



City of Brooks: 2021 Offsite Levy Update

July 15th, 2021

Prepared by:

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July 15th, 2021

City of Brooks
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RE: City of Brooks 2021 Offsite Levy Update

Enclosed is our report in support of the City of Brooks 2021 offsite levy rate update. If you have any questions do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Weiss", followed by a long horizontal line extending to the right.

Greg Weiss
President

1 DOCUMENT INFORMATION

Version Number	Revision Date	Summary of Changes and Author
1.0	July 15 th , 2021	Created by CORVUS Business Advisors.

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3 INTRODUCTION

3.1 Introduction

Bylaw 06/21, established by the City of Brooks ("the City") in 2006 defines offsite levy charges for transportation, water, sanitary sewer and stormwater offsite infrastructure. The City wishes to update this bylaw, amending offsite infrastructure included in the bylaw in alignment with the City's recent actual expenditures, receipts, latest capital/master plans, and ensuring updated costs and development forecasts are reflected fairly and equitably in new rates in accordance with Section 648 of the *Municipal Government Act* ("MGA"), thereby ensuring a financially sustainable community.

This report outlines the methodology and information used in establishing updated transportation, water, sanitary sewer and stormwater offsite levy rates for the City.

3.2 Methodology

The City has various infrastructure capital/master plans, and these plans have been used as a start point for developing key information for this offsite levy review. MPE Engineering and City staff reviewed existing plans and verified offsite projects for transportation, water, sanitary sewer, and stormwater infrastructure. MPE Engineering and City staff also verified benefits to existing development, future development, and benefiting areas.

Support provided by CORVUS Business Advisors ("CORVUS") included:

- Provision of the latest CORVUS offsite levy model.
- Incorporation and configuration of data in the offsite levy model (data provided by City staff).
- Incorporation of area measurements and land development forecasts (provided by City staff).
- Incorporation of infrastructure costs and allocation percentages for existing development, new development, and other parties (provided by MPE Engineering).
- Reconciliation of account opening balances (historical reconciliation details provided by City staff).
- Determination of transportation, water, sanitary sewer, and stormwater levy rates.
- Preparation of the offsite levy report.
- Presentation of results to Administration and Council.
- Training of City staff on the use of the model, and provision of training materials and videos.

Offsite levy rates within the CORVUS model are forecast using a rolling 25-year review period. During this review, a cut-off date of December 31st, 2020 was established, and so the review period stems from **2021 to 2045**. The cut-off date coincides with the City's most recent year-end when the project started. Project expenditures, receipts etc. were gathered as "actuals" from the City's financial records up to the cut-off date. Beyond the cut-off date,

all financial details are estimates. When the City completes its next rate update, information from January 1st, 2021 up to the new cut-off date will be converted from estimates to actuals, and the rolling 25-year review period will move further out.

Costs that benefit development prior to and within the 25-year review period are included in rates. Costs that benefit development beyond the review period (called “financial oversizing”) are excluded from rates. In future years, when rates are updated and the rolling 25-year period moves further out, offsite infrastructure costs beyond 2045 will gradually be included in rates.

4 KEY FINDINGS

The following provides a summary of key findings pertaining to the updating of the City’s offsite levy rates:

Offsite Infrastructure Costs. Offsite infrastructure costs to be included in the offsite levy bylaw total approximately **\$99.80 million**. An overview of offsite infrastructure costs and maps is provided in Appendices B1 (Transportation), C1 (Water), D1 (Sanitary Sewer), and E1 (Stormwater); and a definition of each offsite infrastructure type is provided in Appendix F.

Before determining how the infrastructure costs will be allocated to parties that benefit (e.g., existing/residual development, future development, other municipalities etc.), financing provided by way of special ear-marked grants and other contributions are deducted from offsite infrastructure costs. For this review, the City identified approximately **\$25.12 million** in ear-marked grants and contributions. An overview of ear-marked grants and contributions and resulting net costs is provided in Appendices B2, C2, D2, and E2.

The share of costs which benefits existing/residual development (the City’s share) is **\$45.69 million**; and, the share of costs which benefits other stakeholders (e.g., neighbouring municipalities) is **\$0.00**.

The share of costs which benefits future development totals approximately **\$28.99 million (\$7.67 million + \$21.31 million)** and is based on the allocations shown in Appendices B4, C4, D4, and E4. However, **\$7.67 million** of the cost which benefits future development is beyond the 25-year review period (called “financial oversizing”). Financial oversizing is determined based on the anticipated year of construction (construction staging) which is provided in Appendices B3, C3, D3, and E3.

Of the **\$28.99 million** in total offsite infrastructure costs which benefits future development, the portion that is within the 25-year review period and included in rates today (the offsite levy share) is approximately **\$21.31 million**, as shown in the table below. A complete summary of offsite infrastructure net cost “flow-thru” is provided in Appendices B6, C6, D6, and E6.

Summary of Infrastructure Costs & Allocations

Infrastructure	Special Grants & Contributions	Muni Share of Costs	Other Stakeholders' Share of Costs	Developer Cost Beyond 25 Yrs (Financial Oversizing)	Developer Costs (In Rates)	Total Costs
Transportation	\$ 3,561,170	\$ 1,241,355	\$ -	\$ 212,265	\$ 554,106	\$ 5,568,897
Water	\$ 5,278,901	\$ 18,695,125	\$ -	\$ 4,891,285	\$ 7,271,669	\$ 36,136,980
Sanitary	\$ 16,279,817	\$ 23,261,451	\$ -	\$ 1,823,655	\$ 12,457,602	\$ 53,822,525
Stormwater	\$ -	\$ 2,495,465	\$ -	\$ 745,743	\$ 1,029,653	\$ 4,270,860
Total	\$ 25,119,888	\$ 45,693,396	\$ -	\$ 7,672,948	\$ 21,313,030	\$ 99,799,262

Offsite Levy Collections. Before allocating infrastructure costs to benefitting lands, offsite levy costs must be reduced by the total levies collected to date. Up to **December 31st, 2020**, the City collected approximately **\$6.09 million** in offsite levies as summarized in the table below. Details associated with levy collections are shown in Appendices B5, C5, D5, and E5.

Summary of Levies Collected to Date

Levies Collected To Date	
Transportation	\$ 643,897
Water	\$ 2,498,996
Sanitary	\$ 2,569,024
Stormwater	\$ 378,520
Total	\$ 6,090,437

Offsite Levy Areas and Forecast Development. To facilitate the allocation of infrastructure costs to those lands that benefit from the infrastructure, the City is parsed into **25** offsite levy areas. The area boundaries, numbering schema, and area measurements are described in Appendix A along with an offsite levy map. An overview of offsite infrastructure allocations to each benefitting area is provided in Appendices B7, C7, D7, and E7.

To calculate offsite levy rates, it is necessary to forecast the amount of land that will develop during the 25-year review period. Land development forms the denominator of the rate calculation. A larger denominator reduces rates but could potentially result in under-collection thereby placing an increased burden on taxpayers. A smaller denominator increases rates but could potentially result in over-collection thereby placing an increased burden on future development. Accordingly, land development forecasts need to be: (a) reasonable and reflect current planning assumptions including the current pace of development in the community, and (b) updated regularly.

For this review, the City is forecasting development of approximately **182 ha.** during the 25-year review period (the land development forecast is shown in Appendix A).

Offsite Levy Reserves. The City is currently managing offsite levy receipts and withdrawals via several accounts. These should be consolidated into four offsite levy accounts (i.e., one reserve/account for each infrastructure type), in alignment with *MGA* requirements. The

reason the *MGA* stipulates the requirement for separate accounts is because offsite levies can only be used for the type of infrastructure for which they were collected (e.g., water levies can only be used to construct water offsite infrastructure, not sanitary sewer infrastructure etc.). During this review, several amendments to historical information were identified. Accordingly, the City's offsite levy account balances require amendment as discussed further below and shown in Appendices B8, C8, D8, and E8.

Interest. Offsite levy account balances (both actual and forecast) are impacted by interest. Actual inflows and forecast balances that are in a positive/surplus position earn interest (as required by the *MGA*). Actual outflows and forecast balances that are in a negative/deficit position are charged interest (forecast balances that are negative indicate the requirement for front-ending). Forecast offsite levy account balances over the 25-year review period are shown in Appendices B9, C9, D9, and E9.

Front-ending. Front-ending is an extremely important concept that underpins rigorous management of offsite levies. Front-ending represents monies owed by future development to the front-ending party (municipality or developer) for past construction undertaken on behalf of future development—i.e., a front-ending party will often pay for its share of an offsite infrastructure project in addition to that portion of the project which benefits future development when offsite levy account balances are insufficient.

In Brooks, it is our understanding that the City is the only party with front-ending obligations/claims currently. As such, all excess cash in levy accounts should be used to pay-down the front-ending obligations due to the City (described below).

There are generally 2 alternatives for repaying front-ending *obligations* to claimants: (1) the First-In First-Out (FIFO) approach, and (2) the Average Outstanding Claim (AOC) approach. The approach that the City will use moving forward should be described in an offsite levy policy and practices framework that is separate from the rate bylaw.

Offsite Levy Account Adjustments. At end 2020, City documentation reflected a surplus balance of **\$643,897.00** in the transportation account. However, after adjustments for front-ending obligations due to the City and claim repayments, the balance in the transportation account should be amended to reflect a surplus of **\$189,680.29** at end 2020. This balance assumes excess cash (**\$454,216.71**) will be transferred from the levy account to the City as partial payment for front-ending obligations due to the City. A complete reconciliation of the transportation account balance is provided in Appendix B8.

At end 2020, City documentation reflected a surplus balance of **\$763,751.00** in the water account. However, after adjustments for front-ending obligations due to the City and claim repayments, the balance in the water account should be amended to reflect a deficit of **\$(365,758.34)** at end 2020. This balance assumes excess cash (**\$763,751.00**) will be transferred from the levy account to the City as payment for front-ending obligations due to the City. A complete reconciliation of the water account balance is provided in Appendix C8.

At end 2020, City documentation reflected a surplus balance of **\$2,575,769** in the sanitary

sewer account. However, after adjustments for front-ending obligations due to the City and claim repayments, the balance in the sanitary sewer account should be amended to reflect a surplus of **\$1,603,398.50** at end 2020. This balance assumes excess cash (**\$972,370.50**) will be transferred from the levy account to the City as payment for front-ending obligations due to the City. A complete reconciliation of the sanitary sewer account balance is provided in Appendix D8.

At end 2020, City documentation reflected a surplus balance of **\$378,520.00** in the stormwater account. This balance is in alignment with the balance reflected in the model at end 2020. A complete reconciliation of the stormwater account balance is provided in Appendix E8.

Together, these account adjustments are enabling the withdrawal of approximately **\$2.19 million** as payment for front-ending obligations owed to the City. However, of this withdrawal City staff have determined that approximately **\$0.33 million** is required to replenish unrelated deposits and withdrawals from other uncommitted accounts. The balance of approximately **\$1.86 million** is available to the City and should be utilized to fund the City's share of transportation, water, and sanitary sewer projects that are prioritized in the City's 10-year capital plan.

Offsite Levy Account Reconciliation Withdrawals

2007-2020 Account Reconciliation Withdrawals	
Transportation	\$ 454,217
Water	\$ 763,751
Sanitary	\$ 972,371
Stormwater	\$ -
Total	\$ 2,190,338

5 RATE UPDATES

For future development to pay for its share of the **\$99.80 million** offsite infrastructure costs contained in the City's capital plans, rates are approximately **\$79,823** per net hectare on a weighted average basis, as shown in the tables below. A comparison of rates to other municipalities is shown in Appendix G.

Offsite Levy Rates (Per Net Hectare): High, Low, & Averages¹

	Transportation Levies (/Net Ha.)	Water Levies (/Net Ha.)	Sanitary Levies (/Net Ha.)	Storm Levies (/Net Ha.)	Total (/Net Ha.)
High	\$ -	\$ 38,943	\$ 63,739	\$ 13,507	\$ 102,682
Low	\$ -	\$ 21,751	\$ 29,092	\$ -	\$ 59,322
Weighted Average	\$ -	\$ 25,976	\$ 50,143	\$ 3,704	\$ 79,823

¹ Highs, Lows, and Averages are shown for information purposes only. Developers pay the actual rate applicable to their specific development area.

Summary of Offsite Levy Rates by Area (Per Net Hectare)

Area #	Transportation Levies	Water Levies	Sanitary Levies	Stormwater Levies	Total
1.0	\$ -	\$ 38,943	\$ 42,317	\$ -	\$ 81,260
2.0	\$ -	\$ 21,751	\$ 55,356	\$ 8,479	\$ 85,586
3.0	\$ -	\$ 21,751	\$ 55,356	\$ 8,479	\$ 85,586
4.0	\$ -	\$ 21,751	\$ 42,317	\$ 8,479	\$ 72,547
5.0	\$ -	\$ 21,751	\$ 42,317	\$ 8,479	\$ 72,547
6.0	\$ -	\$ 21,751	\$ 42,317	\$ 8,479	\$ 72,547
7.0	\$ -	\$ 21,751	\$ 29,092	\$ 8,479	\$ 59,322
8.0	\$ -	\$ 21,751	\$ 42,317	\$ 8,479	\$ 72,547
9.0	\$ -	\$ 21,751	\$ 42,317	\$ -	\$ 64,068
10.0	\$ -	\$ 21,751	\$ 62,988	\$ 13,507	\$ 98,246
11.0	\$ -	\$ 21,751	\$ 62,988	\$ -	\$ 84,738
12.0	\$ -	\$ 21,751	\$ 62,988	\$ 13,507	\$ 98,246
13.0	\$ -	\$ 21,751	\$ 62,988	\$ 8,479	\$ 93,217
14.0	\$ -	\$ 21,751	\$ 62,988	\$ -	\$ 84,738
15.0	\$ -	\$ 21,751	\$ 62,988	\$ -	\$ 84,738
16.0	\$ -	\$ 21,751	\$ 62,988	\$ -	\$ 84,738
17.0	\$ -	\$ 21,751	\$ 62,988	\$ 8,479	\$ 93,217
18.0	\$ -	\$ 21,751	\$ 62,988	\$ 8,479	\$ 93,217
19.0	\$ -	\$ 38,943	\$ 48,661	\$ -	\$ 87,604
20.0	\$ -	\$ 38,943	\$ 47,831	\$ -	\$ 86,774
21.0	\$ -	\$ 38,943	\$ 53,036	\$ -	\$ 91,979
22.0	\$ -	\$ 38,943	\$ 48,661	\$ -	\$ 87,604
23.0	\$ -	\$ 38,943	\$ 63,739	\$ -	\$ 102,682
24.0	\$ -	\$ 37,449	\$ 59,364	\$ -	\$ 96,813
25.0	\$ -	\$ 21,751	\$ 59,364	\$ -	\$ 81,115

