Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Director Brian Golden
Boston Planning and Development Agency
1 City Hall Square, 9th Floor
Boston, MA 02201

Re: MyRWA Comments on Suffolk Downs Redevelopment DEIR/DPIR

January 14, 2019

Dear Secretary Beaton and Director Golden:

Thank you for the opportunity to comment on the largest single redevelopment project in the Mystic River Watershed, which spans 21 municipalities from Reading through Revere. The Mystic River Watershed Association (MyRWA), was founded in 1972 to protect and restore the river, its tributaries, and watershed lands for the benefit of present and future generations. The Boston Society of Landscape Architects was founded in 1913 as the first chapter of the American Society of Landscape Architects. Today BSLA connects nearly 600 landscape architects across Massachusetts and Maine, as it serves to advance the profession of landscape architecture and promote the creation of extraordinary environments in cities and towns from the Berkshires to Bar Harbor to Boston.

MyRWA and BSLA partner with multiple communities through our Mystic Greenways Initiative and Resilient Mystic Collaborative to restore and enhance riverfront parks and paths while helping watershed communities prepare for increased flooding, drought and heat. The Suffolk Downs redevelopment has an outstanding opportunity to both support and benefit from these regional efforts.

Please note that we were able to incorporate few additional comments for the modified DEIR, except to say that we strongly support expanding the Sales Creek buffer back to the customary 100 feet from 25 feet. Sales Creek is part of the designated Rumney Marshes Area of Critical Environmental Concern (ACEC) due to its connection to Belle Isle Marsh; a 25-foot buffer minimizes the ability to restore its ecological function.

Overall Analysis
Regulators required a very high standard of analysis of projected 1% stormwater and coastal flooding in 2070. The analysis goes significantly further than what we have seen in past developments and uses the best available scientific data and models. It led to some important insights that point to more cost-effective opportunities for flood management. We hope that public

agencies are able to assist smaller developments with access to this quality of work. We also thank HYM for meeting with us twice and value the project improvements we saw over the course of 2018.

As the expected project buildout spans 20 years during a time of rapid changes in climate science and transportation technologies we ask that the permit require periodic updates in critical data and assumptions (e.g., rate of sea level rise, temperature increases, parking needs) no less frequently than every five years, or when there is a significant change in the proposal. Our specific comments follow by chapter, with recommendations in italics.

Urban Design

Given the scale of this development – larger than Tufts' University campus – urban design decisions will play large roles within this development and for East Boston and Revere. A robust landscape and building stock that provides environmental and quality of life benefits is hugely important. We commend the developer for enhancing Sales Creek and Horseshoe Pond, creating green streets ("green fingers") along portions of the street grid, increasing native plantings and control of invasive species, reusing runoff for landscape irrigation, and redirecting stormwater discharge away from Sales Creek and Belle Isle Marsh. We have several key recommendations that we believe will improve the natural and built environment for residents and neighbors:

- **Connections to Belle Isle Marsh**: We understand that the MBTA Blue Line lies in between the project site and Belle Isle Marsh, limiting opportunities for both pedestrian connections and opportunities for the marsh to migrate inland. *We recommend providing clear signage and wayfinding through the Suffolk Downs and Beachmont Blue Line stations to link proposed pedestrian pathways with those in the marsh.*

- **Design Excellence***: We suggest that the developer recruit and select an array of architectural firms through a competitive RFP process* to ensure that the development doesn't feel generic and monotonous but rather provides visual interest and cutting-edge designs that set a new standard for the region.

- **Supporting Local Nonprofits**: we appreciate the commitment to providing 10% of the retail space to local companies at an affordable rate. We think more could be done to bring the community and local culture into the development. This could *include free and/or discounted spaces for local nonprofits and community groups in the proposed community spaces*. A great example of this is the Society of Arts and Crafts located in the community space at 100 Pier 4, South Boston as part of the Chapter 91 requirement.

Sustainability/Green Building

By pursuing a model of patient, neighborhood-level development, Suffolk Downs has the opportunity to set a new standard for cost-effective, sustainable, carbon-neutral, climate-prepared development. LEED certification is one way to work towards this goal. We are pleased to see plans to pursue LEED certification and that there will be 20% green roofs (as stated in the modified DEIR). We would recommend that the developer pursue a higher standard of LEED certification than 5% LEED Platinum Buildings, a minimum of 75% LEED Gold Buildings, and a maximum of 20% LEED Silver Buildings.

