

## **Memorandum**

To: Members of the Somerville City Council and the Planning Board

From: Bill Valletta (Urban Planner, Brickbottom resident)

Date: 15 March 2019

### **Subject: Comment on the Zoning Text Amendment proposal, no.207460 and 206481 -- Open space requirements for mid-rise and high-rise buildings**

I am submitting the following comments and an attached planning report in partial support of the revised proposal, which the Somerville Planning Department presented at the public hearing of March 12, 2019. I am in agreement with the basic idea that any new large-scale developments in the transformation zones should be required to design, improve and dedicate for public use a modest amount of open space on-site, or participate in a consolidated off-site park project. Experience has shown that, in many such projects of larger scale, these spaces can be well-located, well-designed and well-maintained over time.

I do not agree, however, that a public open space dedication should be imposed on smaller-scale, individual projects in other zones of the city. The experience with these types of spaces has not been positive. When supported by lower scale and less expensive development, these spaces are almost always of mediocre quality, and the complexity of their legal and administrative arrangements has not been compatible with the routine tasks of city agencies.

Finally, I am opposed to the creation of a parkland linkage fee, which in this proposal is expected to be paid by low-scale projects in the zones of squares and corridors. Since these will be the most likely locations for lower-priced infill housing and local-scale commercial spaces, they should not be burdened by another development fee. In theory, this fee would provide revenue for a city capital fund to acquire and improve parkland. But viewed in light of past experience, the fee will yield odd little pots of money at intermittent times and burden the city administration with the responsibility of tracking where it goes and when or whether it is ever used. At the scale, timeline and volume of development, which we foresee in Somerville, this fee will not generate sufficient or sustained revenue to create parks of high-quality and active public use.

In the attached report, I have analyzed the key issues, based on my experience as a planner over 40 years. I would like to add this report to the record of substantiating materials, which the Planning Department has already provided. Their work is excellent! Based on both sets of documentation, I offer the following recommendations:

- Adopt the requirement, now in the draft Zoning Ordinance, which requires every project larger than a small house to achieve a “green score” by quality improvement of some on-site open space.
- For large-scale, Coordinated Developments that take advantage of the Special District or Overlay regulations in the transformation zones, require the improvement and dedication of publicly accessible space at 25% of the project land area.
- Where the 25% space standard cannot be met on a particular large scale project because of spatial constraints, permit a buy-out with a one-time payment into a park improvement

fund, controlled solely by the City Parks Department that will be subject to all the regular city budget, spending and procurement regulations.

- Remove from the substantiating policy-statements in the Zoning Ordinance any reference to the Somer Vision goal of 120 acres of city-wide need or shortfall. The sole justification for the open space requirements should be the impacts of each large scale development on the needs of its new population and their local impacts.

## **Planning Memorandum**

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These proposed amendments to the Zoning Ordinance intend to respond to the perceived deficiency of parkland and open space in the city by adding either:

- the requirement that a portion of every land parcel, being redeveloped in the transformation, mid-rise and high-rise zones, make available on-site open space and a portion of publicly-accessible “usable open space” on-site or off-site;
- a parkland or recreation improvement linkage payment; and/or
- an additional on-site or off-site open space contribution in exchange for bonus height or floor area to be granted by special permit.

These types of zoning mechanisms, often called Privately-Owned Public Spaces, have been used in large and wealthy cities – New York, San Francisco, Seattle, Toronto – and in Boston and Cambridge in our region. (Kayden 2015) Their legal origins and evolution in practice have been well-documented, usually in articles extolling a few high-quality projects like the Manhattan High Line and Boston’s Harborwalk. A smaller number of studies have reported problems in their use, including instances of poor maintenance and exclusion of the public from “zoning bonus” plazas in New York, and failed oversight of spaces and poor accounting of funds in the Boston Redevelopment Authority. (Kayden, 2000; BRA 2014)

Largely ignored in the studies and press have been hundreds of other routine on-site and off-site zoning-created public spaces. Some have been well-designed and are well-functioning, but many are mediocre and poorly-maintained. All require on-going oversight by city agencies as well as occasional actions of the planning commissions, ZBA or Redevelopment Authorities to amend and adjust their terms and conditions. It is this routine administration that appears to pose the greatest challenge for any smaller city that expects to benefit from developer-contributed public spaces. Unless the zoning regulations are written carefully and with a clear understanding of the past difficulties, the results are likely to fall short of expectations and lead to public frustration. This report, therefore, asks the following questions:

- Looking at past experience, can we identify certain factors that are common to the successful examples of zoning-created public open space and other factors, which are the causes for the badly-functioning and mediocre spaces?
- What are the factors and conditions of the zones in Somerville where we foresee the use of these mechanisms? Do they appear to fall into the success or failure categories?
- How can we avoid the problems of administration, lack of oversight and accountability that have arisen in the big cities, despite our much smaller city staff and budgets?

