



Are you on board?

15 State Street Suite 1100
Boston, MA 02109
617 223 8667
bostonharbornow.org

November 21, 2016

Via email to: Ben.Lynch@state.ma.us

Mr. Ben Lynch
Program Chief
MassDEP Waterways Program
One Winter Street, 5th Floor
Boston, MA 02108

Re: Proposed Interpretation of 310 CMR 9.32(1)(a)4 and 9.51(3)(a): Existing Pile Supported Structures and Pile Fields

Dear Mr. Lynch,

Thank you for the opportunity to comment on MassDEP's interpretation of 310 CMR 9.32(1)(a)4 and 9.51(3)(a). We understand this interpretation is the result of a site visit of Lewis Wharf conducted in early 2016 and study of sites along Boston Harbor with similar pile fields and characteristics.

Boston Harbor Now commented on the initial October 2015 Lewis Wharf Environmental Notification Form and continues to monitor changes to the proposed hotel development. We support the conclusions of the Department's site visit and analysis. Our specific comments follow.

As presented in the memo of interpretation released in the September 21, 2016 Environmental Monitor, DEP's analysis focused on two key factors:

1. Was the pile field previously authorized and
2. To what extent is the pile field presently "existing".

A significant portion of the analysis focused on establishing the definition of the word *existing*. In its final interpretation, the Department defined an existing pile supported structure as one that:

1. Has been previously authorized,
2. Is physically standing in place, and
3. Possesses some capability to perform its originally intended function and use.

According to Mass DEP, “[b]ecause the function of any wharf, pier, pile field, or other filled or pile-supported structure is to support structures and uses above the highest water elevation..., the Department’s first criterion...is that an extant structures must remain above the highest predicted tidewater elevation at a specific site (“Extreme High Water Mark”). An existing pile field, therefore, would not include any broken piles that are not visible at high water nor any piles intentionally cut at or near the mudline.”

We understand the proposed interpretation of an existing pile field was triggered by an October 2015 proposal for a new development at Lewis Wharf. Boston Harbor Now commented on that proposal as part of our efforts to promote public access and climate resilience along Boston’s waterfront. That said, the proposed interpretation is one that affects how cities throughout and beyond Boston Harbor manage harbor safety, navigation and climate change preparedness.

Harbor Safety & Navigation

During October and November 2016’s astronomical high tides (“King Tides”), Boston Harbor experienced tides 2.8 feet above average. Boston Harbor Now documented the full length of Boston’s waterfront from land and from boats during these four days. As part of this effort, we spent several hours with a licensed captain from the Boston Harbor Pilots Association. He mentioned two harbor safety concerns during extreme tidal events. First, dilapidated, improperly kept pilings come loose as a result of wave action and tidal flow and create large, floating and submerged marine debris. Second, during extra-high tides, such pilings can be entirely submerged, resulting in unmarked navigation hazards. As Boston Harbor’s sea level continues to rise, additional pilings will be submerged at the “Extreme High Water Mark.”

Statewide Climate Change Concerns

Climate Ready Boston research projects that sea levels are likely to rise up to 1.5 feet by 2050 and between 2.4 and 7.4 feet by 2100. The potential for extreme coastal storms is also predicted to increase. Scientists anticipate that the intensity of hurricanes hitting the Boston area is likely to increase over the decades ahead. “Nuisance flooding” such as seen during this fall’s King Tide has increased from once every two years during the 1920s to multiple times per year since 2010.

Site-specific Climate Change Concerns

With coastal flooding an existing and increasing concern, waterfront development must avoid building in harm’s way. Pile fields represent the seaward edge of development subject to coastal flooding from extreme storms and sea level rise. According to Article 25 (Flood Hazard

Districts), the Lewis Wharf pile field that gave rise to this interpretation lies within an existing “velocity zone” (V zone), an area subject to both flooding and significant wave action. Under this designation, “any new proposed structure shall be located landward of the reach of mean high tide.” As was presented in October 2015, the Lewis Wharf project included pile-supported structures seaward of mean high tide (i.e., within the velocity zone), which is why we opposed the project moving forward as designed.

We agree with MassDEP’s interpretation of “existing” pile fields (310 CMR (9.32)(1)(a)4, 9.51(3)(a)) in the context of the Lewis Wharf project. We more generally support this interpretation being used statewide, as we expect that it will encourage landowners with future development plans to maintain their pile fields and prevent navigation and other harbor safety hazards. As a forward thinking policy, there may need to be more specificity (e.g., how often and when a pile field must be surveyed) in order to make the policy serve its intended purposes. As sea level rise accelerates in coming decades, this interpretation also may serve to discourage future development in areas most likely to be harmed by coastal flooding.

Thank you for the opportunity to comment.

Sincerely,



Julie Wormser

VP of Policy and Planning



Jill Valdes Horwood

Director of Waterfront Policy