



# INNER BELT BRICKBOTTOM PLAN



DECEMBER 2013



**GOODY CLANCY** with

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City of Somerville  
Joseph A. Curtatone, Mayor



inner belt  
brickbottom  
plan

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# 1 | EXECUTIVE SUMMARY



The Inner Belt/Brickbottom study area, seen in part in the lower half of this photo, is a strategic location for mixed use development thanks to new transit connections to downtown Boston (top center) and East Cambridge (center right).

**T**he 140 acres of the Inner Belt/Brickbottom study area offer Somerville a special—and essential—opportunity for economic development at a transformative scale. As at Assembly Square and Boynton Yards, inauguration of new rail transit service to Inner Belt and Brickbottom is turning underutilized, partially forgotten industrial land into fertile ground for new jobs, businesses, homes, services, parks and cultural destinations that will drive prosperity in Somerville for decades to come. Constrained for years by limited access and visibility, Inner Belt and Brickbottom are quickly becoming a regionally significant workplace center as well as a center of community for Somerville.

The following pages provide an overview of the Inner Belt Brickbottom Plan through these components:

- Community-based vision
- Economic development potential
- Integrated transportation and development approach
- Distinctive districts
- Public places network
- Inner Belt/Brickbottom illustrated vision
- Development framework

See later chapters on *Critical Questions*, *Master Plan* and *Putting the Plan to Work* for more detail on the plan

## CORE VALUES OF THIS PLAN

*Five value principles, informed by community engagement during the Inner Belt/Brickbottom planning process, should guide development of buildings, infrastructure and public spaces in the study area.*



### ***Create great places for people***

Inner Belt and Brickbottom lack strong identity today, owing to their isolation, internal obstacles and impersonal nature of much development. Enhance market position and sense of community by using all new investments in buildings, streets and other public spaces to create people-centered places.



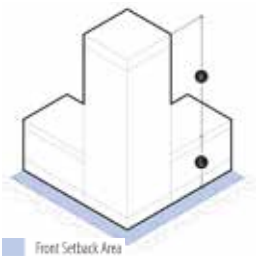
### ***Connect neighborhood to neighborhood***

Physical barriers limit access to/from and awareness of Inner Belt and Brickbottom. Complement new Green Line service with critical walking, transit, biking and driving connections to make the study area a major regional destination for working, living and playing.



### ***Grow the economy***

Green Line service offers transformative opportunities for Inner Belt/Brickbottom—if the streets, buildings and land uses around Washington Station create a safe, inviting walking environment. The greater the quality of walkable streets and transit access in the area, the greater the extent of job and business growth it will foster.



### ***Coordinate public and private investment***

Market-driven private investment is the most important vehicle for economic development in the study area and Somerville overall. Invite investment through clear, predictable development approval standards that maximize value potential throughout the study area.



### ***Deliver ongoing value with sustainable development approaches***

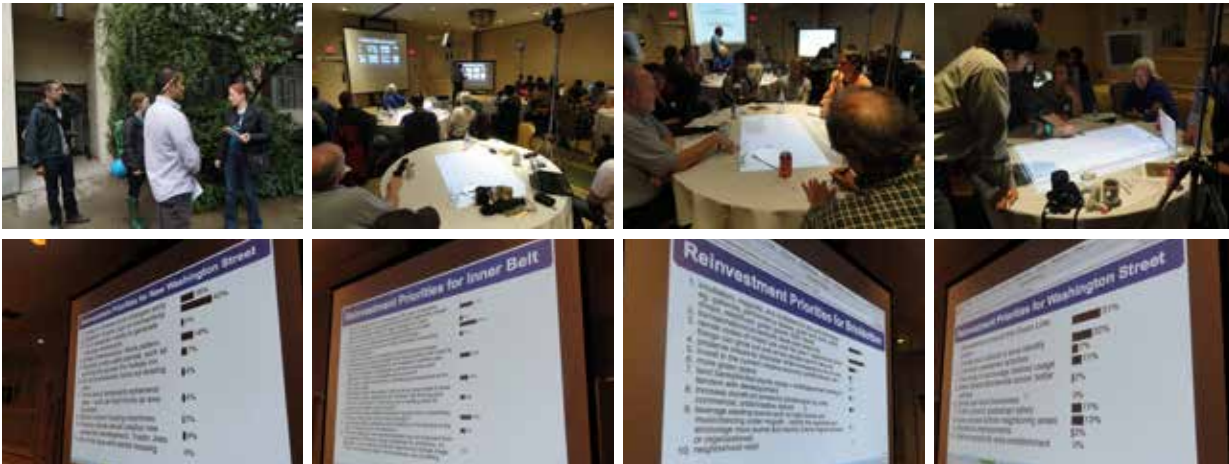
To ensure Inner Belt and Brickbottom support economic and community development in Somerville for decades to come, invest in infrastructure, real estate and businesses in ways that simultaneously build sustainable value in three key areas: the economy, social community, and the natural environment.

## COMMUNITY ENGAGEMENT

*The planning process invited dialogue on the future for Inner Belt and Brickbottom through a public “walkshop,” public vision workshop, and a two-year series of public focus group meetings including key community, business and government agency stakeholders.*

### WALKSHOP | June 2011

Collaborative observation of the study area and identification of opportunities, challenges, and priorities.



### VISION WORKSHOP | October 2011

Building vision alternatives together using maps; blocks representing market-driven development, streets and parks; and images showing possible models to follow.



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## ECONOMIC DEVELOPMENT POTENTIAL

*Market-driven opportunity for business and real estate development sets the foundation for the Inner Belt/Brickbottom Plan—informing decisions around land use mix, infrastructure priorities, urban design and other critical plan elements.*

### Market position: distinguished by access and development choices unparalleled in the Boston region

#### Access choices

- Multiple transit corridors with access to skilled workforce, Kendall, Boston
- Safe, inviting pedestrian network connected to neighborhoods, Union Square
- Unique off-street biking and recreation network
- Excellent road access

#### Development choices

- Multiple large parcels, and opportunities to further aggregate large parcels, offering flexible program, building, street and amenity configurations
- Substantial opportunity for building heights from 5 to 20 or more stories in many locations—adding significant development capacity, views, and visibility
- Multiple parcels with opportunity for large floorplates of 50,000sf or more, serving certain office and fabrication program needs
- Choice of working within established address/identity contexts in parts of Brickbottom and the Washington Street corridor, or defining new address/identity environment

#### Priority assets to leverage for near-term development

- New Green Line service at Washington Street; existing Orange Line service at Sullivan Square
- Established character, address and mixed-use context in Brickbottom and along Washington Street
- Lower land cost than competing areas
- Opportunity for smaller office/research buildings between 50,000sf and 100,000sf
- Established life sciences presence on Roland Street
- Established housing market potential

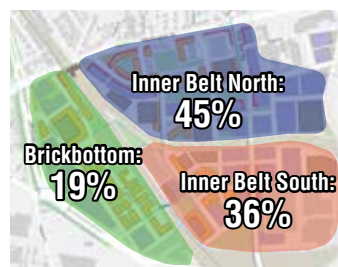
#### Priority assets to leverage for longer-term development

- Large, flexible sites to accommodate spillover development as Kendall Square and North Point development opportunities diminish
- Direct connections to downtown Boston and Cambridge office and research centers support complementary general office and research space development
- Potential for large buildings, 200,000sf or more
- Urban Ring transit corridor connections
- New, prominent address identity of grade-level McGrath boulevard

### Inner Belt/Brickbottom Program Summary

- 5.5 to 10 million sf overall
- 60% office/research/fabrication, 37% housing, 3% retail

	2020 OPPORTUNITY	2035 OPPORTUNITY	SOMERVISION 2030 GOAL	MAPC 2035 PROJECTIONS —HBB	MAPC 2035 PROJECTIONS —CITYWIDE
Office and Research & Development Space	250,000sf	3,250,000sf			
Retail Space	45,000sf	165,000sf			
New Jobs	900	10,250	10,000-11,000	4,879	15,130
New Housing Units	360	2,250	2,000-2,500	838	5,869
New Residents	540	3,400		1,050	6,129



*Approximate share of new development floor space in the study area.*

# INTEGRATED TRANSPORTATION AND DEVELOPMENT APPROACH

*High-value, mixed use development potential will benefit from first class walking, transit and bike access that reduces need for costly roadway improvements.*

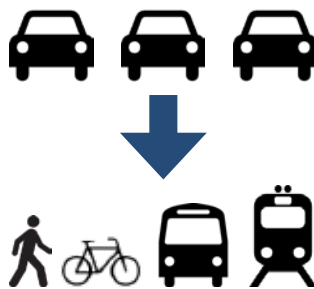
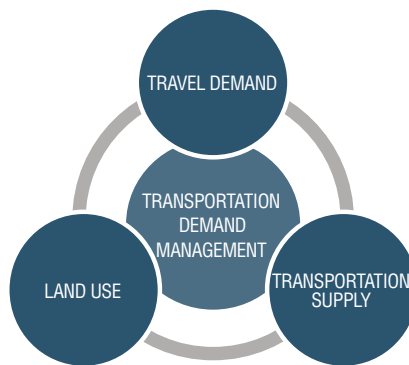
## Travel Demand Management

### ***Make the most of assets***

- Leverage new Green Line station and Urban Ring transit corridor
- Emphasize transit, walkability, and great bike infrastructure

### ***A practical approach***

- Minimize expense of mitigating existing barriers to circulation
- Implementing TDM strategies can cost relatively little for comparable benefits in many cases
- Minimizing new traffic helps:
- Promote livability within and around IBBB
- Preserve vehicle capacity so IBBB can continue to benefit from convenient access to I-93 and other regional roads for trips that must remain vehicular (i.e. trucks)



Reduce parking supply

Increase parking cost

Build infrastructure

Financial incentives

Communicate options

Coordinate travel activity

Provide flexibility



PARKING MANAGEMENT

DEVELOPMENT-BASED

EMPLOYER-BASED

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## DISTINCTIVE DISTRICTS THAT BUILD MARKET POSITION AND COMMUNITY CHARACTER

### INNER BELT GATEWAY: WASHINGTON

#### **Public realm**

- Sidewalks: accommodating mixed residential and retail with planted & paved setbacks; buffered from traffic by parking, trees
- Plantings: Canopy trees marking Somerville gateway and mitigating scale transition across street

#### **Built form**

- Height range: 4–12 stories
- Transitioning to East Somerville neighborhood scale through height step-backs, facade articulation



Pearl District—Portland, OR

### BRICKBOTTOM: MCGRATH EDGE



Waterside Blvd—Norfolk, VA



Commonwealth Ave—Boston, MA



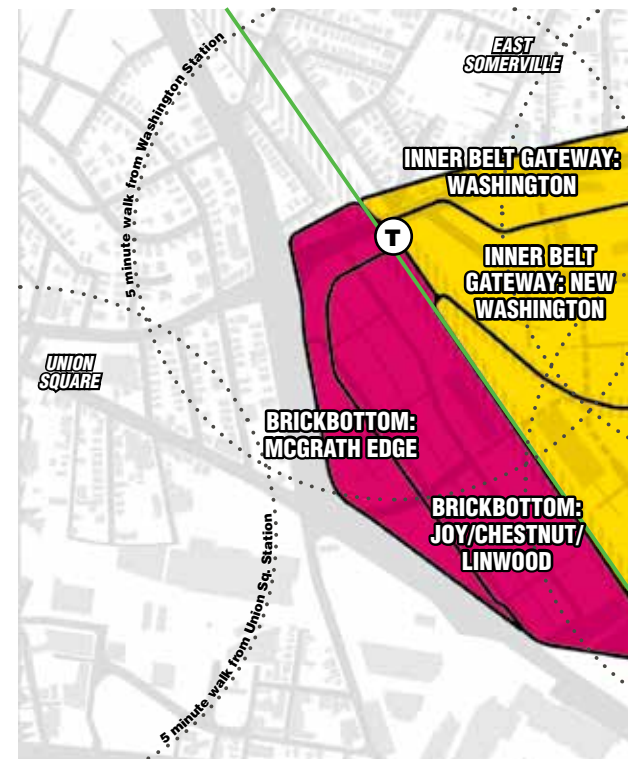
Memphis, TN

#### **Public realm**

- Sidewalks: generous scale, buffered from traffic by parking and/or plantings
- Plantings: canopy street trees framing boulevard greenway; compact ornamental front yards

#### **Built form**

- Height range: 4–12 stories
- Greater height possible as landmarks and to leverage visibility, value. More refined, larger scale version of Joy/Chestnut/Linwood character



### BRICKBOTTOM: JOY/CHESTNUT/LINWOOD

#### **Public realm**

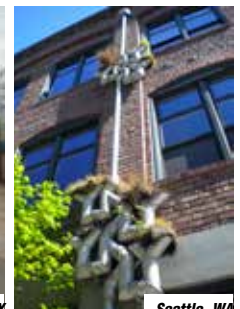
- Sidewalks: compact; accommodating art, dining, periodic events; shared pedestrian/vehicle spaces
- Plantings: intermittent street trees supplemented by planters, green walls

#### **Built form**

- Height range: 4 – 6 stories
- Character: industrial, significant transparency; smaller building scale, larger window scale



Southtown—San Antonio, TX

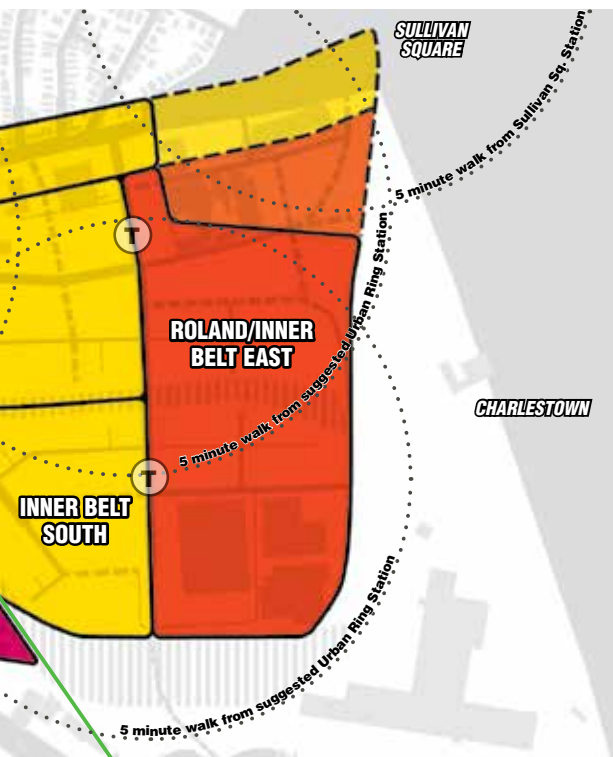


Seattle, WA

*The Inner Belt and Brickbottom portions of the study area each possess unique characteristics that will influence private and public investment in them. The two areas are further distinguished by emerging subdistricts with unique sense of place, shaping and shaped by unique market position and community culture.*



Pentagon Row—Arlington, VA



## INNER BELT GATEWAY: NEW WASHINGTON

### **Public realm**

- Sidewalks: generous width, tied into park landscape; accommodate mixed office, retail, housing frontage
- Plantings: canopy trees, lawn, ornamental plantings

### **Built form**

- Height range: 4–20 stories
- Significant transparency; mix of materials—traditional and modern, dark and light



Gastown—Vancouver, BC



University Park—Cambridge, MA

## ROLAND/INNER BELT EAST

### **Public realm**

- Sidewalks: generous on Inner Belt & New Washington, compact on Roland, Third
- Plantings: canopy trees, tree lawns, planters, green roofs; buffer rail infrastructure

### **Built form**

- Height range: 4–20 stories
- Complement industrial character of Roland buildings, transition to modern face on Inner Belt; opportunity for large floorplates, retaining pedestrian scale along Inner Belt; significant transparency, height



Georgetown—Washington DC



South Lake Union—Seattle, WA

## INNER BELT SOUTH

### **Public realm**

- Sidewalks: moderate width; accommodate mixed office, housing, occasional retail frontage
- Plantings: trees, planters; extend scale of park spaces and greenways; buffer rail infrastructure



### **Built form**

- Height range: 4–20+ stories
- Significant height, transparency to leverage views; large floorplates possible if ped scale retained



South Lake Union—Seattle, WA

# A PUBLIC PLACES NETWORK CREATING DESTINATIONS FOR ALL OF SOMERVILLE—AND THE REGION

## DISTINCTIVE DESIGN THEMES FOR PARKS AND STREETS

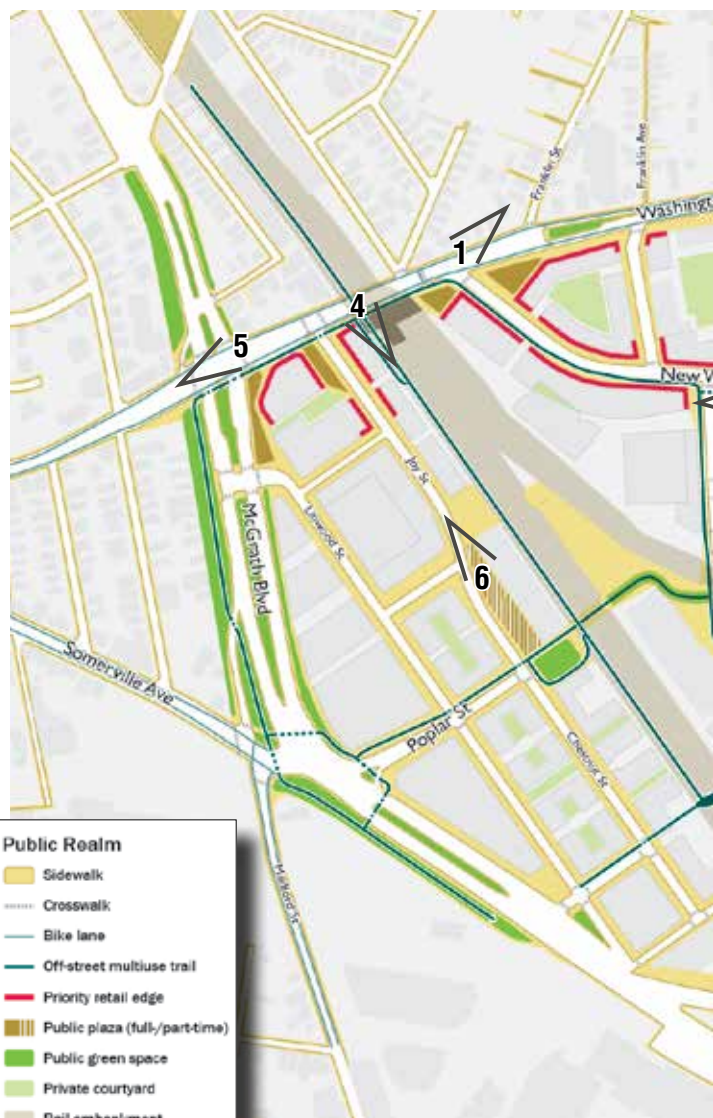
### Inner Belt

- Larger scale
- Stone, metal, concrete, refined
- Distinctive, contemporary
- Dedicated activity spaces



### Brickbottom

- Smaller scale
- Brick, metal, concrete, rugged
- Dynamic, creative
- Overlapping activity spaces



### Public Realm

- Sidewalk
- Crosswalk
- Bike lane
- Off-street multiuse trail
- Priority retail edge
- Public plaza (full/part-time)
- Public green space
- Private courtyard
- Rail embankment
- Proposed building
- Existing building

## 6 | JOY ST.

INFILL: MIX OF OFFICE, ARTS, HOUSING, LIGHT INDUSTRY

STREETSCAPE, WALKING AND BIKING IMPROVEMENTS LINKING BRICKBOTTOM TO GREEN LINE

DUAL USE OF PARKING/LOADING AREA FOR OCCASIONAL PUBLIC/ARTS EVENTS



NIGHT TIME ACTIVITY

***A variety of parks, streets and pathways designed for people introduce activity and identity where lacking today. This supports a vibrant live/work/play environment that attracts new jobs and development, and forms a new center of community within Somerville.***



### 1 | WASHINGTON ST. EAST SIDE

HOUSING

EARLY STAGE  
SMALL-OFFICE  
& RETAIL  
DEVELOPMENT

PUBLIC  
SIDEWALKS &  
PLAZAS WITH  
ENGAGING  
BUILDING USES,  
ART, DESIGN

EXPANDED,  
IMPROVED  
WALKING  
NETWORK



### 2 | NEW WASHINGTON PARK

FLEXIBILITY FOR  
SIGNIFICANT  
BUILDING  
HEIGHT AND  
FLOORPLATES—  
DESIGNED TO  
HUMAN SCALE

PUBLIC SPACE  
AMENITY SERVING  
WORKERS,  
RESIDENTS,  
VISITORS



### 3 | INNER BELT SOUTH

HIGH-VALUE  
COMMERCIAL  
AND HOUSING  
DEVELOPMENT

NEW  
CONNECTIONS  
TO WASHINGTON  
STATION,  
BRICKBOTTOM

PARK,  
COMMUNITY PATH  
CONNECTIONS  
CREATING  
DISTINCT  
SENSE OF PLACE



### 5 | WASHINGTON ST. WEST SIDE

MIXED OFFICE  
AND HOUSING  
WITH GROUND  
FLOOR RETAIL

EXPANDED,  
IMPROVED  
WALKING AND  
BIKING NETWORK

STATION  
INTEGRATED  
WITH BUILDING  
DESIGN



### 4 | COMMUNITY PATH AT WASHINGTON STATION

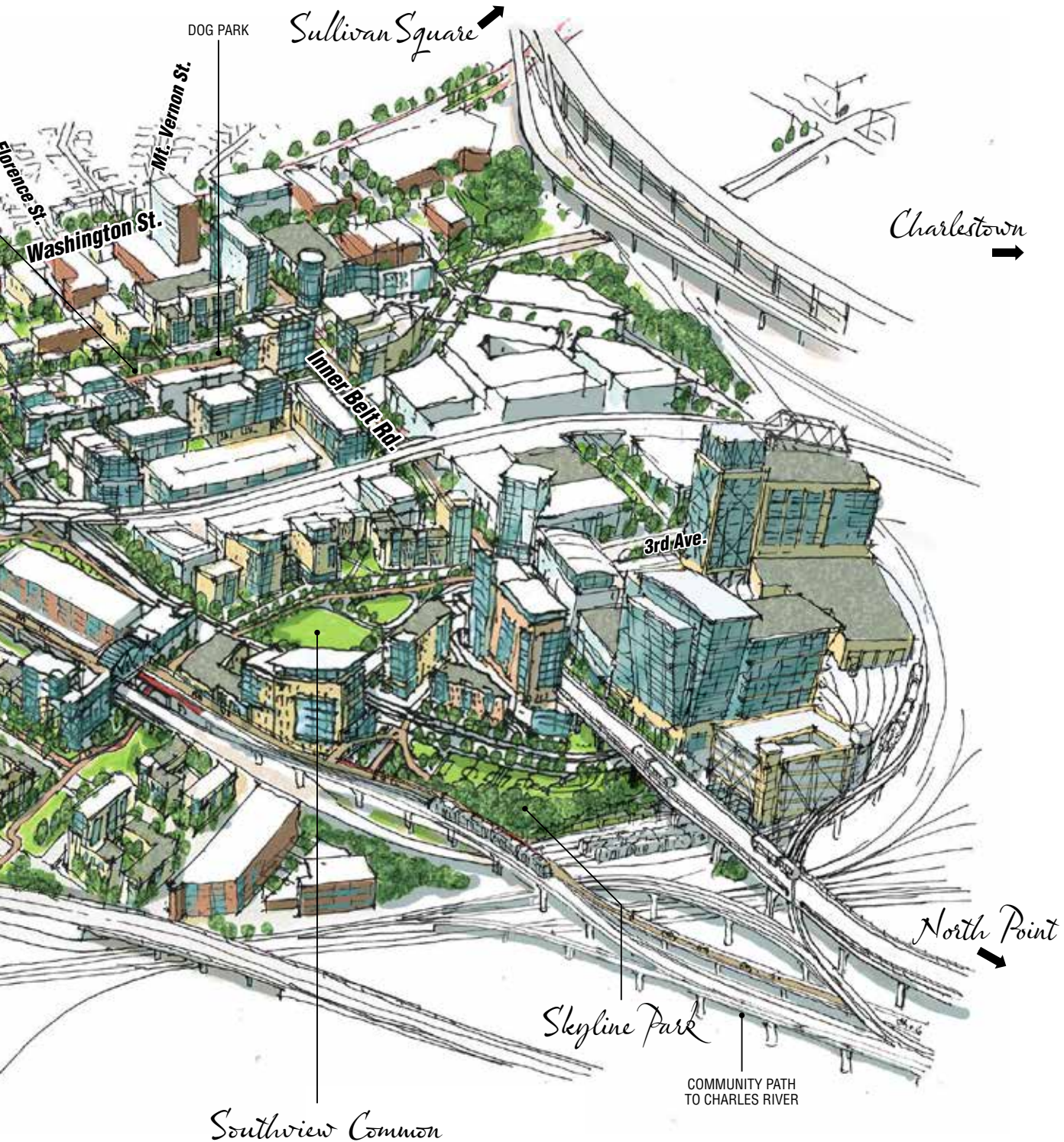


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## INNER BELT/BRICKBOTTOM VISION



*A conceptual scenario of potential new real estate development, supportive street, park and transit infrastructure, and the places they create together.*



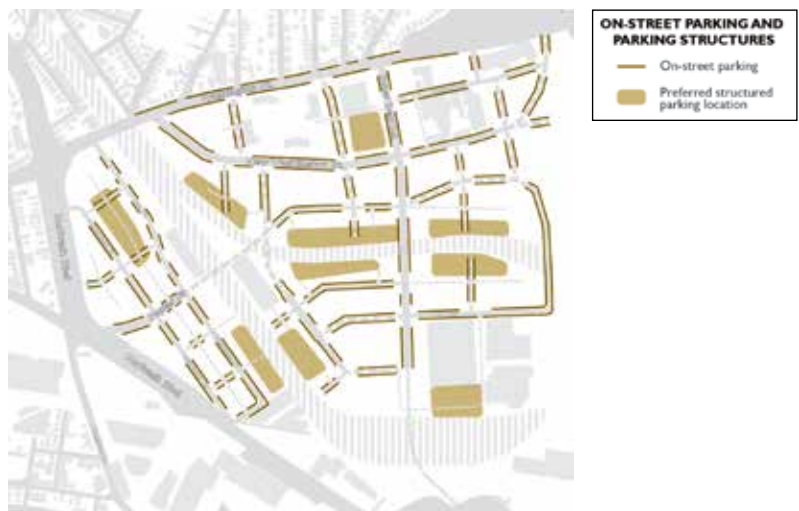
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## PUTTING THE PLAN TO WORK: DEVELOPMENT FRAMEWORK

### STREET NETWORK



### EFFICIENT SHARED-USE PARKING



### VIEW CORRIDORS



***A guide to land and infrastructure development that adds predictability and value while retaining the flexibility to accommodate various market-driven investment opportunities, creative design approaches and public open space goals as Inner Belt and Brickbottom mature.***

## DEVELOPMENT INTENSITY



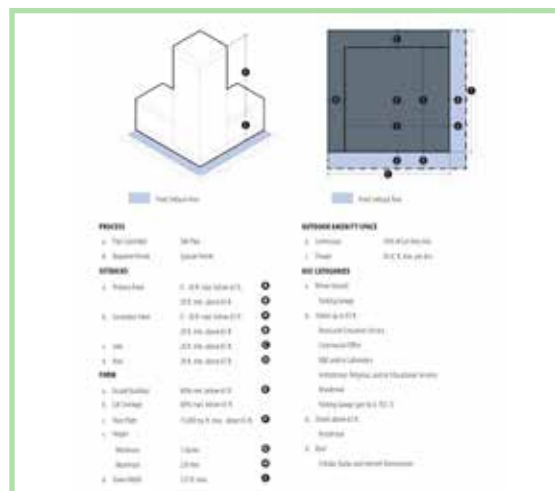
## LAND USE SCENARIO

- Office and research/development welcome anywhere in study area
- Housing welcome west of Inner Belt Road
- Retail welcome anywhere, but should be prioritized in clusters indicated
- Large-floorplate buildings (over about 30,000sf) and fabrication uses welcome in areas indicated



## DEVELOPMENT CODE STRATEGIES

- Addressing building and site development/rehabilitation as well as its integration with improved and new street corridors
- Brickbottom: Form-based
  - > Addresses smaller and more complex existing parcel boundaries, ownership
  - > Promotes as-of-right opportunity
- Inner Belt: Master plan
  - > Addresses larger scale sites with greater flexibility
  - > Design review required
- 5.5 to 10 million sf overall
- 60% office/research/fabrication, 37% housing, 3% retail



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## 2 | CRITICAL QUESTIONS SHAPING THE FUTURE OF INNER BELT AND BRICKBOTTOM



What changes in Inner Belt and Brickbottom will be most effective in achieving community goals?

**T**his planning process for Inner Belt and Brickbottom examined a comprehensive set of critical questions whose answers provided fundamental guidance to the plan. The questions address issues of market-driven investment potential, priority infrastructure improvements, and implementation mechanisms that had to be considered together to determine the most appropriate plan approaches—those that are both transformative in their vision, and practical in their application. This chapter begins with background information on public engagement and study area data, then summarizes findings to a series of twelve critical questions.

## BACKGROUND

- The Inner Belt/Brickbottom Plan public process
- Inner Belt and Brickbottom Today: critical figures

## CRITICAL QUESTIONS

1. How does Somerville's strategic plan guide change in Inner Belt and Brickbottom?
2. What is the regional outlook for smart growth in Greater Boston?
3. What recent investments have been made in Inner Belt/Brickbottom?
4. How can we most effectively harness the study area's economic development potential?
5. What access improvements would do the most to unlock opportunity in the study area?
6. How can we fund needed infrastructure improvements using the value of new development?
7. What will new Green Line service bring—and when?
8. How will the Green Line station at Brickbottom work?
9. When will McGrath Highway be rebuilt as an at-grade roadway connecting neighborhoods?
10. Will congested roads threaten our smart growth goals?
11. Will stormwater drainage threaten growth in Inner Belt & Brickbottom?
12. What constraints do "The Tubes" impose?
13. How can zoning reform work for Inner Belt and Brickbottom?

## PUBLIC PROCESS



INNER BELT / BRICKBOTTOM PLAN



GROUNDING MCGRATH



MBTA GREEN LINE

2011	J			
	F			
	M			
	A			
	M	FOCUS GROUP   MAY 16, 2011		MAY 26, 2011
	J	PUBLIC MEETING #1   JUNE 25, 2011 WALKSHOP	JUNE 29, 2011	JUNE 23, 2011
	J			
	A	FOCUS GROUP   AUGUST 4, 2011	AUGUST 3, 2011	AUGUST 25, 2011
	S	FOCUS GROUP   SEPTEMBER 21, 2011	SEPTEMBER 20, 2011	SEPTEMBER 15, 2011
	O	PUBLIC MEETING #2   OCTOBER 5, 2011 VISION WORKSHOP		
	N	FOCUS GROUP   NOVEMBER 9, 2011		
	D		JUNE 29, 2011	
2012	J			
	F			FEBRUARY 8, 2012
	M		DECEMBER 12, 2011	
	A			
	M			
	J	FOCUS GROUP   JUNE 29, 2012		
	J			
	A			
	S		MARCH 7, 2012	
	O			
	N			NOVEMBER 15, 2012
	D			DECEMBER 11, 2012
2013	J			
	F		FEBRUARY 13, 2013	
	M			
	A		APRIL 25, 2013	
	M	FOCUS GROUP   MAY 15, 2013	MAY 15, 2013	
	J			JUNE 11, 2013
	J			
	A			
	S			
	O	FOCUS GROUP   OCTOBER 24, 2013		OCTOBER 3, 2013
	N			
	D	PUBLIC MEETING #3   DECEMBER 16, 2013 FINAL PLAN OPEN HOUSE		

Community conversation on priorities for the Inner Belt and Brickbottom study area was an important foundation of the planning process. The conversation occurred in two major types of forums. **Focus Group** meetings engaged a selected group of stakeholders to discuss planning questions and concepts in detail. These stakeholders included property and business owners,

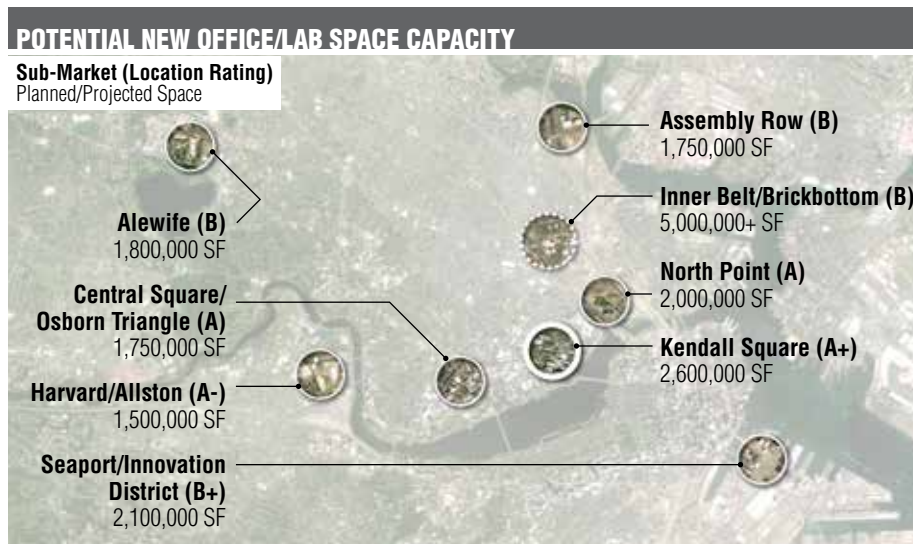
residents, other Somerville community members, and planning staff from Boston and Cambridge, which directly adjoin the study area. Focus Group meetings also welcomed attendance by the general public. Public meetings expressly invited the broader Somerville community and included significant participation by Focus Group members.