## **Part 1: Origins of the municipal powers and agency jurisdictions**

The powers of the city and its agencies to regulate the use and development of privately-owned land and to exchange or co-mingle public and private rights and assets have their origins in several separate bodies of law:

- Ancient common law principles of public passage, the “commons,” waterfront access, and navigation;
- Modern Planning and Subdivision law in which the city can require developers to create proper streets and infrastructure and dedicate these to public use and city ownership;
- Urban Renewal or Redevelopment law, which allows the city to contract with private owners and developers to re-adjust landholding rights, co-mingle public and private assets, and jointly carry out projects of re-development in obsolete urban areas;
- Economic Development law, which allows cities to use various budgeting, tax, and spending mechanisms to support or subsidize industrial and commercial development;
- Environmental law, which requires developers to study and mitigate negative impacts of their projects;
- Zoning law, which allows the city to define permitted and prohibited uses of land and set standards for placement, size bulk and other dimensions of buildings.

In practice over the years, cities in the US have tended to inter-mingle these powers and treat their elements as a “toolkit” of parts, available as needed for any type of project. Some cities like Somerville have been enthusiastic in using conditional special permits to impose on routine developments the kinds of obligations or “amenities” that could be created under urban renewal, subdivision, or waterfront regulations. The Massachusetts courts have generally upheld such conditioned zoning actions, unless they have clearly violated the constitutional provisions of due process and the taking of private property without just compensation.

But settlement of the constitutional issues has not fully resolved the potential problems of legal validity, jurisdiction and liabilities. These remain and they constrain the possible outcomes of size, quality and oversight/accountability. The distinct elements of each body of law remain valid and their separate requirements of procedure and substance contain essential protections for the city, its officers, the treasury and the public, as well as protections for the private owners, developers and neighbors. For example, the members of the Urban Redevelopment Authority are charged by law as fiduciaries with all the rules of accountability and municipal protections (including insurance) that are required. (Mass. Gen Law, Chapter 121B, Sec. 5) By contrast, members of the ZBA and Planning Board are not defined as fiduciaries. In this, and many other ways, zoning is a much weaker legal basis than the other laws as a basis for defining, administering and enforcing detailed arrangements and mutual obligations of public use of private space.

## **Part 2: Past experience with private-owned public spaces and developer contributions to open space**

The past history of use of mechanisms of privately-created public spaces has involved five categories of projects. Examples of each can be seen in the cities of New York, Boston and

Cambridge, as well as a few projects, completed and permitted in Somerville in recent years. The following discussion is based on our review of representative projects, taken from the websites. See Annex, below.

### **(1) Consolidated parklands within large scale urban renewal and planned unit developments (PUD)**

Somerville has already had experience with the creation of parkland in the large-scale redevelopments at Assembly Square and (jointly with Cambridge) at North Point/Cambridge Crossing. Generally in all the cities, the successful projects have shared three key factors: (i) They involved lands that were fully or partly consolidated by actions of the urban renewal authority, a state or municipal agency, or public utility, and their new development was put under control of a master developer. (ii) They required multiple actions (urban renewal/redevelopment plan, PUD, waterfront plan, disposition of city land and assets, municipal financing arrangements – not just zoning actions. (iii) They were projects of significant scale, density and value.

Because of the clarity of the enabling laws, the PUD and urban renewal/redevelopment projects proceeded within well-established frameworks of substantive law and process. Their complex arrangements of deed restrictions, assets exchanges, or transfers of land and air rights were accomplished with standard forms and clear rules. The roles and responsibilities of the participants in the decision-making were defined and subject to established methods of accountability. In addition, because these projects were developed and marketed in phases over time, their architects and landscapers, project managers and promoters stayed in control over multiple seasons. They paid careful attention to the installation, start-up growth and maintenance of the landscape elements in order to insure high quality and attract tenants and buyers.

### **(2) Waterfront networks**

The waterfront walkway networks in New York City, Boston and other coastal towns have been structured differently than the consolidated large scale projects. They required the incremental and sporadic incorporation of small contributions of land and parts of the infrastructure from the landholders in the series. Thus, each network was based on a plan with four critical elements:

- First, the design of each “reach” of coastline was laid out in detail, so that the parts would fit together and each landholder would know the size and character of improvement of his/her portion.
- To insure equality among participants, the regulations and design guidelines based the size and quality of each contribution on either the amount of frontage, the parcel size, the permitted FAR, or a combination of these factors.
- Financing schemes differed among the types of networks with some reaches requiring the city or state to construct and carry debt for common infrastructure (paid off by the later contributions and other revenue sources). On other reaches the networks came together as each individual participant did the required work on his/her portion.

- The roles and responsibilities of each city and state agency were defined, clarifying which was to prepare and record the deed restrictions, plans and approval documents, and who was to carry out subsequent compliance administration, oversight and enforcement.

In Massachusetts, Chapter 91 of the General Laws provided the rules and procedures, making possible the orderly participation of 452 landholders in Boston Harborwalk and over 20,000 waterfront landholders in other Massachusetts shoreline towns. (Boston Globe, editorial Public Private Spaces, 7 August 2017)

### **(3) Linear parks and paths**

Some of the most celebrated public spaces in New York, Boston and Seattle are the linear parks that have been created on abandoned rail lines and over highways. These parks occupied lands already in public ownership with the adjoining or nearby private landholders adding incremental boundary line adjustments and monetary contributions or in-kind improvements. For some linear parks, the contributions have come from new developments; for others, every landholder in a benefitted zone has made one-time or annual payments. Unlike the waterfront walkways, which developed incrementally, most linear park projects have required substantial construction up-front and thus needed a public entity to carry the costs until the flow of private contributions were received.

