Green Streets Guide for Allston Brighton

Prepared by
Charles River Watershed Association

In partnership with
Allston Brighton Green Space Advocates

Prepared for
Allston Brighton Community Development Corporation

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Introduction

This guide is the result of an ongoing collaboration between Charles River Watershed Association (CRWA) and Allston Brighton Community Development Corporation (ABCDC) that seeks to explore the possibilities of implementing “green street” designs in Allston Brighton. The guide is intended to be used by the Allston Brighton Green Space Advocates (ABCDC) to advocate for green street retrofits in various development and redevelopment projects being planned in the neighborhood and to work with various departments in the City of Boston to incorporate these design considerations into any street improvement project being implemented in the neighborhood.

In the first part of the guide, we define green streets and describe the elements that comprise them, as well as define the design considerations that inform specific suggestions for retrofitting streets in urban Boston. In the second part of the guide, we analyze and explore applicability of green street designs to three different urban streets in the Allston/Brighton neighborhood. We believe that many of the lessons learned from this case study will be applicable to other urban areas in New England that have similar climate, traffic regimes, and urban fabric conditions to those present in Boston neighborhoods.
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PART 1

What is a Green Street?
1. What is a Green Street?

A “green street” is a signifier of a healthy neighborhood. On a green street part of the public right-of-way is designed so that stormwater runoff is captured and cleaned by vegetation and soils. Whether the vegetation consists of street trees, grass, or “raingardens,” a green street offers a way to decrease water pollution and beautify neighborhoods with additional vegetation. Furthermore, a green street is a place for pedestrians to walk comfortably and safely; it is a place where the needs of community and environment are balanced with the needs to accommodate the automobile.

From a watershed perspective, green streets differ from conventional city streets because they are designed to retain raindrops where they fall and where possible replenish groundwater instead of conveying water off the land via underground pipe networks. Traditional pipe systems often cause flooding and water quality problems where the pipes end at outfalls—in streams, rivers, lakes and oceans. Water that flows off paved surfaces (stormwater runoff) is often contaminated with the byproducts from driving cars, fertilizing lawns, and other intensive land uses. These pollutants include heavy metals, oils and greases, excess nutrients, bacteria, and sediments. Water flowing through pipes also moves faster, with less friction, than water that percolates slowly through vegetation and soils in an undeveloped environment. The more pavement and rooftops in a watershed, the more water is forced into the pipe network. These volumes of rainfall, along with their toxic slew of contaminants, are delivered rapidly to receiving waters causing flooding and erosion of streambanks and shorelines at the end of the pipes. Thus, the environmental goals of green street design, a component of the Low Impact Development (LID) approach, are to reduce the use of pipe networks and allow natural drainage systems to carry and clean rainfall in cities.

1.1 Elements of Green Streets (A) Public Realm

Roadways: Although walkability is one of the goals of creating green streets, the street greening process is not intended to close off roadways to automobile traffic. That said, the first step in designing green streets is to analyze just how much space one needs in order to accommodate cars, trucks, and emergency vehicles within the roadway. In many cities, autos are allocated wider stretches of pavement than are necessary for mobility. This both encourages driving at faster (often unsafe) speeds and translates to excessive impervious surfaces which lead to poor hydrology and water quality. Green street projects in Portland, Oregon and Seattle, Washington have shown that two-way, two-lane residential street traffic can safely move within a twenty foot paved roadway; other evidence recommends as little as eighteen feet. On heavy traffic mixed use, commercial, and industrial streets, it may be necessary to have wider paved roadways, but regarding auto-mobility, the question should be what the minimum practical width of pavement is, rather than the maximum. Narrower paved roadway widths mean less impervious surface

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1 The authors of the article “In Search of Cheap and Skinny Streets,” Bray and Rhodes, experimented with two fire trucks passing each other and found that, with mirrors turned in, they could safely make it through a street of eighteen feet in width!
to generate stormwater runoff and more space for pedestrian traffic, vegetation and water quality improvements.

**Vegetation:** Within the streetscape trees, shrubs, ornamental plants and grasses create an attractive ambiance, but also provide functions that make for better human habitat and improve environmental quality. *Street Trees* shade their surroundings, improve air quality, increase evaporation, provide habitat, and reduce the urban heat island effect. The root zone of the tree pits in which street trees are placed can also serve as a storage area for stormwater runoff. A combination of engineered soils with extra pore space for water storage and a selection of tree species that can tolerate “wet feet” and drought make expanded street tree networks, a good option for reducing runoff and improving quality of life on urban streets. *Median Strips and Raingardens:* In many cities grass or other vegetation in planting strips and street medians have historically provided an aesthetic amenity and a buffer between auto traffic and pedestrians. These green strips, with or without trees, can be designed as raingardens and used to store and filter stormwater. In Portland, Oregon, they are planted with fine-stemmed, water-tolerant vegetation and placed within the curbs of the sidewalk; stormwater enters the strips through grates cut into the curb (Figure 1). In a Seattle, Washington neighborhood development, the planting medians are designed with two different aesthetic styles (Figure 2 & 3). The first example is similar to Portland’s project within which water is held on the surface by plants. The fine-stemmed vegetation acts as a filter, catching the particles and sediments in stormwater and trapping many of the nutrients and heavy metals that are bound to them. In the second Seattle example, water is held briefly on the grass surface but much of the stormwater is actually stored underground in large cells of specially engineered soils. Collectively, these strategies can serve as examples of ways to avoid directing runoff to overburdened stormwater pipe infrastructure while retaining the mobility and safety functions of the street right-of-way. Depending on the desired street configuration these plantings can be located flanking the roadway adjacent to sidewalks or within median strips that separate driving lanes.

![Figure 1. Sidewalk Stormwater Planter on SW 12th Avenue in Portland, OR. (Courtesy Tracy Tackett, Seattle Public Utilities)](image)
Sidewalks: Wider sidewalks improve the pedestrian realm of the public right-of-way and leave space for other street design elements such as street trees, benches, and lighting. While sidewalks traditionally contribute to the sum of impervious area within a street corridor, it is possible to reduce their effective imperviousness by paving sidewalks with porous and permeable materials that allow water to flow through and recharge groundwater, rather than runoff into the storm sewer pipe network.