6 RECOMMENDATIONS

In addition to implementing the offsite levy rates outlined in Section 5, CORVUS recommends the following:

1. Consolidated offsite levy related accounts into 4—one for each offsite infrastructure type. These accounts should include only to offsite levy related details, in alignment with *MGA* requirements.
2. Amend the balances of offsite levy accounts as reflected in Appendices B8-transportation: **\$189,680**, C8-water: **\$(365,758)**, D8-sanitary sewer: **1,603,398**, E8-stormwater: **\$378,520**; and in so doing, withdraw excess funds from these accounts as partial repayment of front-ending obligations due to the City (see table opposite). Together, these account adjustments are enabling the withdrawal of approximately **\$2.19 million** as payment for front-ending obligations owed to the City. However, of this withdrawal City staff have determined that approximately **\$0.33 million** is required to replenish unrelated deposits and withdrawals from other uncommitted accounts. The balance of approximately **\$1.86 million** is available to the City and

- should be utilized to fund the City's share of transportation, water, and sanitary sewer projects that are prioritized in the City's 10-year capital plan.
3. Develop an offsite levy policy and practices framework to support ongoing management of the bylaw. Topic areas within the framework should include: (1) levy exemptions, (2) levy deferrals, (3) installment payments, (4) indemnification, (5) interim financing, (6) front-ending reimbursement, (7) offsite infrastructure inspection, acceptance, and warranty, (8) interest on unpaid balances, (9) interest rate changes, (10) inflation rate changes, etc.
 4. Establish a formal and regular communication and documentation process between the Finance, Planning, and Engineering departments to enable the accurate documentation of offsite levy expenditure and front-ending details.
 5. Establish individual accounts and/or sub-ledgers for each account to track amounts owed to each front-ending claimant—the City is the only front-ending claimant currently but that will likely change in the future. In so doing, ensure the same interest charging rate that is reflected in the offsite levy model (in any given year) is used to calculate interest on outstanding front-ending balances.
 6. During the reconciliation of account balances in the future, ensure the interest earning and charge rates that underpin the offsite levy model for that time period are used to determine account interest impacts. This is outlined in the offsite levy model user guide and instructions.
 7. Limit future withdrawals from offsite levy accounts to only that portion of project cost for which future development is responsible (i.e., Project Cost X Developer Share %).
 8. Ensure funds withdrawn from offsite levy accounts are only used to finance offsite levy projects contained in the offsite levy bylaw.
 9. Update offsite levy rates annually and provided an annual report to Council outlining the status of levies (monies collected, remaining front-ending debts, etc.). This is a newly amended requirement of the *MGA*.
 10. Recent changes to the *MGA* enable municipalities to charge offsite levies for recreation facilities, fire stations, police stations, and libraries. The City should consider whether it wishes to adopt such levies in the future and, if so, begin developing the support documentation that will be needed to create such levies.

7 ACKNOWLEDGEMENTS

CORVUS Business Advisors would like to thank all City of Brooks staff from Engineering, Planning, and Finance who supported the work of this review, as well as MPE Engineering.

8 DISCLAIMER

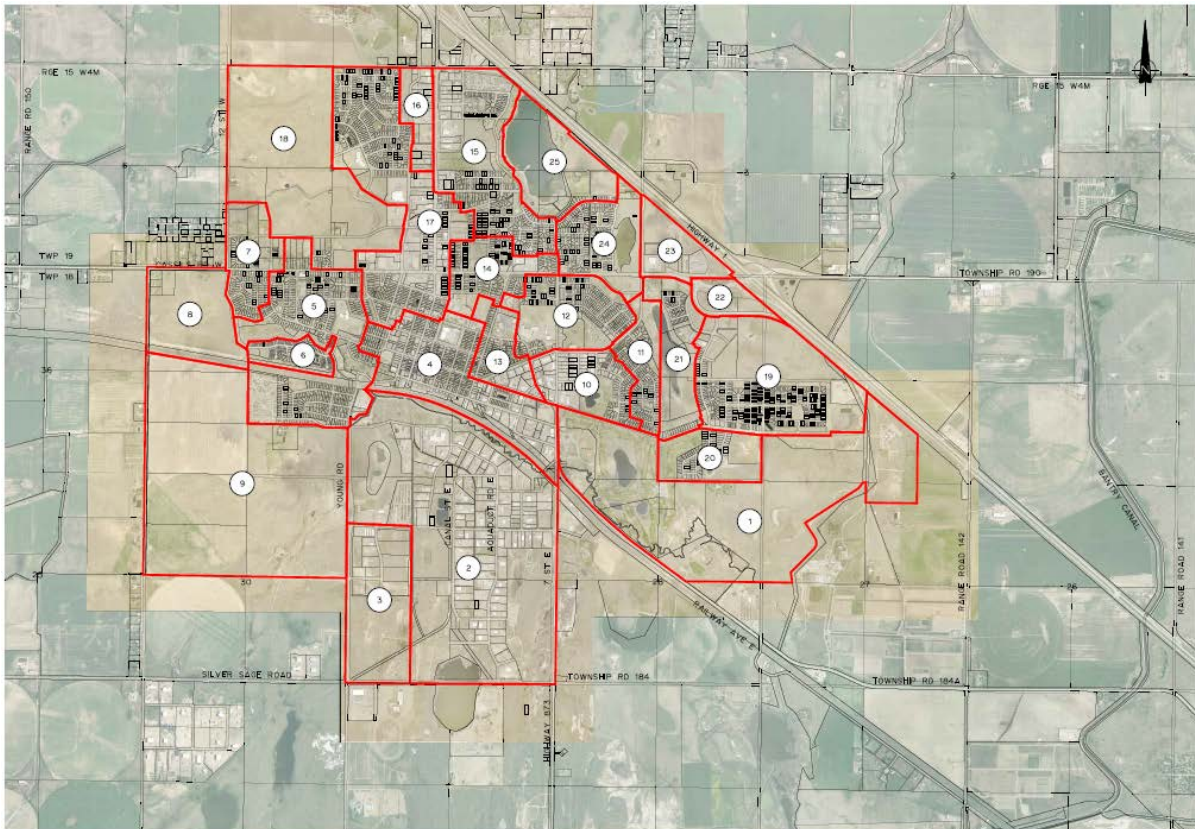
CORVUS Business Advisor relied upon the City of Brooks and its advisors to provide all of the data and information used to construct the offsite levy model and create the rates, such as planning data and assumptions, development forecasts and assumptions, infrastructure costs and costs estimates, allocations to benefitting parties, allocation to benefitting areas, and other assumptions etc. As such, CORVUS Business Advisors makes no guarantee as to the accuracy of the input data and information provided by these groups or the results that stem from this data and information.

Offsite levy rates are not intended to stay static; they are based on assumptions and the best available information of the day. Planning assumptions, cost estimates etc. can change from year-to-year. Accordingly, the *MGA* requires that offsite levy rates be updated with the most available information on a regular basis (usually annually). When information changes, it will be reflected in a future update, and rates adjusted accordingly.

APPENDIX A: OFFSITE LEVY AREAS AND LAND STAGING

The City of Brooks is parsed into **25** offsite levy areas, as shown in the map below. Areas take into consideration the intersection points of existing/planned infrastructure basins (e.g., sanitary sewer basins), and also various natural and man-made barriers (e.g., rivers, highways, etc.). All offsite levy infrastructure costs are allocated to one or more of these areas.

Offsite Levy Areas



Total net development area, the amount of land available for development in all offsite levy areas, is approximately **1675 ha**. In calculating net development area, allowances have been made for environmental reserves, municipal reserves, and arterial road right of way, stormwater management facilities, public utility lots, and other non-developable area.

Offsite Levy Net Development Area²

Area Ref. #	Development Area Location	Gross Area (ha.)	Environmental Reserves (ha.)	Sub-total	Municipal Reserves	Arterial Right of Way and Other Deductions (ha.)	Net Development Area (ha.)
1.1	See Map	219.10	-	219.10	21.91		197.19
2.1	See Map	278.53	-	278.53	27.85	6.30	244.38
3.1	See Map	64.04	-	64.04	6.40	-	57.64
4.1	See Map	85.47	-	85.47	8.55	1.36	75.56
5.1	See Map	104.16	-	104.16	10.42	1.49	92.25
6.1	See Map	15.13	-	15.13	1.51	-	13.62
7.1	See Map	32.60	-	32.60	3.26	0.71	28.63
8.1	See Map	50.87	-	50.87	5.09	1.36	44.42
9.1	See Map	232.38	-	232.38	23.24	-	209.14
10.1	See Map	36.75	-	36.75	3.68	0.97	32.10
11.1	See Map	26.58	-	26.58	2.66	-	23.92
12.1	See Map	50.01	-	50.01	5.00	1.20	43.81
13.1	See Map	25.11	-	25.11	2.51	-	22.60
14.1	See Map	33.83	-	33.83	3.38	2.19	28.26
15.1	See Map	84.85	14.56	70.29	7.03	4.35	58.91
16.1	See Map	17.94	-	17.94	1.79	0.26	15.88
17.1	See Map	118.76	-	118.76	11.88	1.83	105.06
18.1	See Map	137.88	-	137.88	13.79	-	124.09
19.1	See Map	101.88	-	101.88	10.19	-	91.69
20.1	See Map	31.32	-	31.32	3.13	-	28.19
21.1	See Map	38.14	-	38.14	3.81	-	34.33
22.1	See Map	15.02	-	15.02	1.50	5.84	7.68
23.1	See Map	26.62	-	26.62	2.66	5.11	18.85
24.1	See Map	43.92	-	43.92	4.39	2.09	37.44
25.1	See Map	52.19	8.64	43.55	4.36	-	39.20
		1,923.07	23.20	1,899.88	189.99	35.05	1,674.84

Summary of Offsite Levy Net Development Area

Description	ha.
Gross Development Area	1,923.07
Less Environment Reserve	23.20
Less Municipal Reserve	189.99
Less ROW Allowance	35.05
Net Development Area	1,674.84

*Note: 1 Hectare (ha.) = ~2.47 Acres

Net development area definitions will be applied in determining offsite levy obligations of developers on application for subdivision or development within City of Brooks. Net development area is defined as follows:

- Gross Area – The area of lands to be developed in hectares that have not previously paid an offsite levy.

² Area measurements were provided by Town staff.

- Less: Any environmental reserves contained within the development area including environmental reserves and environmental easements.
- Less: A 10% allowance for Municipal Reserves.
- Less: The measurement of arterial road right of way, stormwater management facilities, public utility lots, and other non-developable area that bisects the development lands.
- Equals: Net Developable Area, which is the area subject to offsite levies.

A rate planning period of 25-years underpins the offsite levy model and rate calculations. Many municipalities use this planning period as it provides a reasonable timeframe to recoup the costs associated with offsite levy infrastructure construction, and it aligns with the timeframes of many municipal capital planning and construction cycles.

Of the **1675 ha.** of net land available across all offsite levy areas, approximately **1009 ha. (60%)** have been developed to date, and planners estimate that approximately **182 ha. (11%)** will develop during the next 25-years (the rate planning period) as shown in the tables below.

Summary of Anticipated Development during the 25 Year Rate Planning Period

Developed To Date	1,009.18	60.3%
Developed In Next 25 Years	181.77	10.9%
Developed Beyond 25 Years	483.89	28.9%
Net Development Area	1,674.84	

Anticipated Development during the 25 Year Rate Planning Period

Area Ref. #	Area Developed in Next 25 years (Net ha.)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1.1	23.378	0.78	0.79	0.80	0.82	0.83	0.84	0.85	0.86	0.88	0.89	0.90	0.92	0.93	0.94	0.96	0.97	0.99	1.00	1.01	1.03	1.04	1.06	1.08	1.09	1.11
2.1	21.887	0.73	0.74	0.75	0.76	0.78	0.79	0.80	0.81	0.82	0.83	0.85	0.86	0.87	0.88	0.90	0.91	0.92	0.94	0.95	0.96	0.98	0.99	1.01	1.02	1.04
3.1	12.677	0.42	0.43	0.44	0.44	0.45	0.46	0.46	0.47	0.48	0.48	0.49	0.50	0.50	0.51	0.52	0.53	0.53	0.54	0.55	0.56	0.57	0.57	0.58	0.59	0.60
4.1	0.305	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
5.1	0.642	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
6.1	0.244	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
7.1	1.208	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06
8.1	8.879	0.30	0.30	0.31	0.31	0.31	0.32	0.32	0.33	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.37	0.37	0.38	0.39	0.39	0.40	0.40	0.41	0.41	0.42
9.1	52.213	1.75	1.77	1.80	1.82	1.85	1.88	1.90	1.93	1.96	1.99	2.02	2.05	2.08	2.11	2.14	2.17	2.20	2.23	2.27	2.30	2.33	2.37	2.40	2.44	2.47
10.1	0.101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.1	0.232	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
14.1	0.016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.1	1.769	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
16.1	1.092	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
17.1	1.982	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09
18.1	31.192	1.04	1.06	1.07	1.09	1.11	1.12	1.14	1.15	1.17	1.19	1.21	1.22	1.24	1.26	1.28	1.30	1.31	1.33	1.35	1.37	1.39	1.41	1.43	1.46	1.48
19.1	12.637	0.42	0.43	0.43	0.44	0.45	0.45	0.46	0.47	0.47	0.48	0.49	0.50	0.50	0.51	0.52	0.53	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.59	0.60
20.1	2.144	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10
21.1	1.379	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07
22.1	1.469	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
23.1	2.722	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13
24.1	1.027	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
25.1	2.572	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12
	181.77	6.08	6.17	6.26	6.35	6.44	6.53	6.63	6.73	6.82	6.92	7.02	7.13	7.23	7.34	7.44	7.55	7.66	7.77	7.89	8.00	8.12	8.24	8.36	8.48	8.60

APPENDIX B: TRANSPORTATION

B1. Transportation Offsite Infrastructure

To support future growth, transportation offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$5.57 million** as outlined in the table below. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Transportation Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Cost
1	Cassils Road	\$ 1,732,070	\$ -	\$ -	\$ 1,732,070
2	Cassils Road and 2nd Street West	\$ 3,051,427	\$ -	\$ -	\$ 3,051,427
4	2nd Street West (South) Capacity Improvements	\$ -	\$ -	\$ 785,400	\$ 785,400
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ 4,783,497	\$ -	\$ 785,400	\$ 5,568,897

*Costs estimates provided by City staff.

