



City of Chestermere

PROVINCE OF ALBERTA

Bylaw #009-24

# **Bylaw #009-24**

## **Chestermere Off-Site**

### **Levy Bylaw**

Contents

- 1. NAME OF BYLAW.....3
- 2. DEFINITIONS.....3
- 3. OBJECT OF LEVY.....5
- 4. IMPOSITION OF LEVY.....5
- 5. AUTHORITY OF THE CHIEF ADMINISTRATIVE OFFICER.....6
- 6. DEVELOPMENT AGREEMENT.....6
- 7. ANNUAL REPORT.....7
- 8. ACCOUNTING.....7
- 9. REVIEW.....7
- 10. GENERAL.....7
- 11. TRANSITION.....8
- 12. EXECUTION.....9

**BEING A BYLAW OF THE CITY OF CHESTERMERE IN THE PROVINCE OF ALBERTA  
TO ESTABLISH OFF-SITE LEVIES FOR LAND THAT IS TO BE SUBDIVIDED OR  
DEVELOPED WITHIN THE CITY OF CHESTERMERE**

**WHEREAS** Section 648 of the *Municipal Government Act* allows Council to pass a bylaw for the imposition and payment of off-site levies in respect of land that is to be developed or subdivided;

**AND WHEREAS** Council deems it necessary and expedient to collect Off-Site Levies to pay for the capital cost of infrastructure required to service the Growth of the City;

**AND WHEREAS** The City has engaged in consultation with landowners and representatives of the development industry to address and define existing and future infrastructure required for Growth of the City and the allocation of the capital costs of such infrastructure;

**AND WHEREAS** Council has received the Report, which set out a fair and equitable calculation of Off-Site Levies in accordance with the *Municipal Government Act* and the Off-Site Levy Regulation;

**AND WHEREAS** Council has advertised its intention to consider the enactment of this Bylaw pursuant to the requirements of the *Municipal Government Act*;

**NOW THEREFORE, COUNCIL DULY ASSEMBLED, ENACTS AS FOLLOWS:**

1. NAME OF BYLAW

This bylaw shall be known and referred to as the "Chestermere Off-Site Levy Bylaw."

2. DEFINITIONS

The following terms shall have the following meanings in this Bylaw:

- a. "Bylaw" means this off-site levy bylaw;

- b. "Chief Administrative Officer" means the chief administrative officer for the City, regardless of the specific title that may be conferred on that officer from time to time;
- c. "City" means the City of Chestermere;
- d. "Council" means the council for the City;
- e. "Developable Land" means all land contained within the Development Area:
  - i. Upon which Development takes place after the date of enactment of this Bylaw; or
  - ii. For which Subdivision approval is obtained after the date of enactment of this Bylaw;Excluding all Developed land;
- f. "Developed Land" means land that has been subject to Development or a Subdivision prior to the date this Bylaw comes into force, and in respect of which off-site levies for the same infrastructure have been paid;
- g. "Development" means "development" as defined in the Municipal Government Act;
- h. "Development Agreement" means "development agreement" as referred to in the Municipal Government Act;
- i. "Development Area" includes the area of land within the municipal boundaries of the City identified in Schedule "A" to this Bylaw;
- j. "Growth" means:
  - i. The creation of new Lots through Subdivision; and
  - ii. The occurrence of Development;
- k. "Lot" means "lot" as defined in the Municipal Government Act;
- l. "*Municipal Government Act*" means the *Municipal Government Act*, RSA 2000, c. M 26, as amended or repealed and replaced from time to time;
- m. "Off-Site Infrastructure" means those components and projects referred to in the Report, in relation to water facilities, sanitary sewer

facilities, storm water sewer facilities, transportation facilities, recreation facilities, and fire facilities to be paid for in whole or in part by Off-Site Levies under the Bylaw;

- n. "Off-Site Levies" means the off-site levies imposed pursuant to this Bylaw;
- o. "Off-Site Levy Regulation" means the Principles and Criteria for Off-Site Levies Regulation, Alta. Reg. 187/2017, as amended or repealed and replaced from time to time;
- p. "Report" means the City of Chestermere: Offsite Levy Rates Update, April 09, 2024, prepared by City of Chestermere, attached as Schedule "C" to this Bylaw;
- q. "Subdivision" means "subdivision" as defined in *the Municipal Government Act*.