Bike Lanes: Biking is a healthier and more sustainable form of local transportation than driving. Bicycle safety is an important feature of any street design and, where possible, should be incorporated into any green street retrofit. If a right-of-way is narrow and auto traffic lane width needs confound the ability to designate a separate bike lane, the best option for bikes may be slowing car traffic. Ways to do so include shared travels lanes with appropriate signage, providing vegetation, pavement changes at intersections, visual amenities, and other traffic calming elements within the streetscape.
Parking Lanes: While sometimes indistinguishable from the adjacent roadway in terms of paved surfaces, parking lanes do not need to meet the traffic weight and speed requirements that driving lanes do. Accordingly, they provide an opportunity to incorporate alternative materials, such as porous asphalt or concrete and permeable pavers. If there is adequate off-street parking, choosing to replace parking lanes with bike lanes or vegetation will effectively reduce the amount of right-of-way allocated for

Underground Infrastructure/Utilities: While we can’t convert cities to their predevelopment landscapes, we can be more selective about using natural systems of plants and soils rather than artificial pipe systems to shape the watersheds in which we live. Sometimes the surface width of the street right-of-way is not large enough to incorporate significant areas of soil and vegetation. In that case, we must look beneath the street itself as a place to store and treat stormwater. Infiltration trenches and underground detention and retention chambers can greatly complement the other green streets material mentioned above and work together to mimic natural hydrologic patterns in urban neighborhood settings. (Note that by intervening underground we must be wary of disturbing other existing utilities such as sanitary sewer and power lines.) In addition, green street retrofits need not always require digging up and replacing existing pipes; the older systems can be used for overflow in the case of larger storm events.

Plazas and Large Intersections: Large public spaces such as public plazas, traffic circles, and wide intersections may be ideal locations to locate green street features such as raingardens and deep tree pits. They may also serve as gathering places for the local community and as sites for public art. Stormwater elements can be incorporated in these high-visibility settings as demonstration projects, providing watershed education opportunities for neighborhood residents.

1.2 Elements of Green Streets (B) Private Realm

Adjacent Patios, Driveways and Parking Areas: The water that flows along typical city streets into catch basins and through underground pipes does not originate on streets alone. Driveways and parking lots are often graded to flow from private property into the public street right-of-way. Owners of adjacent property can lessen the burgeoning volumes of rainfall that enters the public street system by reducing the runoff from their property. Options include developing private raingardens into which runoff from “hardscape” (patios and parking areas) can be directed, eliminating or reducing paved areas and replacing them with porous pavers or permeable asphalt/concrete or amended soils and vegetation. Maximizing vegetation on one’s property not only increases absorption of water by plant roots, but increases evaporation, helping to cool the local climate. (Note that heavily compacted turf and lawn vegetation with thick root mats are surprisingly impervious to rainfall and can generate significant volumes of stormwater runoff.)

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2 Maplewood Minnesota has developed a thriving raingardens program in which the city offers neighbors a selection of plant palettes and subsidizes costs for the landscaping in exchange for residents doing the maintenance.
Rooftops and Water Collection: Roof area is also a large contributor to the total rainfall volume that makes its way into public streets and storm sewer pipes. Property owners can help reduce this runoff at the first place where it falls on their parcel by converting flat and low slope roofs to green roofs (also known as “eco-roofs”). Downspouts can also be disconnected from piped drainage systems (if they aren’t already) and rainwater can be conveyed either into cisterns (rain barrels) for irrigation water storage or conveyed directly into raingardens on the property. By thinking about the ultimate destination of every drop of rainfall that lands on our private properties, we can make enormous improvements in urban watershed hydrology and health.

1.3 General Design Considerations

In addition to the public and private realm retrofit approaches mentioned above, the following considerations should be used as a checklist in development reviews and as a part of any street retrofit design process.

Reduce Impervious Pavement

- Use porous pavement for areas such as under bicycle lanes, overflow parking areas, emergency access roads and other low-traffic areas. Porous pavement can be permeable asphalt, concrete, or pavers. However, pavers should not be used where a smooth, even surface is required such as on bicycle lanes.
- Encourage the use of shared parking to reduce the size and number of parking lots. Encourage underground or above ground parking structures for appropriately sized development projects.
- Encourage shared driveways between adjacent development projects or residences.
- Consider reducing parking requirements stipulated in the zoning code for commercial, industrial and multifamily use so as to reduce net impervious area. On-street parking or public parking lots in close proximity can provide some of the required off-street parking supply.

Manage Run-Off Onsite

- Grade sidewalks so that stormwater runs off into adjacent unpaved areas such as planting strips or landscaped private property.
- Use raingardens such as vegetated street swales and stormwater planters whenever possible.
- Design stormwater facilities for specific runoff goals (e.g. 1 year storm) and provide for overflow.
- All suggested BMPs should drain through infiltration or release to a designated discharge point such as another BMP or existing stormwater pipes. When using perforated pipes cleanouts need to be provided.

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For surface stormwater facilities keep slopes and depths as low as possible. This will increase safety, prevent erosion, and improve aesthetics.

For vegetated street swales place check dams every 12 to 20 feet to slow runoff.

Place infiltration stormwater planters 10’ away from building foundations to protect foundations.

For enclosed stormwater drainage systems, consider in-line treatment strategies including special structures to trap sediment (catch basins, sump pits, oil/grit separators).

**Improve Environment for Pedestrians and Bicyclists**

- Whenever possible, provide adequately sized sidewalks that are handicap accessible. According to *Streetscape Guidelines for Boston’s Major Roads*\(^4\) recommended sidewalk widths without trees are 12’-13’ and 13’ to 15’ with trees.
- Add bike lanes or other ways for safer riding such as shared roads. Use signs and shared lane pavement markings (such as sharrows) to indicate that bikes and cars share the travel lane.
- Include placement of bicycle racks on sidewalks and plazas. Refer to *Boston Bicycle Plan* (Boston Transportation Department, May 2001) for recommended racks, proper locations, and minimum clear space around racks.
- Use street calming techniques whenever possible: reduced lane width, extended curbs, raised crosswalks, side-alternating parking lanes.
- Incorporate street furniture, trash receptacles, pedestrian scaled lighting and public art where appropriate.\(^5\)

**Add Trees and Plants**

- Plant street trees wherever possible. Follow Boston’s planting requirements\(^6\):
  - 15’ from light pole
  - 10’ from a driveway
  - 20-40’ from an intersection (depending on the direction of traffic)
  - 10’ from a fire hydrant
- Incorporate stormwater treatment into vegetated areas.
- Select plants that can withstand wet conditions and are appropriate for urban environments in areas where runoff is stored and/or conveyed.

**Observe Preferred Minimum/Maximum Dimensions**

The following dimensions should be used only as guidelines. Detailed designs would need to be developed for each street by designers and engineers including sizing of stormwater facilities which is determined by site conditions such as soils, slope and stormwater goals.

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\(^4\) Boston Transportation Department, *Streetscape Guidelines for Boston’s Major Roads*, July 1999

\(^5\) Design of street amenities such as street furniture and lighting is not included in the scope of this document.

