Dear The Honorable Mayor Michelle Wu,

The Emerald Necklace Conservancy works with the City of Boston, the Commonwealth of Massachusetts’s Department of Conservation and Recreation, the Town of Brookline and the public to protect and improve the Emerald Necklace system of parks which stretch from Franklin Park to the Back Bay Fens and Charlesgate. This world-renowned, historic and multifunctional park system is invaluable to the City of Boston.

TOGETHER WE HAVE LED NATIONALLY IN GREEN SPACE MANAGEMENT, AND WE CAN AGAIN

The Conservancy is proud to be a strong partner to the city and our 9000 publicly-owned trees as we have invested over $2.5 million in donations in our urban tree care, managed thousands of volunteers yearly caring for the parks, provided a free public visitor center to all park users and brought public programs to our chronically underfunded parks. Conditions have improved through our partnership and work: when we launched our forestry program, the City of Boston did not have a tree care cycle or Geographic Information Systems (GIS) database of the Emerald Necklace trees. Now, 7 years later, we do, and we— together—have modeled national best practices for urban tree management, completing our first full 7-year pruning cycle.

Now we can do the same with the challenges of development, as we look to best practices to guide growth and plan investment in the Emerald Necklace and other parks. As Boston works to address housing needs and accommodate economic growth, shaping proposed development to not only minimize impacts on parkland, but support new parkland acquisitions and investment will be challenging. However, this work is best done through consistent and clear policies.

GREEN SPACE AND SUNSHINE ARE ESSENTIAL BASIC NEEDS

In our modern American cities, with so many competing challenges and needs, the protection and needs of public open space are often overlooked. While too many people lack basic and affordable housing, access to food, quality education and supportive health services, quality and sufficient public space is also an essential basic need. The significance of our public land— the only place one can be without permission or fee—has been at times forgotten. Our public spaces are the only
places that we as people can be on the earth, in the air, under the sun. Olmsted called the feeling of being in a park “an enhanced sense of freedom”. You might just call it “freedom” — one little patch of nature that we can inhabit.

Beyond the spiritual and health value these places bring to us, their role in local and global climate protection has become more understood in recent years. Our parks and open spaces manage heat, absorb stormwater, control flooding, clean and cool the air and provide for the health needs of our city’s workers and residents. If we don’t protect and invest in public open spaces in small and large ways, our planet, we know, will no longer sustain us. Protecting and planning for parks is not just about the parks themselves; it’s about protecting our entire ecosystem.

THE TIME IS NOW TO DEVELOP BOSTON’S SUNLIGHT PROTECTION POLICY FOR PARKS CITYWIDE

Our city’s current project-by-project review of development impacts does not work. Only two of Boston’s parks have legislated shadow limits (the Common and the Public Garden). Less than 2% percent of Boston’s park and open spaces have legislated protection from shadows cast by new development. There are height limitations for the first block of development along some limited sections of the Emerald Necklace, but not most, and today’s development proposals demonstrate that a policy is sorely needed.

The city needs a clear policy on each development’s relationship to existing and new open spaces citywide. Should no new shadow be allowed on any park? Do some projects offer benefits important enough to allow ten minutes of new shadow? Does damage from new shadows vary from location to location? Comprehensive policy guidance informed by policies developed and used in other cities would avoid the recurring and divisive tugs-of-war during development review that create a well-known dynamic wherein hard-working advocates, all supporting important public needs (affordable housing, parks and environmental justice, jobs, transit, education) are pushing against each other. Instead, we need to work within a framework that has been developed with city leadership, informed by public needs.

Cities grow and change, but right now, not all voices are equal or even present in these discussions. While a few parks have organizations that advocate on their behalf, most do not. Advocates for jobs, community development corporations and private developers are more likely to be at the table. They support candidates for election. The general public that depends on the parks do not have the same time or resources to engage in the decision-making process. And the trees don’t talk.
THE TIME IS NOW TO CONSIDER NEW FUNDING TOOLS FOR PARKS AND ENVIRONMENTAL NEEDS

The City and the Commonwealth direct less than one percent of their budgets to one of the few public goods used by all and free to all—parks and open space. Years of underfunding have left parks badly dilapidated and understaffed. The Trust for Public Land’s annual ‘park score’ gives Boston’s investment in its parks per capita mediocre scores compared to other similar cities. When the obvious needs of our parks are so plain, project-by-project windfall funding can be very attractive. (See below Attachment C: Photos of the Dilapidated Park Features/Needs at Riverway Park, Emerald Necklace—photos of the existing conditions of the Riverway area, near the proposed Longwood Place development). As an example, the Riverway contains several historic stone bridges, structures and pathways with uncatalogued needs that will likely require many millions of dollars in repairs and ongoing maintenance.