Rather than suggest a ratio of LEED ratings, this development should seek to be carbon neutral, in line with Boston's 2050 goal. As certification is pursued for each building, we believe there should be points for Renewable Energy Production (Energy and Atmosphere) and Protect or Restore Habitat (Sustainable Sites) as these demonstrate an investment in natural systems.

Wetlands and Waterways

We commend the proponents for preserving and improving on-site wetland resource areas including the daylighting of Sales Creek, increasing native plantings and control of invasive species, removing impervious area in the Riverfront area and restoring disturbed or degraded areas closest to Bordering Vegetated Wetlands ("BVW") and Bank. We understand that a 50-foot setback from wetlands associated with Sales Creek in combination with a reduction in development in areas subject to the 1% annual flood would render this project not financially feasible.

However, given the ecological significance to the Sales Creek area, we ask for the customary 100-foot buffer zone to be maintained for Sales Creek to help protect Belle Isle Marsh. Both Sales Creek and Belle Isle Marsh, are part of the Rumney Marshes ACEC that has been characterized by the U.S. Fish and Wildlife Service as "one of the most biologically significant estuaries in Massachusetts north of Boston." The area includes approximately 1,000 acres of highly productive saltmarsh, tidal flats, and shallow subtidal channels.

Transportation

Suffolk Downs is also in an excellent position to exemplify 21st century, multi-modal transportation that reduces greenhouse gas emissions and provides safe and reliable transportation. We are pleased to see proposed walking and biking connections to Belle Isle Marsh and Constitution Beach as well as the 20-foot (where possible) community path between Constitution Beach and Revere Beach. We commend the proponent on pushing back on Revere's higher minimum parking requirements and *support the updated plan to incorporate a "shared parking concept; and inclusion of a requirement to track parking demand data which can allow the Proponent to reduce the construction of additional parking spaces as the development is constructed."*

We believe that several additional measures are needed to mitigate traffic impacts and incentivize mode shifting beyond single-occupancy vehicle use.

- **Ongoing Transportation Mitigation and Management**: as there are many assumptions that will change as the development is built over 20 years (e.g., trip generation predictions, impact on the MBTA Blue Line), *we recommend the creation of a multi-jurisdictional working group to decide the most impactful transportation mitigation projects*. This could be similar to the Lower Mystic Regional Working Group, but also include a budget for capital and operational needs that funds sustainable transportation (transit, walking and biking and car share/electric vehicles initiatives). This will allow for implementation, not just planning efforts. Development of a Transportation Management Agency that coordinates with surrounding North Shore TMA's would be prudent.

- **Active Transportation:** We applaud proposals to connect the site across Bennington Street to both Belle Isle Marsh and Constitution Beach and encourage the proponent to give similar consideration to Chelsea Creek. The proponent's plans to reconstruct Route 1A as a "Super Street" are counter to encouraging access to Chelsea Creek*. We encourage the proponent to*

consider ways that the redesign of Route 1A can include safe and accessible crossings for pedestrians and cyclists to access potential future open space along Chelsea.

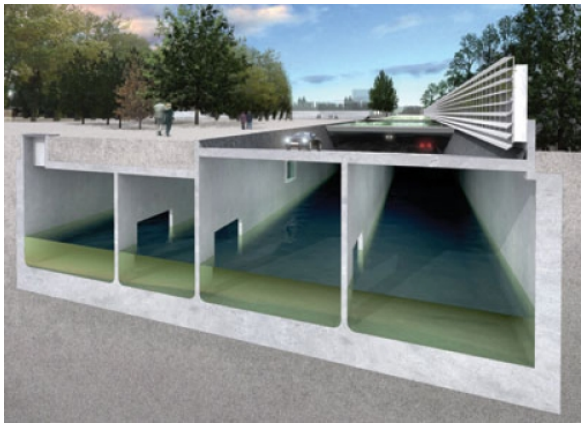
- **Shuttles:** We understand that the nature of the shuttle system will change over time. Successful elements of the shuttle fleet include being: sustainable, reliable and affordable; comparable in price to the MBTA; electric/clean fuel; and connected to surrounding neighborhoods and other transit modes at off-peak hours. *As the proponent rolls this out over the years, we would ask that the shuttle proposal be thoroughly vetted with the community*.