\(^6\) City of Boston, Parks and Recreation Department (http://www.cityofboston.gov/parks/streettrees/seasonal.asp)
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<th>Public Realm Component</th>
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<td>Travel Lane Width</td>
<td>Minimum: 10' (Collector) 9' (Local Road)</td>
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<tr>
<td>Separate Bicycle Lane Width</td>
<td>Minimum: 4' Min. (without parking) 5' (next to parking) Recommended: 5'</td>
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<tr>
<td>Shared Car and Bicycle Lane Width</td>
<td>Minimum: 14'</td>
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<td>Parking Lane Width (Parallel on-street)</td>
<td>Minimum: 7' (For streets not plowed curb to curb 8' Min) Recommended: 8'</td>
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<td>Bus Stop Curb Length</td>
<td>Adjacent to Intersection: 60' Mid-block: 80'</td>
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<td>Sidewalk Width</td>
<td>Minimum: 4' (clear, unobstructed) Recommended: 8' (clear, unobstructed) 12-13' without trees 13'-15' with trees</td>
<td>A, ADA requirement</td>
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<td>Crosswalk Width</td>
<td>Minimum: 10'</td>
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<td>Tree pits (without stormwater management)</td>
<td>Minimum: 4’x6’, 5’x 5’, 0.5’x10’ Recommended: 6’x 6’</td>
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<td>Stormwater Planter (Infiltration) Dimensions</td>
<td>Minimum: 30” Storage Depth: Minimum 12”</td>
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<tr>
<td>Stormwater Planter (Flow-Through) Width</td>
<td>Minimum: 18” Storage Depth: Minimum 12” Slope: Maximum .5%</td>
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<tr>
<td>Vegetated Street Swale Dimensions</td>
<td>Minimum Width: 7’ Storage Depth: 6”-12” Maximum Side Slope: 3:1 Maximum Longitudinal Slope 60%</td>
<td>B</td>
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</tbody>
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*Sources for Dimensions unless otherwise noted:  
A: Streetscape Guidelines for Boston’s Major Roads (City of Boston 1999)  
C: Project Development and Design Guidebook (Mass Highway 2006)
PART 2

Opportunities for Allston Brighton Streets
2. Opportunities for Allston Brighton Streets

2.1 Project Background

At Allston Brighton’s second annual “Green Gathering” in February 2006, 55 residents joined together and stressed the need for a plan that articulated better access to and awareness of the neighborhood’s parks and open spaces. The Allston Brighton CDC and a group of fifty community activists launched the Allston Brighton Green Space Connections planning process, a project whose goal is to contribute to community revitalization by strengthening the network of public parks and making parklands accessible to all modes of transportation.

The Allston Brighton Green Space Connections map proposes three types of green corridors: Urban Boulevards, Local Greenways, and Green Linkage Streets (see Figure 4). This map forms the framework for planning and creating design guidelines on a street-by-street basis.

Figure 4. Allston-Brighton Green Street Opportunities
In February 2007, the ABCDC received a grant from the Department of Housing and Community Development to create design guidelines for green corridors, and hired CRWA as a consultant to develop design guidelines for pilot streets in Allston Brighton. Simultaneously the ABGSA undertook a collaborative effort to analyze a set of streets in the Allston-Brighton, in order to select potential locations for green street retrofits. A combination of factors including stormwater infrastructure challenges, auto and pedestrian mobility issues, and community interest led to the selection of three streets for in-depth analysis and conceptual design development for green streets.

The streets selected for analysis were Everett Street, Market Street, and Brooks Street (See Map in Figure 5). Each street runs predominantly north-to-south, with stormwater pipes that accept flows moving north to outfalls on the Charles River. The buried stormwater infrastructure is roughly five feet beneath the ground surface in this part of Boston and pipes are generally sloped downwards to carry flow by gravity. Each street has its own set of mobility and safety challenges that would be aided by the creation of a more pedestrian-friendly green street design. The design guidelines provide specific instructions that the neighborhood can incorporate into future redevelopment plans to improve streets for walkers and bicyclists, to make public parks more accessible, and to strengthen the overall open space network in the neighborhood.

Figure 5. Pilot Green Street Types in Allston Brighton. Location of the three streets selected to represent three types of Green Streets for developing design guidelines
Over the course of summer of 2007 community workshops were held to engage the local neighborhoods and identify specific issues relevant to potential future street design scenarios. Considerations included which streets can accommodate bike lanes, which streets can accommodate street trees and other low-impact designs from the menu of green infrastructure available. For more details on the workshops refer to Appendix - Community Workshops: Newspaper Articles, Meeting Notes and Survey Results.
2.2 Everett Street

Site Analysis

- Needs repaving
- Variable curb and sidewalk materials—brick, concrete, asphalt, many in disrepair.
- Pedestrian challenges, need for improved (wider) sidewalks and new crosswalks.
- Some “drains to Charles” stenciling
- Passes over Mass Pike and splits off
- Traffic safety challenges at overpass ramps
- Opportunities to collaborate with private lot and building owner(s) immediately south of Mass Pike
- Narrow paved roadway width along much of street
- Road slopes at south end; most significant slopes are at Mass Pike overpasses
- Average right of way: 40’
- Right of way width may not provide enough room for bicycle
- Existing parking lanes only adjacent to Mass Pike overpass
- Hydrologic connection to Charles River at north is beneath parallel Teleford St. to west, but visual connection is along Everett Street to Soldier’s Field Road Drive where there is no overpass or safe crossing to the Charles River.
- Everett Street is classified as an urban collector and carries about 9,000 vehicles per day.
- Connects North Beacon Street to Western Avenue.

Green Street Design Opportunities

- Create pedestrian linkages to river and down street, including potential new overpass
- Add bicycle links (if possible)
- Include vegetation in parks and roadway as habitat (e.g. birds move between parks)
- Redesign hot spot intersection at Holton Street and Everett Street to prevent frequent flooding
- Improve streetscape with trees, shrubs, benches, lighting, public art
- Linkages through private property and contributions of private property owners (e.g. Harvard owned parcels) would help meet community and ecology goals.
Green Streets Guide for Allston Brighton

**Greening Guidelines**

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<td>Improved vegetation management and LID retrofits</td>
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Figure 6. Everett Street. Greening Guidelines
Proposed Street Treatments

Figure 7. Everett Street Section. Stormwater Planters on both sides. Suggested anywhere along Everett Street.
Figure 8. Everett Street Section. Swale on one side. Suggested next to Commercial Sites or Parking Lots.
Figure 9. Everett Street Section. Parking on one side and Stormwater Planter on the other. Suggested next to Mass Pike Bridge.
2.3 Market Street

Site Analysis

- Travel lanes may be wider than necessary
- Steep slopes throughout
- Commercial areas at both ends. Larger parcels with high levels of imperviousness to north; smaller parcels to south.
- Land Use is Residential in between two different commercial zones with different scales: 1-Main Street with shops fronting public right of way; 2-Large scale commercial where parking lot is street frontage
- Large parking area next to the Conservatory, across from Mapleton Street
- Parking lanes between Faneuil Street to Sparhawk Street are less crowded, maybe space available to put in vegetation (trees with benches)
- Excessive flooding and ice build-up occurs at street intersections (at Ryan Road/Market Street and Arlington Street/Sparhawk Street/Market Street intersections)
- Poor drainage from side street is responsible for flooding (e.g. Arlington St. north)
- Need to connect Market Street visually and physically all the way to the Charles River and to playgrounds and pocket parks in the area
- Need for safe pedestrian connections throughout
- Overpass at Soldier’s Field Road is tricky;
- Need green connection to the Charles River and landscape
- Traffic safety challenges at overpass ramps
- Need for bus stop connections
- Bicycle lanes may be possible
- Sidewalks are typically 9-10 ft. wide
- Market Street is classified as an urban collector and carries about 25,500 vehicles per day.
- Runs between Commonwealth Avenue and Western Avenue.