### **(4) Practical and cost factors of the large scale and linear projects**

In all three categories of large-scale, waterfront and linear projects, it is important to recognize that their practical success has been directly related to the size and value of the participating developments, the wealth of the neighborhoods and a linkage of the park funding to accompanying zoning actions, which boosted development potential and land values. For example, in Manhattan, the approval of the plan for the High Line park was accompanied by a rezoning of the Chelsea and Clinton zones. Their already high density (8.0 to 12.0 FAR) was increased to allow an aggregate of 42 million square feet more. The building boom after 2009 resulted in a strong flow of money into the High Line bond repayment fund and the owners of the luxury hotels and apartment houses became enthusiastic boosters for creation and maintenance of the park with the highest quality landscape design and finishes. In Boston, a similar confluence of high FAR, high-real estate values and high demand for new buildings seems to be making the Rose Kennedy Greenway a showplace.

By contrast, in the zones of New York and Boston, where land values have been less spectacular, the corresponding quality of the public spaces has been more modest and the contributions of developers and landholders have come in at a slower pace with corresponding higher debt service for the cities. The 1.3 mile Brooklyn Bridge Park has drawn funding incrementally from adjacent gentrifying neighborhoods, but the city, state and Port Authority have carried the capital funding. In the old industrial waterfront district of Red Hook, Brooklyn, a waterfront park, proposed by the local citizens in their 1996 Community Plan has failed to gain city approval. This disparity of treatment between rich and poor neighborhoods in the use and outcomes of zoning has been discussed in detail by Tom Angotti in *New York for Sale*.

In Cambridge, the walking and bike path along the Grand Junction rail line in East Cambridge and Kendall Square has, so far, drawn a modest \$1 million from MIT and land and some improvements from adjacent R&D building projects on Binney Street. Cambridge is carrying a \$10 million capital cost in addition to railroad and federal funding. Somerville has completed a portion of the Community Path and expects its full realization to occur as part of the Green Line construction project. Keeping the commitment for funding to cover the full \$39 million cost, has been difficult as rail project budgets and the design priorities of the advocates have evolved.

#### **(5) Public plazas, through block passageways and open spaces on individual project sites**

On-site public plazas, through block passageways, and landscape areas with public seating are different from the consolidated and linear park spaces discussed above. Each of these smaller scale open spaces have been individually defined and approved by a Planning Board or ZBA with its own substantiating findings and conditions.

The creation of public open spaces by special permits began in New York City in 1961, when bonus floor area was offered to any developer in the highest density zones, who would provide an on-site public plaza. The bonus was available in Midtown and Lower Manhattan and downtown Brooklyn (12.0 and 15.0 FAR zones). A developer could add 10 ft<sup>2</sup> of floor space at the top of the building in exchange for one ft<sup>2</sup> of open space at the ground. The plazas proved popular with developers when rents and prices for upper-story spaces were high. They were also popular with the public, because they opened up space on congested sidewalks and were considered a feature of sleek modern skyscraper architecture.

Plazas and through block spaces were less used and less desired in zones of smaller-scale and lower height. They did not offer great profit for developers and the public had less need and interest in them. Nevertheless, the New York City Planning Commission and Board of Standards and Appeals began to fix open space requirements as conditions of special permits and variances for building bulk or height. They were seen as mitigations of the impacts of shadows or of larger numbers of people coming out onto the streets. Both boards then further expanded the application of these conditions in cases brought to remedy violations of the Code and Zoning. In these ways, the practice of ad hoc, negotiated deals for park contributions and open spaces gained popularity – in particular, among the community boards and neighborhood groups, who would claim the spaces as victories in their disputes over development and gentrification. (Angotti, 2009)

By the year 2000, in New York City there were 502 plazas and other privately-owned public spaces that had been required as conditions of 320 special permits and variances.<sup>1</sup> A study of these spaces, carried out by the Municipal Arts Council, found that a few were maintained as showcase spaces in high value buildings, but others were no longer functioning and many more were poorly-designed and poorly-maintained. (Kayden 2000) Frequently, when buildings were completed and fully tenanted, maintenance of the public space declined. The

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<sup>1</sup> The Municipal Arts Society study in 2000 of these 502 spaces found that they totaled 80 acres. Thus, at the ratio of the bonus 10 to 1 ft<sup>2</sup>, they had been “bought” with 33.6 million ft<sup>2</sup> of space added to buildings of FAR 8 to 15 – perhaps some 200 million ft<sup>2</sup> of development in total.

original developer, who had a strong interest in open space quality for marketing purposes, sold off the ownership to cooperators or a management entity, which now wanted to save money and increase security. The city had no system in place for routine monitoring or enforcement, and the City Planning Commission and BSA were routinely granting amendments to waive or change the requirements of open spaces that had proven un-workable.

