

Cambridge Committee on Public Planting | Meeting Minutes | Jan 11 2017

Attendance

CPP members: Janet Burns, Kathleen Caldara, Paula Cortes, Chantal Eide, Dennis Jen, Jonathan Lewis, Carolyn Mathews, Johan Paulsson, Nancy Phillips, Florrie Wescoat

Cambridge government: Gary Chan, David Lefcourt, Owen O'Riordan, David Webster

Guest: Curtis Puncher

Minutes from December 2016 meeting were not available and will be reviewed at the February 2017 meeting.

Mass and Main project overview | Curtis Puncher

-Proposed mixed residential/retail project will involve two buildings (Mass Ave: 225 units / Columbia: 58 units). As planned, the project would affect trees located on Mass Ave, on Columbia St, and tucked behind the new buildings.

-There are currently fourteen trees on the affected stretch of Mass Ave. Ten London planetrees and four in planters will be protected during construction. Proposal is to replace the other Mass Ave trees on a one-to-one ratio, by London planetrees and swamp white oak (10 altogether); however, the plan subject to change due to future CDD decisions concerning bike lanes, etc.

-Approximately a dozen other tree species are under consideration for project.

-The goal on Mass Ave is to provide larger wells with ~600-700 cubic feet (15'x15'x3') of structural soil per tree. The structural soil would extend to under the center of the sidewalk, which raised the question of whether the sidewalk will settle unevenly, given the use of different kinds of underlying material. Proposed tree wells are rimmed by 6" curb (not flush with sidewalk), in order to reduce salt exposure etc.

-PC queried whether London planetrees made sense given their susceptibility to drought; JP noted that London planetrees release a significant amount of pollen. Committee members suggested oaks, elms, tulip trees, and Kentucky coffeetree as possible alternatives. Irrigation (to be included) might reduce stress faced by London planetrees.

-Committee members and city officials briefly discussed the durability of flexi-pave (starting to degrade on JFK Street).

-The proposed Columbia St ornamental trees (nine trees) are eastern redbud and serviceberry, but developers are open to alternative suggestions. FW questioned whether redbud can thrive as a street tree. DL said that he has seen mixed results; NC added that some redbuds have been cultivated to be street trees. DL said that ginkgos (a possible alternative) are being phased out.

-The current plan is to not bury utility wires on Columbia St, even though the sidewalk needs to be rebuilt anyway. It was suggested (and generally agreed) that the City could encourage the developer to bury the wires, and that CPP and others could make that suggestion to the Planning Board when the Board considers the project on Jan 24.

-Current plan does not call for irrigation on Columbia St, but DL said that he thinks new city requirements will obligate the developer to install irrigation for structural soil.

-Birch trees are planned for the open bed behind the buildings, next to the city parking lot. DL and Committee members suggested that river birch be used instead of paper birch.

Climate Change Vulnerability Assessment & Preparedness | Owen O'Riordan

-City completed part one of its vulnerability assessment about one year ago and is currently wrapping up part two, which deals more specifically with sea level rise and storm surge events.

- Baseline data for the project include: canopy/tree cover data (35% of city could add tree cover); tree size (dbh); distribution of tree cover (e.g., high in Cambridgeport, low in Alewife).
 - The framework for addressing preparedness begins with developing/analyzing climate scenarios, then assessing vulnerability and preparedness, then developing planning priorities.
 - Projected impacts include warmer climate (similar to Carolinas currently), total annual precipitation levels that are similar to current levels but with more extreme events, and sea level rise.
 - The process of building and protecting assets and structures that can cope with future storm surges/extreme events (e.g. runoff water management) is likely to pose significant challenges, in large part because Cambridge is surrounded by impounded river systems. Dams on the Charles and Mystic Rivers protect against tidal variations but have contributed to rainfall-driven flooding (due to elevated levels of upstream/impounded waters). East Cambridge, the Port, and Alewife areas will be increasingly vulnerable.
 - Temperature increases in the number of days >90°F and >100°F are projected (e.g. ~25 days in 2070 are expected to exceed 100°F). Projected hot spots in city correlate with areas that have relatively low tree cover.
 - Cambridge is using a sophisticated sea level rise model developed with Woods Hole Group that takes into consideration landscape variations and impediments. The model has run 40,000 simulations, resulting in robust probability assessments for different kinds of future events such as flanking and overtopping of Charles River and Mystic River dams. Assessments of flooding potential for 2070 indicate a very high probability of flooding in Alewife (due to flanking of the Amelia Earhart dam on the Mystic) and in the North Point region (due to flanking of Charles River dam). Alewife likely to see flooding events of 3-4ft every 10 years.
 - Climate-related threats to Cambridge's urban forest include infestations, vulnerability to ice storms, heavy snow, flooding, salinity, and wind throw. A determination of which species are most robust in the face of these stresses will be factored into future tree planting RFPs.
 - A potential model for mitigation projects going forward could be the Alewife wetland. The wetland was designed to solve a problem, but is also attractive and provides important habitat.
 - Associated literature is available on the CDD website, and OO's presentation could be posted on DPW site (TBD).
- Envision Cambridge has been asked provide DPW with suggestions for how city requirements might better address heat index issues through natural forms like green walls.
 - CPP members are to review readings circulated by FW prior to the Committee's next meeting. Readings offer different frameworks that could be useful during discussions about a master tree plan and with Envision Cambridge.

Arborist update | David Lefcourt

- DL is currently building a spring planting list.
- There is an ongoing effort to expanding Arbor Day program for April 2017.

CDD update | Gary Chan

- Plans for the King Open School project will be posted on the CDD website on Jan 31.
- Envision Cambridge: The Alewife Working Group is scheduled to meet on Jan 26; the next public meeting is scheduled for Feb 8.

Meeting adjourned

Minutes taken by: Jonathan Lewis