Green Street Design Opportunities

- Create pedestrian linkages to the river, including potential new overpass
- Add bicycle links (if possible)
- Redo hot spot intersection with steep slopes and flooding problems at Arlington Street/Sparhawk Street
- Improve streetscape with trees, shrubs, benches, lighting, public art
- Slopes of street enhance visual connections and should be emphasized; could use terraced model for stormwater treatment.
- Linkages through private property and contributions of private property owners would help meet community and ecology goals
- Public Art and Green Infrastructure as part of way finding, signage along the path to the River, pocket park north of the pike
- Opportunities to connect business district(s) at both ends of Market Street to neighborhoods in between
• Incorporate stormwater management elements when designing needed gateways/entryways to demarcate nodes at both ends of Market Street, e.g. the Charles River or Brighton Center
• Provide a sense of place and arrival through enhancing the visual experience using gardens, light fixtures, street furniture, trash barrels and kiosks.
• There may be an opportunity to create guidelines for the involvement of private landowners.
Greening Guidelines

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Figure 10. Market Street Greening Guidelines.
Proposed Street Treatments

Figure 11: Market Street Section South of Mass Pike. Stormwater Planters within Parking lanes and Bike Lanes on both sides.

Figure 12: Market Street Section North of Mass Pike. Boulevard with Swales, Stormwater Planters, Raingarden, and Bike Lanes.
Figure 13: Market Street Options for Bus Stops with Bike Lane and Stormwater Planters.
Figure 14: Market Street Raised Intersection with Curb Extensions and Stormwater Planters. Suggested for intersections in need of flooding mitigation and safety improvements (see Figure 10: Market Street Greening Guidelines)
Figure 15: Before and after scenarios for greening Market Street
2.4 Brooks Street

Site Analysis
- Traffic calming needed; many accidents on blind hill going up Bigelow Street.; this intersection is at a high point of Brooks Street
- Street slopes down both north and south with a hill crest in the middle
- Slope is near-flat at south end
- Traffic is worse at night coming from the Charles River (Nonantum Road) and worse in the morning coming from Faneuil Street
- Parking conflicts; most residences are double-family size.
- Need for crosswalks, especially near convenience store.
- Need for improved underpass sidewalks
- Street is currently not safe for biking
- Street is slightly wider between Upcrest Road and Bigelow Street
- Sidewalks are narrow (typical width = 7’0’’)
- Few street trees; trees in small tree pits = 18’’ x 18’’
- Population is growing as lots are subdivided for new building construction.
- Brooks Street is classified as an urban collector.
- Runs between and Faneuil Street and Nonantum Road.

Green Street Design Opportunities
- Use speed bumps and other traffic calming techniques that incorporate stormwater treatment elements, such as curb-bulbs with stormwater planters
- Incorporate terraced stormwater elements where slopes are steep
- Expand street tree network using stormwater planters
Green Streets Guide for Allston Brighton

**Greening Guidelines**

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Figure 16: Brook Street Greening Guidelines
Proposed Street Treatments

Figure 17: Brooks Street Section: Stormwater Planter and Parking Lanes. Suggested south of Bigelow Street.

Figure 18: Brook Street Section. Conveyance Swale on one side and Parking Lane on the other. Suggested north of Bigelow Street.
Figure 19: Brook Street Plan showing Swales and Parking alternating sides (traffic calming).
Figure 20: Brook Street. Raised Intersection and Curb Extension with Stormwater Planters at Bigelow Street.

Figure 21: Brook Street Section. Looking at Mass Pike Underpass. Stormwater Planters, Green Walls, and Bike Lanes.
Figure 22: Before and after scenarios for greening Brooks Street with stormwater planters, porous sidewalks and bike lanes in section looking at the Mass Pike underpass area
2.5 Public-Private Site Recommendations

- New construction or redevelopment projects contribute to green streets funding or include green features to reduce stormwater runoff from project site itself.

Recommendations for reducing imperviousness on private residential lots along green streets Source Green Streets METRO, OR
• Eliminate or mitigate for large areas of parking (especially that drain into public right-of-way).

Recommendations for reducing imperviousness on parking lots along green streets
Source Green Streets METRO, OR
• Neighborhood-scale fundraising to support commercial districts by greening streets and improving walkability.

Before and after scenarios for greening Braintree Street parking lot
• Green roofs for residential, commercial, and institutional sites

Green roof on residential garage

• Downspout disconnect into rain barrels, cisterns or stormwater planters and raingardens

Rainbarrel  Stormwater Planter

Cisterns
2.6 Summary of Recommended Green Street Design Elements

Permeable Pavement

Options for permeable pavement are porous concrete or asphalt and permeable pavers.

Benefits:
- Reduce runoff.
- Recharge groundwater (if soils allow infiltration).
- Filter pollutants.
- Superior performance in cold conditions (less prone to crack, needs less salt)

Applications - Public Realm:
- Sidewalks/Intersections
- Bike lanes
- Parking lanes

Applications – Private Realm:
- New/Retrofitted Developments – Paths, plazas
- Parking lots
- Driveways

Permeable Pavement on Sidewalks
Porous Pavers in Parking Lane
Porous Pavers in Parking Lot.
Street Trees

Benefits:

- Improve pedestrian environment.
- Reduce runoff by intercepting rain
- Can be combined with stormwater planters/swales/raingardens to increase infiltration
- Reduce heat island effect and cooling cost of adjacent buildings.
- Reduce and filter pollutants.
- Promote wildlife habitat.

Applications - Public Realm:

- Sidewalks
- Curb extensions

Applications – Private Realm:

- Private gardens
- New/Retrofitted Developments
- Parking lots

Tree in Stormwater Planter in Parking Lot

Street Trees
Rain Gardens

Raingardens are landscaped depressions that collect and treat stormwater runoff. As stormwater infiltrates through mulch, soils, and plant root systems pollutants such as bacteria, nitrogen, phosphorus, heavy metals, oil and grease are retained, degraded, and absorbed. Recommended rain garden types include stormwater planters, swales, and infiltration basins. Stormwater planters are structures that either infiltrate (infiltration planter) or slow and filter runoff (flow-through planters). Swales are planted depressions with gentle slopes that slow and filter runoff. Infiltration basins are vegetated depressions that store and infiltrate runoff.

Benefits:
- Enhance pedestrian environment.
- Reduce and slow runoff.
- Improve water quality.
- Recharge groundwater (if infiltration is possible).
- Reduce heat island effect.
- Promote wildlife habitat.

