

October 25, 2021

Via Email

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**Re: Comments on Harvard Enterprise Research Campus Project, located at 100 – 112 Western Avenue, Allston
Draft Project Impact Report**

Nupoor Monani:

Charles River Watershed Association (“CRWA”) submits the following comments on the Draft Project Impact Report (“DPIR”) for the Enterprise Research Campus Project located at 100 Western Avenue, Boston, Massachusetts, filed with the Boston Planning & Redevelopment Agency (“BPDA”) on July 28, 2021. This project consists of developing an approximately 14.2-acre parcel located at 100 – 112 Western Avenue in the Allston neighborhood of Boston.

CRWA submitted comments to MEPA on the Environmental Notification Form (“ENF”) (dated March 2, 2021) on March 3, 2021 and to the Boston Planning and Development Agency (“BPDA”) on March 24, 2021, focusing on several areas: impervious surfaces and stormwater management, water quality protection, impacts from climate change, trees & vegetation, relationship to proposed North Allston Storm Drain Extension Project (NASDEP), water use and sewer generation, construction period impacts, operation & maintenance of the drainage system, and public engagement. We appreciate the additional materials provided in response to our comments.

However, based on our review of the information provided in the DPIR, CRWA requests additional information and clarifications. The following is organized in accordance with the numbering included in Section 8 of the DPIR.

Comments 13.1, 13.2, 13.11, and 13.12

We understand that the Project Proponent will exceed the BWSC and BPDA standard of 1.25 inches by storing and actively managing an additional 1.5-inches of runoff (a 32-year storm event).

We appreciate the Project Proponent stating that “the infiltration systems will be designed so as to not increase peak runoff rates and volumes of stormwater for the 2-year, 10-year, 25-year, and 100-year rainfall events.” Please document what precipitation values are or source is being used to define the 2-year, 10-year, 25-year, and 100-year rainfall events.

We appreciate that the Project Proponent evaluated the stormwater system's ability to handle peak flows associated with "anticipated larger storm events of the future and is using larger year 2070 storm events (6.4-inch 10-year rainfall, 8.2-inch 25-year rainfall, and 11.7-inch 100-year rainfall)." However, those results are not shared in detail in the DPIR. Please provide these as a response to comments; if this information cannot be provided yet, please explain why and when it will be made available to CRWA and the public.

We better understand the various management systems and how they relate to the buildings and facilities on site. We also thank the Project Proponent for clarifying the downstream drainage routes with and without the NASDEP, and providing Figures 7.3 and 7.4. In the FEIR, please describe any historical drainage system on-site and to where it discharged (BWSC system and BWSC outfall to the River). For existing drainage on-site, please clarify if any of it reach BWSC's system and if so, where it ultimately discharges. Please explain how much of the site infiltrates on-site presently.

Our Comment 13.12, "*The EIR should also include information (description of extent, duration, frequency, etc.) in both written and visual format on the historical flooding areas that will contribute to the downstream route and provide calculations and modeling showing that the proposed project will not have adverse impacts on the downstream drainage system nor the upstream catchment area as indicated in the ENF (see quote above), both under present and anticipated climate conditions (see previous comment sections)*" is not fully addressed.

What we are really trying to understand with our initial questions is, where will it flood on Phase A and Phase B of the ERC, as well as where will it flood in the upstream and downstream neighborhoods based on the new on-site and roadway drainage systems with and without the NASDEP? How deep will the water be, and what land area will it impact? Please provide this information for the 2070 precipitation events. Or, if this information cannot be provided at this phase of design, when will this information be available to CRWA and the public?

Also, we are pleased to see the Project Proponent will review the updates to the Stormwater Management Standards and the Site will be designed to meet the new requirements. What is the "cut-off date" for the new Standards to be incorporated into the design?

Comment 13.3

Regarding surface parking, we understand that ultimately, surface parking will be limited to on-street parking spaces. However, we understand that during construction of Phase A, there will be extensive temporary surface parking in the area associated with Phase B. Please clarify the dimensions of the "temporary parking" that will support construction of Phase A. How long will these be in existence? How will stormwater management for these parking areas be handled? Will any mitigation for urban heat island impacts be employed, such as shading or alternative pavements, be utilized?

Comments 13.4 and 13.5

Please confirm the percent impervious covert on the Project Site, as there are inconsistencies between MEPA and BPDA filings and various sections in these documents.