## INNER BELT & BRICKBOTTOM TODAY

Figures and images below highlight important data and conditions that inform the critical questions on the following pages.

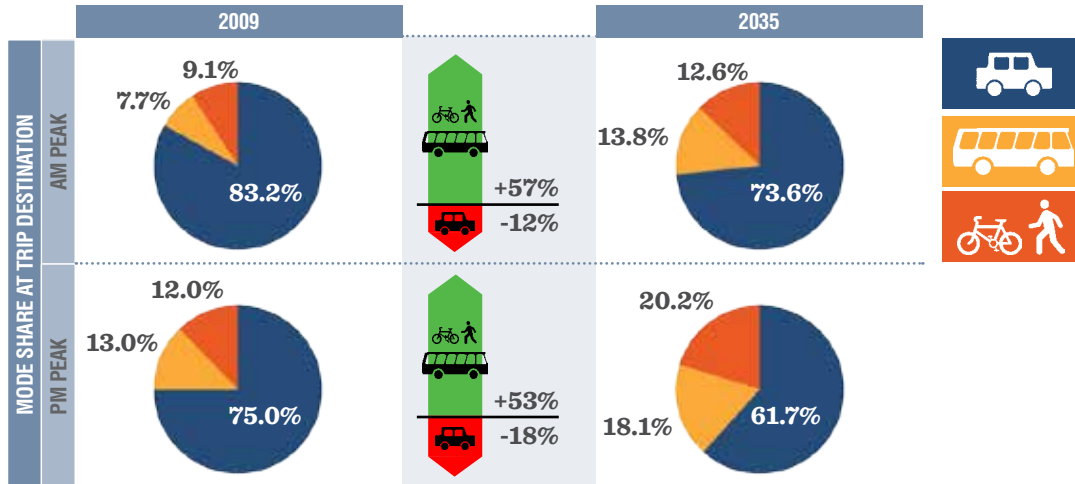
### Competitive life sciences development areas



*Inner Belt/Brickbottom has two to three times the development capacity of peer locations—and high potential to leverage research cluster proximity*

	CLUSTER PROXIMITY	EASE OF DEVELOPMENT	ACCESS AMENITIES	OTHER CONSIDERATIONS	SUM: DEVELOPER CONFIDENCE
Kendall Area (A+)	Best	Redevelopment	Red Line station	Best location; highest rent	Highest
North Point (A)	Adjacent	Ready	Green Line station	Can accommodate large-scale development	Very good/future
Central Square/Osborn Triangle (A)	Adjacent	Redevelopment	Red Line station	Parts of University Park already closer to Central than Kendall	Very good/future
Harvard/Allston (A-)	Potential new cluster location	Land assembled	No MBTA	Harvard University as anchor investor and tenant	Potentially excellent
Seaport/Innovation District (B+)	No	Ready; ample underdeveloped land	Silver Line	Waterfront; proximity to downtown Boston and airport	Moderate
Alewife (B)	No	Redevelopment	Red Line station; not pedestrian-friendly	Suburban environment w/o suburban advantages	Moderate
Assembly Row (B)	No	Needs infrastructure; ample underdeveloped land	Future Orange Line station	Planned environment will add amenity	Moderate
Inner Belt/Brickbottom (B)	No	Redevelopment/ portions need infrastructure	Future Green Line station	Very good access to I-93; two T stops	Moderate

## Regional transportation and development projections assume a modest shift toward walking, transit, and biking in the study area.



	WALK SCORE	TRANSIT SCORE
Inner Belt Brickbottom	85	54
Davis Square	97	71
City Averages	85	55

VEHICULAR TRAFFIC	CARS / DAY
Interstate 93	250,000
McGrath Highway	33,000
Washington Street	23,000
Inner Belt Road	6,000
Joy Street	2,100
New Washington Street	2,000
Linwood Street	1,300

BUS RIDERSHIP	RIDERS / DAY
<b>All routes</b>	<b>3,200</b>
Route 80	590
Route 86	600
Route 87	432
Route 88	630
Route 90	220
Route 91	445
Route CT-2	260

PROPERTY IMPROVEMENTS	\$
<b>Total 2004–2013</b>	<b>51 million</b>
2004	0.9 million
2005	6.5 million
2006	3.5 million
2007	26.3 million
2008	1.3 million
2009	6.2 million
2010	8.2 million
2011	0.1 million
2012	2.0 million
2013	0.1 million

TAX LEVY	\$ / YEAR
Personal property	6.2 million
Real property	2.5 million

EMPLOYMENT	JOBS
Total jobs	1,500

LAND AREA	ACRES
Study area	195
Rail right-of way	43
Boston Engine Terminal	23
Interstate 93	7
NSTAR Land	6
Other MBTA land	3
Approximate land area available for redevelopment or reuse	100

OTHER SPACE	ACRES
Parking lots	32
Civic space	2

BUILT SPACE	SQ. FT.
Warehouse / garage	1,000,000
Office	600,000
Residential	200,000
Hotel	125,000

HOUSING	UNITS
Total units	368
Affordable units	223

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## CRITICAL QUESTION 1

## How does Somerville's strategic plan guide change in Inner Belt and Brickbottom?

Recognizing the transformational impact that Somerville's six new Green Line stations would have on their neighborhoods, and on the City as a whole, Mayor Joe Curtatone took an unprecedented step in 2008—he asked community members to prepare the city's first-ever Comprehensive Plan to guide growth and development. A four-year public process ensued, and in 2012 the City's Board of Aldermen and Planning Board adopted the SomerVision Comprehensive Plan as the official master plan for Somerville under Massachusetts General Law.

SomerVision is a community-based plan intended to ensure that Somerville remains a great place to live, work, play and raise a family. Existing trends suggest that absent a strategic plan, regional economic development will once again leapfrog Somerville, while extreme housing demand will fundamentally erode our character as an accessible, mixed-income community.

Somerville residents articulated a series of core values during the planning process, advocating for a vibrant and diversified economy, a range of choices in the housing market, environmental stewardship, accessible urban streetscapes, and innovation in government.

Next, a Steering Committee of sixty residents was formed, representing every neighborhood of the City and every public agency or advocacy organization operating in Somerville. This group worked for more than two years to prepare an overall public policy framework for the City, addressing topics from infrastructure planning to public education to the small business environment.

By the end of the process, the Steering Committee had listed nearly 600 goals, policies and actions. Participants recognized the need to telescope out to a bigger picture, so their final element of work became the SomerVision Numbers, a series of aspirational targets for land use and development that would be essential in order to meet the more detailed goals. The SomerVision Numbers call for roughly 18 million square feet of new development over the next two decades, with the vast majority in places like Inner Belt and Brickbottom, where infrastructure can support it and economies of scale can allow private property owners to make a business case for smart growth while helping underwrite the costs of public benefits like new open space and affordable housing.



**30,000 new jobs** as part of a reasonable plan to create opportunity for all Somerville workers and entrepreneurs.



**125 new acres of publicly-accessible open space** as part of our realistic plan to provide high-quality and well-programmed community spaces.



**6,000 new housing units—1,200 permanently affordable** as part of a sensitive plan to attract and retain Somerville's best asset: its people.



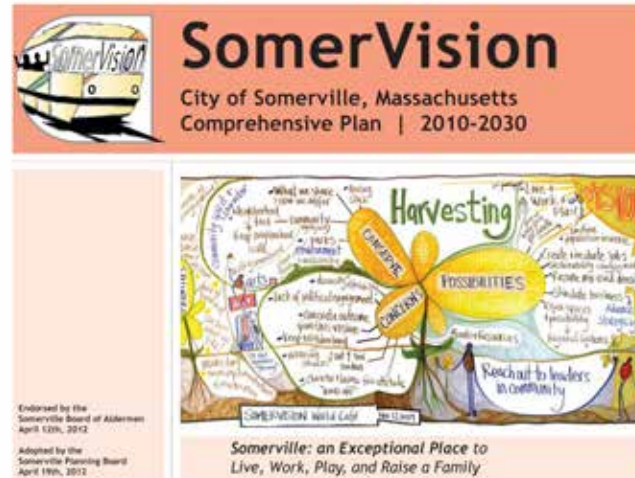
**50% of new trips via transit, bike, or walking** as part of an equitable plan for access and circulation to and through the City.



**85% of new development in transformative area** as part of a predictable land use plan that protects neighborhood character.

## A LEGALLY-ADOPTED PLAN

Comprehensive Plans (known as Master Plans in some states) are a best practice in public administration. When community members agree on a shared vision for the future, it can become easier to build consensus on policies and projects that implement the vision. Somerville is a leader in municipal management, and in 2012 the City formally adopted its first-ever Comprehensive Plan for the future.



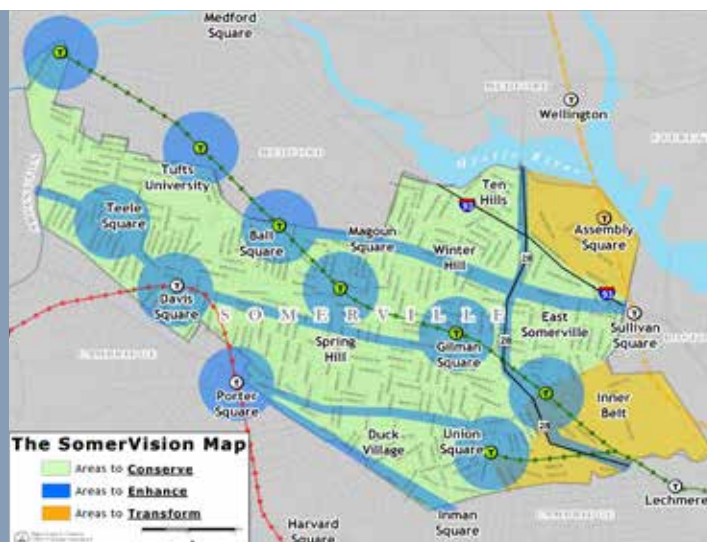
## PUBLIC VISIONING

The four-year public process around SomerVision brought hundreds of residents, businesspersons and community leaders together, including numerous stakeholders from the Inner Belt and Brickbottom districts. An early step in the process was to understand what core values the community. The “Word Cloud” illustrates terms that community members used most frequently during the visioning process.



## SOMERVISION MAP

SomerVision is both a preservation plan and a growth plan. Residents want to steer market energy away from traditional neighborhoods of two- and three-family homes and into existing commercial squares and transitioning industrial districts like Inner Belt and Brickbottom. Roughly 365 acres of industrial land exist on Somerville's eastern and southern edges: plenty of space for new growth that is designed at a human scale and integrated into the City's fabric of great neighborhoods.



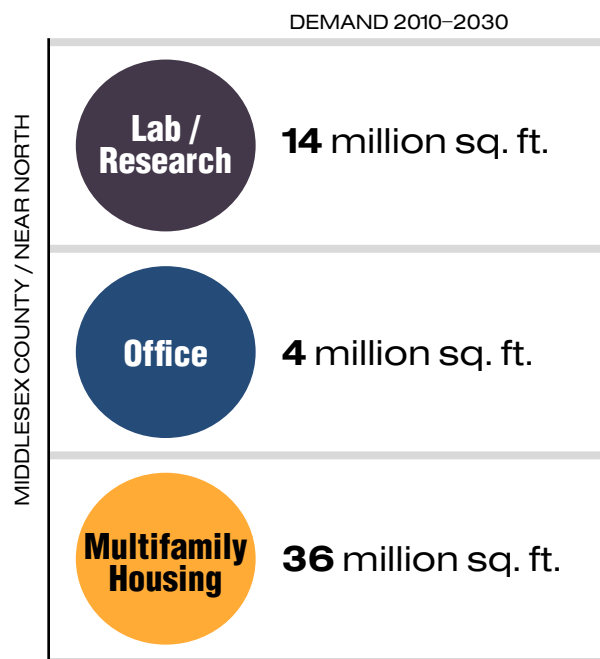
CRITICAL QUESTION **2**

## What is the regional outlook for smart growth in Greater Boston?

The Boston region gets smart growth. In 2008, after five years of public dialogue, the Metropolitan Area Planning Council and its 101 member municipalities adopted a long-range strategic plan for the region's future. The MetroFuture Plan is an organizing framework to keep greater Boston livable, healthy and economically competitive. It calls for roughly 300,000 new jobs and 350,000 new housing units to be created by 2030, with the vast majority being built in urban core communities and walkable regional centers well-served by public transportation. We all know that snarled roadways undermine our quality of life as well as new economic development efforts, and our regional plan offers us a viable alternative.

At the local level, municipal governments in our region are creating plans that are in line with the regional vision for walkable smart growth. Every community has its own specific needs and opportunities, but neighboring municipalities are increasingly learning that coordinated plans produce better results. For example, the City of Boston and the City of Somerville have used an integrated approach to match up Boston's plans for Sullivan Square and Somerville's plans for the Inner Belt. And the City of Cambridge has partnered with Somerville to guide the 45-acre NorthPoint development project, which straddles the municipal boundary and is currently under construction.

In our era of limited resources, it is essential that local governments continue to collaborate, so that public and private investments reinforce each other. It is also essential that our investments are prioritized around walking, bicycling and mass transit. Federal and state funding are being allocated in a competitive environment, and communities that can't demonstrate a commitment to walkability and to regional coordination are



losing out. For example, in 2010 and 2011, the federal Partnership for Sustainable Communities awarded major discretionary planning grants to the City of Boston (\$2 million), the City of Somerville (\$2 million) and the Metropolitan Area Planning Council (\$4 million) because of proven track records in creating new job and housing opportunities using transit-oriented development.

The Boston region has been a bright spot in United States' economic recovery from the Great Recession of 2008, in part because our great neighborhoods attract skilled workers from all over the country and all over the globe. We must build on this progress and continue to position our region as a national leader in smart growth.

## A MARKET FOR WALKABILITY

Transitioning industrial areas in Charlestown, East Cambridge and eastern Somerville are helping meet market demand for new walkable, transit-oriented development. Assembly Square and North Point are under construction, providing clear evidence that smart growth and walkability are viable investments north of the traditional downtown real estate market. Inner Belt, Brickbottom, Union Square and Sullivan Square stand to benefit next.



## NORTH POINT

A large-scale mixed-use district is being built along the Cambridge-Somerville border adjacent to the Lechmere Green Line station. Collaborative planning and zoning efforts between the two cities have helped streamline development totaling roughly 5 million square feet. Upon completion, roughly half of the new space will be commercial and half will be residential. Major open space amenities are included in the development plans.



## ASSEMBLY SQUARE

Fifteen years in the making, a great new Somerville neighborhood is under construction on the shoreline of the Mystic River. Assembly Square is a 125-acre former industrial district, isolated by elevated freeways and railroads. Roughly 3 million square feet of commercial development and 2 million square feet of residential development are being built, along with a new MBTA Orange Line subway stop that will open in 2014.



CRITICAL QUESTION **3**

## What recent investments have been made in Inner Belt / Brickbottom?

More than  
**\$50 million**  
in permitted  
construction has  
been invested in the  
past ten years.

The Inner Belt and Brickbottom districts are home to 400 residents, 100 employers, and 750 workers. The low density of these districts and their unfriendly pedestrian environment hide a healthy business

climate that features low vacancy rates and four of the ten largest taxpaying parcels in Somerville.

Important public and private investments have been made in recent years. Since 2008, tens of millions of dollars have been spent on new civic spaces, resurfaced roadways, gateway signage, facade improvements, and major property acquisitions. Businesses have expanded, and the area's first transit-oriented development project has been permitted. These investments should be celebrated, and should inform phasing of the Master Plan's implementation activities.

- A. Holiday Inn Bunker Hill repositioning
  - B. Inner Belt Gateway Sign
  - C. Triumvirate Environmental expansion and headquarters acquisition
  - D. 150-200 Inner Belt Road sale and repositioning
  - E. Joy Street Studios facade improvement and repositioning
  - F. Grossman Marketing corporate headquarters expansion
  - G. 90 Washington Street mixed-use redevelopment permitting
1. Zero New Washington off-leash recreation area construction
  2. Washington Street resurfacing (American Recovery and Reinvestment Act)
  3. Waste Transfer Facility demolition



## WASTE TRANSFER FACILITY

Brickbottom's Waste Transfer Facility has presented an unwelcoming front door for Somerville for sixty years. The two-acre City-owned property was leased by a private waste hauler, and hundreds of diesel trucks entered the site each day. In 2013, the City of Somerville demolished the hulking facility, sending a clear signal to neighbors and potential investors that Brickbottom is ready for higher-value investment.



## GATEWAYS

Clear signs of public and private investment are visible from the corner of Inner Belt Road and New Washington Street. The Bunker Hill Holiday Inn completed major facility upgrades in 2013. The City of Somerville completed the Zero New Washington Street dog park in 2009. Gateway signage was designed and financed in a collaboration between private landowners and business owners, with assistance from the City.



## BUSINESS EXPANSION

Many growing businesses in the district straddle the line between older economic models like warehousing, and new economy sectors like green technology and digital marketing. Triumvirate Environmental is a national leader in environmental engineering, and in 2012 bought a building on Inner Belt Road to serve as an expanded headquarters facility. Grossman Marketing is a fourth-generation family business on Cobble Hill Road that expanded employment from \_\_\_\_ to \_\_\_\_ in 2013.



## CRITICAL QUESTION 4

# How can we most effectively harness the study area's economic development potential?

## MARKET POTENTIAL AND POSITIONING; DEVELOPMENT ECONOMICS

SomerVision identifies economic development as a top priority for the Inner Belt and Brickbottom study area. It calls for adding more than 10,000 jobs in the study area by 2030. It also calls for adding more than 2,000 housing units in the study area, recognizing that housing helps attract business investment by supporting qualities businesses seek like presence of retail and active sidewalks. Through the guidance of this master plan, the study area can accommodate all of this and more, with flexibility to suit a variety of scenarios for mix and sequencing of different land uses. In all cases, it is recommended and assumed that at least 55% of building floor area be devoted to office, research & development and/or other employment-intensive uses.

### What is the market potential for office and research and development in Inner Belt and Brickbottom?

W-ZHA completed a market analysis for the study area by W-ZHA in 2011.

Key findings for **office-related** industry sectors:

- Principal industry sectors potentially interested in locating in the study area include
  - > Information
  - > Financial Activities
  - > Professional, scientific and Technical
  - > Management of Companies and Enterprises.
- Office buildings in urban locations in and around Boston have demonstrated lower vacancy and higher rents than suburban locations between 2001 and 2011. Inner Belt and Brickbottom can leverage the anticipated continuation of this trend.

- Principal location characteristics sought by businesses in these industry sectors include
  - > Multiple modes of access for workforce and clients
  - > Area with positive image to assist marketing and recruiting
  - > Services and amenities available
  - > Location near other office businesses
  - > Reasonable price

Key findings for **research and development**:

- Demand for research and development space in Middlesex County has been growing 5% annually and is expected to continue
- Kendall Square has limited capacity left (roughly 3 million square feet in the pipeline, roughly 3 million square feet more in potential largely dependent on Federally-owned Volpe site redevelopment)—and high rents. This will increase demand for additional research space conveniently accessible to Kendall Square, within approximately 5-10 years.
- Principal location characteristics sought by research and development businesses include—in **addition to those listed above for office**—the following:
  - > Skilled workforce available
  - > Presence of industry prestige/culture
  - > Ready ability to lease or build lab/research space
  - > Partnership opportunities with other businesses, institutions
  - > Nearby institutions with research funding potential

## How should we position Inner Belt and Brickbottom to be as competitive as possible against peer locations?

The adjacent table summarizing strengths of Inner Belt and Brickbottom against strengths of the principal locations it will compete against for business and real estate development. As the Inner Belt and Brickbottom area is just emerging as a center for high-value office and research and development activities, it has distinct near-term and long-term market positions.

The study area's major assets include:

- Highly educated workforce residing in Somerville and adjacent cities
- Green Line service (coming soon enough to be a tangible benefit to prospective businesses, as demonstrated by this master plan)
- Orange Line service (for northeast portion of study area)
- Large parcels potentially available for redevelopment with potential for large building area and/or floorplates (over 30,000sf)
- Large overall development potential (5 to 10 million square feet of building floor area)
- Excellent fiber optic/internet capacity
- Established character in Brickbottom
- Proximity to major office and research concentrations in Cambridge and Boston
- Good driving access to I-93, Cambridge and Boston

These assets can and should be leveraged now to attract an initial investment in development over the

next 5 years, establishing Inner Belt and Brickbottom as a regional center for high-value office and research and development. Development during this period will likely occur in relatively small increments of buildings up to 50,000-100,000sf.

Additional assets should be cultivated to unlock the study area's much larger development potential over the next 5-20 years:

- Visible presence of housing, retail, hotels, the arts and parks/recreation opportunities in the study area
- Additional transit connections along the Urban Ring Corridor south to Kendall Square and the Longwood Medical and Academic Area, and north to Sullivan and Assembly Squares
- More complete, pedestrian-oriented network of streets within Inner Belt and Brickbottom, with walkable connections to Union Square and East Somerville
- A network of safe, convenient biking paths.

## Program opportunity summary

The table below outlines the potential number of new jobs, built floor area of office/research & development and retail space, housing units and residents possible in the study area through about 2035. [insert "Inner Belt/Brickbottom program summary" table, bullets and diagram from 12/16 boards; in the table, change the "office" label to "Office and Research & Development"] Figures are provided for both a 2020 timeframe—reflecting an initial round of development catalyzed by the inauguration of Green Line service—and a 2035 timeframe, reflecting near-capacity buildout. The 2035 figures are consistent with SomerVision goals.

	2020 OPPORTUNITY	2035 OPPORTUNITY	SOMERVISION 2030 GOAL	MAPC 2035 PROJECTIONS —IBBB	MAPC 2035 PROJECTIONS —CITYWIDE
<b>Office and Research &amp; Development Space</b>	250,000sf	3,250,000sf			
<b>Retail Space</b>	45,000sf	165,000sf			
<b>New Jobs</b>	900	10,250	10,000-11,000	4,879	15,130
<b>New Housing Units</b>	360	2,250	2,000-2,500	838	5,869
<b>New Residents</b>	540	3,400		1,050	6,129

## CRITICAL QUESTION 5

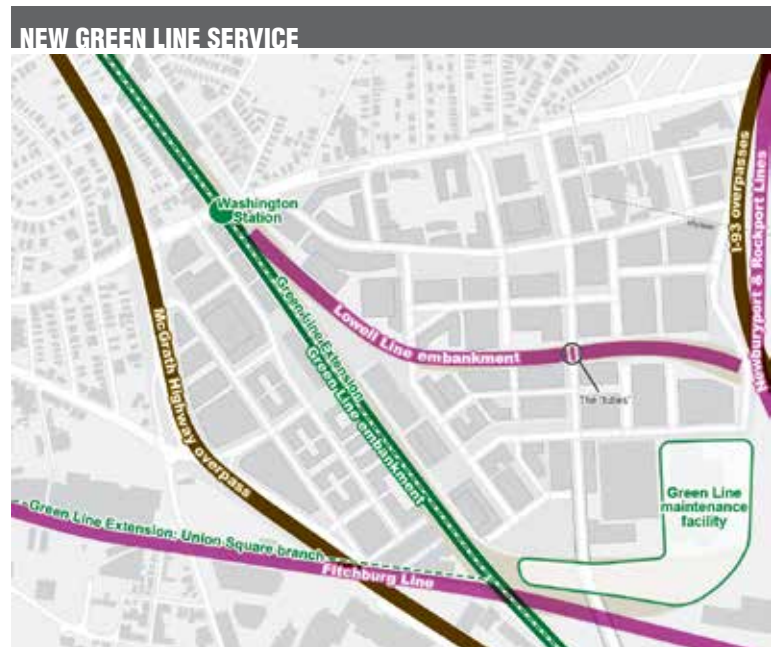
## What access improvements would do the most to unlock opportunity in the study area?

Economic development potential in Inner Belt and Brickbottom has clearly been limited by the area's access constraints. These constraints are created primarily by the presence of four different active rail corridors that have converged on the area's rail yards and Boston's North Station since the 1835–1850 period:

- the Lowell Line, whose embankment splits Inner Belt into north and south sections, connected primarily by the “tubes,” a makeshift underpass along Inner Belt Road that lacks walking and biking accommodations and chronically traps trucks with its low clearances
- the Green Line corridor, historically a segment of the Lowell Line, whose embankment separates Inner Belt from Brickbottom.
- the Fitchburg Line, which separates Inner Belt and Brickbottom from Somerville's Boynton Yards area and Cambridge
- the Newburyport and Rockport Lines, later reinforced as a barrier by I-93 and the Orange Line, separating Inner Belt from Charlestown.

In addition, new Green Line maintenance yard infrastructure will add tracks and a maintenance facility in the southeastern portion of Inner Belt, and a lightly used connecting railroad track at grade level poses some barriers along New Washington Street.

Finally, twentieth century road construction imposed additional barriers. The broad, elevated McGrath and O'Brien Highway corridors separate the study area from Union Square and other Somerville neighborhoods.



***New Green Line service will start to reduce rail and road barriers that have isolated Inner Belt and Brickbottom for more than 160 years.***

For several decades, concepts have been proposed to mitigate some of these barriers with new bridges, tunnels, or grade-level road reconstruction. This plan, however, represents the first comprehensive effort to assess and prioritize these potential, and costly, infrastructure investments based on their anticipated economic and community development benefits. It builds upon the state's initiative to inaugurate Green Line service, which will provide the area an important new means of crossing the Fitchburg Line and McGrath Highway barriers. This plan also builds upon two other major efforts that lay the groundwork for longer-term access improvements.

First, it anticipates inauguration of Urban Ring corridor transit service through the study area. The Urban

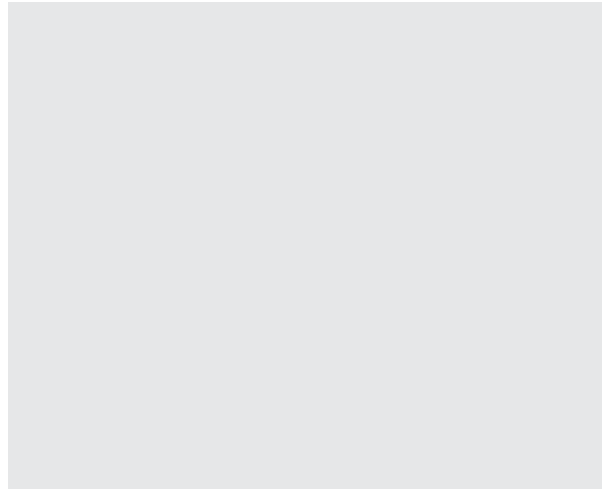
Ring, a circumferential transit corridor ringing Boston defined through several decades of study and policy development, would conceptually link Inner Belt south to Lechmere, Kendall Square, the Longwood Medical and Academic Area, and other destinations to the south and east of central Boston; and north and east to Sullivan Square, Assembly Square, Chelsea and Logan Airport. While the Urban Ring transit corridor currently lacks committed funding or implementation scheduling, strong interest in the corridor by a variety of businesses, institutions, neighborhoods and municipalities will continue to press for its implementation.

Second, this plan was conducted in parallel with a state-sponsored planning study of methods to reconstruct today's elevated McGrath Highway to enhance walking, biking, transit and driving connections in a balanced way. Alternatives included roadways built entirely or partially at grade, and new greenway space for landscape and off-street multipurpose paths. The process identified a preferred "boulevard" solution built at grade, and this alternative was used as a basis for studying potential long-term effects on traffic posed by development in the study area and in the region. Implementation of this alternative is not anticipated for at least ten years. In the meantime, the existing elevated McGrath structure has been rehabilitated to extend its useful life, and interim pedestrian, bike and roadway improvements are being made below the structure to enhance access convenience and safety for all modes.

Transportation infrastructure alternatives analysis methodology and summary recommendations

The access alternatives analysis performed as part of this master plan builds on three major assumptions. It maintains that the optimal access network serving Inner Belt, Brickbottom and its surrounding context should **emphasize a range of convenient transportation choices**; that transportation and land use policy should be managed together; and that implementation decisions must **weigh cost-effectiveness of alternatives across a comprehensive range of economic, transportation and design criteria**.

- The optimal access network should emphasize a range of transportation choices, including but expanding beyond automobile access which predominates today. Special emphasis must be placed on leveraging new Green Line service in particular, given its importance in drawing market-based investment in business and real estate development. This in turn requires emphasis on creating inviting, safe condi-



*Rendering of new Washington Street Green Line station  
(source: MBTA)*



*Concept plan for preferred McGrath Boulevard alternative  
(source: MassDOT)*

DRAFT

tions for walking, biking and using complementary transit services (bus and future Urban Ring corridor transit).

- The optimal access network should be actively coordinated with area land use, both in the planning process and in operations. Transportation Demand Management (TDM) strategies, well-established in other places such as Cambridge's Kendall Square, should be used to offer the best possible range of access choices to property and business owners and their tenants, and to maximize cost-effectiveness of public investments in infrastructure. TDM strategies involve partnership with area employers and property owners, and typically involve incentives for walking, biking and transit usage (such as reduced-cost transit passes, and improved bike parking facilities) coupled with parking pricing policies that reflect market demand for parking.
- Alternatives should be evaluated based on a comprehensive range of criteria including benefit, cost, and implementation feasibility. The optimal transportation network must both make the transformative improvements needed to unlock significant new economic development and community access opportunity, and be fully achievable with respect to physical and financial constraints at hand. The analysis methodology used in this plan scored alternatives using these criteria:
  - > Level of benefit
    - Economic development (up to 3 points)—*to what extent will the project advance market-driven development opportunity?*
    - Transportation (up to 3 points)—*to what extent does the project expand needed high-quality transportation choices?*
    - Urban design (up to 3 points)—*to what extent does the project create high quality places designed for people?*
  - > Cost/benefit (up to 3 points)—*Projects were first sorted into different cost tiers, and then scored according to what overall level of benefit they would provide relative to their cost tier.*
  - > Feasibility
    - Technical (up to 3 points)—*projects with fewer engineering or design challenges earned more points.*
    - Partnerships/land access (up to 3 points)—*projects with fewer potential complications from needed land acquisition, partnerships with*

*private entities or public agencies, or similar factors earned more points.*

- > Timing (up to 3 points)—*Projects achievable sooner earned more points.*

An alternative could serve as little as 0 if it provides no net benefit or -1 if it is detrimental to a criteria standard.

Rankings scored projects within their categories as well as across the overall study area. For instance, different alternatives for improving access across the Lowell Line embankment were ranked against each other to identify which deserve highest priority in that category. Alternatives also fell into certain tiers across the study area based on their overall score, helping identify which ones deserve attention first. The highest ranking alternatives across the study area were grouped into two categories, starting with “low hanging fruit” and others that are most cost-effective and rapidly implemented (see table X). The second category includes projects that provide compelling benefit but require greater investment and/or longer timeframes to implement (see table X). These may deserve near-term action to start their implementation process but are not expected to yield near-term results.