**Estimates include engineering, contingencies, and land costs if any.

***Historical financing charges (if any) are included in the cost of completed work.

****Unallocated levies to end-2020 were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

*****Offsite infrastructure definitions are contained in Appendix F.

*****Project numbers that are “hidden” pertain to projects that have since been removed from the bylaw.

B2. Transportation Offsite Infrastructure Grants & Contributions to Date

The *MGA* enables the City to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). City of Brooks has/will receive **\$3.56 million** in special ear-marked grants or contributions for transportation offsite levy infrastructure as shown in the table below (note, if the City receives other ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$2.01 million**.

Special Grants and Contributions for Transportation Offsite Infrastructure

Item	Project Description	Total Project Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Other Contributions (Historic & Future)	Reduced Project Cost
1	Cassils Road	\$ 1,732,070	\$ 1,178,585	\$ -	\$ -	\$ 553,485
2	Cassils Road and 2nd Street West	\$ 3,051,427	\$ 2,382,585	\$ -	\$ -	\$ 668,842
4	2nd Street West (South) Capacity Improvements	\$ 785,400	\$ -	\$ -	\$ -	\$ 785,400
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -	\$ -
		\$ 5,568,897	\$ 3,561,170	\$ -	\$ -	\$ 2,007,727

B3. Year of Construction

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast account balances, and the estimate of financial oversizing (described in the Section that follows). The City anticipates construction of offsite infrastructure as outlined in the table below. Note, if this schedule is adjusted in the future, it will be reflected in one of the City’s annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	Cassils Road	2006
2	Cassils Road and 2nd Street West	2006
4	2nd Street West (South) Capacity Improvements	2038

*The share of projects constructed beyond the 25-year review period are not included in rates today (see financial oversizing in next section).

**Project costs are inflated by 3% per annum to the year of construction.

B4. Transportation Offsite Infrastructure Benefiting Parties

The transportation offsite infrastructure previously outlined will benefit various parties to varying degrees. Three potential benefiting parties were identified including:

1. City of Brooks – a portion of the transportation infrastructure which is required to service existing residents. This residual benefit is determined at the point in time when the project is added to the bylaw (i.e., it does not fluctuate from year-to-year).
2. Other Stakeholders – other municipalities that benefit from the infrastructure.
3. Future Development:
 - Financial Oversizing – that portion of cost (i.e., leviable transportation infrastructure costs) which benefits future development beyond the 25-year review period.
 - **In Rates – that portion of cost (i.e., leviable transportation infrastructure costs) which benefits future development within the 25-year review period.**

The table below outlines the allocation of transportation offsite levy infrastructure costs to benefiting parties.

Allocation of Transportation Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Cassils Road	\$ 553,485	62.84%			37.16%
2	Cassils Road and 2nd Street West	\$ 668,842	62.84%			37.16%
4	2nd Street West (South) Capacity Improvements	\$ 785,400	60.26%		27.03%	12.72%
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -				100.00%
		\$ 2,007,727				

*Allocations were determined by City staff.

** Projects with costs allocated to other stakeholders are associated with road projects partially funded by Alberta Transportation.

***Financial oversizing is determined by separating out the pro rata portion of developer cost beyond the 25-year review period, in comparison with the anticipated year of construction. As the years move forward and rates are updated, these additional developer costs will be included in rate calculations. For example, a project which is slated to be constructed in year 20 of the 25-year review period will have 20% (5/25) of its costs in rates today, and 80% (20/25) of its costs will sit beyond the 25-year review period.

B5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately **\$0.55 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers (if any) need to be considered in determining the residual/net costs to developers. City staff have advised that **\$0.64 million** in transportation levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately **\$(0.09) million**.

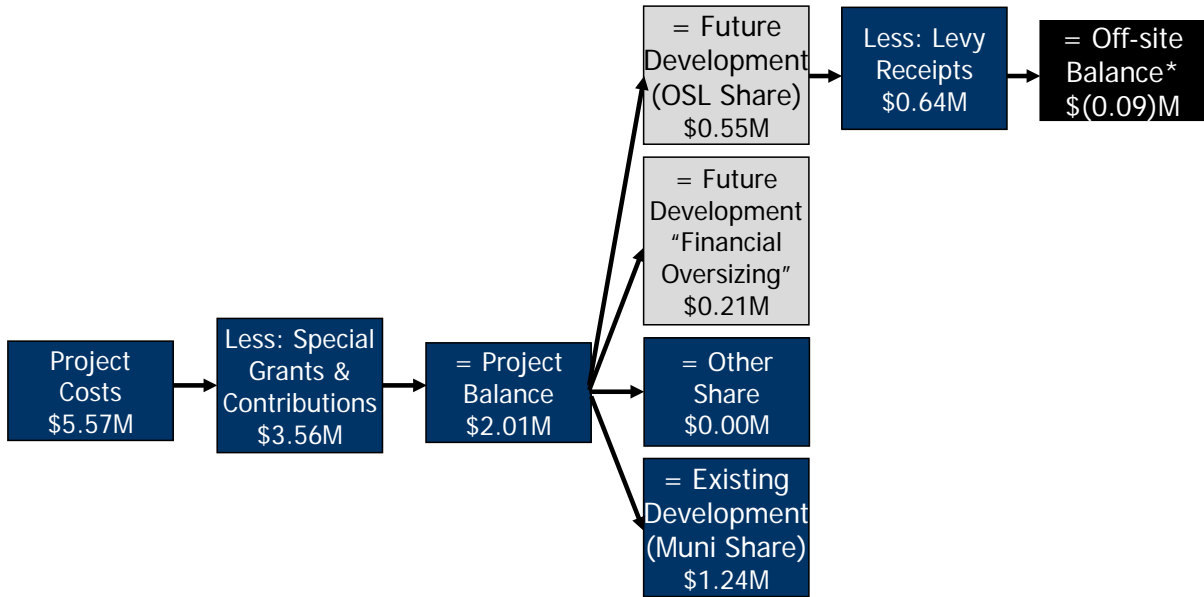
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2020	Offsite Levy Funds Collected Starting Jan 1, 2021	Adjusted Developer (Levy) Cost
1	Cassils Road	\$ 205,675	\$ -	\$ -	\$ 205,675
2	Cassils Road and 2nd Street West	\$ 248,542	\$ -	\$ -	\$ 248,542
4	2nd Street West (South) Capacity Improvements	\$ 99,890	\$ -	\$ -	\$ 99,890
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ 643,897	\$ -	\$ (643,897)
		\$ 554,106	\$ 643,897	\$ -	\$ (89,791)

B6. Summary of Transportation Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for transportation infrastructure that forms the basis of the rate is approximately **\$(0.09) million**. The cost allocations to each benefiting party are based on the benefiting percentages shown in previous section. The offsite levy balance (due from developers) is allocated to various benefiting areas (as described in the next section).

Total Transportation Offsite Levy Costs



B7. Transportation Infrastructure Benefiting Areas

Net developer costs for each project have been allocated to multiple benefiting offsite levy area (see tables below). Allocations are denoted with a “1” below applicable area numbers. Benefiting areas were determined by City staff. The lands anticipated to develop over the 25-years in each offsite levy benefiting area are used to determine rates.

Transportation Allocations to Benefiting Areas

Item	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	\$ 205,675	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	\$ 248,542	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	\$ -	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	\$ 99,890	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	\$ (643,897)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	\$ (89,791)																									

B8. Account Balance

At December 31st, 2020 the transportation account balance was in a deficit of **\$189,680.29**. This amount takes into consideration expenditures and front-ending obligations up to end-2020. This balance also assumes that remaining funds of \$454,216.71 currently in the account are transferred to the City to pay down front-ending obligations owed to the City. Details associated with account reconciliations are summarized in *Appendix H*.

Transportation Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Opening Balance 2006	\$ 511,399.00		\$ 511,399.00
OSL Receipts 2006 - 2020	\$ 118,372.00		\$ 629,771.00
OSL Refunds 2006 - 2020	\$ -		\$ 629,771.00
OSL Receipt Allocations (Withdrawals) 2006 - 2020		\$ -	\$ 629,771.00
Interest Earned (Charged (2006-2020))	\$ 14,126.00		\$ 643,897.00
Account Balance per Muni Records (Unallocated Receipts)			\$ 643,897.00
Front-ending (2006 - 2020)		\$ 454,216.71	\$ 189,680.29
Balance			\$ 189,680.29

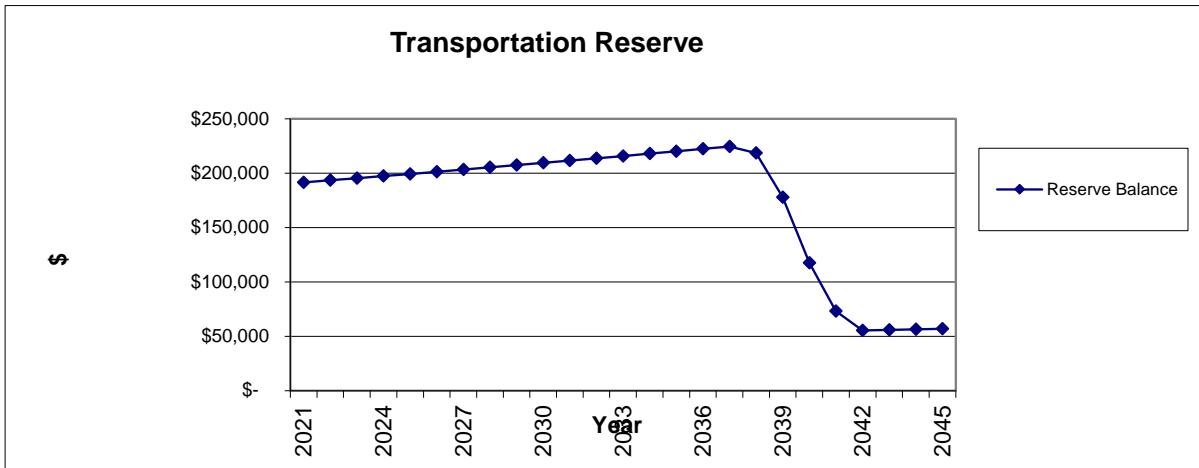
B9. Development and Transportation Infrastructure Staging Impacts

Transportation offsite infrastructure will be constructed in staged fashion over the 25-year review period.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.00%**³ interest allowance is charged to the account when it is forecast to be in a negative balance. Further, a **1.00%** interest credit is provided to the account when it is forecast to be in a positive balance. The graph and table below outline the forecast transportation levy account balances over the 25-year development period.

If necessary, an interest staging adjustment is applied to rates (slightly positive or slightly negative) to ensure that the forecast account balance at the end of the 25-year review period always returns to break-even (i.e., developers are not charged too much thereby providing a windfall to the City, nor are they charged too little thereby placing an unequitable burden on taxpayers)⁴.

Anticipated Transportation Offsite Levy Account Balances



³ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.00%.

⁴ At present, the City has collected more funds in the transportation account than is currently necessary. This surplus will be reduced as additional transportation costs are brought on board in the future.

Anticipated Transportation Offsite Levy Account Balances

			Reserve Balance	\$ 189,680
Year	Receipts	Expenditure	Interest	Balance
2021	\$ -	\$ -	\$ 1,897	\$ 191,577
2022	\$ -	\$ -	\$ 1,916	\$ 193,493
2023	\$ -	\$ -	\$ 1,935	\$ 195,428
2024	\$ -	\$ -	\$ 1,954	\$ 197,382
2025	\$ -	\$ -	\$ 1,974	\$ 199,356
2026	\$ -	\$ -	\$ 1,994	\$ 201,349
2027	\$ -	\$ -	\$ 2,013	\$ 203,363
2028	\$ -	\$ -	\$ 2,034	\$ 205,397
2029	\$ -	\$ -	\$ 2,054	\$ 207,451
2030	\$ -	\$ -	\$ 2,075	\$ 209,525
2031	\$ -	\$ -	\$ 2,095	\$ 211,620
2032	\$ -	\$ -	\$ 2,116	\$ 213,736
2033	\$ -	\$ -	\$ 2,137	\$ 215,874
2034	\$ -	\$ -	\$ 2,159	\$ 218,033
2035	\$ -	\$ -	\$ 2,180	\$ 220,213
2036	\$ -	\$ -	\$ 2,202	\$ 222,415
2037	\$ -	\$ -	\$ 2,224	\$ 224,639
2038	\$ -	\$ 8,255	\$ 2,164	\$ 218,548
2039	\$ -	\$ 42,514	\$ 1,760	\$ 177,794
2040	\$ -	\$ 61,305	\$ 1,165	\$ 117,654
2041	\$ -	\$ 45,103	\$ 726	\$ 73,277
2042	\$ -	\$ 18,582	\$ 547	\$ 55,242
2043	\$ -	\$ -	\$ 552	\$ 55,794
2044	\$ -	\$ -	\$ 558	\$ 56,352
2045	\$ -	\$ -	\$ 564	\$ 56,915

APPENDIX C: WATER

C1. Water Offsite Infrastructure

In order to support future growth, water offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$36.14 million** as outlined in the table below. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Water Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Raw Water Intake	\$ 1,222,871	\$ -	\$ -	\$ 1,222,871
2	Water Treatment Plant	\$ 1,450,000	\$ -	\$ -	\$ 1,450,000
3	Water Treatment Plant Upgrade	\$ 727,986	\$ -	\$ -	\$ 727,986
4	300mm Diameter Main to Fairview Reservoir	\$ 175,000	\$ -	\$ -	\$ 175,000
5	Water Reservoir	\$ 1,534,000	\$ -	\$ -	\$ 1,534,000
6	Upgrade Filters at Water Treatment Plant	\$ 479,050	\$ -	\$ -	\$ 479,050
7	Water Supply, Treatment & Storage - NRSC	\$ 6,708,047	\$ -	\$ -	\$ 6,708,047
8	East Sector Water Mains	\$ 416,026	\$ -	\$ -	\$ 416,026
10	Industrial Main Loop - Phase 1	\$ -	\$ -	\$ 6,164,000	\$ 6,164,000
11	Industrial Main Loop - Phase 2	\$ -	\$ -	\$ 6,031,000	\$ 6,031,000
12	Industrial Main Loop - Phase 3	\$ -	\$ -	\$ 7,045,000	\$ 7,045,000
13	Southeast Main Loop - Phase 1	\$ -	\$ -	\$ 1,186,000	\$ 1,186,000
14	Southeast Main Loop - Phase 2	\$ -	\$ -	\$ 1,350,000	\$ 1,350,000
15	Southeast Main Loop - Phase 3	\$ -	\$ -	\$ 1,648,000	\$ 1,648,000
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ 12,712,980	\$ -	\$ 23,424,000	\$ 36,136,980

*Costs estimates provided by City staff.

**Estimates include engineering, contingencies, and land costs if any.

***Historical financing charges (if any) are included in the cost of completed work.

****Unallocated levies to end-2020 were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

*****Offsite infrastructure definitions are contained in Appendix F.

*****Project numbers that are “hidden” pertain to projects that have since been removed from the bylaw.

Location of Water Offsite Infrastructure

C2. Water Offsite Infrastructure Grants & Contributions to Date

The *MGA* enables the City to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). The City has/will receive approximately **\$5.28 million** in special ear-marked grants and contributions for water offsite levy infrastructure as shown in the table below (note, if the City receives other ear-marked grants or contributions

in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$30.86 million**.

Special Grants and Contributions for Water Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Reduced Project Estimated Cost
1	Raw Water Intake	\$ 1,222,871	\$ 368,738	\$ 613,673	\$ 240,460
2	Water Treatment Plant	\$ 1,450,000	\$ 127,630	\$ 1,095,666	\$ 226,704
3	Water Treatment Plant Upgrade	\$ 727,986	\$ 363,993	\$ -	\$ 363,993
4	300mm Diameter Main to Fairview Reservoir	\$ 175,000	\$ 87,500	\$ -	\$ 87,500
5	Water Reservoir	\$ 1,534,000	\$ 767,000	\$ -	\$ 767,000
6	Upgrade Filters at Water Treatment Plant	\$ 479,050	\$ 1,580,876	\$ -	\$ (1,101,826)
7	Water Supply, Treatment & Storage - NRSC	\$ 6,708,047	\$ -	\$ -	\$ 6,708,047
8	East Sector Water Mains	\$ 416,026	\$ 273,825	\$ -	\$ 142,201
10	Industrial Main Loop - Phase 1	\$ 6,164,000	\$ -	\$ -	\$ 6,164,000
11	Industrial Main Loop - Phase 2	\$ 6,031,000	\$ -	\$ -	\$ 6,031,000
12	Industrial Main Loop - Phase 3	\$ 7,045,000	\$ -	\$ -	\$ 7,045,000
13	Southeast Main Loop - Phase 1	\$ 1,186,000	\$ -	\$ -	\$ 1,186,000
14	Southeast Main Loop - Phase 2	\$ 1,350,000	\$ -	\$ -	\$ 1,350,000
15	Southeast Main Loop - Phase 3	\$ 1,648,000	\$ -	\$ -	\$ 1,648,000
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ 36,136,980	\$ 3,569,562	\$ 1,709,339	\$ 30,858,079

C3. Year of Construction

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast account balances, and the estimate of financial oversizing (described in the Section that follows). The City anticipates construction of offsite infrastructure as outlined in the table below. Note, if this schedule is adjusted in the future, it will be reflected in one of the City's annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	Raw Water Intake	2006
2	Water Treatment Plant	2006
3	Water Treatment Plant Upgrade	2006
4	300mm Diameter Main to Fairview Reservoir	2006
5	Water Reservoir	2006
6	Upgrade Filters at Water Treatment Plant	2006
7	Water Supply, Treatment & Storage - NRSC	2010
8	East Sector Water Mains	2006
10	Industrial Main Loop - Phase 1	2029
11	Industrial Main Loop - Phase 2	2033
12	Industrial Main Loop - Phase 3	2039
13	Southeast Main Loop - Phase 1	2025
14	Southeast Main Loop - Phase 2	2036
15	Southeast Main Loop - Phase 3	2042

*The share of projects constructed beyond the 25-year review period are not included in rates today (see financial oversizing in next section).

** Project costs are inflated by 3% per annum to the year of construction.

C4. Water Offsite Infrastructure Benefiting Parties

The water offsite infrastructure previously outlined will benefit various parties to varying degrees. Three potential benefiting parties were identified including:

1. City of Brooks – a portion of the water infrastructure which is required to service existing residents. This residual benefit is determined at the point in time when the project is added to the bylaw (i.e., it does not fluctuate from year-to-year).
2. Other Stakeholders – other municipalities that benefit from the infrastructure.
3. Future Development:
 - o Financial Oversizing – that portion of cost (i.e., leviable water infrastructure costs) which benefits future development beyond the 25-year review period.
 - o **In Rates – that portion of cost (i.e., leviable water infrastructure costs) which benefits future development within the 25-year review period.**

The table below outlines the allocation of water offsite levy infrastructure costs to benefiting parties.

Allocation of Water Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Raw Water Intake	\$ 240,460	77.23%			22.77%
2	Water Treatment Plant	\$ 226,704	77.23%			22.77%
3	Water Treatment Plant Upgrade	\$ 363,993	77.23%			22.77%
4	300mm Diameter Main to Fairview Reservoir	\$ 87,500	77.23%			22.77%
5	Water Reservoir	\$ 767,000	77.23%			22.77%
6	Upgrade Filters at Water Treatment Plant	\$ (1,101,826)	77.23%			22.77%
7	Water Supply, Treatment & Storage - NRSC	\$ 6,708,047	60.26%			39.74%
8	East Sector Water Mains	\$ 142,201	53.56%			46.44%
10	Industrial Main Loop - Phase 1	\$ 6,164,000	60.26%		12.72%	27.03%
11	Industrial Main Loop - Phase 2	\$ 6,031,000	60.26%		19.08%	20.67%
12	Industrial Main Loop - Phase 3	\$ 7,045,000	60.26%		28.62%	11.13%
13	Southeast Main Loop - Phase 1	\$ 1,186,000	60.54%		6.31%	33.15%
14	Southeast Main Loop - Phase 2	\$ 1,350,000	60.54%		23.68%	15.78%
15	Southeast Main Loop - Phase 3	\$ 1,648,000	60.54%		33.15%	6.31%
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -				100.00%
		\$ 30,858,079				

*Allocations were determined by City staff.

**Financial oversizing is determined by separating out the pro rata portion of developer cost beyond the 25-year review period, in comparison with the anticipated year of construction. As the years move forward and rates are updated, these additional developer costs will be included in rate calculations. For example, a project which is slated to be constructed in year 20 of the 25-year review period will have 20% (5/25) of its costs in rates today, and 80% (20/25) of its costs will sit beyond the 25-year review period.

C5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately **\$7.27 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. City staff have advised that approximately **\$2.50 million** in water levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy

cost of approximately **\$4.77 million**.

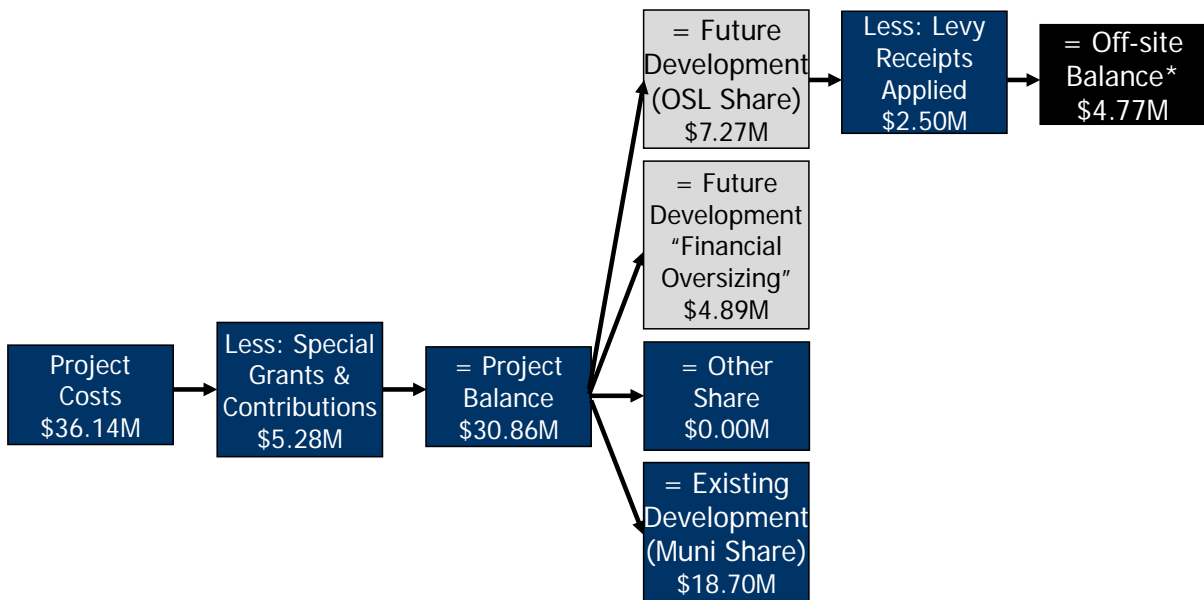
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2020	Offsite Levy Funds Collected Starting Jan 1, 2021	Adjusted Developer (Levy) Cost
1	Raw Water Intake	\$ 54,753	\$ -	\$ -	\$ 54,753
2	Water Treatment Plant	\$ 51,621	\$ -	\$ -	\$ 51,621
3	Water Treatment Plant Upgrade	\$ 82,881	\$ -	\$ -	\$ 82,881
4	300mm Diameter Main to Fairview Reservoir	\$ 19,924	\$ -	\$ -	\$ 19,924
5	Water Reservoir	\$ 174,646	\$ -	\$ -	\$ 174,646
6	Upgrade Filters at Water Treatment Plant	\$ (250,886)	\$ -	\$ -	\$ (250,886)
7	Water Supply, Treatment & Storage - NRSC	\$ 2,666,093	\$ 1,735,245	\$ -	\$ 930,848
8	East Sector Water Mains	\$ 66,038	\$ -	\$ -	\$ 66,038
10	Industrial Main Loop - Phase 1	\$ 1,665,907	\$ -	\$ -	\$ 1,665,907
11	Industrial Main Loop - Phase 2	\$ 1,246,441	\$ -	\$ -	\$ 1,246,441
12	Industrial Main Loop - Phase 3	\$ 784,004	\$ -	\$ -	\$ 784,004
13	Southeast Main Loop - Phase 1	\$ 393,116	\$ -	\$ -	\$ 393,116
14	Southeast Main Loop - Phase 2	\$ 213,084	\$ -	\$ -	\$ 213,084
15	Southeast Main Loop - Phase 3	\$ 104,048	\$ -	\$ -	\$ 104,048
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ 763,751	\$ -	\$ (763,751)
		\$ 7,271,669	\$ 2,498,996	\$ -	\$ 4,772,673

C6. Summary of Water Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for water infrastructure that forms the basis of the rate is approximately **\$4.77 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in previous section. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Water Offsite Levy Costs



C7. Water Infrastructure Benefiting Areas

Net developer costs for each project have been allocated to multiple benefiting offsite levy area (see tables below). Allocations are denoted with a “1” below applicable area numbers. Benefiting areas were determined by City staff. The lands anticipated to develop over the 25-years in each offsite levy benefiting area are used to determine rates.

Water Allocations to Benefiting Areas

Item	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1	\$ 54,753	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	\$ 51,621	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	\$ 82,881	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	\$ 19,924	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5	\$ 174,646	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6	\$ (250,886)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	\$ 930,848	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8	\$ 66,038	1																			1	1	1	1	1		
10	\$ 1,665,907	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
11	\$ 1,246,441	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
12	\$ 784,004	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
13	\$ 393,116	1																			1	1	1	1	1	1	
14	\$ 213,084	1																			1	1	1	1	1	1	
15	\$ 104,048	1																			1	1	1	1	1	1	
100	\$ (763,751)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	\$ 4,772,673																										

C8. Account Balance

At December 31st, 2020 the water account balance was in a deficit of **\$(365,758.34)**. This amount takes into consideration expenditures and front-ending obligations up to end-2020. This balance also assumes that funds of **\$763,751.00** currently in the account are transferred to the City to pay down front-ending obligations owed to the City. Details associated with account reconciliations are summarized in *Appendix H*.

Water Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Opening Balance 2006	\$ 1,635,066.00		\$ 1,635,066.00
OSL Receipts 2006 - 2020	\$ 894,522.00		\$ 2,529,588.00
OSL Refunds 2006 - 2020		\$ 46,183.00	\$ 2,483,405.00
OSL Receipt Allocations (Withdrawals) 2006 - 2020		\$ 1,735,245.00	\$ 748,160.00
Interest Earned (Charged (2006 2020))	\$ 15,591.00		\$ 763,751.00
Account Balance per Muni Records (Unallocated Receipts)			\$ 763,751.00
Front-ending (2006 - 2020)		\$ 1,129,509.34	\$ (365,758.34)
Balance			\$ (365,758.34)

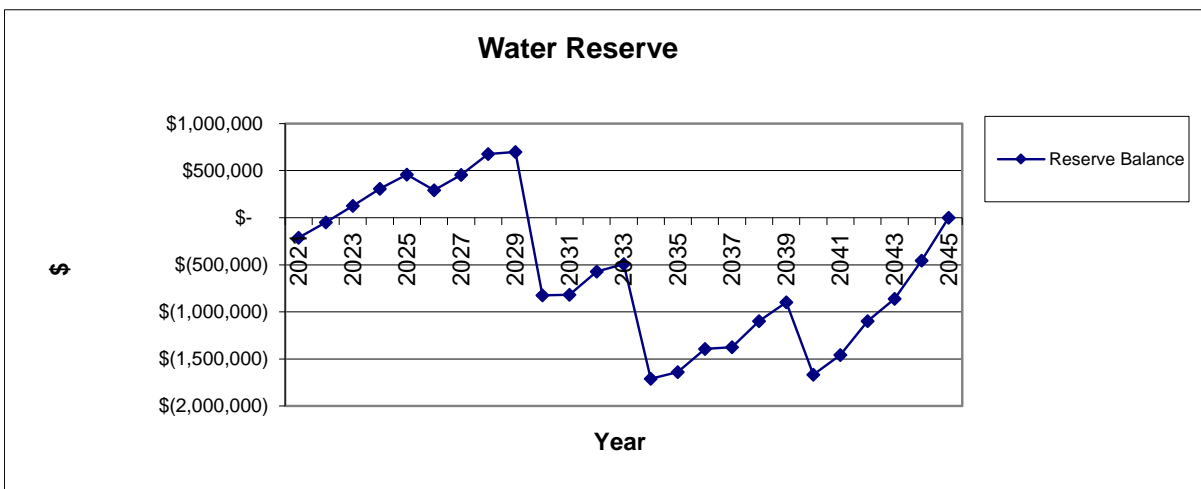
C9. Development and Water Infrastructure Staging Impacts

Water offsite infrastructure will be constructed in staged fashion over the 25-year review period. We have reviewed the availability of offsite levy funds to meet these construction requirements and found that offsite levy account funds will not be sufficient to pay for construction of water infrastructure from time to time—front ending of infrastructure will be required. A front-ender is the party that constructs and pays up front for infrastructure that benefits other parties.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.00%**⁵ interest allowance is charged to the account when it is forecast to be in a negative balance. Further, a **1.00%** interest credit is provided to the account when it is forecast to be in a positive balance. The graph and table below outline the forecast water levy account balances over the 25-year development period.

If necessary, an interest staging adjustment is applied to rates (slightly positive or slightly negative) to ensure that the forecast account balance at the end of the 25-year review period always returns to break-even (i.e., developers are not charged too much thereby providing a windfall to the City, nor are they charged too little thereby placing an unequitable burden on taxpayers).

Anticipated Water Offsite Levy Account Balances



⁵ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%.

Anticipated Water Offsite Levy Account Balances

			Opening Balance	\$ (365,758)
Year	Receipts	Expenditure	Interest	Balance
2021	\$ 157,846	\$ -	\$ (4,158)	\$ (212,070)
2022	\$ 164,955	\$ -	\$ (942)	\$ (48,057)
2023	\$ 172,384	\$ -	\$ 1,243	\$ 125,570
2024	\$ 180,146	\$ -	\$ 3,057	\$ 308,773
2025	\$ 188,267	\$ 44,246	\$ 4,528	\$ 457,322
2026	\$ 196,739	\$ 364,584	\$ 2,895	\$ 292,372
2027	\$ 205,601	\$ 46,940	\$ 4,510	\$ 455,543
2028	\$ 214,859	\$ -	\$ 6,704	\$ 677,106
2029	\$ 224,543	\$ 211,032	\$ 6,906	\$ 697,523
2030	\$ 234,657	\$ 1,738,904	\$ (16,134)	\$ (822,859)
2031	\$ 245,219	\$ 223,884	\$ (16,030)	\$ (817,554)
2032	\$ 256,265	\$ -	\$ (11,226)	\$ (572,514)
2033	\$ 267,800	\$ 177,713	\$ (9,649)	\$ (492,075)
2034	\$ 279,860	\$ 1,464,353	\$ (33,531)	\$ (1,710,100)
2035	\$ 292,469	\$ 188,535	\$ (32,123)	\$ (1,638,289)
2036	\$ 305,651	\$ 33,198	\$ (27,317)	\$ (1,393,153)
2037	\$ 319,412	\$ 273,550	\$ (26,946)	\$ (1,374,237)
2038	\$ 333,797	\$ 35,220	\$ (21,513)	\$ (1,097,172)
2039	\$ 348,832	\$ 133,471	\$ (17,636)	\$ (899,448)
2040	\$ 364,545	\$ 1,099,804	\$ (32,694)	\$ (1,667,402)
2041	\$ 380,965	\$ 141,600	\$ (28,561)	\$ (1,456,597)
2042	\$ 398,104	\$ 19,356	\$ (21,557)	\$ (1,099,406)
2043	\$ 416,054	\$ 159,494	\$ (16,857)	\$ (859,702)
2044	\$ 434,787	\$ 20,535	\$ (8,909)	\$ (454,359)
2045	\$ 454,359	\$ -	\$ -	\$ (0)

APPENDIX D: SANITARY SEWER

D1. Sanitary Sewer Offsite Infrastructure

In order to support future growth, sanitary sewer offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$53.82 million** as outlined in the table below. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Sanitary Sewer Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	New Sewage Treatment Facility, Pumping Station and Forcemain	\$ 2,930,188	\$ -	\$ -	\$ 2,930,188
2	Modification and Expansion Wastewater Treatment Facility	\$ 4,283,941	\$ -	\$ -	\$ 4,283,941
3	Pump Station Modifications and Forcemain	\$ 1,156,251	\$ -	\$ -	\$ 1,156,251
4	East Sector Sanitary Sewer Upgrade	\$ 232,611	\$ -	\$ -	\$ 232,611
5	Cassils Road East Sanitary Sewer Main	\$ 153,225	\$ -	\$ -	\$ 153,225
9	Eastbrook Sanitary Sewer Pump Station Upgrade	\$ 1,536,839	\$ -	\$ -	\$ 1,536,839
10	Main Trunk (Old Lagoons to Hort Lift Station)	\$ 552,456	\$ -	\$ 3,512,014	\$ 4,064,470
11	Main Trunk (7th Street East to Old Lagoons)	\$ -	\$ -	\$ 4,133,000	\$ 4,133,000
12	South Industrial Trunk Main Upsize	\$ -	\$ -	\$ 1,716,000	\$ 1,716,000
13	Eastbrook Lift Station and Forcemain Upgrades	\$ -	\$ -	\$ 1,729,000	\$ 1,729,000
14	Parkland Lift Station Upgrades	\$ -	\$ -	\$ 329,000	\$ 329,000
15	Meadowbrook Lift Station Upgrades	\$ -	\$ -	\$ 1,358,000	\$ 1,358,000
16	Wastewater Treatment Upgrades	\$ -	\$ -	\$ 30,200,000	\$ 30,200,000
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ 10,845,511	\$ -	\$ 42,977,014	\$ 53,822,525

*Costs estimates provided by City staff.

**Estimates include engineering, contingencies, and land costs if any.

***Historical financing charges (if any) are included in the cost of completed work.

****Unallocated levies to end-2020 were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

*****Offsite infrastructure definitions are contained in Appendix F.

*****Project numbers that are “hidden” pertain to projects that have since been removed from the bylaw.

D2. Sanitary Sewer Offsite Infrastructure Grants & Contributions to Date

The *MGA* enables the City to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). City of Brooks has/will receive approximately **\$16.28 million** in special ear-marked grants and contributions for sanitary sewer offsite levy infrastructure as shown in the table below (note, if the City receives additional ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$37.54 million**.

Special Grants and Contributions for Sanitary Sewer Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Reduced Project Estimated Cost
1	New Sewage Treatment Facility, Pumping Station and Forcemain	\$ 2,930,188	\$ 2,785,454	\$ -	\$ 144,734
2	Modification and Expansion Wastewater Treatment Facility	\$ 4,283,941	\$ 1,523,849	\$ 2,075,000	\$ 685,092
3	Pump Station Modifications and Forcemain	\$ 1,156,251	\$ 578,126	\$ -	\$ 578,125
4	East Sector Sanitary Sewer Upgrade	\$ 232,611	\$ 180,776	\$ -	\$ 51,835
5	Cassils Road East Sanitary Sewer Main	\$ 153,225	\$ 76,612	\$ -	\$ 76,613
9	Eastbrook Sanitary Sewer Pump Station Upgrade	\$ 1,536,839	\$ -	\$ -	\$ 1,536,839
10	Main Trunk (Old Lagoons to Hort Lift Station)	\$ 4,064,470	\$ -	\$ -	\$ 4,064,470
11	Main Trunk (7th Street East to Old Lagoons)	\$ 4,133,000	\$ -	\$ -	\$ 4,133,000
12	South Industrial Trunk Main Upsize	\$ 1,716,000	\$ -	\$ -	\$ 1,716,000
13	Eastbrook Lift Station and Forcemain Upgrades	\$ 1,729,000	\$ -	\$ -	\$ 1,729,000
14	Parkland Lift Station Upgrades	\$ 329,000	\$ -	\$ -	\$ 329,000
15	Meadowbrook Lift Station Upgrades	\$ 1,358,000	\$ -	\$ -	\$ 1,358,000
16	Wastewater Treatment Upgrades	\$ 30,200,000	\$ 9,060,000	\$ -	\$ 21,140,000
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ 53,822,525	\$ 14,204,817	\$ 2,075,000	\$ 37,542,708

D3. Year of Construction

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast account balances, and the estimate of financial oversizing (described in the Section that follows). The City anticipates construction of offsite infrastructure as outlined in the table below. Note, if this schedule is adjusted in the future, it will be reflected in one of the City’s annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	New Sewage Treatment Facility, Pumping Station and Forcemain	2006
2	Modification and Expansion Wastewater Treatment Facility	2006
3	Pump Station Modifications and Forcemain	2006
4	East Sector Sanitary Sewer Upgrade	2006
5	Cassils Road East Sanitary Sewer Main	2006
9	Eastbrook Sanitary Sewer Pump Station Upgrade	2012
10	Main Trunk (Old Lagoons to Hort Lift Station)	2016
11	Main Trunk (7th Street East to Old Lagoons)	2022
12	South Industrial Trunk Main Upsize	2029
13	Eastbrook Lift Station and Forcemain Upgrades	2026
14	Parkland Lift Station Upgrades	2023
15	Meadowbrook Lift Station Upgrades	2025
16	Wastewater Treatment Upgrades	2025

*The share of projects constructed beyond the 25-year review period are not included in rates today (see financial oversizing in next section).

** Project costs are inflated by 3% per annum to the year of construction.

D4. Sanitary Sewer Offsite Infrastructure Benefiting Parties

The sanitary sewer offsite infrastructure previously outlined will benefit various parties to varying degrees. Three potential benefiting parties were identified including:

1. City of Brooks – a portion of the sanitary sewer infrastructure which is required to service existing residents. This residual benefit is determined at the point in time when the project is added to the bylaw (i.e., it does not fluctuate from year-to-year).
2. Other Stakeholders – other municipalities that benefit from the infrastructure.
3. Future Development:
 - Financial Oversizing – that portion of cost (i.e., leviable sanitary sewer infrastructure costs) which benefits future development beyond the 25-year review period.
 - **In Rates – that portion of cost (i.e., leviable sanitary sewer infrastructure costs) which benefits future development within the 25-year review period.**

The table below outlines the allocation of sanitary sewer offsite levy infrastructure costs to benefiting parties.

Allocation of Sanitary Sewer Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	New Sewage Treatment Facility, Pumping Station and Forcemain	\$ 144,734	77.23%			22.77%
2	Modification and Expansion Wastewater Treatment Facility	\$ 685,092	77.23%			22.77%
3	Pump Station Modifications and Forcemain	\$ 578,125	77.23%			22.77%
4	East Sector Sanitary Sewer Upgrade	\$ 51,835	62.08%			37.92%
5	Cassils Road East Sanitary Sewer Main	\$ 76,613	74.60%			25.40%
9	Eastbrook Sanitary Sewer Pump Station Upgrade	\$ 1,536,839	70.69%			29.31%
10	Main Trunk (Old Lagoons to Hort Lift Station)	\$ 4,064,470	60.26%			39.74%
11	Main Trunk (7th Street East to Old Lagoons)	\$ 4,133,000	59.23%		1.63%	39.14%
12	South Industrial Trunk Main Upsize	\$ 1,716,000	58.09%		13.41%	28.50%
13	Eastbrook Lift Station and Forcemain Upgrades	\$ 1,729,000	70.69%		5.86%	23.45%
14	Parkland Lift Station Upgrades	\$ 329,000	75.75%		1.94%	22.31%
15	Meadowbrook Lift Station Upgrades	\$ 1,358,000	65.92%		5.45%	28.63%
16	Wastewater Treatment Upgrades	\$ 21,140,000	60.26%		6.36%	33.39%
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -				100.00%
		\$ 37,542,708				

*Allocations were determined by City staff.

**Financial oversizing is determined by separating out the pro rata portion of developer cost beyond the 25-year review period, in comparison with the anticipated year of construction. As the years move forward and rates are updated, these additional developer costs will be included in rate calculations. For example, a project which is slated to be constructed in year 20 of the 25-year review period will have 20% (5/25) of its costs in rates today, and 80% (20/25) of its costs will sit beyond the 25-year review period.

***Financial oversizing for Projects 3,4,5,6,7,8,and 13 was removed as these projects are allocated to offsite levy areas which have no lands developing beyond the 25-year review period.

D5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately **\$12.46 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. City staff have advised that approximately **\$2.57 million** in sanitary sewer levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately **\$9.89 million**.

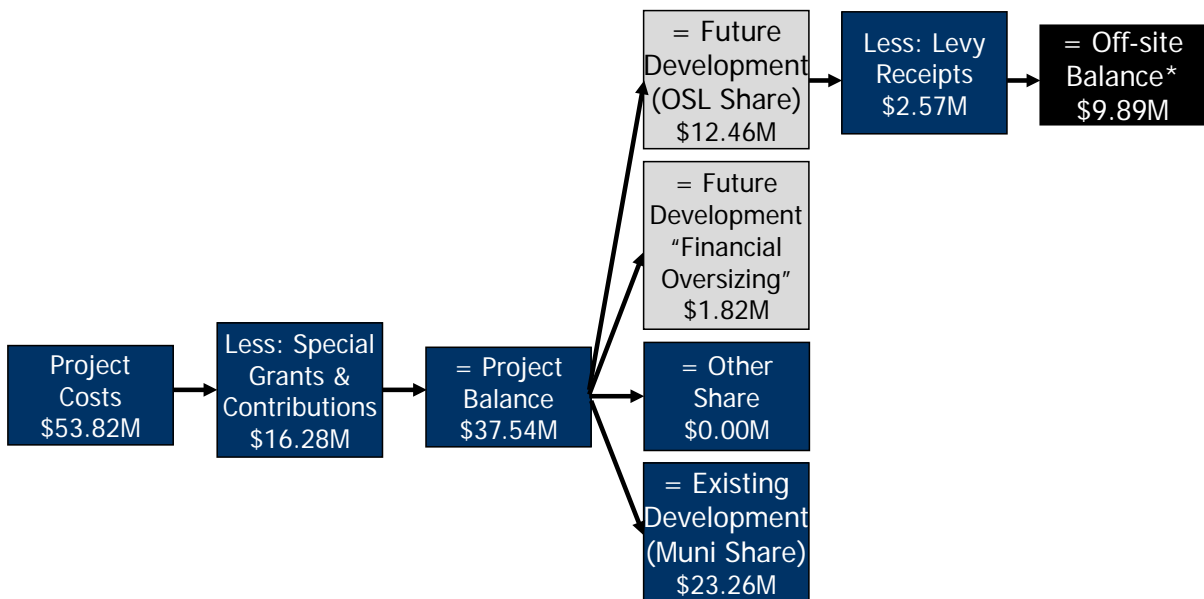
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2020	Offsite Levy Funds Collected Starting Jan 1, 2021	Adjusted Developer (Levy) Cost
1	New Sewage Treatment Facility, Pumping Station and Forcemain	\$ 32,956	\$ -	\$ -	\$ 32,956
2	Modification and Expansion Wastewater Treatment Facility	\$ 155,995	\$ -	\$ -	\$ 155,995
3	Pump Station Modifications and Forcemain	\$ 131,639	\$ -	\$ -	\$ 131,639
4	East Sector Sanitary Sewer Upgrade	\$ 19,656	\$ -	\$ -	\$ 19,656
5	Cassils Road East Sanitary Sewer Main	\$ 19,460	\$ -	\$ -	\$ 19,460
9	Eastbrook Sanitary Sewer Pump Station Upgrade	\$ 450,431	\$ 39,968	\$ -	\$ 410,463
10	Main Trunk (Old Lagoons to Hort Lift Station)	\$ 1,615,411	\$ -	\$ -	\$ 1,615,411
11	Main Trunk (7th Street East to Old Lagoons)	\$ 1,617,745	\$ -	\$ -	\$ 1,617,745
12	South Industrial Trunk Main Upsize	\$ 489,053	\$ -	\$ -	\$ 489,053
13	Eastbrook Lift Station and Forcemain Upgrades	\$ 405,401	\$ -	\$ -	\$ 405,401
14	Parkland Lift Station Upgrades	\$ 73,388	\$ -	\$ -	\$ 73,388
15	Meadowbrook Lift Station Upgrades	\$ 388,765	\$ -	\$ -	\$ 388,765
16	Wastewater Treatment Upgrades	\$ 7,057,703	\$ -	\$ -	\$ 7,057,703
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ 2,511,695	\$ -	\$ (2,511,695)
		\$ 12,457,602	\$ 2,569,024	\$ -	\$ 9,888,578

D6. Summary of Sanitary Sewer Offsite Levy Cost Flow-through

As shown in the figure below, the total costs for sanitary sewer infrastructure that forms the basis of the rate is approximately **\$9.89 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in the previous section. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Sanitary Sewer Offsite Levy Costs



D7. Sanitary Sewer Infrastructure Benefitting Areas

Net developer costs for each project have been allocated to multiple benefitting offsite levy

area (see tables below). Allocations are denoted with a “1” below applicable area numbers. Benefiting areas were determined by City staff. The lands anticipated to develop over the 25-years in each offsite levy benefitting area are used to determine rates.

Sanitary Sewer Allocations to Benefitting Areas

Item	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1	\$ 32,956	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	\$ 155,995	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	\$ 131,639	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	\$ 19,656																				1						
5	\$ 19,460																						1		1		
9	\$ 410,463										1	1	1	1	1	1	1	1	1								
10	\$ 1,615,411	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
11	\$ 1,617,745	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
12	\$ 489,053		1	1																							
13	\$ 405,401										1	1	1	1	1	1	1	1	1								
14	\$ 73,388																								1	1	1
15	\$ 388,765																										
16	\$ 7,057,703	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
100	\$ (2,511,695)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	\$ 9,888,578																										

D8. Account Balance

At December 31st, 2020 the sanitary sewer account balance was in a surplus of **\$1,603,398.50**. This amount takes into consideration expenditures and front-ending obligations up to end-2020. This balance also assumes that funds of \$972,370.50 currently in the account are transferred to the City to pay down front-ending obligations owed to the City. Details associated with account reconciliations are summarized in *Appendix H*.

Sanitary Sewer Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Opening Balance 2006	\$ 1,888,174.00		\$ 1,888,174.00
OSL Receipts 2006 - 2020	\$ 682,873.00		\$ 2,571,047.00
OSL Refunds 2006 - 2020		\$ 28,276.00	\$ 2,542,771.00
OSL Receipt Allocations (Withdrawals) 2006 - 2020		\$ 57,329.00	\$ 2,485,442.00
Interest Earned (Charged (2006 2020)	\$ 90,327.00		\$ 2,575,769.00
Account Balance per Muni Records (Unallocated Receipts)			\$ 2,575,769.00
Front-ending (2006 - 2020)		\$ 972,370.50	\$ 1,603,398.50
Balance			\$ 1,603,398.50

D9. Development and Sanitary Sewer Infrastructure Staging Impacts

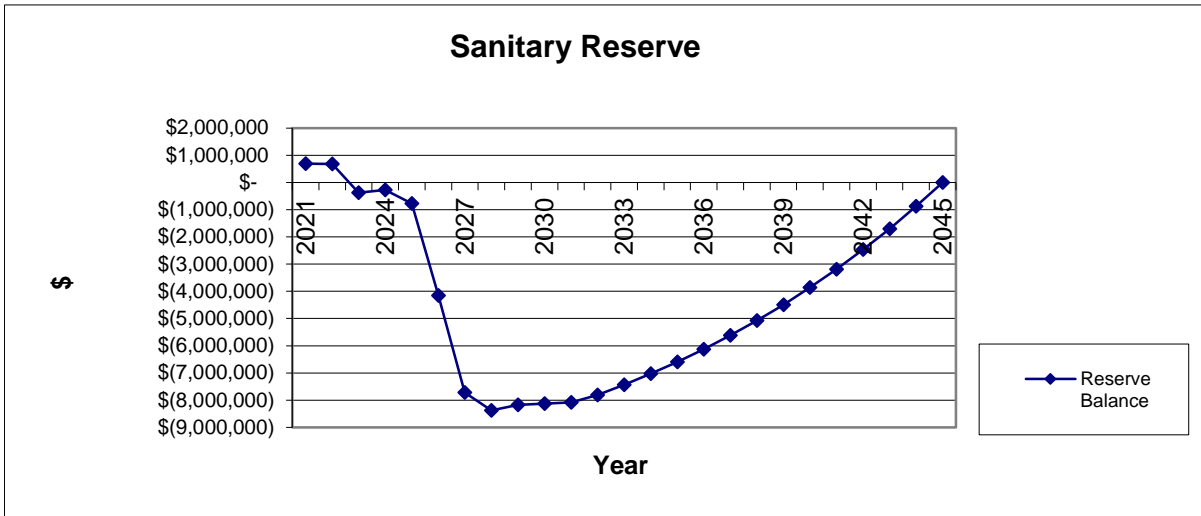
Sanitary sewer offsite infrastructure will be constructed in staged fashion over the 25-year development period. We have reviewed the availability of offsite levy funds to meet these construction requirements and found that offsite levy account funds will not be sufficient to pay for construction of sanitary sewer infrastructure from time to time—front ending of infrastructure will be required. A front-ender is the party that constructs and pays up front for infrastructure that benefits other parties.

To compensate parties for capital they provide in front-ending offsite infrastructure

construction, a **2.00%**⁶ interest allowance is charged to the account when it is forecast to be in a negative balance. Further, a **1.00%** interest credit is provided to the account when it is forecast to be in a positive balance. The graph and table below outline the forecast water levy account balances over the 25-year development period.

If necessary, an interest staging adjustment is applied to rates (slightly positive or slightly negative) to ensure that the forecast account balance at the end of the 25-year review period always returns to break-even (i.e., developers are not charged too much thereby providing a windfall to the City, nor are they charged too little thereby placing an unequitable burden on taxpayers).

Anticipated Sanitary Sewer Offsite Levy Account Balances



⁶ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%.

Anticipated Sanitary Sewer Offsite Levy Account Balances

		Opening Balance		\$ 1,603,398
Year	Receipts	Expenditure	Interest	Balance
2021	\$ 304,709	\$ 1,227,712	\$ 6,804	\$ 687,199
2022	\$ 318,433	\$ 333,015	\$ 6,726	\$ 679,344
2023	\$ 332,773	\$ 1,380,798	\$ (7,374)	\$ (376,054)
2024	\$ 347,756	\$ 240,929	\$ (5,385)	\$ (274,612)
2025	\$ 363,434	\$ 846,366	\$ (15,151)	\$ (772,695)
2026	\$ 379,788	\$ 3,680,270	\$ (81,464)	\$ (4,154,641)
2027	\$ 396,897	\$ 3,804,583	\$ (151,247)	\$ (7,713,574)
2028	\$ 414,768	\$ 917,868	\$ (164,333)	\$ (8,381,007)
2029	\$ 433,462	\$ 61,952	\$ (160,190)	\$ (8,169,687)
2030	\$ 452,986	\$ 255,241	\$ (159,439)	\$ (8,131,381)
2031	\$ 473,376	\$ 262,898	\$ (158,418)	\$ (8,079,321)
2032	\$ 494,699	\$ 67,696	\$ (153,046)	\$ (7,805,364)
2033	\$ 516,966	\$ -	\$ (145,768)	\$ (7,434,166)
2034	\$ 540,247	\$ -	\$ (137,878)	\$ (7,031,797)
2035	\$ 564,588	\$ -	\$ (129,344)	\$ (6,596,554)
2036	\$ 590,034	\$ -	\$ (120,130)	\$ (6,126,650)
2037	\$ 616,600	\$ -	\$ (110,201)	\$ (5,620,252)
2038	\$ 644,368	\$ -	\$ (99,518)	\$ (5,075,401)
2039	\$ 673,391	\$ -	\$ (88,040)	\$ (4,490,050)
2040	\$ 703,724	\$ -	\$ (75,727)	\$ (3,862,052)
2041	\$ 735,423	\$ -	\$ (62,533)	\$ (3,189,162)
2042	\$ 768,508	\$ -	\$ (48,413)	\$ (2,469,067)
2043	\$ 803,159	\$ -	\$ (33,318)	\$ (1,699,227)
2044	\$ 839,322	\$ -	\$ (17,198)	\$ (877,103)
2045	\$ 877,103	\$ -	\$ 0	\$ 0

APPENDIX E: STORMWATER

E1. Stormwater Offsite Infrastructure

In order to support future growth, stormwater offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$4.27 million** as outlined in the table below. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Stormwater Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
13	Marshall Drain Channel Upgrades - Phase 1	\$ -	\$ -	\$ 1,129,545	\$ 1,129,545
14	Marshall Drain Channel Upgrades - Phase 2	\$ -	\$ -	\$ 881,010	\$ 881,010
15	Marshall Drain Channel Upgrades - Phase 3	\$ -	\$ -	\$ 463,455	\$ 463,455
16	Marshall Drain Channel Upgrades - Phase 4	\$ -	\$ -	\$ 1,272,510	\$ 1,272,510
17	Greenbrook Pond Overflow Channel	\$ -	\$ -	\$ 524,340	\$ 524,340
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ 4,270,860	\$ 4,270,860

*Costs estimates provided by City staff.

**Estimates include engineering, contingencies, and land costs if any.

***Historical financing charges (if any) are included in the cost of completed work.

****Unallocated levies to end-2020 were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

*****Offsite infrastructure definitions are contained in Appendix F.

*****Project numbers that are “hidden” pertain to projects that have since been removed from the bylaw.

E2. Stormwater Offsite Infrastructure Grants & Contributions to Date

The *MGA* enables the City to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). City of Brooks has/will receive approximately **\$0.00** in special ear-marked grants and contributions for stormwater offsite levy infrastructure as shown in the table below (note, if the City receives other ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$4.27 million**.

Special Grants and Contributions for Stormwater Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Reduced Project Estimated Cost
13	Marshall Drain Channel Upgrades - Phase 1	\$ 1,129,545	\$ -	\$ -	\$ 1,129,545
14	Marshall Drain Channel Upgrades - Phase 2	\$ 881,010	\$ -	\$ -	\$ 881,010
15	Marshall Drain Channel Upgrades - Phase 3	\$ 463,455	\$ -	\$ -	\$ 463,455
16	Marshall Drain Channel Upgrades - Phase 4	\$ 1,272,510	\$ -	\$ -	\$ 1,272,510
17	Greenbrook Pond Overflow Channel	\$ 524,340	\$ -	\$ -	\$ 524,340
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ -	\$ -	\$ -
		\$ 4,270,860	\$ -	\$ -	\$ 4,270,860

E3. Year of Construction

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast account balances, and the estimate of financial oversizing (described in the Section that follows). The City anticipates construction of offsite infrastructure as outlined in the table below. Note, if this schedule is adjusted in the future, it will be reflected in one of the City’s annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
13	Marshall Drain Channel Upgrades - Phase 1	2024
14	Marshall Drain Channel Upgrades - Phase 2	2029
15	Marshall Drain Channel Upgrades - Phase 3	2034
16	Marshall Drain Channel Upgrades - Phase 4	2039
17	Greenbrook Pond Overflow Channel	2027

*The share of projects constructed beyond the 25-year review period are not included in rates today (see financial oversizing in next section).

** Project costs are inflated by 3% per annum to the year of construction.

E4. Stormwater Offsite Infrastructure Benefiting Parties

The stormwater offsite infrastructure previously outlined will benefit various parties to varying degrees. Three potential benefiting parties were identified including:

1. City of Brooks – a portion of the stormwater infrastructure which is required to service existing residents. This residual benefit is determined at the point in time when the project is added to the bylaw (i.e., it does not fluctuate from year-to-year).
2. Other Stakeholders – other municipalities that benefit from the infrastructure.
3. Future Development:
 - o Financial Oversizing – that portion of cost (i.e., leviable stormwater infrastructure costs) which benefits future development beyond the 25-year review period.

- **In Rates – that portion of cost (i.e., leviable stormwater infrastructure costs) which benefits future development within the 25-year review period.**

The table below outlines the allocation of stormwater offsite levy infrastructure costs to benefiting parties.

Allocation of Stormwater Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
13	Marshall Drain Channel Upgrades - Phase 1	\$ 1,129,545	52.68%		5.68%	41.64%
14	Marshall Drain Channel Upgrades - Phase 2	\$ 881,010	52.68%		15.14%	32.18%
15	Marshall Drain Channel Upgrades - Phase 3	\$ 463,455	52.68%		24.61%	22.71%
16	Marshall Drain Channel Upgrades - Phase 4	\$ 1,272,510	52.68%		34.07%	13.25%
17	Greenbrook Pond Overflow Channel	\$ 524,340	99.51%		0.12%	0.37%
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -				100.00%
		\$ 4,270,860				

*Allocations were determined by City staff.

**Financial oversizing is determined by separating out the pro rata portion of developer cost beyond the 25-year review period, in comparison with the anticipated year of construction. As the years move forward and rates are updated, these additional developer costs will be included in rate calculations. For example, a project which is slated to be constructed in year 20 of the 25-year review period will have 20% (5/25) of its costs in rates today, and 80% (20/25) of its costs will sit beyond the 25-year review period.

E5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of **\$1.03 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. City staff have advised that **\$0.38 million** in stormwater levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of **\$0.65 million**.

