

November 30, 2018

Via email: AllstonI90Intermodal@dot.state.ma.us

Stephanie Pollack
Secretary of Transportation
State Transportation Building
10 Park Plaza
Boston, MA 02116

Dear Secretary Pollack:

The Charles River Watershed Association (CRWA) has been deeply involved in the I-90 Allston Interchange Project, both as members of its Task Force and in collaboration with other environmental organizations and the resident community. CRWA submits the following comments on the Independent Review Team's October I-90 Allston Intermodal Project Technical Review. At the outset, CRWA commends you on the wisdom of establishing the IRT for the Throat Area and the IRT's evaluation of both the Draft Environmental Impact Report (DEIR) alternatives and proposed new variants.

Environmental restoration, resiliency, public access to the river, and improved bicycle and pedestrian travel on the Paul Dudley White Path (PDW) are each integral to any alternative selected and will assist the Task Force and the public in evaluating the alternatives.¹ Regardless of the preferred alternative MassDOT selects, riverfront and bank restoration, including flood storage, improved water quality, increased parkland, and related public realm improvements, are components of the project, and of its permitting. As the IRT Report notes,

¹ This accords with the GreenDOT Sustainability Policy; the GreenDOT Implementation Plan; MassDOT's Climate Change Summit and Summit Leadership Session, and the State Hazard Mitigation and Climate Adaptation Plan (SHMCAP). Pursuant to the SHMCAP, MassDOT commits to requiring "a holistic evaluation of all vulnerability, environmental, transportation and social data sets in the earliest project planning phases . . . Understanding a broad range of constraints and sensitive resources early in project planning ensures resilient infrastructure and helps avoid permitting issues later in the project development process. This initiative will also reduce the need to retrofit infrastructure for adaptation measures post-construction." Additionally, the SHMCAP MassDOT Global Actions also include "Incorporate sustainability and resiliency review items into the Early Environmental Coordination Checklist (EECC), which is a required document for all MassDOT Highway Division roadway and bridge construction projects . . . The EECC requests information related to the environmental aspects of a project, such as nearby sensitive resource areas, and helps MassDOT Environmental Services scope the project for permitting needs and potential design considerations."

Secretary Beaton directed with respect to the Throat Area that “[t]he FEIR should provide an alternative that maximizes parkland, restores the riverbank and improves bicycle and pedestrian access along the Charles River . . .” DEIR Certificate, p. 39.

There is also no question that each alternative will impact the Charles River and its Reservation, albeit in differing ways. Whether the impacts are temporary or permanent, Section 4(f) mandates that “all possible planning” occur.

At the November 14th Task Force meeting, CRWA presented its perspective on the throat area and its connection to the overall project to reinforce the important connection between the work of the IRT and the overall project design and engineering. A copy of the presentation is attached hereto as Appendix A.

Section 4(f) analysis and review should occur before and during the MEPA process. In the Throat, all alternatives will involve use of Section 4(f) land; there are no feasible and prudent alternatives to avoid this.² Accordingly, the project is required to include all possible planning to minimize harm to Section 4(f) property. The IRT report presents three new design options and evaluates these in addition to the three design options presented in the DEIR using the criteria matrix. However, without a full presentation and analysis of mitigation for each option, it is not possible to assess Section 4(f) compliance, or to evaluate the alternatives fully.

For example, the IRT states that the IRT Hybrid and At-Grade designs “preserve the possibility” for North-South connecting bridges across the Throat to the riverfront, yet the team stops short of including those bridges as a mitigation measure.³ None of the options include specific measures with respect to riverbank restoration. Pursuant to Section 4(f), we believe MassDOT is required to develop and commit to these and other mitigation measures *prior* to selecting the preferred alternative. Without this the least overall harm cannot be identified.

Alternatives Analysis for Preferred Option

From CRWA’s perspective, the hybrid option is preferable to either a rebuilt viaduct or the at-grade option because of its overriding benefits--the opportunities for river connections, noise reduction, and visual enhancement to the river, among others. Our understanding is that the original ABC DEIR alternative—filling wetlands along the river bank and cantilevering the PDW over the river would not be permitted by MassDEP absent a wetlands’ variance. The IRT questions whether c. 91, Clean Water Act Section 404 permit and a 401 water quality certification could be issued because there is a viable alternative.

CRWA has a number of questions and concerns about ABC’s Proposed Elevated Multi-Use Path Concept. This all at-grade concept for I-90 and Soldiers Field Road (SFR) would bring SFR to the

² IRT Technical Report at 149, 256.

³ IRT Technical Report at 248, 253.

edge of the river with elevated bike/pedestrian paths above SFR. While it may be possible to create a park-like experience on the elevated paths, this concept, in which 10-foot wide separated bicycle and pedestrian paths are proposed, will add more impervious surface to an area which is already highly impervious, does little to nothing for resiliency, and will increase heat island effect. It also seems likely that this concept would require a retaining wall or seawall in the river, eliminating bank, riverfront area and floodplain. It would also eliminate the scant parkland today along the PDW.

Of the viaduct alternatives, the IRT Viaduct Variant 3-column replacement would shift a portion of SFR beneath the enlarged viaduct's cantilevered edge providing more green space between SFR and the PDW. This green space, however, is unlikely to be usable, high quality open space. Indeed, the IRT proposes stormwater management systems (as does the original viaduct alternative in the DEIR) in this space. However, the Viaduct variant is an improvement over MassDOT's DEIR viaduct alternative.

Of the variants, CRWA believes that the IRT hybrid variant is the most promising. Putting the westbound I-90 (with 11-foot lanes and 2-foot shoulders) in a boat section with an elevated SFR stacked on top would enable connections to the PDW from the BU Bridge and other river connections while significantly increasing green space adjacent to the river. This configuration would reduce I-90 noise impacts, and reduce I-90 westbound stormwater runoff volume.

We are curious about DCR's reaction to this hybrid alternative and of course, all of the alternatives will need to undergo Massachusetts Historical Commission Section 106 review. SFR is a contributing element in the Charles River Basin Historic District. We note, however, that an elevated SFR would provide sweeping vistas of the Charles at reduced speeds compared with those on I-90. Although the current designs lack sufficient detail to show which will best achieve these objectives, the IRT Hybrid option has the most potential to meet the project goals as well as community needs.

Key Areas for Further Analysis

If done right, this project would not only bring about needed safety improvements to the built environment, but it would also provide flood storage, restore aquatic and riverbank habitat (the Charles is an important fish run for alewives, blueback herring, and American shad, migratory fish that return to the river each year to spawn), reduce stormwater runoff, and expand parkland acreage. MassDOT should develop its remedial and mitigation obligations for the project alternatives in accordance with Governor Baker's Executive Order 569 and the state's policies on resilience and climate risk reduction.

The Throat, with its proximity to the Charles River, is a critical piece of land for resiliency planning. The area is vulnerable to flooding and the risk of inundation from extreme storms. This risk will only increase over time as a result of climate change. Given the significant public

investment this project entails, MassDOT should consider the impacts that will occur over the next fifty years and ensure that the preferred alternative is designed in light of those impacts.

River Restoration and Resiliency

The project presents a rare opportunity to leverage significant public infrastructure investment to advance climate resilience for the project site as well as the abutting neighborhoods. In the Resiliency Criteria Matrix, the IRT evaluated each design option with respect to the impacts of potential flooding on the project, but not the impacts of the project on flooding. For instance, the report examines “impervious surface created”⁴ when a better measure of resiliency would be the creation of flood storage capacity. In addition, the report fails to consider the impacts of flooding beyond the project area and into the surrounding neighborhoods. A final design should not only consider how to protect the project from the risk of flooding, but also how to utilize the site to increase flood storage and capacity at the sub-watershed and watershed scale.

Buffer space between the river and the road components of the project is crucial to increasing flood storage and resiliency. The existing usable pedestrian and green space areas are currently insufficient for these purposes and would be compromised further by reducing the buffer space. Given the future risks of flooding for this area, it would be short-sighted to either reduce this critical buffer area, or to miss an opportunity to expand it and its protections. The preferred alternative should maximize and prioritize this buffer space. In addition, surfaces in the buffer zone for pedestrians and cyclists should use permeable materials such as porous asphalt to maximize flood storage capacity and reduce stormwater runoff. .

Stormwater Management

The entire stretch of SFR in the Throat Area currently discharges directly to the Charles River with no stormwater treatment. MassDOT proposed no stormwater management improvements for this pollution in the DEIR. It is highly unlikely that this would comply with MA Stormwater Standard 7 of “maximum extent practical” for redevelopment projects. Additionally, it would fail to comply with the 64% phosphorous reduction established in the *Total Maximum Daily Load (TMDL) for Nutrients in the Lower Charles River Basin, Massachusetts* (2007). “If there is a TMDL that indicates that stormwater BMPs are needed to reduce the concentration in stormwater runoff of pollutants other than TSS such as nitrogen and phosphorus, the BMPs selected must be consistent with the TMDL. MA Stormwater Handbook, Volume 1, Ch.1, p. 10 fn 15. Pursuant to EPA’s Construction General Permit, “If the permit covers a stormwater discharge to a water body for which a TMDL has been developed, the SWPPP must document compliance with the TMDL.” *Id.* at Ch. 2, p. 16.

⁴ IRT Technical Report Table 1.8 at 24.

In selecting the preferred alternative, MassDOT should pay careful consideration to the IRT options' relative capabilities to manage stormwater runoff. A successful stormwater management system should improve water quality in the river by reducing erosion, sedimentation, and pollution, while increasing flood storage capacity. In addition, proper timing of the implementation of stormwater management strategies is essential and project wide green infrastructure should be included in the early phase of the project.

As CRWA commented on the DEIR, it is critical that the stormwater management plan for the Throat not be considered in isolation from the rest of the project. Rather, the entire project should be treated as a single "stormwater management district" to enable planning for a larger sub-watershed green infrastructure (GI) plan.⁵ GI systems should include "blue greenways" and constructed wetlands, as illustrated in previous comment letters as well as CRWA's most recent presentation to the Task Force.⁶ The IRT report fails to identify the potential for BMPs for each design option. For instance, regarding stormwater BMP siting and sizing, the IRT report states that there is "constrained," "moderate," or "sufficient" space for BMPs for the various options without elaboration.⁷ A stormwater engineering review to assess the pollution impact and the potential for improved stormwater management for each design option would greatly benefit the decision-making process.

Bank Restoration and Public Access

Erosion and pollution currently threaten the stability of the bank along the Throat and the health of the river. The bank along the Throat demands immediate restoration and protection. Constructed wetlands could help with stabilizing the river bank, improving water quality, and providing habitat. Wetland vegetation would provide ecosystem as well as practical utility by slowing water flow and reducing erosion, as well as by providing crucial flood storage capacity.

While the PDW and the Esplanade parkland are water-dependent uses pursuant to G.L. c. 91 and its regulations, the Project itself is nonwater-dependent. Importantly, the public rights in these Commonwealth tidelands will be eliminated during the Project's multi-year construction schedule. The Project is required to "preserve any rights held by the Commonwealth in trust for the public to use tidelands . . . for lawful purposes; and shall preserve any public rights of access that are associated with such use." 310 CMR 9.35(1). Reasonable mitigation for the loss of the public's rights, which we believe cannot be considered "temporary" here given the 8-year construction schedule, will be necessary. Regardless of the alternative selected, accommodation of PDW cyclists and pedestrians during construction will need to be addressed. Because this accommodation is likely to require "fill," reasonable measures to minimize the amount of fill must also be taken by MassDOT.

⁵ CRWA DEIR comments, p. 7

⁶ Appendix A

⁷ IRT Technical Report at 177-78.

The preferred alternative must fulfill all of the stated project goals, including enhanced bicycle and pedestrian connectivity.⁸ The preferred alternative's design should include the construction of N-S connection bridges. The IRT report refers to a N-S connection bridge as a "possibility" under the Hybrid and At-Grade options.⁹ The mere possibility of construction of connecting bridge we do not believe is insufficient to fulfill the project's stated goal of increased bicycle and pedestrian connectivity. Rather, it should be designed and constructed in coordination with the rest of the Throat infrastructure.

CRWA is very supportive of increasing the amount of usable space by pedestrians and cyclists on the PDW. In particular, green space is a crucial component of any design. The need for pedestrian space, however, should not come at the cost of introducing fill into the river beyond that needed for remediation and restoration of those areas of the bank.

Lastly, we cannot stress enough that public participation during development of the FEIR is essential to the success of this project for transparency, public review, and a better project. We believe that the Task Force is the ideal vehicle for facilitating this public participation and requests that you create a subcommittee focused specifically on river restoration and project-wide climate resilience.

In sum, this project presents the opportunity to significantly improve parkland, public access to the river, ecology, water quality, and overall resiliency for the Charles River. We ask that you incorporate these into MassDOT's decision-making process.

Please feel free to call us if you have any questions.

Sincerely,



Margaret Van Deusen
Deputy Director and General Counsel



Pallavi Kalia Mande
Director, Blue Cities

⁸ *About the Allston I-90 Intermodal Interchange Improvement Project*, MASS.GOV, <https://www.mass.gov/service-details/about-the-allston-i-90-intermodal-interchange-improvement-project> (last visited Nov. 27, 2018).

⁹ IRT Technical Report at 248, 253.