#### **(6) Problems and limitations of individual project open spaces**

The problems in New York arose from a combination of factors. First, the number of approvals had created a burden of inspection and enforcement that the city administration was unable to carry. Despite the staff of 300 in the Planning Department and 600 inspectors in the Buildings Department, there was no system for periodic checking of the public spaces. Second, the conditions and standards for each one had been negotiated and drafted separately with varied levels of public participation and varied skills of the planning staff, and they were not written or shown on plans in standard ways. The inspectors, who had to regularly visit the 800,000 buildings in the city for safety, electric and plumbing checks, had neither time nor training to check details of tree planting, shrub maintenance, fair scheduling of baseball diamond use, etc. Third, once a variance or special permit was approved, the staff planner, who had negotiated and written the documentation, was busy making new deals and reviewing other applications and had no time, interest or vested authority to follow up previous actions.

Fourth, there was no uniformity in the role of Community Boards or community groups. In some neighborhoods, local people stepped forward as “watchdogs” for the plazas or parks and often they were useful and constructive actors. In other neighborhoods, oversight of parkland spaces or funding led to turf wars among groups or leaders. Boston suffered an incident of inter-group rivalries in 2008, related to control of the schedule of use of baseball diamonds and soccer fields at the Teddy Ebersol fields. (Boston GLOBE, 18 April 2009)

Finally, in New York, the requirements of money payments from developers led to a proliferation of small accounts that were supposed to channel funds into maintenance or bond repayment for various parks or programs. Because these were small and created outside of the regular procedures of the Parks Department or other city agencies, no one had specific responsibility for their oversight. Audits discovered poor accounting, unused monies and even some cases of embezzlement. This same problem of unaccounted funds (but not embezzlement) was uncovered in the 2014 Audit of the Boston Redevelopment Authority.

#### **(7) Analysis of the data on size and quality of open spaces**

In order to answer the question of what may be reasonable standards of size and quality of the open spaces, we have looked back at some PUD and special permit approvals in the different categories of consolidated, linear/waterfront and individual on-site projects. As expected, the large scale urban redevelopment and PUD special permits show several examples of public open spaces that are generous in size and have high quality design, materials and equipment. By contrast, individual parcel projects are much more limited. Obviously, this is a result of the greater flexibility on large sites to arrange the building footprints, driveways,



security and functional equipment to maximize the amount of open space and design and situate it in the most appealing ways.

The examples show that, while the relation of open space size to total project land area is direct, the relation of open space size and quality to building square footage is not a consistent factor -- even for the special permits that calculate the open space as a function of bonus floor area. For each such project, it appears that the architects and developer first see how much plaza area can be squeezed on the parcel without compromising the building floorplate too much, and they then claim whatever bonus floor area results.

The quality of the space when landscaped and furnished does bear a direct relationship to the total size of the building(s), the prestige of its address and the market conditions of tenancy, rents or prices. For example, the published listings and critiques of Manhattan's public plazas show that the plazas of buildings with a strong corporate identity are more elaborate and use richer materials than those on routine, speculative office and apartment houses. (Horsley 2000) In Boston, we can see the striking differences between the Norman Leventhal Park at Post Office Square and similar-size park spaces in the nearby West End Urban Renewal areas. The Post Office Square park is surrounded by the city's leading banks and prestigious corporate offices, all of which have contributed into the private non-profit Friends of the Park entity. (The park draws revenue from the underground parking garage owned by that entity.) By contrast, the sterile and little-used West End public spaces are under BRA, state and condo association control and they draw their care and maintenance from these routine government, rental office and apartment buildings. Only the Cardinal Cushing Park at the Bowdoin T Stop offers an appealing space with trees, plantings, sculpture and seating – it is a regular City of Boston Parks Department space.

In Cambridge, the many public/private spaces in Kendall Square and along Binney Street, have a uniform corporate style. Except for the Kendall South Park that offers kayak rentals and the winter skating rink, all the others are decorative landscaped spaces, with plantings that offset the glass, steel or brick elements of building design and with equipment and paving patterns that encourage uninterrupted walk through. Several spaces serve as patios with outdoor seating for tenant restaurants or coffee shops. None provide unstructured space for spontaneous play and none appear to welcome children – even the spaces at residential projects – 195 Binney, 303 Third Street, and the Sydney Street Commons.

### **Part 3: Somerville's Experience and Expectations**

Comparing the experience in the larger cities with the present conditions and likely future development in Somerville, what can we expect to be the results of zoning-required open spaces? What size and character of spaces have local developers already provided at the scale, mix of uses, and property values that we foresee? What steps will the city need to take to avoid the problems of administration, oversight, accountability and enforcement that have occurred in other places?

#### **(1) Key expectations of Somerville's future development**

Looking at recent developments and at the categories in the draft Zoning Ordinance, the city anticipates three types of development: (i) large-scale, multiple-building plans (called Coordinated Developments); (ii) moderate-to high-scale individual projects in the transformation zones and the mid-rise and high-rise zones; and (iii) smaller scale projects in the low-scale neighborhoods and preservation zones.

The transformation zones will be defined with Overlay or Special District regulations that will encourage landholders and developers to consolidate their parcels into Coordinated Developments and thus gain greater bulk and height. In exchange, they will be required to create consolidated, publicly-accessible open spaces, in addition to other landscaped private spaces on-site and/or off-site improvements like sidewalk trees or bus-stop benches.

**Open Space and Public Open Space Requirements for Coordinated Development (Draft SZO, Sept 2018 version)**

	Zone	Landscaped space	Publicly accessible	citation	Other provisions
1	Assembly Square	25%	12.5%	SZO Art. 7.3 (6)	
2	Boynton Yards		12.5%	SZO Art. 8.1 (6)	
3	Union Square	25%	17.5% (70% of 25)	SZO Art 8.2 (6)	Il lieu payment
4	Brickbottom	-?-	-?-	Not yet written	
5	Inner Belt	-?-	-?-		

Individual projects, conforming to the base zoning in the transformation zones will be allowed, but almost all of these will require some special permits or site reviews in which conditions of on-site open space or other landscape improvements can be imposed. In all other zones and for all building types, the draft zoning would require a portion of the ground level space on every parcel to be landscaped with plantings or equipment in order to meet a “Green Score” that balances size and quality factors. (Draft SZO, Articles 10.3 and 10.4)

This proposed open space zoning amendment would change the rules in all these zones to require that the full 25% of lot area for all developments (large scale and individual) be provided as publicly-accessible space (on-site or off-site) with an in lieu payment if the space cannot be achieved. In other Mid-Rise, High-Rise and Commercial zones, there would be a linkage fee for payments into an open-space acquisition fund.

Using the estimates of all the land parcels in all these zones that appear to have potential for redevelopment, the city planning staff has calculated the following totals of land area and linkage fee revenues, if full build out can be achieved:

**Open space potential by application of proposed zoning (March 12, 2019)**

	Potential develop	25% land area	\$ equivalent
Assembly Square	43.73 A	10.93 A	
Boynton Yards	15.73 A	3.93 A	
Union East	8.27 A	2.07 A	
Grand Junction	22.68 A	5.67 A	
Brickbottom	20.66 A	5.17 A	
Inner Belt	81.74 A	20.44 A	
TOTAL	192.81 A	48.20 A	

Other zones	79.48	40.05 A	\$248 million
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In their presentation, the planners provide some examples of how these volumes of space might be arranged and situated to create well-sized, public parkland for active use (measured by football field sizes) in several places in the transformative zones. The diagrams show that some configurations will be feasible, if re-arrangements of landholdings into large-scale Coordinated Developments can take place. This has already been done at Assembly Square and North Point and the process is now underway at Union Square. However, in all three cases it was the intervention of additional city and state powers -- Urban Redevelopment, state and city property dispositions, city infrastructure and capital financing, and other fiscal subsidies that have induced and supported the private actions.

Thus, it remains unclear whether landholders and developers in the other transformation zones and parts of the city will be able and willing to undertake similar complex coordinated actions without the same high level of city control and financial support. Practically, private investments will occur if there continues to be strong demand for housing and commercial office/lab space and if competing zones in other cities and towns do not allow development in much faster and easier ways.

## (2) Learning from what has already been built

We can already see what is likely to be the outcome of the new rules from the types of projects that have been permitted and begun construction in Somerville in recent years. Even though the new provisions have not yet been enacted, the Planning Board and ZBA have required developers to set aside and improve open space and dedicate some of it for public use, in recent projects. They show what is practically feasible and acceptable given the scale and conditions of blocks and parcels and neighborhood character. The following chart gives several examples:

### Somerville Planning Board and ZBA Approved Development with Open Space Conditions

		Total lot	Building	Open space	%	Public space	Proposed
2008-07	Maxwell Green	236,480 ft2	267,300 ft2	77,000 ft2	32.6%	23,640 ft2	--
2013-03,41	90 Washington St	173,748 ft2	177,850 ft2	10,300 ft2	05.7%	8,750 ft2	43,400 ft2
--	90 Washington St		-?-	-?-	--	-?-	
2013-17	9-39 Medford St	55,357 ft2	108,382 ft2	10,700 ft2	19.3%	3,000 ft2	13,825 ft2
2014-31	434 McGrath	36,600 ft2	75,000 ft2	8,500 ft2	23.2%	--	9,150 ft2
2018-04	2 Earle Street	142,800 ft2	270,000 ft2	42,000 ft2	29.4%	31,000 ft2	35,700 ft2
2018-09	845 McGrath	35,700 ft2 + off site	380,000 ft2	26,400 ft2	73.9%	15,826 ft2 8,542 ft2	12,800 ft2
2018-	20 Inner Belt	69,199 ft2	223,000 ft2	7,200 ft2	10.4%	--	17,250 ft2
2018-	56 Roland Street	35,200 ft2	68,900 ft2	1,015 ft2	02.8%	--	8,800 ft2
2018-138	1 McGrath	17,310 ft2	62,300 ft2	2,233 ft2	12.9%	--	4,325 ft2

What is most evident on the list is the great variety of outcomes in size and type of spaces, making evident that the varied conditions of parcel size and shape, building types, site layouts and surrounding block/street conditions are the deciding factors. When there is flexibility to position buildings and equipment on a larger parcel (or make an easy arrangement for off-site space on an adjoining parcel) a generous amount of open space can be created. By

contrast, when a small land parcel is further constrained by narrow or shallow dimensions, rail embankments and the non-availability of neighboring off-site space, usable open space can be very difficult or impossible to achieve.

The practical dilemma of open space arrangement in the transformation zones can be seen in the two recent approvals at 20 Inner Belt and 56 Roland Street where a moderate sized hotel and residential building have been designed to fit on relatively narrow parcels. Since the planning goal for this zone is transit-oriented, pedestrian urban space, the front facades meet the sidewalk with no setback, and the paved spaces for service vehicles, livery drop-off, and access to underground parking are provided on a roadway extension cut through to the rear of the lots. This leaves both parcels with almost no other open space at ground level for planting or public occupancy, absent distorting the building dimensions. Private open space for the residential tenants is on the second-story level. No public space has been required. However, because the open areas of the Cobble Hill housing and the little-used rail maneuvering lines are adjacent and across the street, there is actually too much open space (rather than too little) if an active pedestrian urban environment is desired.

It is necessary to conclude that in Somerville, the achievement of good open space from zoning conditionality will always be opportunistic – the fortunate coincidence of pre-conditions and timing when projects are being prepared. If the new zoning imposes the uniform standard of 25% publicly-accessible open space on every project in the transformation zones, then the city has a corresponding responsibility to put into place the planning and process regimes that can make project planning direct and unambiguous.

The Boynton Yards model – which pre-identifies the location of the consolidated parkland on a map, will be a necessary starting point. But there will also need to be a detailed plan for each zone that works out how the landholding and street re-arrangements, air rights transfers, and other exchanges will be structured. Each such plan will require a back-up scenario, describing what the city will do if the expected contributions from developers do not arrive with the speed and levels of quality and value that are expected. Without this related planning, the city will risk putting reasonable development proposals into a foggy process of planning and permitting and inviting unusual arrangements of responsibilities and rights with a high potential for mischief or abuse.

The mechanisms of payments in lieu and linkage fees will not provide a satisfactory alternative, when projects are unable to incorporate the standard space dedication requirements. They run the risk of simply creating pots of money that will sit unused for years or will get dissipated, pursuing small agendas, when the main goal of a significant park improvement is frustrated and public interest is lost.

## Annex 1: Examples of Projects with Zoning-Conditioned Open Space from New York, Boston, Cambridge and Somerville

### NEW YORK CITY

date	project	Land area	Building floor area	All landscaped	Public use	% public
Large scale and urban renewal projects						
1925/ 1989	Tudor City, Manhattan (PUD-style)	86 Acre 3 blocks	(12 buildings with 3,000 dwell units)		50,000 ft2	04.1%
				50,000 ft2 (01.4%) Two landscaped gardens with seating and public access 5 other small private landscaped spaces		
1990	Arverne Bay URA, Queens (Urban Renew and PUD)	307 Acre	12,144,000 ft2 res (10,000 dwell units) 380,000 ft2 com 7 Acre industrial	128 Acre	45 Acre	14.6%
				--21 A. park with active recreation facilities --14 A. linear beachfront park Private open spaces include --20 A. commons --16 A. dune preserve		
1992	Riverside South, Manhattan 57 <sup>th</sup> -72 <sup>d</sup> St, Hudson River	72 Acre	6,8 million ft2 19 buildings		25 Acre	34.4%
				Parkland occupies waterfront and utility rights of way area incorporated into site by state actions		
Linear and waterfront parks						
	Manhattan High Line Rezoning gave added FA with linkage payment	1.45 mile	42 million ft2 floor area right added to adjacent parcels	1.45 mile linear park, elevated rail structure, adjacent parcels contribute \$12 million annual for maintenance and amortization		
2002	Brooklyn Bridge Park	85 Acre	1,760,000 ft2 res and comm on 10% of land (8.5 Acre)	1.3 mile waterfront park, \$360 million capital contribution from city, state, Port Authority; maintenance fund from development sites		
1996	Red Hook Community Plan (FAILED)	7 Acre (1996 plan proposal)	800,000 ft2 (2016 building proposal)	City and state funding were not made available, later redevelopment schemes have ignored the plan and proposed corporate commercial buildings on the key parcels.		
Individual on-site special permits						
1968	Zucotti Park, Manhattan Plaza bonus special permit	2 Acre	2.33 mill ft2 offices 54 stories (330,000 ft2 bonus)		33,000 ft2	38%
				open plaza with sculpture and landscape		

