The Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
http://www.mass.gov/eea

August 23, 2021

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
PROJECT COMMENCEMENT NOTICE

PROJECT NAME	: Harvard University's Campus in Allston – Newell Boathouse
PROJECT MUNICIPALITY	: Boston
PROJECT WATERSHED	: Charles River
EEA NUMBER	: 14069
PROJECT PROPONENT	: Harvard University
DATE NOTICED IN MONITOR	: July 23, 2021

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62I) and Section 11.10 of the MEPA regulations (301 CMR 11.00), and the associated Special Review Procedure (SRP) dated November 20, 2013, I have reviewed the Project Commencement Notice (PCN) and hereby determine that the project described therein **does not require** an Environmental Impact Report (EIR).

Project History

Between 2007 and 2014, Harvard University (Harvard) submitted for MEPA review an Institutional Master Plan (IMP) for development of its campus and other properties in Allston (Ten-Year Plan). Due to the complexity and long build-out period of the projects, an SRP was issued on November 20, 2013, to guide MEPA review of the build-out of the Ten-Year Plan projects. Among the procedures identified in the SRP and the Certificate on the Final Environmental Impact Report (FEIR) issued on October 17, 2014, was the filing of a PCN for one or more projects in the IMP as more detail becomes available for such projects.

In July 2007, Harvard filed an Expanded Environmental Notification Form (EENF) initially outlining a 20-Year Master Plan for Harvard's Allston Campus. The EENF indicated that full build-out of this 20-Year Master Plan would include between four and five million square feet (sf) of institutional development on a total of 215 acres of land. Harvard's current Allston Campus contains ±151 acres and is located predominantly on land bounded by Soldiers Field Road and Western Avenue, with North

Harvard Street separating two distinct areas of the existing campus, the Harvard Business School and the athletic area. Specifically, the 20-Year Master Plan development program was estimated to include 1,343 new beds for students, 12,400 average daily vehicle trips (adt), 4,360 new parking spaces, and increases in water usage and wastewater generation.

A Certificate on the EENF was issued on September 14, 2007, outlining both a scope for an EIR and proposing a Phase 1 Waiver to allow construction of a Science Complex in advance of completion of MEPA review of the Master Plan. A Final Record of Decision (FROD) granting this Phase 1 Waiver was issued on October 16, 2007.

A Notice of Project Change (NPC) was filed in 2013 that identified a significantly reduced scope of the master plan for the Allston Campus with respect to land area, number of projects, square footage of development, duration and potential environmental impacts in comparison to the 20-Year Master Plan presented in the EENF. The NPC identified 11 potential projects to accommodate the growth of Harvard's Allston Campus and envisioned redevelopment of underutilized, predominantly industrially zoned land and creation of a pedestrian-friendly campus environment over a 10-year period (Ten-Year Plan or Ten-Year IMP). According to the IMP Notification Form filed with the City of Boston pursuant to Article 80D of the Boston Zoning Code, the Allston Campus was expected to increase in land area by ±27 acres to a total of 178 acres over the 10-year planning period. As described in the NPC, the Ten-Year Plan proposes over one million sf of new building space in addition to ±500,000 sf of renovated space. In addition to the aforementioned reduction in the overall project area and development program, the project was expected to generate 5,420 fewer adt, for a project total of 6,980 adt, and add a total of 178 new parking spaces rather than the 4,360 new parking spaces proposed in the EENF.

Subsequent to the filing of the 2013 NPC, the SRP was established to provide a procedure for review of individual projects addressed in the Ten-Year Plan. Specifically, PCNs are required for each component of the Ten-Year Plan other than the two that were fully described in the FEIR (the Chao Center and Baker Hall projects). PCNs may address one or more projects within the Ten-Year Plan depending on project design advancement and construction scheduling. The Certificate on the FEIR included guidance on the content of future PCNs anticipated for the remaining projects identified in the Ten-Year Plan, consistent with the review framework established by the SRP. One of the remaining projects is the one identified in this PCN, relating to renovations to the Newell Boathouse.

Project Description

Consistent with the Secretary's 2014 FEIR Certificate and SRP, Harvard is submitting this PCN for renovation of the Newell Boathouse. According to the PCN, at the time of the Ten-Year Plan filing, Harvard was considering the renovation of, and addition to, the Newell Boathouse to meet the current programmatic needs of the rowing programs and address limitations of interior program areas and boat storage, and upgrade building systems. The project would need to replace the 1960s rowing tank and the building that houses it. As described in the PCN, the Newell Boathouse project now includes interior renovation to provide new training facilities, new locker and toilet rooms, and improved accessibility; construction of two new boat storage sheds west of the existing boathouse and removal of the 1960s addition; and repair and restoration of the building's envelope and exterior including replacement of the slate roof and walls, copper peaks, windows, doors, sloped deck and dock structure; restoration of finials at corner towers; addition of walkway access to dock structures; movement of south exterior wall to accommodate a new accessible lift; construction of a new ramp to create accessible entrance;

landscaping; storm drainage improvements; and site parking lot improvements and paving.

Harvard is also undertaking a renovation of the Weld Boathouse located in Cambridge including reconstruction of docks, which is the subject of a separate Environmental Notification Form (ENF) under MEPA, submitted simultaneously with this PCN. That project is undergoing separate review, as it is not included within the Ten-Year IMP that was the subject of the 2014 FEIR Certificate and SRP.

