



January 25, 2019

By email: jerome.grafe@state.ma.us

Jerome Grafe
MassDEP – Waterways Regulation Program
One Winter Street, 5th Floor
Boston, MA 02108

Subject: Waterways License Application No. W18-5358
Draw Seven Park Pathway Extension (Charlestown MBTA Facility)

Dear Mr. Grafe:

I am writing to comment on the application filed by the Massachusetts Department of Conservation and Recreation (DCR) for a Chapter 91 license to construct and maintain a shoreline path for public use at the Massachusetts Bay Transportation Authority's (MBTA's) Charlestown Bus Facility in Boston and Somerville.¹

The Mystic River Watershed Association (MyRWA) is highly supportive of the concept for a Draw Seven Park pathway extension and commends the DCR for moving ahead with the planning for construction of this project in coordination with the MBTA shoreline stabilization project now underway. Together, these projects advance the vision for improving climate resiliency, public access to the Mystic River, and continuity with multi-use pathways and parklands throughout the watershed. This is a critical link that will serve *significant* numbers of cyclists and pedestrians that are connecting from a new pedestrian bridge and employers at the Encore Casino and Assembly Row area (12,000+ employees) to downtown Boston. This is a critical investment to meet City of Boston carbon free goals and provide an alternative to single occupancy vehicle travel.

We think that planning for the pathway would benefit from a more robust shared-path design process, including public input and an engineering report addressing safety standards. In addition, we ask that the Department of Environmental Protection (MassDEP) address certain Chapter 91 regulatory issues when evaluating the license application and formulating license terms and conditions. Finally, we ask that no license be issued until the DCR has obtained an appropriate easement that will allow it to construct and maintain a *safe* pathway, with associated amenities, that facilitates both unimpeded travel through the site *and* pedestrian access to and public enjoyment of the surrounding open space.

¹ Transmittal No. X281497, September 2018. The Mystic River Watershed Association previously commented on the Environmental Notification Form (ENF) (EEA #15487) and Waterways License Application (No. W16-4842) filed by the MBTA for its related Shoreline Stabilization and Yard Improvements project.



MyRWA Mission

MyRWA is a non-profit organization dedicated to the preservation and enhancement of the Mystic River Watershed. The mission of MyRWA is to protect and restore the Mystic River, its tributaries, and watershed lands for the benefit of present and future generations and to celebrate the value, importance, and great beauty of these natural resources. A primary goal of MyRWA is to improve public access to water bodies and shorelines throughout the watershed, especially through the formation of continuous greenways that provide recreation and transportation resources associated with the river.

Multi-use Pathway and Public Access

In 2016, MyRWA launched the Mystic Greenways Initiative to restore, revitalize and connect waterfront parklands. In partnership with MassDEP, DCR, municipalities, citizens groups, and property owners, we are well on our way to achieving the goals of this cooperative undertaking. Under Waterways License No. 14505, the public will soon have access to a stretch of tidal riverbank from which it has been excluded for decades.² We envision the proposed DCR pathway as enhancing public access to these Commonwealth tidelands, not only by creating a paved path for use by bicyclists, but by also providing more accessible on-foot passage to open space in the project area, for use by recreational fishermen, birdwatchers, and other pedestrians. In addition, the linkage that the pathway would establish from Somerville to Route 99 in Boston will create an alternative transit corridor for residents and visitors traveling on foot or by bike through the most densely populated area of the Mystic River Watershed.

This location of this shared use path is just downstream of the key physical and urban features that will result in significant use and demand for this path. Encore casino is currently in a design phase with DCR of the Mystic Pedestrian Bridge that will connect the Northern Strand from Everett into Somerville/Charlestown. This connection is a critical connection from the North Shore through Boston. The shared use path is also located just downstream of significant developments with a high density of employment (Wynn Casino, 5,000 employees; Partners HealthCare 4,500 employees, Assembly Row (6,000 employees), Xmbly (not available) and residents at Assembly Row (3,500). The design of a 10 foot path is inconsistent with the use demands that are expected at this path.