### BOSTON

		Site total	Building Floor area	Total open	Public access	% public access
Large scale and urban renewal						
2019	Hood Park, Charlestown	867,800 ft2 (20Acre)	1.168 million ft2 FAR 2.0	--	2.25 Acre	22.0%
				Large active recreation space = 50,000 ft2 Two landscaped plaza areas = 1.2 acre total		
Linear park						
	Rose Kennedy Greenway					
Individual projects						
2018	1000 Boylston St (highway air rights)	40,900 ft2	439,500 ft2	On-top of roof	-0-	-0-
2013	1047 Commonwealth,, Allston	20,600 ft2	100,000 ft2	Decorative planters	-0-	-0-
2017	105 West First St, South Boston	42,200 ft2	266,000 ft2		-0-	-0-
	105A South Huntington, JP	48,600 ft2	214,000 ft2		-0-	-0-
	1120 Washington St, Dorch	48,300 ft2	66,800 ft2		-0-	-0-
2018	115 Winthrop Sq.	47,800 ft2	1,650,000 ft2	Great Hall interior space = 12,500 ft2 Sidewalk widenings with trees = 13,700 ft2		

### CAMBRIDGE

Linear parks						
	Cambridge Grand Junction Greenway		MIT land and funds contributions Adjacent office/lab projects contributions		14 ft. wide	
Large Scale PUD						
	285-303 Binney Street		546,000 ft2 res 8,300 ft2 com	Combined three parcels air rights transferred 70,200 ft2 usable open space		
2004	Discovery Park, Alewife	26.5 Acre	819,900 ft2 com	Open space is 72% of total land, including:		

		with 15.8 A developable		10.7 A wetland (outside development parcel) 7.9 A natural drain area with bicycle path Newly created 7.9 A is 25% of development		
Linear parkway						
	Grand Junction Greenway	14 ft wide ??? mile		Adjacent sites contribute land for path along rail MIT two contributions \$500,000 City budget \$10 million capital		
2017	399 Binney	152,000 ft2	172,500 ft2 45 ft high	20% of lot area = 16,800 ft2 ceded to city for Grand Junction Greenway 8% other open space at entrance to cinema		
		Project land area	Building GSF	Total landscape space	Public	%
1983 1979	67-11 Main Street		598,000 ft2			
1987	144 First St, Land Blvd	127,900 ft2	262,500 ft2		16,250 ft2 25,100 ft2	32.7%
1999	364 Third St, Kendall Sq. N	425,300 ft2	1,275,300 ft2		84,400 ft2	22.2%
2003	North Point PUD	1,558,200 ft2	5.5 million ft2		382,000 ft2	20.0%
2010	100 Binney, Third, Rogers	491,300 ft2 11.3 Acre	1.7 million ft2		2.57 acre 0.59 acre	27.9%
	285-303 Binney		554,000 ft2		70,200 ft2	

## SOMERVILLE

		Project land area	Building GSF	Total landscape space	Public	%
Urban renewal or large scale						
2017	Assembly Square Amend.	2,671,000 63.6Acre	1,750,000 office 2,100,000 residen 800,000 retail	758,000 ft2 (28.3% of total)	586,900 ft2	22.0%
	--Marketplace	1,122,000		100,600	51,600	4.6%
	--Partners	513,100	730,000	322,500	284,900	55.5%
	--Blocks 1,2,3,4,10	443,200		84,000	44,400	10.0%
	--remaining phases	593,300		251,100	205,900	34.7%
2008	Maxwells Green 56-61 Clyde Street	236,900 ft2	9 buildings, 187 DU; 1.06 FAR 56 ft high		23,640	10.0%
Central open commons and portion of linear Community Pathway; other private space creates total of 50% open landscaped						
Linear parkland						
	Somerville Community Path		1.9 mile along Green Line	Bicycle path \$39 million		
Individual projects						
2019	56 Roland Street, Inner Belt	21,734 ft2 13,484 ft2	68,975 ft2 hotel 2.9 FAR 70 ft high			Landscaped area of 2.9% varied from required 10%; front yard reduce to 0.24 ft from req. 15 ft Trees along the road
2019	20 Inner Belt Road	69,199 ft2	223,000 ft2 205 DU 10,550 ft2 com 3.2 FAR 85 ft , 7story			Club and residence 10.5% landscaped area, private on second level rooftop; only public contribution is street trees
2019	346 Somerville Avenue	21,335 ft2	67,300 ft2 100 DU 64 ft, 6 story			Green Score .20 satisfied by courtyard and small planting spaces with patio seating from ground floor commercial restaurant
2018-09	845 McGrath		380,000 ft2		15,826 off-site 8,542 on-site total with private 10,613 \$750,000 park payment	
2014-31	771 McGrath	5.88 Acre supermkt	107,597			Deed over end of street for public with \$25,000 payment
2014-23	434 McGrath	36,600 ft2				8,500 landscaped = 23%
2018-04	2 Earle	3.44 a	270,000 ft2			31,000 ft2 contribution to consolidated 10% open on remaining lot

## Annex 2: Cambridge Privately-Owned Public Spaces

Source: [www.cambridgema.gov](http://www.cambridgema.gov)