In short, infrastructure investment priorities fall into these levels:

- Low-hanging fruit. *These actions will cost-effectively, quickly leverage new Green Line service.*
  - > Enhance existing streets with sidewalks, trees, lighting etc. as needed (up to \$500,000 each).
- First priority. *These actions will assist existing businesses and near-term development projects.*
  - > Replace Inner belt tubes (\$10-12 million)
  - > Improve Tubes bypass, if this facilitates faster, less costly Tubes replacement (\$2.5-3 million)
  - > Create new street segments on an opportunistic basis (up to \$500,000 each).
- Second priority. *These actions will unlock more substantial benefits but require more complex planning and implementation partnerships, and greater levels of funding, making them less relevant to near term development opportunities.*
  - > Poplar St. extension to Inner Belt as walk/bike greenway (\$4-6 million)
  - > North Point bridge, preferably with traffic (\$10-12 million)

- Third priority. *To a greater degree than the second priority actions, these require more time and funding to implement, and so ought to be delayed until market interest can promptly take advantage of their benefits.*
  - > Inner Belt Rd. West extension under Lowell Line (\$10-12 million)
  - > Other Green Line crossings (\$2-6 million)
  - > New Inner Belt South Green Line station if feasible

## Highest Priorities Across Alternatives



### KEY GOALS

- Foster economic development for Somerville
- Enhance walking and biking connections to the Washington Street station from all directions
- Enhance biking and Community Path connections within and beyond the study area

### SUMMARY OF PRIORITY ACTIONS

1. Improve existing streets with better sidewalks and other pedestrian infrastructure, as cost-effective, near term “low hanging fruit” initiatives to leverage Washington Street station and enhance existing properties. Create a new north-south street as part of Cobble Hill Shopping Center redevelopment.
2. Replace the “tubes” with a more attractive and functional bridge. Enhance the street grid and redevelopment opportunities by extending Roland Street west to Inner Belt Road, adding a north-south street west of the Holiday Inn, extending Third Street west to Inner Belt Road West, and enhancing the private drive below the Lowell Line into a public street with sidewalk
3. Create a new walking/biking connection across the Green Line as part of Green Line construction.

## CRITICAL QUESTION 6

## How can we fund needed infrastructure improvements using the value of new development?

The planning process analyzed opportunity for the increased value of new development to pay for the cost of infrastructure improvements needed to help attract and support that new development. Major categories of these investments include street improvements, new streets, critical bridge connections, parks and structured parking. Over the long term, increased tax revenue from new development clearly supports infrastructure costs. The greater challenge is to be able to finance critical near-term infrastructure needs before significant revenues are received from the development it enables. To a significant degree, this challenge can be met, through a combination of carefully prioritizing infrastructure investments (as described under critical question 5), and the following specific financing strategies.

### Finance plan assumptions

- Revenues
  - > Revenues to the city primarily consist of property tax receipts. Because most housing development anticipated in the study area would be multifamily rental housing, it would produce commercial tax payments like office or other business development would.
  - > A second significant source of revenue would be fees from shared parking structures. Whether parking structures are built and managed by private developers or the City or another public entity, these revenues could cover the cost of creating the parking structures. Further, land values in the study area are high enough that greater economic value would be achieved by property owners through building structured parking to reserve more land for building development, than by utilizing significant land area for surface parking. This analysis assumes prevailing parking structure construction costs, and parking fees typical of mixed-use areas where transit, and to a lesser degree walking and biking, offer reasonable alternatives to driving and parking. It also assumes that a limited amount of structured parking—not more than 500 spaces—may be offered at any given time for commuters interested in parking for the day to complete their commute using the Green Line. While such “park-and-ride” facilities are not generally desired in the study area as a long-term presence due to potential traffic impacts and displacement of higher-value uses, park-and-ride revenue would provide valuable near-term financing assistance for parking structures built with greater capacity than can immediately be utilized by new development. (In some cases it is desirable to build excess parking structure capacity to make most efficient use of land, due to the impracticality of adding floor levels to existing parking structures)
- The Community Preservation Act would also produce supplemental revenue to the city, at a rate of 3% of the amount of the property taxes. This analysis has assumed that Community Preservation Act-sourced revenues would be dedicated to fund ongoing costs such as park maintenance, as they are too small to make a significant contribution to capital costs.
- Finance approach recommendations and assumptions
  - > A District Improvement Financing (DIF) approach is recommended, similar to the successful approach taken by the City at Assembly Square. As near-term redevelopment begins, several DIF districts should be established within the study area. These districts would best be scaled approximately similar in size to the character subdistricts outlined in the Master Plan, gathering a mix of near- and longer-term development sites that would all benefit from certain specific infrastructure improvements (such as a new street or connection). General Obligation (GO) bonds—rather than more costly tax-increment financing methods—would be issued with to finance improvements, repaid by growing tax revenues from new development. 20-year terms and 4% leverage are assumed for the GO bonds.
  - > Because smaller, incremental near-term projects will produce too little revenue at first to efficiently support GO bonds, initial infrastructure improve-

ments should be funded on a “pay-as-you-go” basis from the City’s general fund. This approach is feasible since significant near-term improvement can come from relatively inexpensive investments

in sidewalks, street trees and other “streetscape” elements along existing streets such as New Washington, as detailed under critical question 5.

### SAMPLE SEQUENCE OF PUBLIC/PRIVATE INVESTMENTS IN INNER BELT PROPERTIES AND INFRASTRUCTURE

*Sample private and public investments are grouped into these different categories, each representing a DIF (District Improvement Financing) district. On the diagram below, colors distinguish DIF categories, numerals in squares indicate private redevelopment, numerals in circles indicate public infrastructure improvements funded through that private development, and number sequence indicates a sample implementation sequence within each DIF district.*

#### Inner Belt Gateway/Washington Street DIF district (yellow)

1. Phase 1 redevelopment of the Cobble Hill shopping center occurs. Over 3.5 to 4.5 years, its tax revenues can fund streetscape improvements along Washington St., New Washington St. and Inner Belt Rd., a new street linking Washington and New Washington along the Cobble Hill Shopping Center, and extension of Roland Rd. to Inner Belt Rd. through direct General Fund appropriations
2. Phase 2 redevelopment of the Cobble Hill Shopping Center, plus any ONE of the sites with a dashed outline, can fund “Tubes” replacement and a new park along New Washington St. through bond financing.

#### Inner Belt Gateway/New Washington Street DIF district (orange)

1. An initial office building redevelopment adjacent to Washington Station (private and MBTA ownership), plus interim park-and-ride parking revenues, funds an adjacent public parking structure serving multiple sites and uses through bond financing
2. Redevelopment on two additional sites (private, MBTA and city ownership), plus interim park-and-ride parking revenues, funds a second public parking structure serving multiple sites and uses through bond financing

#### Brickbottom DIF district (magenta)

1. Housing redevelopment on the Cataldo Ambulance and adjacent sites funds streetscape improvements along Joy, Chestnut, Linwood and Poplar Streets through General Fund appropriations

2. Mixed-use development on additional sites north of Joy St. funds a Joy Street public space and pedestrian connection across the Green Line (supplementing MBTA Community Path funding) through bond financing
3. Mixed-use development on additional sites between Joy and Linwood Streets funds a public parking structure and street between Joy and Linwood.

#### Inner Belt South DIF district part 1 (blue)

1. Mixed use redevelopment at 200 Inner Belt Road funds a new street underpass below the Lowell Line through bond financing.



## CRITICAL QUESTION 7

## What will new Green Line service bring—and when?

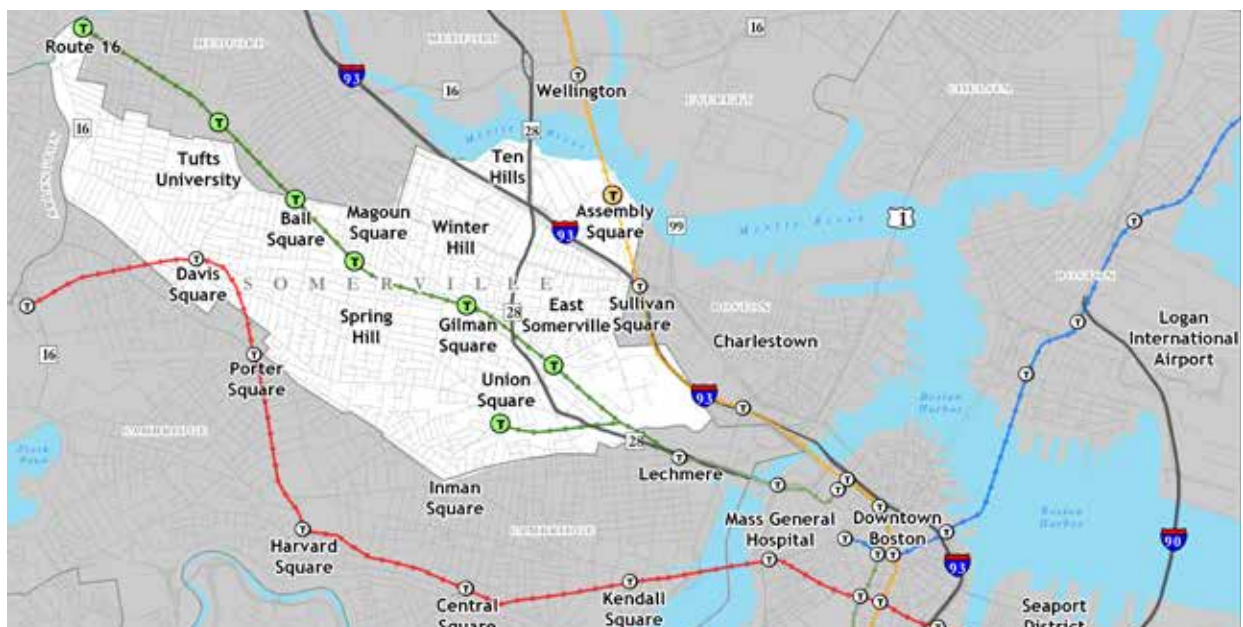
The MBTA Green Line is the most heavily-travelled light-rail line in the United States, with roughly 220,000 daily riders. It provides critical mass transit service between downtown Boston and inner-ring suburbs to the west such as Brookline and Newton. Regionally-significant job centers such as the Longwood Medical Area, cultural icons including Fenway Park, and several major colleges and universities are located along the Green Line. The long-planned Green Line Extension to Somerville will bring convenient transit service to New England's most densely-populated city, connecting residents to jobs and unlocking new opportunities for our region's economy to grow in a sustainable, transit-oriented pattern.

Today, the Green Line light rail system terminates at Lechmere station, located in East Cambridge roughly 1/4 mile from the Somerville border. The Green Line Extension project will extend the light rail service roughly 4.5 miles northwest through Somerville along existing commuter rail rights-of-way. No at-grade street crossings will be built, since the existing rail line is generally below street level. Six new stations will be constructed, and the existing terminus at Lechmere will be moved to tie in with the commuter rail right-of-way.

The extension is being built in phases. The Washington Street station, along with two other stations closest to downtown Boston, will be completed and operational by early 2017. The MBTA signed a construction contract for this phase of the project in September 2013 worth \$393 million, and work is currently underway.

Four additional stations to the west will be completed by early 2019 (see pages 36–37). The MBTA is seeking federal funding for this phase of the project, and submitted an application to the Federal Transit Administration's "New Starts" program in October 2013.

The Green Line Extension project requires the MBTA to invest in new trolley cars and associated maintenance and service infrastructure. A fleet of \_\_\_\_\_ new trolley cars were purchased in 2012 to help handle the projected 50,000 daily riders using the new Green Line stations. A new Vehicle Maintenance Facility will be constructed in Somerville's Inner Belt district to handle storage and maintenance operations for the fleet. The facility will be located on Third Avenue, adjacent to the existing Boston Engine Terminal, which serves the MBTA's fleet of commuter rail locomotives.



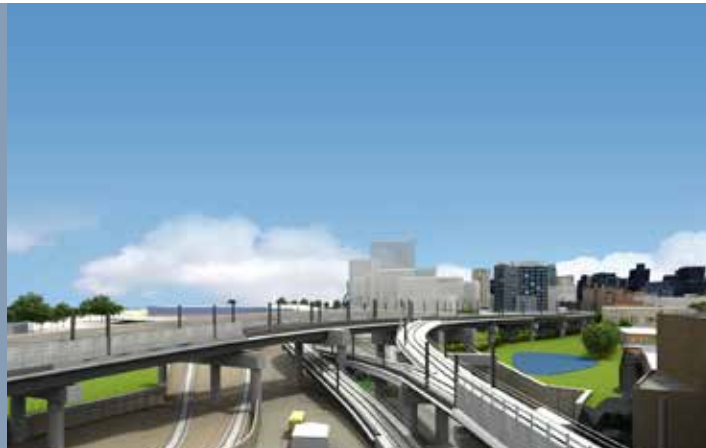
## BRICKBOTTOM STATION

The Brickbottom Green Line station will be open for service in early 2017. A construction contract worth nearly \$400 million was signed in 2013, and major site preparation will begin in 2014. The Washington Street bridge will be rebuilt, stormwater drainage infrastructure will be installed, and the station will be constructed. Riders will reach Boston's North Station in just six minutes.



## COMMUNITY PATH EXTENSION

The Somerville Community Path is a regionally-significant commuting and recreation resource which will soon connect the 14-mile Minuteman Commuter Bikeway to Somerville's west with the 15-mile Charles River path network. The section between Washington Street and Lechmere station will be particularly memorable, with expansive views from the viaduct as it climbs over the Fitchburg tracks.



*Community Path is on the other side of the MBTA bridge from us.*

## MAINTENANCE FACILITY

A large vehicle maintenance facility is necessary to operate the Green Line Extension, and it must be located near the new tracks. The MBTA is acquiring five acres of private property on Third Avenue to build the maintenance facility, which will be located adjacent to the 25-acre Boston Engine Terminal.



## CRITICAL QUESTION 8

## How will the Green Line station at Brickbottom work?



The MBTA Green Line Station will be located on the south side of Washington Street, stretching from Joy Street on the west to New Washington Street on the east. The Green Line trolleys will run in existing rail rights-of-way that currently separate Inner Belt from Brickbottom, parallel to Chestnut Street and Joy Street. The Green Line tracks will converge with the Lowell line commuter rail tracks just south of Washington Street, and both will cross Washington Street on the elevated rail bridge. The Green Line Extension does not include any at-grade roadway crossings.

Riders will enter the station from underneath the rail bridge. A long, glass-fronted arcade will be built facing Washington Street to create transparency and promote safety. Entrances to the arcade will be on the west and east sides of the station. Riders will enter into an open lobby, and fare gates will be located at the southwest (Joy Street) side of the lobby. Stairs, escalators and elevators will bring riders to the elevated station platform.

From the central platform, outbound trains will run along the Lowell commuter rail right-of-way to Gilman Square, Tufts University and eventually the Green Line's Mystic Valley / Route 16 terminus. Inbound trains will run along the old Guilford freight rail sidings between

Inner Belt and Brickbottom, and up onto a viaduct across the Fitchburg commuter rail tracks to the new Lechmere station, Museum of Science and Boston's North Station.

Like all the new Green Line stations, the Washington Street station is intended to function as a walk-up station that serves the neighborhood around it. No commuter parking lots or garages will be built by the MBTA, although an accessible drop-off site will be created just east of the station to serve users of the "The Ride" paratransit program.

To ensure safe and convenient access for riders from the neighborhoods north of Washington Street, the MBTA will be making improvements to the intersection of Tufts Street, Knowlton Street and Washington Street which include a new traffic signal and new crosswalks.

To encourage bicycle use, the MBTA will be installing protected cycletracks on the north and south sides of Washington Street between Joy Street and Tufts Street, and will build an indoor bike cage to provide safe, weatherproof locking options for cyclists. The Washington Street Green Line station will provide direct access onto the Somerville Community Path.

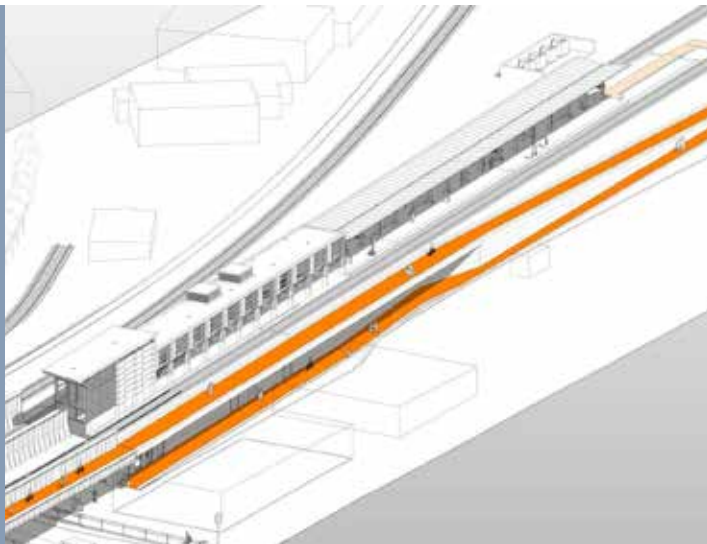
## BRICKBOTTOM STATION

The entrance to the Green Line station will be located underneath the rebuilt Washington Street bridge. The elevated platform is located at bridge level. Accessible drop-off facilities and bicycle storage are located to the east. Pedestrian and bicycle improvements will be made along Washington Street between Joy Street and New Washington Street.



## COMMUNITY PATH

The Community Path is an important way to get Green Line riders to and from the stations. At Washington Street, the path will run alongside the Green Line tracks on the rebuilt bridge structure. The main line of the path will continue south toward Lechmere, and a switchback will connect the station platform's emergency egress back to street level at Washington Street.



## ACCESS IMPROVEMENTS

Thousands of Green Line riders will be walking to the Brickbottom station from East Somerville, and Washington Street creates a major barrier. The MBTA is redesigning the intersection of Washington Street, Tufts Street and Knowlton Street to ensure safety and accessibility, and will install a new traffic signal along with new crosswalks to ensure safety and accessibility.



## CRITICAL QUESTION 9

## When will McGrath Highway be rebuilt as an at-grade roadway connecting neighborhoods?



For generations, heavy transportation infrastructure has isolated the Inner Belt and Brickbottom districts. Today, coordinated planning is beginning to turn historic barriers into assets for access and placemaking. The Massachusetts Department of Transportation's Grounding McGrath initiative is one such example with major implications for the future of Inner Belt and Brickbottom.

State Route 28, known as McGrath Highway in Somerville and O'Brien Highway in Cambridge, is a classic example of a freeway being cut through pre-existing urban neighborhoods, serving suburban automobile commuters at the expense of urban residents and business operators. Throughout its 1.5 mile length in Somerville, the oversized McGrath Highway divides neighborhoods, denying many residents the ability to safely walk to a neighborhood school or grocery store. The elevated section between Washington Street and the Cambridge city line is known as the McCarthy Viaduct was constructed in the mid 1950's, creating a towering wall that separates Brickbottom from the historic and walkable Union Square neighborhood to the west.

Community members have been advocating to remove the elevated portion of McGrath for many years. Under Governor Deval Patrick's administration, the Massachu-

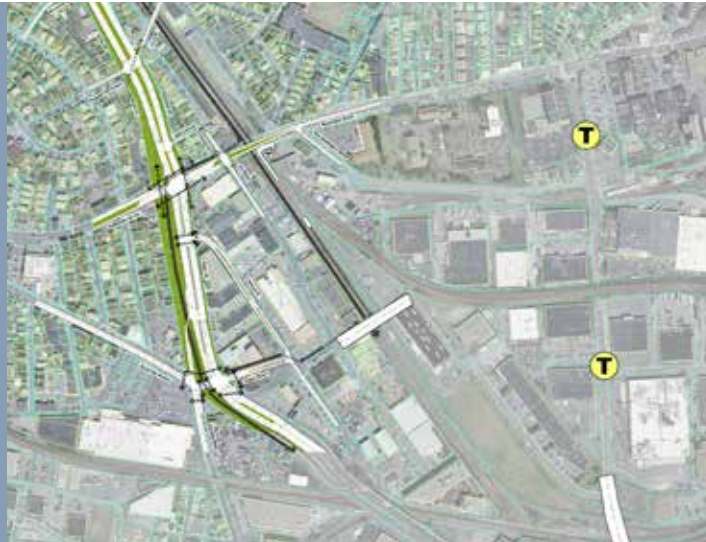
setts Department of Transportation has engaged in a series of landmark collaborations to evaluate whether and how to move forward and implement the community's vision. In 2011, the "Grounding McGrath" study was launched, blending traditional traffic engineering with a 21st century sensibility that focuses on urban design and livability in the highway corridor.

A two-year public process was led by MassDOT, working through existing conditions analysis, development of alternatives for study, alternatives analysis and ultimately recommendations. Economic development, environmental sustainability and public health figured prominently in the study process. Consistent participation by local residents, community-based organizations, municipal governments and state agencies allowed for a meaningful dialogue about various strategies being considered.

In May 2013, the study team shared its recommendations with the public, calling for removal of the elevated McCarthy Viaduct and replacement with an at-grade roadway that better serves all users. In December 2013, a draft study report was published for public review and comment. The Grounding McGrath initiative will now move into its formal environmental review stage.

## COORDINATED STUDY

The MassDOT Grounding McGrath effort was closely coordinated with the City of Somerville's Inner Belt / Brickbottom Master Planning process. Between 2011 and 2013, state and municipal staff worked together to manage the projects, and consultant teams shared data and analytical methods. Both studies relied heavily on stakeholder focus groups, which included many of the same residents, businesspersons and advocacy organizations.



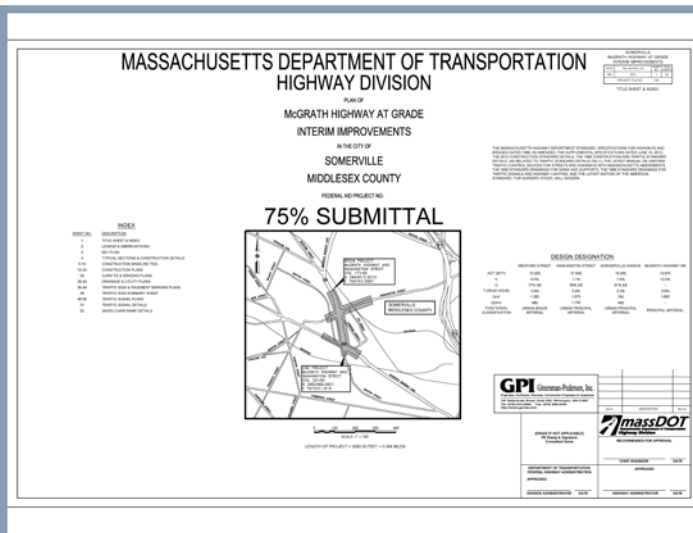
## INTERSECTION DESIGN

Designing a new intersection at Somerville Avenue, Medford Street and Poplar Street is extremely complicated, in part because the City of Cambridge values Medford Street in Somerville as a cut-through for suburban drivers headed to Kendall Square. The 2013 Grounding McGrath study examined basic options for new intersection geometry, but detailed designs will not be explored until the project's environmental phase begins (2014).



## INTERIM IMPROVEMENTS

Since construction of a new at-grade roadway would likely take place between 2021 and 2023, MassDOT has committed to a series of interim improvement measures, including upgrades to pedestrian crossings at several locations, on-street bicycle facilities, and closure of redundant ramps and tunnels along the viaduct.



CRITICAL QUESTION 10

# Will congested roads threaten our smart growth goals?

For generations, Somerville has been viewed as a cut-through for regional traffic, the kind of place that people want to go through, not to. A relatively small local jobs base and insufficient public transit meant that the vast majority of the city’s 45,000 workers were forced to drive to their place of employment, since local jobs were few and public transit options insufficient. Today, Somerville is re-establishing a more balanced approach to meet its transportation needs.

This master plan is rooted in the philosophy of choice. The Inner Belt and Brickbottom districts are ideally located to offer unique access to the MBTA’s Orange Line and Green Line, Interstate 93, the future Community Path, and walkable neighborhoods like East Somerville and Union Square. To achieve smart growth targets called for in regional and local plans, roughly 50% of new trips should be handled by transit, bicycling and walking, and 50% are expected to be made by automobile. The City must preserve roadway capacity for essential vehicular trips, like commercial trucks serving local businesses.

To test whether these goals are viable, the study team evaluated existing conditions, historical trends, and future projections under several growth scenarios.

A progressive partnership with the Massachusetts Department of Transportation and the region’s Central Transportation Planning Staff allowed the Inner Belt / Brickbottom team to run development simulations using the officially-endorsed regional model, which accounts for changes like the new Green Line service and major new smart growth project like Assembly Square and North Point.

The results of these modeling efforts indicated that if new development is oriented around pedestrians and public transit, the region’s roadways can handle that growth. Techniques known as “Transportation Demand Management” must be used to discourage unnecessary driving. These techniques include parking management, shuttle services, and employer investments in transit passes and bicycle facilities.

In addition, street reconstruction and new street projects must use a “Complete Streets” approach that emphasizes designs accommodating all forms of travel. Recent studies have shown that local economies perform better near complete streets projects than near 1960’s style roadway projects. The City of Somerville will publish a Complete Streets design manual in 2014.

2035 PROJECTIONS			
BASELINE 2010			
SCENARIO 1			
Approx. 6 million sf of development, 70% trips by auto			
SCENARIO 2			
Approx. 6 million sf of development, 50% trips by auto			
Daily Vehicle Miles Traveled	85,000 miles	131,000 miles	41,000 miles
Daily Trips	12,000 trips	36,000 trips	24,000 trips
% of Non-Auto Trips	5%	30%	50%

## WASHINGTON STREET

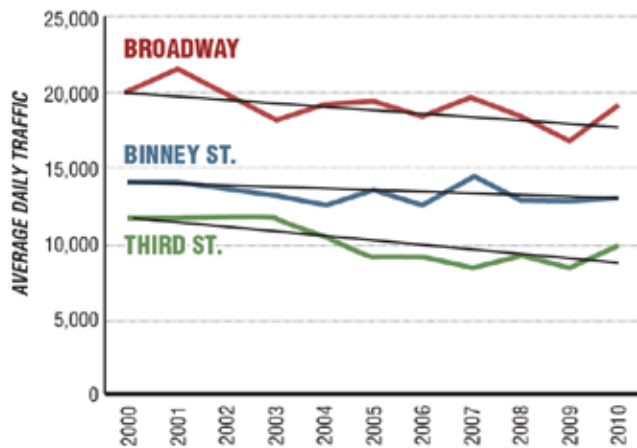
For Inner Belt and Brickbottom to grow, traffic congestion in Somerville's Union Square must be alleviated. During peak commuting hours, the intersection of Washington Street and McGrath Highway experiences backups stretching eastward from Union Square, more than 1/4 mile away. The City of Somerville recently began a major intersection redesign project for Union Square that will improve traffic flow all the way to New Washington Street.



## DEMAND MANAGEMENT

Traffic patterns can be viewed as a supply and demand relationship. Wider roads do not solve traffic problems, since they increase both supply and demand. The Kendall Square success story is about demand management. By limiting parking, improving mass transit, and focusing on biking and walking, the City of Cambridge has helped bring 20,000 new jobs to Kendall since 1999. Automobile traffic has dropped 14% during that period.

Kendall Square Average Daily Traffic with Trend Lines



## INTERSTATE 93

North of Boston, Interstate 93 carries roughly 250,000 cars every weekday. Efforts are underway to squeeze additional capacity from the existing roadway, including reclaiming unused lane space at the High-Occupancy Vehicle lanes near Sullivan Square. New development in the I-93 corridor must adhere to smart growth principles, with siting, uses and designs that allow 50% of new trip demand to be met by public transit, bicycling and walking.



## CRITICAL QUESTION 11

## Will stormwater drainage threaten growth in Inner Belt & Brickbottom?



For generations, heavy transportation infrastructure has isolated the Inner Belt and Brickbottom districts. The low-lying Inner Belt district has historically struggled with drainage issues. Much of the area is former marshland filled in during the nineteenth century. Roughly 85% of all sewer and stormwater drainage in Somerville makes its way to the study area. Storm and sewer flow from much of central and western Somerville is piped through the MWRA's lines connecting Poplar Street in Brickbottom northeast to Sullivan Square.

Drainage from East Somerville and much of the Inner Belt, however, does not successfully escape the study area. Large pipes run east along New Washington Street and north along Inner Belt Road, then join together to run east along Third Avenue toward Interstate 93 and ultimately the MBTA's engine terminal facility. A major blockage in an historic stone culvert on MBTA property prevents drainage, and backups and flooding have been common in recent decades.

The City and its partners are working towards progressive solutions for drainage and flooding issues in the district, to ensure public safety today and unlock development opportunities during the coming decades.

The MBTA will design and build a major pump station adjacent to the Washington Street Green Line station, a buried detention cistern running along the Green Line tracks south of the station, and a detention pond at the site of the former Red Bridge.

The City of Somerville has adopted a stormwater ordinance that will support on-site stormwater retention in upstream neighborhoods, and is expanding education programs for water and sewer ratepayers to encourage conservation. The MBTA and the City are partnering to prepare hydrologic models of the Inner Belt and Brickbottom districts, to quantify the performance and cost benefit of various improvement plans.

This plan recommends that rather than attempt to retrofit the MBTA's old stone culvert drainage, the City partner with the MBTA and MWRA to bypass it, ensuring that system capacity equivalent to a functioning old stone culvert is made available at an alternate location. Pipes below Inner Belt Road should be reversed to flow south instead of north, and should be connected to large pipes along the MBTA's Fitchburg rail line that run east behind the engine terminal.

## HISTORIC MILLER'S RIVER

Much of Inner Belt is filled marshland along the banks of the historic Miller's River, and Boston Harbor is only a mile away. Projected sea level rise provides a strong incentive for sustainable development strategies in the district. New drainage capacity is needed to increase resilience from flooding events. Adaptation strategies including on-site stormwater retention and siting of electrical systems in new buildings above basement level will also be key.



## OLD STONE CULVERT

Constructed around 1940, the five-foot square "Old Stone Culvert" is located on MBTA property on Third Avenue, and was designed to serve a 250-acre drainage area. A major upgrade project was planned in the early 1990's, but never built, and the culvert has since become unusable due to sediment blockage. Cleaning, upgrades, or re-routing of all related pipes will be necessary to achieve this plan's goal of 12,000 new jobs and 2,000 new housing units.



## 2010 FLOOD EVENT

A flash flood event in July 2010 caused widespread damage in Somerville and Cambridge. Insufficient capacity at the New Washington Street pump station contributed to flooding underneath the Washington Street bridge. As a result, the Green Line station is being designed with a much more robust stormwater system, including major upgrades to the pump station and significant detention facilities along the tracks to the south.



CRITICAL QUESTION **12**

## What constraints do “The Tubes” impose?

The earthen berm that carries the Lowell commuter line rail tracks is a tremendous impediment to north-south mobility in the Inner Belt district. The temporary Tubes that bring Inner Belt Road underneath the tracks are a public safety hazard, and a clear deterrent to new investment. Replacement of the Tubes with a real bridge structure is one of the top priorities of this plan.

Installed in 1985, the Tubes were intended to be a temporary substitute for a bridge. They offer poor sight lines, dangerous and inaccessible sidewalks, and potholed roadway surfaces. Business and property owners have been watching the corrugated metal become more and more compressed by the weight of the berm, tracks, and trains, since there are no bridge abutments to carry the load above. The Tubes are the only public roadway connecting properties south of the Lowell line to the regional street grid.

Over time, the Tubes have been slowly collapsing under the weight of an unsupported load. In 1999, local business owners arranged to host a tour of the Tubes for state, regional and local officials. as the delegation

stood watching, an 18-wheel tractor trailer passing through the Tubes became stuck. The truck driver was forced to let air out of the truck’s tires to gain a few inches of clearance and extract the vehicle from the Tubes.

Replacement of the Tubes will require a coordinated plan of action, and significant financial resources. The *2005 Inner Belt Access Alternatives Study* by Vollmer Associates, and a circa 1988 study referenced therein by Universal Engineering Corporation, outlined a construction methodology and provided rough cost estimates. A primary driver of cost is the need to maintain Amtrak and commuter rail service during construction. To close the Tubes during construction, an alternate route must be established to serve properties south of the Lowell line. Third Avenue, a private road that crosses under the Lowell line to the east, should be used as a primary access route during replacement of the Tubes.