### 3. OBJECT OF LEVY

The object of the Off-Site Levies is to provide funds to pay for all or part of the capital costs of the Off-Site Infrastructure required for Growth, as determined in the Report.

### 4. IMPOSITION OF LEVY

- a. The Off-Site Levies are hereby established and imposed in respect of all Developable Land on the basis set out in the Report.
- b. The amount of the Off-Site Levies imposed is as calculated in the Report and set out in Schedule "B".
- c. The Off-Site Levies will be assessed on all Developable Land on a per hectare basis, excluding those portions of Developable Land that are designated pursuant to a Subdivision as:
  - i. environmental reserve;
  - ii. school reserve;
  - iii. municipal reserve; or

- iv. arterial road right of way; or
    - v. public utility lots dedicated for off-site levies project.
  - d. Unless otherwise agreed, payment of Off-Site Levies imposed under this Bylaw is due:
    - i. In the case of Subdivision, at or prior to plan endorsement; and
    - ii. In the case of Development, as a condition of the issuance of the development permit.

## 5. AUTHORITY OF THE CHIEF ADMINISTRATIVE OFFICER

- a. The Chief Administrative Officer is delegated the authority to enforce and administer this Bylaw, including, but not limited to the authority to:
  - i. enter into Development Agreements on behalf of the City with respect to, among other things, the collection of Off-Site Levies;
  - ii. defer or waive collection of Off-Site Levies imposed pursuant to this Bylaw; and
  - iii. require security for payment of any deferred levies.
- b. The Chief Administrative Officer may delegate the authority to enforce and administer this Bylaw.

## 6. DEVELOPMENT AGREEMENT

- a. Council may, from time to time adopt policies or guidelines for the assistance and direction of the Chief Administrative Officer in determining which Development and Subdivision applications require a Development Agreement.
- b. Where it is determined that a Development Agreement is appropriate for any application for Development or Subdivision, the developer or the owner, as the case may be, shall enter into a Development Agreement with the City that provides for the payment of Off-Site Levies in accordance with this Bylaw or that provides for the deferral of Off-Site Levies, including requiring security for the payment of such deferred levies.

## 7. ANNUAL REPORT

On or before December 31 in each calendar year, the Chief Administrative Officer shall provide an annual report to Council regarding the Off-Site Levies imposed under this Bylaw, including:

- a. Off-Site Infrastructure constructed during the previous calendar year;
- b. Construction costs of Off-Site Infrastructure constructed in the previous calendar year;
- c. Estimated construction costs for Off-Site Infrastructure yet to be constructed and an explanation as to any adjustments to the estimates since the previous annual report;
- d. Amount collected in Off-site Levies; and
- e. Specifics of total value of Off-site Levies being held by City and yet to be expended on Off-Site Infrastructure, interest earned and commitments for future expenditures of such monies.

## 8. ACCOUNTING

All funds collected pursuant to this Bylaw shall be accounted for in a special fund for each category of infrastructure and expended only as permitted under the *Municipal Government Act*.

## 9. REVIEW

The City shall review the rates for Off-Site Levies annually and, if required, shall amend this Bylaw accordingly to update the rates for Off-Site Levies.

## 10. GENERAL

- a. Nothing in this Bylaw precludes the City from:
  - i. imposing further or different levies, duly enacted by bylaw, on any portion of the Developable Lands in respect of which the City has not collected Off-Site Levies;

- ii. deferring collection of Off-Site Levies on any portion of Developable Lands, including requiring security for payment of such deferred levies; or
  - iii. reducing or forgiving payment of the Off-Site Levies required pursuant to this Bylaw, or otherwise providing for credits for other Off-Site Infrastructure or oversize infrastructure constructed by a developer in calculating and/or collecting the Off-Site Levies that become payable pursuant to this Bylaw.
- b. Schedules "A" and "B" to this Bylaw, and specifically, without restricting the generality of the foregoing, the rates for Off-Site Levies set out in the Report, may be updated or amended from time to time by resolution of Council.
- c. In the event that any provision of this Bylaw is declared invalid or void by any Court having competent jurisdiction, then such invalid or void provision shall be severed from the Bylaw and the remaining provisions of the Bylaw shall be maintained and deemed valid.