² We anticipate that public access will be restored as soon as the shoreline stabilization project is completed. License 14505 authorizes the MBTA to “construct and maintain long-term shoreline protection” and to “convey an easement and physical space” to the DCR for the future construction of a multi-use pathway, under separate license. License 14505 contemplates that the shoreline stabilization structures will be used to “provide public access to and along waterfront open space for passive recreational use.”

Scope and Terms of DCR Easement

It is crucial that the MassDEP clarify the terms of the easement to be granted by MBTA to DCR, and confirm its grant, before issuing a Chapter 91 license for the shoreline path.³ Three topics that MassDEP should address are the geographic extent, duration, and stated purpose of the easement.

The DCR's project narrative states that the MBTA shoreline stabilization project has "accommodated" or "provided for" the pathway's route "within a dedicated easement." Transmittal X281497, Attachment A, pp. 1 and 4.⁴ The DCR's proposed project includes a number of structures and landscape elements well outside the 14-foot strip containing the path, for which the DCR will have sole management responsibility. (We argue below that any lateral barriers *must* be placed outside this strip.) The MBTA, moreover, has not joined in the license application. Clearly, the DCR's easement must be congruent with and fully accommodate the structures and uses authorized by the requested license. MyRWA asks that the entire area from the water's edge (or at least the seaward top of slope) and the landward limit of work shown or implied on the draft license plans be included in the easement.

The phrase "dedicated easement" connotes a permanent grant for public use, which reserves to the grantor no rights that are incompatible with the full exercise and enjoyment of the public uses to which the property has been devoted. License No. 14505, conditioned on the MBTA's conveyance of the easement, was issued for an unlimited term. A permanent easement is necessary to ensure that the purpose of that license is fulfilled.

Although the project narrative does not expressly state that easement will create a public "park," to be administered by the DCR, this is fairly implied. The project provides for not only a "public recreation pathway adjacent to a waterway" (Transmittal X281497, Attachment A, p. 2), but also a significant amount of open space landward of the path, containing vegetation, benches, informational signage, and other public amenities. It is a path within a greenway. The easement should enable the DCR to create and maintain a public park. (Additional comments pertaining to the easement are included below.)

Determination of Water-Dependency

MassDEP has characterized the DCR project as a water-dependent use project under 310 CMR 9.12(1). According to the project narrative, this determination is warranted because the project consists entirely of uses in the following category: "parks, esplanades, boardwalks, and other

³ The easement has yet to be conveyed, so the MBTA is currently not in compliance with license conditions for its shoreline stabilization project. See License No. 14505, p. 2 (Special Waterways License Condition 3).

⁴ The project narrative mischaracterizes License No. 14505 as referring to a "14-foot wide easement." Transmittal X281497, Attachment A, pp. 10-11. This statement must be disregarded, in deference to the actual license language, cited in footnote 2.

pedestrian facilities that promote use and enjoyment of the water by the general public and are located at or near the water's edge, including but not limited to any park adjacent to a waterway and created by a public agency . . ." 310 CMR 9.12(2)(a)4.

It is unclear whether the DCR's easement will create a "park," within the meaning of 310 CMR 9.12(2)(a)4. If it does not, then it is imperative that the project be designed *primarily* to provide "pedestrian facilities that promote use and enjoyment of the water by the general public." We doubt that a paved pathway leading to a public park (i.e., Draw Seven Park) would qualify under this standard if it is designed primarily for commuter and recreational bicyclists and contains features that discourage pedestrian use and interfere with visual enjoyment of the river. Certain project design elements that raise safety issues or may otherwise limit pedestrian use are discussed below, along with suggestions for improved pedestrian access.

The proposed project includes a tall security fence, whose primary purpose is evidently to secure property at the adjacent MBTA facility, a non-water dependent use. Although a modest physical and visual barrier, set well back from the path, may be appropriate to protect users from harm, the placement of a tall security fence close to the path is a non-water dependent use that MassDEP should not consider in this licensing proceeding.

