City of Richmond

Agenda

Finance and Audit Committee

Anderson Room, City Hall
6911 No. 3 Road

Monday, November 16, 2026
Immediately following the General Purposes Committee meeting

Pg. # ITEM

MINUTES

FIN-3 ***Motion to adopt the minutes of the meeting of the Finance Committee held on October 5, 2026.***

FINANCE AND CORPORATE SERVICES DIVISION

1. **2027 UTILITY BUDGETS AND RATES**
(File Ref. No. 10-6060-01) (REDMS No. 8457589)

FIN-5 See Page **FIN-5** for full report

Designated Speaker: Melissa Shiau, Jason Ho and Kristina Grozdanich

STAFF RECOMMENDATION

That the 2027 utility budget options presented below and as outlined in the report titled "2027 Utility Budgets and Rates", dated November 2, 2026, from the General Manager, Engineering and Public Works and General Manager, Finance and Corporate Services, be approved as the foundation for establishing the 2027 utility rates and be included in the Consolidated 5 Year Financial Plan (2027-2031):

Pg. # ITEM

(a) Option 1 for Water (page 6, Table 2);

(b) Option 1 for Sewer (page 13, Table 6);

(c) Option 1 for Flood Protection (page 20, Table 10); and

(d) Option 2 for Solid Waste and Recycling (page 25, Table 12).

2. **2027 DISTRICT ENERGY UTILITY RATES**
(File Ref. No. 01-0060-20-LIEC1) (REDMS No. 8516169)

FIN-41

See Page **FIN-41** for full report

Designated Speaker: Alen Postolka and Aaron Yeung

STAFF RECOMMENDATION

(1) That the Alexandra District Energy Utility Bylaw No. 8641, Amendment Bylaw No. 10792 be introduced and given first, second and third readings;

(2) That the Oval Village District Energy Utility Bylaw No. 9134, Amendment Bylaw No. 10793 be introduced and given first, second and third readings; and

(3) That the City Centre District Energy Utility Bylaw No. 9895, Amendment Bylaw No. 10794 be introduced and given first, second and third readings.

ADJOURNMENT

City of Richmond

Minutes

Finance and Audit Committee

Date:	Monday, October 5, 2026
Place:	Anderson Room Richmond City Hall
Present:	Mayor Malcolm D. Brodie, Chair Councillor Carol Day Councillor Andy Hobbs Councillor Bill McNulty Councillor Michael Wolfe
Absent:	Councillor Laura Gillanders Councillor Kash Heed Councillor Alexa Loo
Call to Order:	The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded
That the minutes of the meeting of the Finance and Audit Committee held on September 8, 2026, be adopted as circulated.

CARRIED

FINANCE AND CORPORATE SERVICES DIVISION

1. **CONSOLIDATED FEES BYLAW NO. 8636, AMENDMENT BYLAW NO. 10774**
(File Ref. No. 03-1240-01) (REDMS No. 8432370)

It was moved and seconded
That the Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 10774 be introduced and given first, second and third readings.

CARRIED

2. **PERMISSIVE PROPERTY TAX EXEMPTION (2027) BYLAW NO. 10773**
(File Ref. No. 03-0925-02-04) (REDMS No. 8420439)

It was moved and seconded
That Permissive Property Tax Exemption (2027) Bylaw No. 10773 be introduced and given first, second and third readings.

CARRIED

3. **AMENDMENTS TO THE CONSOLIDATED 5 YEAR FINANCIAL PLAN (2026-2030) BYLAW NO. 10727**
(File Ref. No. 03-0970-25-2026-01) (REDMS No. 8521959)

It was moved and seconded
That the Consolidated 5 Year Financial Plan (2026-2030) Bylaw No. 10727, Amendment Bylaw No. 10802, which incorporates and puts into effect the changes as outlined in the staff report titled "Amendments to the Consolidated 5 Year Financial Plan (2026-2030) Bylaw No. 10727", dated September 22, 2026, from the General Manager, Finance and Corporate Services, be introduced and given first, second and third readings.

CARRIED

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (4:01 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Finance and Audit Committee of the Council of the City of Richmond held on Monday, October 5, 2026.

Mayor Malcolm D. Brodie
Chair

Lorraine Anderson
Legislative Services Associate

City of Richmond

Report to Committee

To:	Finance and Audit Committee	**Date:**	November 2, 2026
From:	Roeland Zwaag General Manager, Engineering and Public Works	**File:**	10-6060-01/2026-Vol-01
	Jerry Chong General Manager, Finance and Corporate Services		
Re:	**2027 Utility Budgets and Rates**		

Staff Recommendation

That the 2027 utility budget options presented below and as outlined in the report titled "2027 Utility Budgets and Rates", dated November 2, 2026, from the General Manager, Engineering and Public Works and General Manager, Finance and Corporate Services be approved as the foundation for establishing the 2027 utility rates and be included in the Consolidated 5 Year Financial Plan (2027-2031)

a) Option 1 for Water (page 6, Table 2);

b) Option 1 for Sewer (page 13, Table 6);

c) Option 1 for Flood Protection (page 20, Table 10); and

d) Option 2 for Solid Waste and Recycling (page 25, Table 12).

Executive Summary

Utility fees provide dedicated funding for the City's Water, Sewer, Flood Protection and Solid Waste and Recycling utilities. This includes Council-endorsed programs and initiatives, funding for the operation, maintenance and upgrade of City infrastructure and assets, and Richmond's share of Metro Vancouver's regional utility costs, including major infrastructure projects.

Key Drivers for the 2027 Utility Budgets and Rates

Metro Vancouver costs remain a key driver of the proposed 2027 Water, Sewer and Solid Waste and Recycling utility budgets. The City's 2027 utility rates are based on Metro Vancouver's proposed five-year projections at the time of writing and staff will report back to Council if the approved rates differ substantially from Metro Vancouver's projected rates. Metro Vancouver's proposed water rate is increasing by 3.1%, their sewer levy is increasing by 4.1%, and their solid waste tipping fee is increasing by 5.4%. Metro Vancouver's sewer levy includes Richmond's existing $11.9M annual allocation for the North Shore Wastewater Treatment Plant project.

The proposed Flood Protection budget reflects the Council-approved Accelerated Flood Protection Program, which aims to upgrade the City's dikes over a 50-year period to address rising sea levels. Annual capital funding is proposed to increase from $18.2M to $20.5M in 2027, with the target annual funding requirement of $38.7M by 2032.

Key cost drivers for the Solid Waste and Recycling Utility include additional costs and resources that are required to meet the City's contractual obligations. This includes inflationary contract costs stipulated in existing contracts, disposal cost increases, and overall growth in the number of units to be serviced.

Utility Budgets and Rates Options

Three budget options are presented for each utility. Staff recommend Option 1 for Water, Option 1 for Sewer, Option 1 for Flood Protection, and Option 2 for Solid Waste and Recycling. These options provide a balance of supporting infrastructure renewal and service delivery while limiting rate increases.

Under the recommended options, total utility charges for a single-family dwelling with average water consumption and a standard 240 L garbage cart would increase by approximately 6.6% ($149.41).

Staff Report

Origin

This report presents the recommended 2027 utility budgets and rates for Water, Sewer, Flood Protection, and Solid Waste and Recycling. Should the utility budgets and rates presented in this report be endorsed by the Finance and Audit Committee, a subsequent report will be presented to Council to introduce amendment bylaws that reflect the approved utility rates.

This report supports the following focus area within Council's Strategic Plan 2022-2026

Focus Area #4 Responsible Financial Management and Governance:

> *Responsible financial management and efficient use of public resources to meet the needs of the community.*

Overview Summary

The City provides four utility services to residents and businesses:

- **Water:** The Water Utility provides distribution of water to Richmond's residents and businesses. Bulk drinking water supply is purchased from Metro Vancouver and distributed through the City's pressure reducing valve stations and watermain network. This utility also supports programs to encourage water conservation within the City.

- **Sewer:** The Sewer Utility provides sewer service for properties within the regional sewerage boundaries. Sewage is collected through the City's sanitary infrastructure and conveyed to Metro Vancouver's trunk sewer system and wastewater treatment plants for treatment and discharge. Richmond pays Metro Vancouver for treatment and conveyance services each year.

- **Flood Protection:** The Flood Protection Utility provides flood protection services for Richmond, which includes a diking network to protect from coastal flooding, and drainage infrastructure to convey and discharge rainwater out of the City. This utility supports infrastructure upgrades to protect against climate change induced sea level rise and atmospheric events.

- **Solid Waste and Recycling:** The Solid Waste and Recycling Utility includes garbage and recycling collection services and programs designed to advance broader waste reduction and recycling objectives. This utility supports initiatives designed to reduce waste, enhance recycling and maintain streetscapes.

The Water, Sewer, Flood Protection and Solid Waste and Recycling utilities have dedicated reserve bylaws to secure funding for infrastructure upgrades and any related items that support the respective utilities.

Long Term Infrastructure Needs

Maintaining these services requires ongoing investment to replace ageing municipal infrastructure and upgrade assets to meet future needs. Flood protection is one example of where the City needs to plan for changing conditions as well as infrastructure renewal.

Scientific modelling predicts up to one metre of sea level rise by 2100. At the April 12, 2021 Council meeting, Council adopted a 50-year implementation period for the Accelerated Flood Protection Program, with the objective of upgrading the City's dikes within that period. To deliver this program, $38.7M in annual capital funding within the Flood Protection Utility is required by 2032.

Annual funding levels required to maintain and replace the City's utility infrastructure are assessed in the Ageing Utility and Road Infrastructure Planning – 2025 Update, presented to the Public Works and Transportation Committee on July 23, 2025. The report is updated regularly to reflect current infrastructure needs and funding requirements. The next scheduled update is for Q3 2027. Table 1 below compares 2026 approved annual capital funding with the long-term requirements identified in the report.

Table 1: Ageing Utility Infrastructure Planning 2025 Update: Annual Capital Funding Levels

Infrastructure Type	2026 Approved Annual Funding Level	Expected Long-Term Average Annual Funding Requirement	Estimated Additional Capital Funding Required
Water	$8.7M	$13.2M	$4.5M
Sewer	$8.0M	$14.7M	$6.7M
Flood Protection	$18.2M	$38.7M	$20.5M

The funding gaps do not affect current service levels. Addressing them over time will help the City replace ageing infrastructure before it fails, maintain reliable utility services and complete planned flood protection upgrades.

Comparison of Utility Rates with Comparator Municipalities

The City's utility budgets are managed to provide high levels of service to Richmond's residents, despite external increases that are outside of the City's control. Figure 1 compares Richmond's current utility rates with comparator municipalities. The 2026 rates are presented as the 2027 rates have not been established yet for comparator municipalities.

All utility fees presented below are net of applicable discounts. Richmond and Surrey water and sewer rates include applicable metering costs and are based on average annual consumption. Funding sources for Blue Box, waste management and Large Item Pick-up programs vary among neighbouring municipalities. These fees have been excluded from Richmond's garbage and organics charge for comparison purposes.

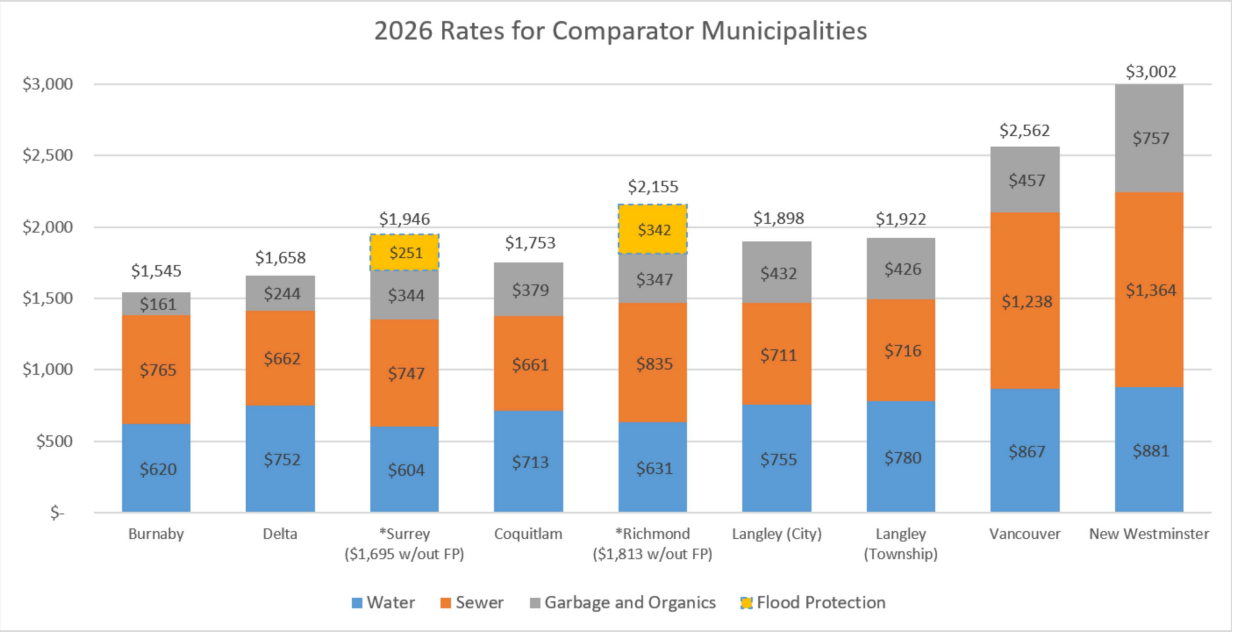


Figure 1: Comparison of Average Single Family Dwelling Utility Rates for Richmond with Comparator Municipalities (2026 Rates)

Richmond's flat topography, high water table and proximity to the water places unique challenges on the City's utility infrastructure, resulting in larger and deeper pipes, the need for 39 drainage and 154 sanitary pump stations and the need for an extensive flood protection system that includes 49 kilometres of perimeter dikes. In addition, the City has made substantial investments to upgrade flood protection infrastructure in advance of anticipated climate change impacts through the ongoing accelerated flood protection program. Despite these challenges and the additional infrastructure needs, the City of Richmond continues to maintain competitive fees for utility services while providing a high level of service.

Analysis

Water Utility

The three budget options for the Water Utility are shown in Table 2 below. Italicized values represent the difference between the 2026 rates and the 2027 rate options. The 2027 base budget for each option is equal to the sum of the 2026 base budget plus the changes in italics. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections of this report.

