="list-style-type: none"> Location? Public conveyance or covenant? Clearer purpose of community space? Ongoing commitment to open space/community programming?
Connectivity & Permeability	<ul style="list-style-type: none"> Connectivity plan in development proposal Publicly beneficial open space to include contiguous connectors Criteria for PUD approval 	<ul style="list-style-type: none"> Specify connections such as Broad Canal, Sixth Street walkway, Fifth Street extension, Galaxy Park? Regional connections such as Grand Junction? Connectivity with Federal site?
Activation	<ul style="list-style-type: none"> 65% active ground-level frontage on Broadway and Third Street GFA exemption of up to 5,000 square feet per establishment Required study by retail specialist \$15M for community space Criteria for PUD approval 	<ul style="list-style-type: none"> Activation of public open spaces and connections through site? Indoor public space for all-season enjoyment (e.g., market hall)? Size criteria for retail exemption?
Inclusiveness	<ul style="list-style-type: none"> Housing requirement w/inclusionary Housing plan in development proposal Criteria for diverse housing mix \$15M for community space 25% of active use space for Independent Retail Operators 85,000 SF Innovation Space (not necessarily on-site) \$5/SF contribution to community fund 	<ul style="list-style-type: none"> Family-sized units? Private open space/common space for residents (balconies, elevated courtyards)? Smaller-scale owner-operated enterprise? (possible overlap with innovation space) Family-friendly retail and open space qualities? Stronger inclusiveness criteria for PUD approval?
Comfort	<ul style="list-style-type: none"> Noise mitigation standards (similar to others in K2) Required studies of wind and shadows in development proposal 	<ul style="list-style-type: none"> Criteria for “human-scaled” spaces? Shadow/wind/noise – more explicit comfort studies at early site plan stage? More specific criteria/guidelines? Vegetation, shade for heat island mitigation?
Sustainability	<ul style="list-style-type: none"> LEED Gold and other standards (consistent with K2 study) Sustainability narrative covering ongoing topics Reduced maximum parking ratios \$5/SF contribution to transit fund 	<ul style="list-style-type: none"> Criteria focusing on net zero plan (energy efficiency/renewables) and resiliency? Site sustainability/resiliency plan in development proposal? Permeable open space, wetland, vegetation (ground-level or roof)? Transportation study including transit? Alternative transit funding approaches?