Project Site

The Newell Boathouse is located on ±1.99 acres of land within the Massachusetts Department of Conservation and Recreation (DCR) Charles River Reservation owned in fee by the Commonwealth under the care and control of DCR and leased by Harvard. The project site is located on the Boston shoreline of the Charles River adjacent to Soldiers Field Road, and across the Charles River from the John F. Kennedy Memorial Park and northwest (upstream) of the Anderson Memorial Bridge. The project site contains a pile-supported boathouse (original boathouse) completed in 1900, an addition that was constructed in the 1960s (1960s addition), a gravel parking lot, and fixed pile-supported timber decks that connect the original boathouse with floating docks on the Charles River. The existing building has two stories containing ±21,000 sf of space. A large ramped (sloped) deck over the Charles River extends the width of the building and provides dock access. The Newell Boathouse is listed in the State Register of Historic Places as a contributing property in the Charles River Basin Historic District which was listed in the National Register of Historic Places in 1978. Harvard operates the men's varsity rowing program out of the Newell Boathouse. Harvard women's rowing uses the Weld Boathouse on the Cambridge side of the Charles River.

The project site contains filled and flowed tidelands associated with the Charles River. Wetland resource areas include Bank, Bordering Vegetated Wetlands (BVW), Riverfront Area (RFA), Bordering Land Subject to Flooding (BLSF) and Land Under Water (LUW). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Map No. 25017C0557E, effective June 4, 2010), a portion of the site is located within a Zone AE (area subject to inundation by a one-percent annual chance flood event) with a base flood elevation (BFE) at 4 feet.[1]

Jurisdiction and Permitting

This project is subject to MEPA review procedures as outlined in the 2013 SRP. The Ten-Year Plan was subject to MEPA review and required a mandatory EIR because, in its entirety, it requires Agency Action and exceeds several MEPA review thresholds including: 301 CMR 11.03(6)(a)(6) – Generation of 3,000 or more unadjusted new adt on roadways providing access to a single location; 301 CMR 11.03(5)(b)(4)(a) – New discharge or expansion in discharge to a sewer system of 100,000 or more gallons per day (gpd) of sewage, industrial wastewater, or untreated stormwater; and 301 CMR 11.03(10)(b)(1) – Demolition of all or any exterior part of any Historic Structure listed in or located in any Historic District listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth.

[1] All elevations referenced in this Certificate are based on North American Vertical Datum of 1988 (NAVD88) unless otherwise specified

Implementation of the various components of the Ten-Year Plan require a Non-Major Comprehensive Plan Approval from the Massachusetts Department of Environmental Protection (MassDEP), a Construction and Access Permit from DCR, a Sewer Use Discharge Permit and 8(m) Permit from the Massachusetts Water Resources Authority (MWRA), and Chapter 254 Review by the Massachusetts Historical Commission (MHC). The project is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (GHG Policy).

Each individual IMP project identified in the Ten-Year Plan will be required to undergo additional review by the Boston Planning and Development Authority (BPDA) under the applicable Article 80 provisions of the Boston Zoning Code. As part of the IMP process, a program of community benefits was memorialized in a series of agreements between the City of Boston and Harvard, including a Cooperation Agreement, Institutional Construction Management Plan guidelines, and a Transportation Access Plan Agreement (TAPA). Certain projects may require an Order of Conditions (OOC) from the Boston Conservation Commission (or, on appeal only, a Superseding Order of Conditions (SOC) from MassDEP) and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the U.S. Environmental Protection Agency (EPA).

The Newell Boathouse project independently triggers the MEPA review threshold at 301 CMR 11.03(3)(b)(6) because it involves construction, reconstruction or expansion of an existing solid fill structure of 1,000 or more sf base area or of a pile-supported structure of 2,000 or more sf base area, provided the structure occupies flowed tidelands or other waterways. The project requires a Chapter 91 License (c. 91) from MassDEP and a Construction and Access Permit from DCR.

The Newell Boathouse project requires an OOC from the Boston Conservation Commission (or in the case of an appeal, a SOC from MassDEP); review by MHC in accordance with M.G.L. Chapter 9, Sections 27-27c, as amended; Pre-Construction Notification with the U.S. Army Corps of Engineers; and potentially, a NPDES CGP from EPA.

Some portions of the project may receive Financial Assistance in the form of tax-exempt bond financing from the Commonwealth. Because the project may be undertaken with State Financial Assistance, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEP A regulations.

Review of the PCN

Consistent with the terms outlined in the SRP, the PCN underwent a 20-day comment period (similar to that required for an NPC) and was published in the July 23, 2021 *Environmental Monitor*. The comment period concluded on August 12, 2021. The PCN provides a description of existing and proposed conditions, preliminary project plans and graphics, a summary of potential environmental impacts and a limited analysis of alternatives. It identifies measures to avoid, minimize and mitigate project impacts. Harvard submitted supplemental information on August 13 and 17, 2021 to provide estimates for impacts to wetland resource areas and a response to comments from the Charles River Watershed Association (CRWA), respectively. For purposes of clarity, all supplemental materials are included in the reference to "PCN" unless otherwise referenced.

DCR comments indicate that permits for work on the project site must be reviewed and approved by DCR prior to filing with the Boston Conservation Commission, MassDEP, and MHC. DCR indicates

that, in its view, the proposal will avoid impacts to the Charles River Reservation and minimize unavoidable impacts.