- **Parking:** We understand that the City of Revere is requiring parking ratios for office/lab spaces at twice the ratio the City of Boston proposed for this site. The proponent suggests that meeting Boston's lower parking ratios would be "difficult", but provides no explanation for why this would be difficult in a TOD site uniquely served by existing transit. *We would ask that this office/lab space ratio be revisited to see if there is a way to cut down on parking so as to not incentive more single-occupancy vehicle use.*

  Included in the proposed 15,250 parking spaces are 557 on-street parking spaces which the proponent identifies as free time-limited spaces. *We would ask that the developer explore the idea of metering these spaces to provide local revenue and encourage greater parking turnover rates.*

Climate Change Resilience

It was clear from the DEIR that state regulators required a very high standard of analysis. We were glad to see that the DEIR uses best available numbers and flood models and that HYM is making this analysis available to Revere and DCR for use in climate planning in the Sales Creek watershed. *We encourage HYM to keep up with the latest climate projections even after permitting has been secured.* We were glad to see that the analysis led to the creation of on-site stormwater retention and the proposal to re-grade the property to drain into larger Chelsea Creek instead of smaller Sales Creek to lessen the risk of flooding nearby neighborhoods.



One strategy cited for on-site storage is the use of underground parking garages. Please note that when this strategy is used, the water storage area is typically separate from the parking area, as shown in the depiction of a stormwater storage tank built under a parking garage in downtown Rotterdam (see left).

We note that the DEIR appeared to contain some confusion between stormwater versus coastal flooding (for example, Appendix B, Page 7, E-1: "A large portion of the site will be designated as...sea level rise storage"). **Bordering lands subject to stormwater flooding** require compensatory flood storage on site. Stormwater flooding, even when extreme, is of finite volume with opportunities to store and release it slowly. Strategies to prevent stormwater flooding on one property—especially through elevating a site—may well increase flooding elsewhere. The proposal to send stormwater

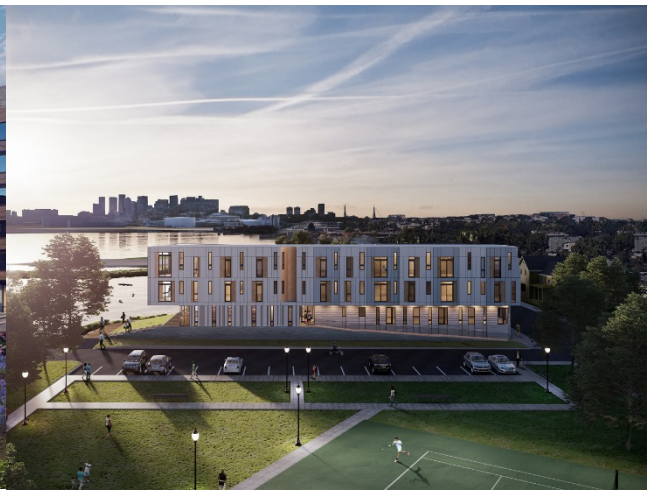
to Chelsea Creek, not Sales Creek is a good way to manage stormwater with a neutral to positive impact on neighbors.

Conversely, **lands subject to coastal flowage** (e.g., water coming in through Belle Isle Marsh) don't require on-site flood storage because coastal saltwater flooding is essentially of infinite volume and is not storable. Preventing coastal flooding requires barriers (including tide gates) of effective height to keep out ocean water. This project should have no inherent impact on coastal flooding of its neighbors.

We strongly support the recommendation that HYM contribute to a larger regional coastal flood barrier, rather than be required to complete a barrier that only protects its own site. We understand that this is beyond HYM's discretion, and hope that the cities of Boston, Revere and Chelsea, the MBTA, Mass CZM and local stakeholders such as the Friends of Belle Isle Marsh form a taskforce to design and implement a regional flood barrier that would also provide ecological and social benefits.

