March 16, 2021

Via email

Mayor Martin J. Walsh 1 City Hall Square, Suite 500 Boston, MA 02201 mayor@boston.gov Boston City Council 1 City Hall Square, Room 550 Boston, MA 02201 city.council@boston.gov

#### Re: Opportunities to Build Climate Resilience at Widett Circle

Dear Mayor Walsh, City Council President Janey, and City Councilors,

We write in regards to the potential redevelopment of the Widett Circle/Frontage Road area and specifically, to highlight opportunities to create district-scale climate resilience that would protect surrounding neighborhoods from flooding. Recently, the Boston Globe reported that consideration is being given to building a new Amazon distribution center at Widett Circle. Such redevelopment in this location would be at best incredibly short-sighted, and at worst a danger to residents and property.

Allowing private development in this area squanders a rare opportunity to implement exactly the kind of resilience and flood protection measures the City has identified as critical to Boston's long-term survival in the era of climate change. Restoring the wetlands, bay, and tidal stream that originally existed in this location would mitigate existing and future stormwater flooding, protect neighboring homes and businesses—including many low-income residents in the South End, Dorchester, and Roxbury<sup>2</sup>—and provide much-needed green space for Bostonians. Based on the City's own projections for sea level rise and future coastal storms, this area will be regularly flooded a mere two decades into the useful life of any development. We urge you to consider this as decisions are made about Widett Circle redevelopment.

#### **Current conditions**

Widett Circle, built on fill, is one of the lowest-lying parts of the city. This area was historically under water, composed of South Bay tidelands. The City has acknowledged that flooding in Widett Circle "has been and will continue to be an issue," the impacts of which are already being felt on the City's Frontage Road campus.<sup>3</sup> During 2018's extreme winter storms, those unlucky enough to have cars in the City's tow lot found them partially underwater when they went to collect them. The same storms and king tides halted Boston Transportation Department operations as staff "were reassigned to relocate vehicles out of the way of seawater coming up through the storm drains."<sup>4</sup> The Police Department has had to relocate its emergency

<sup>4</sup> *Id*.

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<sup>&</sup>lt;sup>1</sup> Tim Logan and John Chesto, The Boston Globe, *Once touted as the potential site of an Olympic stadium, Widett Circle could be home to a massive Amazon distribution center* (Mar. 4, 2021).

<sup>&</sup>lt;sup>2</sup> City of Boston, *Climate Ready Boston Final Report* (Dec. 2016) at 331 ("A system that prevents flooding from Fort Point Channel can also benefit areas as far inland as the South End, Roxbury, Newmarket").

<sup>&</sup>lt;sup>3</sup> City of Boston, Cabinet of Streets, Transportation, and Sanitation, *Exploring Alternative Locations for Municipal Operations Final Report* (June 2019) at 13.

communications equipment from the first floor of its building in order to renew its insurance and continue to qualify for federal funding.<sup>5</sup>

The City has seen the writing on the wall: flooding at Widett Circle "is an issue that must be addressed whether or not the campus is redeveloped," and is already so bad that "retrofitting existing facilities may not be feasible, due to the extent of the site that is currently affected by king tides."

### Climate change impacts

The Northeast has experienced greater increases in extreme precipitation than any other region of the country with a 70 percent increase from 1958 to 2010, a trend which is expected to continue. At the same time, "[r]ising sea levels mean that any given storm will cause more flooding in the future than it would today." The National Climate Assessment has warned that "urban areas are at risk for large numbers of evacuated and displaced populations and damaged infrastructure due to both extreme precipitation events and recurrent flooding." According to Climate Ready Boston, "[c]oastal and riverine flooding is expected to lead to the most significant increases in climate hazard consequences to people, buildings, infrastructure, and the economy." A recent study by First Street Foundation, a New York nonprofit research group that specializes in flood risk, states that in the next three decades, more than 3,000 Boston residential properties annually will become vulnerable to substantial risk of damage from flooding. The report estimates that losses are likely to exceed \$62 million a year in 2050, a 75% increase from today. 12

Maintaining low-lying parcels like Widett Circle as impermeable surface—e.g., buildings and roads—is risky, and will grow more so. When it rains, water that would have soaked into the ground instead runs off into storm drains. As shown in Figures 1 and 2, the area will experience considerable stormwater flooding impacts in the very near term. Add to that sea level rise and storm surge, and this site faces a "triple threat." It makes sense then that Climate Ready Boston has concluded that "Widett Circle...will be exposed to high-probability flood impacts expected from mid-century storm events" and that "redevelopment of the area must consider sea level rise and coastal flood impacts to ensure that investments are protected in the long term." <sup>13</sup>

Specifically, "[a]s sea levels rise in Boston Harbor, coastal flooding is also significantly more likely to penetrate inland through Fort Point Channel to much of the South End and the northern portion of Roxbury." Flood entry points like the Fort Point Channel "are likely to require large-scale infrastructure improvements to reduce flood risk but would likewise result in

<sup>&</sup>lt;sup>5</sup> *Id*.

<sup>&</sup>lt;sup>6</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> Climate Ready Boston Final Report at xxi.

<sup>&</sup>lt;sup>8</sup> *Id.* at 11.

<sup>&</sup>lt;sup>9</sup> Dupigny-Giroux, L.A., et al., U.S. Global Change Research Program, United States: Fourth National Climate Assessment, Volume II, Impacts, Risks, and Adaptation, 2018: Northeast at 672.

<sup>&</sup>lt;sup>10</sup> Climate Ready Boston Final Report at 47.