While these one-time wins feel significant - for example the $23 million provided the Common in 2017 due to shadow from a tall tower - Renée Loth in the Boston Globe points out, “it’s not nearly enough.” In the same column she quotes Liz Vizza, Executive Director of the Friends of the Public Garden as saying, “We could disappear $23 million in the drainage system alone” (Renée Loth, Boston Globe, November 4th 2022).

Contrast this one-time investment to the value of long-term financing tools, such as the recently instituted “Soda Tax” in Philadelphia, which has to date raised $385 million for a variety of projects, including parks, libraries and more. (See Attachment B: Examples of Public Funding Methods for Park and Environmental Funding and Financial Support.)

Boston has some tools for financing public needs – they use a formula for payments from development to support affordable housing and job training. For example, using the city’s required formula, the currently proposed Longwood Place would yield $17 million to the city’s housing fund. An update of this system is required to support parks, transportation, daycare or other public goods like in other cities. (See Attachment B: Examples of Public Funding Methods for Park and Environmental Funding and Financial Support.)

We need to plan for what we have now. We also must invest in new parks to keep up with future demand. Recently, the City of Boston’s Parks and Recreation Department staff noted that to keep up with proposed development at our existing open space per capita, we would need to add 600 acres of new open space over time.
OUR CITY’S CURRENT FINANCING STRUCTURE DOES NOT BALANCE ALL NEEDS WELL, RESULTS IN GREATER INEQUITIES

We currently have an economic model in Boston wherein roughly 70% of the city’s services are funded by development and property tax. Additionally, our city must depend on the “pipeline” of future development for our future needs. It is understandably very difficult to disrupt this model with new approaches, but the continuity of city services should not be contingent on a willingness to lose and trade the value of public lands.

Even though a better approach requires the coordination of different departments, needs, and constituencies, it is the way to ensure the best possible outcomes for all. Without developing policies and using more tools, the city’s development will continue to occur haphazardly, and scatter benefits and impacts in ways that magnify economic inequality.

SPECIFIC THINGS WE CAN START TODAY

We have new leadership and a new understanding of the value of healthy and green open space. Your administration sees the value of re-inventing the development process, and the value of coordinating to maximize benefit. This is a difficult challenge, but the benefits to the city, our parks and our communities are immense.

The good news is that we aren’t starting from zero. We can work from examples employed by other cities to protect sunlight, and finance important long-term needs like parks. A city-wide “Sunlight Protection Policy” would guide numerous projects in consideration today, and those coming tomorrow, in all parts of our growing city. Additionally, like in other cities, Boston’s Parks and Recreation Commission should review all proposed development that would affect sunlight on public parks.

Some might argue that “this is the wrong time” for a new policy, or that we cannot object to a proposal that has been working its way through the review process. But all are better off with clear rules that provide certainty for our parks, residents, communities, leaders, builders, institutions, and workers. We all need to understand the opportunities and limitations in a context based on consensus instead of the current mayhem that pits one public good against another, and the success of the few.
Like other major cities, Boston needs to add sustainable density to grow. Unguided development will prevent Boston from ensuring the necessary health and environmental benefits that parks provide. Frederick Law Olmsted saw our future when he wrote 150 years ago that city residents need access to places where they “may stroll for an hour, seeing, hearing, and feeling nothing of the bustle and jar of the streets, where they shall, in effect, find the city put far away from them.” We are still struggling with this today, but I believe with our current leadership, we can stop struggling and start to lead.

Sincerely,

Karen Mauney-Brodek

President

CC: Chief Jemison, Planning and Director of Boston Planning and Development Agency
    Councilor Bok, Boston City Council
    Chief White-Hammond, Environment, Energy and Open Space
    Commissioner Woods, Parks and Recreation
    Kate England, Director of Green Infrastructure
    Sarah Black, Project Manager, Boston Planning and Development Agency

Attachment A: Examples of Established Shadow/Sunlight Protection Policies in Various Cities

Attachment B: Examples of Public Funding Methods for Park and Environmental Funding and Financial Support

Attachment C: Photos of the Dilapidated Park Features/Needs at Riverway Park, Emerald Necklace

Attachment D: Why do we care about shadow on parks?
Attachment A: Established Shadow/Sunlight Protection Policies in Various Cities

- Arlington County, Virginia
  - Zoning Ordinance for Arlington County, VA.pdf (Page 135, regulations around the percent of parks in sunlight between certain hours)

- San Francisco
  - San Francisco Height and Shadow Ordinance
  - Planning Department’s Shadow Guidance
    - https://sfplanning.org/resource/shadow-analysis-procedures-and-scope-requirements