Table 2: 2027 Water Utility Budget

Key Budget Areas	2026 Base Level Budget	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Option 1 + $250,000 Increase to Annual Capital Funding	Option 3 Option 2 + $250,000 Additional Increase to Annual Capital Funding
Expenditures				
Salary	$8,526,300	*$307,800*	*$307,800*	*$307,800*
Operating Expenditures	$4,198,100	*$37,800*	*$37,800*	*$37,800*
Toilet Rebate Program	$100,000	*$0*	*$0*	*$0*
GVWD Water Purchases (Metro Vancouver)	$36,263,900	*$505,600*	*$505,600*	*$505,600*
Capital Infrastructure Replacement Program	$8,672,000	*$0*	*$250,000*	*$500,000*
Residential Water Metering Program	$3,085,900	*$0*	*$0*	*$0*
Construction Period Allocation	$750,000	*$0*	*$0*	*$0*
Firm Price/Receivable	$3,298,900	*$83,000*	*$83,000*	*$83,000*
Overhead Allocation	$1,205,100	*$419,700*	*$419,700*	*$419,700*
Total Base Level Expenditure Budget	**$66,100,200**	**$67,454,100**	**$67,704,100**	**$67,954,100**
Revenues				
Provision (Rate Stabilization)	$0	*$0*	*$0*	*$0*
Investment Income	-$264,000	*$0*	*$0*	*$0*
Firm Price/Receivable	-$3,298,900	*-$83,000*	*-$83,000*	*-$83,000*
Meter Rental	-$2,081,300	*-$18,800*	*-$18,800*	*-$18,800*
YVR Maintenance	-$30,100	*$0*	*$0*	*$0*
Provision (Toilet Rebate/Flushing)	-$101,600	*$1,600*	*$1,600*	*$1,600*
Meter Re-Reads and Other Services	-$233,300	*$0*	*$0*	*$0*
Reserve (Residential Water Metering Program)	-$450,000	*$0*	*$0*	*$0*
Construction Period Revenue	-$750,000	*$0*	*$0*	*$0*
Total Base Level Revenue Budget	**-$7,209,200**	**-$7,309,400**	**-$7,309,400**	**-$7,309,400**
Net Budget	**$58,891,000**	**$60,144,700**	**$60,394,700**	**$60,644,700**
Net Difference Over 2026 Base Level Budget		***$1,253,700***	***$1,503,700***	***$1,753,700***

The expenditures and revenues for the Water Utility budget reductions and increases given in Table 2 are outlined below.

Expenditures

The cost drivers for the Water Utility include the Metro Vancouver Water Purchases, and salary and operating expenditures.

Metro Vancouver Water Purchases

Bulk water is purchased from Metro Vancouver on a volumetric basis. Metro Vancouver's water rate is proposed to increase by 3.1%. The City's 2027 Water Purchase budget is increasing by $0.5M to $36.8M based on Metro Vancouver's rate increase and adjusted for average usage in peak and off-peak months, which forms the basis of water purchase projections based on average City-wide water consumption. This is an overall increase of 1.4% from the City's 2026 Water Purchase budget. Despite continued population growth, City water use has declined in recent years. Contributing factors may include greater conservation among increased metered users, watering restrictions, and the proactive capital infrastructure program. Accordingly, water-use projections have been adjusted, resulting in a lower budget increase – relative to Metro Vancouver's water rate increase.

Metro Vancouver Water Purchases account for the largest share of the 2027 non-discretionary expenditure increase. Metro Vancouver charges different rates for water during peak and off-peak periods. The blended rate represents the average cost of water based on the proportion purchased during each period. The City's 2027 water rates are based on Metro Vancouver's proposed 2027-2031 Financial Plan (Table 3).

Table 3: Metro Vancouver Water Rate Projection - Proposed 2027-2031 Financial Plan

	2027	2028	2029	2030	2031
Blended Rate ($/m^3)	$1.0971	$1.1245	$1.1616	$1.2162	$1.2904
% Change	3.1%	2.5%	3.3%	4.7%	6.1%

Since 2006, the Metro Vancouver water rate has increased by 277%, or an average annual increase of 6.5%. These increases are notably higher than the City's water utility rates, which increased by 75%, or an average annual increase of 2.7%, over the same period.

Due to these increases, Metro Vancouver costs have increased from accounting for 44% of Richmond's water utility rate in 2006 to 58% in 2027 (Figure 2 on the next page). The increases in Metro Vancouver costs are a primary budget driver for the Water Utility.

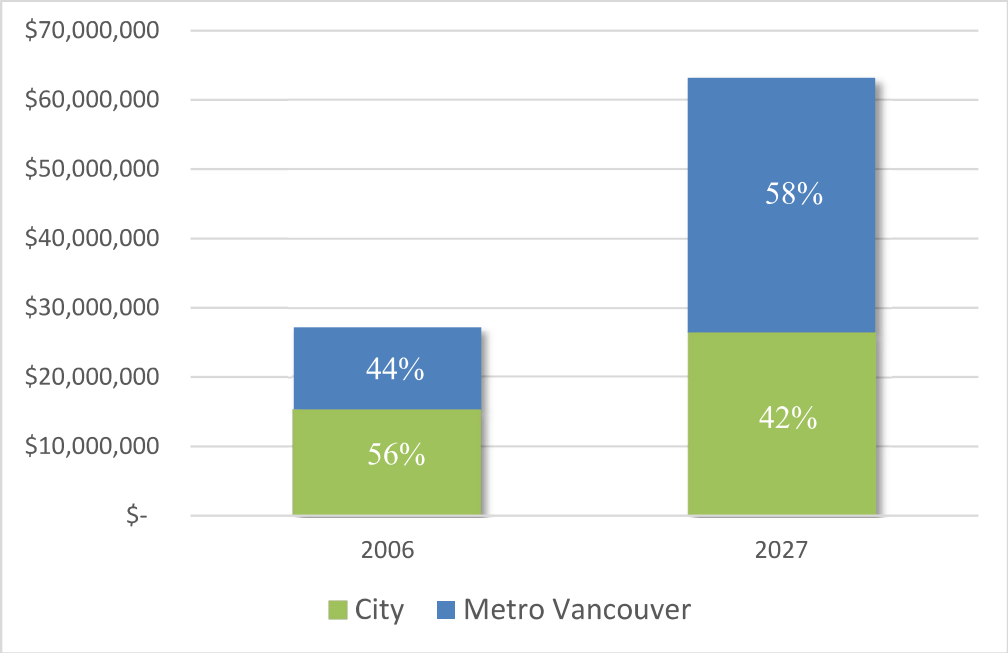


Figure 2: 2006 vs 2027 Water Utility Cost Breakdown

Water Capital Infrastructure Replacement Program Contribution

The Water Capital Infrastructure Replacement Program facilitates proactive management of the City's water assets, which allows the City to maintain a high level of service by minimizing watermain breaks and service disruptions. Approximately 35% (223 km) of the City's watermains are asbestos cement (AC) pipes. Through proactive management of ageing infrastructure and implementation of the City's water pressure management program, the City has successfully reduced water losses as a result of pipe leakage in the water distribution system. This has resulted in additional cost savings from avoided Metro Vancouver water purchase costs as well as associated emergency response expenditures. Council's proactive approach to infrastructure replacement is also a sound preventative maintenance strategy.

The annual capital contribution for water infrastructure replacement is currently $8.7M, excluding the amount currently dedicated to the water metering program. The "Ageing Utility and Road Infrastructure Planning – 2025 Update" report identified a long-term annual funding requirement of $13.2M. Option 2 and Option 3 include increases to annual capital funding for the water utility in the amount of $250,000 and $500,000, respectively, to bridge the gap between current and targeted funding levels. Bridging the funding gap between current and targeted funding levels supports proactive infrastructure replacement, thereby offsetting financial obligations for future years.

Water Metering (Avoided Water Purchase Costs)

Water metering plays an essential role in the City's water demand management program, which improves equity to ratepayers by providing volume-based user fees and reduces bulk water purchase costs by promoting water conservation and reducing private-side leakage.

Since inception of the program in 2003, the City's total water use has decreased by approximately 17% despite an increase in population of 39%. The reduction in per capita water usage is estimated to result in annual savings of $22M in avoided water purchase cost.

The City has made significant advances in water metering since the program was first introduced. Approximately 85% of the City's water use is currently metered. All single-family and Industrial, Commercial and Institutional (ICI) properties are metered. 67% of multi-family units are metered and the City has an active program to meter the remaining multi-family units. The single-family residential flat rate will continue to apply to duplex units that share one water service.

Water Salary and Operating Expenditures

The main cost drivers for the operating expenditure increase include the following:

- Salary increases of 3.5% plus step progressions and fringe benefits increases, including WorkSafeBC experience and industry premium increases; and
- Materials cost increases.

Proactive maintenance, pressure management and early leak detection have reduced water losses and the need for emergency repairs, contributing to operational savings. For 2027, the contract services budget has also been reduced to reflect anticipated needs based on recent spending. The average increase to the City's non-discretionary operating expenditures since 2023 has been 1.9%, which is below the CPI over the same period.

Overhead Allocation

Administrative overhead represents the corporate services required to support utility operations, including financial management, human resources, information technology, purchasing, legal, and general administration. To recognize the cost of these services, the City applies an established overhead allocation to direct labour, materials, and equipment. This approach aligns the utility budgets with the current level of corporate support provided and ensures the appropriate allocation of corporate costs to the utility services that benefit from them. The overhead rate adjustment applied to the Water utility is $400,000.

Revenues/Transfers

Water Levy Provision for Rate Stabilization

The Water Levy Provision was established by Council as a funding source for water rate stabilization. The Provision is projected to have a balance of $12M as of November 1, 2026, and is intended to address temporary spikes in regional water purchase costs.

None of the options for 2027 include a planned drawdown from the Water Levy Provision, and staff recommend that the Provision continue to be preserved in anticipation of future Metro Vancouver rate increases.

Reserve (Residential Water Metering Program)

At the November 8, 2021 Council Meeting, Council endorsed increasing the annual funding level for the water metering program to $3M to implement a Universal Multi-Family Water Metering Program. The increased funding was to be achieved through a phased annual 1% increase to the water rate over four years, along with utilization of the Watermain Replacement Reserve to make up the difference over that period.

Through the first few years of delivering the program with staff and in-house construction crews, significant efficiencies and cost savings have been realized. This has resulted in program costs to date being lower than previous estimates, which were based on historical external contractor pricing. As a result, the additional 1% annual rate increase ($450,000) has been excluded since 2025, and staff will continue to monitor, review costs and update Council if any changes are required in future years.

Construction Period Revenues

The City receives construction period revenues from development for water use during construction. The revenue can vary significantly from year to year depending on construction activity. Due to the instability of this revenue source, it is not utilized as a funding source for operational activity. Any actual revenue received is transferred to the Water Levy Stabilization provision for future rate stabilization funding. An estimate is included in the budget based on the last three full years of activity with an offsetting transfer to provision for reference.

Impact on 2027 Water Rates

The impact of the three budget options on water rates is shown in Table 4 and Table 5 on the next page. Table 4 shows the options for metered customers and Table 5 shows the options for flat rate customers. The rates presented include fixed costs for metering, such as meter reading, billing and maintenance. The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

Option 1 is the recommended option and represents non-discretionary increases that are required to maintain existing levels of services. Option 2 includes everything in Option 1 and a $250,000 increase to the Water Capital Infrastructure Replacement Program. Option 3 includes Option 2 and an additional $250,000 increase to the Water Capital Infrastructure Replacement Program.

Table 4: 2027 Metered Rate Water Options (Net of Discount)

Customer Class	2026 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling (based on 325 m^3 average consumption)	$630.80	$662.20 *$31.40*	$664.89 *$34.09*	$667.59 *$36.79*
Townhouse (based on 218 m^3 average consumption)	$430.14	$451.20 *$21.06*	$453.01 *$22.87*	$454.82 *$24.68*
Apartment (based on 157 m^3 average consumption)	$292.86	$308.02 *$15.16*	$309.33 *$16.47*	$310.63 *$17.77*
Metered Rate ($/$m^3$)	$1.8080	$1.9046 *$0.0966*	$1.9129 *$0.1049*	$1.9212 *$0.1132*
Metro Vancouver % Change		*2.1%*	*1.9%*	*1.8%*
City % Change		*3.2%*	*3.9%*	*4.5%*
Total % Change		***5.3%***	***5.8%***	***6.3%***

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

Table 5: 2027 Flat Rate Water Options (Net of Discount)

Customer Class	2026 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling	$960.14	$1,011.44 *$51.30*	$1,015.85 *$55.71*	$1,020.25 *$60.11*
Townhouse	$785.95	$827.94 *$41.99*	$831.54 *$45.59*	$835.15 *$49.20*
Apartment	$506.47	$533.53 *$27.06*	$535.85 *$29.38*	$538.18 *$31.71*
Metro Vancouver % Change		*2.1%*	*1.9%*	*1.8%*
City % Change		*3.2%*	*3.9%*	*4.5%*
Total % Change		***5.3%***	***5.8%***	***6.3%***

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

The City's Waterworks and Water Rates Bylaw No. 5637 provides a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The rates outlined in Table 4 and Table 5 are net discounted rates.

Water Utility Options Summary

The following is a summary of the Water Utility budgets and rates for Option 1:

Option 1 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.

The following is a summary of the Water Utility budgets and rates for Option 2:

Option 2

- Includes everything in Option 1; and
- Increases the annual capital funding by $250,000.

The following is a summary of the Water Utility budgets and rates for Option 3:

Option 3

- Includes everything in Option 2; and
- Increases the annual capital funding by an additional $250,000.

Water Utility Recommended Option

Staff recommend the budgets and rates identified in Option 1 for the Water Utility. This option includes the minimum increase required to maintain the current service levels and limits the rate increase.

Sewer Utility

The three budget options for the Sewer Utility are shown in Table 6 below. Italicized values represent the difference between the 2026 rates and the 2027 rate options. The 2027 base budget for each option is equal to the sum of the 2026 base budget plus the changes in italics. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections of this report.

Table 6: 2027 Sewer Utility Budget

Key Budget Areas	2026 Base Level Budget	Option 1 (Recommended) Non Discretionary Increases	Option 2 Option 1 + $500,000 Increase to Annual Capital Funding	Option 3 Option 2 + $500,000 Additional Increase to Annual Capital Funding
Expenditures				
Salary	$4,943,100	*$296,300*	*$296,300*	*$296,300*
Operating Expenditures	$3,490,200	*$31,500*	*$31,500*	*$31,500*
Metro Vancouver Sewer Levy (Debt Component)	$12,127,000	*$99,500*	*$99,500*	*$99,500*
Metro Vancouver Sewer Levy (O&M Component)	$29,873,000	*$2,127,400*	*$2,127,400*	*$2,127,400*
Metro Vancouver North Shore Wastewater Treatment Plant Levy	$11,900,000	*$0*	*$0*	*$0*
Capital Infrastructure Replacement Program	$7,978,300	*$0*	*$500,000*	*$1,000,000*
Construction Period Allocation	$700,000	*$0*	*$0*	*$0*
Firm Price/Receivable	$810,000	*-$9,600*	*-$9,600*	*-$9,600*
Overhead Allocation	$784,100	*$309,800*	*$309,800*	*$309,800*
Total Base Level Expenditure Budget	**$72,605,700**	**$75,460,600**	**$75,960,600**	**$76,460,600**
Revenue/Transfers				
Provision	-$40,000	*$0*	*$0*	*$0*
Construction Period Revenue	-$700,000	*$0*	*$0*	*$0*
Investment Income	-$102,000	*$0*	*$0*	*$0*
Firm Price/Receivable	-$810,000	*$9,600*	*$9,600*	*$9,600*
Total Base Level Revenue Budget	**-$1,652,000**	**-$1,642,400**	**-$1,642,400**	**-$1,642,400**
Net Budget	**$70,953,700**	**$73,818,200**	**$74,318,200**	**$74,818,200**
Net Difference Over 2026 Base Level Budget		***$2,864,500***	***$3,364,500***	***$3,864,500***

The expenditures and revenues for the Sewer Utility budget reductions and increases given in Table 6 are outlined on the next page.

Expenditures

The key driver for the Sewer Utility is the Metro Vancouver Sewer Levy cost. Secondary drivers include Salary and Operating expenditures.