<sup>&</sup>lt;sup>11</sup> First Street Foundation, The Cost of Climate, America's Growing Flood Risk (2021).

<sup>&</sup>lt;sup>12</sup> David Abel, The Boston Globe, *As climate change increases flooding, Mass. likely to see damaged-property costs surge, report says* (Feb. 22, 2021).

<sup>&</sup>lt;sup>13</sup> Climate Ready Boston Final Report at 291.

<sup>&</sup>lt;sup>14</sup> *Id*. at 47.

significant benefits, reducing flood exposure across multiple neighborhoods."<sup>15</sup> Figures 3 and 4 show the extent of regular coastal flooding at Widett Circle from the Fort Point Channel by 2050 and 2070, respectively, according to the Climate Ready Boston Map Explorer.

## Opportunity to build district-scale climate resilience

Widett Circle presents the City of Boston with a golden opportunity to make good on its climate resilience promises and protect residents and property. As Charles River Watershed Association presented to the City Council in November 2018, restoring the filled lands to wetlands and/or daylighting the buried "Bass River" would cost-effectively reduce flooding, protect neighboring homes and businesses, provide much-needed cooling during extreme heat, and create green space for Boston residents in an area where it is currently lacking. A 300-acre wetland in this area could store runoff from a 10-inch storm from over 1,000 acres of the surrounding developed area, protecting homes and businesses, including many low-income residents in the South End, Dorchester, and Roxbury. Even a partial restoration project to restore the stream would protect the surrounding area against modest rainfall events (~1 year storm).

These are just a few possibilities. We urge the City to explore this opportunity to build climate resilience and mitigate the flooding we know is coming, as well as the flooding that is already here. Any redevelopment that fails to incorporate climate resilience measures will only exacerbate flooding, extreme heat, and other climate vulnerabilities in surrounding communities.

These goals are consistent with the Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation in the City of Boston, enacted in 2019 to "enable the improved management of the City's urban wetlands and enable the city to better protect against the effects of climate change," recognizing that "Boston's plans for climate adaptation include the development of green infrastructure, including the option to construct, restore, and revitalize local wetlands." The purposes of the ordinance include protecting wetlands, water resources, and flood-prone areas to further values such as short term and long term coastal and stormwater flood control; storm damage prevention, including coastal storm flowage; and flood conveyance and storage. The ordinance is also intended "to protect the health, safety, and welfare of the public and to mitigate impacts from climate change."

In advocating for the restoration of Widett Circle, we recognize the critical need for affordable housing in Boston and the desire to consider utilizing some of this space to meet that need. However, building affordable housing in an area that will regularly flood without also implementing adequate resilience measures is not a solution to the City's housing crisis and would only undermine, rather than further, goals of environmental justice and equity.

On the other hand, restoring Widett Circle as a floodplain would directly benefit some of the City's most vulnerable populations by protecting existing neighborhoods from the catastrophic flood impacts we know are coming. When it comes to Frontage Road and Widett Circle, rather

<sup>15</sup> Id

<sup>&</sup>lt;sup>16</sup> Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation in the City of Boston.

<sup>&</sup>lt;sup>17</sup> *Id.* at 7-1.4.a.

<sup>&</sup>lt;sup>18</sup> *Id.* To accomplish these purposes, the Boston Conservation Commission is required to "give special consideration to the best available data provided by the City of Boston and the Commonwealth on expected conditions due to climate change." *Id.* at 7-1.4.b.

than focus on further development—which likely would have to be abandoned sooner than we think or would require millions to protect after it's built—we should protect public health and invest in climate resilience now.

Sincerely,

Emily Norton, Executive Director Charles River Watershed Association

Frank O'Brien Allandale Coalition

Dwaign Tyndal, Executive Director Alternatives for Community and Environment (ACE)

Aaron Toffler, Director of Policy Boston Harbor Now

Rev. Vernon K. Walker, Program Manager Communities Responding to Extreme Weather

Deanna Moran, Director, Environmental Planning Conservation Law Foundation

Kannan Thiruvengadam, Director Eastie Farm

Elizabeth Turnbull Henry, President Environmental League of Massachusetts

Mary Mitchell, President The Friends of Belle Isle Marsh Roseann Bongiovanni, Executive Director GreenRoots

Magdalena Ayed, Founder & Executive Director
The Harborkeepers

Julia Blatt, Executive Director Massachusetts Rivers Alliance

Deb Pasternak, Chapter Director Massachusetts Sierra Club

Patrick Herron, Executive Director Mystic River Watershed Association

Kerry Snyder, Advocacy Director Neponset River Watershed Association

David Meshoulam, Executive Director Speak for the Trees, Inc.

Jocelyn Forbush, Acting President & CEO The Trustees of Reservations

David A. Deese, Professor at Boston College

# **Figures**

# Near-term stormwater flooding impacts



Figure 1. Climate Ready Boston Map Explorer

# Flooding from a common near-term intense rain event (i.e., thunderstorm) dropping 1.8" of rain with 1.3' of sea level rise



Figure 2. Boston Water and Sewer Commission Inundation Model Viewer

## 2050 10% Annual Coastal Flood Risk



Figure 3. Climate Ready Boston Map Explorer

## 2070 10% Annual Coastal Flood Risk

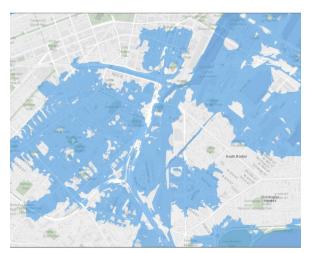


Figure 4. Climate Ready Boston Map Explorer