The Tubes also prevent establishment of radial Bus Rapid Transit service, which is a goal of this Plan.



## SO CLOSE, AND YET SO FAR

The Prudential Center seems close enough to touch, yet the “temporary” Tubes on Inner Belt Road are the only public way in or out of the district’s southern properties. Remarkably, there are no abutments to support the load above, meaning that the Tubes are not even classified as a bridge structure. This makes qualifying for public financing more difficult, despite the Commonwealth’s focus on improving bridge safety.



## THIRD AVENUE DETOUR

Just north of the Tubes, the private Third Avenue turns east toward Interstate 93. Dozens of trucks use this route every day to access the Royal White Laundry facility, and employees of the MBTA’s Boston Engine Terminal also use it. The City of Somerville should work with private landowners to secure safe and legal access for all vehicular traffic headed south of the Lowell line.



## THIRD AVENUE EXTENSION

Third Avenue crosses under the Lowell line using a narrow bridge. Just to the south of this bridge is the location of the MBTA’s future Green Line Vehicle Maintenance Facility, which is scheduled to be completed between 2018 and 2019. As the MBTA moves forward with construction, a partnership with the City of Somerville and abutting landowners should be explored to undertake any necessary traffic detours and drainage improvements in this area, and ultimately replace the Tubes.



CRITICAL QUESTION **13**

## How can zoning reform work for Inner Belt and Brickbottom?



For generations, heavy transportation infrastructure has isolated the Inner Belt and Brickbottom districts. Zoning is a means to an end. It is a tool that municipal governments can use to guide private investment in ways that are consistent with a shared vision for the future. The SomerVision Comprehensive Plan identifies zoning reform as a key step to achieving its smart growth goals. In 2013, the City of Somerville began a complete overhaul of its outdated zoning ordinance.

In Brickbottom, the vision is for small, fine-grained blocks with buildings built to the street edge. Adaptation of existing buildings will be encouraged to help retain the post-industrial feel of the district and to maintain a diversity of price points. Performing arts and fabrication spaces will be prioritized. New residential buildings in Brickbottom will be limited to between 30% and 40% of new square footage in the district.

In Inner Belt, the vision is generally for larger buildings, with the exception of along Washington Street where scale should be moderated. Commercial buildings such as office, lab and research & development will be prior-

itized to maximize on-site job counts. Commercial development should account for between 60% and 70% of new square footage in the district. Some residential buildings will be allowed to ensure a mix of daytime and evening activity.

In 2013, the City adopted a small zoning reform package for the North Point development district that offers important lessons for Inner Belt and Brickbottom. To make commercial development more attractive than residential development, the North Point zoning allows certain types of commercial buildings as-of-right, instead of by special permit, offering greater predictability for both the private developer and the City.

Zoning will also play a key role in managing transportation demand. A “less is more” approach to parking requirements will promote transit use, minimize up-front costs for developers, and improve housing affordability. Garage parking should be required, but shared garages should be encouraged so that not every new building has to park itself.

## BUILDING TYPES

This plan calls for 60%-70% of new development to be commercial (office, laboratory, fabrication). The most predictable way to achieve that mix is by organizing new zoning around building types. Since the residential real estate market is virtually infinite, but commercial development is more difficult, commercial buildings should generally be allowed by-right. In some locations, residential buildings should not be permitted at all.



## SITE ASSEMBLAGE

One of Inner Belt's competitive advantages is that it is one of very few districts in greater Boston than can support large-floorplate office and research buildings. New zoning should encourage neighboring property owners to work together to assemble large development sites. Clear design standards should be established to ensure active, pedestrian-friendly blocks and usable civic spaces even in large-scale projects.



## LAND DEDICATION

New development is expected to provide public benefits, and zoning reform can be used to ensure this process is transparent, fair and predictable. New streets, alleys and civic spaces are needed to achieve the vision for a vibrant Inner Belt and Brickbottom. A minimum land area dedication should be established for new development, and a clear entitlement path should be made available for developers who dedicate essential new streets to the City of Somerville.



### 3 | MASTER PLAN



**T**he Master Plan takes the community-based plan principles described in Chapter 1, plus the answers to critical questions covered in Chapter 2, and translates them into a tangible, achievable vision for Inner Belt and Brickbottom. The Master Plan includes the following components, including an initial Framework covering the entire study area, and guidelines for individual districts and subdistricts that manifest the framework in more specific place-based ways.

## FRAMEWORK

- **District identity framework**, drawing upon assets of the study area, and adding new elements, to shape the distinct sense of place needed to draw market-driven development and community activity
- **Street and thoroughfare framework**, adding to existing streets both the internal and external connections needed to expand safe, convenient choices for all modes, with emphasis on walking, transit and biking.
- **Public places framework**, a network of parks, plazas and greenways that add value to existing and new development in the study area, and build community by drawing together workers, residents and visitors from throughout the study area, city and region
- **Development framework**, a predictable guide for new building development that offers flexible options for capturing market-driven business and real estate growth potential, while manifesting the vision principles in high-value streets and public spaces.

**SUBDISTRICT GUIDELINES**, defining great new places through application of the components above

- **Inner Belt**
  - > *Inner Belt Gateway: Washington*
  - > *Inner Belt Gateway New Washington*
  - > *Inner Belt South*
  - > *Roland/Inner Belt East*
- **Brickbottom**
  - > *Brickbottom: Joy/Chestnut/Linwood*
  - > *Brickbottom: McGrath Edge*

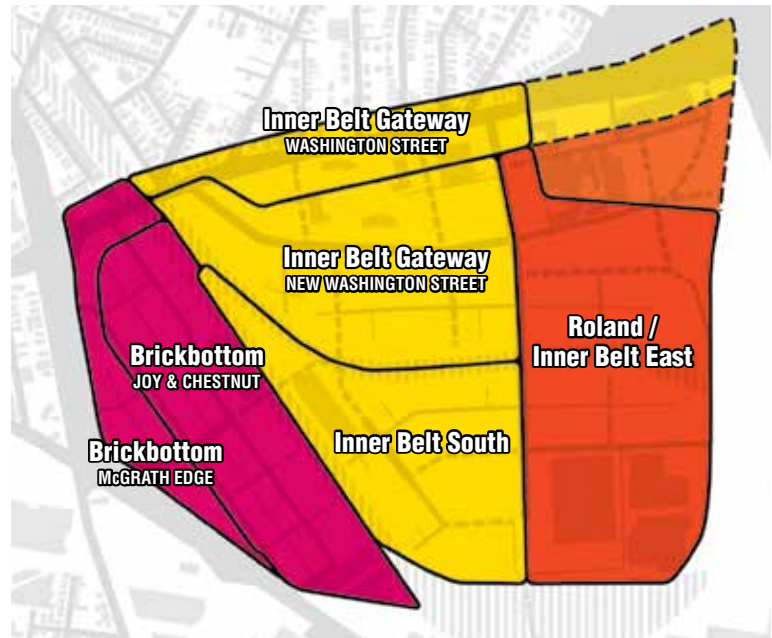
## MASTER PLAN FRAMEWORK

## DISTRICT IDENTITY

The study area includes two major districts—Inner Belt and Brickbottom—of distinct character. These districts further include subdistricts—four in Inner Belt, two in brickbottom—each with their own distinct character affecting physical scale and feel as well as market position. The districts and subdistricts are described beginning on page 64, with specific attention to these characteristics of streets, building form, land use and overall sense of place:

- Defining qualities, with attention to land use mix, scale and other factors
- Streets
  - > Character
  - > Sidewalk width and general characteristics
  - > Plantings, materials and streetscape
  - > Parking
- Street/building relationships
  - > Ground level use mix
  - > Ground level transparency
  - > Loading and servicing
  - > Building relationship to parks
- Building form
  - > Overall height
  - > Setbacks
  - > View corridors
  - > Specific themes and architectural character

## SUBDISTRICTS



*Four distinct subdistricts within Inner belt and two within Brickbottom should emerge, each with its own memorable sense of place and position in the real estate market.*



## STREETSCAPE DESIGN APPROACH

Distinct approaches to design should be applied to the overall Inner Belt and Brickbottom areas to reinforce the unique identity of each.

### INNER BELT

- Larger scale
- Stone, metal, concrete, refined
- Distinctive, contemporary
- Dedicated activity spaces



### BRICKBOTTOM

- Smaller scale
- Brick, metal, concrete, rugged
- Dynamic, creative
- Overlapping activity spaces



## MASTER PLAN FRAMEWORK

## STREETS AND THOROUGHFARES

## STREETS IN THE STUDY AREA

The streets the study area has and needs must serve multiple roles, all of them compatible with each other. Many service and parking access functions, needed by most all parcels, tend to detract from the pedestrian-friendly, transit-oriented address qualities that are important to attracting market-driven development interest and providing safe and inviting means of access other than driving. Therefore, the master plan outlines a street network for Inner Belt and Brickbottom that utilizes a range of street types, some tailored more to walkability and others more to service functions, arrayed so that each parcel can have the range of access it needs.

While some overlapping of pedestrian-oriented and service-oriented functions is inevitable—due to existing conditions and the incremental process through which the street network will grow—the more they can be separated, the greater the area’s value will be. Where physical overlap is inevitable, the timing of different uses can help reduce conflicts. For instance, alleys—termed “back streets” in this network—can be managed so that service access mainly occurs in the early morning or other times when few pedestrians are likely to be present. At other times of the day when traffic is light, pedestrians can feel sufficiently safe and welcome to make the back street an appropriate place for some front door addresses. Back streets can be designed to

reinforce this quality, so that vehicles using them proceed cautiously and anticipate the presence of people walking. This approach is particularly relevant to Brickbottom, where uses requiring significant service vehicle access and others requiring more pedestrian access coexist and there are few options for adding new streets. Locations in Inner Belt where similar conditions exist may also merit such an approach. However, the capacity and management limitations of the approach mean that it should be complemented by other streets that have greater distinction between pedestrian and service functions.

To achieve this goal the street network should incorporate the following hierarchy of types. Each street’s type should be reflected in its design and function, as well as the design and function of the buildings, open spaces and parking lining it. Off-street walking and biking paths—which sometimes run along a street and sometimes run independent of a street—provide important supplementary connections, and should be considered as part of the street network as well. These paths are diagrammed in the Public Places section of this document.

The street network responds to the street infrastructure prioritization described in Chapter 2.

## STREET NETWORK AND TYPES



## WALKING RADII





**FRONT STREET**—*priority location for retail, other active ground floor uses, and a safe and inviting walking environment*

- Ground floor commercial requirement
- Ground floor residential prohibited (except lobby)
- Min. Ground floor height requirement
- Loading, service, parking entrances prohibited
- Structured parking must be lined



**SIDE STREET**—*desirable location for retail and other active ground floor uses, with some flexibility to include service functions*

- No ground floor use regulations (intended for residential and office entrances)
- Ground floor residential shall have individual entrances
- Upper floor residential accessed by common lobby
- Width restrictions on service entrances/loading docks/ parking entrances (limited to one bay and 20% of block face)
- Structured parking must be lined



**BACK STREET**—*desirable location for occupied commercial and/or residential buildings featuring a regular occurrence of windows and doors, with some flexibility to include service functions*

- No ground floor use restrictions
- Ground floor residential shall have individual entrances
- Upper floor residential accessed by common lobby
- Width restrictions on service entrances/loading docks/ parking entrances)
- Structured parking acceptable with occupied ground floor, architectural facade



**ALLEY/SERVICE ACCESS**—*preferred location for service functions, to reduce their presence on front, side and back streets*

- No specific ground floor use requirements
- Minimal transparency (>10-20%)
- No sidewalk or streetscape required
- No plantings required
- Unlimited service docks/entrances
- Structured parking acceptable

## Street sections

Street section diagrams illustrate application of the street type characteristics to principal streets in Inner Belt and Brickbottom. The sections demonstrate how design and allocation of space use within the street area, and in adjacent buildings, should work together to achieve the desired qualities for the street. See Street Types diagram on page 54 for section locations.

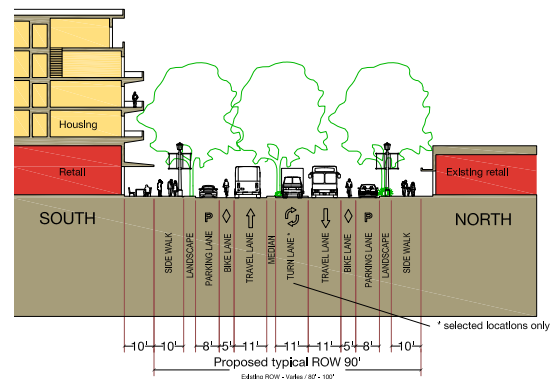
### A | WASHINGTON STREET LOOKING WEST

#### Character/Functional Goals:

- Create an attractive and an active mixed-use gateway to Somerville
- Create walkable connections across Washington St. between residential/retail uses to the north and transit and amenities to the south.
- Leverage infill opportunities to create a distinctive “Main Street” linking Washington St. and adjacent mixed-use development with Sullivan Square in the west and Union Square in the west.

#### Key Design Strategies:

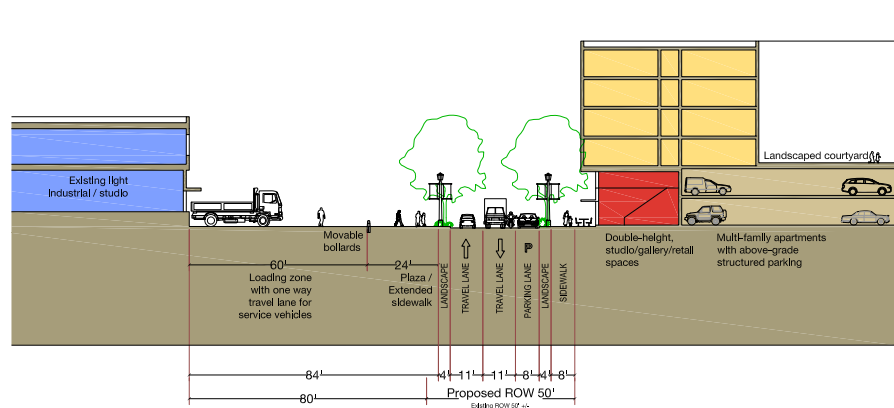
- Strengthen E-W pedestrian connection with active ground level uses.
- Provide spaces for outdoor dining along the infill buildings in the southern edge.
- Accommodate paratransit can parking and a taxi/drop-off stand near MBTA station on Washington St. and/or on New Washington St. per MBTA standards.
- Encourage distinctive architectural character with high degree of transparency.



### B | JOY STREET @ POPLAR

#### Character/Functional Goals:

- Reinforce and build upon the mixed-use, industrial character of the streets.
- Establish an Arts theme in streetscape improvements and in new public spaces.
- Provide new pedestrian-friendly amenities; minimize potential conflict between additional pedestrian traffic and existing loading/service functions.
- Accommodate periodic public events like art fairs, concerts, farmers market, etc., along/adjacent to street.



#### Key Design Strategies:

- Retain existing from loaded service condition. Encourage transparent garage door to minimize the extent of blank walls.
- Encourage flexible spaces that facilitate easy conversion of under-used service docks and indoor parking spaces into galleries retail or other uses.
- Employ street design elements like bollards, trees, and planter boxes to eliminate conflict between the service vehicles and pedestrian traffic.
- Reduce paved surfaces and increase ground water retention with permeable pavers and landscape strips.
- Manage parking/loading areas and/or provide public park space to accommodate public events.
- Install distinctive street lights that can also provide lighting for nighttime events.
- Incorporate locally-produced art into building exteriors, streetscape and public open spaces.

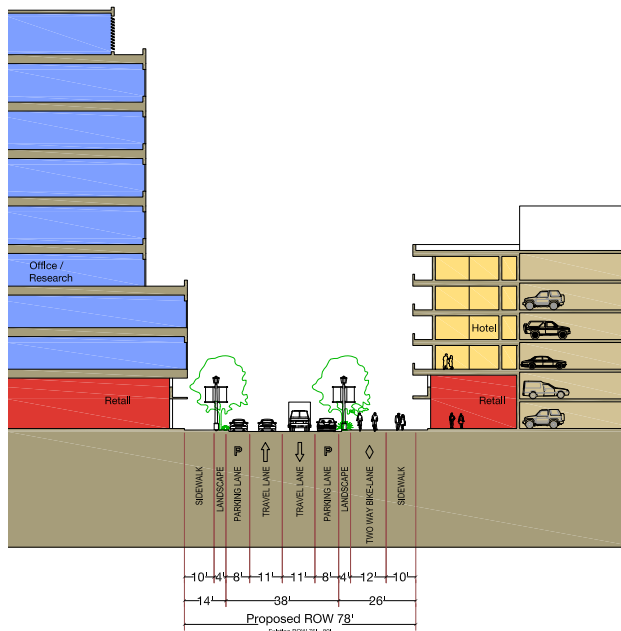
### C | INNER BELT ROAD @ NEW WASHINGTON (LOOKING SOUTH)

**Character/Functional Goals:**

- Create a prominent business address and gateway to the Inner Belt area and Somerville, emphasizing opportunity for new research-related development expanding on existing research uses in the area.
- Encourage high-value development and active ground-floor uses on vacant and infill sites.

### Key Design Strategies:

- Accommodate research/office buildings distinctly visible from Washington Station.
- Limit curb cuts and entrances to parking garage and service docks to side street.
- Use permeable pavers, rain gardens and other street-edge landscaping to help manage storm water.
- Include greenway/bike path as signature public realm and connectivity feature.



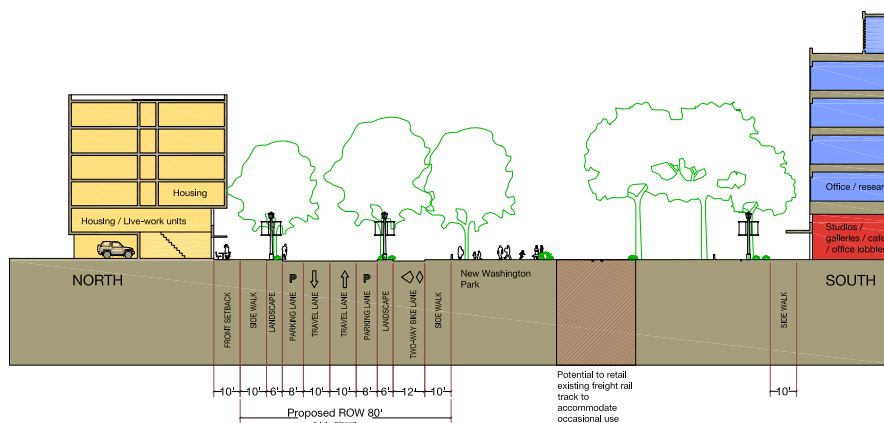
## D I NEW WASHINGTON STREET

**Character/Functional Goals:**

- A vibrant mix of infill residential and new office uses organized by proposed park—an upgraded expansion of existing dog park that will cater to new residents, visitors and office employees.

### Key Design Strategies:

- Distinct residential/live-work edge with front gardens along the infill residential development north of the park.
- Office buildings with active ground-level uses and outdoor dining along the southern edge of the park.
- On-street parking on both sides of the streets and tighter travel lanes as a traffic calming measure.



DRAFT

## MASTER PLAN FRAMEWORK

## PUBLIC PLACES NETWORK

*A highly visible and useful system of public spaces that touches every block, helps establish sense of place, and can be achieved through a series of practical near- and longer-term improvements.*

Public parks and landscaped streets create community value as amenities attracting people to work, live and play. This community value builds economic value by attracting investment in workplaces, housing and neighborhood retail and dining, that naturally benefit from being near centers of community activity. Inner Belt and Brickbottom will particularly benefit from added parks and landscaped streets as very little of these are currently present (apart from the successful dog park on New Washington Street). SomerVision has further identified the study area as a priority location for new

park space serving the whole Somerville community, given the relative lack of other open space opportunities in the city.

The public places framework outlines a network of public places that are varied in their form and program. This is partly to provide the wide variety of activities a diverse community seeks at different times of the day, week and year, from the more personal to the more public—from quiet seating to active recreation, and personal enjoyment of public art to large festivals. The variation in form is also a practical means to create as much high quality public space as possible in an area that contains little city-owned land today and also needs to serve the economic development objectives outlined in this plan.

## PUBLIC PLACES FRAMEWORK



## Types of park and green corridor program opportunities

The public places network offers flexibility for a wide range of programming that can be confirmed over time

- **Parks.** Principal types and sample program:
  - > Destination parks, accommodating uses such as festivals; art and farmers' markets; compact sports and recreation events; dog exercise
  - > Local parks and plazas, accommodating uses such as outdoor seating for adjacent dining or retail; compact art installations and music performance; passive seating; ornamental plantings
  - > Semi-public spaces, accommodating uses such as seating and outdoor dining adjacent to building entrances
- **Greenways and bikeways.** Principal opportunities:
  - > Community Path, connecting on to other Somerville neighborhoods as well as North Point and the Charles River, and helping connect Brickbottom with Inner Belt
  - > Greenway links, augmenting the Community Path with landscaped walking and biking connections throughout Inner Belt and Brickbottom and connecting with transit and adjacent neighborhoods
  - > Public art and interpretive signage, expressing a creative identity for Inner Belt and Brickbottom, and telling stories of people and places from history and today
  - > Cycle tracks and bike lanes, integrating a high-quality, safe biking network with streets and destinations.
- **Landscaped streets.** Principal opportunities include:
  - > Tree canopy, gained from additional street trees
  - > Rain gardens, addressing stormwater impacts in environmentally health ways while also providing attractive landscape amenity
  - > Medians, adding gateway signage and plantings as well as enhanced pedestrian safety at selected Washington Street locations
  - > Green walls, transforming existing blank building walls or infrastructure into elements that contribute to a walkable, high-value environment



## Creating park space

The framework reflects four potential methods of securing land for parks and green corridors:

- Utilizing existing city-owned land.** The existing dog park on New Washington Street occupies a city-owned parcel (a remnant of the Inner Belt Expressway right of way) that stretches further along New Washington and offers additional parkland opportunity in the heart of an area with strong potential for redevelopment. The dog park, while highly successful, could potentially be relocated over time to other places in the study area if other park activities more directly related to adjacent development are desired. The city's former waste transfer facility at Poplar Street and McGrath Boulevard offers another important park opportunity. Like the dog park, it offers potential for near-term uses such as youth sports fields that serve the whole city, and that by attracting community activity serve as a catalyst for real estate development on nearby parcels. Over time, park program on the site could change or be relocated to places that better serve community goals. For instance, as the potential development value of the prominent site grows over time, the site or portions thereof could be sold (or swapped with other private land) for redevelopment and the proceeds used to purchase other park land in the study area.
- Incentivizing large redevelopment projects to dedicate new public park spaces.** The study area has potential, particularly in Inner Belt, for large redevelopment projects that include multiple buildings and the opportunity or need for new street and park infrastructure. Often it is in the direct interest of redevelopment applicants to incorporate new public park space to enhance the value of their real estate development (as well as to help satisfy stormwater management requirements with pervious landscaped area). This interest can be further incentivized by offering a development density bonus, where appropriate to context, in exchange for providing more significant amounts of public park space.
- Incorporating public park land into public rights of way.** Streets are important parts of the public open space network, expanding on their inherent role as active walking routes. Traditional streetscape elements like street trees, low plantings and benches create significant amenity by themselves, enhancing the value of adjacent property addresses. Where space allows along existing streets or those created as part of large-scale redevelopment, additional public facilities should be created. The off-street recreation path network leverages this opportunity, creating a highly visible element that is highly functional for access and recreation needs, solves some of the study area's access challenges, incorporates space for additional street trees and public art, and in total serves as a unique signature element lending identity to the study area. Small plazas and broadened sidewalks also offer significant public benefit, particularly where retail or other active uses are possible.
- Opportunistic use of land not useful for development or other private use.** Certain land areas lack real development value due to constrained size or shape inadequate for buildings. The rarely used freight railroad track that parallels New Washington Street may also offer opportunity for public use in portions of its land area. Such areas may be useful as park spaces, recreational path corridors and/or for landscaping and stormwater facilities. Public access to these lands may be possible in return for public investment in such infrastructure, in partnership with property owners.
- City purchase of park space.** City acquisition of additional land in the study area is always a possibility, but considered challenging due to the growing land costs associated with the area's development value. Therefore, the alternate means of creating park land described above are emphasized in this framework.

Private landscaped areas such as courtyards, and including green roofs, offer an important complement to public park land. While they may not be publicly accessible, they can offer multiple benefits as attractive landscapes, useful park areas for private use of workers or residents, and places that serve environmental goals benefiting the whole area like reducing heat gain and stormwater impacts. The public places framework diagram thus distinguishes some private open space opportunities to recognize these contributions.

## Creating civic space

### New City Park Creation

Civic space is often built by public agencies. The City of Somerville owns roughly 150 acres of civic space, and has added several acres in recent years. The 0.75-acre Zero New Washington Street Park at the corner of Inner Belt Road was opened in 2009, after the City acquired the land from the MBTA. Since design and construction of new civic spaces can cost around \$1 million per acre, the City is constantly exploring new financing opportunities.



### Private Dedication or Payment in Lieu

A second mechanism used to create new civic spaces relies on the energy of the private market. Many cities require new development to provide civic space on-site. In some cases, a private developer might prefer to transfer land ownership to a public agency, rather than build and maintain the space. Alternatively, developers might make payments in lieu of a land dedication. In Somerville's Assembly Square district, a private developer conveyed two acres of land to the Massachusetts Department of Conservation & Recreation. The revitalized Baxter Park was opened in 2013.



### Private Construction & Maintenance

Great civic spaces add value to private development, and in some cases, private developers build on-site civic spaces, retaining ownership and maintenance responsibilities. In 2013, the 200-unit Maxwell's Green residential was completed in central Somerville, featuring a central green framed by four apartment buildings. The private property owner maintains the 0.75-acre civic space.



## MASTER PLAN FRAMEWORK

## DEVELOPMENT FRAMEWORK

## LAND USE



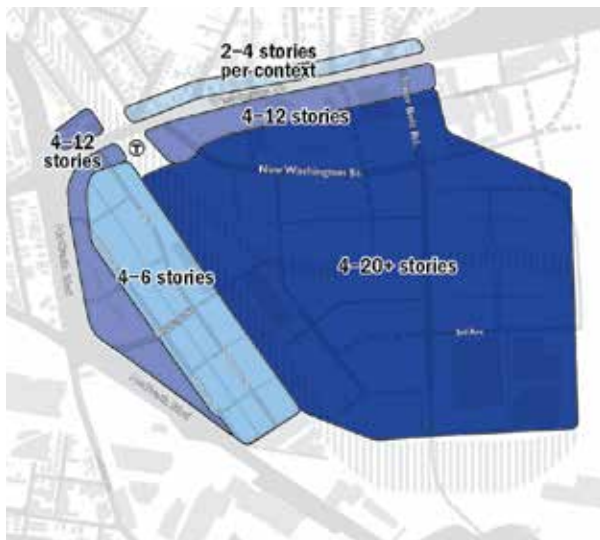
**Land use.** A variety of major land uses should be welcomed on every block in the study area, particularly in areas within ¼ mile of transit service. Mixing uses helps keep streets and parks active weekday and weekend, day and night; enables new development to respond in flexible ways to real estate market potential; and makes most efficient use of transportation and public place infrastructure.

## EFFICIENT SHARED-USE PARKING



**Efficient shared-use parking.** A development approach rooted in a proactive Transportation Demand Management (TDM) policy both promotes efficient use of land and financial resources devoted to parking, and ensures that adequate, conveniently located parking is available to serve existing and new development. Public parking, shared among different land uses that exert peak demand at different times, should be located in the toned areas shown to leave space for occupied buildings along major public streets and parks. As development intensity increases in the study area, structured parking should be used to maximize development potential. Near-term parking needs may be accommodated in part by surface parking if sufficient space is available.

## DEVELOPMENT INTENSITY



**Development intensity.** Development throughout the study area should preferably rise at least four stories, and at a minimum two to three stories, to best leverage potential development value and shape walkable streets. Additional height is welcomed where it can take advantage of views, expand development capacity and land use options, and lend regional prominence to Inner Belt and Brickbottom. In all cases, building height and massing should be designed to achieve transitions in scale to established neighborhoods or other sensitive context within a one-block area. In light of this goal, building heights up to...

- six stories are appropriate in core areas of Brickbottom respecting its small street and block scale;
- twelve stories are appropriate along McGrath Boulevard and Washington Street, reflecting the greater scale and visibility of these streets; and
- twenty or more stories are appropriate in portions of Inner Belt more than 100 feet from Washington Street, given this area's relative lack of sensitive context, and strong opportunities to leverage value of views out of and into the area.
- Building heights that diverge from these suggested minimums and maximums may be considered if their associated use and design are shown to advance the goals of the vision principles.