Metro Vancouver Sewer Levy

Richmond pays Metro Vancouver a Sewer Levy for bulk transmission and treatment of liquid waste on a flat rate basis. This levy is broken down into Operations & Maintenance and Debt components for the City's contribution of liquid waste to the following three Metro Vancouver sewerage areas:

- Lulu Island West Sewerage Area (LIWSA);
- Vancouver Sewerage Area (VSA) – for sewage from Mitchell Island; and
- Fraser Sewerage Area (FSA) – for sewage from Fraserwood Industrial and Hamilton.

In 2027, the proposed Operations & Maintenance component is $43.9M and the Debt component is $12.2M.

North Shore Wastewater Treatment Plant (NSWWTP) Project

Metro Vancouver's NSWWTP Project is currently expected to be completed in 2030 at a total cost of $3.9B. At the May 31, 2024, Metro Vancouver Board Budget Workshop, the Board provided direction for the funding model to cover the additional $2.8B project cost.

As part of the Metro Vancouver Sewer Levy, an annual $11.9M is included as Richmond's allocated debt servicing for the NSWWTP upgrade. The annual $11.9M debt servicing is Richmond's apportionment for a regional 15-year amortized payment plan, which started in 2025, to complete Metro Vancouver's NSWWTP project. This amount is already included in the base budget.

Total Metro Vancouver Sewer Costs

The overall annual levy is funded through utility rates and is increasing by $2.2M (4.1%) to $56.1M in 2027. Metro Vancouver's 2027 increase accounts for 78% of the non-discretionary expenditure increases proposed for the 2027 sewer rates. Richmond's 2027 sewer rates are based on Metro Vancouver's sewer levy from the proposed 2027-2031 Financial Plan (Table 7 on the next page).

Table 7: Metro Vancouver 5-Year Projected Total Sewer Levy Cost for Richmond (from the Proposed 2027-2031 Financial Plan)

	2027	2028	2029	2030	2031
O&M and Debt	$44.2M	$47.2M	$49.2M	$52.4M	$55.8M
Average Annual NSWWTP Debt Servicing	$11.9M	$11.9M	$11.9M	$11.9M	$11.9M
Total Levy	$56.1M	$59.1M	$61.1M	$64.3M	$67.7M
% Change	4.1%	5.3%	3.4%	5.3%	5.2%

Metro Vancouver rate increases are significant and are anticipated to continue rising in future years due to the Lulu Island Wastewater Treatment Plant upgrades and Iona Wastewater Treatment Plant Upgrade project for which some costs are shared by all sewerage areas. Since the projected costs for Metro Vancouver's major infrastructure projects throughout the region have increased by billions of dollars in recent years, the impact to City utility rates will be significant even with the majority of costs being allocated to other sewerage areas.

Metro Vancouver's Sewer Levy has increased by 320% since 2006, which is an average annual increase of 7.1%. This is notably higher than the City's sewer utility rate increases, which have increased by 127%, an average annual increase of 4.0%, over the same period.

Due to these increases, Metro Vancouver's Sewer Levy costs have increased from accounting for 63% of Richmond's sewer utility budget in 2006 to 76% in 2027 (Figure 3). The increases in Metro Vancouver costs are a primary budget driver for the Sewer Utility.

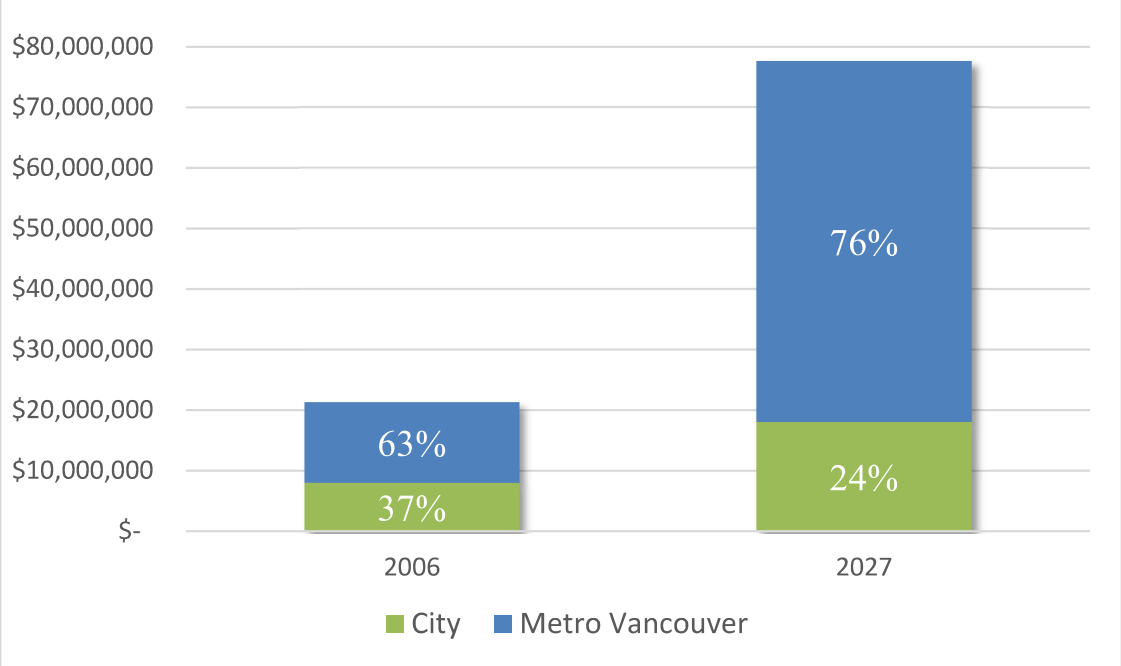


Figure 3: 2006 vs 2027 Sewer Utility Cost Breakdown

Sewer Salary and Operating Expenditures

The main cost drivers for the operating expenditure increase include the following:

- Salary increases of 3.5% plus step progressions and fringe benefits increases, including WorkSafeBC experience and industry premium increases; and
- Materials cost increases.

The average increase to the City's non-discretionary operating expenditures since 2023 has been 2.2%, which is below the CPI over the same period.

Sewer Capital Infrastructure Replacement Program

The Sewer Capital Infrastructure Replacement Program facilitates proactive management of the City's sewer assets, which allows the City to maintain a high level of service by minimizing sewer breaks and service disruptions.

The City received approval from the Minister of Housing for an exemption from the Bill 44 housing requirement until December 30, 2030 for the Steveston area. The temporary exemption is required to complete critical sanitary sewer infrastructure works in order to allow increased housing density in the form of small-scale multi-unit housing. Completing these works by the extended deadline while maintaining existing infrastructure will place additional demands on the City's sewer capital program. Annual capital funding will need to be increased in future years in order to complete the required Steveston sanitary sewer infrastructure works.

The annual capital contribution for sewer infrastructure replacement is currently $8.0M. The "Ageing Utility and Road Infrastructure Planning – 2025 Update" report identified a long-term annual funding requirement of $14.7M. Option 2 and Option 3 include a $0.5M and $1.0M increase to the Sewer Capital Infrastructure Replacement Program, respectively.

Although the funding gap does not affect short-term service levels, increasing capital funding over time remains important to replace ageing infrastructure, reduce the risk of failures and support future housing needs. Long-term funding requirements will continue to be reviewed through future utility budgets and updates to the City's ageing infrastructure report.

Overhead Allocation

Administrative overhead represents the corporate services required to support utility operations, including financial management, human resources, information technology, purchasing, legal, and general administration. To recognize the cost of these services, the City applies an established overhead allocation to direct labour, materials, and equipment. This approach aligns the utility budgets with the current level of corporate support provided and ensures the appropriate allocation of corporate costs to the utility services that benefit from them. The Overhead rate adjustment for the Sewer utility is $300,000.

Revenues/Transfers

Sewer Levy Provision for Rate Stabilization

The Sewer Levy Provision was established by Council as a funding source for sewer rate stabilization. The Provision is projected to have a balance of $3.1M as of November 1, 2026, and is intended to address temporary spikes in regional sewer collection and treatment costs.

None of the options for 2027 include a planned drawdown from the Sewer Levy Provision, and staff recommend that the Provision continue to be preserved in anticipation of future Metro Vancouver rate increases.

Construction Period Revenues

The City receives construction period revenues from development for sewer use during construction. The revenue can vary significantly from year to year depending on construction activity. Due to the instability of this revenue source, it is not utilized as a funding source for operational activity. Any actual revenue received is transferred to the Sewer Levy Stabilization provision for future rate stabilization funding. An estimate is included in the budget based on the last three full years of activity with an offsetting transfer to provision for reference.

Impact on 2027 Sewer Rates

The impact of the three budget options on sewer rates is shown in Table 8 and Table 9 on the next page. Table 8 shows the options for metered customers and Table 9 shows the options for flat rate customers. The italicized numbers represent the difference between 2026 and the rate options for 2027.

Option 1 is the recommended option and represents non-discretionary increases that are required to meet demands placed on the City by factors outside of the City's direct control. Option 2 includes everything in Option 1, and a $500,000 increase to the Sewer Capital Infrastructure Replacement Program. Option 3 includes everything in Option 2, and an additional $500,000 increase to the Sewer Capital Infrastructure Replacement Program.

Table 8: 2027 Metered Rate Sewer Options (Net of Discount)

Customer Class	2026 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling (based on 325 m^3 average consumption)	$835.22	$902.02 *$66.80*	$908.21 *$72.99*	$914.39 *$79.17*
Townhouse (based on 218 m^3 average consumption)	$560.24	$605.05 *$44.81*	$609.20 *$48.96*	$613.34 *$53.10*
Apartment (based on 157 m^3 average consumption)	$403.47	$435.75 *$32.28*	$438.74 *$35.27*	$441.72 *$38.25*
Metered Rate ($/$m^3$)	$2.5699	$2.7755 *$0.2056*	$2.7945 *$0.2246*	$2.8135 *$0.2436*
Metro Vancouver % Change		*6.2%*	*5.8%*	*5.5%*
City % Change		*1.8%*	*2.9%*	*4.0%*
Total % Change		***8.0%***	***8.7%***	***9.5%***

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

Table 9: 2027 Flat Rate Sewer Options (Net of Discount)

Customer Class	2026 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling	$1,053.65	$1,137.94 *$84.29*	$1,145.73 *$92.08*	$1,153.52 *$99.87*
Townhouse	$964.05	$1,041.18 *$77.13*	$1,048.31 *$84.26*	$1,055.44 *$91.39*
Apartment	$802.91	$867.15 *$64.24*	$873.08 *$70.17*	$879.02 *$76.11*
Metro Vancouver % Change		*6.2%*	*5.8%*	*5.5%*
City % Change		*1.8%*	*2.9%*	*4.0%*
Total % Change		***8.0%***	***8.7%***	***9.5%***

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

The City's Sanitary Sewer Bylaw No. 10427 provides a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The rates outlined in Table 8 and Table 9 are net discounted rates.

Sewer Utility Options Summary

The following is a summary of the Sewer Utility budgets and rates for Option 1:

Option 1 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.

The following is a summary of the Sewer Utility budgets and rates for Option 2:

Option 2

- Includes everything in Option 1; and
- Increases annual capital funding by $500,000.

The following is a summary of the Sewer Utility budgets and rates for Option 3:

Option 3

- Includes everything in Option 2; and
- Increases annual capital funding by an additional $500,000.

Sewer Utility Recommended Option

Staff recommend the budgets and rates identified in Option 1 for the Sewer Utility. This option includes the minimum increase required to maintain current service levels and limits the rate increase.

Flood Protection Utility

The three budget options for the Flood Protection Utility are shown in Table 10 below. Italicized values represent the difference between the 2026 rates and the 2027 rate options. The 2027 base budget for each option is equal to the sum of the 2026 base budget plus the changes in italics. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections of this report.

Table 10: 2027 Flood Protection Utility Budget

Key Budget Areas	2026 Base Level Budget	Option 1 (Recommended) Non-Discretionary Increases + Increase to Annual Capital Funding per the Accelerated Flood Protection Program	Option 2 Option 1 + $250,000 Increase to Annual Capital Funding	Option 3 Option 2 + $250,000 Additional Increase to Annual Capital Funding
Expenditures				
Salary	$6,654,500	*$374,700*	*$374,700*	*$374,700*
Operating Expenditures	$3,523,700	*$348,800*	*$348,800*	*$348,800*
Capital Infrastructure Replacement Program	$18,193,000	*$2,277,500*	*$2,527,500*	*$2,777,500*
Firm Price/Receivable	$691,300	*-$96,600*	*-$96,600*	*-$96,600*
Overhead Allocation	$0	*$600,000*	*$600,000*	*$600,000*
Total Base Level Expenditure Budget	**$29,062,500**	**$32,566,900**	**$32,816,900**	**$33,066,900**
Revenues/Transfers				
Provision	-$105,500	*$69,500*	*$69,500*	*$69,500*
Investment Income	-$39,000	*$0*	*$0*	*$0*
Firm Price/Receivable	-$691,300	*$96,600*	*$96,600*	*$96,600*
Total Base Level Revenue Budget	**-$835,800**	**-$669,700**	**-$669,700**	**-$669,700**
Net Budget	**$28,226,700**	**$31,897,200**	**$32,147,200**	**$32,397,200**
Net Difference Over 2026 Base Level Budget		***$3,670,500***	***$3,920,500***	***$4,170,500***

The expenditures and revenues for the Flood Protection Utility budget reductions and increases given in Table 10 are outlined on the following page.

Expenditures

The key driver for the Flood Protection Utility is the Capital Infrastructure Replacement Program increases as part of the Accelerated Flood Protection Program. Secondary drivers include Salary and Operating expenditures.

Accelerated Flood Protection Program

Scientific modelling predicts up to 1 m of sea level rise and 0.2 m of ground settlement by 2100. The City's Flood Protection Management Strategy identifies the need to raise the City's dikes by approximately 1.2 m to protect the City against flooding. At the April 12, 2021 Council Meeting, Council adopted a 50-year implementation period for an accelerated flood protection program with the objective of upgrading the City's dikes within 50 years.

In order to deliver this program and upgrade flood protection infrastructure well in advance of current anticipated climate change impacts, $38.7M in annual capital funding within the Flood Protection Utility is required by 2032, as outlined in the "2025 Ageing Utility and Road Infrastructure Planning – Update" report. All utility options presented in the report include increasing the annual rates due to the increase in the annual transfer to capital reserves from $18.2M to $20.5M to support acceleration of this program as a component of the overall flood protection budget. Annual capital funding would need to increase by an average of $3.65M in each of the next five budget cycles to reach the target annual funding.

Due to proactive flood protection planning efforts, the City has been successful in obtaining approximately $54M in senior government grants since 2010 to support the advancement of this work. A strong capital program allows the City to continue leveraging opportunities to secure grant funding, such that money collected from Richmond's residents is multiplied and provides greater value for investments into Richmond's flood protection infrastructure.

Flood Protection Salary and Operating Expenditures

The main cost drivers for the operating expenditure increase include the following:

- Salary increases of 3.5% plus step progressions and fringe benefits increases, including WorkSafeBC experience and industry premium increases;
- Materials cost increases; and
- Third party utility rate increases.

The City's operating expenditures are carefully managed, and considerable measures have been taken to minimize cost increases where possible.

Flood Protection Provision for Rate Stabilization

The Flood Protection Provision is projected to have a balance of $4.6M as of November 1, 2026 and is intended to stabilize utility rates when unforeseen infrastructure failures or emergency works require additional capital funding.

Overhead Allocation

Administrative overhead represents the corporate services required to support utility operations, including financial management, human resources, information technology, purchasing, legal, and general administration. To recognize the cost of these services, the City applies an established overhead allocation to direct labour, materials, and equipment. This approach aligns the utility budgets with the current level of corporate support provided and ensures the appropriate allocation of corporate costs to the utility services that benefit from them. The Overhead rate adjustment for the Flood Protection Utility is $600,000.

Impact on 2027 Flood Protection Rates

Since 2016, Council has endorsed the creation of flood protection rate classes that differentiated between the various types of property in the City. Prior to this, all accounts paid the same rate regardless of parcel size or assessed value. Creating equity between these rate classes is an ongoing effort as property values, land use and construction costs continue to evolve. In general, groups with higher value assets, such as ICI properties, will be contributing more to flood protection and the rate increases reflect the different levels of demand that properties place on the City's flood protection system.

Staff will continue to review the various rate classes to identify opportunities for improving balance and equity and will bring forward resulting recommendations for Council's consideration.

The impact of the three budget options on flood protection rates is shown in Table 11 on the next page. The italicized numbers represent the difference between 2026 and the rate options for 2027.

Option 1 is the recommended option and represents non-discretionary increases that are required to maintain existing levels of services and includes increases to annual transfer to capital reserves funding per the Accelerated Flood Protection Program.

Option 2 includes everything in Option 1, and $250,000 towards the capital program, further accelerating the Flood Protection Program.

Option 3 includes everything in Option 2, and an additional $250,000 towards the capital program, further accelerating the Flood Protection Program.

Table 11: 2027 Flood Protection Rate Options (Net of Discount)

Rate Class	2026 Rates	Unit Count	Option 1 (Recommended)	Option 2	Option 3
Single-family Residential	$342.00	28,484	$374.61 *$32.61*	$377.56 *$35.56*	$380.50 *$38.50*
Agricultural	$342.00	764	*$374.61* *$32.61*	*$377.56* *$35.56*	*$380.50* *$38.50*
Multi-family Residential	$230.98	60,804	$253.01 *$22.03*	$255.00 *$24.02*	$256.98 *$26.00*
Small ICI (less than 800m^2)	$342.00	129	$374.61 *$32.61*	$377.56 *$35.56*	$380.50 *$38.50*
ICI (from 800m^2 and 1,999m^2)	$661.13	262	$724.18 *$63.05*	$729.87 *$68.74*	$735.56 *$74.43*
Medium ICI (from 2,000m^2 and 9,999m^2)	$1,624.53	755	$1,779.44 *$154.91*	$1,793.43 *$168.90*	$1,807.42 *$182.89*
Large ICI (from 10,000m^2 and 19,999m^2)	$3,722.22	219	$4,077.16 *$354.94*	$4,109.21 *$386.99*	$4,141.26 *$419.04*
Large ICI (from 20,000m^2 and 49,999m^2)	$8,375.41	188	$9,174.06 *$798.65*	$9,246.18 *$870.77*	$9,318.30 *$942.89*
Large ICI (from 50,000m^2 and 99,999m^2)	$12,274.47	39	$13,444.91 *$1,170.44*	$13,550.61 *$1,276.14*	$13,656.31 *$1,381.84*
Large ICI (from 100,000m^2 and 499,999m^2)	$21,646.09	24	$23,710.17 *$2,064.08*	$23,896.57 *$2,250.48*	$24,082.97 *$2,436.88*
Largest ICI (above 500,000m^2)	$50,853.80	3	$55,703.01 *$4,849.21*	$56,140.92 *$5,287.12*	$56,578.84 *$5,725.04*
% Change			*9.5%*	*10.4%*	*11.3%*

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

The City's Flood Protection Bylaw No. 10426 provides a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The rates outlined in Table 11 are net discounted rates.

Flood Protection Utility Options Summary

The following is a summary of the Flood Protection Utility budgets and rates for Option 1:

Option 1 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service; and
- Increases the annual capital funding by $2.3M.

The following is a summary of the Flood Protection Utility budgets and rates for Option 2:

Option 2

- Includes everything in Option 1; and
- Includes a $250,000 increase to annual capital funding.

The following is a summary of the Flood Protection Utility budgets and rates for Option 3:

Option 3

- Includes everything in Option 2; and
- Includes an additional $250,000 increase to annual capital funding.

Recommended Option

Staff recommend the budgets and rates identified in Option 1 for the Flood Protection Utility. This option includes increased annual capital funding in accordance with the Council-approved Accelerated Flood Protection Program and increases necessary to maintain the current level of service. Additional annual capital budget increases ranging from $2.8M to $4.6M over the next five budget cycles will be required in order to reach the $38.7M annual capital funding level needed to deliver the program.

Solid Waste and Recycling Utility

Table 12 presents three budget options for the Solid Waste and Recycling Utility. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections.

Table 12: 2027 Solid Waste and Recycling Budget

Key Budget Areas	2026 Amended Budget	Option 1 Base Level Services	Option 2 (Recommended) Option 1 + $0.25M Contribution to Reserve	Option 3 Option 2 + Environmental Coordinator 2
Expenditures				
Salaries	$6,175,000	*$17,600*	*$17,600*	*$149,500*
Contracts	$12,310,500	*$231,600*	*$231,600*	*$271,600*
Equipment/Materials	$1,476,400	*$1,400*	*$1,400*	*$4,500*
Disposal Costs	$1,801,200	*$197,700*	*$197,700*	*$197,700*
Recycling Materials Processing	$4,517,300	*$104,600*	*$104,600*	*$104,600*
Container Rental/Collection	$537,000	*$12,800*	*$12,800*	*$12,800*
Operating Expenditures	$670,700	*-$19,800*	*-$19,800*	*-$16,600*
Overhead Allocation	$217,000	*$713,200*	*$713,200*	*$713,200*
Agreements	$95,000	*$0*	*$0*	*$0*
Rate Stabilization	$1,881,400	*-$51,300*	*-$51,300*	*-$51,300*
Construction Period Allocation	$25,000	*$0*	*$0*	*$0*
Transfer to Reserve	$750,000	*$0*	*$250,000*	*$250,000*
Total Base Level Expenditure Budget	**$30,456,500**	**$31,664,300**	**$31,914,300**	**$32,092,500**
Revenues/Transfers				
General Application Fees	-$112,600	*$0*	*$0*	*$0*
Recycling Materials	-$502,900	*-$27,100*	*-$27,100*	*-$27,100*
Garbage Tags	-$20,000	*$0*	*$0*	*$0*
Unrealized Discounts	-$112,000	*-$5,000*	*-$5,000*	*-$5,000*
Revenue Sharing Grant/Other	-$134,800	*-$2,500*	*-$2,500*	*-$2,500*
Recycling Commission	-$328,600	*-$6,500*	*-$6,500*	*-$6,500*
Recycle BC Incentive	-$5,059,300	*-$158,600*	*-$158,600*	*-$158,600*
Construction Period Revenue	-$25,000	*$0*	*$0*	*$0*
Provision (Pilot Initiatives)	-$806,100	*$657,500*	*$657,500*	*$657,500*
Total Base Level Revenue Budget	**-$7,101,300**	**-$6,643,500**	**-$6,643,500**	**-$6,643,500**
Net Budget	**$23,355,200**	**$25,020,800**	**$25,270,800**	**$25,449,000**
Net Difference Over 2026 Base Level Budget		**$1,665,600**	**$1,915,600**	**$2,093,800**

An explanation of the budget reductions and increases outlined in Table 12 is below.

Expenditures

Salaries

The 2027 base level budget includes salary increases of 3.5% plus step progressions and fringe benefits increases, including WorkSafeBC experience and industry premium increases, which are the primary drivers for non-discretionary increases.

Three temporary full-time (TFT) positions previously funded by the General Solid Waste and Recycling Provision concluded with the end of pilot programs in 2026. The textiles, bike reuse and business recycling support pilot programs were approved for formalization into on-going program costs utilizing existing staffing levels. This reduction in TFT staff is reflected in savings in Salaries, which helps offset the staff rate increases.

Increases under Option 3 include a request for a new regular full-time Environmental Coordinator 2 position to support expansion of pollution prevention activities from Mitchell Island to a City-wide, risk-based program. This will require sustained program leadership and ongoing business outreach and assessments, corrective action follow-up, water-quality monitoring, interagency coordination and enforcement support.

Contracts

Contract costs under Option 1 are increased in accordance with overall growth in the number of units serviced and escalation clauses as stipulated in the City's various solid waste and recycling service contracts.

Contract costs also include adjustments for programs such as textiles, bike reuse and business recycling support which are now formalized from previous pilots.

Option 3 includes specialized services to support the Environmental Coordinator 2 in delivery of the pollution prevention program such as laboratory analysis, water quality and sediment monitoring.

Equipment and Material Costs

Equipment and material cost increases are marginally adjusted under Option 1 associated with increased costs for recycling receptacles and under Option 3 for computer equipment to support the Environmental Coordinator 2 position.

Disposal Costs

Disposal costs are increased associated with Metro Vancouver's regional tipping fee for local governments. Metro Vancouver is proposing to increase this fee by $8 per tonne, or from $148 per tonne in 2026 to $156 per tonne in 2027.

Recycling Materials Processing

Recycling materials processing costs are increased due to higher organics tonnage drop off at Ecowaste as well as for rate increases under contractual service agreements for organics processing for residential collection and Recycling Depot material processing.

Container Collection Costs

Container collection costs have increased primarily due to contractual increases for hauling Works Yard waste/recycling materials and recyclable materials from the Recycling Depot.

Operating Expenditures

Operating expenditures are reduced under Option 1 and associated with program adjustments through formalizing pilot programs. Option 3 reflects minor expenditures to support the Environmental Coordinator 2 position.

Overhead Allocation

Administrative overhead represents the corporate services required to support utility operations, including financial management, human resources, information technology, purchasing, legal, and general administration. To recognize the cost of these services, the City applies an established overhead allocation to direct labour, materials, and equipment. This approach aligns the utility budgets with the current level of corporate support provided and ensures the appropriate allocation of corporate costs to the utility services that benefit from them. The overhead rate adjustment applied to the Solid Waste and Recycling Utility is $700,000.

General Solid Waste & Recycling Rate Stabilization Provision (Rate Options)

The General Solid Waste and Recycling Provision was established by Council as a funding source for rate stabilization. The Provision has a balance of $17.6M as of November 1, 2026.

Rate stabilization is reduced by $51,300 under all options to maintain Blue Box and Blue Cart fees at current levels as per previous Council direction.

Transfer to Reserve

The creation of the Solid Waste and Recycling Reserve Fund Establishment Bylaw No. 10417 was approved at the November 14, 2022 Council meeting. Option 1 maintains the contribution of $750,000 to the reserve, and Options 2 and 3 would increase the contribution to $1,000,000 for future funding needs for Solid Waste and Recycling programs. The current annual reserve target is $3.5 million and is required to ensure a funding source for facilities, equipment and infrastructure for City services including the Recycling Depot, litter operations and collection receptacles used by residents.

Revenues

Recycling Materials

Recycling material revenue is increased based on market rates for commodities collected at the Recycling Depot and additional material being dropped off for recycling. The increased revenues are primarily related to adjustments in market rates for scrap metal and lead acid batteries, along with noted volume increases for scrap metal, motor oil and batteries.

Unrealized Discounts

Residents are entitled to a 10% utility bill discount if the amount owing is paid on or before the due date. Unrealized discounts are comprised of late payments wherein the owner did not receive the discount due to making the payment after the due date, therefore the discount amount is then considered a revenue for the City. These revenues are estimated by the Finance Department based on the trend of historic payments.

Other Revenues

This marginal increase is based on additional commercial customers utilizing the yard trimming drop-off service at the Recycling Depot.

Recycling Commission

Since 2022, the City has received funding from Metro Vancouver for allowing regional customers to drop off base recycling materials at the Recycling Depot. The increase for 2027 represents an estimated 2.0% CPI adjustment as outlined in the agreement.

Recycle BC Incentive

Under the agreement with Recycle BC, effective January 1, 2025, an allowance for annual adjustments to the financial incentives is applied based on either a cost study or the Consumer Price Index (CPI) for BC. The increase is partially related to the CPI adjustment but also is reflective of the additional households covered under the agreement as recycling services are implemented for new construction. A slight increase to the volume of polystyrene foam, flexible plastic and glass bottles and jars under the Recycle BC agreement is reflected in the additional revenue being received.

Construction Period Revenues

The City receives construction period revenues from development for solid waste and recycling during construction. The revenue can vary significantly from year to year depending on construction activity. Due to the instability of this revenue source, it is not utilized as a funding source for operational activity. Any actual revenue received is transferred to the General Solid Waste and Recycling provision for future rate stabilization funding. An estimate is included in the budget based on the last three full years of activity with an offsetting transfer to provision for reference.

Provision

Provision funding is being reduced as a number of pilot programs have been concluded and established as on-going programs removing the requirement for this provision funding.

Impact on 2027 Solid Waste and Recycling Rates

The impact of the budget options to ratepayers is provided in Table 13 below and Table 14 on the next page. The principal reason for the increase in 2027 relates to salary increases per negotiated agreements, inflationary contract costs stipulated in existing contracts, an increase in the regional tipping fee, and changes related to material processing at the Recycling Depot. Numbers in italics represent the difference between 2026 rates and the various rate options for 2027.

Table 13 provides total costs based on standard garbage cart sizes for single-family (240L) and townhouse (120L). Table 14 provides a more detailed breakdown of recommended Option 2 rates based on the four different garbage cart size options that are available to residents in single-family and townhouse units. The percentage of container sizes subscribed by each customer class is also presented for reference. Residents can reduce or increase the amount they pay based on the cart size they select for garbage collection services.

Table 13: 2027 Solid Waste and Recycling Rate Options (Net of Discount)

Customer Class	2026 Rates	Option 1	Option 2 (Recommended)	Option 3
Single-Family Dwelling (Standard 240L Cart)	$442.55	$458.60 *$16.05*	$461.15 *$18.60*	$463.00 *$20.45*
Townhouse (Standard 120L Cart)	$314.25	$326.60 *$12.35*	$329.15 *$14.90*	$331.00 *$16.75*
Apartment	$155.80	$166.55 *$10.75*	$169.10 *$13.30*	$170.95 *$15.15*
Business Rate	$53.99	$56.82 *$2.83*	$59.37 *$5.38*	$61.22 *$7.23*
Total % Change		*3.6% to 6.9%*	*4.2% to 10.0%*	*4.6% to 13.4%*

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

Table 14: 2027 Single-Family and Townhouse Net Rates by Garbage Cart Size (Per Recommended Option 2)

Cart Size	Single Family		Townhomes	
	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size
80L	$399.80	*4.0%*	$298.80	*14.1%*
120L	$430.15	*10.3%*	$329.15	*75.1%*
240L	$461.15	*77.3%*	$360.15	*10.2%*
360L	$591.00	*8.4%*	$490.00	*0.6%*

The rates outlined in Table 13 and Table 14 are net rates. The *Solid Waste & Recycling Regulation Bylaw* provides a 10% discount for utility bills paid prior to the due date. The rates shown in the bylaw will be before the 10% discount is applied, in order to achieve full cost recovery.

Solid Waste and Recycling Options Summary

The following is a summary of the Solid Waste and Recycling Utility budgets and rates for Option 1:

Option 1

- Represents full recovery via rates of all program costs, including costs associated with managing increasing operating costs, disposal costs and recycling material processing fees; and
- Meets the City's contractual obligations related to inflationary aspects of agreements and contracts.