Site Constraints

Regarding the design of the multi-use pathway, we understand that the MBTA has chosen to make available only a very limited amount of space for this water-dependent use project. Given these severe constraints, we believe that the DCR's design for the most part serves the public interest under Chapter 91. The lateral barriers, however, must be re-designed to improve the safety of path users and avoid undue interference with the public's rights of on-foot passage and other lawful use.

The MBTA bus facility itself—a largely unlicensed, non-water dependent use of Commonwealth tidelands—is beyond the scope of this license application. We understand that there is some disagreement about the extent of the easement to be conveyed to the DCR. At a minimum, the easement should be drawn to accommodate a 14-foot paved path and all associated safety features and public amenities, including landscaping elements. Ideally, it would cover the entire area from the water's edge to the landward limit of work shown or implied on the draft license plans. This would allow the DCR to manage access to open space beyond the pathway itself. In the absence of broad DCR management authority, we foresee potential conflict among different users (e.g., bicyclists, anglers, birdwatchers, and picnickers), which may diminish the utility of the pathway as a transportation conduit and impair public enjoyment of this important tideland resource.

MyRWA believes that the DCR's current project proposal takes an unduly narrow view of the promised easement. The path width has been reduced from 14 feet to 10 feet, and physical barriers on either side of the path have been crammed into the 14-foot allotment, without regard to their effect on public safety or enjoyment. We do not think that this is what MassDEP had in mind when it conditioned License No. 14505 on the conveyance of an easement and physical space sufficient to

enable the DCR to “create an approximate 14 foot wide multi-use pathway along the entire project shoreline.” It should be noted that the license plan accompanying License No. 14505 illustrates a 14-foot easement for a “bike path” unimpeded by vertical barriers. Whereas a 10-foot single-use path with 2-foot shoulders on each side might accommodate the anticipated bicycle traffic in this segment, we recommend that a multi-use path in this area provide 14 feet of pavement, with 2-3 feet clearance on either side width of pavement—an 18-20 foot allotment—wherever feasible. We fail to see why the MBTA should object to this, given that the public already has the right to unimpeded on-foot passage in the open spaces surrounding the 14-foot corridor illustrated on the plans. But in no event should lateral safety barriers or security fences be constructed within the 14-foot minimum width needed to accommodate a 10-foot paved path.

Wooden Guiderail

The project proposal includes a continuous wooden barrier along the entire seaward edge of the 10-foot pathway. Because this structure would block all pedestrian access to Commonwealth tidelands below the path and seriously detract from pathway users’ visual and aesthetic experience of the waterfront, it should only be approved to the extent necessary to protect public safety. We urge MassDEP and the DCR to consider design modifications that reduce interference with water-related public rights.

Although details are lacking in the license application materials provided, it appears that the “guiderail” would consist of three or more parallel wooden boards on wooden posts, the topmost at a uniform height of 4 feet. The structure would stand some distance landward from the top of the embankment slope but *a mere 7½ inches* from the edge of the pathway pavement.

We assume that DCR has determined that the proximity of the 2:1 gradient embankment requires a physical barrier for bicyclist safety. (A much lower barrier, or none at all, would suffice for pedestrians.) Clearance of only 7½ inches, however, is manifestly inconsistent with bicyclist safety and, as a result, increases risk of injury to all pathway uses. We are not transportation engineers but believe that applicable standards for shared-use paths recommend 3 feet of clearance, and a minimum of 2 feet, between pavement and barrier (see. p. 131-132 of [Guide for the Development of Bicycle Facilities](#), 4th Edition, 2012). Moreover, the farther the distance between pavement and barrier, the lower the barrier can be while affording adequate protection to bicyclists from fall injury.

We ask that the pathway and guiderail be reconfigured so that the guiderail stands as close as practicable to the top of slope and at least 2 feet of clearance are provided. This should be done, if at all possible, without reducing the 10-foot width of paved surface.

In addition, we ask that MassDEP and the DCR provide for a guiderail design that minimizes visual interference while improving bicyclist safety (e.g., by substituting rounded rails for boards). Confining pedestrians to the path should not be a goal of this structure. Indeed, we recommend that there be several breaks in the guiderail (with appropriate safety features) to admit pedestrians to the

embankment slope and facilitate interaction with the waterfront (e.g., for fishing, birdwatching, and other lawful uses). At greater distance from the path, a 42-inch barrier should be sufficient. Angling the top of the guiderail seaward would increase its effective height; this may allow use of a 3-foot guiderail.

MBTA Security Fence

It appears that the DCR is also asking permission to install a tall fence immediately adjacent to the pathway to secure MBTA property from intrusion by pathway users. This design element is highly inappropriate to a water-dependent use project and requires significant modification.

Although details are sorely lacking in the application, it appears from the draft license plans that the fence would stand at least 8 feet, perhaps 12 feet, high and extend along the entire landward length of the pathway, with a single gated entrance midway, inaccessible to the public. For most of its length, this tall fence (of undisclosed materials, but presumably chain-link) would be placed a mere 7½ inches from the edge of the 10-foot pathway surface. See Transmittal X281497, Attachment E, sixth sheet (“Typical Path Section (Bus Garage Area)”). North of the bus garage, it appears that the MBTA security fence would stand at a variable distance from the pavement, seaward of the sheet pile floodwall in some places, landward of the floodwall in others.

For safety reasons, no security fence should be allowed within 3 feet of the paved surface of the path. Furthermore, the only type of fence that can be justified on the landward side of the path is a minimal physical and visual barrier, to discourage pedestrians from venturing into the MBTA facility. Any barrier designed to “secure” the MBTA’s property and activities at the site is a non-water dependent use.

Floodwall and Other Features

There appears to be a pinch point where a 10-foot paved pathway will necessarily run very close to the sheet pile floodwall landward of the path. The draft license plans do not indicate how the top of this structure is to be guarded to protect bicyclists and pedestrians from fall injury. We ask that MassDEP consider requiring an appropriate wooden barrier or covering and/or signage to protect pathway users. If necessary, the pavement width could be reduced to less than 10 feet to create lateral clearance between the pavement edge and floodwall. It may be that some compromise is needed between pavement width and distances to both floodwall and wooden guiderail in this section. Wherever pavement width is less than 10 feet or lateral clearance on either side is less than 2 feet, reflective warning signs should be installed.



S Curve, Sightlines, and Gradient

We ask that MassDEP and DCR give particular attention to the effect that the S curve in the path will have on sightlines and bicycle lean and take into account the increased speed of northbound bicyclists resulting from the 4 degree downgrade. It may be that greater lateral clearances and/or a modified guiderail offering less visual interference is needed at the S curve, and speed controls may be needed to protect both bicyclist and pedestrian safety.

Request for Public Hearing

If the DCR is unwilling to postpone consideration of its Chapter 91 license application while it conducts a public charrette and prepares a safety report, we ask that MassDEP consider holding a public hearing on the application. This would allow MassDEP to become better informed about the public's interest in access to these tidelands and the considerable safety concerns raised by the current pathway design.

Future Connectivity

Once this path is completed, the next "missing link" will be the crossing over Alford Street/Route 99, connecting the Mystic River paths with the Boston Harborwalk that starts in Boston, in front of Ryan Playground. We would ask that the DCR coordinate with the Boston Department of Transportation as they develop a redesign for Rutherford Ave. and Sullivan Square. And within the scope of this project, we would ask that the design not preclude a future signalized crossing over Alford St/Route 99.

I thank the Department for the opportunity to comment on this important project.

On behalf of the Mystic River Watershed Association,

A handwritten signature in black ink that reads "Patrick Herron". The signature is written in a cursive, flowing style.

Patrick Herron, Executive Director

cc: Alyssa Jacobs, Epsilon Associates, Inc.
MyRWA Policy Committee
Deanna Moran, Conservation Law Foundation