Applications - Public Realm:
- Sidewalks
- Roads and Intersections (curb extensions)

Applications – Private Realm:
- Private gardens
- New/Retrofitted Developments
- Parking lots
Curb Extensions/Raised Intersections

Benefits:
- Improve pedestrian environment.
- Slow traffic.
- Provide opportunities for runoff treatment and added vegetation.

Applications - Public Realm:
- Roads
- Intersections

Bike Lanes/Shared Roads

Benefits:
- Safer environment for bicyclists
- Slow traffic.
- Provide opportunities for runoff treatment when using permeable pavement.

Applications - Public Realm:
- Roads
- Sidewalk

Applications - Private Realm:
- New/Retrofit Development
Public Art/Street Furniture/Educational Interventions

Benefits:

- Create pedestrian-friendly environment.
- Engage the community, especially if participation in the design and implementation of art projects is encouraged.
- Provide opportunities to connect neighborhood to the Charles River.
- Help the neighborhood recognize urban environments and can bring the importance of water and plants back into people’s minds.

Applications - Public Realm:

- Sidewalks
- Bridge Crossings
- Intersections

Applications – Private Realm:

- New/Retrofitted Developments

Examples of Bridge Crossings

Improved Sidewalks and Intersections in Brookline, MA.

Educational Sign in Portland, OR
2.7 Maintenance

Whatever green streets elements are designed and constructed, maintenance will play an important role in their success. Maintenance activities within the street right-of-way can eliminate flooding and improve water quality. They will affect structures and materials as well as vegetation and soil health. Activities may range from general repairs of sidewalks to vactoring (cleaning) out catch basins to street sweeping to pruning trees and weeding other vegetated areas. Some of these activities are more common on typical street designs; others are particular to green streets. Some maintenance duties—such as emptying sedimentation structures or tree pruning—can be performed by city departments; others—such as weeding rain gardens and inspecting catch basins for clogging—may be accomplished by local residents and business owners who are interested in helping a green street function properly. Maintenance programs should be developed for all green streets; planners may want to borrow from maintenance manuals used by cities with successful green streets and green alleys programs, such as Seattle, Portland, Vancouver B.C. and Chicago. Ultimately, no green street should be planned without consideration of maintenance objectives and needs and agreements as to who will be responsible for maintenance activities during the project’s life.

- Regularly remove trapped sediment and pollutants to avoid resuspending them in subsequent storms.
- Select grass species that produce a uniform cover of fine-hardy vegetation that can withstand prevailing moisture conditions. Provide routine mowing to keep grass in active growth phase and to maintain dense cover.
- Follow guidelines for erosion control techniques during construction of regional streets and adjacent development projects.

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7 Seattle, WA: Natural Drainage Systems Program
Portland, OR: Green Streets Program
http://www.portlandonline.com/bes/index.cfm?c=44213&
Chicago, IL: CDOT Green Alleys Program
Vancouver, B.C. Canada: City of Vancouver Country Lanes & Sustainable Streets Programs
http://www.city.vancouver.bc.ca/engsvcs/streets/design/enviro.htm
3. References


Links to other Green Streets Programs:


Vancouver, B.C. Canada: City of Vancouver Country Lanes & Sustainable Streets Programs http://www.city.vancouver.bc.ca/engsvcs/streets/design/enviro.htm
Appendix

Community Workshops: Newspaper Articles, Meeting Notes and Survey Results
On the street where they live

Workshop on Everett explores 'green' future

By Andraea Downs
GLOBE CORRESPONDENT

Bicycle paths, storm drains, mosquitoes, and rats were all subjects on the table when about 20 people gathered Monday to discuss how to redesign Everett Street in Allston.

The meeting, in a tiny basement room of St. Anthony's School, comes at a crucial time for residents and neighborhood groups pondering the future of one of Allston's main thoroughfares, which is treeless, narrow at many spots, and dangerous for pedestrians and bikers.

In August, the city will begin repaving parts of Everett Street. Meanwhile, Harvard University is drafting its master plan for the properties it owns on both sides of the street, sometimes at its narrowest stretches. Once these plans are implemented, the opportunity for making substantial changes to the street will vanish.

Residents hope to present their neighborhood-generated guidelines for street improvements to Boston's transportation, public works, and water and sewer departments, as well as some of the area's major institutions, in hopes that at least some of the ideas will be incorporated in repaving and institutional master plans.

Among the ideas bandied about Monday were ways to retain storm water to prevent flooding and farther erosion of the riverbank park; adding a bicycle lane, wider sidewalks, or street trees; and most important, how Storrow Drive could be safely crossed at Everett.

The Everett Street Greening Workshop heard from Stephanie Hurley, a student at Harvard's Graduate School of Design, and Pallavi Mande, with the nonprofit Charles River Watershed Association.

Hurley talked about efforts in the Pacific Northwest to make streetscapes more absorbent of storm runoff. The trouble with storm drains in underground pipes is that heavy rains can exceed pipe capacity and cause flooding, she said.

Mande said 2 acres of parkland along the banks of the Charles had already been eroded by storm-water surges.

Hurley showed slides of streets in Seattle and Portland, Ore., with open, planted areas that collect storm water and drain it slowly into the ground or let it evaporate. Because the drains are not enclosed, these streets can handle even "100-year" storms, she said.

Such so-called green street systems in Seattle cost less in the long run than traditional, paved-over and drained-under streets, Hurley said.

Asked about mosquitoes and rats, Hurley said the green drainage systems drain standing water before mosquitoes can mature. She could not comment on rats.

Closer to home, Mande noted a project in Lawrence that has transformed neglected alleyways into green passageways for children, pedestrians, and water retention. The alleys also connect parks to the Spicket River and collect rain water in flower beds.

Talking just about Everett Street, residents argued for a safer crossing of Storrow Drive to reach the parks and Publick Theatre.

"You take your life in your hands to cross there," said resident Brent Whelan. "You can't even take your bike over."

Tamara Daly, also a resident, said there is no easy access to the bike paths on the river.

"It would be nice if we had bike paths on Everett Street, so residents could use the bike path along the Charles to get to work," she said. "And potentially, we could get some car traffic off the street."

Other participants talked of making pedestrian crossing at Western Avenue safer, perhaps with a colorful crosswalk.

The workshop was the first of three on "green" streets being sponsored by the Allston-Brighton Community Development Corporation, with help from the Charles River group. A meeting on Market Street is slated for next month, and one on Brooks Street is planned for August. For more details, visit crwa.org or allstonbrightoncdc.org.
Everett St. facelift coming
Planning workshop addresses safety, connection to river

By Paul Reynolds
CORRESPONDENT

Ever since the city of Boston worked on Everett Street in July 2005, David McNair thinks twice about walking it with his 2-year-old daughter, Lauren. Instead, he often cuts through St. Anthony's School and winds his way up to Raymond Street, a route that runs parallel to Everett.

"You're pushing your daughter in a stroller and you want to have some feeling of security — and there's absolutely none," McNair said about Everett.

McNair, who has lived on Bagual Street — one block east of Everett in Allston — for nearly 12 years, remembers a time when the street was safer, prior to the city's renovation. "Before they reconditioned the street and repaved it, it was so bumpy that the cars were slower," he said.

"There used to be an actual sidewalk, with a curb. It was in bad shape, but at least there was a real sidewalk and it had a curb."

Harry Mattison, another local, agreed. "I walk down Everett with my two kids and two dogs almost every day," he said. "I don't feel safe, because there is no curb on most of Everett and the sidewalk slopes down to the street." Safety was one of many issues raised Monday night at a workshop at St. Anthony's in Allston to discuss possible greening ideas and general renovations for Everett Street. Organized by the Allston-Brighton Community Development Corporation, the "Everett Street Greening Workshop" was the first of a series of three public meetings that will continue through the summer.

Stephanie Hurley, a landscape designer for the Charles River Watershed Association, told around 30 local citizens, politicians and property managers who gathered in St. Anthony's about successful projects in Portland, Ore., and Seattle, Wash. In these cities, she explained, the government and community members collaborated to design streetscapes that manage water runoff in natural ways — by letting it soak and evaporate in planted strips on the roads without piping it along with accumulated dirt and trash, directly to rivers. These projects also addressed the issue of safety by providing pathways for bicyclists and pedestrians. Hurley showed pictures of several of the residential streets snaking through lush vegetation.

Although street greening has already been implemented in Portland and Seattle, Everett Street is considered a pilot project for Boston.

"I think having the attitude that it's a pilot project will be motivating for the designers," Hurley said. "If you really make the pilot project work, it will be an example and a gateway for subsequent projects."

At several meetings held over the last two years, green space advocates have already identified Market Street and Brooks Street as areas to focus on next, according to Heather Knobspyder, the open space community organizer for the CDC. She said that those streets were considered because they are major thoroughfares in Allston that connect the community to the Charles River.

The CDC will hold workshops and meetings in July and August to begin designing proposals for them.

"It's going to be a long process, but I think the city is going in the same direction," Heather said. "I'm very hopeful. There's a lot of talk about creating sustainable neighborhoods in Boston, and I think this fits right in."

On Monday, Knobspyder and Kate Jordan, the AmeriCorps open space community organizer for the CDC, extended the discussion portion of the workshop to accommodate eager input. While McNair and Mattison raised concerns about pedestrian safety, Tim McHale, with the CDC, who has lived two blocks west of Everett on Litchfield Street for 34 years, said he wanted more green space it gives its residents, the better off a city is. There are already plans in place to beautify the street while creating additional parking. On July 1, Bill Wertz, a local property manager, will begin building a new parking lot at 95 Everett, which he described with enthusiasm. "We'll have 14 brick columns around the parking lot," said Wertz. "We'll have landscaping and islands. We'll have reserve spots for motorcycle parking and additional parking for the commercial buildings."

Wertz added that he will work "very closely" with the CDC and the Charles River Watershed Association.

Even with all of these varying interests among community members going into the same proposal, not to mention that whatever proposal results from the workshops will still have to meet city approval, Hurley is hopeful. "I think that if the community is willing to sign on in support of this idea, it has a good chance of going through," she said. "One of the big things that came up [at the meeting on Monday] was the actual connection to the river at the end of Everett Street. If that is a safe, green access place to the river over Soldiers Field Road, then the rest of the street will seem more practical."

McNair put the issue of practicality a different way. "There are all sorts of problems with Everett," he said. "But it's not too much to ask to have a sidewalk you can walk on."
River Access

1. General Goals
   a. Make a pedestrian/bike pathway to the Charles along Everett Street
   b. “Moving people” to the river, as well as water
   c. Link parks in neighborhood to each other and Charles “ecologically” via Everett St (i.e. birds can travel between parks)

2. Significance
   a. Currently no pedestrian crosswalk at Soldier’s Field Rd and Everett St
   b. Crossing Soldier’s Field Rd to reach the river is a “death trap” for pedestrians and cyclists
   c. Getting kids to the river on foot is unsafe
   d. If Everett St not physically connected to the river the visual and mental connection from street to river is lost: green street should follow Everett the whole way

3. Suggested Solutions
   a. Create a pedestrian overpass or underpass at Soldier’s Field
      i. Could create a pedestrian bridge with a wind barrier to make it more pedestrian friendly and provide an “identity marker” for Allston Brighton on the Mass Pike
   b. Depress Soldier’s Field Road at neighborhood end as well as Harvard end (will hydrology work?)
   c. Create a number of access points for bike riders along Everett so they can use it to get to the Charles and follow the Charles to get downtown
   d. Consider pedestrian bike access that goes right and left across road ("Y" ramp); allows bike traffic to easily go separate ways along river
   e. Turn Charles into a way for bike riders to get downtown
      i. Charles is already a significant destination for bikes
      ii. With better river access people could use it to get to work
   f. Consider increasing access from Thomas Gardner School to the river (so kids can experience open space)
   g. Connect Ringer Park and playgrounds to Charles via Everett St
   h. Consider resurfacing and making parking lot along Charles across from Everett St green
      i. Design something that is good for both hydrology and pedestrians
      ii. Do not necessarily completely get rid of parking lot because river is a regional asset, not just a local one
      iii. Find way to accommodate trees, green spaces, and pedestrian paths without dramatically reducing parking
   i. Need to make passage safer with curb and street widening along Everett
   j. Create a 20-foot green swath all along the western edge of Everett St (north of the bridge across the pike) to incorporate various green strategies in Harvard owned properties
**Possible other Connections**

1. Connect Everett St to Telford across parking lot
2. Improve intersection of Everett Street and Western Ave (currently “bleak”) – need to improve the node and make it “greener”
3. Redesign Braintree Street
   a. Could be a shortcut to Stop & Shop
   b. Could make section of Everett St parallel to Mass pike bridge on the southern end one way

**Pedestrian and Bike Access to Everett**

1. Goal: Create pedestrian and bike passages along Everett St
2. Significance
   a. Encourages biking and walking: good for human health
   b. Bikes currently go along North Harvard St to get to Charles, but if Everett St improved it would provide additional access that would be used
3. Problems and Solutions
   a. Street is too narrow in spots for both cyclists and cars to travel down together → could squeeze a bike lane on Everett St
   b. Speed bumps to slow down cars would be good if only affected cars (some feel road is not too fast right now)
   c. Is it possible to create an overpass over I-90 just for bikes that runs parallel to the car overpass?

