



City of
Burnaby

Engineering Department

INTER-OFFICE MEMORANDUM

TO: CHAIR AND MEMBERS PLANNING AND DEVELOPMENT COMMITTEE DATE: 2018 November 05

FROM: DIRECTOR ENGINEERING FILE: 31000-05

SUBJECT: STORM EXTENSIONS – 7280 2ND STREET

Through direction from the Planning and Development Committee, staff prepared a detailed letter specifically responding to each question posed by Simranjit Minhas of 7280 2nd Street, including the additional question posed during the Committee meeting.

A copy of the letter sent to Simranjit has been *attached*.

Sincerely,

Leon A. Gous, P. Eng., MBA
Director Engineering

JWH/ac

Attachment

Copied to: Mayor's Office
City Manager



2018 November 05

FILE: 31000 05

Simranjit Minhas
[REDACTED]

Dear Simranjit Minhas;

SUBJECT: STORM SEWER EXTENSION – 7280 2ND STREET

Staff prepared the following responses to your questions presented at the Planning & Development Committee meeting on Tuesday, 2018 October 30.

1. **Why did the City of Burnaby not install a storm water main system in 1966 when a new sewer main system was installed? They installed a storm sewer main system network in 1974 on neighbouring 19th Street, even at that point in time they ignored the 7200 block of 2nd Street and did not build one.**

Why am I paying a \$20,000 deposit for a storm sewer extension for a service that was never provided for before and never been an issue until now?

Approximately 80% of Burnaby properties have storm sewers for drainage servicing, which are typically provided by the original development, through re-development or through Local Area Service (LAS) Programs. LAS programs are cost-shared between property owners and the City. The approximately 20% of Burnaby single-family properties that do not have existing storm connections to a storm sewer manage storm drainage using on-property rock pits (all drainage entirely contained on-site) or ditches adjacent to the property.

However, challenges have been encountered (and are increasing) with regard to rock pit and ditch drainage. Rock pits are possible when the majority of the surface of the property and the underlying soil is permeable, and when the property does not have a basement. However, while older homes might have had 60-80% permeable area, re-developed properties typically only have 30% permeable area, and can also have basements, which prevents rock pits from being technically feasible. Rock pits require ongoing maintenance which is not typically performed, leading to flooding onto streets and neighbouring properties, as well as drainage connections being illegally connected to the sanitary sewer. Ditches were originally designed to handle road drainage only, not the drainage from single family properties. Further, ditches are being 'culverted', which reduces storage capacity and function, increasing the likelihood of ditches overflowing into the street or private properties.

Finally, storm intensities are increasing, requiring increased drainage capacity which is not currently being provided by rock pits and ditches.

Ultimately, homeowners and developers prefer a gravity storm connection, as this reduces the likelihood of basement flooding and removes the risks associated with a pumped connection such as pump failure and power outages.

2. **The city has been charging residents on this block for storm, sewer, water utility tax fees all these years yet never provided an actual storm water service how is that fair?**

The City does not charge residents storm utility taxes.

3. **Who will explain to the 5 neighbours of mine why they will be getting bills for storm sewer extension contribution. I don't think I will feel very welcome in this neighbourhood once my neighbours find out the reason why they will be getting bills from the City of Burnaby for storm sewer extensions is because I have built a new home which has triggered the process for a storm sewer installation.**

I don't think any of my neighbours will welcome the idea of having to pay between 11-19 thousand dollars for a storm sewer extension for connections they won't actively even be hooked into.

Benefitting properties are only required to pay upon submission and approval of a subdivision application or a building permit application worth more than \$250,000. Benefitting properties are notified of the process by letter. New house building permit values currently average approximately \$500,000.

4. **In the meantime my interim solution for the storm sewer water that will be produced from my home is to pump the water directly into the laneway and let it flow down to Wedgewood Street. Just like the previous home I demolished to begin building my new one did since the 1940's. Why can't my new home do this?**

All properties are required to manage storm water generated on the property. Surface drainage increases the risk of private and public flooding and also presents a safety hazard for pedestrians and is generally not allowed. Rather than delay your house construction and occupancy, staff allowed this interim solution while the new storm main is being built. The new storm system will collect on-site drainage and also provide catch basins to reduce the volume of surface water in the lane, improving the level of service and reducing the risk for all properties.

