Mystic River
WATERSHED ASSOCIATION

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114
Re: XMBLY, Somerville, MA Draft Environmental Impact Report (EEA #15595)

July 20, 2018

Dear Secretary Beaton,

Thank you for the opportunity to comment on the DEIR for the XMBLY project. Our comments essentially can be summed up in a slogan: Be like Partners HealthCare. Partners Healthcare has set the standard for energy efficient, flood resilient architecture and landscaping. We believe that XMBLY's final design can and should be required to match Partner's excellence in public realm, stormwater management, temperature mitigation, flood resilience and energy efficiency. Specific comments follow.

Public realm and non-motorized transportation
With over 81,000 residents across 4.2 square miles, Somerville is the most densely populated municipality in New England (16th in the US). Parks comprise less than 6% (158 acres) of its landmass, scattered across over 80 parcels. That is, Somerville contains less than two acres of parks per thousand residents, most of which are less than an acre in size.

The XMBLY project represents a critical linkage between East Somerville—a highly-urban, majority people-of-color residential neighborhood—and Assembly Row, an emerging mixed-use area with civic space, employment centers, retail and services, public transit, and the 10-mile, 329-acre, Mystic River Reservation linear park along the Mystic River. As such, it plays a key role in providing continuous, safe pedestrian and bicycle routes from the neighborhood to these public amenities.

The construction of I-93 through Somerville severed pedestrian and local street connections among East Somerville neighborhoods and between East Somerville and the Mystic River. The redevelopment of the XMBLY site and its edges, together with other planned pedestrian and circulation improvements by MassDOT, Boston and Somerville, will restore some environmental and economic benefits to a community that has borne a disproportionate share of environmental burdens from regional transportation, utility infrastructure, and industrial pollution.

The XMBLY project should create separate pedestrian and bike-friendly routes for non-motor-vehicular travel along its boundaries along Foley Street, Middlesex Ave, Grand Boulevard and Revolution Drive. We believe the project should emphasize a "complete streets design not only within but surrounding the site. Existing and proposed streets can be made safer and more comfortable with wider sidewalks; more shade, street trees and furniture; bike facilities; and signalized crosswalks that favor non-motorized travel. In addition, the external street frontage should prioritize public facilities such as retail and restaurants.

Foley Street is a particularly important neighborhood pedestrian and bike corridor between East Somerville and Assembly Row. The pedestrian underpass connecting Foley Street to Foss Park is one of very few opportunities for pedestrians and cyclists from East Somerville can safely cross the I-93 barrier

to reach Assembly Row, the Orange Line and the Mystic River. This route in particular, bordering the XMBLY project, should be developed as an attractive, safe walking and biking path.

In addition, we believe that project proponents, working with MassDOT and Somerville, should improve the crossings at the Middlesex Avenue intersection, increase active uses on the first floor of Building 1, and mitigate two major vehicular entries that interrupt the pedestrian sidewalk at Building 1—the fire station truck exit on Middlesex Avenue and the garage entrance on Foley Street.

Finally, the other three streets that form the site boundaries also bring pedestrians and bicyclists from the pedestrian underpass at Main Street near Sullivan Square, and from the Sullivan Square MBTA bus, commuter rail and transit station. These streets should also be developed into pedestrian and bike-friendly complete streets with safe crossings.

Stormwater Management

We commend the Project's stated intention to incorporate Low Impact Development ("LID") techniques including green roofs on Blocks 21 and 23, structural water quality units to treat stormwater runoff from roadways, and rain gardens and permeable pavers to retain and treat surface water from sidewalks and open space, as well as other structural and non-structural Best Management Practices for stormwater management.

We commend the Project's commitment that their water quality treatment for runoff will exceed the MassDEP goal of 80% Total Suspended Solids Removal. As noted, the Project is required to adopt stormwater Best Management Practices for critical areas, because the two outfalls the Project proposes to connect to, discharge to "Prohibited" shellfish growing areas. The Project also commits to construction control plans and long-term operations and maintenance plans that will protect water quality.

With rapid redevelopment of Assembly Row and increases in rainfall intensity due to climate change, it is critically important that new developments such as XMBLY are effectively designed to manage the quality and quantity of stormwater flooding expected today and throughout its projected lifespan.

XMBLY proposes to discharge all stormwater runoff from the Project site into the existing 84-inch storm sewer and the recently constructed 72-inch storm sewer, both of which discharge into the Mystic River below the Amelia Earhart Dam. This is a continuation of the existing site drainage pattern. We ask that the City of Somerville and the Project proponent confirm that the two storm sewers have sufficient capacity to meet the loads from this and future projects in the area that will want to use this infrastructure, and that projected total flows throughout the project lifespan can be discharged without compromising water quality in the Mystic River.

The Project proposes to design a stormwater system that will release flows less than or equal to the existing conditions. Given that the existing condition is a worst-case, virtually entirely-paved site with little or no retention infrastructure, the Project should be held to a much higher standard than this.

The Project is described as a redevelopment project in terms of MassDEP's water quality standards, and therefore commits to meeting MassDEP standards to the "maximum extent practicable". We believe that the adjacent Partners campus represents a good example of "maximum extent practicable" and that this project should be held to this standard. Given that Partners HealthCare has a vested interest in its neighbors' ability to manage flooding, we are certain that they would share any lessons learned.

In sum, effective stormwater management to protect water quality in the Mystic River is essential to the area's growing value as a recreational resource, restored ecological system, and public open space asset. We urge the Proponent to maximize responsible stormwater retention, treatment, and management at each stage of the Project and during construction periods. We further urge the City of Somerville to monitor the Project's delivery on these commitments and ensure that XMBLY contributes to the Mystic's long-term water quality.