Offsite Levy Funds Applied to Date

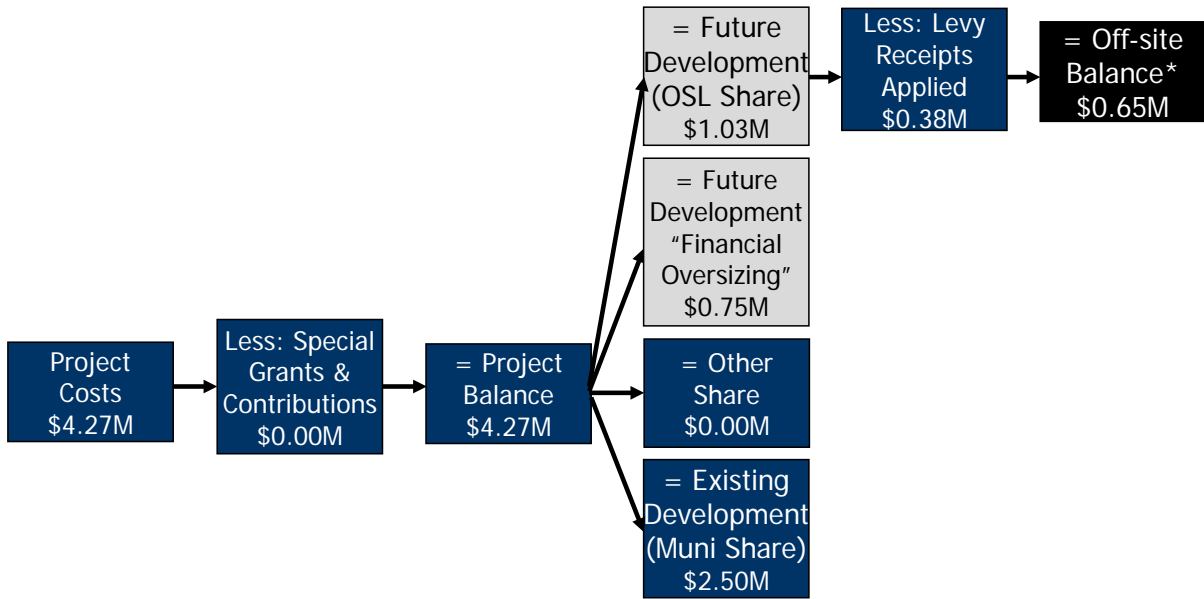
Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2020	Offsite Levy Funds Collected Starting Jan 1, 2021	Adjusted Developer (Levy) Cost
13	Marshall Drain Channel Upgrades - Phase 1	\$ 470,357	\$ -	\$ -	\$ 470,357
14	Marshall Drain Channel Upgrades - Phase 2	\$ 283,486	\$ -	\$ -	\$ 283,486
15	Marshall Drain Channel Upgrades - Phase 3	\$ 105,267	\$ -	\$ -	\$ 105,267
16	Marshall Drain Channel Upgrades - Phase 4	\$ 168,601	\$ -	\$ -	\$ 168,601
17	Greenbrook Pond Overflow Channel	\$ 1,942	\$ -	\$ -	\$ 1,942
100	Unallocated Offsite Levies Collected to Dec 31, 2020	\$ -	\$ 378,520	\$ -	\$ (378,520)
		\$ 1,029,653	\$ 378,520	\$ -	\$ 651,133

E6. Summary of Stormwater Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for stormwater infrastructure that forms the basis of the rate is **\$0.65 million**. The cost allocations to each benefiting party are based on the benefiting percentages shown in previous section. The offsite levy balance (due from

developers) is allocated to various benefitting areas (as described in the next section).

Total Stormwater Offsite Levy Costs



E7. Stormwater Infrastructure Benefitting Areas

Net developer costs for each project have been allocated to multiple benefitting offsite levy area (see tables below). Allocations are denoted with a “1” below applicable area numbers. Benefitting areas were determined by City staff. The lands anticipated to develop over the 25-years in each offsite levy benefitting area are used to determine rates.

Stormwater Allocations to Benefitting Areas

Item	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
13	\$ 470,357		1	1	1	1	1	1	1					1				1	1							
14	\$ 283,486		1	1	1	1	1	1	1					1				1	1							
15	\$ 105,267		1	1	1	1	1	1	1					1				1	1							
16	\$ 168,601		1	1	1	1	1	1	1					1				1	1							
17	\$ 1,942										1		1													
100	\$ (378,520)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	\$ 651,133																									

E8. Account Balance

At December 31st, 2020 the stormwater account balance was in a surplus of **\$378,520.00**. This amount takes into consideration expenditures and front-ending obligations up to end-2020. Details associated with account reconciliations are summarized in *Appendix H*.

Stormwater Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Opening Balance 2006	\$ 243,133.00		\$ 243,133.00
OSL Receipts 2006 - 2020	\$ 151,111.00		\$ 394,244.00
OSL Refunds 2006 - 2020		\$ 30,861.00	\$ 363,383.00
OSL Receipt Allocations (Withdrawals) 2006 - 2020		\$ -	\$ 363,383.00
Interest Earned (Charged (2006 2020)	\$ 15,137.00		\$ 378,520.00
Account Balance per Muni Records (Unallocated Receipts)			\$ 378,520.00
Front-ending (2006 - 2020)		\$ -	\$ 378,520.00
Balance			\$ 378,520.00

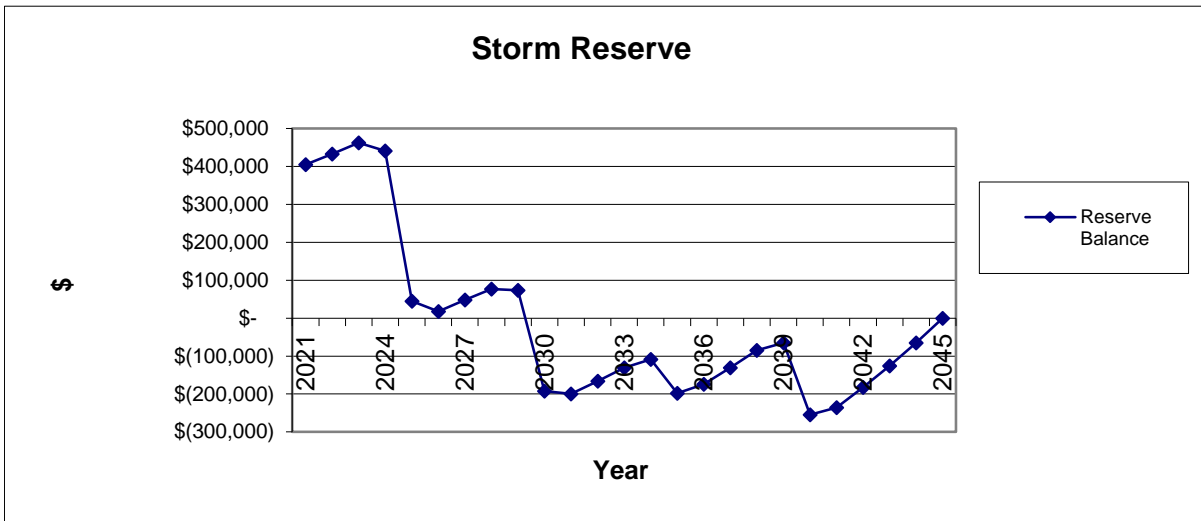
E9. Development and Stormwater Infrastructure Staging Impacts

Stormwater offsite infrastructure will be constructed in staged fashion over the 25-year development period.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.00%**⁷ interest allowance is charged to the account when it is forecast to be in a negative balance. Further, a **1.00%** interest credit is provided to the account when it is forecast to be in a positive balance. The graph and table below outline the forecast water levy account balances over the 25-year development period.

If necessary, an interest staging adjustment is applied to rates (slightly positive or slightly negative) to ensure that the forecast account balance at the end of the 25-year review period always returns to break-even (i.e., developers are not charged too much thereby providing a windfall to the City, nor are they charged too little thereby placing an unequitable burden on taxpayers).

Anticipated Stormwater Offsite Levy Account Balances



⁷ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%.

Anticipated Stormwater Offsite Levy Account Balances

			Opening Balance	\$ 378,520
Year	Receipts	Expenditure	Interest	Balance
2021	\$ 22,510	\$ -	\$ 4,010	\$ 405,040
2022	\$ 23,523	\$ -	\$ 4,286	\$ 432,849
2023	\$ 24,583	\$ -	\$ 4,574	\$ 462,006
2024	\$ 25,690	\$ 51,397	\$ 4,363	\$ 440,661
2025	\$ 26,848	\$ 423,513	\$ 440	\$ 44,436
2026	\$ 28,056	\$ 54,527	\$ 180	\$ 18,144
2027	\$ 29,320	\$ 232	\$ 472	\$ 47,705
2028	\$ 30,640	\$ 1,911	\$ 764	\$ 77,198
2029	\$ 32,021	\$ 36,157	\$ 731	\$ 73,792
2030	\$ 33,463	\$ 295,908	\$ (3,773)	\$ (192,426)
2031	\$ 34,969	\$ 38,098	\$ (3,911)	\$ (199,465)
2032	\$ 36,545	\$ -	\$ (3,258)	\$ (166,179)
2033	\$ 38,189	\$ -	\$ (2,560)	\$ (130,549)
2034	\$ 39,909	\$ 15,459	\$ (2,122)	\$ (108,221)
2035	\$ 41,707	\$ 127,380	\$ (3,878)	\$ (197,771)
2036	\$ 43,587	\$ 16,400	\$ (3,412)	\$ (173,996)
2037	\$ 45,550	\$ -	\$ (2,569)	\$ (131,015)
2038	\$ 47,601	\$ -	\$ (1,668)	\$ (85,083)
2039	\$ 49,745	\$ 28,703	\$ (1,281)	\$ (65,322)
2040	\$ 51,986	\$ 236,515	\$ (4,997)	\$ (254,848)
2041	\$ 54,327	\$ 30,451	\$ (4,619)	\$ (235,591)
2042	\$ 56,771	\$ -	\$ (3,576)	\$ (182,396)
2043	\$ 59,331	\$ -	\$ (2,461)	\$ (125,526)
2044	\$ 62,003	\$ -	\$ (1,270)	\$ (64,794)
2045	\$ 64,794	\$ -	\$ (0)	\$ (0)

APPENDIX F: OFFSITE INFRASTRUCTURE DEFINITIONS

F1. Transportation

The City of Brooks maintains a roadway classification system consistent with the definition of arterial, collector, and local roads contained in the Transportation Association of Canada's Manual of Geometric Design Standards for Canadian Roads.

New developments contribute their proportionate share of the cost of the following via the transportation offsite levy charge:

- Urban arterial roads.
- Rural grid roads which function as a major road network.
- Arterial roadway landscaping and pedestrian linkages.
- Noise attenuation facilities required for upgrading in conjunction with completion of arterials in developed areas.
- Arterial/arterial road intersection signals.
- Arterial/collector road intersection signals.
- Underground power costs applicable to arterial road construction.
- Lands purchased to accommodate any leviable infrastructure.

All other transportation related infrastructure, such as local and collector roads within new development areas, is constructed by developers, at their cost, in conjunction with the development.

F2. Water

New developments contribute their proportionate share of the cost of the following via the water offsite levy charge:

- New water transmission mains. Water "transmission" mains are distinguished from water "distribution" mains by their function, not size. Transmission mains are typically larger, service a large area, and provide little or no direct service along their length. In comparison, distribution mains are typically smaller and are used for local servicing (i.e., service connections to abutting lots and blocks).
- New water distribution mains that benefit an entire basin.
- Water reservoirs and fill/supply mains.
- Water supply and treatment facilities.
- Existing water transmission mains and water distribution mains that are required to be expanded or upgraded to meet current standards and benefit an entire basin. These projects are proportionately allocated to existing developed benefiting areas through utility rates and new undeveloped benefiting areas through offsite levies.
- Lands purchased to accommodate any leviable infrastructure.

All other water related infrastructure, such as local water distribution lines within new development areas, is constructed by developers, at their cost, in conjunction with the development.

F3. Sanitary Sewer

New developments contribute their proportionate share of the cost of the following via the sanitary sewer offsite levy charge:

- New wastewater trunks. Wastewater “trunks” are distinguished from wastewater “collectors” by their function, not size. Trunks are typically larger, service large areas, and are located along arterial or otherwise leviabale roads. In comparison, collectors are typically used for local servicing (i.e., service connections to abutting lots and blocks).
- New wastewater collectors that benefit an entire basin.
- Lift stations that benefit an entire basin.
- Wastewater treatment and disposal facilities.
- Existing trunk mains and collector mains that are required to be expanded or upgraded to meet current standards and benefit an entire basin. These projects are proportionately allocated to existing developed benefiting areas through utility rates and new undeveloped benefiting areas through offsite levies.
- Lands purchased to accommodate any leviabale infrastructure.

All other sanitary sewer related infrastructure, such as local sanitary sewer collectors within new development areas, is constructed by developers, at their cost, in conjunction with the development.

F4. Stormwater

New developments contribute their proportionate share of the cost of the following via the stormwater offsite levy charge:

- New stormwater trunks. Stormwater "trunks" are distinguished from stormwater "collectors" by their function, not size. Trunks are typically larger, service large catchment areas, and are located along arterial or otherwise leviabale roads. In comparison, collectors are typically used for local servicing (i.e., service connections to abutting lots and blocks).
- New stormwater collectors that benefit an entire basin.
- Stormwater lift stations and that benefit an entire basin.
- New overland drainage infrastructure that benefits an entire basin.
- Existing trunk mains and collector mains that is required to be expanded or upgraded to meet current standards and benefits an entire basin. These projects are proportionately allocated to existing developed benefiting areas through utility rates and new undeveloped benefiting areas through offsite levies.

- Any leviable infrastructure, per the above, to provide an adequate stormwater outlet to an entire benefitting basin.
- Lands purchased to accommodate any leviable infrastructure.

All other stormwater related infrastructure, such as local stormwater collectors within new development areas, is constructed by developers, at their cost, in conjunction with the development.

APPENDIX G: COMPARISON OF RATES

The table below compares the new City offsite levy rates to other municipalities.