The following is a summary of the Solid Waste and Recycling Utility budgets and rates for Option 2:

Option 2 (Recommended)

- Includes everything in Option 1; and
- Includes an increased contribution to the Solid Waste and Recycling Reserve Fund from $750,000 to $1,000,000 for future solid waste and recycling programming inclusive of Recycling Depot improvement and replacement costs, facilities and equipment to support services to the community, and initiatives designed to further circular economy objectives.

The following is a summary of the Solid Waste and Recycling Utility budgets and rates for Option 3.

Option 3

- Includes everything in Option 2; and
- Includes a new Environmental Coordinator 2 position to expand pollution prevention activities.

Recommended Option

Staff recommend the budget and rates identified in Option 2 for Solid Waste and Recycling. This option funds all existing programs and includes an increased contribution to the Solid Waste and Recycling Reserve Fund to support these programs and future solid waste and recycling programming.

Total Recommended 2027 Utility Rate Option

In light of the significant challenges associated with the impacts of regional costs and new programs in the City, staff recommend the budget and rate options as follows:

- Option 1 is recommended for Water
- Option 1 is recommended for Sewer
- Option 1 is recommended for Flood Protection
- Option 2 is recommended for Solid Waste and Recycling

Table 15 below summarizes the estimated total metered rate utility charge, based on average water and sewer consumption. Table 16 on the next page summarizes the total flat rate utility charge. Numbers in italics represent the difference between 2026 rates and 2027 proposed rates.

Table 15: 2027 Estimated Total Net Rates to Metered Customers

Customer Class	2026 Estimated Net Metered Rates	2027 Estimated Net Metered Rates	% Change
Single-Family Dwelling	$2,250.57	$2,399.98 *$149.41*	*6.6%*
Townhouse (on City garbage service)	$1,535.61	$1,638.41 *$102.80*	*6.7%*
Townhouse (not on City garbage service)	$1,423.11	$1,523.56 *$100.45*	*7.1%*
Apartment	$1,083.11	$1,165.88 *$82.77*	*7.6%*
Metered Water ($/m^3)	$1.8080	$1.9046 *$0.0966*	*5.3%*
Metered Sewer ($/m^3)	$2.5699	$2.7755 *$0.2056*	*8.0%*

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

Table 16: 2027 Total Net Rates to Flat Rate Customers

Customer Class	2026 Net Flat Rates	2027 Net Flat Rates	% Change
Single-Family Dwelling	$2,798.34	$2,985.14 *$186.80*	*6.7%*
Townhouse (on City garbage service)	$2,295.23	$2,451.28 *$156.05*	*6.8%*
Townhouse (not on City garbage service)	$2,182.73	$2,336.44 *$153.71*	*7.0%*
Apartment	$1,696.16	$1,822.79 *$126.63*	*7.5%*

Note: The italicized numbers represent the difference between 2026 rates and the rate options for 2027.

The rates outlined in Table 15 and Table 16 are net rates. The bylaws provide a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The gross rates charged to residents are outlined in Attachment 1. These rates would be reflected in the amending bylaws for each utility area, should they be approved by Council.

Flat Rate and Metered Customers

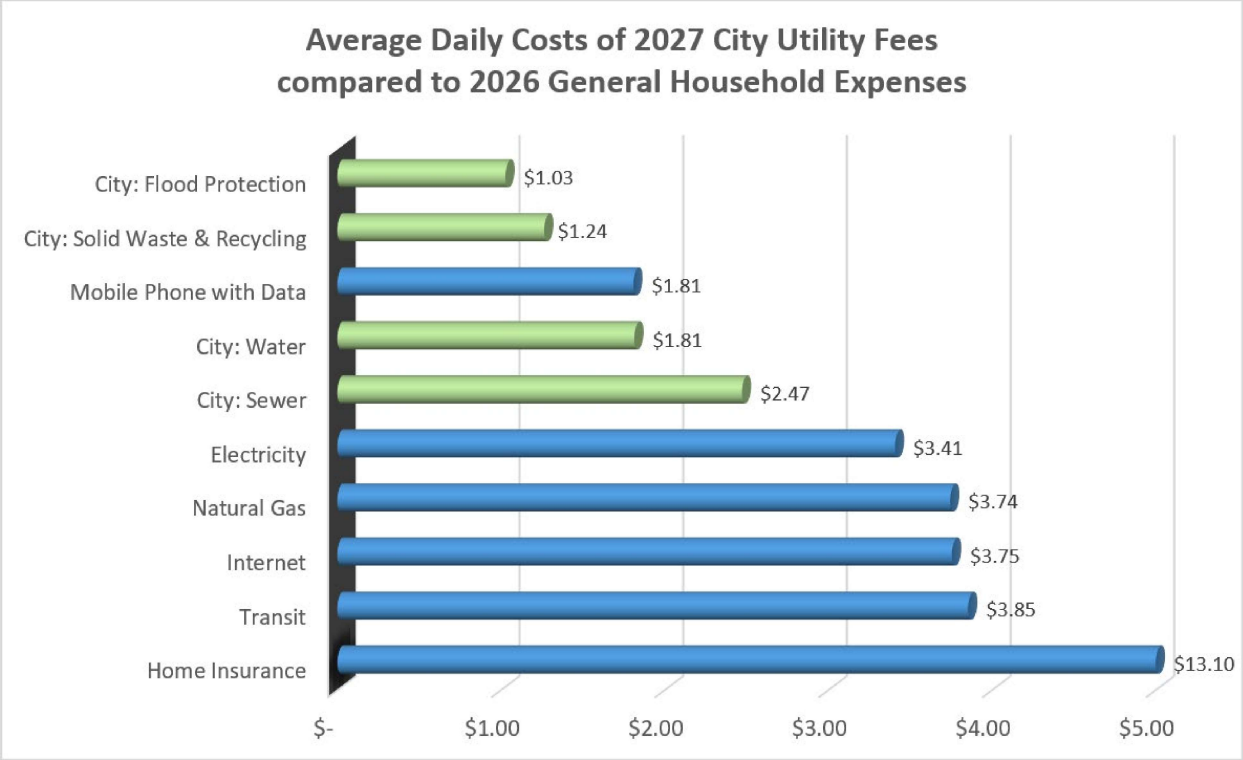
All single-family and ICI properties in the City are metered. The single-family residential flat rate will continue to apply to duplex units that share one water service. 33% of townhouses and apartments are still on flat rate utility services. However, the number of units with meters will continue to increase with ongoing implementation of the universal multi-family water metering program. The number of units by customer class is presented in Table 17.

Table 17: Flat Rate and Metered Property Unit Counts

	2026 percentages (Mid-Year)	2026 Counts (Mid-Year)	2027 Counts (Mid-Year Estimated)	Difference
Single-Family Residential	Flat Rate (3%)	732	732	0
	Metered (97%)	28,139	28,268	129
Townhouse	Flat Rate (45%)	8,435	8,248	-187
	Metered (55%)	10,238	11,109	871
Apartment	Flat Rate (27%)	11,248	10,916	-332
	Metered (73%)	30,586	31,968	1,382
Total Residential Units		**89,378**	**91,241**	**1,863**
Commercial Units	**Metered**	**3,554**	**3,560**	**6**
Farms	**Metered**	**51**	**51**	**0**

Comparison of 2027 City Utility Rates to Other Major Household Expenses

The proposed 2027 City utility fees account for approximately 18% of total household expenses (2026 values) and represent good value. Water, sewer, solid waste and recycling, and flood protection services are fundamental to the quality of life for residents and necessary infrastructure to support the local economy. Figure 4 illustrates the value of these services based on the proposed 2027 rates when compared to 2026 costs for other common daily household expenses.



Sources: BC Hydro, Fortis BC, Rogers, TD Insurance, and TransLink
Figure 4: Cost Comparison of Main Household Expenses for a Single-Family Dwelling

Budgetary Implications

The budget and rate impacts associated with each option are outlined in detail in this report. In all options, the budgets and rates represent full cost recovery for each City service.

Staff recommend the following budgets by utility:

- Option 1 is recommended for Water, for a net budget of $60.1M;
- Option 1 is recommended for Sewer, for a net budget of $73.8M;
- Option 1 is recommended for Flood Protection, for a net budget of $31.9M;
- Option 2 is recommended for Solid Waste and Recycling, for a net budget of $25.3M; and
- An overall net utility budget of $191.1M.

Conclusion

This report presents the proposed 2027 utility budgets and rates for City services relating to the provision of water, sewer, flood protection, as well as solid waste and recycling. Considerable measures have been taken to reduce costs where possible to minimize rate increases. A significant portion of the City's costs relate to impacts from influences outside of the City's direct control, such as regional and contract cost impacts. Regional costs are expected to continue increasing to meet demands for high quality drinking water and sewer treatment. Staff recommend that the budgets and rates, as outlined in this report, be approved and that the appropriate amending bylaws be brought forward to Council to bring these rates into effect.

Respectfully submitted,

Milton Chan, Director, Engineering
Suzanne Bycraft, Director, Public Works
Mike Ching, Director, Finance

Report Contributors

This report was prepared by Jason Ho, Manager, Engineering Planning, Kristina Grozdanich, Manager, Recycling and Waste Recovery, and Melissa Shiau, Manager, Financial Planning & Analysis and reviewed by: Finance, Engineering and Environmental Programs.

Endorsed by Serena Lusk, CAO

Att. 1

2027 Annual Utility Charges – Recommended Gross Rates per Bylaw (Estimated Metered and Actual Flat Rate)

10% discount applied to gross rates for utility bills paid prior to due date	**Water**	**Sewer**	**Flood Protection**	**Garbage/ Recycling**	**Total**
Metered (Based on Average Consumption)					
Single-Family Dwelling	$735.78	$1,002.24	$416.23	$512.40	**$2,666.65**
Townhouse (with City garbage)	$501.33	$672.28	$281.12	$365.73	**$1,820.46**
Townhouse (no City garbage)	$501.33	$672.28	$281.12	$238.12	**$1,692.85**
Apartment	$342.24	$484.17	$281.12	$187.89	**$1,295.42**
Flat Rate (Actual)					
Single-Family Dwelling	$1,123.82	$1,264.38	$416.23	$512.40	**$3,316.83**
Townhouse (with City garbage)	$919.93	$1,156.87	$281.12	$365.73	**$2,723.65**
Townhouse (no City garbage)	$919.93	$1,156.87	$281.12	$238.12	**$2,596.04**
Apartment (no City garbage)	$592.81	$963.50	$281.12	$187.89	**$2,025.32**
General – Other/Business					
Metered Water ($/m^3)	$2.1162				
Metered Sewer ($/m^3)		$3.0839			
Business: Garbage				$65.97	
Small ICI (less than 800m^2)			$416.23		
ICI (from 800m2 and 1,999m2)			$804.64		
Medium ICI (from 2,000m2 and 9,999m2)			$1,977.16		
Large ICI (from 10,000m2 and 19,999m2)			$4,530.18		
Large ICI (from 20,000m2 and 49,999m2)			$10,193.40		
Large ICI (from 50,000m2 and 99,999m2)			$14,938.79		
Large ICI (from 100,000m2 and 499,999m2)			$26,344.63		
Largest ICI (above 500,000m2)			$61,892.23		
Agricultural			$416.23		

City of Richmond

Report to Committee

To:	Finance & Audit Committee	**Date:**	October 16, 2026
From:	Jerry Chong General Manager, Finance and Corporate Services Chief Financial Officer, Lulu Island Energy Company	**File:**	01-0060-20-LIEC1/2026-Vol 01
Re:	**2027 District Energy Utility Rates**		

Staff Recommendations

1. That the Alexandra District Energy Utility Bylaw No. 8641, Amendment Bylaw No. 10792 be introduced and given first, second and third readings;

2. That the Oval Village District Energy Utility Bylaw No. 9134, Amendment Bylaw No. 10793 be introduced and given first, second and third readings; and

3. That the City Centre District Energy Utility Bylaw No. 9895, Amendment Bylaw No. 10794 be introduced and given first, second and third readings.

Executive Summary

Lulu Island Energy Company Ltd. (LIEC), a corporation wholly-owned by the City of Richmond, was established to provide district energy services on behalf of the City. All capital and operating costs are recovered through revenues from user fees, ensuring that the business is financially self-sustainable. City Council is the regulator and sets customer rates.

LIEC is seeking Council approval of 2027 rate amendments for the Alexandra, Oval Village, and City Centre District Energy Utilities. A 4.0% rate increase is proposed for all service areas to address anticipated utility and inflationary cost pressures, support capital and operating requirements, and maintain the long-term financial self-sustainability of the company. For a typical residential customer, this represents an estimated increase of approximately $4.30 per month.

Even with the proposed adjustment, district-energy customers are expected to pay about 13% less than comparable conventional energy system customers. The increase also supports future infrastructure investment, reserve requirements, and the continued expansion of low carbon district energy service in Richmond.

Staff Report

Origin

The purpose of this report is to recommend the 2027 Alexandra District Energy Utility (ADEU), Oval Village District Energy Utility (OVDEU), and City Centre District Energy Utility (CCDEU) district energy utility rates.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

> *3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.*

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

> *Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.*
>
> *5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.*

Lulu Island Energy Company Ltd. (LIEC), a corporation wholly-owned by the City of Richmond, was established to provide district energy services on behalf of the City. Information regarding LIEC's district energy utility (DEU) operations can be found in Attachment 1. All capital and operating costs are recovered through revenues from user fees, ensuring that the business is financially self-sustainable. City Council is the regulator and sets customer rates.

Analysis

The City incorporated LIEC in 2013 for the purpose of carrying out the City's district energy initiatives based on the following Council approved guiding principles:

1. The DEU will provide end users with energy costs that were competitive with conventional energy costs, based on the same level of service.
2. Council will retain the authority to set customer rates, fees and charges for DEU services.
3. The DEU will provide a flexible platform for adopting low-carbon energy technologies.

Based on these principles, LIEC staff have assessed the following factors when developing the 2027 rate recommendation:

- **Financially self-sustainable:** All LIEC service areas were established on the basis that all capital and operating costs would be recovered through revenues from user fees. Expenditures required to provide utility service include capital, operations, utilities, financing, and administration costs. These costs are susceptible to non-discretionary increases due to material and equipment cost increases, rises in electricity and natural gas rates and general inflation. Additionally, as endorsed by Council in 2022, LIEC executed

a Project Agreement (PA) with City Centre Energy Limited Partnership (Corix) to design, construct, finance, operate and maintain the CCDEU. As part of the annual planning process, Corix submits a request to LIEC for a rate increase for next year in line with the financial model regularly updated by LIEC and Corix. Following the rate increases as per the long-term financial model is critical to ensure the utility's positive financial performance and avoid increasing the capital repayment deferral account balance and/or under-recovering LIEC's operating expenses.

