

**From:** Brad Bellows  
**Sent:** Wednesday, January 30, 2019 2:50 PM  
**To:** Woodbury, Catherine  
**Cc:** O'Riordan, Owen; Jan Devereux  
**Subject:** RE: Tree Canopy and overhead utilities

Catherine,

Thanks for your reply and excellent points, to which I would respond:

- I certainly agree that undergrounding is complicated and expensive, and in the near term, it can also impact tree root systems.
- there is not doubt that existing underground system are *a* constraint to tree placement, but overhead systems are probably a much greater constraint, given the clearance requirements. It would be good to actually quantify the differences, and I believe this should be included in the Urban Forest study.
- the actual volume of space needed below grade should be small compared to storm drain systems, which seem to coexist happily with trees (once past the initial construction disruption). In my experience, tree roots are remarkable adept at working around obstacles.
- we already use underground distribution for our main streets, and many other cities have fully buried their utilities, so it's not inherently infeasible.
- the system we have is 100+ years old, in decrepit condition, expensive to maintain, and non-resilient. What's our long term plan?

Here are a few photos from my neighborhood in Riverside, where the overhead utilities look more like what one would see in the 3rd world than a wealthy modern city.

I look forward to further conversations.

Brad





On January 30, 2019 at 2:06 PM "Woodbury, Catherine" <cwoodbury@cambridgema.gov> wrote:

Hello Brad,

Thank you for forwarding along your thoughts. I will share with the design team and task force by posting this on the UFMP website under Public Letters and Comments.

Putting aside the enormous cost and significant disruption to the community, undergrounding overhead utility lines is a significant challenge given the extensive underground network of existing utilities. Equally important to a tree's health and growth is the availability of sufficient soil and nutrients for root growth and expansion. The underground network of existing utilities has been identified as a constraint to tree placement and growth in previous presentations (see slide 8 in the October 3, 2018 public meeting presentation:

<https://www.cambridgema.gov/~media/Files/publicworksdepartment/urbanforestmasterplan/20181003publicmeetingpresentation1.pdf> Further encumbering this space with more utilities would further restrict options for tree plantings and root growth.

I am happy to discuss this with you.

Sincerely,  
Catherine Daly Woodbury  
Project Manager

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