

April 11, 2019

Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority  
Atten: Woods Hole Terminal Designs  
228 Palmer Ave  
Falmouth, MA 02540

Dear Steamship Authority:

Thank you for the opportunity to comment on the design of the Steamship Authority's Woods Hole Terminal. I wonder if an amphibious structure might help address some of the flooding, grade, space, and permit issues the SSA is facing in this project. Amphibious architecture is a growing concept for building in coastal flood-prone areas (some links below). The amphibious concept is for the terminal to be built on a buoyant base, which might be partially or fully recessed in a foundation. When a major flood overtops the pier, the base floats the terminal, keeping it above flood level. This design would be resilient to almost any level of flooding. An amphibious structure would eliminate the need to flood-proof the first floor, might reduce grade changes, and facilitate state permitting. In addition, a basement in the base might be possible, providing additional space.

Brad Butman

[Redacted signature block]

Here are a few links to amphibious architecture:

<https://www.newyorker.com/tech/annals-of-technology/a-floating-house-to-resist-the-floods-of-climate-change>

<https://www.nbcnews.com/mach/science/how-floating-architecture-could-help-save-cities-rising-seas-ncna863976>

<https://www.smithsonianmag.com/innovation/what-can-cities-do-to-go-blue-180965085/>

<https://archpaper.com/2016/10/arx-pax-floating-buildings-flooding/>