Also, although the project is unlikely to affect the adjacent Irving Oil Terminal on Chelsea Creek, we are concerned that a severe coastal storm could damage the fuel tanks and spill oil into Chelsea Creek and the Suffolk Downs site. *HYM and its public and private neighbors have a strong interest in ensuring that the Irving Oil Terminal is prepared for the more extreme coastal storms predicted by climate change.*
The project lifespan is predicted to last fifty years from full build out, or 2085. If sea level rise projections are higher than the 2100 intermediate projections modeled, the site could experience high tides six feet higher by then. *Given the project site's susceptibility to coastal flooding, we urge proponents to elevate finished floor elevations to closer to 24 feet BCB through additional terracing between street level and their entrances*.

Two recent East Boston developments, Clippership Wharf and 181 Coleridge Ave (left to right, below), use effective variations on this to elevate first floor openings to this height. *Including extra-high first floor ceilings also provide opportunities to raise first floor elevations in the future.* Clippership Wharf also provides examples of multi-functional landscape architecture approaches that accommodate salt water inundation, while also providing new areas of public access and recreation to the harbor.



In addition, *shelter-in-place strategies, as proposed in the DEIR/DPIR require that residences be inhabitable for multiple days during hot and/or cold weather without access to power*. The Concord Highlands project in Cambridge, for example, is an affordable housing project that is designed maintain comfortable interior temperatures even without HVAC.

We are glad that project proponents met with experts in resilient architecture, including Ellen Watts of Architerra. Ellen has been promoting the idea of creating a branded standard of excellence in building, branding and marketing exemplary energy efficient/resilient buildings, as Hamburg, Germany has done (see www.rexboston.com). *HYM could and should similarly issue RFPs with energy efficiency, design and resiliency standards for each building to take advantage of Boston-area design excellence in creating a highly-desirable, immediately exemplary neighborhood*.

Additional general comments:

- The NECASC precipitation data represent averages; Suffolk Downs is likely to experience the most damage from intense cloudbursts such as Hurricane Michael and Harvey brought North Carolina and Texas. *HYM's stormwater strategy needs to include a "fail quickly-fail cheaply" strategy for intense rainfall events that exceed design parameters.*
- Summer heat in Greater Boston is already increasing to levels beyond historical norms. Climate Ready Boston projections indicate that Boston could experience Washington, DC's climate by mid-century and Birmingham, AL's climate by late century. Landscape designs should include more water and shade elements than historic New England norms.
- We were glad to see project proponents go beyond regulatory requirements in considering heat effects (that said, local regulations regarding heat mitigation strategies are quite limited). Some recommendations:
    - *Include not only light pavement, but also white roofs;*
    - *Incorporate interactive water elements such as the Greenway's ring fountain and mist tents to help children and adults cool off;*
    - *Make sure bike/pedestrian paths are shaded so they continue to be used during heat waves.*

Environmental Protection

We commend the proponent for the thorough analysis of environmental impact on wind, shadow, air quality, and the impacts during construction. The Air Quality analysis focuses, as required, on CO and VOCs. However, traffic also generates heavy metal pollution that degrades water quality. Since the development will generate a significant increase in traffic, we feel that the impact should be assessed. *Since heavy metals are transported to water bodies via stormwater, we ask that the stormwater management plan address heavy metals.*

Infrastructure

We commend the proponent for a stormwater management plan that will significantly improve the overall quality of stormwater run-off. We appreciate the reuse of runoff for landscape irrigation, as well as re-grading the site to direct more of the stormwater discharge into Chelsea Creek instead of smaller Sales Creek. The stormwater management plan utilizes retention rather than infiltration because of the existing soil conditions. The plan appears to have adequate stormwater storage

capacity to address current 100-year storms; as precipitation increases in intensity, additional strategies will be needed.

In closing, we are encouraged to see a development revitalizes an underused site and connects communities across municipal borders and between Chelsea Creek and Boston Harbor. We look forward to a continued partnership with HYM and its host communities to create a thriving, climate-prepared, low-carbon new neighborhood. Please do not hesitate to contact us with questions or comments at (781) 316-3438 or julie.wormser@mysticriver.org.

Sincerely,

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