Temperature Mitigation

Much of the proposed open space in the XMBLY project is projected to be paved, either as roadway or within a 48,000SF public plaza. We believe the Project needs to incorporate more tree coverage, narrower parking spaces, wider vegetated swales on sidewalks, and permeable paving to help reduce the public's heat exposure and the intensity of the urban heat island effect. We support the proposed use of high-albedo and vegetated roofs and encourage their maximization to further reduce heat absorption and increase energy conservation.

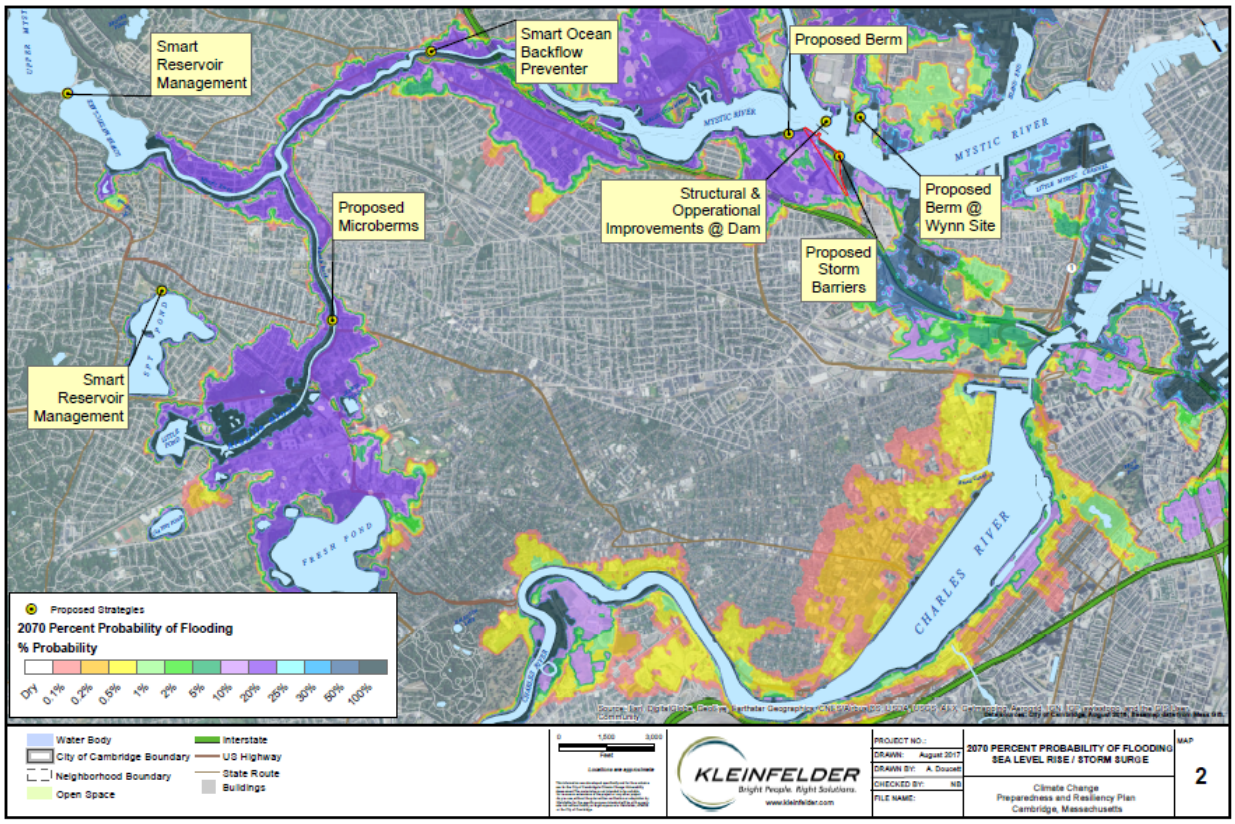

Figure 1. Projected late-century coastal flooding (courtesy City of Cambridge)

Flood resilience

The XMBLY project is located outside the current FEMA 1% riparian flood zone as defined in 310 CMR 10.54(c) and is therefore currently presumed not to require protection from coastal flooding. This is not expected to remain true throughout the project lifespan, however. Kleinfelder's work for the Cambridge Climate Vulnerability Assessment indicates that Assembly Row is likely to flood at least twice each decade by late century (see Figure 1).

The developer proposes to raise finished floor elevations above projected flood elevations; this design should include the ability to continue to elevate the ground floor (e.g., through wet flood proofing and

including an extra-high first floor ceiling) as flooding becomes more chronic. In addition, critical building infrastructure should be elevated and waterproofed to allow for public safety during and rapid recovery following flood events. Each building should employ an updated flood hazard mitigation plan to protect occupant and public safety.

Energy Efficiency

The Project commits to reduce stationary source greenhouse gas (GHG) emissions beyond the minimum MA code requirements. They propose a 26.2% equivalent estimated energy use reduction for the project, which translates to 19.9% reduction in stationary source CO2 emissions compared to the ASHRAE 90.1-2013 defined Base Case. The adjacent Partners building has achieved 50% reduction compared to Base Case. Again, we encourage proponents to work with Partners to further decrease energy consumption.

The Project proposes to reduce GHG from mobile sources through transit-oriented development, an improved pedestrian environment and new public space, and Traffic Demand Management (TDM) measures, including minimizing onsite parking to the minimum to satisfy tenant and resident needs, adaptive signal controllers to reduce vehicle congestion, and participating in the Assembly Square Transportation Management Association. We commend these commitments. The Project should optimize its proximity to public transportation and walkable destinations to reduce single-occupancy automobile trips.

Again, thank you for the opportunity to comment on this project. Please do not hesitate to contact us with any questions or comments.

Sincerely,

Patrick Herron
Executive Director