Municipality / Area	Average Per Ha.
City of Beaumont* Residential (roads, water, sewer)	\$53,900 - \$77,600 (2019)
City of Fort Saskatchewan (West Park) (roads, water, sewer, storm)	\$62,900 - \$76,700 (2017)
Town of Stony Plain (roads, water, sewer, recreation)	\$74,950 (2021)
City of Lacombe (roads, water, sewer, storm)	\$19,800 - \$120,100 (2013)
Town of Edson* (roads, water, sewer)	\$77,400 (2016)
Town of Rocky Mountain House* (roads, water, sewer) (by Dev Agreement)	\$79,700 (2016)
City of Brooks* (roads, water, sewer, storm)	\$79,823 (2021)
Parkland County* (roads, water, sewer, storm)	\$82,500 (2018)
Sturgeon County – Sturgeon Valley* (roads, water, sewer)	\$82,800 (2021)
City of Spruce Grove* (roads, water, sewer)	\$83,000 (2020)
City of Beaumont* Industrial (roads, water, sewer)	\$80,900 - \$116,390 (2019)
Town of Sylvan Lake* (roads, water, sewer, storm)	\$85,000 (2021)
Town of Blackfalds (roads, water, sewer, storm)	\$90,100 (2015)
Town of Calmar* (roads, water, sewer)	\$95,700 (2020)
Lacombe County (Joint Economic Area) (water, sewer)	\$95,000 (2016)
Town of Strathmore (roads, water, sewer)	\$96,300 (2017)
City of Cold Lake* (roads, water, sewer, storm)	\$103,000 (2007)
City of Fort Saskatchewan (South Fort) (roads, water, sewer, storm)	\$104,100 (2017)
Leduc County* - Nisku (roads, water, sewer)	\$109,000 (2017)
Town of Redcliff* (roads, water, sewer, storm)	\$109,200 (2016)
City of Lloydminster (roads, water, sewer)	\$112,900 (2011)
Town of Devon* (roads, water, sewer)	\$119,900 (2019)
Town of High River (roads, water, sewer)	\$130,000 (2013)
City of Leduc* (roads, water, sewer)	\$138,500 (2021)
Town of Cochrane (roads, water, sewer, storm, recreation)	\$250,000 (2020)
Town of Okotoks (roads, water, sewer)	\$198,600 (2020)
City of Red Deer* (roads, water, sewer, storm)	\$203,300 (2019)
City of Chestermere* (roads, water, sewer, storm, recreation)	\$226,980 (2021)
Red Deer County (Gasoline Alley) (roads, water, sewer, storm)	\$220,000 (2017)
City of Medicine Hat* (subsidy) (roads, water, sewer, storm)	\$250,000 (2019)
City of Lethbridge (roads, water, sewer, storm)	\$281,000 (2020)
City of St. Albert* (roads, water, sewer, storm)	+\$300,000 (2020)
City of Edmonton (roads, water, sewer, storm)	+\$300,000
City of Calgary (roads, water, sewer, storm, rec, stabilization)	+\$350,000

*CORVUS clients

**Information adapted from online sources as at Jan 1st, 2021.

APPENDIX H: OFFSITE LEVY ACCOUNT RECONCILIATIONS

At present, the City manages offsite levy funds together with several other infrastructure reserves. During this review, City staff gathered details associated with all infrastructure accounts (including offsite levies) to enable the identification and separation of finance details associated only with offsite levies (moving forward, the City must manage offsite levy account details separately in alignment with MGA requirements).

For each infrastructure type (e.g., water) 2 tables were created—one includes the details associated with all infrastructure reserves, and one includes the details associated only with offsite levies (see below). Information highlighted in ‘yellow’ pertains to transactions that are not offsite levy related and have been removed from offsite levy account reconciliations.

Transportation

All Accounts								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$511,399.00	\$40,778.00			(\$122,455.00)			\$429,722.00
2007	\$429,722.00	\$14,957.00			(\$120,785.00)	\$43,219.00		\$367,113.00
2008	\$367,113.00	\$23,180.00			(\$63,594.00)	\$75,603.00		\$402,302.00
2009	\$402,302.00	\$1,747.00			(\$75,833.00)			\$328,216.00
2010	\$328,216.00	\$804.00			(\$75,391.00)	\$120,080.00	\$8,035.00	\$381,744.00
2011	\$381,744.00	\$8,891.00			(\$87,375.00)		\$445.00	\$303,705.00
2012	\$303,705.00	\$2,188.00			(\$37,375.00)		\$376.00	\$268,894.00
2013	\$268,894.00	\$3,145.00			(\$134,667.00)			\$137,372.00
2014	\$137,372.00	\$3,511.00			(\$37,375.00)			\$103,508.00
2015	\$103,508.00	\$3,448.00			(\$37,375.00)			\$69,581.00
2016	\$69,581.00	\$1,159.00			(\$37,375.00)			\$33,365.00
2017	\$33,365.00	\$534.00			(\$37,375.00)		\$1,119.00	(\$2,357.00)
2018	(\$2,357.00)	\$13,707.00			(\$37,375.00)		\$1,420.00	(\$24,605.00)
2019	(\$24,605.00)	\$323.00			(\$37,375.00)		\$1,834.00	(\$59,823.00)
2020	(\$59,823.00)				(\$37,375.00)		\$897.00	(\$96,301.00)
		\$118,372.00	\$0.00	\$0.00	(\$979,100.00)	\$238,902.00	\$14,126.00	
OSL ONLY								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$511,399.00	\$40,778.00						\$552,177.00
2007	\$552,177.00	\$14,957.00						\$567,134.00
2008	\$567,134.00	\$23,180.00						\$590,314.00
2009	\$590,314.00	\$1,747.00						\$592,061.00
2010	\$592,061.00	\$804.00					\$8,035.00	\$600,900.00
2011	\$600,900.00	\$8,891.00					\$445.00	\$610,236.00
2012	\$610,236.00	\$2,188.00					\$376.00	\$612,800.00
2013	\$612,800.00	\$3,145.00						\$615,945.00
2014	\$615,945.00	\$3,511.00						\$619,456.00
2015	\$619,456.00	\$3,448.00						\$622,904.00
2016	\$622,904.00	\$1,159.00						\$624,063.00
2017	\$624,063.00	\$534.00					\$1,119.00	\$625,716.00
2018	\$625,716.00	\$13,707.00					\$1,420.00	\$640,843.00
2019	\$640,843.00	\$323.00					\$1,834.00	\$643,000.00
2020	\$643,000.00						\$897.00	\$643,897.00
		\$118,372.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,126.00	
							Front-ending	\$454,216.71
							Adjusted Balance	\$189,680.29
							Funds to be withdrawn as front-ending pay down	\$454,216.71

Water

All Accounts								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$1,635,066.00	\$193,493.00						\$1,828,559.00
2007	\$1,828,559.00	\$99,627.00						\$1,928,186.00
2008	\$1,928,186.00	\$280,355.00				(\$126,160.00)		\$2,082,381.00
2009	\$2,082,381.00	\$20,296.00				(\$32,401.00)		\$2,070,276.00
2010	\$2,070,276.00	\$9,742.00						\$2,080,018.00
2011	\$2,080,018.00	\$44,096.00	(\$46,183.00)	(\$390,086.00)				\$1,687,845.00
2012	\$1,687,845.00	\$31,767.00		(\$871,852.00)				\$847,760.00
2013	\$847,760.00	\$17,117.00		(\$448,108.00)				\$416,769.00
2014	\$416,769.00	\$9,180.00		(\$25,199.00)				\$400,750.00
2015	\$400,750.00	\$8,927.00						\$409,677.00
2016	\$409,677.00	\$8,382.00						\$418,059.00
2017	\$418,059.00	\$5,604.00					\$2,779.00	\$426,442.00
2018	\$426,442.00	\$162,183.00					\$3,981.00	\$592,606.00
2019	\$592,606.00	\$3,753.00					\$5,917.00	\$602,276.00
2020	\$602,276.00						\$2,914.00	\$605,190.00
		\$894,522.00	(\$46,183.00)	(\$1,735,245.00)	\$0.00	(\$158,561.00)	\$15,591.00	
OSL ONLY								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$1,635,066.00	\$193,493.00						\$1,828,559.00
2007	\$1,828,559.00	\$99,627.00						\$1,928,186.00
2008	\$1,928,186.00	\$280,355.00						\$2,208,541.00
2009	\$2,208,541.00	\$20,296.00						\$2,228,837.00
2010	\$2,228,837.00	\$9,742.00						\$2,238,579.00
2011	\$2,238,579.00	\$44,096.00	(\$46,183.00)	(\$390,086.00)				\$1,846,406.00
2012	\$1,846,406.00	\$31,767.00		(\$871,852.00)				\$1,006,321.00
2013	\$1,006,321.00	\$17,117.00		(\$448,108.00)				\$575,330.00
2014	\$575,330.00	\$9,180.00		(\$25,199.00)				\$559,311.00
2015	\$559,311.00	\$8,927.00						\$568,238.00
2016	\$568,238.00	\$8,382.00						\$576,620.00
2017	\$576,620.00	\$5,604.00					\$2,779.00	\$585,003.00
2018	\$585,003.00	\$162,183.00					\$3,981.00	\$751,167.00
2019	\$751,167.00	\$3,753.00					\$5,917.00	\$760,837.00
2020	\$760,837.00						\$2,914.00	\$763,751.00
		\$894,522.00	(\$46,183.00)	(\$1,735,245.00)	\$0.00	\$0.00	\$15,591.00	
							Front-ending	\$1,129,509.34
							Adjusted Balance	(\$365,758.34)
							Funds to be withdrawn as front-ending pay down	\$763,751.00

Sanitary Sewer

All Accounts								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$1,888,174.00	\$191,862.00		(\$27,363.00)	(\$20,000.00)	\$123,920.00		\$2,156,593.00
2007	\$2,156,593.00	\$78,110.00		(\$6,072.00)	(\$31,670.00)	\$243,424.00		\$2,440,385.00
2008	\$2,440,385.00	\$164,169.00			(\$477,250.00)			\$2,127,304.00
2009	\$2,127,304.00	\$11,174.00			(\$189,682.00)	\$161,723.00		\$2,110,519.00
2010	\$2,110,519.00	\$5,392.00		(\$87,968.00)	(\$129,797.00)	\$178,394.00		\$2,076,540.00
2011	\$2,076,540.00	\$18,456.00	(\$28,276.00)		(\$315,956.00)			\$1,750,764.00
2012	\$1,750,764.00	\$15,706.00			(\$118,198.00)			\$1,648,272.00
2013	\$1,648,272.00	\$16,369.00			(\$373,856.00)	\$143,494.00		\$1,434,279.00
2014	\$1,434,279.00	\$9,187.00			(\$68,065.00)	\$466,077.00		\$1,841,478.00
2015	\$1,841,478.00	\$10,791.00			(\$180,664.00)	\$78,026.00		\$1,749,631.00
2016	\$1,749,631.00	\$5,247.00			(\$161,329.00)	\$969,560.00		\$2,563,109.00
2017	\$2,563,109.00	\$3,822.00			(\$126,790.00)	\$460,685.00	\$18,824.00	\$2,919,650.00
2018	\$2,919,650.00	\$150,526.00			(\$109,169.00)	\$686,461.00	\$24,405.00	\$3,671,873.00
2019	\$3,671,873.00	\$2,062.00			(\$1,291,539.00)	\$617,564.00	\$31,619.00	\$3,031,579.00
2020	\$3,031,579.00				(\$587,218.00)	\$629,011.00	\$15,479.00	\$3,088,851.00
		\$682,873.00	(\$28,276.00)	(\$121,403.00)	(\$4,181,183.00)	\$4,758,339.00	\$90,327.00	
OSL ONLY								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$1,888,174.00	\$191,862.00		(\$11,289.00)				\$2,068,747.00
2007	\$2,068,747.00	\$78,110.00		(\$6,072.00)				\$2,140,785.00
2008	\$2,140,785.00	\$164,169.00						\$2,304,954.00
2009	\$2,304,954.00	\$11,174.00						\$2,316,128.00
2010	\$2,316,128.00	\$5,392.00		(\$39,968.00)				\$2,281,552.00
2011	\$2,281,552.00	\$18,456.00	(\$28,276.00)					\$2,271,732.00
2012	\$2,271,732.00	\$15,706.00						\$2,287,438.00
2013	\$2,287,438.00	\$16,369.00						\$2,303,807.00
2014	\$2,303,807.00	\$9,187.00						\$2,312,994.00
2015	\$2,312,994.00	\$10,791.00						\$2,323,785.00
2016	\$2,323,785.00	\$5,247.00						\$2,329,032.00
2017	\$2,329,032.00	\$3,822.00					\$18,824.00	\$2,351,678.00
2018	\$2,351,678.00	\$150,526.00					\$24,405.00	\$2,526,609.00
2019	\$2,526,609.00	\$2,062.00					\$31,619.00	\$2,560,290.00
2020	\$2,560,290.00						\$15,479.00	\$2,575,769.00
		\$682,873.00	(\$28,276.00)	(\$57,329.00)	\$0.00	\$0.00	\$90,327.00	
							Front-ending	\$972,370.50
							Adjusted Balance	\$1,603,398.50
							Funds to be withdrawn as front-ending pay down	\$972,370.50

Stormwater

All Accounts								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$243,133.00	\$54,188.00			(\$6,763.00)			\$290,558.00
2007	\$290,558.00	\$13,549.00			(\$16,000.00)			\$288,107.00
2008	\$288,107.00	\$12,102.00						\$300,209.00
2009	\$300,209.00	\$1,188.00						\$301,397.00
2010	\$301,397.00	\$1,362.00						\$302,759.00
2011	\$302,759.00	\$10,364.00	(\$30,861.00)					\$282,262.00
2012	\$282,262.00	\$785.00						\$283,047.00
2013	\$283,047.00	\$2,555.00						\$285,602.00
2014	\$285,602.00	\$4,897.00						\$290,499.00
2015	\$290,499.00	\$12,327.00						\$302,826.00
2016	\$302,826.00	\$784.00						\$303,610.00
2017	\$303,610.00						\$2,929.00	\$306,539.00
2018	\$306,539.00	\$37,010.00					\$3,791.00	\$347,340.00
2019	\$347,340.00						\$5,652.00	\$352,992.00
2020	\$352,992.00						\$2,765.00	\$355,757.00
		\$151,111.00	(\$30,861.00)	\$0.00	(\$22,763.00)	\$0.00	\$15,137.00	
OSL ONLY								
	Opening Balance	OSL Receipts	OSL Refunds	Withdrawals (Funds Applied to Projects)	Other Project Expenditures	Other Adjustments	Interest Earned (Charged)	Closing Balance
2006	\$243,133.00	\$54,188.00						\$297,321.00
2007	\$297,321.00	\$13,549.00						\$310,870.00
2008	\$310,870.00	\$12,102.00						\$322,972.00
2009	\$322,972.00	\$1,188.00						\$324,160.00
2010	\$324,160.00	\$1,362.00						\$325,522.00
2011	\$325,522.00	\$10,364.00	(\$30,861.00)					\$305,025.00
2012	\$305,025.00	\$785.00						\$305,810.00
2013	\$305,810.00	\$2,555.00						\$308,365.00
2014	\$308,365.00	\$4,897.00						\$313,262.00
2015	\$313,262.00	\$12,327.00						\$325,589.00
2016	\$325,589.00	\$784.00						\$326,373.00
2017	\$326,373.00						\$2,929.00	\$329,302.00
2018	\$329,302.00	\$37,010.00					\$3,791.00	\$370,103.00
2019	\$370,103.00						\$5,652.00	\$375,755.00
2020	\$375,755.00						\$2,765.00	\$378,520.00
		\$151,111.00	(\$30,861.00)	\$0.00	\$0.00	\$0.00	\$15,137.00	
							Front-ending	\$0.00
							Adjusted Balance	\$378,520.00
							Funds to be withdrawn as front-ending pay down	\$0.00