## VIEW CORRIDORS



## KEY VIEW CORRIDORS AND LANDMARK SITES

- ← Key public right-of-way view corridors through IBBB
- ← Key public right-of-way view corridors from IBBB
- Other priority view corridors and viewsheds
- ← Major external views into IBBB
- Priority area for landmarks visible from external viewpoint(s)

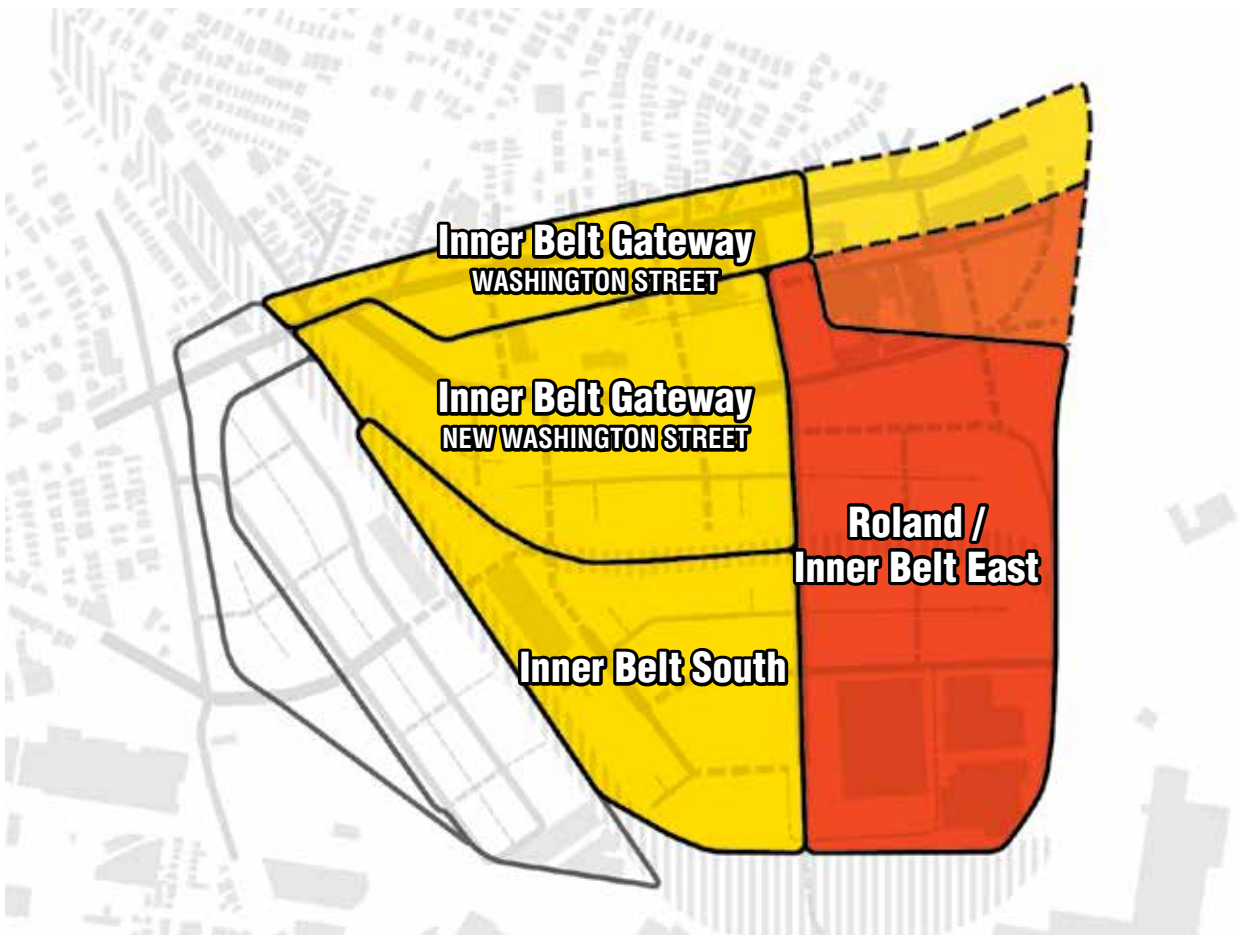
**View corridors.** The study area's high visibility from regional corridors like I-93 and McGrath Boulevard, and dramatic views out toward downtown Boston, Kendall Square, Somerville, Boston Harbor and other landscapes of interest, are major assets to leverage for their value in building sense of place

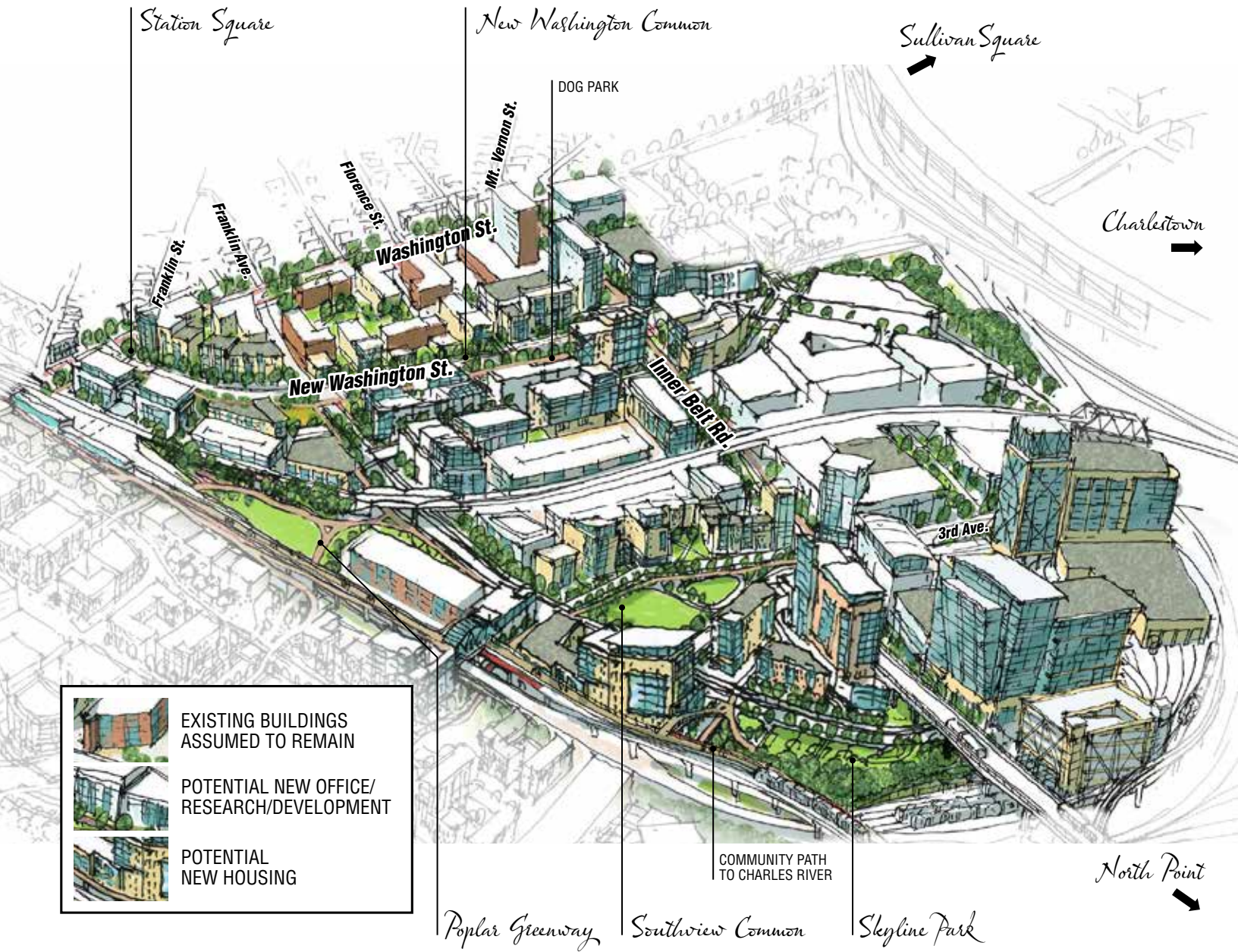
and economic value. Development proposals should demonstrate how they take advantage of these opportunities.

## CHARACTER AREA SUBDISTRICTS

# INNER BELT

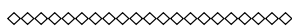
*Inner Belt is a large, high-value district that presents unique opportunities in the regional marketplace for master-planned sites, mixed land use, new and more walkable street and block patterns, large-floorplate building types, and larger open space typologies.*





DRAFT

# INNER BELT GATEWAY: WASHINGTON ST



## DEFINING QUALITIES

- Somerville and Inner Belt gateway
- Scale and use transition to East Somerville
- Mixed employment, housing, retail, hospitality
- Access choices

*As the front door to Inner Belt today and location of the Washington Street Green Line station, the Inner Belt Gateway/Washington subdistrict will continue to play a critical role in defining identity, providing access and attracting investment for the Inner Belt area. High quality mixed-use development should be prioritized wherever possible along this corridor in the near term, to demonstrate the new era of economic and community development potential now arriving here with the Green Line. New development should include both office space, to reinforce the larger Inner Belt district as an emerging center for knowledge-based business, and housing, hospitality and retail space, to leverage established market opportunity and help reinforce community connections with East Somerville.*

## DEVELOPMENT OPPORTUNITY



## PUBLIC REALM



HOUSING

PUBLIC SIDEWALKS &  
PLAZAS WITH ENGAGING  
BUILDING USES, ART, DESIGN

EXPANDED,  
IMPROVED WALKING  
NETWORK

EARLY STAGE SMALL-  
OFFICE & RETAIL  
DEVELOPMENT


*The intersection of Washington and New Washington Streets presents the most important near-term opportunity to demonstrate the value of new Green Line service with new high-value development and a public realm designed for people. Planned multifamily housing and neighborhood retail, shown at left, should be complemented with prominent office development and clear, convenient walking access to the station from all directions.*

DRAFT

## INNER BELT GATEWAY: WASHINGTON ST

# *development and design guidelines*

## Streets

### Street character

- Distinctive gateway to Inner Belt area and Somerville as a whole.
- Active neighborhood-oriented ground level retail edge and sidewalk uses.
- Potential short median at city line/Inner Belt Road intersection and where center left turn lane not needed. Otherwise, allocate surplus width to street edges.

### Sidewalk width and general characteristics

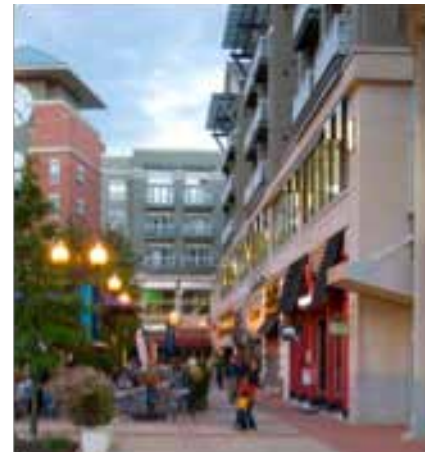
- Washington and Inner Belt Road: Widen existing sidewalk to 12'—14'. Minimum of 8' clear passage. Recommended 6' for tree lawns.
- New side streets perpendicular to Washington: 8'-12'
- Mixed use buildings with ground level retail
- Enable free flow of pedestrian traffic. Provide for single row of outdoor seating.
- Accommodate bus stops
- Accommodate added crosswalks, especially near Washington Station

### Plantings, materials and streetscape

- Maintain existing mature trees. Add canopy trees where missing. Utilize trees to help mitigate scale transition between building heights on either side of street. New street trees to match existing already on site.
- Distinctive materials, differentiated from Brickbottom. The use of specialty paving materials to enhance the area; granite and/or concrete unit pavers.
- Signage (banners, median sign and/or other) indicating entrance into Somerville. Light fixtures to include LED banners and speakers for music and public announcements.
- Transform existing suburban-style landscaping (setbacks with lawns and shrubs) toward more urban approach (smaller courtyards shaped by buildings and/or fences; tree lawns; planters) Potential for planted areas to harvest rain water—bio retention

### Parking

- On-street parking typical (maintain existing parking along Washington; add along New Washington)
- Provide parking space for 'The Ride' paratransit and kiss-and-ride at the MBTA station.
- Provide signage to shared-use parking structures within Inner Belt area.



## Street / Building Relationship

### Ground level use mix

- South side: retail, transit station lobby. Automated ticketing machines, kiosk retail, cafes, drug store.
- North side: Convert to neighborhood-oriented retail or dining through renovation/ redevelopment.

### Ground level transparency

- 60-80% ground level transparency

### Loading and servicing

- Locate all servicing off side streets

### Building relationship to parks

- Accommodate public plaza spaces at corners with New Washington

## Building Form

### Overall height

- South side: 5-6 stories; greater heights possible near Washington Station. Include transitional height elements (setbacks, cornice lines etc.) to make transition to 2-3 story scale of north side.
- North side: 2-3 stories typical; 4-6 stories possible if compatible with adjacent neighborhood.

### Setbacks

- Build to line where proposed roadway design can accommodate 14' sidewalk.

### View corridors

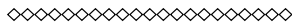
- Maintain view corridors along N-S streets to keep the option open for future connections with the street grid south of Lowell Line.

### Specific themes / architectural character

- Encourage distinctive architectural character emphasizing high-value businesses, hotel/visitor accommodations



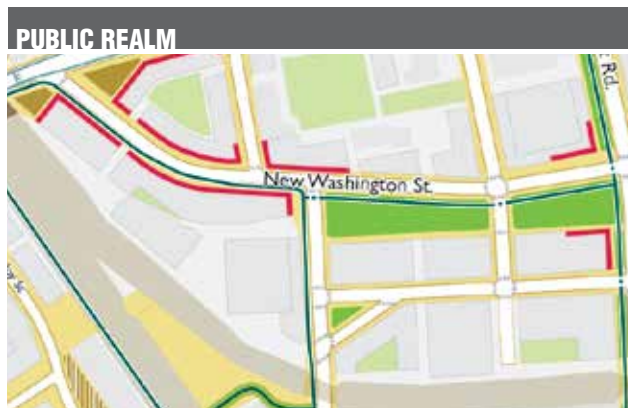
# INNER BELT GATEWAY: NEW WASHINGTON ST



## DEFINING QUALITIES

- High quality, high profile public spaces and architecture
- Destination park
- Mixed employment, hospitality, housing, retail

*New Washington Street offers the study area's most important economic development potential over the next ten years, owing to its convenient walking access to both the Washington and Sullivan Square transit stations, adjacency to established life science, hospitality and housing investment, and variety of significant parcel redevelopment opportunities. Redevelopment potential on both sides of the street, and the current presence of a park and other public land, create special opportunity to transform the street into a landmark public space that heightens development value and builds sense of community within and beyond the subdistrict.*



FLEXIBILITY FOR SIGNIFICANT BUILDING HEIGHT AND FLOORPLATES—DESIGNED TO HUMAN SCALE

PUBLIC SPACE AMENITY SERVING WORKERS, RESIDENTS, VISITORS



*The New Washington Street dog park became a valued community destination remarkably quickly. This public space should evolve into one that serves a growing variety of people living and working nearby, and coming from other neighborhoods, as redevelopment proceeds on parcels along New Washington. As this happens, consider relocating the important dog park function to another space(s) in the study area as a way to establish additional community park destinations.*

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## INNER BELT GATEWAY: NEW WASHINGTON ST

### Sample investment sequence along New Washington Street

New Washington Street has special significance as a place for early development opportunity. Its direct connection to the new Washington Street Green Line station, easy access from Washington Street and Inner Belt Road, variety of parcels with flexible redevelopment potential as well as viable ongoing uses, and presence

of Zero New Washington Park, provide good assets and options attracting reinvestment. Images on these pages depict a potential sequence of site redevelopment and infrastructure improvements working hand in hand to create a great place to work, live and play.

#### EXISTING



*Today, New Washington is not an inviting place to walk or invest: sidewalks are missing, abandoned boxcars create an eyesore, and the adjacent Cobble Hill housing understandably buffers itself from this view with dense landscaping.*

#### PHASE 1



*In the distance next to Washington Station, a new office building is developed accommodating multiple small tech business tenants and ground floor retail. Sidewalks and street trees are installed flanking the street; an off-street cycle track is constructed to one side.*

**PHASE 2**

*A second office building is constructed near the bend in the street. Behind the office buildings, a public parking structure is built to replace temporary surface parking. A public art installation at left replaces the abandoned boxcars.*

**PHASE 3**

*New housing and neighborhood retail facing New Washington Street are developed on the right on underutilized portions of the Cobble Hill housing site at right. A large floorplate office or lab building is developed at far left for a major research company. The lightly used freight track on the left is integrated with publicly owned land to create a landscaped park.*

**DRAFT**

## INNER BELT GATEWAY: NEW WASHINGTON ST

# development and design guidelines

## Streets

### Street character

- A vibrant mix of high-value residential and office/research uses over ground floor retail and other active uses, grouped around a central linear park space serving a mix of residents, visitors and workers.

### Sidewalk width and general characteristics

- 12' - 20.' Sidewalk widths along park edges may differ from those along building edges.
- New side streets perpendicular to New Washington: 8'-12'
- Wider sidewalk with outdoor seating at retail uses (likely clustered toward Washington Station and Inner Belt Road). Consider consistent generous width accommodating more plantings and seating than other streets in study area.

### Plantings, materials and streetscape

- Canopy trees. Consider the use of larger street trees with open canopies for the wider sidewalks; Honey locust. Smaller trees on the narrower streets. Different tree species will help to define neighborhoods
- Signature linear park with numerous viewpoint along and across park to adjacent building facades. Park to include an in-ground water feature and areas for activities and contemplation. Dog park area?
- Accommodate occasional train passage along existing freight track; integrate track into landscape design. Potential to have freight carriages provide dining opportunities at certain times of the year
- Distinctive materials, differentiated from Brickbottom. Park and streets to incorporate materials and some references to the train which runs through the heart of the area
- Distinctive public art

### Parking

- On-street parking on all streets.
- Provide signage to shared-use parking structures located off side streets



## Street / Building Relationship

### Ground level use mix

- Mix of infill residential, office and hotel with ground floor retail/dining and entertainment on north side of street and park. Design ground level spaces to be convertible to retail.
- Emphasis on commercial/office uses south of the park, with potential housing interspersed, and ground level retail/dining/entertainment where possible. Design ground level spaces to be convertible to retail.

### Ground level transparency

- 60-80% ground level transparency

### Loading and servicing

- Locate entrances to parking garages and loading docks from side streets

### Building relationship to parks

- Building use and design should leverage quality and views of central park along New Washington.

## Building Form

### Overall height

- 5-6 stories typical, with towers of slender to moderate floorplate possible.

### Setbacks

- Build to line where proposed roadway design can accommodate 14' sidewalk. If the sidewalk is less than 10', employ 6'-10' setback to allow space for outdoor dining.

### View corridors

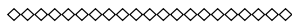
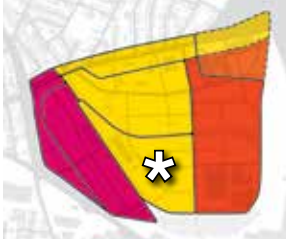
- Locate and design buildings to be prominent at either end of linear park.

### Specific themes / architectural character

- High quality, high-value design with significant transparency. Mix housing and/or hotel amidst office to prevent monolithic office character.



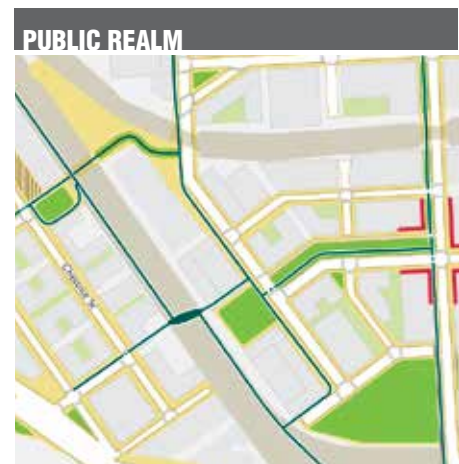
# INNER BELT SOUTH



## DEFINING QUALITIES

- View corridors to Boston/Kendall
- Destination park space
- Greater building height
- Mixed employment, housing

*Inner Belt South provides both an economically strong business park environment today, and the study area's most flexible and expansive set of redevelopment opportunities over the long term. The time required to enhance multi-modal access to the area—starting with replacing the “tubes” and creating safe, convenient walking access to the Green and Orange lines, and moving on to North Point/Kendall Square connections—means that current businesses can continue to operate in a stable environment even as market potential matures to unlock a new generation of development opportunities in the area. Those opportunities will leverage expansive potential for building height and floor area serving a variety of uses, fast connections to Kendall Square and other economic centers, regional views, and high quality public street and park spaces.*



NEW CONNECTIONS TO  
WASHINGTON STATION,  
BRICKBOTTOM

HIGH-VALUE  
COMMERCIAL AND  
HOUSING DEVELOPMENT

PARK, COMMUNITY PATH  
CONNECTIONS CREATING  
DISTINCT SENSE OF PLACE



*New direct walking connections to Green Line, Orange Line and Urban Ring corridor transit will unlock market potential to take advantage of Inner Belt South's large scale redevelopment opportunities. Tall buildings with views to Boston, Cambridge and Boston Harbor will tangibly demonstrate Somerville's strategically valuable location for business investment.*

DRAFT

**INNER BELT SOUTH***development and design guidelines*

## Streets

**Street character**

- A vibrant mix of high-value residential and office/research uses over ground floor retail and other active uses, grouped around a central park space serving a mix of residents, visitors and workers.

**Sidewalk width and general characteristics**

- Inner Belt Road and Third Street extension (west of Inner Belt Road): 12'-14'. Accommodate BRT/bus stops.
- Other new streets: 8'-12'

**Plantings, materials and streetscape**

- Canopy trees selected and located to be compatible with significant truck traffic. The selection of columnar street trees might be beneficial in this area to avoid conflicts with passing trucks.
- Distinctive materials, differentiated from Brickbottom
- Landscaped berm as buffer to active rail tracks and maintenance facilities. The berm could become an important feature within the landscape.

**Parking**

- On street parking
- Structured parking serving multiple uses in district



## Street / Building Relationship

### Ground level use mix

- Research, office, housing and hotel uses. Ground level retail/dining/entertainment where feasible.

### Ground level transparency

- Inner Belt Road and Third Street extension: 50-80% ground level transparency. Other streets: 40-60%.

### Loading and servicing

- Limit entrances to parking garages and loading docks to side streets.

### Building relationship to parks

- Leverage views to Inner Belt Intensity central park space.

## Building Form

### Overall height

- 6-30 stories. Pedestrian-scale elements toward ground level. Towers of slender to medium floorplate.

### Setbacks

- No more than 10'

### View corridors

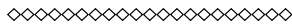
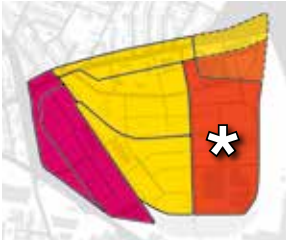
- Highlight public and private views toward Kendall Square, Lechmere and Boston.

### Specific themes / architectural character

- Encourage diverse architectural vocabulary that is tied together by an active pedestrian realm; where each residential building and towers is a distinct part of a unified high density mixed used cluster.



# ROLAND / INNER BELT EAST



## DEFINING QUALITIES

- Somerville and Inner Belt gateway
- View corridors in and out
- Roland St. historic character, life sciences use
- Greater building height
- Greater floorplates possible
- Mixed employment, hospitality, retail

*This subdistrict offers premier commercial development opportunity due to its high visibility and accessibility from I-93 and the Orange Line, substantial building floorplate and height opportunities, and adjacency to established life sciences uses. While Inner Belt Road and new streets in the subdistrict deserve high quality landscape and building architecture as premier, walkable address streets, the subdistrict's edges along rail infrastructure offer the study area's greatest opportunities for industrial and large-scale development unconstrained by pedestrian-oriented settings.*



FLEXIBILITY FOR SIGNIFICANT  
BUILDING HEIGHT AND FLOORPLATES

HIGH-VALUE RESEARCH AND  
OFFICE BUILDINGS WITH  
ACTIVE GROUND LEVEL USES

TRANSIT SHELTER  
SERVING BRT  
USERS

"TUBES" REPLACED WITH  
ATTRACTIVE BRIDGE FACILITATING  
CONTINUOUS STREETScape.

OFF-STREET RECREATIONAL  
PATH OR CYCLE TRACK

HOUSING

EXPANDED, IMPROVED  
PEDESTRIAN REALM



*Roland/Inner Belt East offers prime locations for development that benefits from high visibility, large floorplates, large total floor area, and clustering with life sciences program.*

DRAFT

**ROLAND / INNER BELT EAST***development and design guidelines*

## Streets

**Street character**

- Establish a walkable street grid compatible with large floor plate office/research/light industrial buildings and structured parking facilities.

**Sidewalk width and general characteristics**

- Inner Belt Road: 12'-14'. Accommodate BRT/bus stops.
- Roland Street and new streets: 8'-12' (or match existing Roland St. section)

**Plantings, materials and streetscape**

- Canopy trees selected and located to be compatible with significant truck traffic. The selection of columnar street trees might be beneficial in this area to avoid conflicts with passing trucks.
- Sidewalks to be concrete only

**Parking**

- On street parking
- Structured parking serving multiple uses in district



## Street / Building Relationship

**Ground level use mix**

- Research, office, light industrial and hotel uses. Ground level retail/dining/entertainment where feasible.

**Ground level transparency**

- Inner Belt Road: 50-80% ground level transparency. Other streets: 40-60%.

**Loading and servicing**

- Limit entrances to parking garages and loading docks to side streets

**Building relationship to parks**

- Building use and design should leverage quality and views of central park along New Washington.



## Building Form

### Overall height

- 6-20 stories

### Setbacks

- No more than 10'

### View Corridors

- Accommodate extension of Roland Street corridor to Inner Belt Road.
- Frame views down Inner Belt Road toward Lechmere, Back Bay

### Specific themes / architectural character

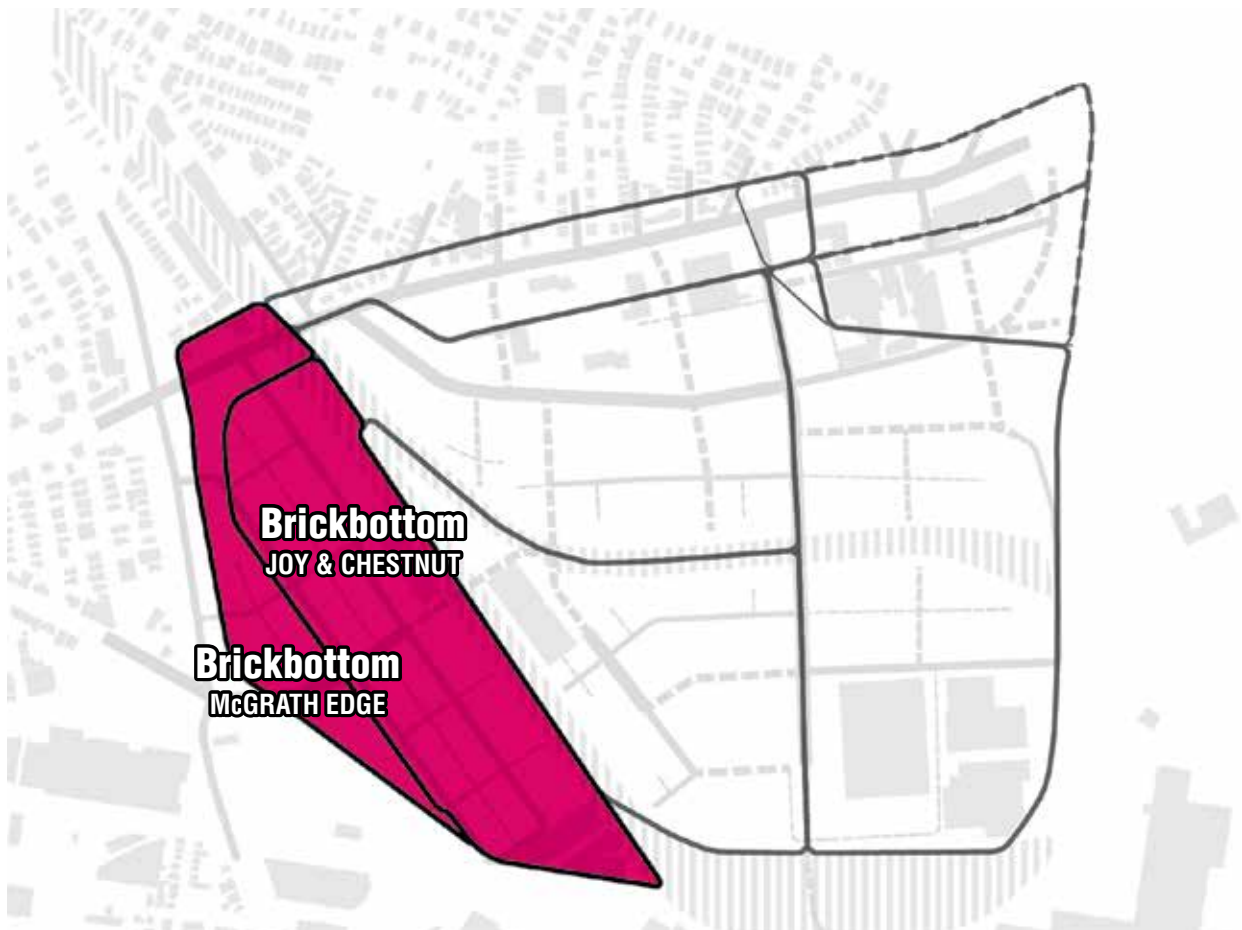
- Where possible open up ground level research and workshop spaces with transparent glazing bringing about a visual connection between pedestrians along the side walk and building users.
- High quality, high-value design with significant transparency.



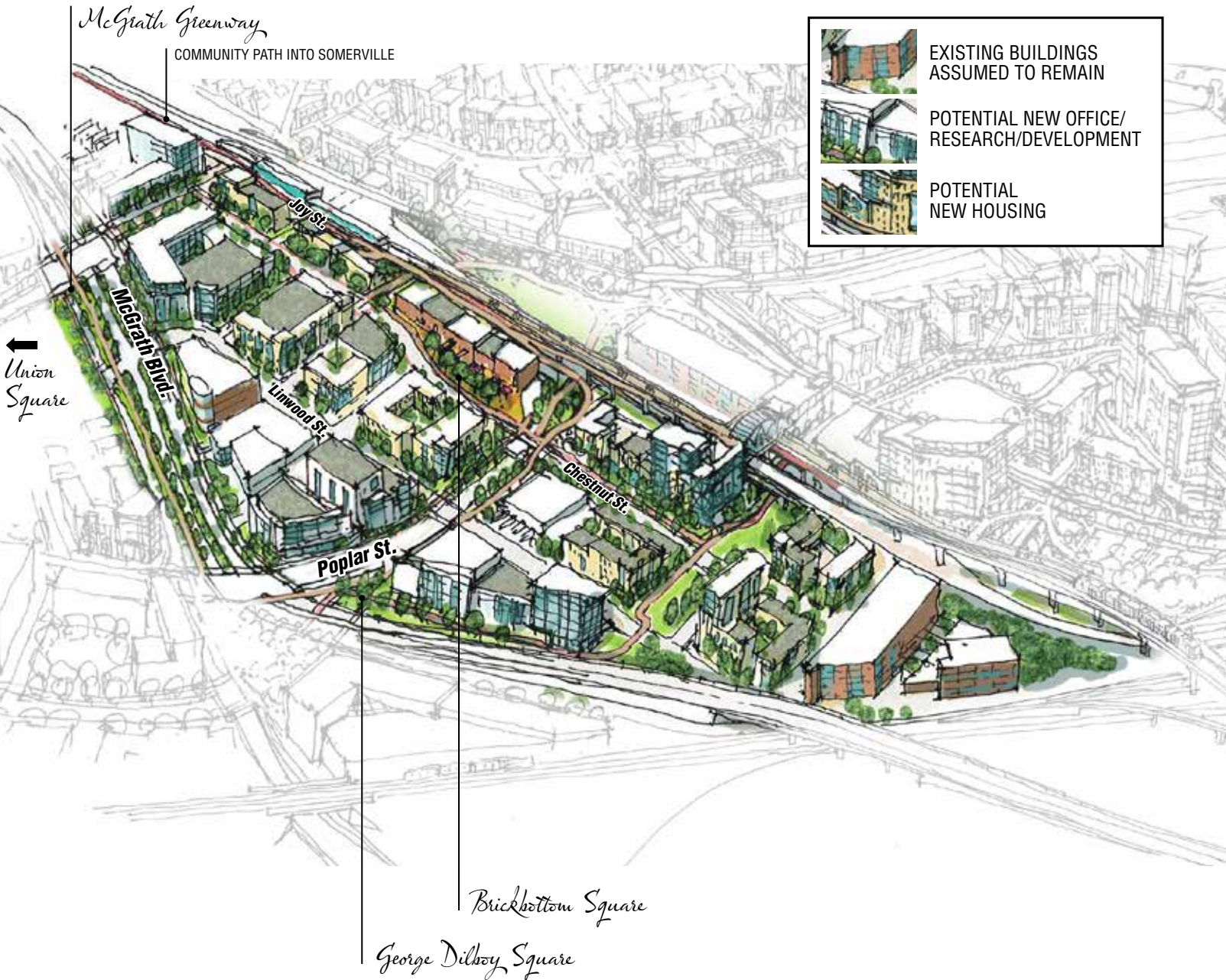
## CHARACTER AREA SUBDISTRICTS

# BRICKBOTTOM

*Brickbottom is a funky loft, arts/creative economy and nightlife district, with a relatively established street grid and compact, flexible-use public spaces that are scattered throughout the district. A mix of old and new buildings (and hence price points) provide variety of architecture and market opportunity. Building heights should generally rise four to six stories, with potential for as many as 12 stories immediately adjacent to McGrath Highway and Washington Street.*

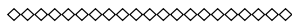


# ILLUSTRATIVE VISION CONCEPT



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# BRICKBOTTOM / JOY & CHESTNUT



## DEFINING QUALITIES

- Fine-grained scale: narrower streets, smaller parcels
- “Loose fit” tolerating mix of light industry, arts, office, housing, entertainment, retail
- Brick and industrial materials
- Public art
- Intermittent plantings

*Brickbottom sports the study area’s most established sense of place, anchored by a strong arts presence. While individual parcel redevelopment opportunities are limited in size, their variety, scale and walkable proximity to Washington Station mean they are both ripe for near term redevelopment and will collectively register substantial gains in economic impact and quality of place. Brickbottom can tolerate and thrive on coexistence of a wide variety of activities from light industry and arts fabrication to housing and office.*



DUAL USE OF PARKING/LOADING  
AREA FOR OCCASIONAL PUBLIC/  
ARTS EVENTS

STREETScape, WALKING AND  
BIKING IMPROVEMENTS LINKING  
BRICKBOTTOM TO GREEN LINE



NIGHT TIME  
ACTIVITY



INFILL: MIX OF OFFICE, ARTS,  
HOUSING, LIGHT INDUSTRY



*Joy Street and adjoining parking lots can become vibrant centers of community activity through design and programming that allow public and private uses to share the same spaces at different times. Needed new walks, trees, and lighting should be installed to allow broad flexibility of land use and vehicular access.*

DRAFT

**BRICKBOTTOM: JOY & CHESTNUT***development and design guidelines*

## Streets

**Street character**

- Reinforce and build upon the mixed-use, industrial character of the street with pedestrian friendly amenities for newer residents and visitors.