The Certificate on the FEIR required that each PCN provide project-specific mitigation measures, as well as an update on the status of the mitigation measures described in the FEIR for the Ten-Year Plan. Mitigation for this project includes: updated sidewalks and parking area, new gas utilities, four infiltration trenches, a bioretention basin, and improved drainage to the Charles River; accessibility enhancements; consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties for all exterior work proposed; Construction Management Plan (CMP) consistent with Harvard and City of Boston guidelines; maintaining and strengthening strategies that support existing passive design features regarding energy use; and system upgrades that lower energy footprints.

The 2013 IMP included a comprehensive master plan for community benefits with commitments in the areas of public realm, education programming, workforce development, and housing. According to the PCN, Harvard is up-to-date on all commitments associated with the community benefits master plan including the measures that have impacts on the public realm. These IMP mitigation commitments were presented in the Interim Update submitted to the MEPA Office in 2019 pursuant to the SRP; the PCN includes a table summarizing the status of the Cooperation Agreement for the IMP (Appendix B).

Alternatives Analysis

The PCN provides an analysis of alternatives to replacing the pier (Preferred Alternative, as described herein) including No Action and Pier Repair. The No Action Alternative would maintain existing conditions at the project site and leave the docks in need of additional repairs since temporary repairs were conducted in 2019. The PCN describes the need for reconstruction based upon safety and operational reasons. The pier will continue to degrade and result in structural deficiencies that could result in pier failure, which could cause property damage and personal harm. Therefore, the No Action Alternative is not considered viable. Continuing to repair the pier will not be cost effective and will only continue to provide temporary fixes. Replacing the pier will increase the longevity and safety of the pier. While the Preferred Alternative has greater impacts than the No Action or Pier Repair alternatives as it involves reconstruction of docks and construction of new sheds, the ENF asserts that it has been designed to minimize environmental impacts to the greatest extent feasible while meeting the programmatic needs of the Harvard Athletic Programs, which include keeping the rowing programs operational during construction.

Wetlands and Stormwater

The project will impact 290 linear feet of Bank, 80 sf of LUW, and 2,900 sf of RFA. The Boston Conservation Commission will review the project for its consistency with the Wetlands Protection Act (WPA), Wetlands Regulations (310 CMR 10.00) and associated performance standards including stormwater management standards (SMS).

The pier has reached the end of its service life and is in need of replacement. Repairs have been performed over the life of the structure with the last set of repairs completed in 1980 and temporary repairs completed in 2019. The project involves replacing the existing pier and floating docks, as well as extending the length of the floating dock, construction of an additional pier, construction of two boat sheds, and stormwater drainage areas. Pier replacement will consist of removing the pier components,

including cutting the timber piles at the mudline, installing 75 new steel pipe piles, steel pile caps and beams, timber stringers and timber decking. No dredging is proposed. In addition, the project includes landscaping and stormwater drainage areas. Best Management Practices (BMPs) to be employed during the construction period include deployment of a floating debris boom around the proposed repair areas and turbidity/silt curtains to avoid dispersal of debris material during construction work from migrating into the river. It is anticipated that construction staging will occur in the northwest area of the site adjacent to the building and parking lot. It is anticipated that a crane located on a floating barge in addition to small work floats and a work skiff will be used to stage the repairs.

Site improvements will result in ±10,780 sf of new impervious area (8 percent overall increase). The project is proposing to install several infiltration stormwater BMPs throughout the site including four infiltration trenches, porous pavement or a subsurface system, a bioretention basin and two drainage outfalls to the Charles River to mitigate for stormwater runoff. The project is unable to collect and treat all the impervious area onsite but BMPs are sized to overtreat and provide the volume required to treat the total impervious area onsite.

As previously mentioned, Harvard submitted supplemental information to respond to comments from CRWA regarding stormwater management, compliance with Total Maximum Daily Loads (TMDLs) for phosphorus and bacteria, construction period impacts, and tree removal. The Notice of Intent (NOI) anticipated to be submitted to the Boston Conservation Commission in Fall 2021 will include a detailed stormwater report with back up calculations to demonstrate compliance with the SMS; address seasonal high groundwater (i.e. lining of systems) and use of porous pavement or a trench drain along the parking area discharging to a lined subsurface basin underneath the parking area that will mitigate for peak rates and water quality, if porous pavement is deemed infeasible; include calculations demonstrating compliance with the TMDLs; a detailed operation and maintenance plan for the different stormwater management systems; and landscape plans.

The gravel area east of the parking area will continue to sheet flow into the Charles River. It is anticipated that the infiltration basins designed throughout the project site will be able to mitigate for the phosphorous and pathogen TMDL removal requirements. Harvard will explore the measures recommended in CRWA comments to minimize migration of sediment and other pollutants from the land surface to the Charles River during construction and will provide additional information and detailed plans as part of the NOI. The project's design will prioritize retention of most of the existing native trees throughout the site including all trees along the river's edge, except for a very limited number of trees in locations where new docks are required or where the trees are a threat to the structure of the existing historic boathouse building. The landscape design will be consistent with the DCR Charles River Basin Master Plan, which anticipates the use of all native plants. The proposed design contemplates new trees and groupings of shrubs and plants that will be placed in irregular masses, with plants varying in species, size, ecological and aesthetic attributes.

