From: Bill Fellner Sent: Saturday, February 27, 2016 1:27:25 PM To: City Councillors Cc: Maloney, Patrick Subject: Londons neglected sewer Infrastructure

To the Mayor and Council,

I would appreciate it if you could place this letter on the Council agenda and particularly, the Civic Works Committee.

The City of London Civic Works Committee has been dealing with severe basement flooding recently and I would like to emphasize the urgency of the situation, given the huge intensification underway downtown.

In the past year, there have been announcements of more huge apartment towers downtown. I have no objection to the construction of such towers. My profession was dealing with the infrastructure of such buildings and the underground servicing requirements for them. Of concern is not the buildings themselves but the effect they will have on the many old sewers in the downtown areas and downstream, that are very old, leaking and severely undersized for such structures.

The city is leaving itself wide open for class action lawsuits that will result from the massive flooding that will occur in the downtown and outlying areas as intensification continues with little concern for the aging underground infrastructure.

We have seen increased flooding throughout the city each year after heavy storms and it will continue to increase.

You cannot put massive housing on undersized old leaking sewer systems.

Tackling individual basement flooding will not fix the core problem. It lies farther downstream.

While the City is considering urban renewal strategies such as the "Back to the River" and other architectural design frippery to re-engage the public appeal at the convergence of the Thames River branches, we need to talk about the city's 'gastro-intestinal' problems as well. We have ignored for too long the condition of our antiquarian sewers which are already being over-tasked due to current densities.

Sewers aren't the best way to score political points but if ever neglected, when it all come home to roost, no City can do without it.

Surely, we all remember Walkerton, where because of municipal negligence, the public water supply was compromised and lives were lost. Talk to the people who reside in Flint, Michigan about the importance of maintaining the integrity of municipal infrastructure. Let's not add the City of London to the list!

While the development of a Light Rapid Transit system and intensification of residency concentration around mass transit are noble aspirations, we can expect more frequent sewer emergency repairs to happen. The Greenway trunk sewer is a good example. It is about 100 years old, as are many of our major downtown trunk sewers. One of the largest, the "Greenway trunk", is an egg shaped sewer, about 100 years old, made of bricks.

It is about 1.5 meters high and is flowing full of raw sewage, almost 24 hours a day, 365 days a year, to the Greenway Pollution control Plant. It's condition is largely unknown.

It won't last forever and when this sewer collapses, even partially, or any of the other of the old systems downtown, millions of liters of raw sewage will spew into the streets and find its way to the Thames.

This will go on for months until a new sewer can be constructed.

Environmental Assessments be damned at that point!

The City has no contingency plans for such an eventual occurrence, and one of these collapses WILL happen, most likely sooner than later, especially with the massive hi-density "stack and pack" building spree occurring downtown.

These old sewers can't and won't handle it.

You may recall the collapse at Dundas and wellington a few years back and how long it took to repair it? That was only a small collapse and fortunately it did not carry sewage .

We recently witnessed the Montreal situation where millions of litters had to be dumped into the St Lawrence River because of this exact problem and their negligence in dealing with that old sewer earlier. The Greenway trunk could be twinned now while time is on our side but instead, the city choses to give \$20 million to

Fanshawe for the Kingsmill building and other such politically popular projects. That \$20 million probably could have twined that sewer. It will take many times that to deal with these urgencies throughout the area.

Recently, Mayor Brown stated that the development levies can help pay for the LRT (a project that is NOT needed in a city this size).

He forgets that most development fees for core downtown projects, are levy exempt! So now, we have huge multi story structures being built downtown, with a large population influx and with little regard for what that will do to these century old downstream trunk sewers. Do you know what happens when 300 households in a hi-rise get up after the hockey game and all flush the toilets at the same time?

The raw sewage will literally have to be "squirted " through these old sewer systems. I can tell you now, they cannot handle it and it will not work.

Very little \$ is earmarked for these major sewer replacements or even a contingency plan for major collapses. Your EA's seldom touch on these issues or prioritize.

If you are a municipal consulting firm in London, you dare not press this issue if you ever want another engineering contract from the City or from those who are building downtown. Don't blame the developers ; they are only responding to current city policy perks to attract such intensification. As we speak, the City is spending millions to have an "outside" consultant study the City sewer problems, AGAIN and tell us what we already know. Furthermore, this expensive study will not deal with the effect that massive intensification will have downtown. Phase I of this report was submitted to Council in late 2014. I doubt if anyone has taken the time to read it; it's 286 pages long! Many studies on this issue have been done and shelved in the past. Your city engineer is fully aware of these problems but his hands are tied by a lack of priority funding.

Similarly, I think you will find very little on the urgency of this problem in the consultants final Reports.

It is a tragic situation to see this continue, when every consultant in the City knows the urgency of this matter. The 'Back to the River' project is an example of how we have misplaced our priorities. Before constructing a "beach" at the forks, let's focus our efforts on this major civic problem: our continuing abuse of the water in the Thames.

Since I am now retired from engineering, I am free to speak as a concerned citizen. The city is sitting on a sewage time bomb, which will soon become a huge political liability.

Our essential services (water, sanitary, public health and safety) must come first; before a LRT system, before adding urban density and certainly before we celebrate the heritage value of the Thames River. We cannot ignore our necessary long term servicing issues.

I would be happy to discuss this with anyone at any time. The city can't keep its finger in the dyke forever.

With Regards Bill Fellner P. Eng. 519-878-3420