Revised CDA Site Plan would lead to MORE downstream flooding than prior plan

To: Durham Planning Board / From: Joshua Meyrowitz, 7 Chesley Drive / December 3, 2021

I offer some brief comments on the <u>Stormwater Peer Review by Horsely Witten Group 10-27-21</u>. I write in necessary haste, given that, although that peer review was completed on Oct 27, 2021, it was not posted on the Mill Plaza CUP site until five weeks later, Dec 2, 2021.

<u>First</u>, I see no comparable current information in the new report to this item in the first peer review: "The **Applicant has proposed an INCREASE in impervious area** of approximately 17,415 square feet (sf)." Horsley Witten Group First Peer Review 5-4-20 (emphasis added). And now?

Further, I am distressed to see that:

- (1) the Oct 2021 plan is worse than the prior May 2020 plan in terms of factors that will increase downstream flooding (the Peak *Rate* of Stormwater Discharge in Cubic Feet per Second, or CFS);¹
- (2) there is very little improvement between "Pre-Development" (that is, the current NO stormwater system) and the Oct 2021 "Post-Development" calculations in terms of **peak rate of discharge** once one reaches a 25-year storm, and virtually no difference at the increasingly frequent 50-year storm level (almost certainly within the margin of error for such calculations);
- (3) the Oct 2021 Post-Development "Peak *Volume* of Stormwater Discharge in Acre-feet (af)" is *higher* than the current pre-development levels at *every* Storm Level listed on that chart;
- (4) there is still no attention to the true "pre-existing" condition (pre-Sept 2002 eastern hillside bulldozing), as I have outlined in numerous presentations to PB, ConCom, & TC;²
- (5) there is still no attention to post-2002 increased flooding, erosion, and silting documented by me and others in presentations and submitted documents (see footnote #2) and recall that the first peer report reflected CDA's misrepresentation that College Brook does not overflow;
- (6) there is still no attention to the added stress on College Brook from the interrelated plan to deforest Church Hill Woods for Plaza-tenant parking (see College Brook as 19 Main St Drain).
- (7) there is no attention to Prof. Ballestero <u>prediction</u> (footnote 3) that *slowing* release of Plaza stormwater would increase flooding because currently later-arriving upstream water would join it.

In short, the "pre-existing condition" on the Plaza site is not properly conceived, and the Town of Durham's promises over the decades to address the post-2002 increase in flooding and silting and erosion are not being kept. This stormwater plan, if implemented as proposed, would close the door to the necessary "repair" – unless the full buffer is restored (as required by Zoning and the Settlement), and unless the targeted-for-destruction thickly vegetated hillside is spared, allowing an otherwise fine stormwater system to do its job.

¹ "HW notes that the post-development rates generally increased from the previous (May 2020) design iteration, while total runoff volumes decreased. During the 25-year storm event the site discharges 7 cfs higher peak flow rates into College Brook than the previous design iteration."

² See, for example: "College Brook Flooding," <u>Meyrowitz 11-4-19;</u> "Laughable' Landscaping at the Heart of Durham," <u>Meyrowitz 3-5-20;</u> "Destroying Pervious Land & Deceiving on College Brook Flooding," <u>Meyrowitz 6-12-20;</u> "Will CDA Be Permitted to Violate CU Zoning & Further Degrade a Flood-Zone Ecosystem?," <u>Meyrowitz 11-19-20;</u> "Ongoing Abuse of Plaza Site," <u>Meyrowitz 12-31-20;</u> "20 Years of Violations & Deceptions," <u>Meyrowitz 10-4-21.</u>