**Sidewalk width and general characteristics**

- 8'—12' on Joy, Chestnut, Linwood, Fitchburg
- 12'-14' on Poplar
- New streets parallel to Poplar: 6'-12'. Consider curbless shared pedestrian/vehicle streets.
- Enable free flow of pedestrian traffic while at the same time accommodating existing front loading zones in live-work buildings. Locate any outdoor dining or other outdoor active uses away from loading facilities.
- Consider lighting suspended from and/or projected on buildings

**Plantings, materials and streetscape**

- Include trees where possible, though limited street width and occasional loading docks limit consistent placement. Consider interspersing trees within parking lane. Species to consider in the narrow streets are Armstrong Red Maples and Princeton Elms which have an upright growth habit.
- Include additional plantings using planters, trellises, green walls or other strategies, especially where trees are infeasible. Due to the narrow streets static planters might be problematic. Consider installing smaller removable planters.
- Use materials compatible with industrial character—reinforcing limited presence of “brick” but also other industrial materials. Site furnishings to be constructed of powder coated metal with forms consistent with the industrial appearance. Consider a narrow brick furniture zone for the placement of lights, benches, trash receptacles, etc. Main walking surface to be poured in place concrete. Install solar power parking stations as a standard element throughout the entire project

**Parking**

- Employ on-street parking as an active design device to reduce vehicle speeds and to provide for additional parking demands from newer buildings.
- Consider eliminating the curb between sidewalks and streets, using bollards to separate on-street parking from sidewalk spaces



## Street/Building Relationship

### Ground level use mix

- Primary Uses: artist studios & galleries, small offices, restaurants and cafes, entertainment, retail, live/work spaces
- Secondary Uses: housing
- Prevent conflict between housing and other uses by locating housing on upper floors only or by raising ground floor housing at least one foot above grade.

### Ground level transparency

- Encourage retrofitting existing building with greater transparency at ground level.
- Encourage transparent garage doors that facilitate easy conversion of indoor parking spaces into galleries, retail, office or other uses.
- 40% - 60% transparency in new buildings

### Loading and servicing

- Retain the existing front loaded service conditions, but selectively employ street design elements like bollards, trees and planter boxes to prevent conflict between service vehicles and pedestrian traffic.
- Repurpose loading docks where possible for outdoor dining, stoops etc.

### Building relationship to parks

- Support a network of semi-public plazas and open spaces, by utilizing portions of underused front setbacks between the streets and existing buildings.



## Building Form

### Overall height

- 3-6 stories, with the option of taller towers at Washington St. edge near Washington Station

### Setbacks

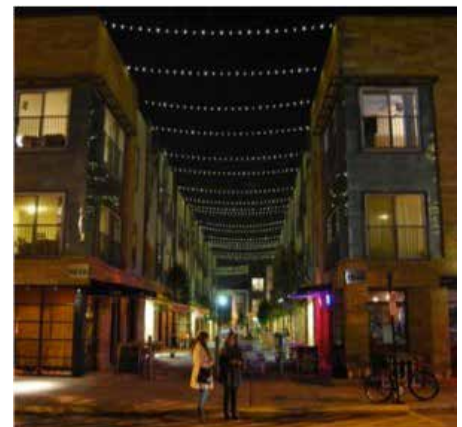
- None (Minimum 4' setback where outdoor seating intended).

### View corridors

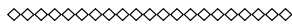
- Retain view corridors to downtown Boston.
- Highlight prominent buildings at ends of streets and at bends in Joy Street.

### Specific themes / architectural character

- Preserve and encourage the finer grain, industrial character of Brick bottom.
- Maintain the similar palette of exposed brick and earthy color tones for future buildings
- Limit uninterrupted building length to 150'
- Employ large windows and transparent garage doors for ground level uses. Large industrial-style windows encouraged on upper floors.



# BRICKBOTTOM / McGRATH EDGE



## DEFINING QUALITIES

- Larger scale responding to McGrath Boulevard
- Park/greenway setting with consistent tree canopy; public art
- High value, high quality landmark architecture

*The Brickbottom/McGrath Edge subdistrict makes the study area's most important connections to Union Square, Boynton Yards and adjacent areas seeing transit oriented redevelopment. Near-term improvements to McGrath Highway will enhance walking and biking connections to these areas, while the longer-term conversion of McGrath into an at-grade boulevard and greenway will unlock new market opportunity for high-value, large-scale mixed-use development.*



EXPANDED, IMPROVED  
WALKING AND BIKING  
NETWORK

STATION  
INTEGRATED WITH  
BUILDING DESIGN

MIXED OFFICE AND  
HOUSING WITH GROUND  
FLOOR RETAIL



*A variety of parcels west of Washington station hold potential for transit-oriented redevelopment that establishes prominent, pedestrian-friendly connections to Union Square and beyond.*

DRAFT

**BRICKBOTTOM: McGRATH EDGE***development and design guidelines*

## Streets

**Street character**

- Tree lined multi-way boulevard and greenway framed by mid-rise, mixed-use building edge

**Sidewalk width and general characteristics**

- 10'-15' along building edges
- Cycle track or multi-use path along greenway
- Outdoor dining, public art, water features and provision for parking mobile retail vehicles (e.g. food trucks)

**Plantings, materials and streetscape**

- Tree canopy along and across boulevard. Tree species for the central roadway median are to be columnar. For trees planted in the sidewalk zone consider London Plane or Pin Oaks.
- Distinctive linear lower landscape plantings along greenway. Sidewalk materials help to define zones for pedestrian movement and outside dining/gathering spaces. Consider the use of moveable planters for color and texture; they can also help to define the outside dining areas. Sidewalk materials to consist of a brick furniture zone and concrete. Site amenities to be a modern mix of metal and wood.
- Use plantings, public art and/or signage to establish pedestrian scale and buffer pedestrians and bikes from traffic Bump outs created for pedestrian safety can also house public art and/or water features whilst providing ample room for public viewing. Food trucks can also be stationed in close proximity to the bump outs to provide larger dining areas. Installing solar parking stations will reduce the amount of clutter on the street.

**Parking**

- Consider expanding on-street parking by adding a carriage road with parking on both sides (28'-34' wide overall)



## Street/Building Relationship

### Ground level use mix

- Office and retail. Non-retail spaces should be convertible to retail.

### Ground level transparency

- 50-80% ground level transparency

### Loading and servicing

- Eliminate all service access from McGrath edge. Locate service docks from mid-block alleys.

### Building relationship to parks

- Building use and design should leverage quality of McGrath greenway as linear park

## Building Form

### Overall height

- 5-6 stories typical, with towers of slender floorplate possible.

### Setbacks

- None.

### View corridors

- Reinforce views toward Kendall Square

### Specific themes / architectural character

- Signature mixed use boulevard for the city of Somerville that celebrates the re-insertion of pedestrian realm with the city fabric.

## 4 | PUTTING THE PLAN TO WORK



A good neighborhood plan is easy to put to work. It must clearly spell out short-term actions that can be taken, to build momentum and enthusiasm for the medium-term and long-term activities. Issues that require many years to coordinate and complete should be broken into bite-sized pieces. People love checking items off of a list, and long-range neighborhood plans must play to that strength. After all, you can't manage what you can't measure.

Similarly, plans need to use everyday language. Since government agencies often take the lead on plan activities, there is always a risk of using too much technical or bureaucratic language in the plan. Good neighborhood plans remind the reader that each action is intended to improve quality-of-life, help businesses succeed, and increase community pride.

This chapter is structured as a calendar. The Inner Belt Brickbottom Plan calls for the City and its partners to take 100 specific actions over the next decade to achieve the goals of the plan. For each action, an approximate starting point in time is listed. Of the 100 actions listed, 50 will begin in 2014. Some actions will extend beyond 2024, but to keep the calendar readable, years in the later period (2024-2035) are grouped together.

This neighborhood plan is rooted in five core values: creating places for people; connecting neighborhood to neighborhood; growing the economy; coordinating public and private investment; and, making development sustainable. Since these values are broad, they are broken down into more manageable strategies, which continue to use everyday language.

<i><b>Plan Values</b></i>	<i><b>Strategies</b></i>
Create great places for people.	Welcome People to Somerville
	Invest in Civic Spaces
	Invite People to Walk
	Make Bicycling a Signature of the District
	Share Street Space Between Cars and People
	Create 18-Hour Neighborhoods
Connect neighborhood to neighborhood.	Replace the Tubes
	Connect Inner Belt to Brickbottom
	Link Inner Belt and Brickbottom to East Somerville
	Connect Inner Belt to Cambridge
	Connect Inner Belt to Boston
Grow the economy.	Make Commercial Development Easy
	Ensure that Inner Belt Brickbottom are Somerville Neighborhoods
	Support New Job Creation
	Develop the Local Workforce
	Empower a Business Management Organization
Coordinate public and private investment.	Create and Expand Street Grids
	Capture the Value of Transit
	Plan Regionally
Make development sustainable.	Utilize Low-Impact Development Practices
	Manage Stormwater Effectively and Efficiently
	Promote Choice in Housing
	Manage Transportation Demand

## 1 CREATE GREAT PLACES FOR PEOPLE

**Table X: Action Items: Create great places for people**

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
<b>1.1 Welcome people to Somerville</b>	Partner with the MBTA and MassDOT to design and construct the Green Line station at Washington Street, with 360 degrees of public accessibility	<b>City</b> , MBTA, MassDOT	
	Partner with the MBTA and MassDOT to design and construct the full Somerville Community Path Extension from the Green Line station at Washington Street to the new Lechmere Station, with connections to local streets in and around Inner Belt and Brickbottom	<b>City</b> , MBTA, MassDOT	
	Install additional Inner Belt gateway signs like the one at the corner of Inner Belt Road and New Washington Street.	<b>City</b> , local business and property owners	
	Launch a Citywide wayfinding signage program including financing strategies for design and installation	<b>City</b> , local business and property owners	
<b>1.2 Invest in civic spaces</b>	Ensure that reformed zoning includes a process by which each development project must build high-quality civic space on-site, or provide a payment in-lieu to allow the City to purchase and create centralized space like those spaces shown on the Vision Plan.	<b>City</b>	
	Design and install a temporary, pedestrian-oriented use at the former Waste Transfer Facility site.	<b>City</b> , local artists, business and property owners, residents	
	Ensure that privately-owned civic spaces included in the redevelopment of 90 Washington Street are built and maintained.	<b>City</b> , property owner	
	Seek opportunities to create additional temporary recreation and/or public art spaces on underutilized sites in Inner Belt until redevelopment occurs.	<b>City</b> , business and property owners, local artists	
	Expand the Zero New Washington public space west along Cobble Hill Road to create the "New Washington Common" shown in the Vision Plan. <i>See also action 3.2.</i>	<b>City</b> , Pan Am Railways, business and property owners, local artists	
	Partner with the private owner of 86 Joy Street to plan and build "Brickbottom Square" as a front yard for the building, as shown in the Vision Plan. <i>See also action 3.1.</i>	<b>City</b> , property owner, local artists	
	Ensure that reformed zoning includes a process by which each development project must build high-quality civic space on-site, or provide a payment in-lieu to allow the City to purchase and create centralized space like those spaces shown on the Vision Plan	<b>City</b>	
<b>1.3 Focus on walking</b>	Design and construct sidewalks and crosswalks on Washington Street, New Washington Street, Inner Belt Road, Joy Street, Chestnut Street, Linwood Street and Poplar Street that are ADA-compliant, constructed of durable, long-lifespan materials, provide opportunities for outdoor café seating and encourage comfortable pedestrian life. <i>See also action 2.3.</i>	<b>City</b> , MassDOT, adjoining property and business owners	
	Establish a palette of artistic street furnishing materials for Brickbottom and Inner Belt, promoting the unique identity of each area.	<b>City</b> , local artists, business and property owners	
	Ensure that reformed zoning provides for engaging street frontage for all new buildings, including multiple doors facing the street.	<b>City</b>	
	Adopt planting standards to ensure that landscaping for streetscapes and private property frontage is designed to encourage walking and sitting.	<b>City</b>	
	Adopt and enforce design standards requiring new parking garages to be wrapped by active buildings.	<b>City</b>	
	Ensure that reformed zoning identifies key street frontage appropriate for loading and delivery, and adopt design and performance standards for new development.	<b>City</b>	

	ACTION TIMEFRAME										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

## 1 CREATE GREAT PLACES FOR PEOPLE CONTINUED

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
<b>1.4 Make safe, convenient, enjoyable bicycling a signature of the study area</b>	Partner with the MBTA and MassDOT to design and construct the full Somerville Community Path Extension from the Green Line station at Washington Street to the new Lowell Street Station, with connections to local streets.	<b>City, MBTA, MassDOT</b>	
	Partner with the MBTA and MassDOT to ensure that two-way cycle tracks are constructed on Washington Street between Joy and New Washington Streets when the Green Line station is built.	<b>City, MBTA, MassDOT</b>	
	Prioritize separated bicycle facilities on all road reconstruction projects.	<b>City, MassDOT</b> (as applicable)	
	Revise development standards for new commercial buildings to provide bicycle storage and commuter shower facilities.	<b>City</b>	
<b>1.5 Re-balance street space allocation among cars and people</b>	Support MassDOT's Grounding McGrath project, including entering into the environmental process to return the roadway to an at-grade urban thoroughfare.	<b>City, MassDOT</b>	
	Redesign Washington Street from Sullivan Square to McGrath Highway as a Complete Street, to ensure better sharing of space between pedestrians, cyclists, transit riders and drivers. Investigate options to fund implementation, then pursue implementation.	<b>City, MassDOT, City of Boston</b>	
	Investigate funding options to reconstruct Washington Street as a Complete Street.	<b>City, MassDOT, City of Boston</b>	
	Ensure that reformed zoning includes parking maximums for new development.	<b>City</b>	
	Establish parking facilities that will be shared by different uses, eliminating the need for every new development project to provide its own new parking.	<b>City, business and property owners</b>	
<b>1.6 Create 18-hour neighborhoods</b>	Ensure that reformed zoning establishes active ground-floor uses in identified retail clusters, per Master Plan recommendations.	<b>City</b>	
	Ensure that 30% to 40% of new development is residential to ensure activity throughout the day and night and on weekends.	<b>City</b>	



## 2 CONNECT NEIGHBORHOOD TO NEIGHBORHOOD

**Table X: Action Items: Connect neighborhood to neighborhood**

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
<b>2.1 Replace the Tubes</b>	Partner with private property owners and the MBTA to secure passage rights to the Third Avenue Extension underneath the Lowell line as a temporary vehicular access for properties south of the Tubes during the planning, design and construction of a bridge structure at Inner Belt Road.	<b>City</b> , MBTA, property owners	
	Work with the MBTA and its commuter rail contractor to plan, finance and construct a bridge structure to replace the Tubes.	<b>City</b> , MBTA, rail contractor	
	Partner with private property owners at 30 and/or 50 Inner Belt Road to secure temporary easements for construction staging on privately-owned parking lots.	<b>City</b> , MBTA, property owners	
<b>2.2 Connect Inner Belt and Brickbottom</b>	Partner with the MBTA and MassDOT to create at least one safe, convenient walking connection between Inner Belt South and Brickbottom as part of Green Line and Community Path installation. Ensure the elevated Community Path is built to accommodate potential connections to future adjacent buildings and/or open spaces. <i>See also action 4.2.</i>	<b>City</b> , MBTA, MassDOT	
	Work with property owners flanking the Green Line and the MBTA to encourage installation of accessible pedestrian bridge(s) over the Green Line connecting Inner belt and Brickbottom streets. <i>See also action 4.2.</i>	<b>City</b> , MBTA, MassDOT, property owners	
<b>2.3 Connect Inner Belt and Brickbottom to East Somerville</b>	Redesign Washington Street to include safer pedestrian crossings, wider sidewalks, protected cycletracks, and on-street parking.	<b>City</b> , MBTA, MassDOT, property owners	
	Partner with the MBTA and MassDOT to design and construct the full Somerville Community Path Extension from the Green Line station at Washington Street to the Cross Street bridge.	<b>City</b> , MBTA, MassDOT	
	Ensure that reformed zoning encourages adaptive re-use and selective, appropriately-scaled redevelopment on the north side of Washington Street, with active, pedestrian-oriented uses on the ground floor.	<b>City</b> , property owners	
	Ensure that reformed zoning encourages consistent building frontage on the south side of Washington Street to create a more walkable street edge.	<b>City</b> , property owners	
	Establish strategies to improve connections between Washington Street and Broadway for pedestrians, cyclists, and in limited circumstances, drivers as part of a neighborhood plan for East Somerville.	<b>City</b>	
<b>2.4 Connect Inner Belt to Cambridge</b>	Design a bridge structure that connects Inner Belt Road to North Point.	<b>City</b> , MBTA, MassDOT	
	Explore financing options to build an Inner Belt-North Point bridge. Work with the City of Cambridge to explore a bridge design that allows full vehicular use of the Inner Belt / North Point bridge. Design the bridge structure in partnership with the City of Cambridge, the MBTA and adjoining property owners. Take further actions as needed to foster bridge construction. <i>See also action 4.2.</i>	<b>City</b> , MBTA, MassDOT, adjoining property owners	
	Establish a Transportation Management Association to provide transit services connecting employment centers at Assembly Square, Sullivan Square, Inner Belt, North Point and Kendall Square, or in the alternative, seek public support for this service in coordination with Urban Ring implementation.	<b>City</b> , property and business owners, MassDOT, MBTA, Cities of Boston and Cambridge, institutions and/or other interested partners	
	Work with the City of Cambridge to explore a bridge design that allows full vehicular use of the Inner Belt / North Point bridge.	<b>City</b> , City of Cambridge	

	ACTION TIMEFRAME										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

DRAFT

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
2.5 Connect Inner Belt to Boston	Coordinate with the City of Boston and private property owners to plan for the extension of Roland Street to Inner Belt Road as new development occurs.	City, property and business owners City of Boston	
	Work with the MBTA to explore potential longer-term relocation of rail yard space east of Inner Belt Road, to enable extension of New Washington Street and additional development opportunities.	City, MBTA	

	ACTION TIMEFRAME										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

### 3 GROW THE ECONOMY

Table X: Action Items: Grow the economy

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
<b>3.1 Make commercial development easy</b>	Ensure that between 60% and 70% of new square footage developed in Inner Belt and Brickbottom is commercial.	City	
	Organize zoning regulations around building types.	City	
	Prepare zoning regulations that include by-right entitlements for multi-story commercial building types with design review.	City	
	Ensure that reformed zoning provides incentives for neighboring property owners to prepare shared development plans that maximize development potential.	City	
	Overhaul Somerville's sign code to streamline review and ensure high-quality design.	City	
<b>3.2 Ensure that Inner Belt and Brickbottom are great Somerville neighborhoods</b>	Ensure that reformed zoning includes regulations enabling fabrication and light manufacturing uses.	City	
	Protect the viability of walkable, transit-centered artist live-work space at 1 Fitchburg Street.	City, property owner	
	Partner with the private owner of Joy Street Studios to preserve and expand the affordable studio and light manufacturing space that supports Somerville's creative economy.	City, property owner	
	Ensure that reformed zoning encourages multiple, small gallery spaces and performing arts venues to be built in Brickbottom.	City	
	Ensure that public art is located throughout Inner Belt and Brickbottom.	City, local artists	
	Partner with the MBTA and private rail operators to create a pilot project that cleans up the Yard 10 Lead track and boxcar at Cobble Hill Road to create an attractive, branded gateway for New Washington Street, with enhanced public open space and streetscape opportunities.	City, MBTA, Pan Am Railways	
<b>3.3 Support new job creation</b>	Ensure, through zoning and project design review, that old and new buildings can co-exist as development occurs in Inner Belt and Brickbottom.	City, property owners, developers	
	Support adaptive re-use of existing commercial buildings to achieve increased job density.	City, property and business owners	
	Through zoning and economic development policies, encourage a diverse mix of job types in Inner Belt and Brickbottom.	City, Somerville Chamber of Commerce	
	Ensure that new zoning regulations allow building types that meet a range of space needs and price points.	City	
	Ensure that reformed zoning in Inner Belt establishes the opportunity to place large floorplate buildings in appropriate locations, thereby positioning the district to meet a unique need in the regional commercial real estate market.	City	
	Coordinate with private property owners of outdoor vehicle storage and equipment storage sites to plan to transition these sites into more job-dense uses.	City, property and business owners	
<b>3.4 Develop our local workforce</b>	Publicize existing partnerships and programs offering job training.	City, workforce training partners	
	Expand workforce development efforts.	City, workforce training partners	
	Ensure that reformed zoning includes a predictable jobs linkage mechanism.	City	
<b>3.5 Empower a business management organization</b>	Explore establishment of a new entity empowered to support business recruitment efforts, perform marketing and branding services, maintain public and private civic spaces, oversee cultural programming, and manage parking and shuttle services.	City, Somerville Chamber of Commerce and/or other business partners	

	ACTION TIMEFRAME										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Develop and implement a comprehensive digital marketing strategy, including social media, email newsletters, and targeted advertising campaigns.											
2. Launch a new product line, focusing on sustainable and eco-friendly options, and ensure high-quality standards.											
3. Expand into new international markets, starting with Europe and Asia, and establish local partnerships.											
4. Invest in research and development to create innovative solutions and improve existing products.											
5. Strengthen financial management, including budgeting, forecasting, and regular financial reporting.											
6. Enhance customer service and support, offering personalized assistance and prompt response times.											
7. Implement a robust cybersecurity protocol to protect sensitive data and ensure system integrity.											
8. Foster a strong corporate culture and employee engagement, promoting professional development and team collaboration.											
9. Monitor and evaluate the progress of all initiatives, making data-driven adjustments as needed.											
10. Establish a clear communication plan to keep stakeholders informed and aligned with the company's vision.											

**D R A F T**

## 4 COORDINATE PUBLIC INVESTMENT WITH PRIVATE INVESTMENT

**Table X: Action Items: Coordinate public investment with private investment**

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
<b>4.1 Create and expand street grids</b>	Ensure that reformed zoning includes street standards for front streets, side streets and back streets that include definitions, dimensional characteristics and performance standards.	<b>City</b>	
	Ensure that reformed zoning establishes a minimum land area dedicated as street or as civic space.	<b>City</b>	
	Ensure that reformed zoning provides incentives unlocking additional development capacity for owners who dedicate essential streets.	<b>City</b>	
	Require or incent property owners to connect Joy Street to Linwood Street with at least one new side street and one new back street as development occurs	<b>City, property owners</b>	
	Require or incent property owners to connect Chestnut Street to Linwood Street with at least one new side street and one new back street as development occurs	<b>City, property owners</b>	
	Require or incent property owners to create a new east-west internal street in the vicinity of First Avenue as development occurs.	<b>City, property owners</b>	
	Require or incent property owners to create a new east-west internal street west of Inner Belt Road and south of the Tubes as development occurs.	<b>City, property owners</b>	
<b>4.2 Capture the value of transit</b>	Partner with the MBTA and MassDOT to design and construct tie-in points for future privately-funded access onto the Community Path, specifically where necessary to connect the Inner Belt South sub-area to the Green Line station.	<b>City, MBTA, MassDOT, adjoining property owners</b>	
	Encourage the private owners of 150 Inner Belt Road to construct an access point onto the Community Path when the site is developed.	<b>City, property owner</b>	
	Encourage the private owners of 20 Chestnut Street to construct an access point onto the Community Path when the site is redeveloped.	<b>City, property owner</b>	
	Partner with the MBTA to release MBTA property not needed for right-of-way near the Washington Street Station for sale and redevelopment. Issue a Request for Proposals with development standards consistent with this Master Plan.	<b>City, MBTA</b>	
	Explore District Improvement Financing (DIF) as a tool to fund needed sewer and stormwater improvements.	<b>City</b>	
	Explore federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan funding to support construction of the Inner Belt—North Point bridge, leveraging Urban Ring transit corridor opportunity. <i>See also action 2.4.</i>	<b>City, MassDOT, City of Cambridge, private sector partners</b>	
	Partner with the MBTA and MassDOT to prepare the Mystic Yard facility along New Washington Street for more valuable transit-oriented development	<b>City, MBTA, MassDOT, adjoining property owners</b>	
<b>4.3 Plan regionally</b>	Collaborate with the City of Boston and MBTA to create high-quality, walkable transit-oriented redevelopment around Sullivan Square complementing Inner Belt-Brickbottom goals	<b>City, City of Boston, MBTA</b>	
	Collaborate with the City of Cambridge on the North Point master development and transportation links.	<b>City, City of Cambridge</b>	
	Collaborate with the City of Cambridge and private sector/institutions to ensure the high-cost life sciences and technology industries in Kendall Square have access to lower-cost back office and manufacturing space in Inner Belt and Brickbottom.	<b>City, City of Cambridge, private sector and institutions</b>	
	Advocate with state and regional agencies to ensure that limited roadway systems capacity is used judiciously to support sustainable regional economic growth.	<b>City, MAPC, MassDOT, MBTA</b>	

	ACTION TIMEFRAME										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Strategic Initiatives	[Bar chart showing durations for Strategic Initiatives]										
	[Bar chart showing durations for Strategic Initiatives]										
	[Bar chart showing durations for Strategic Initiatives]										
	[Bar chart showing durations for Strategic Initiatives]										
	[Bar chart showing durations for Strategic Initiatives]										
Operational Projects	[Bar chart showing durations for Operational Projects]										
	[Bar chart showing durations for Operational Projects]										
	[Bar chart showing durations for Operational Projects]										
	[Bar chart showing durations for Operational Projects]										
	[Bar chart showing durations for Operational Projects]										
Support Functions	[Bar chart showing durations for Support Functions]										
	[Bar chart showing durations for Support Functions]										
	[Bar chart showing durations for Support Functions]										
	[Bar chart showing durations for Support Functions]										
	[Bar chart showing durations for Support Functions]										

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## 5 DELIVER ONGOING VALUE WITH SUSTAINABLE DEVELOPMENT APPROACHES

**Table X: Action Items: Deliver ongoing value with sustainable development approaches**

ACTION STRATEGY	ACTION DETAILS	AGENTS (LEAD/PARTNER)	
<b>5.1 Pursue sustainable development practices</b>	Encourage new development to meet or exceed LEED Silver standards or equivalent. In general, encourage construction techniques that are resource- and energy-efficient, minimize detrimental environmental impacts, and promote public health.	<b>City, property owners, developers</b>	
	Encourage transit-oriented development and design.	<b>City</b>	
	Highlight sustainable development and design achievements in marketing and branding for Inner Belt and Brickbottom	<b>City, Somerville Chamber of Commerce and/or other business partners</b>	
<b>5.2 Manage stormwater efficiently and effectively</b>	Ensure that the MBTA and MassDOT construct high-capacity stormwater infrastructure with the Green Line Extension, including the Washington Street Pump Station, the Green Line detention cistern, the Red Bridge detention pond, and Maintenance Facility site improvements as needed.	<b>City, MBTA, MassDOT</b>	
	Partner with the MBTA and MWRA to perform drainage capacity modelling, and improve infrastructure as needed, to ensure that the Inner Belt and Brickbottom districts can support the buildout of transit-oriented development called for in the SomerVision Comprehensive Plan.	<b>City, MBTA, MWRA</b>	
	Ensure that responsible parties resolve issues related to the blocked Old Stone Culvert at the Boston Engine Terminal, and convey all upstream flows out of the Inner Belt district via the MWRA sewer at Roland Street or the MBTA Fitchburg main drain. Coordinate with Green Line Maintenance Facility design and construction.	<b>City, MBTA, MWRA, other partners as needed</b>	
	Reform zoning to include performance standards for on-site stormwater retention for new buildings, and opportunity for district-scale stormwater management.	<b>City</b>	
	Develop incentive programs to promote retrofitting of existing buildings for better stormwater performance, including rooftop storage.	<b>City</b>	
	Design and build new civic spaces that increase stormwater retention in the district (potentially serving district-scale needs) while also providing amenities with aesthetic and/or recreational value.	<b>City, property owners, developers</b>	
	Explore creation of a Citywide stormwater enterprise fund.	<b>City</b>	
<b>5.3 Promote choice in housing</b>	Partner with the private owner of the Cobble Hill Apartments to extend affordability provisions in perpetuity.	<b>City, property owner</b>	
	Partner with the private owner of the Cobble Hill Apartments to extend affordability provisions in perpetuity.	<b>City, property owner</b>	
	Ensure that new zoning regulations allow multiple residential building types, including town-house buildings and vertical apartment towers	<b>City</b>	
	Revise the City's Inclusionary Housing Ordinance to require either a greater percentage of affordable units in new residential development projects, or a greater number of family-sized units.	<b>City</b>	
<b>5.4 Manage transportation demand</b>	Create a Transportation Management Association empowered to manage parking resources, including access coordination, hours of operation, pricing, security, lighting, advertising, maintenance and insurance.	<b>City, property and business owners</b>	
	Partner with the MBTA, MassDOT, other agencies and private sector partners to develop a business plan for high quality transit service to connect Sullivan Square to Kendall Square and beyond via a new Inner Belt—North Point bridge. Coordinate with Urban Ring transit corridor planning to date.	<b>City, MassDOT, MBTA, private sector/institution partners, Cities of Boston and Cambridge</b>	

	ACTION TIMEFRAME										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Develop a comprehensive strategic plan for the next five years, focusing on digital transformation and sustainable growth.											
2. Launch a new product line targeting the emerging market of sustainable consumer goods.											
3. Implement a robust cybersecurity protocol to protect sensitive customer data and intellectual property.											
4. Expand operations into international markets, starting with Europe and Asia.											
5. Invest in research and development to create innovative solutions for environmental challenges.											
6. Strengthen partnerships with industry leaders and academic institutions to foster innovation.											
7. Optimize internal processes to improve operational efficiency and reduce costs.											
8. Enhance customer engagement through personalized marketing campaigns and loyalty programs.											
9. Conduct regular financial audits and ensure compliance with all relevant regulations.											
10. Foster a culture of continuous learning and professional development for all employees.											

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# APPENDIX

- A. Abstracts of Past Circulation Studies
- B. Existing Circulation Conditions Analysis
- C. Existing Circulation Conditions Technical Appendix
- D. Walkability Audit
- E. Urban Ring Corridor Shuttle Feasibility Analysis
- F. Office and Research Market and Positioning Analysis
- G. Preliminary Development Economics Analysis
- H. Infrastructure Financing Approach Analysis
- I. Build-out Alternatives
- J. Street Sections

# **A. ABSTRACTS OF PAST CIRCULATION STUDIES**



## **B. EXISTING CIRCULATION CONDITIONS ANALYSIS**

**D R A F T**



# **C. EXISTING CIRCULATION CONDITIONS TECHNICAL APPENDIX**

**D R A F T**



## **D. WALKABILITY AUDIT**

**D R A F T**



## **E. URBAN RING CORRIDOR SHUTTLE FEASIBILITY ANALYSIS**

**D R A F T**



## **F. OFFICE AND RESEARCH MARKET AND POSITIONING ANALYSIS**

**D R A F T**



# **G. PRELIMINARY DEVELOPMENT ECONOMICS ANALYSIS**

**D R A F T**



## **H. INFRASTRUCTURE FINANCING APPROACH ANALYSIS**

This section of the document includes, first, a list of assumed costs to implement some priority infrastructure improvements, and second, an analysis and sample structure for how these costs might be borne by revenues from new high-value development. A diagram indicates how this sample structure could play out across multiple parcels and streets.