Waterways

The project site includes ±53,050 sf of Commonwealth filled tidelands subject to c. 91. A portion of the original boathouse and the 1960s addition are located on a narrow strip of filled tidelands parallel to the existing shoreline. The site also includes fixed and floating docks connected to the original boathouse that are located over flowed tidelands. The PCN provides a summary of the project's consistency pursuant to 310 CMR 9.00 and historic licensing. License No. 2275 (1899) authorized

construction of the original boathouse, an earthen dike to isolate the building from the river, and the placement of fill. MassDEP will review the project to determine its consistency with the c. 91 Waterways Regulations (310 CMR 9.00). The project will require submission of a Waterways License Application. MassDEP will likely determine that the project would be classified as a water-dependent use project pursuant to 310 CMR 9.12.

The project site includes the following existing and proposed elements that are located in part within c. 91 jurisdiction:

- original pile-supported boathouse
- demolition and removal of the 2,950-sf 1960s unlicensed building addition
- after-the-fact licensing for an existing gravel parking lot that is proposed to be improved with porous pavement
- continued operation of the site for water-dependent recreational boating activities
- reconstruction and expansion of the existing pile-supported, floating docks and ramps, including replacement of the structural frame, piles, and deck
- construction and operation of a concrete pedestrian path along the east and southeast edges of the boathouse that will improve accessibility between the boathouse and the docks
- construction of two 20-foot by 77-foot boat storage houses on a concrete structural slab within filled tidelands to support recreational boating activities from the site
- relocation of and operation of a new gasoline dispensing system away from the water's edge where it is currently located

Harvard will obtain a new water dependent license under c. 91 for the project which will be designed to comply with all applicable provisions of c. 91. Prior to submission of this PCN, Harvard coordinated with MassDEP on several occasions regarding the circumstance that the existing and proposed docks extend past the State harbor line. According to the PCN, although the State harbor line no longer demarcates a meaningful navigation channel, c. 91, the Waterways Regulations, and MassDEP's guidelines limit MassDEP's ability to license structures located beyond the State harbor line pending legislative action to authorize the project either as an exception to the established harbor line or to relocate the harbor line. Harvard is committed to working collaboratively with MassDEP to secure legislative action prior to the issuance of a final c. 91 license for the project.

Supplemental information responds to comments from CRWA regarding public access in compliance with 310 CMR 9.00, specifically the public's "broad rights to use such lands for any lawful purpose," including by interfering with the public's rights to freely access this part of the riverbank and watersheet and navigate through the area where the Boathouse and docks are located. Harvard acknowledges Section 9.35(4) of the c. 91 regulations which requires water dependent use projects located on Commonwealth Tidelands to provide compensation to the public for interfering with its broad rights to use such lands for any lawful purpose. Currently, users of the Dr. Paul Dudley White bike path and the general public can access and walk along the waterfront to the northwest and southeast of the boathouse. Harvard is committed to ensuring that the project complies with all c. 91 regulatory standards, and will provide appropriate mitigation that will facilitate public access to and along the waterfront. In addition, Harvard is committed to ensuring that the project will enhance, and will not impede navigation and use along the Charles River which is over 400 feet wide at this location; the boathouse extends approximately 80 feet riverward of the seawall preserving over 80 percent of the

channel width for navigating past the boathouse. Harvard will work with the CRWA, MassDEP and other stakeholders as the project advances through the c. 91 Licensing process.

Climate Change and Resiliency

The PCN includes a discussion of the project in the context of climate change adaptation and resiliency. New infrastructure proposed to be constructed at the water-dependent facility is anticipated to have a design life of less than 50 years. According to the FEMA FIRM, the Project Site is located in a non-tidal portion of the Charles River and the upland portion of the site is not currently subject to flooding during the one percent annual chance flood event, which is contained within the banks of the Charles River. The Boston Harbor Flood Risk Model (BHFRM) indicates that the project site is located within the Boston Planning and Development Agency (BPDA) Sea Level Rise – Flood Hazard Area (SLR – FHA), and would be vulnerable to flooding in 2070 during the one percent annual chance flood event up to elevation 13.5 NAVD88. In this event, the boathouse would be protected, as its first floor is elevated to 17.1 NAVD88. During an extreme storm event the docks would not be in use. The fixed and floating docks which are located in and over the water may be vulnerable to flooding from future 100-year 2070 coastal storm events that flank the Charles River Dam. The docks and deck structures are designed to get wet, and the useful design life of these structures is less than 50 years with regular maintenance. The Proponent will consider any changes in future climate change projections and flood elevations when the docks are rebuilt/reconstructed in the future.

Construction Period

Construction is anticipated to commence in Spring 2022 start and be completed by Summer 2024. The project will be phased to accommodate the programs and limit interruption during the rowing seasons. The project will provide a temporary rowing dock and temporary floats at the site to support the construction of the two new docks.

All construction and demolition (C&D) activities should be managed in accordance with applicable MassDEP's regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017). The Proponent will install BMPs on the project site to control erosion and sedimentation during the construction period. The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with Air Quality regulations (310 CMR 7.11).

I encourage the Proponent to require contractors to use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Town should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000). The contractor will be required to have hazardous materials spill prevention and clean up kits available on site for any waterborne equipment. All C&D activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Proponent to reuse/recycle C&D debris to the maximum extent.

Conclusion

The PCN has sufficiently defined the nature and general elements of the Newell Boathouse project for the purposes of MEPA review. I am satisfied that any outstanding issues can be addressed by the Proponent as part of State and local permitting processes for this individual project. Based on review of the PCN and comments received, and in consultation with State Agencies, I hereby determine that no further MEPA review is required for the Newell Boathouse project.

K. Theoharides

August 23, 2021
Date

Kathleen A. Theoharides

Comments received:

08/11/2021 Massachusetts Department of Conservation and Recreation (DCR)
08/12/2021 Charles River Watershed Association (CRWA)

KAT/PPP/ppp

dcr
Massachusetts

August 12, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
Attn: Purvi Patel, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EOEEA #14069 Newell Boathouse - Project Commencement Notice

Dear Secretary Theoharides:

The Department of Conservation and Recreation ("DCR" or "Department") is pleased to submit the following comments in response to the Project Commencement Notice ("PCN") submitted by Harvard University (the "Proponent") for the Newell Boathouse (the "Project").

Harvard University's Ten-Year Master Plan for the Allston campus includes seven new construction projects and two renovation projects. The Chao Center and the Baker Hall Renovation projects were fully described in the 2014 FEIR. In accordance with a Special Review Procedure outlined in the MEPA Certificate, an additional submittal is required when more detail is available for each of the remaining projects.

As described in the PCN, the Newell Boathouse project includes exterior repairs, modest interior renovations, interior and exterior accessibility enhancements, and reconstruction of the existing docks. The Project site is located adjacent to Soldiers Field Road, upstream of the Anderson Memorial Bridge. DCR has care, custody, and control of the Charles River Reservation where the Newell Boathouse is located. The land on which the Newell Boathouse is located is currently the subject of a long-term lease granted to the proponent by the Metropolitan Parks Commission, a predecessor agency of DCR.

Chapter 91 and Wetlands Protection Act regulations are applicable to work activities on the Project site. A Project Notification Form will be submitted for review by the Massachusetts Historical Commission ("MHC"). Permits for work on the Project site must be reviewed and approved by DCR prior to filing with the Boston Conservation Commission, DEP and MHC. Apart from work on the boathouse structure owned by the proponent, work activities will also require a DCR Construction and Access Permit ("CAP").

DCR believes the proposal avoids detrimental impacts to the Charles River Reservation and minimizes unavoidable impacts. DCR looks forward to working with the Proponent prior to and during construction and to ensure protection of natural and historical resources.

Thank you for the opportunity to comment on the PCN. Please contact Ruth Helfeld, Director, Landscape Architecture Section at ruth.helfeld@mass.gov with questions related to site design considerations. Please contact Sean Casey, Director of Construction and Access Permits at sean.casey@mass.gov to request a CAP.

Sincerely,

Jim Montgomery
Commissioner

cc: Sean Casey, Ruth Helfeld, Patrice Kish, Priscilla Geigis, Tom LaRosa

Charles River Watershed Association

August 12th, 2021

Via email

Purvi Patel, Environmental Analyst
MEPA Office, Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114
purvi.patel@mass.gov

Re: Project Commencement Notice (PCN) for the Renovation of Newell Boathouse, Boston, EEA #14069

Dear Purvi Patel:

Charles River Watershed Association (CRWA) submits the following comments on the Project Commencement Notice (PCN) for the renovation of the Newell Boathouse (Boathouse), located in Boston on the shoreline of the Charles River adjacent to Soldiers Field Road, across the Charles River from the John F. Kennedy Memorial Park, and northwest (upstream) of the Anderson Memorial Bridge. According to the PCN, the existing Boathouse consists of a two-story pile-supported boathouse (the "original boathouse"), a 1960s addition, a gravel parking lot, and floating docks on the Charles River connecting to the Boathouse by fixed pile timber decks.

Harvard University, the project proponent, proposes to undertake internal and external renovations to the existing Boathouse, docks, and landscape. Specifically, Harvard proposes constructing two new structures for boat storage (boatsheds) and a new access ramp, and reconstructing the existing Boathouse deck and adjoining dock, including an extension to the east side of the dock. The changes and additions to the project would result in a net increase of impervious surface of 8% (from 24,140 square feet (sf) to 34,290 sf) on land and a 3,245 sf increase of new dock on the river.

Post-Construction Stormwater and Water Quality Management

CRWA is pleased to see the project proponent is planning to make improvements to the site to manage post-construction stormwater runoff. These best management practices (BMPs) consist of four infiltration trenches, porous pavement, and a bioretention basin.

We are concerned, however, about the lack of separation between the bottom of the BMPs and seasonal high groundwater. How will the BMPs function under future climate conditions when seasonal high groundwater may be much higher? Are there safety concerns posed by porous pavement if it does not have adequate drainage abilities?

Harvard provides limited design and sizing information in the PNC. Figure 1-4 shows the proposed site plan but does not indicate the locations of the four infiltration trenches or the two new outfalls. The narrative provides a water quality volume summary but does not explain how the project will comply with the Massachusetts Stormwater Management Standards and Handbook.

Page 14 of the PNC notes that "[a]lthough the parking area is treated as impervious area for calculations, it will be porous pavement which will allow for infiltration. We appreciate that the water quality volume calculations are conservative, but it is not clear whether the gravel parking area included in the impervious area estimate.

Harvard should address these questions in a response to comments on the PCN and these design concerns should be resolved during subsequent City permitting processes.

Furthermore, as Harvard is aware, the Lower Basin of the Charles River is subject to a Total Maximum Daily Load (TMDL) for phosphorus (Total Maximum Daily Load for Nutrients In the Lower Charles River Basin, Massachusetts, June 2007 (EPA TMDL No. 33826)) and a TMDL for bacteria (Final Pathogen TMDL for the Charles River Watershed January 2007 (EPA TMDL No. 32371)). There is no discussion in the PCN about how the project will address these TMDLs. As stated in the PCN, the project will increase the site's total impervious surfaces by 10,150 square feet (8% overall increase). Complete documentation of how the project is designed to address the TMDLs, including calculations of pre- and post-construction pollutant loading (including TSS and phosphorus), should be provided.

Construction Period Impacts

The PCN notes that Harvard will prepare and submit a Construction Management Program (CMP), in compliance with the City of Boston's CMP and Harvard's Final Environmental Impact Report CMP guidelines, to the Boston Transportation Department once final plans are developed. While we appreciate Harvard's commitment to minimizing impacts during construction, we note that the CMP narrative in the PCN does not discuss mitigation of construction period impacts to the Charles River and wetlands resources areas. Instead, that narrative is provided in Section 3.6.4 (pages 25 and 26) and is very limited in details.

CRWA frequently monitors the water quality in this area, specifically at the Larz Anderson Bridge, weekly during summer and fall. Enclosing the project worksite with a floating debris boom during construction and having a hazardous materials spill kit on-site will help, however, is not sufficient to minimize the migration of sediment and other pollutants from the land surface to the Charles River during construction. In particular, at the very least, the list of measures described below should be included in the CMP for the project:

- Employ a double row of hay bales and silt fences (properly installed) as erosion control measures around the construction site and at the mudline. Mulch tubes/fiber rolls/etc.

are not acceptable for this location as they are often perforated post-construction and material left on-site, which will ultimately likely enter the river.

- Develop and implement a protective protocol to prevent construction materials and disturbed soils from entering the river during construction.

- Install netting and/or tarps under the dock structures to ensure that debris is not released from work over water into the river.

- Develop and implement a protocol for inspecting and ensuring the integrity of these erosion measures every day, including replacing the hay bales as they deteriorate.

- Set up detailed truck staging and parking—non-essential construction vehicles should park more than 50 feet from the river, trucks should not be allowed to park within 25 feet of Riverfront zone, and a parking area should be designated for all non-essential vehicles.

- Develop and implement a spill prevention plan and emergency flood control plan (and submit this plan to the Boston Conservation Commission for review within 10 days of beginning construction).

Harvard should include stormwater and wetlands mitigation in the CMP. CRWA would be happy to work with Harvard to develop this plan. Harvard should address these concerns in a response to comments on the PCN and resolve these design concerns during subsequent City permitting processes.

Operation & Maintenance of the Drainage System

The PCN provides no information on proposed operation and maintenance of the drainage system, including the BMPs. Such documentation should be provided in the City permitting processes to ensure that the BMPs will be maintained to function for their useful life.

Landscaping and Trees

CRWA supports the project removing existing, invasive plantings and replacing them with plantings consistent with the DCR Charles River Basin Master Plan. We also support native and naturalized warm-season grass being integrated along the river's edge to complement the existing trees proposed to remain.

The PCN states that the two new boatsheds will be sited to preserve trees where possible. However, the PCN does not provide information on how many and which trees will be removed. Harvard should provide planting plans that document existing and proposed trees (and vegetation) and indicate species and size (diameter at breast height). Due to the proximity to the river, CRWA recommends that, for each tree removed, a minimum of two replacement trees be planted both to help filter stormwater before it enters into the river and to help reduce the heat

island effects associated with the nearby roadway. The planting plan should pay special attention to preserving and planting trees along the riverbank, a critical riparian habitat and buffer for the river.

Public Access

The PCN indicates that this project will require a new Chapter 91 waterways license that must comply with the waterways regulations found at 310 CMR 9.00. We look forward to providing more detailed comments on the application for the new license, but at this point note the following concerns.

According to the PCN, this boathouse is used for Harvard's men's varsity rowing, recreational rowing programs that serve the Harvard community, and community dock access for special community events such as The Head of the Charles Regatta. The project will be built over both filled and flowed tidelands, all of which are Commonwealth tidelands. This project is water-dependent and is therefore presumed to serve a proper public purpose. 310 CMR 9.31(2)(a). The project must comply with applicable provisions of the waterways regulations that protect public rights in tidelands. 310 CMR 9.35(1) ("The project shall preserve any rights held by the Commonwealth in trust for the public to use tidelands...and other waterways for lawful purposes; and shall preserve any public rights of access that are associated with such use.").

The waterways regulations require compensation for any interference with public rights in Commonwealth tidelands. Section 9.35(4) of the regulations provides that "[a]ny water-dependent use project which includes fill or structures for private use of Commonwealth tidelands… shall provide compensation to the public for interfering with its broad rights to use such lands for any lawful purpose. Such compensation shall be commensurate with the extent of interference caused, and shall take the form of measures deemed appropriate by the Department to promote public use and enjoyment of the water, at a location on or near the project site if feasible."

Under the waterways regulations, projects on Commonwealth tidelands shall not significantly interfere with public rights to walk or otherwise pass freely for purposes of fishing, fowling, navigation, and the natural derivatives thereof, and all other lawful activities, including swimming, strolling, and other recreational activities. 310 CMR 9.35(3)(b). "If the project is a water-dependent use project on filled Commonwealth tidelands, said project shall provide for public passage thereon by such means as are consistent with the need to avoid undue interference with the water-dependent uses in question" and "measures which may be appropriate in this regard include, but are not limited to, allowing the public to pass laterally along portions of the project shoreline, or transversely across the site to a point on the project shoreline." 310 CMR 9.35(3)(b)2.b. The regulations further require that "for any private recreational boating facility, reasonable arrangements shall be made to accommodate public pedestrian access along or to the water's edge; generally, unless other measures are determined to be more appropriate by the Department, such access shall be provided by establishing, as a

condition of the license, a lateral accessway at or near the high water mark wherein the public may pass freely across the seaward end of the property from dawn to dusk." 310 CMR 9.35(4)(a).

