City of Boston Flood Resiliency Zoning Overlay District and Design Guidelines
BPDA Resiliency Checklist – Sea Level Rise Flood Hazard Map
Climate Ready
Boston Coastal
Resilient Solutions
for East Boston
2016
Layered Protections
Zoning Scope

• Underlying zoning dimensional and use requirements and how these standards may need to be modified to address a design flood elevation based upon future sea level rise.

• Elevation transitions from public ways to new site and building conditions and the implications for zoning setback and site coverage.

• Floor Area Ratio modifications for new and existing buildings to address removal of occupied space in vulnerable areas to accommodate transitional structures such as stairs and ramps within a building.

• Potential for waterfront sub-districts to address flood pathways and district-scale coastal flood protection infrastructure. Building height and density as they relate to value capture.

• Higher level of building sustainability and LEED certification required within an Overlay.

• Updates to Article 80 and Planned Development Area policy and standards to better address resiliency.

• Address flexibility for updates based upon new climate science, data and modeling of sea level rise.
Guideline Scope

- Review resiliency design guidelines developed regionally and nationally.
- Identify primary building typologies within Boston’s 40-inch Sea Level Rise Flood Hazard Area model.
- Develop building topology design guidelines and best management practices for building resiliency.
- Identify a methodology of how design performance standards can be integrated into retrofit projects, including historic buildings.
- Identify design measures necessary to transition from street and sidewalk elevations to higher building ground floor elevation to encourage a quality streetscape and address accessibility challenges.
Initial Fact Finding

Identify requirements and conflicts

- City Zoning

- 1% annual coastal flood risk (2070)
- Flood Hazard District (Article 25)
- Groundwater Conservation Overlay District
Initial Fact Finding

Identify requirements and conflicts - City Zoning

- 2070 1% annual coastal flood risk
- Waterfront base zoning districts
- Neighborhood base zoning districts
- Downtown base zoning districts
V. Initial Fact Finding

Potential Building Typologies in the 2070 floodplain

- **Detached two-family** (Dorchester)
- **Triple decker** (East Boston)
- **Attached multi-family** (South End)
- **General industrial** (Dot Ave, South Boston)
- **Pre-war commercial / wharf buildings** (South Boston Waterfront, Financial district, North End)
- **Contemporary high-rises** (Financial district, South Boston Waterfront)
NYC Planning – Coastal Climate Resiliency: Retrofitting Buildings for Flood Risk