- New York City Shadow Management Resources

Boston-Specific Shadow Regulation Information and History

- Existing Bill Limiting Shadow on the Common and the Public Garden

- Proposed (not passed) Commonwealth legislation to limit shadow on the Back Bay Fens
  - H1169.pdf

- Article about the Bill and its fate introduced by Representative Rushing in Boston Magazine

- Article about Shadow Challenges of Booming Cities, includes reference to Boston
Attachment B: Examples of Public Funding Methods for Park and Environmental Funding and Financial Support

Existing Park Public Financing Mechanisms Currently Employed in Boston

- Parks and Environmental funding in the City’s General Fund (annual budget)— less than 1% of city spending at this time
- Recently passed Community Preservation Act (CPA) funds from the city and state provide one time capital (physical improvement support). At least 10% must be spent for open space. The overwhelming majority of this funding provides for housing needs.
- Business Improvement District (BID) funds –This has been employed for the Rose Kennedy Greenway and the Downtown BID. (A property owner-approved and self-imposed tax by district.)
- One-time transactions of either funds or in-kind improvements or services— provided by real estate development, generally related to approvals from the BPDA, provided to city agencies, non-profits or other organizations. The best-known example of this recently was the funding specifically for the Boston Common and Franklin Park related to Winthrop Square.

Park/Environment Tools Not Currently Employed (or under-employed) in Boston

- **Bonds.** Boston generally doesn’t use General Obligation Bonds or General Revenue Bonds to build capital projects including parks. Usually, these must be authorized by a majority vote of the public. (See recent New York State Bill highlighted below).
- **Impact Fees.** Boston collects “impact fees” for supporting affordable housing, and jobs program, but not for parks or other public spaces. These are often called Parkland Dedication Fees and are in active use in Austin, Atlanta, San Francisco and elsewhere.
- **Dedicated property or sales taxes** to environmental projects, programs and needs (see Philadelphia soda tax example below).
- **Hotel Occupancy Tax (HOT)** Can be used for tourism related expenses, for example, improving parks or historic structures that are often visited by tourists.
- **Tax Increment Financing (TIF)** – This is largely used in a business district that is poised for redevelopment and expecting a new boost in property tax income. It essentially allows future tax revenue for a specific period of time (usually 5-10 years) to be used to finance (or repay) public infrastructure improvements, which can include parks and open space.
- **Earned income fees.** Both Boston and DCR charge some businesses for food and drink, site rental and the provision of recreational equipment (kayaks, canoes, sail boats). DCR has recently done more of this. Boston has not.
- **Usage fees.** Apart from recreational sports leagues, the City of Boston doesn’t charge for park or facility rentals, by and large. DCR, however, does in many cases.

- Two Recent Funding Examples to Highlight:
  - Philadelphia had strong success with a relatively new tax on soda, over $385 Million to Universal Pre K, parks and libraries (https://www.phila.gov/programs/rebuild/).

Overview/summary provided here:

- https://www.charliemccabe.co/post/how-public-parks-are-funded-part-1
- https://www.charliemccabe.co/post/how-parks-are-funded-part-2
Attachment C: Photos of the Dilapidated Park Features/Needs at Riverway Park, Emerald Necklace
Attachment D: Why do we care about shadow on Parks?

Below is a non-exhaustive list of some of the reasons and research to be considered in the development of policy.

1. Health of the Trees:
   a. New Shadow is cast on trees that have acclimated to the conditions and competed for the sunlight that they rely on. Trees are known to be less productive when in shaded areas as this reduces their capacity to photosynthesize, filter air, sequester carbon, and potentially mitigate stormwater and bank erosion – all of which are ecosystem services that the city needs and were central to Olmsted’s vision. When trees are shaded out, phenotypic changes ensue, and qualities such as leaf size, leaf mass, stomatic density, and chlorophyl content are all documented to change (Masarovicová & štefančík, 1990).

2. Watershed and Landscape/River Bank Impacts:
   a. Shade is understood to increase the presence of both ice and freeze/thaw cycles throughout winter months. These cycles have been extensively documented to dramatically worsen erosion in a number of natural and laboratory settings (Ferrick & Gatto, 2005). This is particularly concerning around rivers and other bodies of water that are susceptible to freezing and bank erosion (Kaczmarek et al., 2019). Mean radiant temperatures are likely to decrease in the area, on behalf of the extensive shadow, which will continue to perpetuate these winter problems for the river and the highly sloped banks in this part of the necklace (Lindberg & Grimmond, 2011).

3. Increased Access Risks for Park Users:
   a. The Emerald Necklace is a highly trafficked transportation corridor, and many sections are in heavy use by medical professionals who are commuting, often in the early morning hours. This development will shade their commutes and create icier and more dangerous conditions throughout the winter.

Works Cited: