

COUNCIL REPORT

Report Date: October 6, 2025 Contact: Amy Sidwell Contact No.: 604.871.6069

RTS No.: 18149
VanRIMS No.: 08-2000-20
Meeting Date: October 29, 2025
Submit comments to Council

TO: Standing Committee on Policy and Strategic Priorities

FROM: General Manager of Engineering Services, in consultation with the

General Manager of Planning, Urban Design and Sustainability

SUBJECT: Reducing Average Sewer Upgrade Costs for Developers

#### Recommendations

- A. THAT Council adopt the Sewer Capacity Development Review Policy attached as Appendix A (the "Policy") and accompanying Guidelines attached as Appendix B (the "Guidelines") which outline the process and criteria to decide which rezoning or development permit applications will be subject to review and potential sewer upgrade requirements, and further authorize the City Engineer / General Manager of Engineering Services ("GMES") to amend the Guidelines from time to time at the discretion of the GMES.
- B. THAT Council endorse and authorize the GMES to remove or amend sewer and drainage servicing conditions for those developments outlined in Appendix C Table C-1 and further authorize the continued removal or amendment of sewer and drainage servicing conditions for other developments that meet the requirements outlined in this report, all in compliance with the Policy and Guidelines.
- C. THAT Council authorize staff to reduce the neighbourhood serving sewer servicing costs for the developments at 8378 and 8444 Oak Street to be equal to the average sewer servicing costs per square footage of development for the other developments providing direct contributions to the Oak Street Sewer Upgrade project, with the \$5.6 million offset provided from the previously approved multi-year capital project budget for the Oak Street Sewer Upgrade project funded by utility development cost levies.

#### **Purpose and Executive Summary**

Staff have been working to improve development viability within the City of Vancouver and this report outlines the following actions to reduce sewer upgrade costs in support of this goal:

Formalization of an updated Sewer Capacity Development Review Policy, and

associated Guidelines and process, to reduce the amount of sewer capacity reviews and sewer upgrades needed, saving industry on average \$300,000 per development (85% reduction in sewer condition costs) considering reduced sewer upgrade costs offset by increased onsite rainwater management costs. Staff anticipate annual cost savings of approximately \$0.8M through the reduction of six full-time equivalent (FTE) positions previously dedicated to review processes.

This Policy is predicated on the recently proposed amendments (<u>RTS 17861</u>) to the *Building By-law* regarding on-site rainwater management (for sites larger than 1000 m<sup>2</sup> and/or with greater than 1.0 FSR) which for most development scenarios will sufficiently limit rainwater discharges to significantly reduce the need for local sewer capacity upgrades in the City's combined sewer system.

- Endorsement of a process to remove conditions from approved rezonings and development permits subject to meeting the new Policy and Guidelines. To date 27 in-stream applications have had previous sewer upgrade conditions valuing \$39.7 million removed, and another 23 applications are under review to assess if upgrade conditions can be removed.
- Reduction of \$5.6M in sewer upgrade conditions on two active developments with offset funding provided from the sewer Utility Development Cost Levy (UDCL) to align the average costs of current neighbourhood serving sewer upgrade projects for all developments contributing directly to this sewer upgrade.

These actions have been developed to balance technical, financial, equity and social objectives, including balancing risks, cost management, resourcing limitations, supporting development viability and housing growth, and other factors that are involved in responsibly managing the sewer and drainage system.

#### **Council Authority/Previous Decisions**

- Council adopted the 3-3-3-1 Permit Approval Framework in June 2023 to help increase the supply of housing (meeting minutes; Permitting Improvement Program).
- Council has referred to public hearing (<u>meeting minutes</u>) changes to the *Building By-law* for complex buildings (<u>RTS 17861</u>) which, if approved, enhance the current city-wide rainwater management requirements integral to the policy for sewer capacity reviews. Public hearing for the *Building By-law* update is tentatively set for October 23, 2025. Onsite rainwater management is required under the current Liquid Waste Management Plan (<u>Action 1.1.20</u>).
- The City of Vancouver Zoning and Development By-law allows for the Director of Planning (General Manager of Planning, Urban Design and Sustainability) to withhold development approvals where adequate sewerage or drainage service is not available (Sec 4.3.3(d)).
- The City of Vancouver Sewer and Watercourse By-law allows the GMES to limit the rates of flow discharged to City sewers when there is insufficient sewerage or drainage capacity (Sec 2.13).
- In June 2018 Council referred the Referral Report for 8444-8480 Oak Street (<u>RTS</u> 12546) to Public Hearing held in July 2018, and enacted Rezoning By-law No. 12763 for the subject site on September 15, 2020.

In December 2017 Council referred the Referral Report for 8378-8432 Oak Street (RTS 12289) to Public Hearing held in January 2018, and enacted Rezoning By-law No. 12333 for the subject site on December 18, 2018.

#### **City Manager's Comments**

The City Manager concurs with the foregoing recommendations.

#### **Context and Background**

The City of Vancouver's sewer and drainage system manages over 93,000 service connections and includes 40,000 catch basins, 2,149 km of pipes, and 25 pump stations. This system collects and conveys sanitary sewage, groundwater, and rainwater runoff, helping reduce flood risk and protect public health and ecosystems.

To ensure the sewer system can support the increased sanitary flows resulting from growth, the City conducts sewer capacity development reviews for rezoning applications and select development permits. Excluding Major Projects<sup>1</sup>, approximately 30% of these reviews result in upgrade conditions, with average costs of \$350,000 per site (ranging from \$0 to \$5.8 million for individual sites), totalling \$21 million<sup>2</sup> annually. These additional costs have been difficult for developers to predict and are impacting project viability.

As much of the sewer system is still functionally combined (sanitary and rainwater in one pipe), increasing rainwater discharge controls through expanded rainwater detention requirements significantly reduces the need for local sewer capacity upgrades that may otherwise be needed to service growth. Consequently, many development-triggered local sewer capacity upgrades can instead be avoided.

In September 2025, updates to rainwater detention requirements in the *Building By-law* to support development viability improvements were brought forward in the referral report "Alleviating Sewer Infrastructure Issues Through On-Site Rainwater Management" (RTS 17861). Additional context on the site requirement changes is provided in that report. Those updates build upon previously enacted on-site rainwater management regulations for new developments (RTS 15424 and RTS 16455) to further reduce the need for sewer upgrade conditions.

There are multiple land use plans that already rely or in the future will rely on the increased rainwater discharge controls to reduce the need for more expensive developer delivered sewer upgrades. These include, but are not limited to, the Rupert and Renfrew Station Area Plan (RTS 17631), the Standardized Apartment Districts and City-Initiated Zoning Changes to Implement Broadway Plan and Cambie Corridor Plan (RTS 17679) and the Vancouver Plan Villages Planning Program. Implementing this tool in land use plans has increased transparency and predictability for developers, however the development community has indicated it would be helpful to have more certainty on how the updates to the rainwater detention requirements impact the approach to sewer capacity reviews and upgrades Citywide.

As part of the City's commitment to enhancing development viability, staff have assessed the impacts of the new rainwater management requirements on existing sewer capacity policy, as

<sup>&</sup>lt;sup>1</sup> Typically large or unique sites and/or sites with special upgrade or servicing requirements, including sites subject to the *Rezoning Policy for Sustainable Large Developments*.

<sup>&</sup>lt;sup>2</sup> Average annual value of sewer upgrade conditions for all sites excluding Major Projects. This indicates the maximum expected savings to development with potential future updates to the Guidelines to increase the density threshold, while still conditioning Major Projects. Including Major Projects, the average annual value of upgrade conditions is \$44 million.

well as development conditions that could be removed when applying the updated policy. Staff have also reviewed current sewer projects that are funded jointly by the Utility Development Cost Levy (UDCL) and direct conditions to see if there were inequities in the costs of the servicing compared to other developments that were funding the sewer project.

#### Discussion

Based on Council direction on supporting development viability as well as the context of 3-3-3-1 Permit Approval Framework, staff recommend updates to the Sewer Capacity Development Review process and consideration of modifications to sewer servicing conditions to meet the following objectives:

- Improve development viability by reducing sewer servicing costs, on average
- Enhance sewer capacity review transparency and consistency for developers
- Reduce sewer capacity review time, and right-size City effort and resources
- Create a system-wide, streamlined approach

The following provides a summary of the *Sewer Capacity Development Review Policy* and Guidelines that balance technical, financial, and social needs and risks. It also outlines changes to development conditions for Council consideration. The rationale for each action is provided below.

#### Sewer Capacity Review Policy & Guidelines

With Council's approval of enhanced rainwater management under the *Building By-law* (RTS 17861) and the proposed *Sewer Capacity Development Review Policy* and Guidelines (see Appendix A and B) existing capacity previously needed for rainwater conveyance can be used to service increasing sanitary sewage demand due to growth.

The proposed Sewer Capacity Development Review Policy and Guidelines refocuses staff efforts on applications exceeding a density threshold, those that generate high sanitary flows (e.g. industrial, institutional, and Major Projects), and sites with special servicing requirements, including sites subject to the <u>Rezoning Policy for Sustainable Large Developments</u>. It introduces a three-tier review process:

- Tier 1 "No Review Threshold": Less dense sites would be exempt from review and sewer upgrade conditions and would exit the process at this point.
- Tier 2 "Low Impact Classification": Sites would undergo a high-level screening review to estimate system impact and potentially be exempt from sewer upgrade conditions, exiting the process at this point.
- Tier 3 "Full review": Remaining sites would undergo a full technical, modelled sewer analysis to determine sewer system impacts and assign sewer upgrade conditions (or other effective alternatives) as needed.

The "No Review" density threshold is currently set at 7.0 FSR, exempting almost all new developments under proposed R3, R4 and R5 zoning from sewer capacity reviews and potential sewer upgrades.<sup>3</sup> Sites above this threshold, or those classified as institutional, industrial, or Major Projects, are screened to determine if 1) the post-development sanitary site discharge is less than the "Sanitary System Low Impact Threshold", and/or 2) the magnitude of the combined sanitary and rainwater discharge from the site post-development is less than the pre-

<sup>&</sup>lt;sup>3</sup> Zoning changes to an R3, R4 or R5 district and updates to the rezoning policy for the <u>Broadway Plan</u> and <u>Cambie Corridor Plan</u> areas was approved by Council on October 7, 2025 (<u>RTS 17679, meeting minutes</u>).

development condition, factoring in the enhanced rainwater management requirements. If a site does not satisfy the "Low Impact Classification", it will proceed to a technical modelled sewer analysis to determine potential sewer upgrading conditions to accommodate the additional flows.

Staff have determined, based on technical sewer and drainage planning analyses, that there is no to minimal increase in flooding risk in exempting these sites from reviews and conditions, and in some cases system performance issues may be resolved due to the enhanced rainwater management requirements. Any required interventions that are not conditioned to developments will be addressed through the City's Renewal and UDCL capital programs on a prioritized basis. This Policy is not expected to change the level of sewer system investment required of the City under the current thresholds, as there are additional factors that are driving investment including asset condition, capacity, and the requirement to separate 1% of combined sewers per year in accordance with the Metro Vancouver Integrated Liquid Waste and Resource Management Plan regulations.

Future updates to the Guidelines may consider raising the thresholds for 'No Review' or 'Low Impact' classifications. However, any such changes would need to carefully weigh the potential increase in system flooding risk and the possibility of triggering additional financial investments by the City to mitigate those risks. Decisions will depend on the level of risk deemed acceptable and the need to balance these considerations with broader planning and infrastructure objectives.

If the expected process improvement, financial, and system performance outcomes are not achieved as development proposals and densities shift in the future, the GMES will revisit the thresholds by updating the Guidelines which accompanies the Policy. Where resulting changes in risk acceptance are notable, the GMES may opt to return to Council to review the updated Guidelines and how they satisfy the Policy objectives.

#### Outcomes

The anticipated impacts of these changes, based on current application volumes, is an annual reduction in sewer capacity reviews from about 65 to 15, and an annual decrease in conditioned developer costs for sewer upgrades of approximately \$16 million.<sup>4</sup> (excluding Major Projects). This equates to an 85% reduction in average sewer capacity related development costs, from \$350,000 to \$50,000, per site not including UDCL contributions which are unchanged under this Policy.

Eliminating sewer upgrade conditioning for certain categories of development applications also increases the predictability of development costs, decreases uncertainty when assessing development viability, reduces processing time and, in certain cases, reduces the need to administer Latecomer Agreements.

The proposed changes do not impact the need for neighbourhood-scale utilities upgrades. These are addressed by the UDCL program, which currently faces more growth-related demands than it can support. The City-wide rainwater management requirement update will help manage UDCL program needs and prioritise projects in the context of both existing financial constraints, including the option to defer UDCL payments (RTS 17891), and expanded housing options from Province-led and City-led initiatives. A UDCL program update is scheduled to be presented to Council in 2026, and the impacts of this Policy will be considered with those updates.

<sup>&</sup>lt;sup>4</sup> Average annual value of sewer upgrade conditions for sites less than or equal to 7.0 FSR, excluding Major Projects.

Other positive outcomes include reductions in:

- Review staffing 6 FTEs directly involved in the reviews, and additional unquantified FTEs involved in subsequent processes such as external design review,
- Financial securities (e.g. Letter of Credit, Pay-on-demand Surety Bonds) from developments that are not conditioned with sewer upgrades,
- Delays in the development process, including faster on-average application processing (sewer capacity review has previously contributed to application delays during periods of high application volumes), and
- Engineering holds on development, building and occupancy permits.

Reduced review requirements support Council's 3-3-3-1 Permit Approval Framework. Rather than managing many small sewer upgrades across Vancouver, this allows the City to prioritize infrastructure investments based on a strategic asset management approach informed by the Healthy Waters Plan, and delivering critical growth-triggered upgrades.

The updated Policy and Guidelines, which have been provisionally implemented at the direction of the GMES, have resulted in meaningful reductions to sewer upgrading conditions for eligible new and in-stream applications. Progress achieved to September 23, 2025 is as follows:

- 29 new applications have been exempted from sewer capacity reviews and sewer upgrade conditions.
- 27 in-stream applications have had previous sewer upgrade conditions valuing \$39.7 million removed.
- 23 additional in-stream applications are being reviewed to determine if upgrade conditions can be removed.
- Approximately 400 applicants (since 2017) have been contacted by email advising of the
  proposed change in the Policy and inviting them to self-identify for condition reevaluation, if approved. This will ensure that potentially dormant applications can benefit
  from the Policy updates in the same way as active applications being flagged by City
  staff.

Appendix C Table 1 and Table 2 identifies each of the development sites that have benefitted from the updated Policy and Guidelines, as of September 23, 2025. These benefits were implemented in advance of formal Council endorsement because:

- developers have indicated an urgency to implement measures that support project viability,
- there was no additional cost to the City for the changes to the sewer conditions; and
- there were no material changes to Community Amenity Contribution (CAC) calculations.

Staff recommend that Council endorse and authorize the GMES to remove sewer-related development conditions for these sites as well as other sites that may have been missed from the list but are deemed by the GMES to meet the same criteria. This would be for a limited duration as it would only apply to projects that have not constructed sewer infrastructure and have already received conditions through a rezoning or permitting stream. All future rezonings and permits will be assessed under the updated Policy.

As the City continues to evaluate eligibility for removing sewer upgrade conditions, staff will report back to Council with recommendations if any removals are found to materially impact City costs or CAC calculations.

#### Stakeholder Analysis

Through the public engagement process for the *Building By-law* rainwater management update, staff took the opportunity to also engage with the public and industry (including the Urban Development Institute (UDI)) on the *Sewer Capacity Development Review Policy* that is the key driver of the *Building By-law* update. Engagement occurred on the following occasions:

- Initial meeting with UDI staff March 3, 2025
- Webinar for UDI members May 26, 2025
- Public engagement webinar for the Building By-law update June 19, 2025
- Public engagement period for the Building By-law update ended July 7, 2025
- Letter to UDI with comment responses and draft Guidelines for the Policy August 18, 2025
- Direct email outreach to approximately 400 applicant contacts since 2017 (including webform link for intake of sewer upgrade condition re-evaluation requests) – September 11, 2025

In general, feedback from industry has been positive, expressing support for approval streamlining and cost savings, while also requesting process transparency. The Policy and Guidelines published in Appendix A and B are intended to provide the clarity and cost certainty that industry desires for common development typologies.

#### Active UDCL/Developer Funded Projects – Contribution Alignment

To further support development viability, staff conducted a review of developer contributions to active sewer projects funded from a combination of UDCL and direct developer contributions. Currently, there are two such projects underway. Moving forward, larger neighbourhood serving sewer projects are intended to be fully funded by the UDCL program wherever possible. Over the past 5 to 7 years, sewer construction projects have experienced significant increases in construction costs. In response to escalating costs, staff assessed whether the sewer servicing costs per square foot were equitable across all developments conditioned to contribute to the two active projects.

The review identified cost disparities in the Oak Street Sewer Upgrade Project, where two developments – six-storey residential buildings at 8378 and 8444 Oak Street – were found to have sewer servicing costs per square foot more than three times higher than those of other contributing developments. No Latecomer Agreement was in place for these sites as the sites predated the Latecomer program. To address this inequity, staff recommend a reduction in sewer servicing costs of \$3.2M for 8378 Oak Street and \$2.4M for 8444 Oak St, aligning their contributions with the average costs (average of ~\$1.2M per development, equivalent to ~\$11/sqft) borne by the other developments contributing to the project.

The second active project, Alberta Trunk and West 49th Separation Upgrade Project was also reviewed. Staff found that the sewer upgrade conditions for all contributing developments were equitable, and therefore no changes to conditions are proposed for that project.

#### **Financial Implications**

#### Updated Sewer Capacity Development Review Policy & Guidelines

Progress has already been made in reducing the number of reviews, sewer upgrade conditions, and development costs, improving overall development viability because of the proposed updated *Sewer Capacity Development Review Policy* and Guidelines.

These updates, primarily enabled through rainwater management requirements, will:

- reduce conditioned infrastructure requirements imposed on developments by ~\$16 million a year;
- remove 6 FTE staffing (\$0.8 million) from sewer capacity reviews; and
- improve economies of scale given that upgrades and renewal are delivered by the City in a batched approach rather than as individual developer-delivered projects.

#### Active UDCL/Developer Funded Projects – Contribution Alignment

The \$5.6 million overall reduction in contribution towards the neighbourhood serving sewer servicing costs from the developments at 8378 and 8444 Oak Street will be replaced with funding from the previously approved multi-year capital project budget for the Oak Street Sewer Upgrade project funded by UDCL for emerging priorities. This adjustment will align the contribution of these two developments with those of the other developments contributing to the Oak Street Sewer project.

#### **Legal Implications**

If the Recommendations in this report are adopted by Council, Council will approve a Policy regarding the City's approach to sewer capacity development reviews and approve various changes to development requirements regarding sewers. The Recommendations in this report are within the authority conferred by the Vancouver Charter.

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#### **APPENDIX A**

## City of Vancouver SEWER CAPACITY DEVELOPMENT REVIEW POLICY

#### Terms referenced in this Policy

"applicant" means rezoning and development permit applicant.

"City Engineer" means City Engineer appointed under section 288 of the *Vancouver Charter* or their designate.

"Combined System" means a system of sewage pipes that is intended to convey sanitary (wastewater) and rainwater/stormwater together.

"Combined System Low Impact Threshold" means the threshold set for Combined Systems in the Sewer Capacity Guidelines.

"development" means the development or redevelopment of a site, or a development or redevelopment project.

"Director of Planning" means Director of Planning appointed under section 560 of the Vancouver Charter or their designate.

"**Process**" means the process by which the City assigns Sewer System Upgrade Requirements to applicants as a condition of development.

"Low Impact Classification" means the classification described in this Policy under which a site is not subject to SSURs.

"No Review Threshold" means the density or other development criteria threshold identified in the Sewer Capacity Guidelines and as described in this Policy.

"Sanitary System" means a system of sewage pipes that is intended to convey wastewater.

"Sanitary System Low Impact Threshold" means the threshold set for Sanitary Systems in the Sewer Capacity Guidelines.

"Sewer Capacity Guidelines" means the guidelines related to this Policy set by the City Engineer and approved by Council, that may be amended from time to time at the discretion of the City Engineer.

"Sewer System Upgrade Requirement" or "SSUR" means conditions requiring sewer system improvements or upgrades assigned by the City to certain developments. SSURs are not intended to include sewer service connection requirements between the site and the City's sewer mains.

"Sewer System" means the City's system of sanitary, rainwater/stormwater and/or combined and underground sewage pipes, conduits, pump stations, surface drainage and other infrastructure.

#### **Purpose**

1. Under the Process, the City of Vancouver (the "City") assigns Sewer System Upgrade Requirements (SSURs) as a condition of development on an as-needed basis.

- Historically, SSURs were based on the estimated capacity of the Sewer System. The form of development was not a direct input into determining the SSURs. This led to uncertainty, unmanageable development costs, and difficulty in applying SSURs consistently.
- 3. To manage the impact of development on the Sewer System, while supporting development viability, the City is introducing measures to reduce flows into the Sewer System at their origin by restricting discharge into the Sewer System. Under changes to the *Building By-law* coming into effect in 2026 applicants are required to include adequate on-site discharge controls such that the post-development condition does not increase Sewer System related flood risk for common development typologies.
- 4. This Policy is intended to improve the Process by defining thresholds to indicate when the City will undertake review to determine whether SSURs will apply to developments.
- 5. This Policy was established by taking the following into consideration:
  - a. reducing Process complexities and associated costs, for the City and for applicants;
  - supporting development viability and accelerating housing and other development projects without increasing flood risk from growth related capacity demands;
  - increasing clarity, predictability, consistency and efficiency of the Process, and balancing the need for timely project delivery with ensuring that reasonable Sewer System capacity and function are maintained;
  - d. reflecting a change in approach for remediating existing Sewer System deficits to not burden limited City resources or deter development;
  - e. optimizing City programs and management of Sewer System capacity;
  - f. aligning with land use policies (e.g. City initiated re-zoning) and other rainwater/ stormwater runoff initiatives by the City; and
  - g. streamlining internal processes to optimize use of resources and achieve permitting timeline targets.

#### **Policy Overview**

- 6. The City has undertaken preliminary analyses based on current Sewer System data and understanding to identify site typologies that are not anticipated to increase flood risk related to the Sewer System. The "No Review Threshold" determines the site typologies that will not require review by the City Engineer and will not be subject to SSURs.
- 7. For all other site typologies, applicants will be required to demonstrate, to the satisfaction of the City Engineer or Director of Planning, that the proposed development will not negatively impact Sewer System performance as described in this Policy.

#### **Thresholds**

#### No Review Threshold

- 8. All sites with residential or commercial zoning as identified in *Section 9* of the *Zoning* and *Development By-law*, or a mixture, that are below the No Review Threshold, are not subject to review or to SSURs.
- 9. All other sites are subject to review to determine if they meet the "Low Impact Classification" as described below.

#### **Low Impact Classification**

- 10. If a site does not meet the No Review Threshold, the applicant must demonstrate the following, to the satisfaction of the City Engineer or Director of Planning, to meet the Low Impact Classification and not be subject to SSURs:
  - a. for sites that discharge to or contribute to a Sanitary System, the sanitary peak flow from the site in the post-development condition cannot exceed the Sanitary System Low Impact Threshold;

or

b. for sites that exceed the Sanitary System Low Impact Threshold and/or discharge to or contribute to a Combined System, the sum of the sanitary and rainwater/stormwater peak flows from the site in the post-development condition cannot exceed the Combined System Low Impact Threshold.

#### Other Sites Subject to Review

11. The site typologies not captured by the No Review Threshold or the Low Impact Classification are subject to detailed technical review by the City Engineer to determine appropriate SSRUs.

#### **Guidelines/Criteria**

12. The guidelines, criteria and parameters associated with this Policy are set out in the Sewer Capacity Guidelines.

#### **Policy Limitations/ Exclusions**

- 13. This Policy is not intended to address or affect:
  - a. other rezoning or development conditions that may be applicable to applicants, including site service connections, green infrastructure or other, whether related to the Sewer System, or otherwise;
  - b. overflows from the Sewer System into waterways which occur as currently designed and approved; and
  - c. the authority of the City to restrict flows of groundwater, rainwater/stormwater and/or other sources from the site to the Sewer System.

14. Sites subject to the *Rezoning Policy for Sustainable Large Sites* are excluded from any thresholds in this Policy, although the Sewer Capacity Guidelines will be considered in assessing SSURs.

#### **Departure from Policy**

- 15. The City acknowledges that circumstances may warrant a departure from this Policy. As such, the City Engineer or Director of Planning retain the discretion to deviate from this Policy regarding the inclusion or exclusion of a development site in any threshold in this Policy.
- 16. This policy supersedes all previous written and unwritten policies of the City regarding the Process as defined in this Policy.

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### Appendix B

## Guidelines for the Sewer Capacity Development Review Policy

October 2025 (REV 0)

## 1.0 Executive Summary

This document accompanies the *Sewer Capacity Development Review Policy* and defines the guidelines, criteria and parameters to be used for determining whether proposed rezoning and development permit applicants will be exempt from a review process as set out in the Policy, and therefore from Sewer System Upgrade Requirements ("**SSURs**"), and if not exempt, the extent of such review.

These guidelines determine if developments will:

- 1. bypass review altogether (an automatic exemption from SSURs),
- 2. bypass a detailed review (also an automatic exemption from SSURs); or
- 3. be subject to a detailed review.

#### 2.0 Context

The City has made changes to rainwater management that impact sewer system management. As of 2026, the City of Vancouver's rainwater management criteria will require rainwater/stormwater discharge from a development site exceeding 1.0 FSR and/or greater than 1,000 m² to be controlled and limited such that:

1. the first 15 mm of rainfall on non-landscaped area be controlled to a maximum of 5 litres per second per hectare (L/s/ha);

and

2. the remainder, up to a "10-year design storm", controlled to 25 L/s/ha.

This updated rainwater discharge control on redeveloped sites creates the opportunity for portions of the combined sewer system to accommodate additional flows from density without the need for sewer system improvements because rainwater discharge controls are expected to reduce rainwater flows, enabling capacity for additional sanitary flows from development. This has allowed for a change in the process for sewer capacity reviews.

#### 3.0 Intention and Overview

The rationale applied by the City when reviewing development applications is that reviews for sewer upgrade conditions, and the conditions themselves, will only be applicable to developments that could negatively impact sewer system performance. The City has decided to allow for densification that is expected to result in peak sanitary discharge below the determined city-wide average sanitary capacity of the system (10.5 L/s/ha) without developer-delivered upgrades. Applicants will only be required to address capacity issues when these issues are anticipated to arise due to the redevelopment. Existing capacity issues will be addressed

through City renewal or growth funding sources, as appropriate.

The City's intention with the Sewer Capacity Development Review Policy is to set out criteria for sites that will not be reviewed because they fall within the "No Review Threshold", and to provide applicants with an alternative pathway to support densification by meeting the "Low Impact Classification" and thereby avoiding costly reviews and/or sewer upgrades, all without increasing flooding risk in the sewer system.

As detailed below, the **No Review Threshold** applies to residential and commercial applicants for developments within a certain FSR set out in **Section 4.1**.

The criteria used for assessing the **impact** to sewer system capacity are detailed in **Section 5.0** below and have been set to reflect expected system performance based on available City data.

The goal of the **Low Impact Classification** requirements is to confirm minimal impact from the site on the separate sanitary and combined sewer systems. These criteria have been developed based on technical analysis of the overall sewer system in support of the Policy and guidelines. To fit within the **Low Impact Classification** applicants must demonstrate that they meet the following:

 <u>"Sanitary System Low Impact Threshold"</u>: for sites that discharge to or contribute to a sanitary system, the sanitary peak flow from the site in the post-development condition cannot exceed 10.5 L/s/ha based on the calculation in Section 5.2;

or

"Combined System Low Impact Threshold": for sites that exceed 10.5 L/s/ha and/or discharge to or contribute to a combined system, as set out in the calculation at Section 5.3, the total combined peak flows from the site in the post-development condition cannot exceed the total combined peak flow from the site in the pre-development condition for specified design events set out in Section 5.4.

All sites may prove alignment with the *Low Impact Classification* and may be exempt from SSURs on that basis.

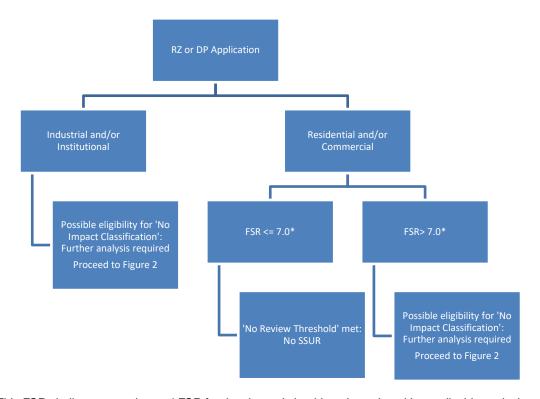
This guideline document provides the necessary criteria and parameters for assessing applicability for typical sites; however, additional sewer, drainage or rainwater infrastructure requirements may apply to Major Projects (including sites under the *Rezoning Policy for Sustainable Large Developments*) as befitting the scope and needs of the development.

## 4.0 Processing of Rezoning and Development Permit Applications

The process diagrams in **Figure 1** and **Figure 2** describe applicability of the **No Review Threshold** and **Low Impact Classification** to applications.

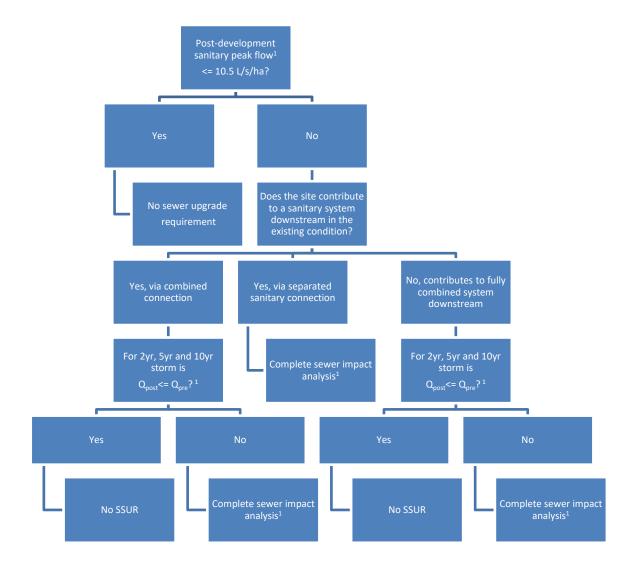
For residential and commercial the *No Review Threshold* is met when the proposed development has a **FSR at or below 7.0**.

Sites that fall outside of the scenarios indicated in **Figure 1** will proceed to **Figure 2** for the **Low Impact Classification** analysis.



\*This FSR shall represent the total FSR for the site and should not be reduced by applicable exclusions in the City of Vancouver Zoning and Development By-law 3575

Figure 1: Process Diagram for Applications – 'No Review Threshold' Applicability



#### Notes:

1. See **Section 5.0** below for more information on applicable parameters and calculations

Figure 2: Process Diagram for New Applications - Low-Impact Classification Applicability

## 5.0 Impact Analysis

The following section details the calculations and parameters to be used in quantifying the impacts of a development on the sewer system. The following sections are intended to provide clarification for the terms and calculations noted in the process charts in the preceding sections.

#### 5.1 Updated Assessment Criteria – Low Impact Classification

If the applicant can demonstrate alignment with the *Sanitary System Low Impact Threshold* or *Combined System Low Impact Threshold* described in *Section 3.0* (as applicable), each calculated according to the methodology in *Sections 5.2* to *5.4*, they will be exempt from sewer upgrade conditions under the *Low Impact Classification*. Other sewer, drainage and rainwater infrastructure requirements may be applied to Major Projects as befitting the scope and needs of the development.

#### 5.2 Sanitary Peak Flow Calculation

The pre- and post-development sanitary peak flows (L/s/ha) for the **Sanitary System Low Impact Threshold** will be calculated using the following equation and parameters, intended to represent expected conditions in residential and commercial redevelopment.

$$Q_{sanitary} = \left(\frac{Res. \ Per \ Capita\left(\frac{L}{cap}\right) \times Peak \ Factor \times FSR}{\frac{86400 \ s}{day} \times density\left(\frac{m^2}{cap}\right) \times \frac{1 \ ha}{10000m^2}} + I\&I\left(\frac{L}{\frac{s}{ha}}\right)\right)$$

Table 1: Parameters to be used for Sanitary Peak Flow Analyses (Residential and Commercial)

Density	Res. Per Capita	Peak Factor	1&1
35 m²/cap	250 L/cap/day	1.8	0.13 L/s/ha

The FSR in this calculation shall represent the total FSR for the site and should not be reduced by applicable exclusions in the *City of Vancouver Zoning and Development By-law 3575*.

Flows for industrial and institutional redevelopment (expressed in L/s/ha) should be provided by the applicant and shall be calculated and authenticated by the applicant's Engineer of Record.

#### 5.3 Combined System Peak Flow Calculation

The **Combined System Low Impact Threshold** will be determined with the following equation (expressed in L/s/ha) considering sanitary and rainwater/stormwater peak flow discharges:

$$Q_{post-development} \leq Q_{pre-development}$$
 or  $Q_{post-dev\, sanitary} + Q_{post-dev\, storm} \leq Q_{pre-dev\, sanitary} + Q_{pre-dev\, storm}$ 

When using this equation, the equation and parameters in **Section 5.2** will be used for estimating the pre- and post-development sanitary flows expressed in L/s/ha.

The values to be used for the rainwater/stormwater runoff peak flows will be as provided in **Section 5.4** to align with the overall city-wide technical analysis.

If the site exceeds the *Low Impact Classification*, a modelled sewer impact analysis will be required by the City Engineer and will be reviewed in alignment with the principles outlined in **Section 3.0**. See **Section 5.5** for more details.

#### 5.4 Rainwater/Stormwater Runoff Calculations

Rainwater/stormwater runoff for the **pre-development** condition has been pre-calculated based on an overall city-wide analysis. These rates are based on calibrated models for the City of Vancouver and are intended to approximate rainwater/stormwater runoff rates of standard site typologies.