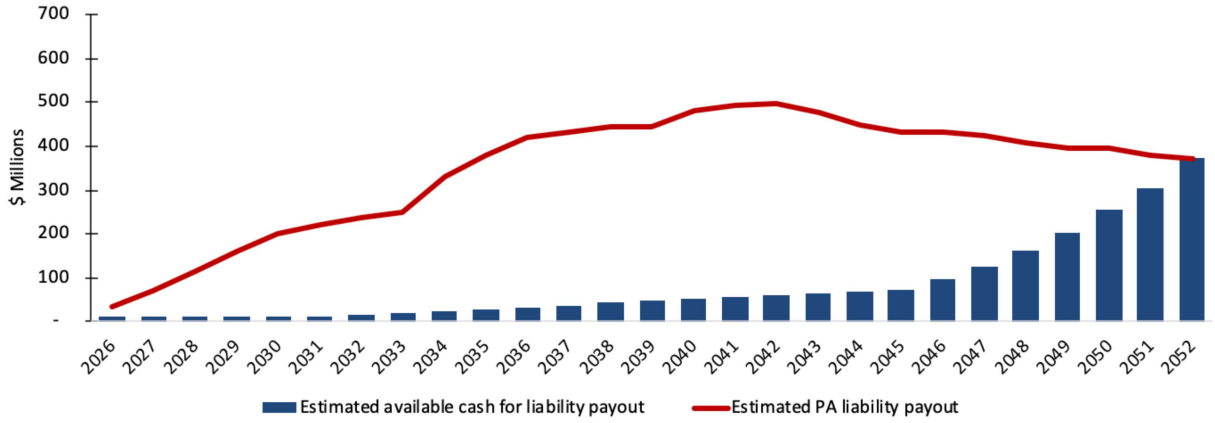
- **Competitive Rate:** Council's objective is to provide end users with annual energy costs that are competitive with conventional system energy costs, based on the same level of service. To date, LIEC's district energy rates have been compared to a Business as Usual (BAU) scenario based on the increase of conventional utilities (i.e. Fortis BC and BC Hydro). Staff regularly updates the BAU model to ensure the proposed district energy rates continue to be competitive with conventional energy systems that provide the same level of service and environmental performance.

Recommended 2027 Customer Rates

LIEC's systems are still early in their operational life and still require significant capital investments in distribution infrastructure and low carbon energy sources to connect more customers and ensure low carbon objectives are achieved. BC Hydro rates are expected to increase by 3.75%, while natural gas costs are projected to increase by 3.8% next year due to delivery rate increases. For CCDEU, the annual payment to Corix is projected to increase by approximately 5.2% next year based on the latest financial model, which represents approximately 60% of LIEC's overall cost of service. When all three service areas are considered, the recommended 4.0% rate increase is sufficient to recover LIEC's projected cost of service in 2027.

In order to provide competitive and stable rates for LIEC customers, rates are levelized to gradually recover costs as the customer base is fully established. This approach ensures infrastructure costs are more equitably distributed between existing customers and those who connect in later years. Based on the most recent LIEC financial model (Attachment 2), customer rates are estimated to increase by 4.0% year-over-year in order to fully recover operating expenses and avoid increasing the capital repayment deferral account balance. This increase is consistent with the historical increase of conventional utilities, making LIEC rates competitive with conventional energy costs, as per City Council's objective. This increase also ensures LIEC will have enough reserve funds available at the end of the Project Agreement to meet future liability obligations. Graph 1 illustrates the relationship between the estimated available reserve funds for liability payouts and confirms that sufficient liquidity will be available to meet future obligations.

Graph 1 – Projected Liability Coverage

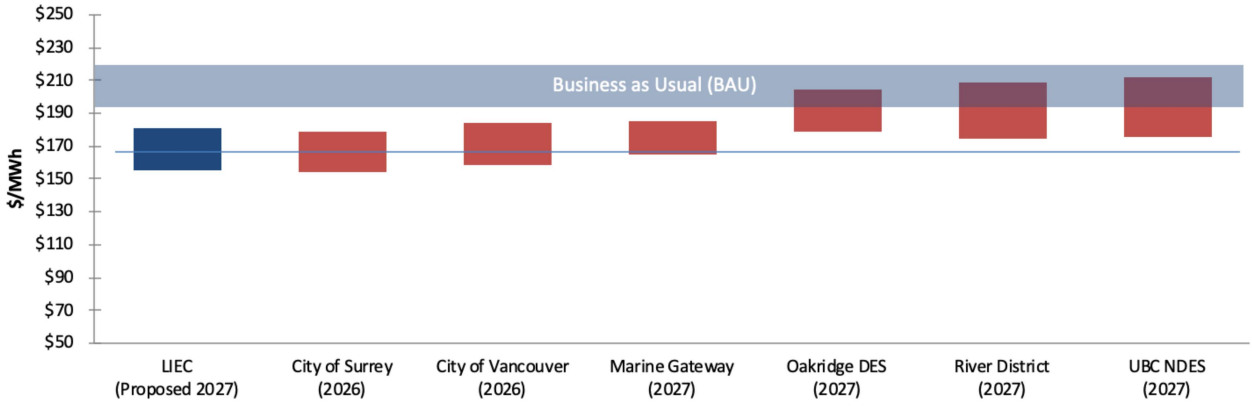


In consideration of these factors, a 4.0% rate increase is recommended for 2027 to ensure all capital and operating costs continue to be recovered in the long term. The recommended increase would also be sufficient to recover the non-discretionary increases due to electricity and natural gas rates and general inflation projected for 2027. The proposed 2027 service rates for the ADEU, OVDEU and CCDEU service areas are included in Attachments 7-9.

Rate Competitiveness

The recommended 4.0% rate increase also supports Council's objective to keep the annual energy costs for LIEC customers competitive with conventional energy costs, based on the same level of service. If the recommended rate increase is approved, LIEC customers would still be paying 13% less than users using equivalent conventional energy systems in Richmond based on the same level of service. Staff also conducted a benchmarking analysis to confirm LIEC rates are competitive with other district energy utilities in Metro Vancouver (see Graph 2).

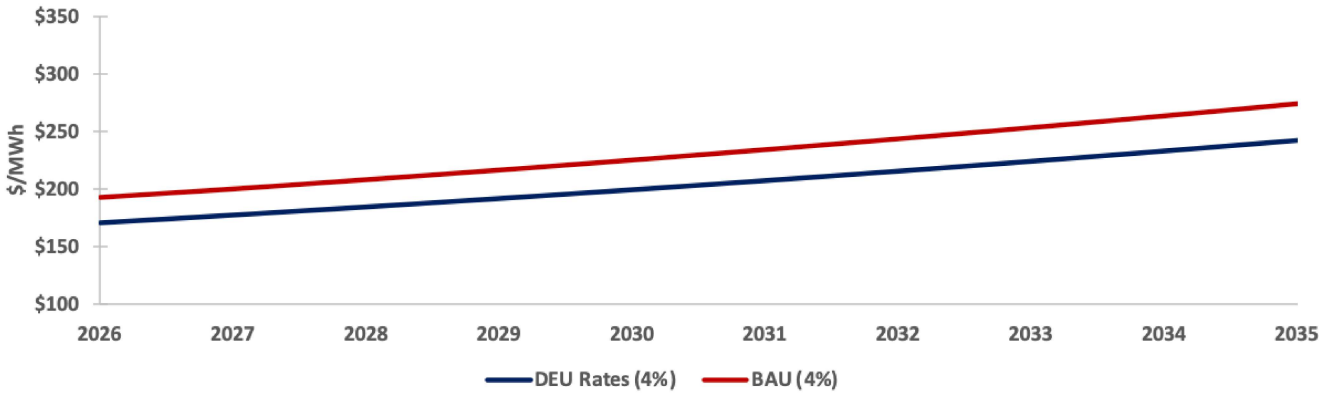
Graph 2 - Metro Vancouver DEU Rates Comparison[1]



The projected 4.0% year-over-year rate increase also ensures customer rates continue to grow at a similar rate to the historical increase of conventional utilities, making rates competitive in the long term (Graph 3).

[1] *Based on reported rates and assuming an EUI range of 70-90 kWh/m2 for heating and domestic hot water and 25 kWh/m2 for cooling*

Graph 3 – Projected DEU Rates vs BAU



The recommended 4.0% rate increase would result in approximately $4.30 per month increase in DEU fees in 2027 for the average LIEC residential customer.

Budgetary Implications

No impact to the City's budget. All LIEC capital and operating costs are recovered through user fees, as LIEC operates as a financially self-sustaining business enterprise.

Conclusion

The recommended 4.0% increase for ADEU, OVDEU and CCDEU 2027 service rates supports Council's objective to keep the annual energy costs for LIEC customers competitive with conventional energy costs, based on the same level of service. This rate increase also ensures sufficient revenues to offset capital investment and operating costs. Staff will continuously monitor energy costs and review the rate to ensure fairness for consumers and cost recovery for LIEC.

Respectfully submitted,

Jerry Chong
General Manager, Finance and Corporate Services

Report Contributors

This report was prepared by Constantino Retes, Senior Project Manager (LIEC) and Helen Zhao, Controller (LIEC), and reviewed by Finance and Law.

Endorsed by Serena Lusk, CAO

Att. 1: District Energy in Richmond
Att. 2: LIEC Financial Model (September 2026)
Att. 3: DEU Greenhouse Gas (GHG) Emissions Reductions
Att. 4: Alexandra Neighbourhood and ADEU Service Area
Att. 5: Oval Village Neighbourhood and OVDEU Service Area
Att. 6: City Centre and CCDEU Service Area
Att. 7: ADEU Proposed 2027 Rates for Services
Att. 8: OVDEU Proposed 2027 Rates for Services
Att. 9: CCDEU Proposed 2027 Rates for Services

Attachment 1 – District Energy in Richmond

Richmond's 2041 Official Community Plan (OCP) establishes a target to reduce greenhouse gas (GHG) emissions 50 percent below 2007 levels by 2030 and 100 percent by 2050. The City identified district energy utilities (DEUs) as a leading strategy to achieve the City's GHG reduction goals and incorporated Lulu Island Energy Company Ltd. (LIEC) in 2013 for the purpose of carrying out the City's district energy initiatives based on the following guiding principles:

1. The DEU will provide end users with energy costs that were competitive with conventional energy costs, based on the same level of service.
2. Council will retain the authority to set customer rates, fees and charges for DEU services.
3. The DEU will provide a flexible platform for adopting low-carbon energy technologies.

The City established three DEU service areas: ADEU, OVDEU, and CCDEU. Table 1 below provides a summary of the developments connected under the DEU service areas to date.

Table 1 – DEU Bylaw Service Areas - Current and Projected Connected Space

	Buildings To-Date	Residential Units To-Date	Floor Area	
			To-Date	Build-out
Alexandra DEU	13	2,200	2.4M ft^2	4.4M ft^2
Oval Village DEU	15	3,524	3.7M ft^2	6.4M ft^2
City Centre DEU	8	3,085	3.2M ft^2	48M ft^2
Total	**36**	**8,809**	**9.3M ft^2**	**58.8M ft^2**

The ADEU provides heating and cooling services to ten residential buildings, the large commercial development at "Central at Garden City", the Richmond Jamatkhana Temple, and Fire Hall No. 3, comprising 2,200 residential units and over 2.4 million square feet of floor area. While some electricity was consumed for pumping and equipment operations, most of this energy was currently produced locally from the geo-exchange fields in the greenway corridor and West Cambie Park, and highly efficient air source heat pumps.

The OVDEU services 15 buildings, containing 3,524 residential units. Energy is currently supplied from the four interim energy centres with natural gas boilers, which provide almost 24 MW of heating capacity. LIEC received a $6.2 million grant from the CleanBC Communities Fund for the design and construction of a sewer heat recovery permanent energy centre for the area. This project is expected to be completed in 2031. Once completed, the system will be able to produce up to 70% of low-carbon energy from the Gilbert Trunk sanitary force main sewer.

The CCDEU currently services eight buildings, comprised of 3,085 residential units and approximately 3.2 million square feet of floor area. While off-site energy infrastructure is being built, CCDEU utilizes on-site low-carbon energy plants to service new customers. At full build-out, 176 developments, 28,000 residential units and approximately 48 million square feet of floor space will be serviced by 5 permanent energy centers with over 130 MW of heating and 115 MW of cooling capacity. The built-out system is estimated to reduce over one million tonnes of GHG emissions compared to conventional service.

LIEC Financial Model Summary										
	2027	2028	2029	2030	2031	2032	2037	2042	2047	2052
CCDEU Customer Rate Increase	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
ADEU Commercial Rate Increase	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
ADEU Residential Rate Increase	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
LIEC Overall (ADEU + CCDEU)										
Metered Billings	13,324,806	15,918,593	19,635,743	22,592,280	26,352,233	32,145,461	62,925,393	96,586,908	135,860,260	176,670,039
Total Revenue	14,306,291	16,900,079	20,617,229	23,573,766	27,333,719	33,126,947	63,906,879	97,568,394	136,841,746	177,651,525
Gross Margin	4,181,814	5,374,358	7,263,204	8,836,895	10,552,271	9,059,915	21,555,499	41,253,293	59,285,230	80,577,347
Net Income	662,866	226,298	570,227	313,702	195,092	(1,627,815)	(722,662)	13,557,774	28,524,345	60,367,071
EBITA	6,051,287	8,369,673	11,390,022	13,644,648	16,129,460	19,993,376	42,715,960	67,491,223	83,357,671	105,982,447
Gross Margin %	29%	32%	35%	37%	39%	27%	34%	42%	43%	45%
Net Income %	5%	1%	3%	1%	1%	-5%	-1%	14%	21%	34%
Overall EBITA %	42%	50%	55%	58%	59%	60%	67%	69%	61%	60%

Estimated Development Timing for Future Connections										
Square Footage	2027	2028	2029	2030	2031	2032	2037	2042	2047	2052
New connections	0	6	9	6	8	6	9	6	3	3
Incremental ADEU (ft2)	-	179,235	495,764	316,529	125,244	125,243	-	-	-	-
Incremental CCDEU (ft2)	-	1,243,244	1,777,303	801,168	1,624,316	2,311,946	2,899,375	1,317,600	1,831,831	1,178,496
Total (ft2)	-	1,422,480	2,273,067	1,117,697	1,749,559	2,437,189	2,899,375	1,317,600	1,831,831	1,178,496
Cumulative (ft2)	9,329,739	10,752,219	13,025,286	14,142,983	15,892,542	18,329,731	29,224,043	37,090,908	42,996,391	46,144,837

Projected Capital Expenditures for LIEC										
	2027	2028	2029	2030	2031	2032	2037	2042	2047	2052
CCDEU CAPEX										
Annual Corix CAPEX	37,774,638	40,438,488	43,263,513	38,014,736	20,719,988	14,280,587	14,018,036	21,799,791	4,880,943	411,358
Annual ETS Contribution	1,100,000	3,572,200	4,240,201	5,012,597	3,034,896	4,933,158	8,545,656	8,196,257	4,583,365	4,664,248
Annual LCEP Contribution	-	1,423,907	2,762,618	3,291,272	-	4,444,220	15,096,851	-	-	-
Annual DCP Contribution	-	5,614,199	3,939,897	617,621	6,435,048	13,503,233	-	2,438,571	6,113,129	-
CCDEU LIEC In-house CAPEX	1,320,556	1,042,276	1,035,156	1,069,238	1,041,909	1,047,026	1,144,347	1,263,451	1,394,952	1,540,140
	40,195,194	52,091,070	55,241,385	48,005,464	31,231,841	38,208,223	38,804,890	33,698,070	16,972,389	6,615,746
Cumulative CCDEU Capital Assets	125,651,016	177,742,087	232,983,471	280,988,935	312,220,777	350,429,000	639,143,109	836,148,834	929,941,922	961,660,089
ADEU CAPEX										
Annual ADEU ETS Contribution	-	1,500,000	2,250,000	-	750,000	-	-	-	-	-
ADEU LIEC in-house CAPEX	942,218	1,865,920	1,189,108	2,926,020	2,531,541	2,537,171	317,060	350,060	386,495	426,722
	942,218	3,365,920	3,439,108	2,926,020	3,281,541	2,537,171	317,060	350,060	386,495	426,722
Cumulative ADEU Capital Assets	29,720,082	33,086,003	36,525,111	39,451,131	42,732,672	45,269,843	50,944,184	52,627,179	54,485,342	56,536,903
Cumulative LIEC Capital Assets	155,371,099	210,828,089	269,508,582	320,440,066	354,953,448	395,698,843	690,087,292	888,776,013	984,427,264	1,018,196,992

The total estimated Project Liability at the end of the contract (YR 2052)	$	371	million
The total estimated Capex financed through CCDEU Project Agreement	$	591	million

Disclaimer:
The financial model is based on information, projections, and assumptions available at the time of preparation. It reflects current market conditions, business strategies, and anticipated developments. The model is subject to change as circumstances evolve. Staff will review and update the financial model regularly to ensure its continued relevance and accuracy.