## 11. TRANSITION

- a. This Bylaw applies to:
  - i. any Subdivision where the date of subdivision approval occurs on or after the date this Bylaw comes into force; and
  - ii. any Development where the date of issuance of a development permit occurs on or after the date this Bylaw comes into force.
- b. Development Agreements entered into prior to the enactment of this Bylaw shall remain valid and in effect.
- c. Any off-site levies payable under Development Agreements entered into prior to the enactment of this Bylaw, are confirmed and shall continue to be payable notwithstanding the repeal of previous off-site levy bylaws pursuant to subsection (d).
- d. Bylaw 006-023 is hereby repealed.

## 12. EXECUTION

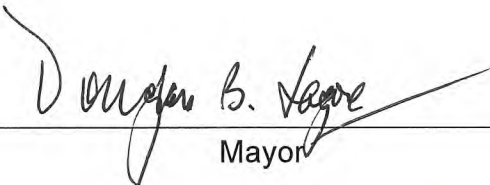
This Bylaw shall take effect and come into force effective after final reading and signature thereof by the Chief Elected Official and Chief Administrative Officer, or their authorized delegates.

FIRST READING passed in open Council duly assembled in the City of Chestermere, in the Province of Alberta, this 9<sup>TH</sup> day of APRIL, 2024.

SECOND READING passed in open Council duly assembled in the City of Chestermere, in the Province of Alberta, this 23<sup>RD</sup> day of APRIL, 2024.

THIRD AND FINAL READING passed in open Council duly assembled in the City of Chestermere, in the Province of Alberta, this 23<sup>RD</sup> day of APRIL, 2024.

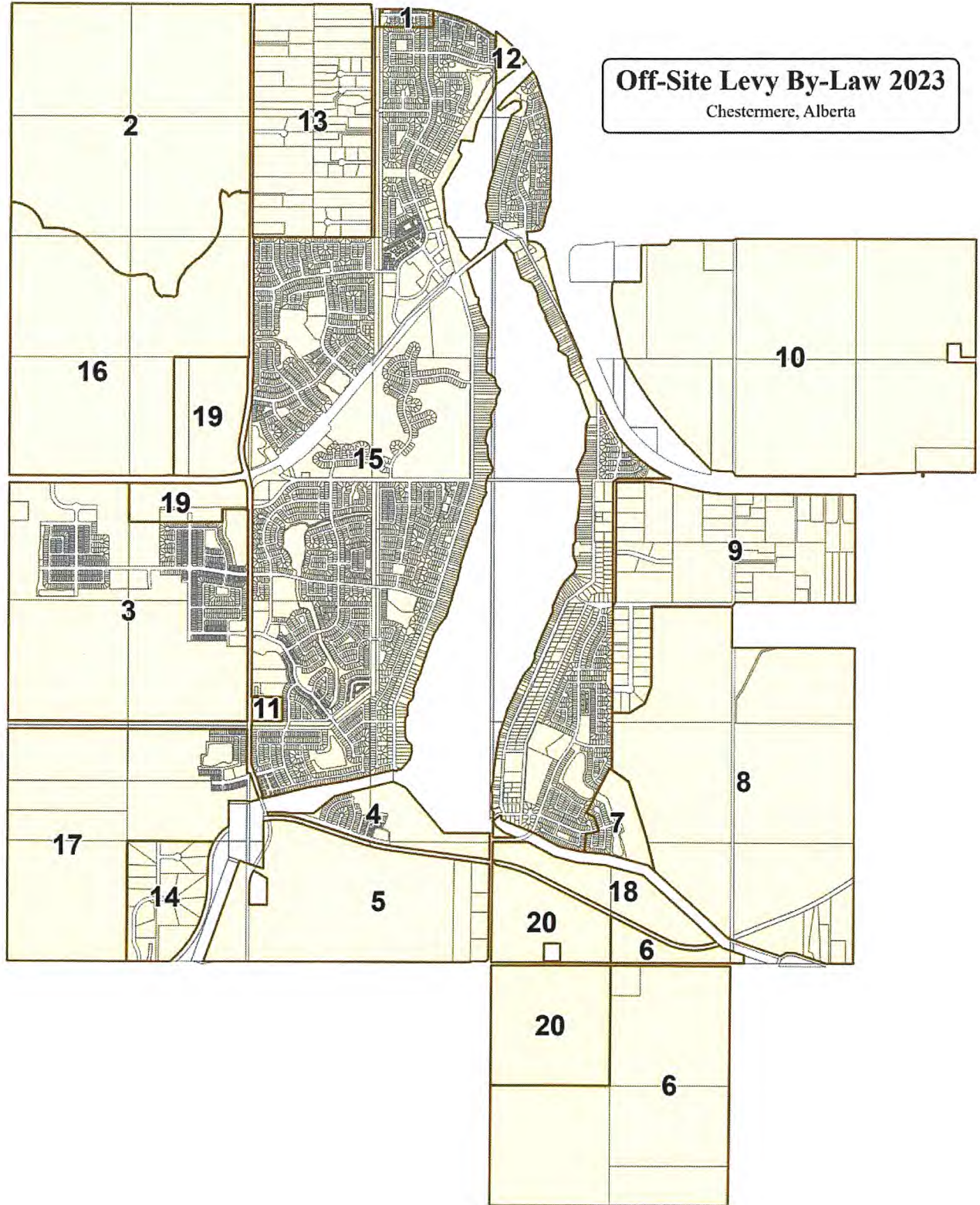
Res: 240409-09 / 240423-17 / 240423-18

  
\_\_\_\_\_  
Mayor

  
\_\_\_\_\_  
Chief Administrative Officer

# SCHEDULE A

## Map of Development Area



## SCHEDULE B

### Summary by Development Area

Area	2024 Off Site Levy per Hectare						
	Water	Sanitary	Storm	Transportation	Recreation	Fire	Total
1	\$ 57,022	\$ 42,524	\$ -	\$ 106,048	\$ 34,618	\$ 17,392	\$ 257,604
2	\$ 57,022	\$ 84,258	\$ 71,997	\$ 106,048	\$ 34,618	\$ 17,392	\$ 371,335
3	\$ 57,022	\$ 67,713	\$ 78,000	\$ 106,048	\$ 34,618	\$ 17,392	\$ 360,793
4	\$ 57,022	\$ 42,524	\$ -	\$ 106,048	\$ 34,618	\$ 17,392	\$ 257,604
5	\$ 57,022	\$ 42,524	\$ 71,972	\$ 106,048	\$ 34,618	\$ 17,392	\$ 329,575
6	\$ 57,022	\$ 83,158	\$ 63,859	\$ 106,048	\$ 34,618	\$ 17,392	\$ 362,097
7	\$ 57,022	\$ 31,871	\$ -	\$ 106,048	\$ 34,618	\$ 17,392	\$ 246,950
8	\$ 57,022	\$ 83,158	\$ 96,520	\$ 106,048	\$ 34,618	\$ 17,392	\$ 394,758
9	\$ 57,022	\$ 83,158	\$ 96,520	\$ 106,048	\$ 34,618	\$ 17,392	\$ 394,758
10	\$ 57,022	\$ 91,021	\$ 96,520	\$ 106,048	\$ 34,618	\$ 17,392	\$ 402,620
11	\$ 57,022	\$ 42,524	\$ -	\$ 106,048	\$ 34,618	\$ 17,392	\$ 257,604
12	\$ 57,022	\$ 31,871	\$ -	\$ 106,048	\$ 34,618	\$ 17,392	\$ 246,950
13	\$ 57,022	\$ 84,258	\$ 71,997	\$ 106,048	\$ 34,618	\$ 17,392	\$ 371,335
14	\$ 57,022	\$ 42,524	\$ 78,000	\$ 106,048	\$ 34,618	\$ 17,392	\$ 335,604
15	\$ 57,022	\$ 67,713	\$ -	\$ 106,048	\$ 34,618	\$ 17,392	\$ 282,793
16	\$ 57,022	\$ 84,258	\$ 71,997	\$ 106,048	\$ 34,618	\$ 17,392	\$ 371,335
17	\$ 57,022	\$ 42,524	\$ 78,000	\$ 106,048	\$ 34,618	\$ 17,392	\$ 335,604
18	\$ 57,022	\$ 83,158	\$ 97,523	\$ 106,048	\$ 34,618	\$ 17,392	\$ 395,761
19	\$ 57,022	\$ 73,605	\$ 78,904	\$ 106,048	\$ 34,618	\$ 17,392	\$ 367,588
20	\$ 57,022	\$ 83,158	\$ 65,766	\$ 106,048	\$ 34,618	\$ 17,392	\$ 364,004

## **SCHEDULE C**

**City of Chestermere: Offsite Levy Rates 2024 Report, April 2024, prepared by City of  
Chestermere**

April, 2024

# Off Site Levy Rates

## 2024

CITY OF CHESTERMERE



**Document Information**

<b>Version</b>		
<b>Number</b>	<b>Revision Date</b>	<b>Description</b>
1.0	March, 22 2024	Draft Issued for Stakeholder Review
2.0	April, 9 2024	Issue for Bylaw 009-24

## Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2</b>	<b>KEY FINDINGS.....</b>	<b>7</b>
<b>3</b>	<b>RATES .....</b>	<b>10</b>
<b>4</b>	<b>RECOMMENDATIONS .....</b>	<b>11</b>
	<b>APPENDIX B: WATER OFFSITE INFRASTRUCTURE .....</b>	<b>14</b>
	<b>APPENDIX C: SANITARY OFFSITE INFRASTRUCTURE.....</b>	<b>23</b>
	<b>APPENDIX D: TRANSPORTATION OFFSITE INFRASTRUCTURE .....</b>	<b>28</b>
	<b>APPENDIX E: STORMWATER OFFSITE INFRASTRUCTURE .....</b>	<b>41</b>
	<b>APPENDIX F: RECREATION OFFSITE INFRASTRUCTURE.....</b>	<b>47</b>
	<b>APPENDIX G: FIRE STATIONS OFFSITE INFRASTRUCTURE.....</b>	<b>53</b>
	<b>APPENDIX H: RATE COMPARISON.....</b>	<b>59</b>

## 1 INTRODUCTION

Bylaw 006-23 amended by the City of Chestermere (“the City”) in 2023 defines offsite levy charges for roads, water, sanitary, stormwater, recreation and fire infrastructure in the municipality. The City wishes to update this bylaw, amending certain infrastructure in alignment with the City’s current capital plans, ensuring updated costs and development forecasts are reflected fairly and equitably in rates, and amending other key inputs and variables thereby ensuring a financially sustainable community.

This report outlines the methodology and information used to update the offsite levy charges for the City, as well as other key findings and recommendations.

The City maintains various capital plans, and these plans have been used to generate key inputs for this offsite levy rates review. City staff and their engineering advisors reviewed existing plans and identified offsite projects for roads, fire, water, sanitary, stormwater, and recreation<sup>1</sup>.

The City’s review also included:

- Incorporation of offsite levy area measurements and land development forecasts.
- Incorporation of infrastructure costs and allocation percentages for existing development, new development, and other parties.
- Reconciliation of offsite levy reserve opening balances.
- Development of offsite levy rates and associated report using Chestermere’s offsite levy model.
- Review of offsite levy rates with development industry, staff, and Council.