**Safety on Everett Street**

1. Significance
   a. Corner of Holton and Everett is a “hot spot”
      i. At least three accidents have taken place there
   b. Both bridge intersections have safety issues due to poor visibility
   c. Cars speed on newly smooth road
   d. Slope too steep
   e. No crosswalks with or without lights
   f. Curb is sloped and in some places no curb at all (protects cars not pedestrians)
2. Suggested solutions
   a. Is it possible to eliminate left or right turns at the intersections?
   b. Need consistent sidewalks and full curb at minimum
   c. More trash barrels
   d. Provide crosswalks where possible
      i. Need one in front of BJH apartments: trees in the middle are just weeds
   e. Need traffic calming (i.e. one way streets as in Portland, OR)

**Flooding/Storm water Management**

1. Believe that parking lot on Charles (across from Everett St) and playground next to it is prone to flooding
2. Other parking lots along Everett thought to face to some flooding
3. Water builds up and floods near BJH apartments at the base of the Everett St bridge at its southern end
4. Generally flooding is minor issue because road slopes down to river, but happens in isolated spots

Physical Items on Street
1. “Tree up as much as possible”
2. Green Shrubbery to act as buffer
3. Benches (few places for them, but could someone give a piece of a parking lot for a bench?)
4. Public Art Element that serves educational purpose
   a. Call attention to hydrology (show how it works)
   b. Explain access to river
   c. Neighborhood would probably like ornamental pieces
   d. Markers that are significant to the neighborhood → little sculptures
   e. See example in Watertown designed by Dan Driscoll
   f. Possibly use back of benches
   g. Make vandal resistant
5. Interesting art and signage could lead pedestrians, bicyclists, and drivers to the Charles
6. Street aesthetics might be better accepted if more “conventional” in appearance, recommendations for ornamental plants within storm water plantings
7. Lighting
   a. Change lighting to see sky at night
   b. Lighting for pedestrians, not cars (cars have headlights)
   c. Reduce lighting pollution (we over-light our streets right now)
   d. Short light posts along sidewalk

Public Transit
1. Significance: There is no bus line along Everett St, but many surrounding it
2. Solution: Increased pedestrian access could help with access to public transit

Harvard Involvement
1. Significance
   a. Harvard wants to move Charlesview to Brighton Mills and if Everett St is green they may be more willing to go
   b. Harvard and the city own the two properties at the northern segment of Everett between Western and Soldiers Field
2. Solutions
   a. Can Harvard pay for some of this?
   b. Can greening be done in collaboration with Harvard?

Private Landowner contribution
1. Parking lots
   a. Steel company (vacant property) to north of pike
b. Harvard’s proposed land swap for Charlesview Apartments along Western/Everett could be partly greened

2. Street tree care
3. Space for benches
Notes from Market Street Greening Meeting  
July 16, 2007

General Comments and Feedback on Market Street

- Travel lanes in street may be “wider than they need to be” so it is a good candidate for introducing green infrastructure within the public right of way
- Goal is to increase interest along sidewalk for residents and employees with local businesses to walk up to center (24 hour “eyes on the street”)
- Need to highlight the endpoints on both ends by creating “Gateways” and reinforcing the visual link from the hill to the River
- Faneuil to Sparhawk parking lanes are less crowded, may be space available to put in vegetation (trees with benches)
- Excessive flooding and ice build-up occurs at street intersections (e.g. close to Irish Village, street before Faneuil)
- Flooding on Keenan St dead-end, downhill from Market
- Poor drainage from side Street is responsible for flooding issues (e.g. Arlington Street north)
- Need to connect Market Street all the way to Charles River and playgrounds and pocket parks in the area visually and physically
- Safe pedestrian connections are needed. Crucial to provide safe access to the River, especially on the parkway for people walking to Arsenal Mall
- Bus stops and other public transit elements could be incorporated, benches in certain areas. The bus stop for Route 86 should be moved closer to the parking lot so it is not such a safety hazard
- Screening of parking lots with greenery
- Public Art and Green Infrastructure as part of way finding, signage along the path to the River, pocket park north of the pike

Main Streets Market Street Charrette (March? 2007) Outcomes

- Mission to “Brand Brighton”
- Provide a sense of place and arrival through enhancing the visual experience through tools like gardens, light fixtures, street furniture, trash barrels and kiosks. Gateway/Entryway at ends of Market, demarcating River and Brighton Center
- Way finding techniques
- Signage - symbols and way finding (so people know where the parks are) + informational signage for public education on green infrastructure
- Street Furnishing and Lighting, flower boxes, facades, kiosks
- Slopes of street enhance visual connections and should be emphasized
- Land Use is Residential in between two different commercial zones with different scales: 1-Main Street with shops fronting public R/W; 2-large scale commercial where parking lot is street frontage
- AB Historical Society Museum
Policy Issues
• Proposed Loews Home Center development and other larger commercial establishments like CompUSA, that change the traffic patterns and appearance of the area may be required to mitigate traffic impacts with public realm improvements that include implementing stormwater BMPs within the public right of way. Opportunity for wider sidewalks, introduction of larger and terraced tree pits to retain water.
• Other?

Opportunities and Constraints
• Transitional aesthetics in terms of green infrastructure… different appearance in residential vs. commercial areas. Maybe have a denser tree canopy and gardens in the residential stretch.
• Market Street Commercial and LID goals can complement each other
• Involvement of Private Owners. Guidelines for private parking lots and incentives for greening private businesses

History
• Cattle and leather market
• Could be identified through signage
• Bring back the gardens and the streams through street greening

Funding Options
• The main street workshop was funded through the Brown fund Grant.
• Consider the Mayor’s Cross Roads Initiative (as it relates to the Rose Kennedy Greenway),
• Consider Emerald Necklace and other precedents where a solution for stormwater management and combined sewer overflows is found through the design of the public realm.
• Use mitigation money from redevelopment projects as a match for city funding for street reconstruction.
Brooks St. Workshop, Oak Square YMCA  
August 8, 2007

Street signage/indicators/traffic calming:  
- Paint lines on the street  
- There is a blind hill going up Bigelow St. Most of the accidents occur there. need set of lights at Bigelow and Brooks.  
- Street trees and street plantings on corners that are widened to prevent parking would be an improvement.  
- Speed bump out near Hobart Park. Minor gradual bumps  
- Create curves on sidewalk to slow traffic (Winchester St)  
- North Beacon St. Bridge needs light  
- Crosswalk at convenience store would increase pedestrian visibility

Sidewalk Widening:  
- Fire hydrants and corners where you don’t want parking could be green islands  
- Some widening could take place near Winchester  
- Gentle curve outs act as a permanently parked car.  
- Eliminate one sidewalk on the one side of the underpass and then widen the other side.

Street furniture:  
- Get rid of overhead wires and put them underground  
- Special paving materials that indicate conduit to the river.  
- Historical Markers, like the Freedom Trail  
- Trees in containers  
- Less maintenance with the right trees planted.  
- No stop sign speed bump out before crest.  
- No parking signage

Urban Wild at Underpass:  
- Urban wild owned by Turnpike Authority  
- Pocket park? (may not be desired by residents)  
- Manage vegetation to improve visibility at underpass  
- Urban wilds by the underpass needs to be cared for. The urban wild floods near underpass.