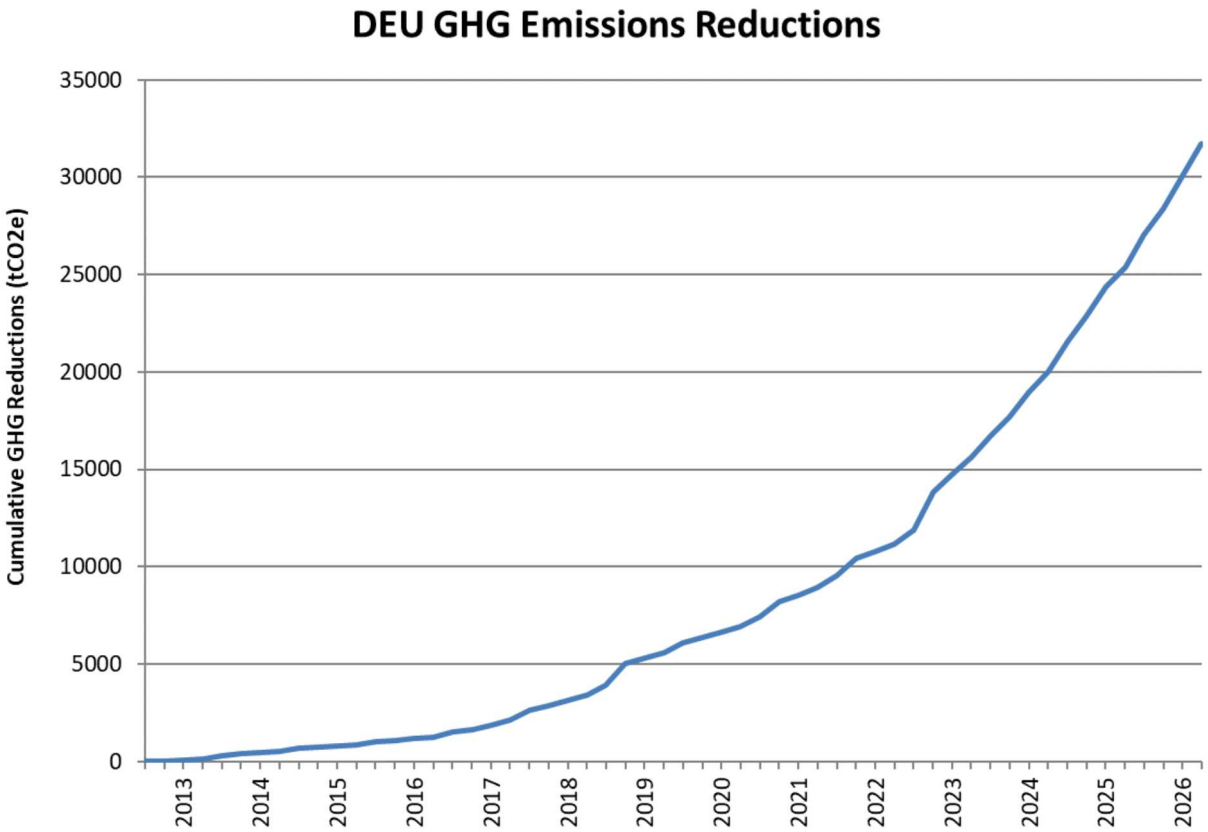
LIEC - Overall Financial Pro-Formas

Project Year	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 15	YR 20	YR 25	YR 30
Year	2027	2028	2029	2030	2031	2032	2037	2042	2047	2052
INCOME STATEMENT										
Revenue										
Metered billings - ADEU	3,246,786	3,644,924	4,473,159	5,257,311	5,581,742	6,124,892	8,517,004	10,362,238	12,607,247	15,338,643
Metered billings - CCDEU	10,078,020	12,273,669	15,162,584	17,334,969	20,770,491	26,020,568	54,408,388	86,224,670	123,253,013	161,331,395
Service fee	981,486	981,486	981,486	981,486	981,486	981,486	981,486	981,486	981,486	981,486
Total Revenue	14,306,291	16,900,079	20,617,229	23,573,766	27,333,719	33,126,947	63,906,879	97,568,394	136,841,746	177,651,525
Expenses										
Utility expenses - ADEU	302,886	338,742	420,586	482,757	520,728	560,965	776,763	945,052	1,149,800	1,398,907
Contract expense - ADEU	766,760	789,762	813,455	837,859	1,034,211	1,153,890	1,239,499	1,281,574	1,328,028	1,379,317
Utility expenses - CCDEU	2,791,565	3,333,182	3,998,291	4,388,543	5,092,388	5,902,031	10,193,440	14,411,118	18,205,030	21,542,213
Contract expense - CCDEU	2,937,956	3,073,150	3,238,625	3,619,973	3,852,380	4,319,950	7,248,166	10,543,491	24,831,939	39,370,777
Utility expense - DCP	-	34,296	61,090	93,496	151,018	380,976	1,047,268	1,419,809	2,079,872	2,322,789
Contract expense - DCP	-	32,729	74,863	117,412	348,320	916,505	2,795,984	4,010,479	5,071,018	5,998,893
Depreciation expense	3,325,311	3,923,860	4,747,115	5,196,830	5,782,403	10,832,715	19,050,260	23,703,579	24,890,829	25,061,281
General and administration expense	3,083,494	2,963,719	3,071,702	3,173,062	3,315,020	3,826,473	5,250,959	6,708,366	10,270,421	9,124,446
Financing income	(606,000)	(500,206)	(515,923)	(559,296)	(229,133)	(249,107)	(482,363)	(824,614)	(626,618)	(836,357)
Financing expense	2,669,110	4,719,720	6,588,603	8,693,413	10,381,098	11,037,582	24,870,726	31,054,484	30,569,115	21,390,453
Developers contributions	(1,627,656)	(2,035,173)	(2,451,405)	(2,783,985)	(3,109,807)	(3,927,219)	(7,361,161)	(9,242,717)	(9,452,032)	(9,468,265)
	13,643,425	16,673,781	20,047,003	23,260,064	27,138,628	34,754,761	64,629,540	84,010,620	108,317,401	117,284,454
Net Income	662,866	226,298	570,227	313,702	195,092	(1,627,815)	(722,662)	13,557,774	28,524,345	60,367,071
Cumulative net income	16,700,924	16,927,222	17,497,449	17,811,151	18,006,242	16,378,428	6,709,570	48,172,044	161,395,783	394,354,292
EBITA										
Net income per above	662,866	226,298	570,227	313,702	195,092	(1,627,815)	(722,662)	13,557,774	28,524,345	60,367,071
Depreciation expense	3,325,311	3,923,860	4,747,115	5,196,830	5,782,403	10,832,715	19,050,260	23,703,579	24,890,829	25,061,281
Net financing expense (income)	2,063,110	4,219,514	6,072,680	8,134,116	10,151,966	10,788,475	24,388,362	30,229,870	29,942,497	20,554,096
EBITA	6,051,287	8,369,673	11,390,022	13,644,648	16,129,460	19,993,376	42,715,960	67,491,223	83,357,671	105,982,447
CASH FLOW STATEMENT										
Cash inflow from meter billing	13,324,806	15,918,593	19,635,743	22,592,280	26,352,233	32,145,461	62,925,393	96,586,908	135,860,260	176,670,039
Cash inflow from service fee	981,486	981,486	981,486	981,486	981,486	981,486	981,486	981,486	981,486	981,486
Cash inflow from other income	606,000	500,206	515,923	559,296	229,133	249,107	482,363	824,614	626,618	836,357
	14,912,291	17,400,285	21,133,152	24,133,062	27,562,852	33,376,054	64,389,242	98,393,008	137,468,363	178,487,882
Less: ADEU utility	(302,886)	(338,742)	(420,586)	(482,757)	(520,728)	(560,965)	(776,763)	(945,052)	(1,149,800)	(1,398,907)
Less: ADEU contract	(766,760)	(789,762)	(813,455)	(837,859)	(1,034,211)	(1,153,890)	(1,239,499)	(1,281,574)	(1,328,028)	(1,379,317)
Less: Payment to Corix	(8,287,651)	(10,133,585)	(12,897,384)	(14,600,030)	(17,574,770)	(21,633,965)	(46,481,557)	(78,805,622)	(93,309,901)	(96,655,655)
Less: LIEC Management and Overhead	(2,134,942)	(2,253,647)	(2,318,960)	(2,373,749)	(2,462,117)	(2,552,114)	(3,051,962)	(3,591,406)	(4,252,070)	(5,226,319)
Less: Utility - DCP	-	(34,296)	(61,090)	(93,496)	(151,018)	(380,976)	(1,047,268)	(1,419,809)	(2,079,872)	(2,322,789)
Less: Contract expense - DCP	-	(32,729)	(74,863)	(117,412)	(348,320)	(916,505)	(2,795,984)	(4,010,479)	(5,071,018)	(5,998,893)
	(11,492,238)	(13,582,761)	(16,586,339)	(18,505,302)	(22,091,165)	(27,198,414)	(55,393,034)	(90,053,941)	(107,190,689)	(112,981,881)
Net cash flow from operations	3,420,053	3,817,524	4,546,814	5,627,760	5,471,687	6,177,639	8,996,208	8,339,068	30,277,675	65,506,001
Less: LIEC Financed Capital Projects	(2,262,775)	(2,908,196)	(2,224,264)	(3,995,258)	(3,573,450)	(3,584,198)	(1,461,407)	(1,613,511)	(1,781,447)	(1,966,861)
Less: Contributions	(1,100,000)	(5,072,200)	(6,490,201)	(5,012,597)	(3,784,896)	(4,933,158)	(8,545,656)	(8,196,257)	(4,583,365)	(4,664,248)
Add: Developers contributions	1,100,000	5,072,200	6,490,201	5,012,597	3,784,896	4,933,158	8,545,656	8,196,257	4,583,365	4,664,248
Annual Cash Flow	1,157,278	909,328	2,322,550	1,632,501	1,898,236	2,593,441	7,534,801	6,725,556	28,496,228	63,539,140
Cumulative cash flow	19,134,784	20,044,112	22,366,662	23,999,163	25,897,400	28,490,841	58,806,467	95,225,854	163,888,875	411,417,961
Cumulative cash flow	19,134,784	20,044,112	22,366,662	23,999,163	25,897,400	28,490,841	58,806,467	95,225,854	163,888,875	411,417,961
Revenue lag	(2,861,258)	(3,380,016)	(4,123,446)	(1,885,901)	(2,186,698)	(2,650,156)	(5,112,550)	(7,805,472)	(10,947,340)	(14,212,122)
Estimated year-end cash balance	16,273,526	16,664,096	18,243,216	22,113,262	23,710,702	25,840,685	53,693,917	87,420,383	152,941,535	397,205,839
Working capital	(3,395,690)	(4,146,585)	(4,626,326)	(5,522,791)	(6,799,604)	(7,742,197)	(15,270,609)	(24,963,887)	(26,602,820)	(22,596,376)
Capital projects	(2,908,196)	(2,224,264)	(3,995,258)	(3,573,450)	(3,584,198)	(3,600,114)	(1,490,635)	(1,645,782)	(1,817,076)	(1,966,861)
Estimated available cash for liability payout	9,969,639	10,293,248	9,621,632	13,017,021	13,326,901	14,498,375	36,932,673	60,810,714	124,521,639	372,642,602
Estimated PA liability payout	71,139,874	113,280,901	158,225,291	199,141,240	222,465,227	237,645,770	431,281,816	496,767,153	422,925,529	371,256,747

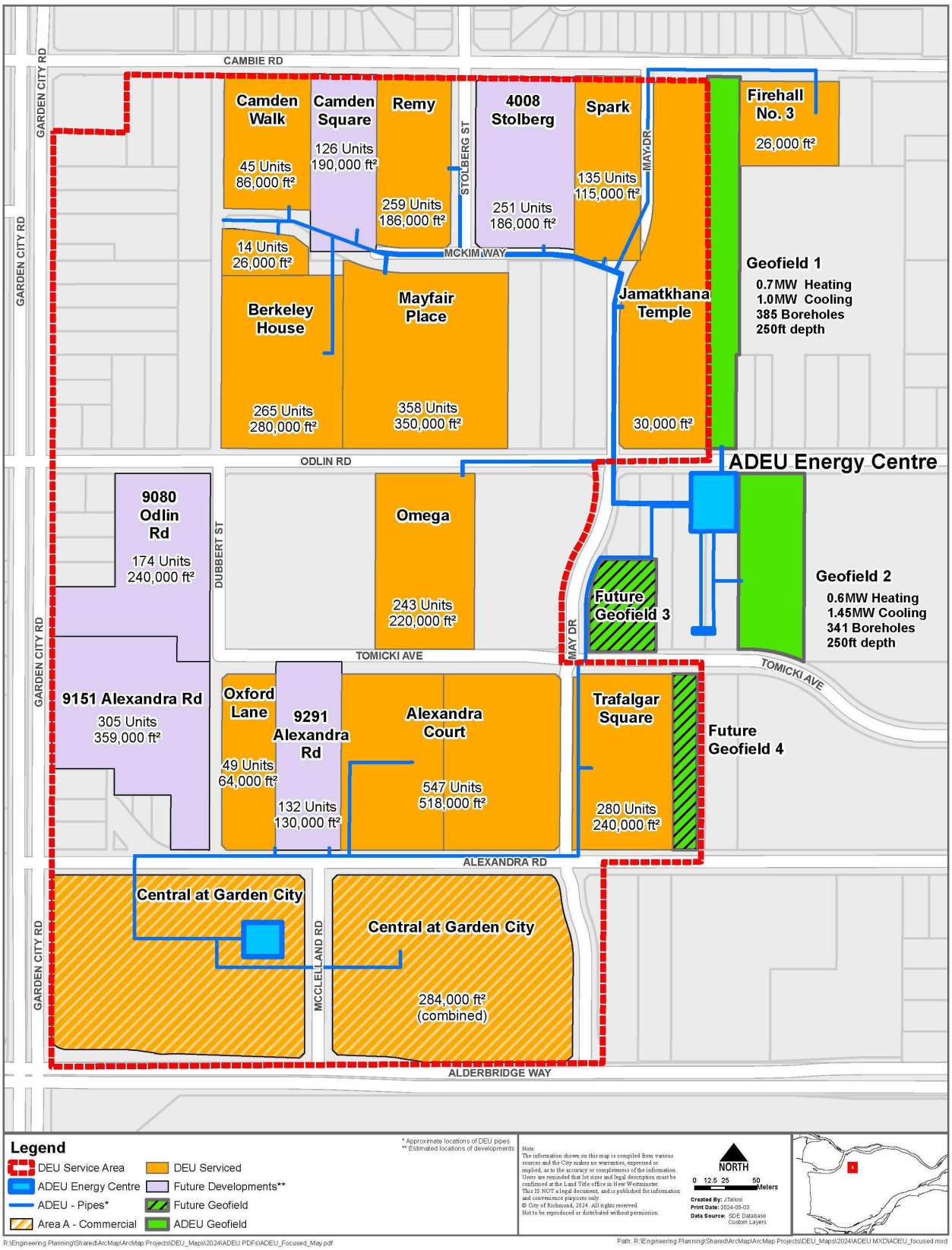
Disclaimer:

The financial model is based on information, projections, and assumptions available at the time of preparation. It reflects current market conditions, business strategies, and anticipated developments. The model is subject to change as circumstances evolve. Staff will review and update the financial model regularly to ensure its continued relevance and accuracy.