Offsite levy rates within the City’s offsite levy model are forecast using a rolling 25-year review period. During this review, a cut-off date of **December 31<sup>st</sup>, 2023** was established (the most recent year-end when the project commenced), and so the 25-year review period stems from **2024 to 2048**. Project expenditures, offsite levy receipts etc. were gathered as “actuals” from City 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 1<sup>st</sup>, 2024, up to the new cut-off date will be converted from estimates to actuals.

Costs that benefit development prior to and within the 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 2048 will gradually find their way into rates.

---

<sup>1</sup> It is not within OSL’ scope of work to review or assess capital plans. Infrastructure requirements, costs, allocations etc. are determined by the municipality and their engineering/consulting advisors through various technical document.

## 2 KEY FINDINGS

Key findings pertaining to the update of City offsite levy rates are as follows:

- Offsite infrastructure costs to be included in the offsite levy bylaw total approximately **\$612.7 million** (current dollars). An overview of offsite infrastructure costs and maps is provided in Appendices B1, C1, D1, E1, F1, and G2.
- Before determining how the infrastructure costs will be allocated to parties that benefit (e.g., existing development, new development, other municipalities etc.), financing provided by way of special ear-marked grants and other contributions are deducted from offsite infrastructure costs. For this update, the City has identified approximately **\$16.99 million** in special grants and contributions. An overview of special grants and contributions and resulting net costs is provided in Appendices B2, C2, D2, E2, F2, and G2.
- The residual benefit allocated to existing development (the City’s share) is approximately **\$66.88 million**. The share allocated to other stakeholders for joint benefiting projects have been excluded from the model calculation at this time. (e.g. Rockyview and Alberta Transportation contributions to the Highway 1 interchanges).
- That portion of cost which is allocated to future development totals approximately **\$526.82 million** { \$202.49 million (oversizing) + \$324.33 million (in rates) } and is based on the allocations shown in Appendices B4, C4, D4, E4, F4, and G4. However, a portion of the cost allocated to 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, E3, F3, and G3.
- Of the **\$526.86 million** in total offsite infrastructure costs allocated to future development, the share allocated to future development that is included in rates today (the offsite levy share) is approximately **\$324.33 million**, as shown in the table below. A complete summary of offsite infrastructure net cost “flow-thru” is provided in Appendices B6, C6, D6, E6, F6, and G6.

Summary of Infrastructure Costs & Allocations

Infrastructure	Special Grants & Contributions	Muni Share of Costs	Other Stakeholder s' Share of Costs	Developer Cost Beyond 25 Yrs (Financial Oversizing)	Developer Costs (In Rates)	Total Costs
Transportation	\$6,447,246	\$27,552,020	\$-	\$105,997,520	\$103,137,463	\$243,134,249
Water	\$3,499,537	\$-	\$-	\$18,608,803	\$54,762,489	\$76,870,829
Sanitary	\$4,399,274	\$6,833,439	\$-	\$22,417,175	\$58,374,204	\$92,024,092
Stormwater	\$-	\$-	\$-	\$13,418,112	\$61,868,557	\$75,286,669
Recreation	\$2,644,885	\$34,495,732	\$-	\$41,555,503	\$34,184,851	\$112,880,971
Fire	\$-	\$-	\$-	\$500,000	\$12,000,000	\$12,500,000
Total	\$16,990,942	\$68,881,190	\$-	\$202,497,114	\$324,327,564	\$612,696,810

Before allocating infrastructure costs to benefitting lands, offsite levy costs must be reduced by the amount of levies collected to date. Up to December 31<sup>st</sup>, 2022, the City has collected approximately **\$61.60 million** as shown in Appendices B5, C5, D5, E5, F5, and G5.

Summary of Offsite Levy Collections

<b>Levies Collected To Cut-off Date</b>	
Transportation	\$19,903,562
Water	\$14,798,898
Sanitary	\$10,268,699
Stormwater	\$6,774,751
Recreation	\$9,494,744
Fire	\$357,189
<b>Total</b>	<b>\$61,597,842</b>

To facilitate the allocation of infrastructure costs to those lands that benefit from the infrastructure, the City is parsed into **20** offsite levy areas. The area boundaries, numbering schema, and area measurements are described in *Appendix A* along with an offsite levy map; and, an overview of offsite infrastructure allocations to each benefitting area is provided in Appendices B7, C7, D7, E7, F7, and G7.