Urban Renewal and Redevelopment Authority projects						
ZO 15-00		University Park, Cambridgeport UR	1.5 million minimum	--	100,000 ft2	Three park spaces, largest 1.3 acre, passive gardens, seating
KS Urb Renew		Kendall Square – Cambridge Center	4.5 million FAR 4.0, 8.0	42 acres	100,000 ft2	Open space calculated: 5 ft2 per 100 ft2 industrial; 8 ft2 per 100 ft2 office; 10 ft2 per 100 ft2 retail; 15 ft2 per 100 ft2 residential
	1982	Parcel 2 – Kendall Sq. Cambridge Center	770,000 ft2	426,200 ft2	20,040 ft2	30 ft wide pedestrian through-block passage
	1988	Parcel 3—Kendall Sq		229,500		
	1988	Parcel 4 – Kendall Sq		216,200	25,000 ft2	Triangle park and transit plaza Garage rooftop garden
Planned Unit Developments						
PB1	1983/1979	67-11 Main St PUD Riverfront Office	598,300 ft2			Canal-side walkway
PB65	1987	144 First St, Land Blvd. PUD	262,500 ft2 6-stories 2.0 FAR	127,900 ft2	16,250 ft2 25,100 ft2 32.7%	Waterfront parkland to city and on-site courtyard kept \$363,000 park improve paid
PB141	1999	Kendall Square North, 364 Third St PUD	1,275,300 ft2 230 ft. high	425,300 ft2	84,400 ft2 22.2%	Open space with seating and winter skating
PB179	2003	North Point PUD	5.5 million ft2 85 to 220	1,558,200 ft 37.1 acre	382,000 ft2 20.0%	Central park of 5.5 acre
PB243	2010	100 Binney, Third and Rogers Streets PUD	1.5 mill Com 220,000 Res 78-140 ft high	491,300 ft2 11.3 acres	2.57 acres 0.59 acres 27.9%	Cede parkland to city, Retain on-site courtyard and through block passage
Individual Special Permits and Variances with Conditions						
PB20	1981	124 Mount Auburn St	198,300 ft2	68,400 ft2		Through building and external arcade for pedestrians
PB78	1988	12-14 Mifflin Place (Brattle Street)	99,000 ft2 71 ft high 3.1 FAR	13,300 ft2	2,800 ft2 21.0%	Pedestrian walkway through block
PB79	1988	38-40 Brattle St	See PB78			
PB150	1999	Amgen R&D building, 1400 Binney St	285,500 ft2 120 ft high 4.0 FAR			Linear way along rail line
PB151A	1999	286 Third St, Binney St	128,000 ft2 70 ft. high 3.0 FAR	42,600 ft2	2,485 ft2 05.8%	Side yard passage between buildings to 364 Third
PB164	2001	Harvard Sq. Post Office 125 Mount Auburn St	49,900 ft2 5-story 3.9 FAR	12,800 ft2	1,400 ft2 11.0%	Setback sidewalk and 5 ft wide passage between buildings
PB180	2003	Theater at Arrow and Mt. Auburn	38,000 ft2	19,000 ft2		Passage between buildings
PB231	2008	159 First St and Bent St	249,000 ft2 65 ft high 2.0/2.5 FAR	109,900 ft2	9,000 ft2 8.2%	Open plaza on –site

These data come from the City of Cambridge website, which lists 17 projects in which developers either contributed land to the city or dedicated spaces on their sites for public use or passage. For the four Urban Renewal and Redevelopment project at Kendall Square and Cambridgeport/Sydney Street, the size of the open spaces was calculated for each area by a ratio of open space per building Gross Square Footage:

- Industrial: 5ft2 open space per 100 ft2 GSF
- Office: 8 ft2 open space per 100 ft2 GSF
- Retail: 10 ft2 open space per 100 ft2 GSF
- Residential: 15 ft2 open space per 100 ft2 GSF

Thus the very large-scale projects of high value office and residential uses have yielded correspondingly large open spaces.

In terms of types of open space and quality of improvements, their variety cuts across the legal categories. Larger park areas with walkways, trees, plantings and seating have been provided both by Urban Renewal and PUD projects. Some of these allow outdoor café table or restaurant seating for businesses within the buildings. Through block pedestrian walkways were required as conditions of individual projects and in some of the PUD projects. A linear walk and bikeway along the rail tracks has also been required of adjacent PUD and individual projects. Notably, however, none of the projects -- even the largest Cambridgeport Urban Renewal and North Point PUD -- have offered parkland for active athletic use. Sociological studies of public spaces have shown that corporate and condo owners have a strong preference for spaces that are decorative and allow only passive use – discouraging children, teens and idle people. (Article...

A final characteristic of these projects is the complexity of their legal documentation, some of which is provided on the website listing. It suggests the difficulties of administration and enforcement. For example, the details of the conditions for the Triangle Plaza and Transit Plaza open spaces on parcel 4 of the Kendall Square Urban Renewal area are embedded in 358 pages of legal documentation, which was drafted and approved for the original 1988 plan approval. Subsequently, up to 2013, the plan has undergone amendment 10 times with varying re-alignment, re-design and re-definition of the uses of the spaces. Somewhere in those amendments a rooftop garden on the garage was added, and then subsequently it had to be re-designed to allow a connecting interior passageway for the two halves of the Google space in the two towers to connect. Hundreds of hours of planning and legal staff time have been involved with this single project, apart from the time and effort of the planning board, ZBA, Redevelopment Authority, and the public and advocacy groups.

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