Office of the City Clerk City Hall 71 Main St. W., 1st Floor Hamilton, ON L8P 4Y5

10 Feb 2019

Dear Sir/Madam

HAMILTON BUDGET DEPUTATION DAY PRESENTATION: STORMWATER BUDGET – SOURCES OF FUNDING; PRIORITIZATION OF CAPITAL FUNDING; SUFFICIENCY OF CAPITAL RESERVE

This is to convey concerns to council during the budget deputation day presentation, 11 Feb 2019. Unfortunately, I will be out of town on business that day, but would appreciate it if the issues addressed in this letter could be presented at that forum in lieu of my verbal presentation.

I am concerned that the budget provides adequately for stormwater infrastructure investment in Hamilton given the increasing criticality of this infrastructure to meet the challenges posed by the anticipated local impacts of global climate change. The report "The Science of Climate Change: Climate Data for the City of Hamilton, Ontario" generated by ICLEI Canada in 2016 presents these as including:

- a 3% increase in annual precipitation (more than 10% winter seasonal) in the immediate future, rising to a more than 10% annual (greater than 50% winter seasonal) increase over the time span for which the current infrastructure investments will have to operate; and – more significantly -
- 2. a drastic increase in extreme weather and heavy rain events.

These predictions mirror recent experience with catastrophic flooding events that resulted in major losses, in a number of local cities (Burlington, 2014; Toronto, 2018). Had similar experiences in Hamilton (Stoney Creek, 2006; Binbrook, 2013), occurred more centrally within the urban area, our impacts would have exceeded these. Accordingly, it seems like providing for adequate and sustainable stormwater infrastructure should be a critical priority in the city budget.

Reviewing the 2018 Hamilton budget, however, this does not seem to be the case.

First, the amount of the capital budget allocated to stormwater infrastructure seems out-of-step with that in comparable local municipalities, both in terms of absolute magnitude and of relative priority visà-vis wastewater/water infrastructure. The 2018 budget allocated \$17M capital investment for stormwater infrastructure, which represents only 8% of the total capital provided for water related infrastructure. This is roughly half that in Mississauga (\$33M), which has a comparable watershed. Waterloo – with a substantially smaller stormwater system and watershed impact - has allocated almost half as much (\$6.7M in 2019), and prioritized roughly 50% of its combined wastewater/water capital budget over the next 10 years.

Second, combined storm-/wastewater capital reserves have been significantly drawn down at a time that these should be increasing to reflect the increased climate change-related risk. The current reserve forecast indicates the combined reserve balance will roughly halve from \$120 M at the end of 2017, to

\$62 M in 2020 and then increase over the years to \$86 M in 2027. Is this wise given the likelihood that existing infrastructure will be significantly impacted over that period by climate related emergencies? Again, this does not match reserve provisions maintained by comparable municipalities (Mississauga = \$110M reserve for stormwater alone!).

Finally, the funding approach used to pay for stormwater infrastructure development and maintenance is unfair, and does not match best practices adopted successfully elsewhere. The current budget aggregates storm- and wastewater charges and funds them out of a single rate per user based solely on water consumption. This is entirely divorced from the true drivers of stormwater costs – impermeable property area - and results in a perverse system where residential ratepayers bear more of the cost, while commercial, institutional, and industrial payers – whose expansive parking lots and roof areas disproportionately generate stormwater runoff into the system – pay very little for its upkeep.

Other approaches employing dedicated user charges and development charge provisions related to measures of property impermeable surface area are much more effective and equitable in principle and have been demonstrated in practice by many local jurisdictions. Daniella Dávila Aquije reports in her paper "Paying for Stormwater Management: What Are the Options" for the Institute on Municipal Finance & Governance at the Munk School of Global Affairs:

"User charges have been adopted successfully by several cities in Canada to pay for stormwater management. The Cities of Kitchener and Waterloo introduced user charges in 2010 and fully implemented a stormwater rate system by 2011. Both cities were able to quantify appropriate levels of services and measure the imperviousness of properties in order to determine what each property owner would be charged. The City of Stratford introduced stormwater user charges in 2007, after a recommendation to Council noted the importance of reducing the municipality's reliance on property taxes to fund the stormwater management program. Finally, the City of Calgary conducted a study on the viability of user charges in 2008. The study recommended that stormwater rates be based on a parcel analysis and the imperviousness of area units, as well as on the stormwater management program revenue requirements of the City."

The City of Mississauga introduced a Stormwater User Charge in 2016, and maintains the superior levels of capital investment and reserves noted above, while – by the analysis reported within the Hamilton budget itself – maintaining the lowest combined water/wastewater charges of 15 local municipalities, including Hamilton.

Beyond providing a more sustainable and equitable means of funding what must be a concerted and long term project of stormwater infrastructure development, this kind of funding allows the city to incentivize users to mitigate the potential impacts of extreme weather events before they even enter the system. Again, as reported by Aquije for the Mississauga program:

"a credit program has been introduced for multi-residential and non-residential properties. This system will reward property owners for proactively and sustainably managing stormwater on their properties before it reaches the municipal system (through mechanisms that either reduce stormwater runoff volumes or peak flow rates, or improve the quality of the runoff before it leaves the property and enters the City's system)." Given these considerations, I would like to request council to consider that the Hamilton budget for 2019 be reviewed to:

- 1. prioritize funding to support the development of stormwater infrastructure sufficient to meet the challenge posed by anticipated climate change effects;
- 2. research and maintain an appropriate risk reserve to address the impact to this infrastructure of increasingly frequent severe weather events; and
- 3. evolve the policy and mechanism used to fund stormwater investments and maintenance to reflect the true drivers of stormwater system usage in particular, consider the use of a dedicated user charge based on property impermeable surface area.

I would be happy to clarify any of these points at your convenience. Thank you for your consideration, and for the opportunity to provide this input.

Sincerely,

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