## COST ASSUMPTIONS FOR MAJOR INFRASTRUCTURE INITIATIVES

GREEN LINE EXTENSION	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Extension to Brickbottom	\$300 million	MA T-Bond Bill	2014–2017
Extension to Tufts University	\$800 million	FTA New Starts	2015–2019
Vehicle maintenance facility	\$100 million	FTA New Starts	2015–2019
COMMUNITY PATH	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Extension to Brickbottom	\$15 million	TBD	2014–2017
Local connections	\$1 million	Private	2016–2021
Extension to Lowell Street	\$15 million	FTA New Starts	2015–2019
INNER BELT–NORTH POINT BRIDGE	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Design	\$15 million	MA T-Bond Bill	2014–2017
Construction	\$25 million	FHWA TIFIA Loan	2015–2018
<b>BUS RAPID TRANSIT SERVICE</b>			
<i>Kendall Square to Sullivan and Assembly Squares via Inner Belt</i>			
	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Vehicles	\$4 million	TMA	2018–2020
Operations	\$2.3–2.5 million / year	TMA	2019–2024
GROUNDING MCGRATH HIGHWAY	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Interim measures	\$1 million	MA T-Bond Bill	2014
Environmental	\$2 million	MPO TIP	2014–2015
Design	\$7 million	MPO TIP	2015–2018
Construction	\$55 million	MPO TIP	2018–2022
TUBES REPLACEMENT	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Interim measures	\$1 million	TBD	2014
Design	\$2 million	TBD	2014–2015
Construction	\$9–12 million	TBD	2015–2018
LOCAL STREET IMPROVEMENTS	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Washington Street	\$4 million	City G.O. Bond	2020–2024
New Washington Street	\$2 million	City G.O. Bond	2016–2018
Joy Street / Chestnut Street	\$1 million	City G.O. Bond	2017–2019
Linwood Street	\$1 million	City G.O. Bond	2017–2019

SEWER & STORMWATER	ROUGH COST	FUNDING SOURCE	TIMEFRAME
MBTA Pump Station	\$1 million	MA T-Bond Bill	2024–2015
MBTA Yard 8 Detention Cistern	\$2 million	MA T-Bond Bill	2014–2015
Old Stone Culvert Cutoff	\$20 million	TBD	2017–2019
Local sewer & storm	\$10 million	City DIF	2017–2022

CIVIC SPACE IMPROVEMENTS	ROUGH COST	FUNDING SOURCE	TIMEFRAME
New Washington Common	\$1 million	City CDBG	2016–2018
Brickbottom Square	\$0.2 million	City CDBG	2014–2015
George Dilboy Square	\$0.5 million	Private	207–2019
Poplar Greenway	\$1 million	City, Private	2022–2024
Southview Common	\$3 million	City Private	2024–
Skyline Park	\$3 million	City, Private	2024–

PARKING STRUCTURES	ROUGH COST	FUNDING SOURCE	TIMEFRAME
Mystic Yard Garage	\$4 million	City, Private	2018–2019

**DIAGRAM OF SAMPLE DEVELOPMENT AND INFRASTRUCTURE  
FINANCE SCENARIO: SEE DESCRIPTION IN FOLLOWING MEMO**

*Sample private and public investments are grouped into these different categories, each representing a DIF (District Improvement Financing) district. On the diagram below, colors distinguish DIF categories, numerals in squares indicate private redevelopment, numerals in circles indicate public infrastructure improvements funded through that private development, and number sequence indicates a sample implementation sequence within each DIF district.*

**Inner Belt Gateway/Washington Street DIF district (yellow)**

1. Phase 1 redevelopment of the Cobble Hill shopping center occurs. Over 3.5 to 4.5 years, its tax revenues can fund streetscape improvements along Washington St., New Washington St. and Inner Belt Rd., a new street linking Washington and New Washington along the Cobble Hill Shopping Center, and extension of Roland Rd. to Inner Belt Rd. through direct General Fund appropriations
2. Phase 2 redevelopment of the Cobble Hill Shopping Center, plus any ONE of the sites with a dashed outline, can fund "Tubes" replacement and a new park along New Washington St. through bond financing.

**Inner Belt Gateway/New Washington Street DIF district (orange)**

1. An initial office building redevelopment adjacent to Washington Station (private and MBTA ownership), plus interim park-and-ride parking revenues, funds an adjacent public parking structure serving multiple sites and uses through bond financing
2. Redevelopment on two additional sites (private, MBTA and city ownership), plus interim park-and-ride parking revenues, funds a second public parking structure serving multiple sites and uses through bond financing

**Brickbottom DIF district (magenta)**

1. Housing redevelopment on the Cataldo Ambulance and adjacent sites funds streetscape improvements along Joy, Chestnut, Linwood and Poplar Streets through General Fund appropriations



2. Mixed-use development on additional sites north of Joy St. funds a Joy Street public space and pedestrian connection across the Green Line (supplementing MBTA Community Path funding) through bond financing
3. Mixed-use development on additional sites between Joy and Linwood Streets funds a public parking structure and street between Joy and Linwood.

**Inner Belt South DIF district part 1 (blue)**

1. Mixed use redevelopment at 200 Inner Belt Road funds a new street underpass below the Lowell Line through bond financing.

# **I. BUILD-OUT ALTERNATIVES**

**D R A F T**

## Highest Priorities Across Alternatives



### KEY GOALS

- Foster economic development for Somerville
- Enhance walking and biking connections to the Washington Street station from all directions
- Enhance biking and Community Path connections within and beyond the study area

### SUMMARY OF PRIORITY ACTIONS

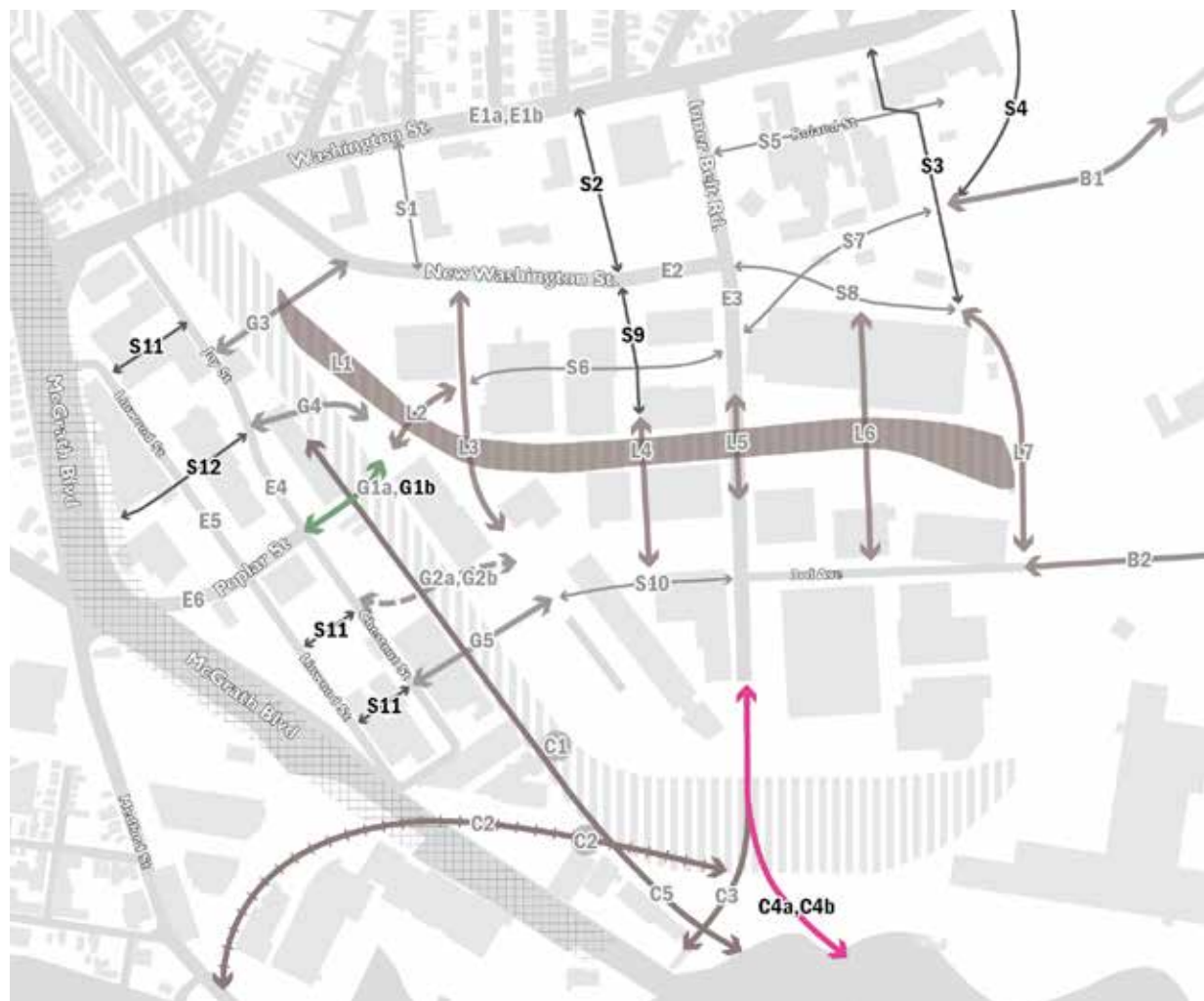
1. Improve existing streets with better sidewalks and other pedestrian infrastructure, as cost-effective, near term “low hanging fruit” initiatives to leverage Washington Street station and enhance existing properties. Create a new north-south street as part of Cobble Hill Shopping Center redevelopment.
2. Replace the “tubes” with a more attractive and functional bridge. Enhance the street grid and redevelopment opportunities by extending Roland Street west to Inner Belt Road, adding a north-south street west of the Holiday Inn, extending Third Street west to Inner Belt Road West, and enhancing the private drive below the Lowell Line into a public street with sidewalk
3. Create a new walking/biking connection across the Green Line as part of Green Line construction.

Highest Priorities

ALTERNATIVE DESCRIPTION		EVALUATION CRITERIA					IMPLEMENTATION CHALLENGE				RESULTS						
		EFFECTIVENESS (SEE LEGENDS BELOW)			COST ORDER OF MAGNITUDE	FEASIBILITY		REQUIRED PARTNERSHIPS	TIMING (FROM 2013)		EFFECTIVE- NESS	SCORING IMPLEMEN- TATION OPPORTU- NITY	COMPOSITE		PRIORITY		
		ECONOMIC DEVELOPMENT	TRANSPORTATION	URBAN DESIGN		ENGINEERING, RIGHT OF WAY	DESIRABLE		LIKELY FEASIBLE	WITHIN STUDY AREA (TIER)			WITHIN CATEGORY				
CODE	DETAILS																
E1a	Add continuous landscaped median in Washington Street from New Washington to city line. Relocate curbs to expand sidewalk space where possible.	+++	++	++	A	City right of way; Boston, MBTA and MassDOT coordination	Local partnership for median maintenance desirable	By Washington Station opening (1-4 years)	1-5 years	9	9	18	2	1+			
E1b	Add landscaped median in Washington Street only at Inner Belt Rd. and Franklin St. where they will mirror left turn lanes and enhance crosswalk safety. Otherwise maximize space dedicated to sidewalks and tree lawns by rebuilding curbs along most or all of street segment.	+++	+++	+++	A	City right of way; Boston, MBTA and MassDOT coordination	Local partnership for median & tree lawn maintenance desirable	By Washington Station opening (1-4 years)	1-5 years	12	9	21	1				
E2	New Washington sidewalk, lighting, street tree, bike lane improvements	+++	+++	+++	A	City right of way	Adjacent property owners	By Washington Station opening (1-4 years)	1-5 years	12	9	21	1	1+			
E3	Inner Belt Rd. sidewalk, lighting, street tree, bike lane improvements	++	++	+++	A	City right of way	Adjacent property owners	By Washington Station opening (1-4 years)	1-5 years	10	9	19	3	1+			
E4	Joy/Chestnut St. sidewalk, lighting, street tree, bike share improvements	++	+++	+++	A	City right of way; sidewalk easement on certain adjacent properties desirable	Adjacent property owners	By Washington Station opening (1-4 years)	1-5 years	11	9	20	2	1+			
E5	Linwood St. sidewalk, lighting, street tree, bike share improvements	++	++	+++	A	City right of way	Adjacent property owners	By Washington Station opening (1-4 years)	1-5 years	10	9	19	3	1+			
E6	Poplar St. sidewalk, lighting, street tree, bike lane improvements	++	++	+++	A	Coordinate with McGrath intersection reconstruction and waste transfer parcel redevelopment	Adjacent property owners	By Washington Station opening (1-4 years)	1-5 years	10	9	19	3	1+			
L5	Replace tubes. Reference 2003 Access Alternatives Study concept IB1	+++	+++	+++	D	Establishing another vehicular connection under Lowell Line first may enhance feasibility by enabling temporary closure for construction	MBTA	1-5 years	1-5 years	10	7	17	1	1			

ALTERNATIVE DESCRIPTION		EVALUATION CRITERIA						RESULTS			
		EFFECTIVENESS (SEE LEGENDS BELOW)			IMPLEMENTATION CHALLENGE			EFFECTIVENESS	SCORING IMPLEMENTATION OPPORTUNITY	PRIORITY	
		ECONOMIC DEVELOPMENT	TRANSPORTATION	URBAN DESIGN	COST	FEASIBILITY	TIMING (FROM 2013)				
CODE	DETAILS				ORDER OF MAGNITUDE	ENGINEERING, RIGHT OF WAY	REQUIRED PARTNERSHIPS	DESIRABLE	LIKELY FEASIBLE	COMPOSITE	WITHIN STUDY AREA (TIER)
<b>S1</b>	Washington to New Washington between Corcoran-Jenison Cobble Hill parcels	++	++	++	A	Property owner supportive. Coordinate with Washington St. crosswalk improvements.	1 property owner	1-5 years, with Cobble Hill Shopping Center redevelopment	1-5 years, with Cobble Hill Shopping Center redevelopment	18	1
<b>S5</b>	Roland St extension to Inner Belt Rd	+++	++	+++	A	Requires coordination with City of Boston, ROW acquisition, and Inner Belt Rd. street improvements	1+ property owner(s), City of Boston	Within 1-5 years, coordinated with G4	With redevelopment of affected sites	18	1
<b>S6</b>	New east/west link, Inner Belt Rd. West to Inner Belt Rd.	+++	+++	++	A	Requires coordinated redevelopment and/or ROW acquisition involving multiple property owners	Multiple property owners	1-5 years	1-5 years	18	1
<b>S7</b>	New east/west link, Inner Belt Rd. to Roland St. district	+++	+++	++	A	Requires coordinated redevelopment and/or ROW acquisition involving City of Boston, multiple property owners. Requires acquisition or grade crossing of MBTA yard and Pan Am track	City of Boston, MBTA, Pan Am, multiple property owners	5-10 years	5-10 years	17	2
<b>S8</b>	New Washington extension east of Inner Belt Rd	+++	++	++	A	Requires coordinated redevelopment and/or ROW acquisition involving multiple property owners. Requires acquisition or grade crossing of MBTA yard and Pan Am track	MBTA, Pan Am, multiple property owners	1-5 years	1-5 years	17	2
<b>S10</b>	2nd/3rd Ave extension west	+++	+++	+++	A	Requires coordinated redevelopment and/or ROW acquisition involving multiple property owners.	Multiple property owners	With redevelopment of adjacent sites	With redevelopment of adjacent sites	18	1

## Top **Longer-Term Priorities** Deserving Near-Term Action



### KEY GOALS

- Secure right-of-way and public/private partnerships needed to create priority connections
- Secure support from and partnership with Boston, Cambridge, state agencies, and other agencies on infrastructure requiring their collaboration
- Set the stage to capitalize on early Washington Station-driven growth with expanded redevelopment opportunity

### SUMMARY OF PRIORITY ACTIONS

1. Expedite creation of a transit connection to Lechmere and Kendall Square by working with Boston, Cambridge, and other urban ring corridor stakeholders to advocate state investment in a bridge linking Inner Belt South to North Point
2. Add another walking/biking connection across the Green Line, to further reinforce land use and amenity synergies between Inner Belt and Brickbottom, and expand access options
3. Continue to develop a finer-scale street grid throughout the study area by working proactively with property owners to create streets as part of redevelopment projects

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### Table X: Longer-term Priorities Deserving Near-term Actions

Alternative Description		Evaluation Criteria							Results				
Details		Effectiveness (See legends below)			Implementation Challenge				Scoring		Priority		
		Economic Development	Level of Benefit	Urban Design	Cost	Feasibility	Engineering, Right of Way	Required Partnerships	Timing (from 2013)	Effective-ness	Implemen-tation opportunity	Composite	Within Study Area (Tier)
Code					Order of Magnitude								
G1b	Poplar St walk/bike extension to Inner Belt Gateway/South below Green Line. Reference 2003 Access Alternatives Study concept M4.	++	++	+++	C \$4-6M	Coordinate with L2, L3, S6. Requires less excavating underpass to near sea level, possibly avoiding need for groundwater pumping equipment. Must remain above MWRA sewer. Must avoid impacting 200 Inner Belt foundation. ROW acquisition required.	MBTA, 3+ property owners	1-5 years	5-10 years	9	6	15	1 2
C4a	Bridge to North Point -- carrying Urban Ring transit and general traffic	+++	+++	+++	D	Requires coordination with City of Cambridge, Urban Ring planning and Green Line implementation (grade crossing). Cambridge welcomes transit and Community Path connections, opposes general traffic connection. Inner Belt South street network and development must accommodate ramp south of Third St.	City of Cambridge, MBTA, adjacent property owners	1-5 years	5-10 years	10	5	15	1 2

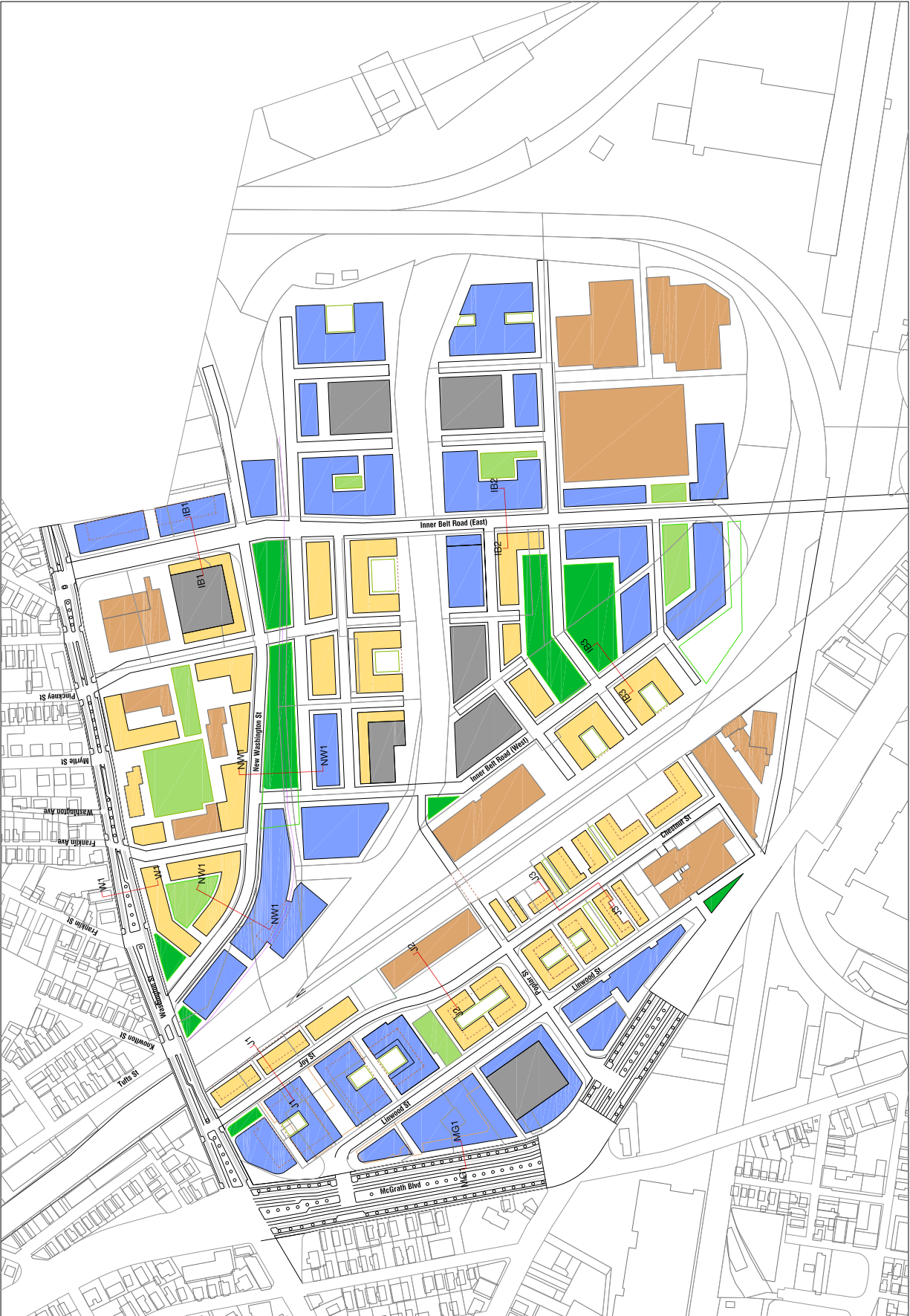
ALTERNATIVE DESCRIPTION		EVALUATION CRITERIA							RESULTS					
		EFFECTIVENESS (SEE LEGENDS BELOW)				IMPLEMENTATION CHALLENGE			SCORING		COMPOSITE	WITHIN STUDY CATEGORY	PRIORITY	
		ECONOMIC DEVELOPMENT	LEVEL OF BENEFIT		COST	FEASIBILITY		REQUIRED PARTNERSHIPS	TIMING (FROM 2013)	EFFECTIVE-NESS				IMPLEMEN-TATION OPPORTU-NITY
TRANSPORTATION	URBAN DESIGN		ORDER OF MAGNITUDE	ENGINEERING, RIGHT OF WAY		DESIRABLE	LIKELY FEASIBLE							
C4b	Bridge to North Point -- carrying Urban Ring transit, no general traffic	+++	+++	+++	D	Requires coordination with City of Cambridge, Urban Ring planning and Green Line implementation (grade crossing). Cambridge welcomes transit and Community Path connections. Inner Belt South street network and development must accommodate ramp south of Third St.	City of Cam-bridge, MBTA, adjacent prop-erty owners	1-5 years	5-10 years	9	6	15	1	2
S2	Washington to New Washington between Corcoran-Jenison Cobble Hill parcel and Holiday Inn	++	++	++	A	Property owner support required, coordinated redevelopment desirable. Coordinate with Washington St. crosswalk improvements.	2 property owners	1-5 years	1-5 years	9	7	16	3	2
S3	Washington to New Washington and L6/L7 connections across Roland St. Reference 2003 Access Alternatives Study concept NW1 Part 1.	++	++	++	A	Requires coordi-nation with City of Boston and multiple property owners. Requires acquisition or grade crossing of MBTA yard and Pan Am track for south-ern segment.	City of Boston, MBTA, Pan Am, multiple proper-ty owners	1-5 years	1-5 years	9	7	16	3	2
S9	New north/south street west of Inner Belt Rd	++	++	+++	A	Requires coordi-nated redevelop-ment and/or ROW acquisition involving multiple property owners. Requires removal or grade crossing of Pan Am track	Pan Am, mul-tiple property owners	With rede-velopment of adjacent sites	With redevel-opment of adjacent sites	10	6	16	3	2



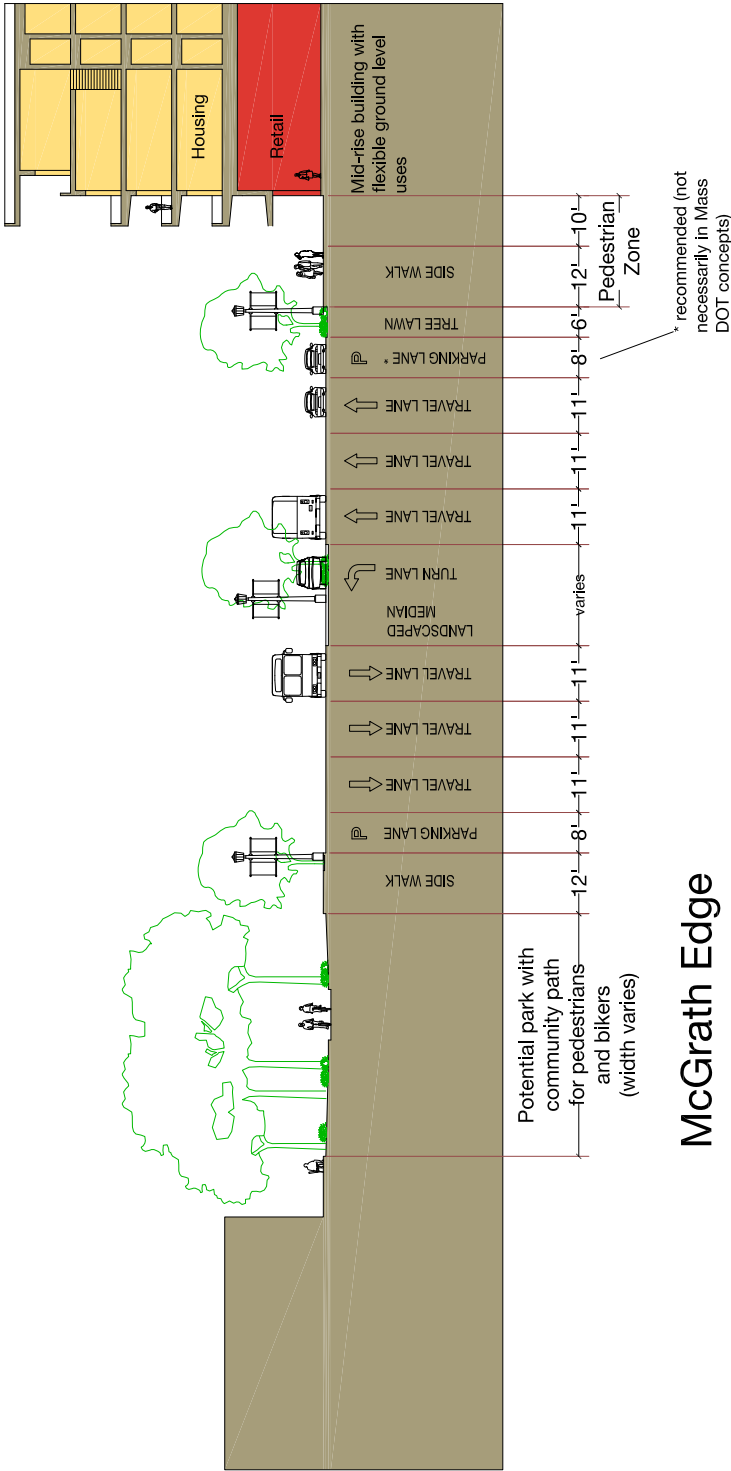
# **J. STREET SECTIONS**

**D R A F T**

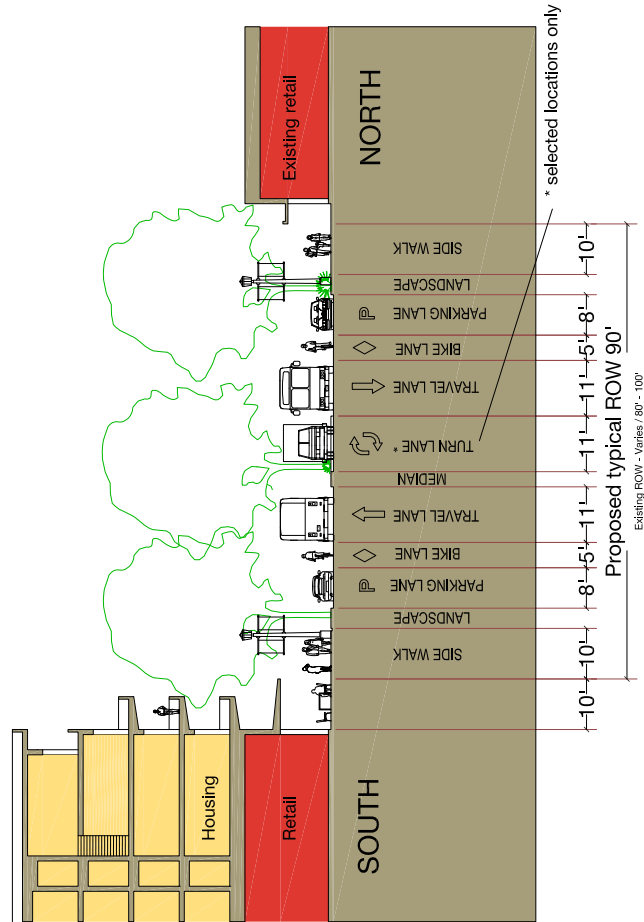
Inner Belt Brickbottom Design Guidelines



# Inner Belt Brickbottom Design Guidelines



# Inner Belt Brickbottom Design Guidelines



## Washington St (Section W1)

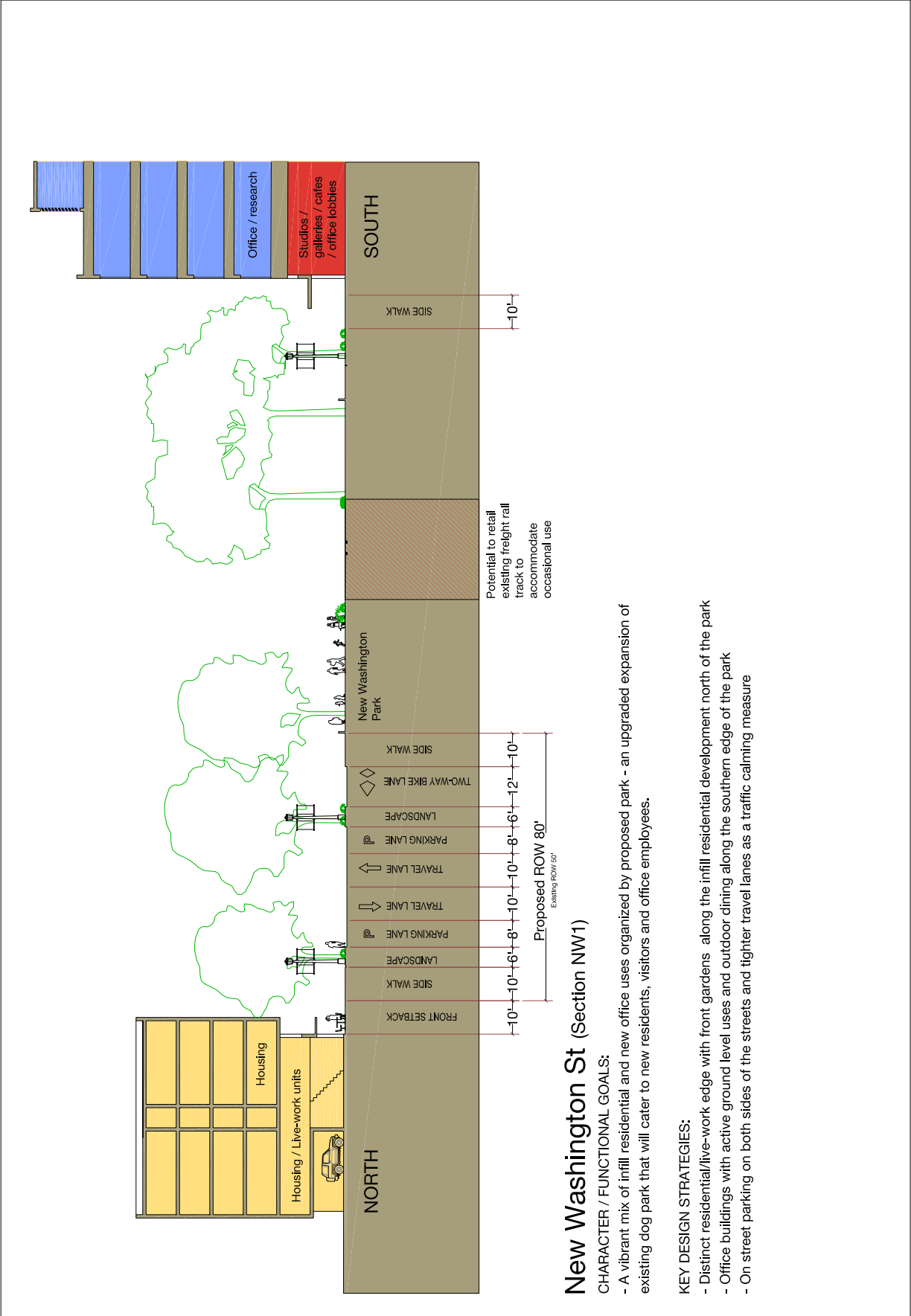
### CHARACTER / FUNCTIONAL GOALS:

- Create an attractive and an active mixed-use gateway to Somerville.
- Create walkable connections across Washington St between residential/retail uses to the north and transit and amenities to the south.
- Leverage infill opportunities to create a distinctive "Main Street" linking Washington St and adjacent mixed-use development with Sullivan Square in the east and Union Square in the west.