We also note the BPDA Climate Resiliency Checklist states “the project is evaluating the potential for onsite stormwater reuse as well as opportunities for green roofs.”

The language is non-committal (e.g., “opportunities”) so when and in what filing or permitting process will the Project Proponent confirm the total site impervious and pervious area coverages, and the area and percent of the site which will be green roofs?

Figure 4.14, Vegetation, Permeability, and Canopy, shows the extent of permeable paving in a green shading, which is misleading. We recommend these visuals be updated to a different color or shading pattern to avoid misleading the public. Also, for the permeable paving, please provide anticipated dimensions on the diagram so we can understand the width of the walkways along the buildings. Is there a requirement for the walkways to be the sizes shown? Can these be minimized further?

For impervious surfaces in the greenway, can you please clarify the requirements associated with these areas? What is needed for maintenance parking, emergency response, and is the pervious cover no larger than the minimum required to meet these needs? If not, can be it further minimized?

We appreciate that Figures 7.5 a and b show the locations of the bioretention cells and bioretention basin, the two green stormwater practices proposed to be employed, as well as the storage tank and stormwater recharge system, which are sub-surface grey stormwater management systems. Are there opportunities for use of any other surface systems that are more diverse and spread out across the site? If not, why?

We note that “the Proponent will continue to evaluate ways to maximize green infrastructure, employ low impact development techniques, increase green space, and decrease impervious area as the design progresses, which could further optimize the stormwater management system. The stormwater engineering team will continue to refine the system design outlined above and will do so in coordination with the Harvard Enabling Infrastructure. As the design progresses, the timing and sequence of stormwater storage and infiltration may be adjusted.” When will the final design be available to CRWA and the public?

Comments 13.6 and 13.7

To achieve compliance with the Total Maximum Daily Load for Nutrients In the Lower Charles River Basin, Massachusetts, June 2007 (EPA TMDL No. 33826), the project must achieve at least 65% phosphorus removal and not 64% as stated in the Response. Given that the City of Boston has to remove at least 4,100 kg/year (over 9,000 lbs/year) of phosphorus from the City, we urge BWSC and BPDA to require the site to remove the maximum amount of annual phosphorus load possible. CRWA requests that proof of compliance, including methodology and calculations showing the anticipated pollutant removal, to address the Phosphorus TMDL, by provided to CRWA and the public in advance of the BWSC Site Plan review process to allow time for review.

There is no discussion in the DPIR about how the project will address the Final Pathogen TMDL for the Charles River Watershed January 2007 (EPA TMDL No. 32371). Inflow and Infiltration (I&I) mitigation work to address aging sewer infrastructure is one important way to

limit the migration of bacteria into our local waterbodies; illicit discharge detection and elimination (IDDE) is another. Under Stormwater Handbook Standard 10 – Prohibition of Illicit Discharges, for any sewer and storm drain infrastructure remaining on site, we would expect the proponent to confirm the condition and separation of stormwater utilities, and that there are no illicit connections. Bacteria in waterbodies does not only come from sewers, but also non-point source pollution—in particular, animal and pet waste that is improperly disposed of. The project should provide pet waste stations or trash cans that are emptied on a sufficiently frequent schedule, catch basin grates cast with the term “Do not Dump – Drains to River,” and signs about the importance of picking up after your pet. Bacteria can also come from soils and decomposition of natural materials. Catch basins and water quality units collect much of this material, and some of it may enter the infiltration systems. Frequent cleaning as part of a long-term operation and maintenance program is a critical way to keep these materials from entering the piped network and subsurface systems.

Comments 13.8 and 13.9

We appreciate that Chapter 6 of the DPIR provides additional documentation on climate change and sustainability.

CRWA, in our original comments, specifically requested that “further detail about how the project will specifically address these climate concerns [precipitation, flooding, heat, drought, and storms] should be provided in the EIR.”

We do not see extensive information provided on drought, other than limited consideration of onsite stormwater reuse and green roof potential, as described in the Boston Climate Resiliency Checklist, and ask the proponent to describe how the project will manage drought. Will the project include rainwater harvesting or greywater recycling? If so, how? How will the Project Proponent select plantings and vegetation that are climate resilient?