5. **I was told by Engineering that no storm sewer installations will proactively be done by the city. They will only get done when a developer buys a property and then pays for the storm sewer contribution fee to have the work initiated as the city can't afford to do this.**

As approximately 20% of the single-family properties in Burnaby do not have an existing gravity storm sewer, the total cost to pro-actively construct between 100-150km of storm sewers could range from \$100-200M. Burnaby is already spending \$3-5M per year on storm extensions, which is approaching 10% of the entire Infrastructure capital plan. This approach proactively installs gravity storm sewers for the benefitting properties (typically 6 'benefiters' for each extension), and thus far has proactively installed storm sewers for over 150 properties. While Burnaby pre-funds the contributions for the benefitting properties, the program is intended to be funded 100% (including lost investment income) by the benefitting properties, similar to the historic storm sewer construction approach. This innovative approach reduces the up-front burden for any initiating developer, while also ensuring a fair and cost-effective approach for the remaining taxpayers.

6. **Engineering delayed releasing my plans by 2 months after they were cleared by the planning department because they couldn't figure out the process for this storm sewer water. Holding me back from starting my project and leaving a home empty when we are amidst a housing a crisis, I couldn't even rent it out during that time period because I didn't know how short of a notice I would have to give to a potential tenant.**

Your application was submitted on 2017 December 22. At the time, due to the volume of applications, Engineering had a backlog of approximately 3 months. Staff initiated discussions with you in March 2018. Your property line is within 45.7m of the existing storm sewer, which through the Plumbing Bylaw requires you to design, build, and pay for 100% of the storm extension. However, through review with the Legal Department and recognizing the challenge this cost and complexity can pose to single-family developers, staff interpreted the bylaw in your favour (45.7m to house instead of property line), and arranged for the City to handle design and construction, and for you to only pay your proportionate share of the project.

As the process for storm sewer extensions can require additional review time, applicants are now required to include storm, sanitary, and water servicing requirements on their building permit applications before the building permit application will be accepted. This ensures that the applicant conducts sufficient research and design toward off-site servicing requirements before designing and submitting detailed building permit applications.

Additional Engineering staff resources have also been applied to review these applications, and the initial Engineering response time is now targeted for approximately 1 month. However, this response time will vary depending on the volume of applications received.

7. **I was originally told a storm sewer interim solution which was to build the storm sewer pipe from my new home and cap it at the lane way and put a riser pump on it and let it drain into the laneway, which I did. The next day I got a phone call in a panic from the same individual who told me to do this saying I was given the wrong information, I had already done the work. It cost me an extra 3000 dollars to bring back an excavator to my property and to then do the work a different way installing a sump and using an electric pump with a hose to pump water into the laneway. No apology was issued. Instead I was told by the manager the person who told you that information is “still learning his job.”**

Staff originally proposed a simple interim connection method to reduce your costs. However, upon field review with the Plumbing Department, a sump and pumped connection was recommended to reduce flooding risk for your house.

8. **During the meeting, Councillor Jordan mentioned the city is investing in projects across the city to install new storm lines to separate them from sanitary lines. My wife asked if the properties on those streets/lanes have to pay additional fees on top of their property taxes for their new storm sewers. Councillor Jordan replied with no. My wife wants clarification on why those residents don't have to pay for a new storm sewer but residents with non-existent storm lines do. Also, what is the difference in the work being done? They both sound like capital projects. There is a bylaw requirement to separate storm from sanitary but there is also a bylaw requirement to have a storm sewer.**

Combined sewer separation is a regulatory requirement (not a bylaw requirement) and involves infrastructure renewal through replacement of an existing combined pipe with two separate pipes that each convey only storm water or sewerage.

Simranjit Minhas

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Storm extensions are not an infrastructure renewal project, and are a bylaw requirement. Storm extensions are provision of an entirely new service which has historically been funded through the original development or through the Local Area Service program. Similar to the sewer separation program, any infrastructure renewal project (such as sewer main replacement, lane or road repaving and watermain replacement) that is coordinated to coincide with a storm extension project is fully funded by the Capital Program.

Yours truly,



Leon A. Gous, P. Eng., MBA
Director Engineering

JWH/ac

Copied to: Director Planning
Director Finance
City Solicitor