The PCN does not explain what compensation will be provided for interference with the public's rights in these Commonwealth tidelands, nor what reasonable arrangements will be made to accommodate public pedestrian access along or to the water's edge. Instead, the proponent states that "[t]he existing boathouse and docks are not accessible to the general public. The renovations to the water-dependent boathouse and recreational boating activities will not inhibit, restrict, or otherwise discourage existing public use or access of the waterfront within the Charles River Reservation." This statement does not address the proponent's obligations to comply with the regulatory requirements described above.

This project will interfere with the public's "broad rights to use such lands for any lawful purpose," including by interfering with the public's rights to freely access *this* part of the riverbank and watersheet (the proponent wrongly focuses on whether the project will affect the public's ability to use and access the waterfront within the broader Charles River Reservation) and navigate through the area where the Boathouse and docks are located. The regulations do not require any threshold to be met with respect to the extent of the interference in order for compensation to be required; they require compensation commensurate with the extent of interference caused. The regulations also clearly require reasonable accommodation for public passage along or to the river's edge, which is not contemplated in the PCN. We expect to see these critical omissions addressed in the waterways license application.

Fuel Dispensing and Fuel Storage

CRWA is pleased to see proactive steps taken to consider relocating the existing fuel dispensing away from the water to reduce risks of spills and contamination in the Charles River. We look forward to reviewing the detailed plans during the Chapter 91 licensing process.

Thank you for considering these comments. Please feel free to contact me with any questions at djohanif@crwa.org or 781-788-0007 x 215.

Sincerely,

Dira Johanif,
Program Associate for Community Resilience

August 18, 2021

Purvi Patel
MEPA Office
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Newell Boathouse Renovation (EEA# 14069): Response to Comments

Dear Ms. Patel:

The Proponent (Harvard University and the Harvard University Athletics) received a comment letter from the Charles River Watershed Association ("CRWA") dated August 12, 2021 that you forwarded to us. Below, we present the CRWA comment (or paraphrase of the comment), followed by our response.

Comment:

We are concerned, however, about the lack of separation between the bottom of the BMPs and seasonal high groundwater. How will the BMPs function under future climate conditions when seasonal high groundwater may be much higher? Are there safety concerns posed by porous pavement if it does not have adequate drainage abilities?

Response:

The stormwater calculations were done without using an infiltration rate, so the systems can be lined if the two inches of separation cannot be maintained. The use of porous pavement is one option for mitigating runoff from the parking area. If porous pavement is not deemed feasible, a trench drain will be installed along the back side of the parking area that will discharge runoff to a lined subsurface basin underneath the parking area that will be designed to mitigate for peak rates and water quality. Due to the high groundwater elevation, we anticipate designing an impermeable liner around it with an underdrain system that will discharge to the Charles River. A full stormwater report with back up calculations will be submitted as part of the Notice Of Intent (NOI) to the Boston Conservation Commission.

Comment:

Harvard provides limited design and sizing information in the PNC. Figure 1-4 shows the proposed site plan but does not indicate the locations of the four infiltration trenches or the two new outfalls. The narrative provides a water quality volume summary but does not explain how the project will comply with the Massachusetts Stormwater Management Standards and Handbook.

101 Walnut Street
PO Box 9151
Watertown, Massachusetts 02471
P 617.924.1770
F 617.924.2286

Response:

Compliance with the 10 MassDEP Stormwater Standards will be shown in detail with a stormwater report and back up calculations that will be submitted with the Notice of Intent (NOI) filing. As described in the PCN filing, site improvements and proposed best management practices (BMPs) are anticipated to include four infiltration trenches, a bioretention basin, the use of pervious pavement or a subsurface system, and two drainage outfalls to the Charles River.

Comment:

Page 14 of the PNC notes that "[a]lthough the parking area is treated as impervious area for calculations, it will be porous pavement which will allow for infiltration. We appreciate that the water quality volume calculations are conservative, but it is not clear whether the gravel parking area included in the impervious area estimate.

Response:

The stormwater BMP for the parking area is sized solely for the impervious parking area and a portion of the sidewalk along the front of the building. The current design anticipates that the gravel area east of the parking area will sheet flow into the Charles River similar to today's condition.

Comment:

Furthermore, as Harvard is aware, the Lower Basin of the Charles River is subject to a Total Maximum Daily Load (TMDL) for phosphorus (Total Maximum Daily Load for Nutrients In the Lower Charles River Basin, Massachusetts, June 2007 (EPA TMDL No. 33826)) and a TMDL for bacteria (Final Pathogen TMDL for the Charles River Watershed January 2007 (EPA TMDL No. 32371)). There is no discussion in the PCN about how the project will address these TMDLs. As stated in the PCN, the project will increase the site's total impervious surfaces by 10,150 square feet (8% overall increase). Complete documentation of how the project is designed to address the TMDLs, including calculations of pre- and post-construction pollutant loading (including TSS and phosphorus), should be provided.