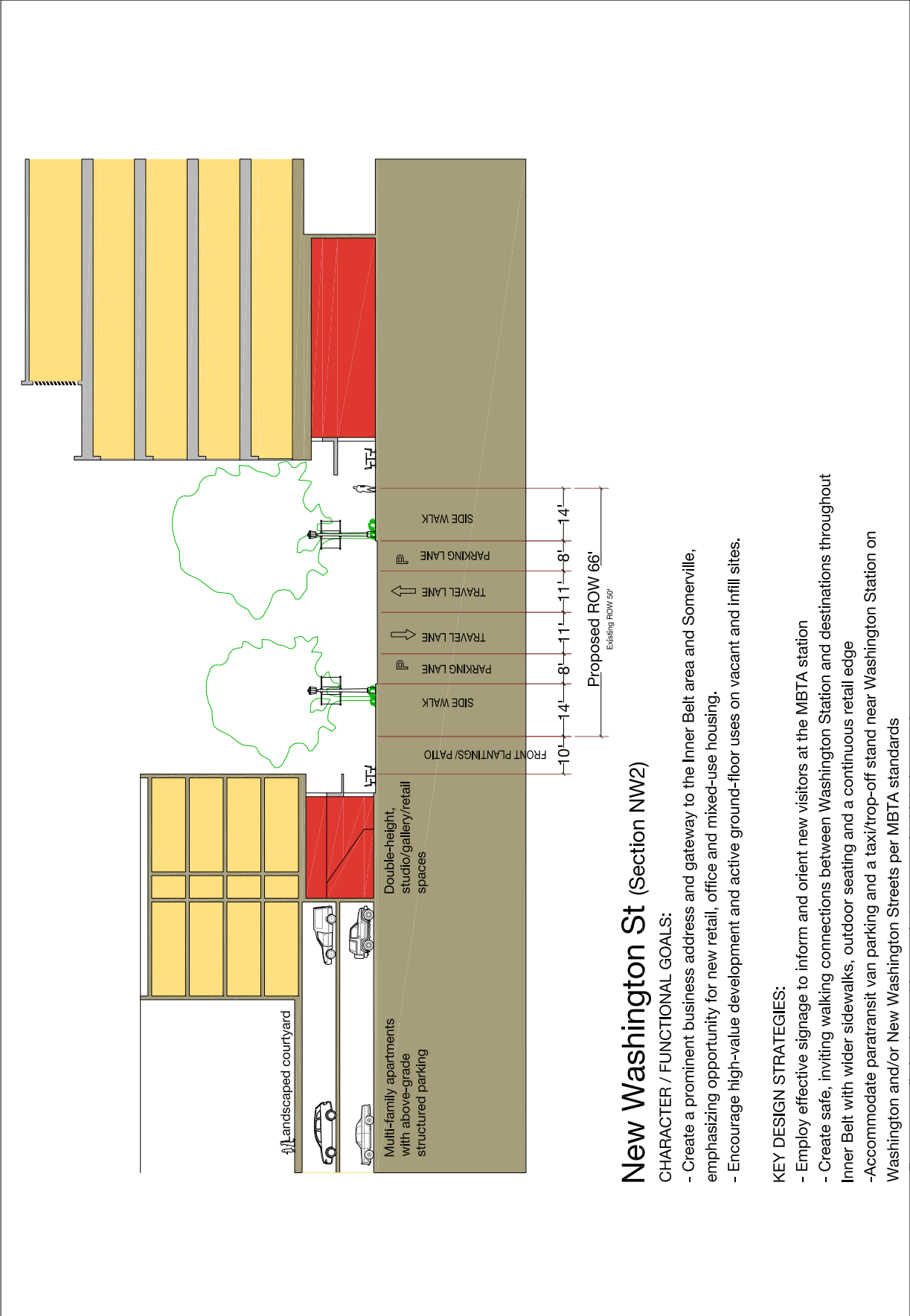
### KEY DESIGN STRATEGIES:

- Strengthen E-W pedestrian connections with active ground level uses.
- Provide spaces for outdoor dining along the infill buildings in the southern edge.
- Accommodate paratransit van parking and a taxi/drop-off stand near MBTA station on Washington St and/or on New Washington St per MBTA standards.
- Encourage distinctive architectural character with high degree of transparency.

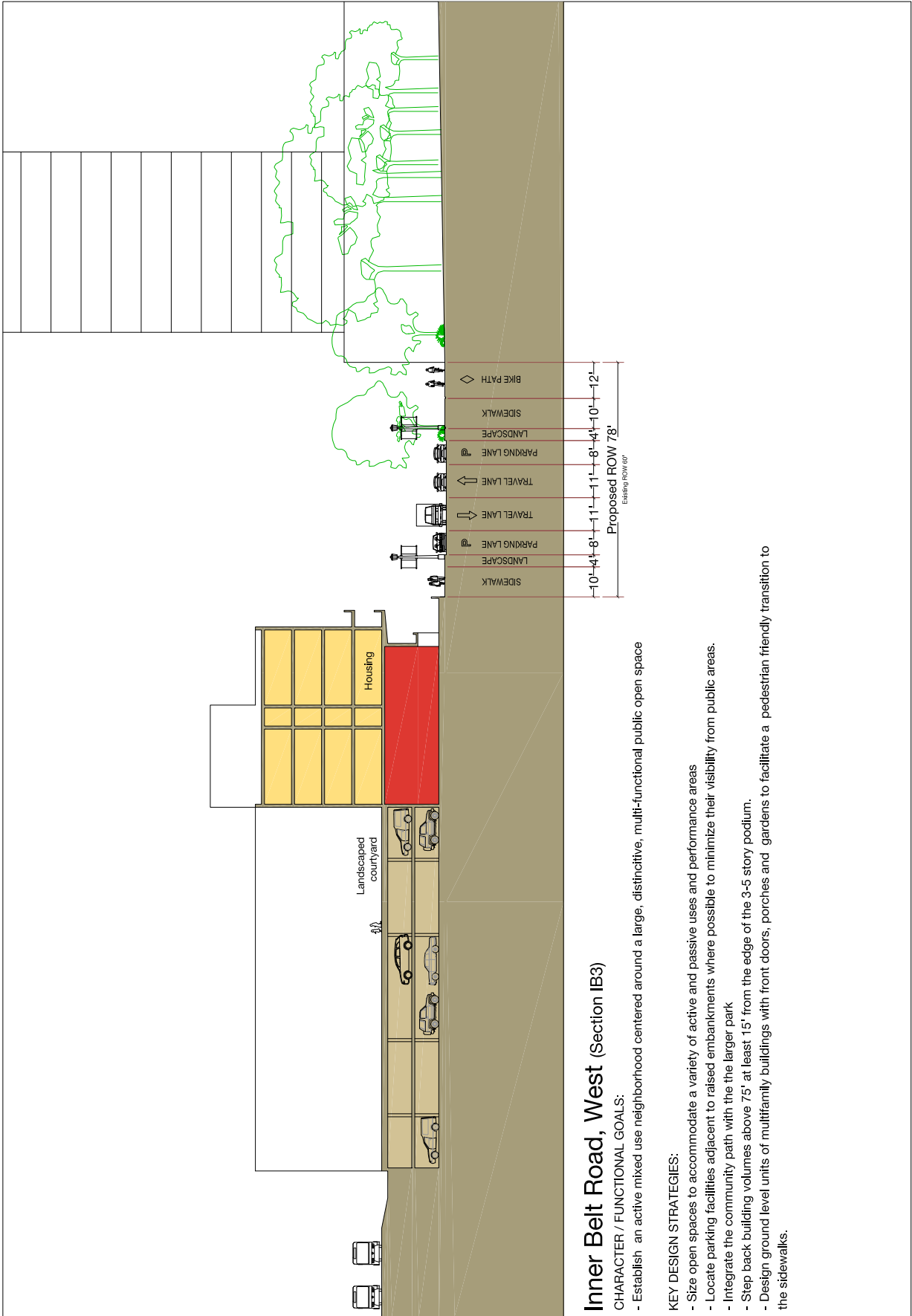
Inner Belt Brickbottom Design Guidelines



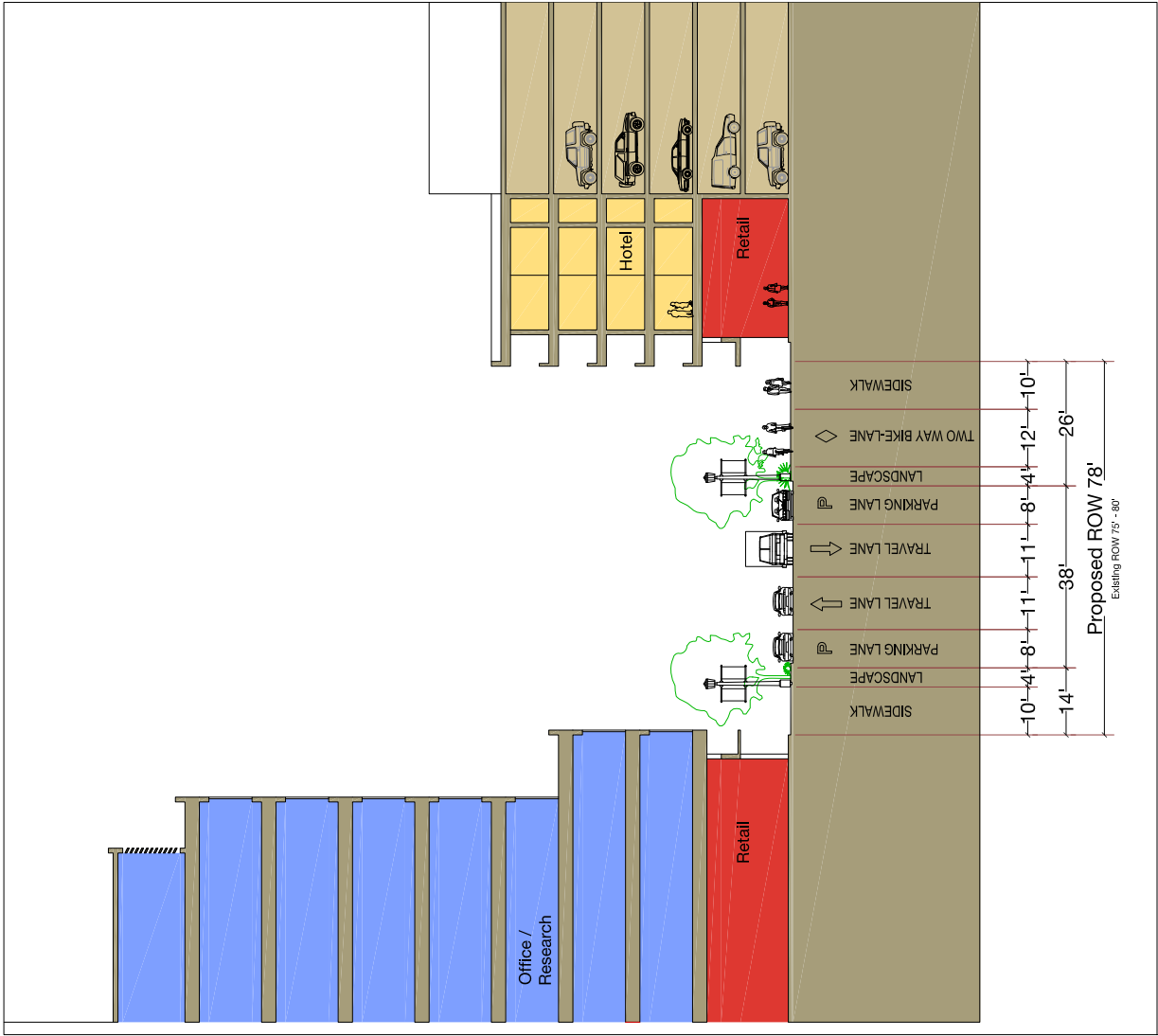
Inner Belt Brickbottom Design Guidelines



# Inner Belt Brickbottom Design Guidelines



# Inner Belt Brickbottom Design Guidelines



## Inner Belt Road @ Washington St/ Roland St (Section IB1)

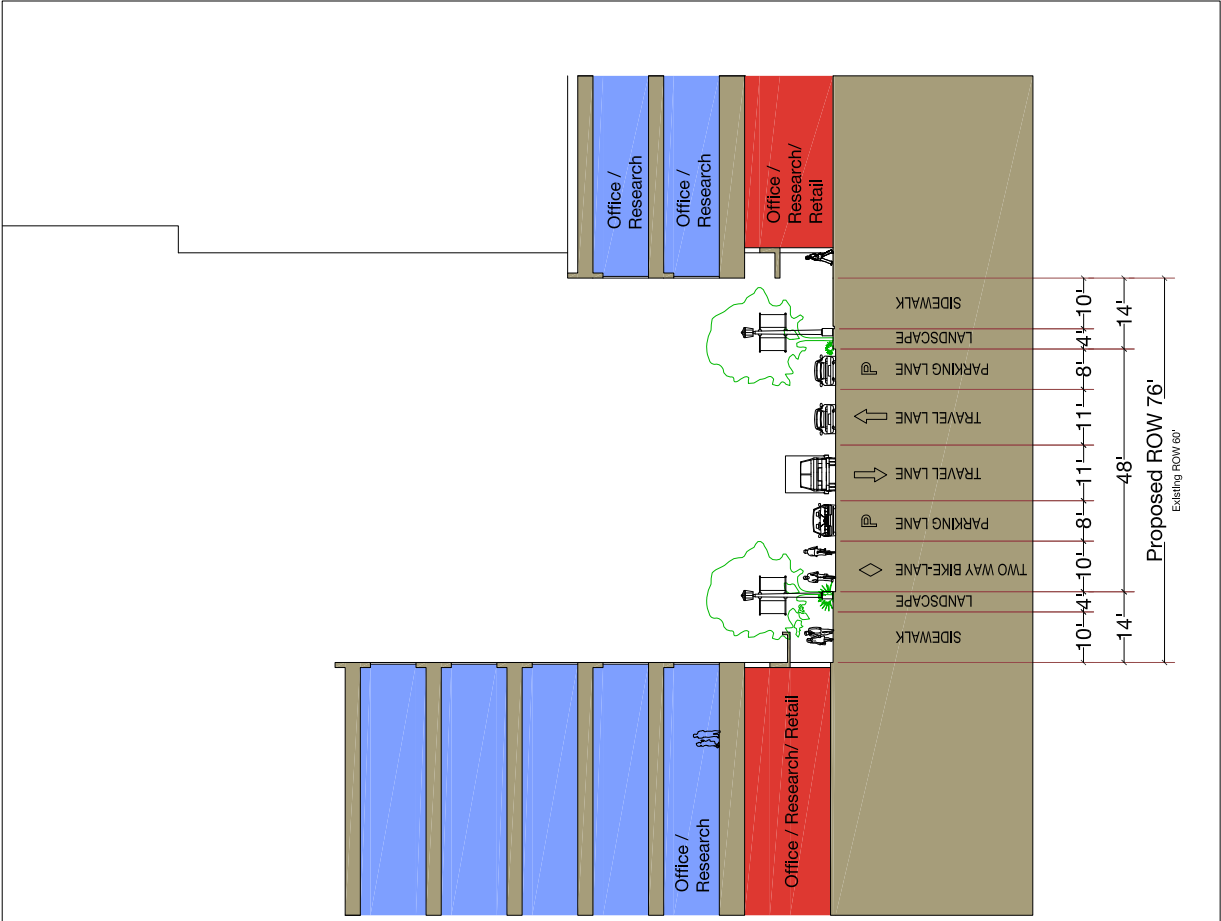
### CHARACTER / FUNCTIONAL GOALS:

- Create a prominent business address and gateway to the Inner Belt area and Somerville, emphasizing opportunity for new research-related development expanding on existing research uses in the area
- Encourage high-value development and active ground-floor uses on vacant and infill sites

### KEY DESIGN STRATEGIES:

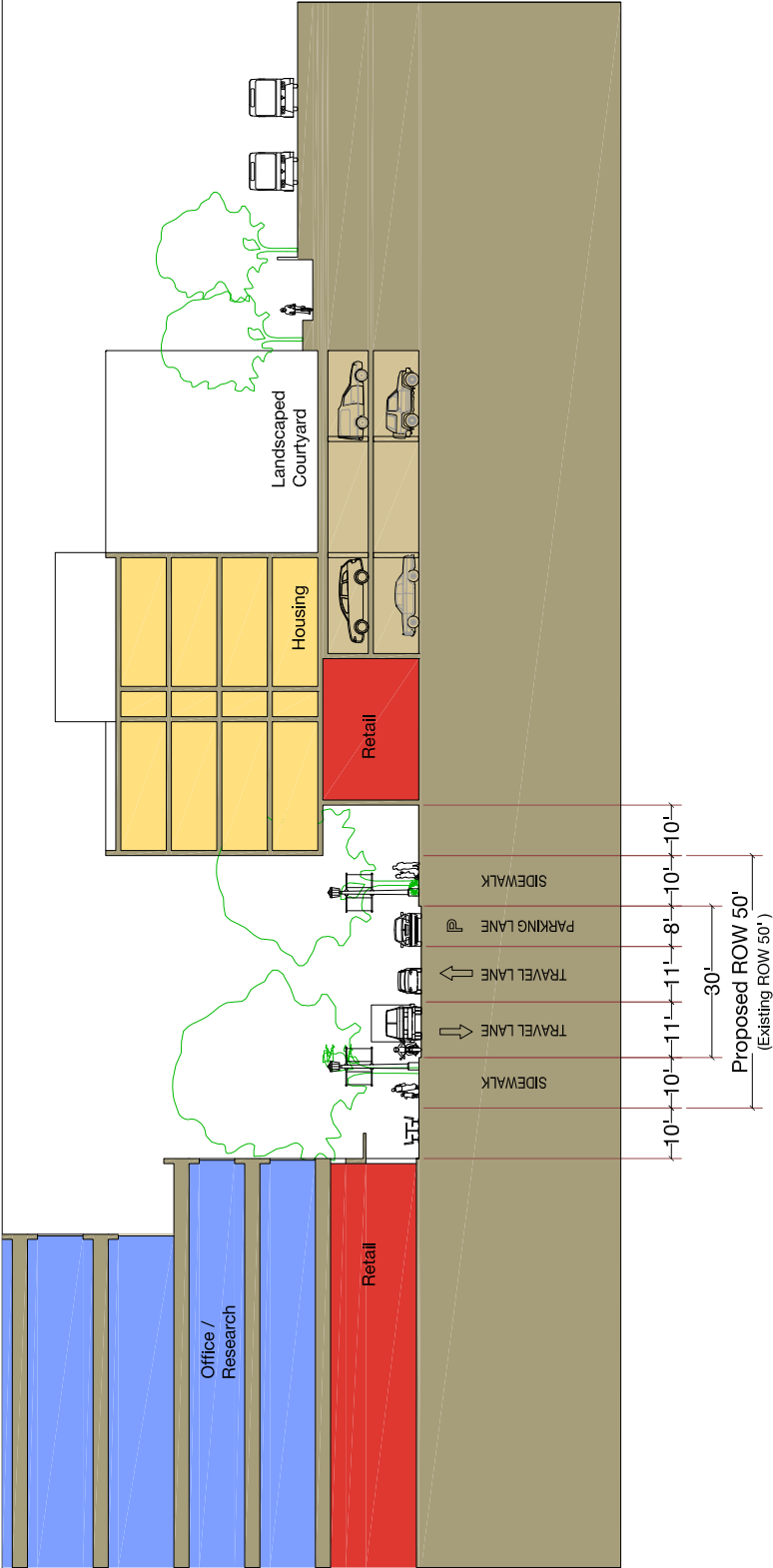
- Accommodate research/office buildings distinctly visible from Washington Station
- Limit curb cuts and entrances to parking garage and service docks to side street
- Use permeable pavers, rain gardens and other street-edge landscaping to help manage storm water.
- Include greenway/bike path as signature public realm and connectivity feature

Inner Belt Brickbottom Design Guidelines



- Inner Belt Road, South**  
(Section IB2)
- CHARACTER / FUNCTIONAL GOALS:**
- Establish a welcoming, pedestrian-friendly research/office N-S spine along the Inner Belt Road.
- KEY DESIGN STRATEGIES:**
- Locate transparent building lobbies, cafes and other active uses in the ground level in full vicinity of sidewalk.
  - On-street parking catering to visitors should supplement the employee parking provided within the interior blocks.
  - Limit the number of curb cuts; locate entrances to parking garages and service docks along side streets.
  - Use permeable pavers, rain gardens and other street-edge landscaping to help manage storm water.
  - Include greenway/bike path as signature public realm and connectivity feature

# Inner Belt Brickbottom Design Guidelines



## Joy St @ Washington (Section J1)

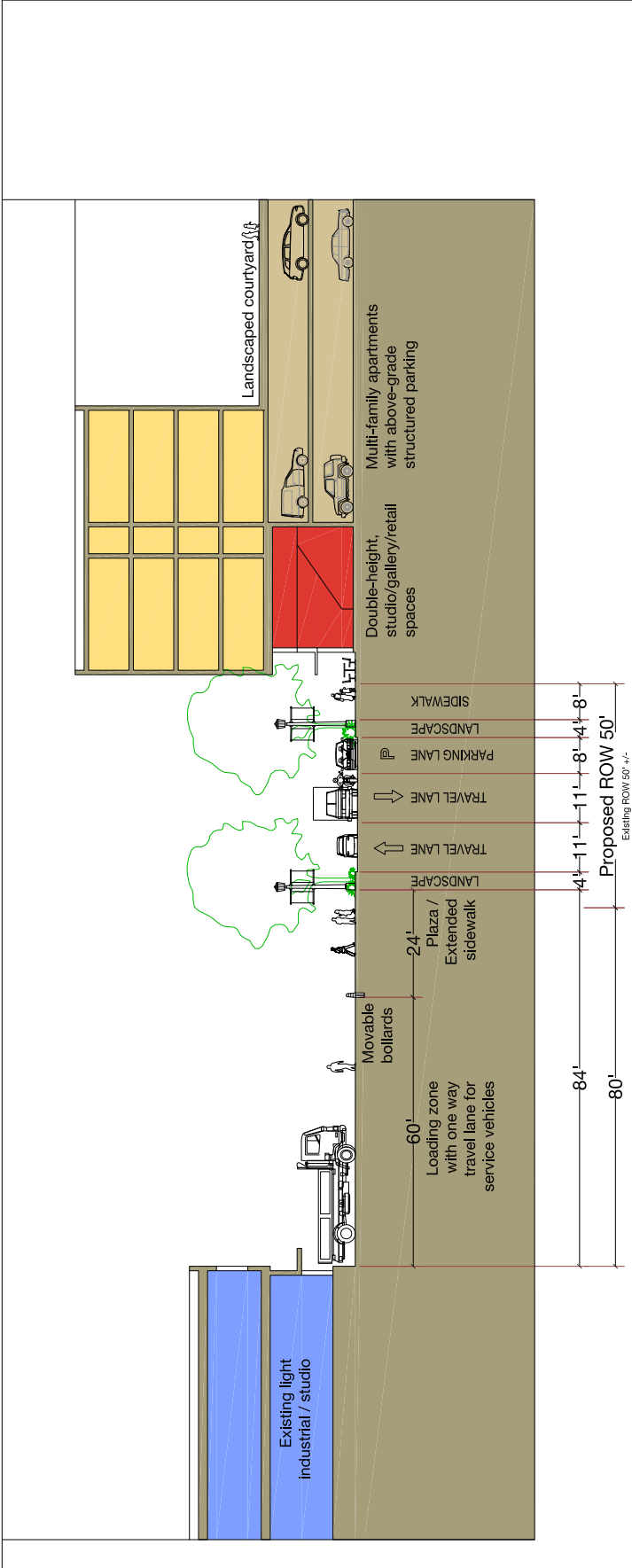
### CHARACTER / FUNCTIONAL GOALS:

- Create a prominent mixed use node that marks the western entrance to MBTA station and acts as a gateway to the new Brickbottom development
- Establish an "Arts Theme" in the design of streetscapes, public plazas and building exteriors.

### KEY DESIGN STRATEGIES:

- Facilitate active pedestrian realm with wider sidewalks, outdoor dining and ground level retail
- Employ structured parking and landscaped roof decks to negotiate the grade difference between Joy St. sidewalks and the community path adjacent to the raised rail lines.
- Promote safety and increase use of outdoor space by ensuring direct visibility between the community path and the buildings.
- Provide opportunities for public art along Joy St, community path and in semi-public building lobbies.
- Explore the feasibility of ground level retail arcades to augment sidewalk widths and to provide sheltered outdoor seating.

# Inner Belt Brickbottom Design Guidelines



## Joy St @ Poplar (Section J2)

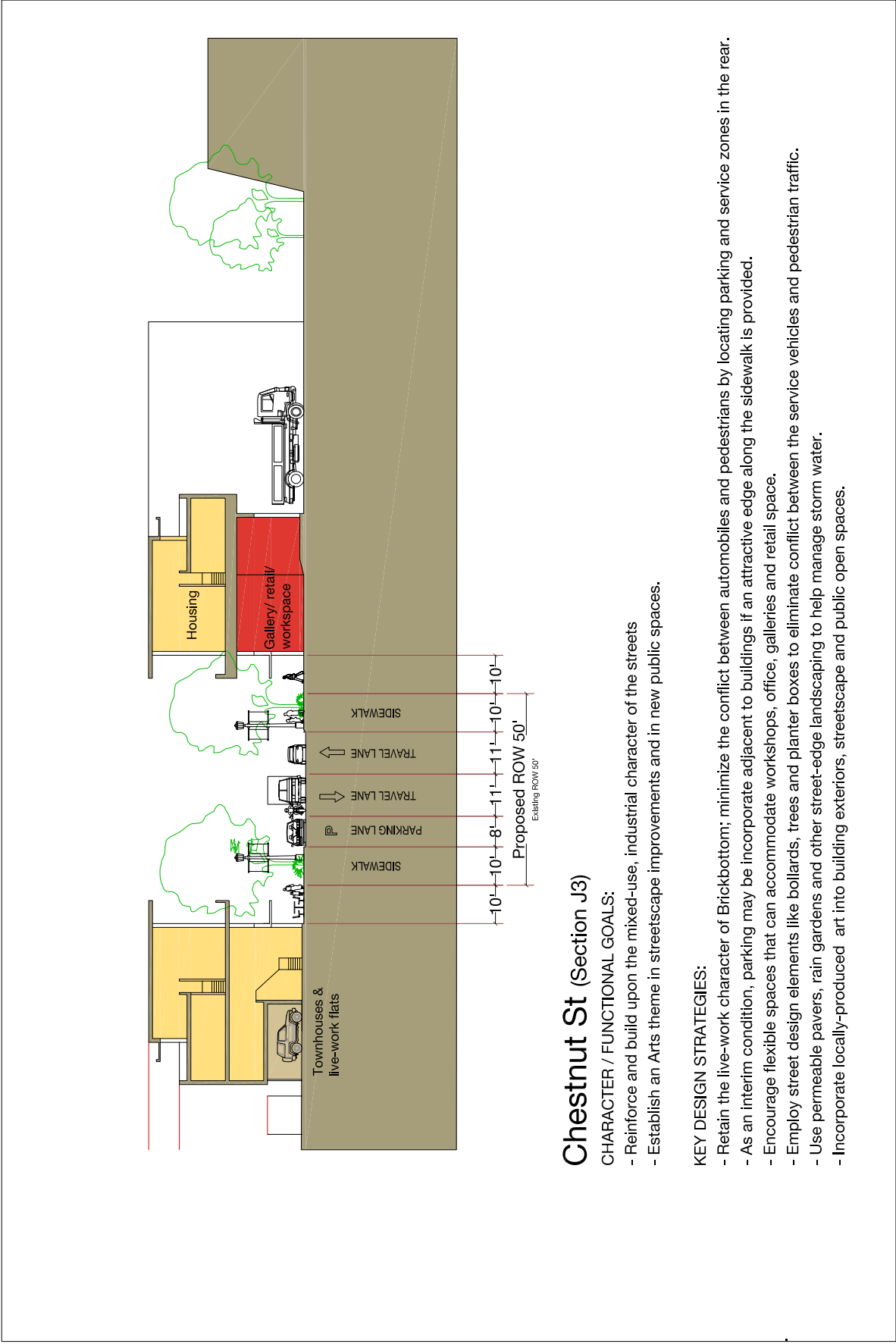
### CHARACTER / FUNCTIONAL GOALS:

- Reinforce and build upon the mixed-use, industrial character of the streets
- Establish an Arts theme in streetscape improvements and in new public spaces.
- Provide new pedestrian-friendly amenities ; minimize potential conflict between additional pedestrian traffic and existing loading/service functions.
- Accommodate periodic public events like art fairs, concerts, farmers market etc, along/adjacent to street.

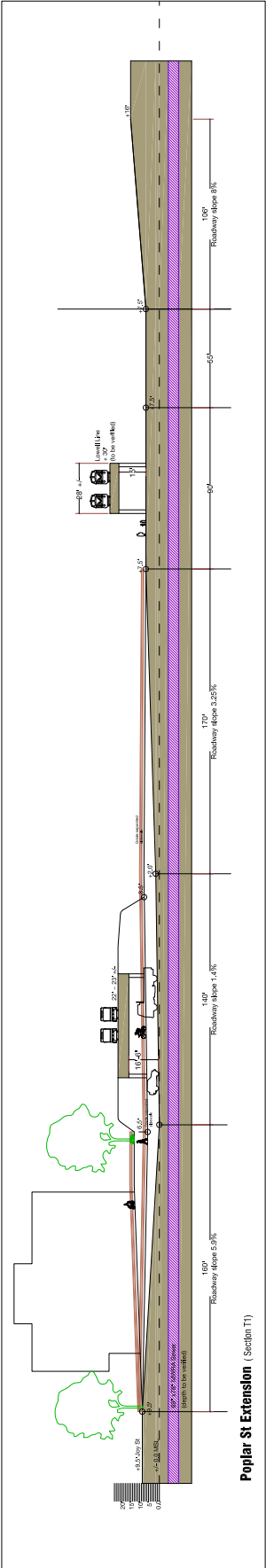
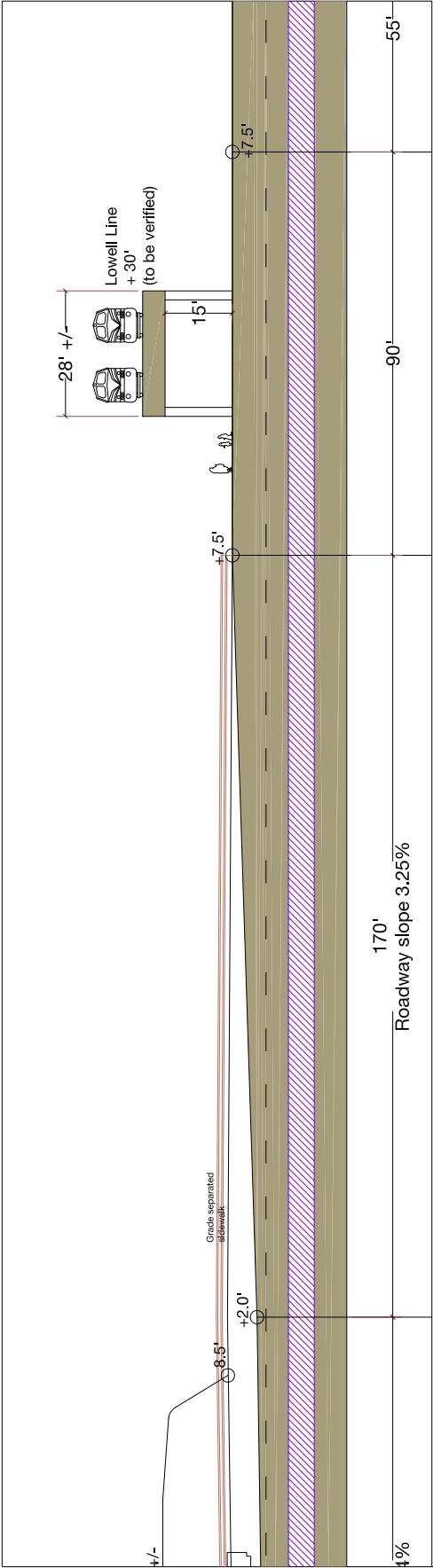
### KEY DESIGN STRATEGIES:

- Retain existing front loaded service condition. Encourage transparent garage door to minimize the extent of blank walls.
- Encourage flexible spaces that facilitate easy conversion of under-used service docks and indoor parking spaces into galleries, retail or other uses
- Employ street design elements like bollards, trees and planter boxes to eliminate conflict between the service vehicles and pedestrian traffic.
- Reduce paved surfaces and increase ground water retention with permeable pavers and landscape strips.
- Manage parking/loading areas and/or provide public park space to accommodate public events.

# Inner Belt Brickbottom Design Guidelines



Inner Belt Brickbottom Design Guidelines



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