Regarding flooding, Chapter 5.1 states that “The Project Site is not within a current FEMA floodplain and is also located outside the boundary for the 2070 1% annual chance event used in Climate Ready Boston. First floor elevations are proposed to be raised to be between 18.5-19.5 feet Boston City Base (BCB). While the Project has limited coastal flood risk, the team is also considering opportunities to elevate additional equipment within the building to provide extra flood protection.” There is also the BWSC City of Boston Inundation Model¹. This model shows extensive areas of flooding, many of which are predicted to be over two feet in a Nor-easter 100-year storm event with 2070 sea level rise and a 100-year storm surge and even over one foot under various other scenarios. How does the project account for these storm conditions? Will the elevation of critical support infrastructure (electrical, heating/cooling, etc.) also be raised along with the ground floor?

Comment 13.10

CRWA continues to be disappointed that the project is not incorporating more tree canopy and vegetation. We do understand that underground utilities and proximity to foundations

¹ <https://www.bwscstormviewer.com/stormapp/>

impact tree canopy potential, however, we are not convinced the project site has maximum canopy and vegetation cover.

Section 5.1 and the Boston Climate Resiliency Checklist say the tree canopy will cover approximately 60,000 SF, Section 5.5.4.1 and the Boston Climate Resiliency Checklist say "The current landscape design is estimated to provide approximately 51,855 SF of tree canopy at the Project Site, approximately 20% of the total site area." Section 7.3.2 says "it estimated that tree canopy will extend to 1.4 -acres of the site, approximately 24% of the Site (14% of the Project Greenway and 10% of the streetscape)." Please confirm the final amount of canopy cover.

On average, Boston's tree canopy is 27% of the City's land area according to the Tree Canopy Assessment. We'd expect to see Harvard do significantly more than the average in Boston. Please review the Boston Tree Canopy Assessment to understand the City's work to date, including assessments completed by neighborhood, and in the FEIR explain how the project will help the City achieve the Climate Ready Boston goals associated with tree canopy (e.g., 35% coverage City-wide by 2030) and urban heat. At a minimum, we request that the Project Proponent look at the average canopy on the Business School Campus and meet or exceed that coverage, assuming it is greater than the City's average.

In addition, there are other vegetation options besides trees that provide many co-benefits including evapotranspiration (natural air conditioning), mental health improvements, habitat, carbon storage and cleaner air, etc. Can more plantings be incorporated into the design where trees are not feasible? If not, document why.

Comments 13.13 and 13.14

We appreciate that the Project Proponent reviewed and updated the water and wastewater projections from the ENF and is utilizing water conservation measures and providing Infiltration/Inflow mitigation.

Comment 13.15

We appreciate the Project Proponent providing additional information in Sections 6.6 and 6.7 in Chapter 6, *Environmental Protection*.

We request that the Stormwater Pollution Prevention Plan (SWPPP) developed for management of the site during construction include a provision to observe and monitor ultimate point(s) of discharge to the Charles River and that there are benchmarks that trigger remedial actions on-site.

Comment 13.16

The Response to this comment is vague ("Maintenance and operation plans will be developed by the design team and maintenance will be the responsibility of the owner.")

Long-term success of the water quality and water quantity management components of the grey and green infrastructure heavily depends on proactive operation and maintenance and

rehabilitation at the end of useful life. Will maintenance be completed in accordance with the MA handbook or the manufacturer's recommendation? When will the drainage structures including grey and green practices need complete rehabilitation (i.e., what is the length of the useful life)?

Comment 13.17

We acknowledge that the Project Proponent has established a scheduled community outreach process in the form of 'Pop-ups', door-to-door canvassing, and a site walk to provide information to residents and receive feedback about the bigger framework. We also understand that the Project Proponent has established connections/relationships with a number of local Allston-Brighton organizations. We hear and support the community's concern that there has not been adequate community engagement with diverse stakeholders. CRWA requests that the Project Proponent produce a summary analysis of the feedback received from the Pop-ups, door-to-door canvassing, and the in-person site walk. This summary analysis should include:

- How many people attended each event
- How the Project Proponent conducted outreach with Environmental Justice populations
 - What languages and how many languages were available during outreach and during promotion for the events?
 - What accommodations were provided?
- List of organizations that have been contacted and engaged
- Summary feedback from residents and businesses including results of the petition in support for the project development from the door-to-door canvassing
- Follow-up information for the public that engaged with the Proponent from all outreach events

Additionally, we suggest (if the Project Proponent has not already done or planned for) to make all the events available as part of the project timeline posted on the BPDA website.

Thank you for considering these comments.

Sincerely,



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