Attachment 3 – DEU Greenhouse Gas (GHG) Emissions Reductions



Attachment 4 – Alexandra Neighbourhood and ADEU Service Area



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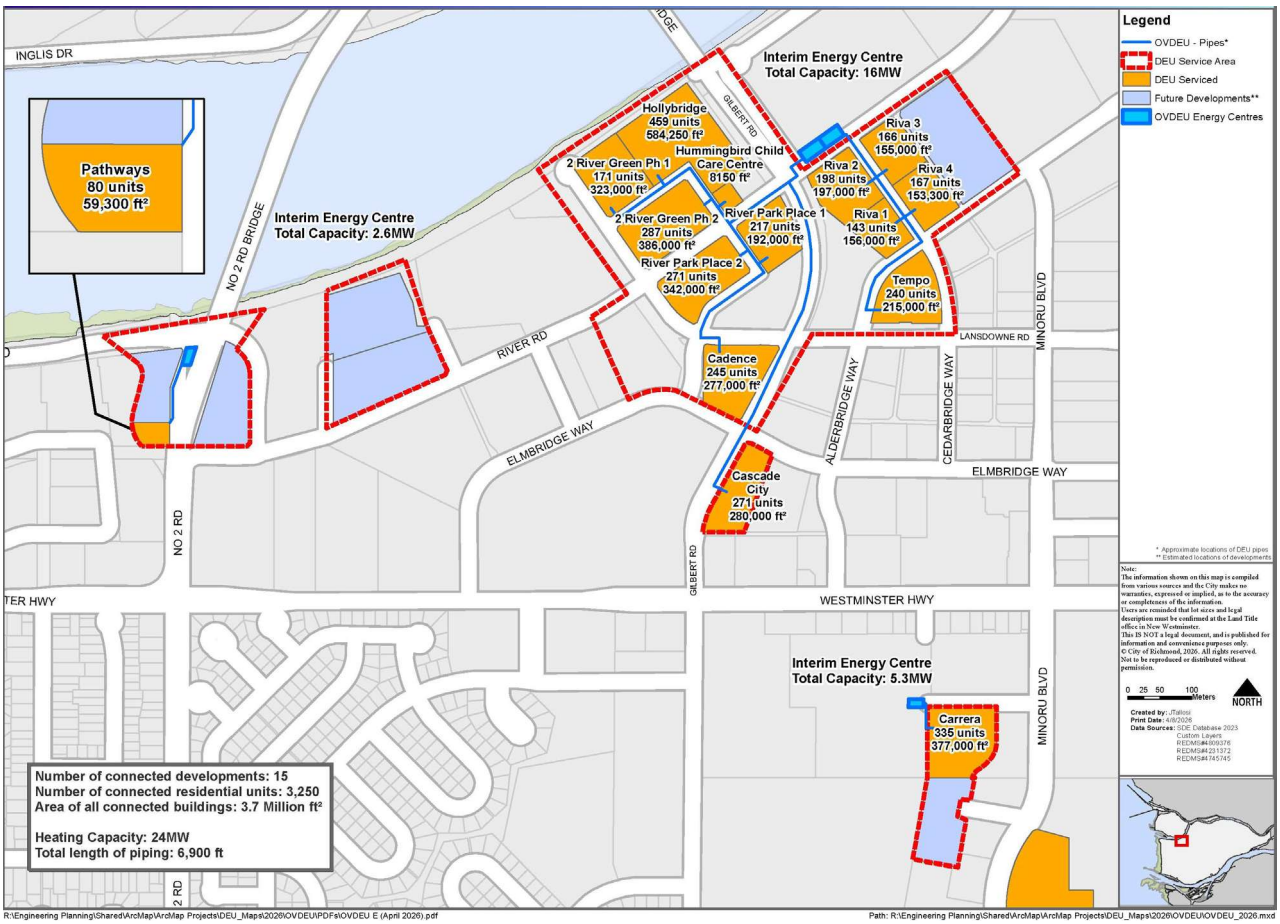
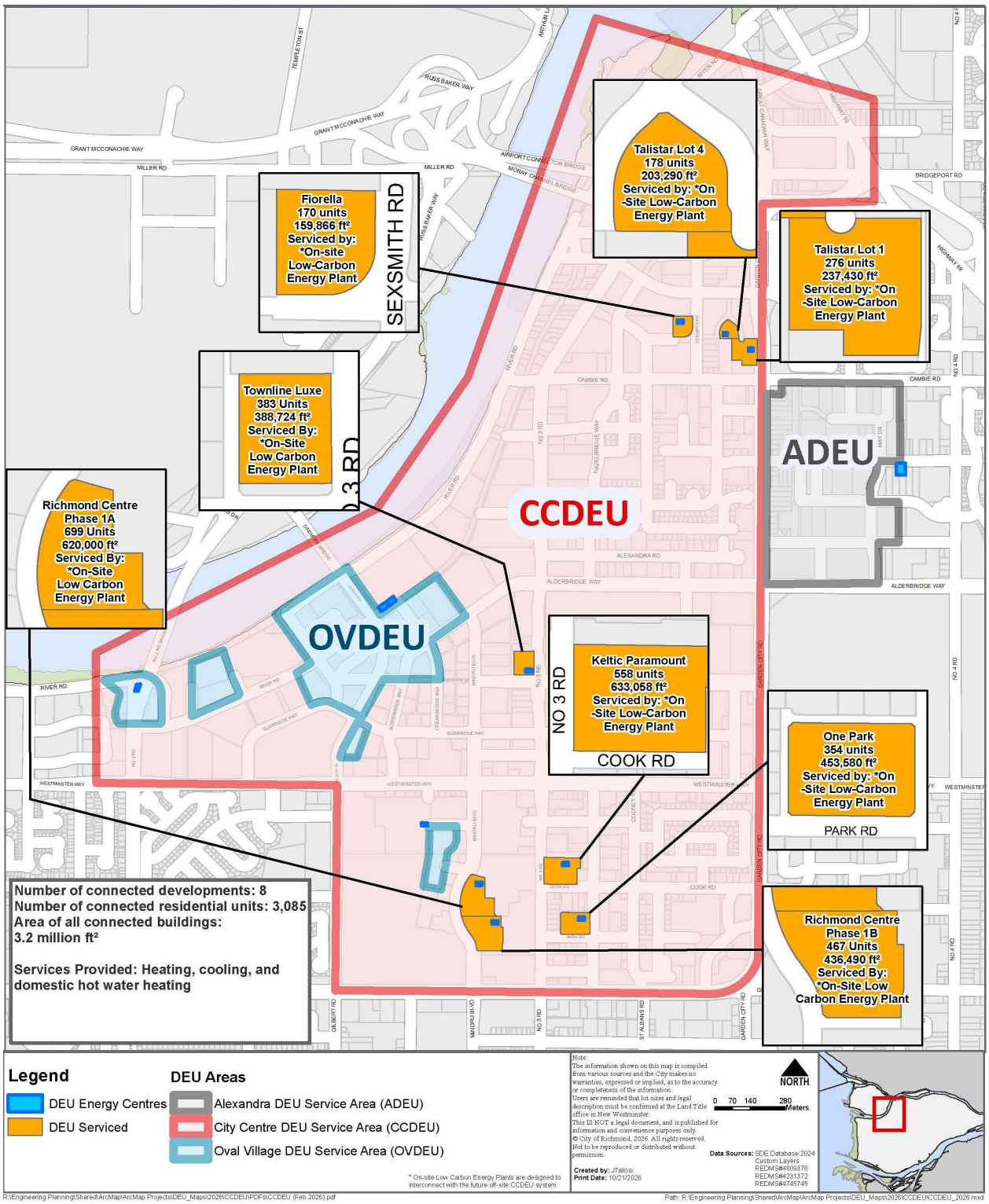
Attachment 5 – Oval Village Neighbourhood and OVDEU Service Area



Attachment 6 – City Centre and CCDEU Service Area



Attachment 7 – ADEU Proposed 2027 Rates for Services

Table 1: Proposed Rates for Services, excluding commercial area (Area A)

	ADEU	
	2026	**2027**
Capacity Charge One: Monthly charge per square foot of the building gross floor area	$0.1058	$0.1100
Volumetric Charge: Charge per megawatt hour of energy consumed by the building	$26.756	$27.826
Excess Demand Fee - for each watt per square foot of each of the estimated peak heat energy demand and the estimated peak cooling demand that exceeds 6 W/ft2	$0.2150	$0.2236

Table 2: Proposed Rates for Services, commercial area (Area A)

	Area A	
	2026	**2027**
Volumetric Charge: Charge per megawatt hour of energy consumed	$103.855	$108.009

Attachment 8 – OVDEU Proposed 2027 Rates for Services

OVDEU

	2026	**2027**
Capacity Charge One: Monthly charge per square foot of the building gross floor area	$0.0739	$0.0769
Volumetric Charge: Charge per megawatt hour of energy consumed by the building	$45.516	$47.337
Excess Demand Fee - for each watt per square foot of the aggregate of the estimated peak heat energy demand that exceeds 6 W/ft2	$0.2150	$0.2236

Attachment 9 – CCDEU Proposed 2027 Rates for Services

CCDEU

	2026	**2027**
Capacity Charge One: Monthly charge per square foot of the building gross floor area	$0.0862	$0.0896
Volumetric Charge: Charge per megawatt hour of energy consumed by the building	$52.980	$55.099
Excess Demand Fee - for each watt per square foot of each of the estimated peak heat energy demand and the estimated peak cooling demand that exceeds 6 W/ft2	$0.2150	$0.2236

City of Richmond

Bylaw 10792

Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 10792

The Council of the City of Richmond enacts as follows:

1. The Alexandra District Energy Utility Bylaw No. 8641, as amended, is further amended by deleting Schedule C (Rates and Charges) in its entirety and replacing it with a new Schedule C attached as Schedule A to this Bylaw.

2. This Bylaw is cited as **"Alexandra District Energy Utility Bylaw No. 8641, Amendment Bylaw No. 10792".**

FIRST READING	
SECOND READING	
THIRD READING	
ADOPTED	

CITY OF RICHMOND
APPROVED for content by originating dept.
CR
APPROVED for legality by Solicitor
BRB

MAYOR

CORPORATE OFFICER

8516174

Schedule A to Bylaw No. 10792

SCHEDULE C to BYLAW NO. 8641

Rates and Charges

PART 1 - RATES FOR SERVICES

The following charges, as amended from time to time, will constitute the Rates for Services for the Service Area excluding shaded Area A as shown in Schedule A to this Bylaw:

(a) Capacity charge – a monthly charge of $0.1100 per square foot of Gross Floor Area; and

(b) Volumetric charge – a charge of $27.826 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property.

PART 2 - EXCESS DEMAND FEE

Excess demand fee of $0.2236 for each watt per square foot of each of the estimated peak heat energy demand and estimated cooling demand referred to in section 21.1(e)(i), 21.1(e)(ii), and 21.1(e)(iii) that exceeds 6 watts per square foot.

PART 3 - RATES FOR SERVICES APPLICABLE TO AREA A

The following charges will constitute the Rates for Services applicable only to the Designated Properties identified within the shaded area (Area A) shown in Schedule A to this bylaw:

(a) Volumetric charge – a charge of $108.009 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property calculated on each of (i) an energy use of 2644 MWh per annum ("Basic Supply Amount"), and (ii) any energy use in excess of the Basic Supply Amount.

City of Richmond

Bylaw 10793

Oval Village District Energy Utility Bylaw No. 9134 Amendment Bylaw No. 10793

The Council of the City of Richmond enacts as follows:

1. The Oval Village District Energy Utility Bylaw No. 9134, as amended, is further amended by deleting Schedule D (Rates and Charges) of the Bylaw in its entirety and replacing it with a new Schedule D as attached as Schedule A to this Bylaw.

2. This Bylaw is cited as **"Oval Village District Energy Utility Bylaw No. 9134, Amendment Bylaw No. 10793".**

FIRST READING	_____	CITY OF RICHMOND
SECOND READING	_____	APPROVED for content by originating dept. CR
THIRD READING	_____	
ADOPTED	_____	APPROVED for legality by Solicitor BRB

_____ MAYOR

_____ CORPORATE OFFICER

8516176

Schedule A to Bylaw No. 10793

SCHEDULE D

Rates and Charges

PART 1 - RATES FOR SERVICES

The following charges, as amended from time to time, will constitute the Rates for Services:

(a) capacity charge - a monthly charge of $0.0769 per square foot of gross floor area; and

(b) volumetric charge – a monthly charge of $47.337 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property.

PART 2 - EXCESS DEMAND FEE

Excess demand fee of $0.2236 for each watt per square foot of the aggregate of the estimated peak heat energy demand referred to in section 19.1(e) (i), (ii), and (iii) that exceeds 6 watts per square foot.

City of Richmond

Bylaw 10794

City Centre District Energy Utility Bylaw No. 9895 Amendment Bylaw No. 10794

The Council of the City of Richmond enacts as follows:

1. City Centre District Energy Utility Bylaw No. 9895, as amended, is further amended by deleting Schedule D (Rates and Charges) in its entirety and replacing it with a new Schedule D as attached as Schedule A to this Bylaw.

2. This Bylaw is cited as **"City Centre District Energy Utility Bylaw No. 9895, Amendment Bylaw No. 10794".**

FIRST READING	
SECOND READING	
THIRD READING	
ADOPTED	

CITY OF RICHMOND
APPROVED for content by originating dept.
CR
APPROVED for legality by Solicitor
BRB

MAYOR

CORPORATE OFFICER

8516179

Schedule A to Bylaw No. 10794

SCHEDULE D

Rates and Charges

PART 1 - RATES FOR SERVICES

The following charges, as amended from time to time, will constitute the Rates for Services:

(a) capacity charge - a monthly charge of $0.0896 per square foot of gross floor area; and
(b) volumetric charge – a monthly charge of $55.099 per megawatt hour of Energy returned from the Energy Transfer Station at the Designated Property.

PART 2 - EXCESS DEMAND FEE

Excess demand fee of $0.2236 for each watt per square foot of each of the estimated peak heat energy demand and estimated cooling demand referred to in section 19.1(f) (i), 19.1(f) (ii) and 19.1(f) (iii) that exceeds 6 watts per square foot.