Resident Concerns:  
- I don’t think you can narrow Brooks St. if you want to keep 2 lane traffic and thereby access to river from Oak Square  
- Brooks St. underpass is dangerous more of a pedestrian issue to get across river  
- Difficult to get three entities (DCR, Mass Highway, and Mass Turnpike) to work together. Someone needs to advocate for them to work together on this.
• Access to the MDC pool needs to be improved.
• Bike paths? This neighborhood is not bike friendly. Very narrow sidewalks sometimes you share with a bicyclist. Concrete patch on Nonantum Rd. & Brooks St. is dangerous.
• Parking is an issue. Need resident parking on Brooks St.
• There is a critical congestion of cars.
• People (abutters) have been buying lots from the City Issue on street of buying green spots to build houses. Need to contact Jerry McDermott; send letters to the zoning board.
• Light is on the other side of the street near the underpass, but the MDC pool is on the other side.
• Traffic is worse at night from river
• Traffic is worse in the morning from Faneuil
Survey Results- Everett Street

Do you have more ideas that you didn’t get to discuss tonight? Your ideas are extremely important to us. Please take a moment to fill out this survey based on the information we discussed tonight. We will include your responses in our recommendations for improving Everett Street.

1. How do you usually get to the Charles River (Please mark an “x” next to the answer that best applies)?
   
   a. Walking 3       c. Public Transportation ___ e. Running 1
   
   b. Biking 1        d. Car 3 
   
   f. Other____

2. What parts and/or intersections of Everett Street do you see as most dangerous for pedestrians and cyclists? Why?
   
   • The bridge and the part that crosses to the river
   • Everett Street Bridge
   • Where the Everett St Bridge meets the part of Everett St coming from Lincoln St
   • Everett and Holton (3 accidents that I know of)
   • Braintree and Everett: People trying to merge and oncoming drivers can’t see

3. What would make your trip as a pedestrian or cyclist easier, more accessible, safer, or more enjoyable?
   
   • Some kind of overpass crossing Soldier’s Field Rd
   • Less Traffic
   • More trees and plantings along street
   • Wider sidewalks/trees in sidewalk (shade/less noise/looks better)
   • I think it is good as is

4. What needs to be done to improve Everett Street and what should remain the same?
   
   • Make it greener ecologically and visibly
   • Clean up
   • More plantings and somehow find a way to make the pike bridge more welcoming
   • Make both ends of bridge and intersections safe

5. From the green menu we have presented tonight, what kinds of treatments would you like to see on Everett Street? Where? Why?
   
   • More trees and possibly artwork
6. What specific improvements would you like to make on Everett Street? Please list in order of priority.

   • Street re-pavement, clean up, landscape
   • Safety, more trees (shade/looks better/less noise), Bike Lane
   • Intersection safety

7. How do you feel about widening sidewalks by reducing travel lane widths and/or replacing a few parking spaces with tree pits along Everett Street?

   • That’s a great idea
   • No, we need parking
   • I agree!

8. What would you do to improve the bridge crossing over the Pike and the overpass on Soldiers Field Road? Are there other ways you can suggest to improve the accessibility to the Charles River from the neighborhood?

   • Create pedestrian and bike lanes
   • Since planting may be difficult to maintain (or survive weather conditions), maybe artwork that “softens” the crossing

9. Anything else you’d like to share?

   • The Everett Street Bridge should say “Allston/Brighton” in big letters (let’s show neighborhood pride)

10. Would you be willing to work with the Green Space Advocates on any of the issues that we discussed tonight?

    a. Yes 3  b. No _____

11. If so, how would you like to participate and what is the best way to contact you?

Please return your responses to Kate Jordan at the Allston Brighton Community Development Corporation:

   By Mail:
   Allston Brighton Community Development Corporation
   320 Washington Street, 3rd Floor
   Brighton, MA 02135

   Or By Fax:
   (617) 787-0425
Survey Results - Brooks Street

Do you have more ideas that you didn't get to discuss tonight? Your ideas are extremely important to us. Please take a moment to fill out this survey based on the information we discussed tonight. We will include your responses in our recommendations for improving Brooks Street.

1. How do you usually get to the Charles River (Please mark an “x” next to the answer that best applies)?
   a. Walking ___
   b. Biking___
   c. Public Transportation ___
   d. Car___
   e. Running___
   f. Other____

2. What parts and/or intersections of Brooks Street do you see as most dangerous for pedestrians and cyclists? Why?
   Faneuil St. intersection – cars will not show down for pedestrians. The hill in Brooks--no visibility. Traffic is fast. Commercial area near underpass--traffic speeds

3. What would make your trip as a pedestrian or cyclist easier, more accessible, safer, or more enjoyable?
   Slower Traffic
   Safer crossing
   Aesthetic improvements at underpass

4. What needs to be done to improve Brooks Street and what should remain the same?
   For improvements, see #3 and others. Remain the same: - Preserve towns by preventing owners from black topping front yards. It’s against code, but people ignore codes, desperate for parking spaces. Also, preserve trees on the hill in old public right of way behind properties on the odd numbered side of street.

5. From the green menu we have presented tonight, what kinds of treatments would you like to see on Brooks Street? Where? Why?
   More trees and / or other plantings Widening of one sidework + elimination of the other sidewalk under underpass. Attractive (and permeable) new sidewalk materials - esp at key spots.

6. What specific improvements would you like to make on Brooks Street? Please list in order of priority.
   See # 3. To slow traffic + increase safety introduce speed “bumps” as on Winchester St. in Brookline and install pedestrian “cones” on crosswalks as in Brookline. And “bump-outs” at fire hydrants.
7. How do you feel about widening sidewalks by reducing travel lane widths and/or replacing a few parking spaces with tree pits along Brooks Street?

I would like to see tree pits wherever possible but the possibilities are limited. The organizers of this event may have understood how desperate people are for parking spaces, and may not have considered the importance of a wide street for the bus and fire trucks.

8. What would you do to improve the bridge crossing over the Pike and the overpass on Soldiers Field Road? Are there other ways you can suggest to improve the accessibility to the Charles River from the neighborhood?

Change sidewalks, as above # 5. Develop/re-design areas to left and right (standing in Brooks St.). Perhaps more murals out to more visible places in there re-designed spaces.

9. Anything else you’d like to share?
   1. Possible prune growth along river bank opposite Brooks St. to create a pleasing view of the river.
   2. Possible design a sign to be placed at nononferm rood weleaming people to the residential community of brooks st and at river a low speed limit 25 mi / HR
   3. Be aware: most houses on Brook St. are doubles. This creates the population density and demand for parking
   4. About ¼ of the houses are entirely rented out and have absentee landlords.

10. Would you be willing to work with the Green Space Advocates on any of the issues that we discussed tonight?

   a. Yes _X__  b. No ____

11. If so, how would you like to participate and what is the best way to contact you?

Please return your responses to Kate Jordan at the Allston Brighton Community Development Corporation:

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