Response:

It is anticipated that the suite of infiltration basins designed throughout the Project Site will be able to mitigate for the phosphorous and pathogen TMDL removal requirements. Calculations demonstrating compliance with the Charles River phosphorous & pathogen TMDL will be included with the Stormwater Report that will be submitted as part of the NOI.

Comment:

CRWA frequently monitors the water quality in this area, specifically at the Larz Anderson Bridge, weekly during summer and fall. Enclosing the project worksite with a floating debris boom during construction and having a hazardous materials spill kit on-site will help, however, is not sufficient to minimize the migration of sediment and other pollutants from the land surface to the Charles River during construction. In particular, at the very least, the list of measures described below should be included in the CMP for the project:

- Employ a double row of hay bales and silt fences (properly installed) as erosion control measures around the construction site and at the mudline. Mulch tubes/fiber rolls/etc. are not acceptable

for this location as they are often perforated post-construction and material left on-site, which will ultimately likely enter the river.

- Develop and implement a protective protocol to prevent construction materials and disturbed soils from entering the river during construction.
- Install netting and/or tarps under the dock structures to ensure that debris is not released from work over water into the river.
- Develop and implement a protocol for inspecting and ensuring the integrity of these erosion measures every day, including replacing the hay bales as they deteriorate.
- Set up detailed truck staging and parking—non-essential construction vehicles should park more than 50 feet from the river, trucks should not be allowed to park within 25 feet of Riverfront zone, and a parking area should be designated for all non-essential vehicles.
- Develop and implement a spill prevention plan and emergency flood control plan (and submit this plan to the Boston Conservation Commission for review within 10 days of beginning construction).
- Harvard should include stormwater and wetlands mitigation in the CMP.

Response:

So noted. The Proponent will explore the above measures, and will provide additional information and detailed plans as part of the NOI to the Cambridge Conservation Commission. Installing netting and/or tarps is not necessary for timber construction as the timber should float and will be contained in the floating debris boom. This netting will also make it potentially more hazardous to work, as the work will likely be done both from floats and the deck.

Comment:

The PCN provides no information on proposed operation and maintenance of the drainage system, including the BMPs. Such documentation should be provided in the City permitting processes to ensure that the BMPs will be maintained to function for their useful life.

Response:

A detailed operations and maintenance (O&M) plan for the different proposed stormwater management systems will be included as part of the Stormwater Report submitted with the NOI.

Comment:

The PCN states that the two new boatsheds will be sited to preserve trees where possible. However, the PCN does not provide information on how many and which trees will be removed. Harvard should provide planting plans that document existing and proposed trees (and vegetation) and indicate species and size (diameter at breast height). Due to the proximity to the river, CRWA recommends that, for each tree removed, a minimum of two replacement trees be planted both to help filter stormwater before it enters into the river and to help reduce the heat island effects associated with the nearby roadway. The planting plan should pay special attention to preserving and planting trees along the riverbank, a critical riparian habitat and buffer for the river.

Response:

Landscape plans that provide the detail requested by the CRWA are currently under development and will be submitted as part of the Notice of Intent (NOI) filing that is expected to be submitted Fall 2021.

Many large existing trees, including the mature specimen oak tree in the lawn south of the boathouse, are intended to be protected. The Project's design has prioritized the retention of most of the existing native trees throughout the Project Site. All existing trees along the river's edge are intended to remain, except for a very limited number of trees in locations where new docks are required or where the trees are a threat to the structure of the existing historic boathouse building.

The landscape design will be consistent with the DCR Master Plan, which anticipates the use of all native plants. The proposed design contemplates new trees and groupings of shrubs and plants that will be placed in irregular masses, with plants varying in species, size, ecological and aesthetic attributes.

Comment:

This project will interfere with the public's "broad rights to use such lands for any lawful purpose," including by interfering with the public's rights to freely access *this* part of the riverbank and watersheet (the proponent wrongly focuses on whether the project will affect the public's ability to use and access the waterfront within the broader Charles River Reservation) and navigate through the area where the Boathouse and docks are located. The regulations do not require any threshold to be met with respect to the extent of the interference in order for compensation to be required; they require compensation commensurate with the extent of interference caused. The regulations also clearly require reasonable accommodation for public passage along or to the river's edge, which is not contemplated in the PCN. We expect to see these critical omissions addressed in the waterways license application.

Response:

The Proponent acknowledges Section 9.35(4) of the Chapter 91 regulations which requires water dependent use projects located on Commonwealth Tidelands to provide compensation to the public for interfering with its broad rights to use such lands for any lawful purpose. Under existing conditions, users of the Dr. Paul Dudley White bike path and the general public are able to access and walk along the waterfront to the northwest and southeast of the boathouse within the Project Site, which is located within the broader Charles River Reservation.

The Proponent is committed to ensuring that the Project complies with all Chapter 91 regulatory standards, and will provide appropriate mitigation that will facilitate appropriate public access to and along the waterfront.

Additionally, the Proponent is committed to ensuring that the Project will enhance, and will not impede navigation and use along the Charles River. At this location in the lower basin, the Charles River is over 440 feet wide and the boathouse only extends approximately 80 feet riverward of the seawall; preserving over 80% of the channel width for navigating past the boathouse. Therefore, the boathouse does not impinge on the channel width and does not interfere with navigation through this reach of the lower basin.

The Proponent looks forward to working with the CRWA, MassDEP Waterways and other stakeholders as the Project advances through the Chapter 91 Licensing process.