

City planning efforts underway that will address Brown Petition components:

- Envision Cambridge – completion expected Dec 2018. Initial rezoning proposals expected Spring/ Summer 2019
- Climate Change Preparedness and Resilience (CCPR) planning – recommendations for Alewife done. Port process beginning Fall 2018. Citywide completion expected Summer 2019
- Urban Forestry Master Plan – Underway. completion expected Summer 2019

Brown Petition provision	How the topics will be addressed through City plans
Expanding responsibility to deal with flooding issues in areas beyond existing FEMA floodplain	<ul style="list-style-type: none"> • Petition references the Climate Change Vulnerability Assessment. Clear boundaries are not drawn. • CCPR recommendations will address flooding impacts in areas identified by CCVA outside the FEMA floodplain • Cambridge FloodViewer identifies which parcels fall within FEMA flood insurance zones, City projected present day flood zones, and areas affected by CCVA climate change-based precipitation flood risk areas projected for 2030 and 2070 and sea level rise/storm surge flood risks for 2070.
Flood protection elevations	<ul style="list-style-type: none"> • DPW provides guidance to applicants based on the 2070 10-year and 100-year flood elevations, which new developments have been following. CCPR is developing a regulatory framework that will set a regulatory standard based on the 2070 10-year and 100-year flood risk areas.
Site hydrology report	<ul style="list-style-type: none"> • DPW stormwater regulations require hydrologic modeling and compliance with 25-to-2 stormwater storage requirement.
Site contamination report	<ul style="list-style-type: none"> • The State (Ch.21E, Mass. Contingency Plan) sets environmental contamination standards and clean up requirements and management of historic contamination. • We do not anticipate creating additional requirements
Stormwater plan requirement	<ul style="list-style-type: none"> • Stormwater plan currently required under zoning and DPW stormwater regulations for special permit developments. • CCPR is evaluating options to integrate future precipitation rates into requirements.
Emergency plan requirement	<ul style="list-style-type: none"> • Brown Pet reiterates existing requirement under zoning. • City has a an MVP grant project to work with community organizations to plan neighborhood resilience hubs
Tree study	<ul style="list-style-type: none"> • DPW is working on Urban Forestry Master Plan • CCPR will coordinate with Urban Forest Master Plan.
Critical facility prohibitions	<ul style="list-style-type: none"> • CCVA evaluated critical facilities for climate risks. • Municipal facilities are beginning to be addressed through the Municipal Facilities Improvement Plan. • City is engaging Eversource and MBTA to share data and support improvements at Alewife Station/Red Line, commuter rail, and Eversource substation.
Critical facility-elevated	<ul style="list-style-type: none"> • DPW provides guidance to applicants based on the 2070 10-year and 100-year flood elevations. Municipal projects utilize CCPR flood risk elevations. CCPR is developing a regulatory framework that will set a regulatory standard based on the 2070 10-year and 100-year flood risk areas.

Hazardous materials storage	<ul style="list-style-type: none"> Hazardous materials storage is regulated under federal and state regulations. The Fire Department and Public Health Department coordinates with the institutions and businesses through the Local Emergency Planning Committee. License Commission issues permits for petroleum storage and Fire Department regulates underground storage tanks. CCPR is evaluating Chemical Safety and Climate Change Preparedness Program services offered through the Massachusetts Office of Technical Assistance.
Development standards	
Setbacks	<ul style="list-style-type: none"> Brown Pet proposes 25 feet from all lot lines. Envision Cambridge is proposing setbacks informed in part by CCPR and in part with the goal of creating active and engaging pedestrian environments
Open space	<ul style="list-style-type: none"> Brown Petition proposes 30% minimum. Envision Cambridge/Envision Alewife is proposing open space requirements informed in part by CCPR.
Permeable area	<ul style="list-style-type: none"> Brown Petition proposes 30% minimum. CCPR evaluating options to manage stormwater holistically given limited effect of stormwater infiltration in parts of the city e.g. Alewife area due to poor soils and high water table.
Required tree canopy	<ul style="list-style-type: none"> Requires 30% tree canopy cover. Envision Cambridge, CCPR, and Urban Forest Master Plan are evaluating tree canopy goals as a strategy primarily to reduce heat vulnerability. Effect of trees on stormwater runoff limited to small storms; does not have discernible impact on runoff from 10 and 100 year storms.
Tree removal	<ul style="list-style-type: none"> Urban Forest Master Plan is evaluating strategies to maintain the existing tree canopy and expand it. Regulatory tools will be evaluated along with incentives and public education.
Site access for evacuation during flood events	<ul style="list-style-type: none"> CCPR is evaluating options to enable shelter-in-place based on the projection that flood events will be relatively short in duration (i.e., one day) assuming pumps at the river dams remain operational.
Building elevation & height	<ul style="list-style-type: none"> DPW currently providing guidance to developers for projects to be built or protected up to the 2070 10% annual flood risk elevation and be able to recover from the 2070 1% annual flood risk. Generally, first floors are being designed to be at or above the 2070 10% annual flood risk. CPR is evaluating options to enable shelter-in-place based on the projection that flood events will be relatively short in duration (i.e., one day)
Flood protection/ stormwater standards	<ul style="list-style-type: none"> Regulated through state and federal requirements for flood zones CCPR is not currently considering additional compensatory flood storage on sites that are not currently in flood zones (but may be in the future). Given that flood elevations will be changing due to climate change and flood risk reduction actions between now and 2070, it is challenging to expand compensatory flood storage requirements. (The situation could be better than the projections with regional infrastructure interventions -- the City is working with neighboring cities to consider flood barrier options that will reduce flood risk from storm surges and protect Fresh Pond.)
Heat island reduction	<ul style="list-style-type: none"> CCPR is developing strategies to reduce urban heat islands citywide and adapting buildings to increasing heat vulnerability.

Green factor	<ul style="list-style-type: none">• City staff is aware of the green factor systems used in Seattle and Washington, DC. The City is communicating with the City of Somerville, which is trying to develop a green factor requirement.• CCPR finds the green factor proposed in the Brown Petition may not achieve the intended goals of the petition. However, the approach is being evaluated as a means to achieve greater implementation of green infrastructure and vegetated space. Other strategies are also being considered.
Flood markers	<ul style="list-style-type: none">• Brown Petition proposes all structures shall display markers of the projected 100 year and 500 year flood levels• The Cambridge FloodViewer makes flood elevations available online at the parcel level.• City is working on various approaches to make projected flood elevations and risks easier to understand.• Permanent markers are problematic since projected elevations will continue to shift.