**Table 2: Pre-development Condition Runoff Rates** 

Existing Site Imperviousness	Average Peak Rainwater/Stormwater Runoff (L/s/ha)		
	2018 2y1h	2018 5y1h	2018 10y1h
Less than 60%	35	46	54
Greater than 60%	39	53	76

The **post-development** discharge rate is assumed to be **25 L/s/ha** for any of the 2-, 5- and 10-year storm events for the purposes of the *Low Impact Classification* calculation.

#### 5.5 Sewer Impact Analysis

Where a site has been confirmed to not meet the *Low Impact Classification* using the calculations above, and therefore to have a more considerable impact on the sewer system, the City Engineer will require a sewer impact modelling analysis. This analysis will be prepared either by the City, or by the applicant, as determined by the City Engineer. Where flow monitoring data is available, the analysis will utilize a calibrated model.

## 6.0 Policy Application: Next Steps

The implementation of the Sewer Capacity Development Review Policy will continue to be monitored and this guideline may be modified, with approval of the City Engineer, to ensure the stated intention is met. The review of the Policy will include impacts on related City policies and programs such as the Utility Development Cost Levy (UDCL) and/or the Capital Infrastructure Plan, as well as impacts to applicants and to the sewer system.

#### **APPENDIX C**

# APPLICATIONS EXEMPTED FROM SEWER CAPCITY REVIEWS OR WITH SEWER UPGRADE CONDITION CHANGES

TABLE C-1: Sites with conditioned sewer upgrades that have been reduced or removed.

ADDRESS	COST REDUCTION UNDE	COST YEAR
10 E 11TH AVENUE	\$ 875,00	00 2024
1125 W 10TH AVENUE	\$ 1,127,00	00 2024
1305 W 13TH AVENUE	\$ 640,30	00 2024
1366 W 12TH AVENUE	\$ 595,00	00 2024
1698 W GEORGIA STREET	\$ 840,00	2019
189 E 51ST AVENUE	\$ 910,00	00 2017
2030 BARCLAY STREET	\$ 260,00	00 2024
2092 NANTON AVENUE	\$ 4,985,00	00 2022
2108 W 16TH AVENUE / 3205 ARBUTUS STREET	\$ 805,00	00 2021
2110 W 5TH AVENUE	\$ 580,00	00 2024
2175 W 7TH AVENUE	\$ 1,500,00	00 2024
2180 W 6TH AVENUE	\$ 1,100,00	00 2024
2212 W 10TH AVENUE	\$ 740,00	00 2024
2520 W 16TH AVENUE	\$ 598,00	00 2024
282 W 49TH AVENUE	\$ 2,900,00	00 2025
310 E 14TH AVENUE	\$ 3,336,00	00 2024
3295 COMMERCIAL DRIVE	\$ 380,00	00 2024
3803 W 10TH AVENUE / 2553 HIGHBURY STREET	\$ 350,00	00 2022
414 W PENDER STREET	\$ 1,800,00	00 2025
4471 FRASER STREET	\$ 1,100,00	00 2024
4545 W 10TH AVENUE	\$ 6,100,00	00 2024
456 PRIOR STREET	\$ 3,126,00	00 2021
520 W 29TH AVENUE	\$ 720,00	00 2024
6428 CAMBIE STREET	\$ 210,00	00 2017
701 KINGSWAY	\$ 2,400,00	00 2024
767 W 28TH AVENUE	\$ 730,00	00 2021
975 W 57TH AVENUE	\$ 950,00	00 2024

#### Notes:

- 1. Based on the updated Sewer Capacity Development Review Policy and accompanying Guidelines
- 2. These are known eligible applications to September 23, 2025. It is anticipated that additional applications will be eligible moving forward.

TABLE C-2: New applications that are not subject to a sewer capacity review or sewer upgrade conditions.

1000
ADDRESS
1088 W 12TH AVENUE
1120 W 16TH AVENUE
1230 W 12TH AVENUE
1249 W 41ST AVENUE
1366 W 12TH AVENUE
138 E 7TH AVENUE
1401 E 49TH AVENUE
1613 NANAIMO STREET
185 SW MARINE DRIVE
2465 W 41ST AVENUE
325 W 41ST AVENUE
3320 W 41ST AVENUE
3731 W 4TH AVENUE
4088 GRANVILLE STREET
4339 CAMBIE STREET
453 E 10TH AVENUE
4615 ARBUTUS STREET
4711 CAMBIE STREET
4910 WILLOW STREET
4967 MAIN STREET
5262 GRANVILLE STREET
5770 GRANVILLE STREET
5889 DUNBAR STREET
6333 YUKON STREET
6486 CHESTER STREET
6507 MAPLE STREET
6679 MAIN STREET
678 W 30TH AVENUE
717 W 28TH AVENUE

#### Notes:

- 1. Based on the updated Sewer Capacity Development Review Policy and accompanying Guidelines
- 2. These are known eligible applications to September 23, 2025. It is anticipated that additional applications will be eligible moving forward.