Wharf District Council's "District Protection & Resiliency Plan" Executive Summary June 7, 2023

The Wharf District Neighborhood has already experienced flooding from rising sea levels and storm surges from Boston Harbor. Members of the Wharf District Council recognized the importance of developing a long range plan that confronts these impacts and identifies the components/details associated with protecting the Wharf District as well as of Downtown Boston's people and infrastructure. The Wharf District Council (a neighborhood organization representing the district's residents, businesses, property owners, and institutions) formed a public/private task force in 2020 to develop a conceptual resiliency masterplan. Building upon previous studies by the City of Boston, the intent was to develop amongst all stakeholders a consensus solution around a continuously elevated harbor's edge. After twelve months of study and discussion with the help of the ARUP team of consultants, the Task Force delivered its recommendations in June, 2023, available at www.WharfDistrictCouncil.org



The process leveraged individual property owners' own engineering studies and mapped existing elevations against projected 2070 "Design Flood Elevations", as necessary to qualify for public funding. A set of "Evaluation Criteria" was developed to rate all potential solutions for Effectiveness, Feasibility, Adaptability, Social Equity and Access, and Environmental and Additional Benefits. Stormwater flood pathways were analyzed to plan new outfall storage cisterns and pump stations to prevent inland flooding. The final plan was endorsed by all 16 Wharf District waterfront property owners.

To help better understanding the implications of the proposed plan in this Final Report, illustrations were developed that compare existing conditions to the proposed:



example: Existing condition

Proposed solution

Additionally, a secondary set of inland raised elements were designed to limit district-wide inundation in case of a breach of any component by containing flooding within smaller zones within the district. Overall detailed project cost estimates are approximately \$1.2 billion (and have been benchmarked against similar projects underway elsewhere in the US). When completed the project will protect \$3.9 billion of public and private buildings and infrastructure. The plan is segmented into several sub-district projects, which have been prioritized along a timeline for implementation based upon exposure level.

Next steps include a more in-depth analysis of permitting, operations and maintenance, and use restrictions. Water transit infrastructure will also be evaluated. Existing dock capacity and access has been maintained, but further study might suggest better solutions to expand capacity. Eventually the project needs to move past the "conceptual" design stage toward the "schematic" level, which will require significantly more funding.

The plan is primarily an engineering study; it is NOT a design of the public realm. Decisions about the landscape on both sides of the elevated harbor walk should be made through a robust public process, which can now be based upon a solid foundation of engineering.

Many thanks go to Ways and Means Chair Aaron Michlewitz, his staff, the Massachusetts State government, the City of Boston BPDA, and to the waterfront property owners whose support enabled this special public/private partnership to become a reality. Sincere thanks also go to the Wharf District Council's Climate Resilience Task Force and their consulting team of ARUP, Halvorson, VHB, Haley & Aldrich, and the Woods Hole Group.