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 tax payers. 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 update, the City is forecasting development of approximately **754 ha.** over the 25-year review period. The land development forecast and underpinning assumptions are shown in *Appendix A*. This is a small decrease since the last update and moderates the increase in rates (discussed further below).

**Offsite Levy Accounts.** The City is managing offsite levy receipts and withdrawals via 6 accounts, in alignment with MGA requirements (i.e., one account for each infrastructure type). The reason that an account is required for each infrastructure type 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 infrastructure etc.). An overview of updated account balances is shown in Appendices B8, C8, D8, E8, F8, and G8.

**Interest.** Offsite levy accounts (both actual and forecast) are impacted by interest. Actual reserve inflows and forecast account balances that are in a positive position earn interest (as required by the MGA). Actual reserve outflows and forecast account balances that are

in a negative position are charged interest (forecast balances that are negative indicate that front-ending will be required).

An overview of account interest rates and forecast balances over the 25-year review period is shown in Appendices B9, C9, D9, E9, F9, and G9.

**Front-ending.** Front-ending is an extremely important concept that underpins rigorous management of offsite levies. Front-ending represents debts owed by future development to the municipality for past construction undertaken by the municipality on behalf of future development—i.e., a municipality 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 reserve balances are insufficient to pay for future development’s share of the project.

Because front-ending balances represent debts owed to the municipality, they need to be clearly reflected in official City documents such as levy account balances, financial statements (e.g., front-ending notes), or accounts receivables, etc. This documentation enables the City to collect on these debts as future development occurs, and offsite levies are collected.

At end 2022, the overall net front-ending due to the City was **\$39.65 million**. A complete reconciliation of balances for each of the 5 accounts is provided in Appendices B8, C8, D8, E8, F8, and G8.

Summary of Account Balances & Front-ending

Account/Reserve	Account Balance	Front-ending Due
Transportation	\$ 8,419,924	\$
Water	\$ (4,549,177)	\$ 4,549,177
Sanitary	\$ (35,105,663)	\$ 35,105,663
Stormwater	\$ 4,605,815	\$
Recreation	\$ 9,906,474	\$
Fire	\$ 360,761	\$
<b>Total</b>	<b>\$ (16,361,865)</b>	<b>\$ 39,654,840</b>

### 3 RATES

For future development to pay for its share of the **\$612.7 million** infrastructure costs either built already or contained in the City's future capital plans, rates are **\$380,618 per net hectare** on a weighted average basis. These rates reflect the actual cost of infrastructure required to facilitate development in the City. A comparison of offsite levy rates with other municipalities is summarized in *Appendix G*.

Since the last update, rates have increased an average of **~9.6%**. The reason for this increase is increase of infrastructure costs, and additional projects within the 25-year review period. The land development forecast has decreased **~2.8%**.

Summary of Offsite Levy Charges (Per Net Ha) <sup>2,3</sup>

	Transportation Levies (/Net Ha.)	Water Levies (/Net Ha.)	Sanitary Levies (/Net Ha.)	Storm Levies (/Net Ha.)	Recreation Levies (/Net Ha.)	Fire Levies (/Net Ha.)	Total (/Net Ha.)
High	\$120,100	\$57,022	\$91,021	\$97,523	\$34,618	\$17,392	\$416,673
Low	\$120,100	\$57,022	\$31,871	\$-	\$34,618	\$17,392	\$261,003
Weighted Average	\$120,100	\$57,022	\$73,526	\$77,959	\$34,618	\$17,392	\$380,618

<sup>2</sup> Highs, lows, and weighted averages are shown for information purposes only. Developers pay the actual offsite levy charges pertaining to their specific offsite levy area.

Summary of Offsite Levy Charges by Area (Per Net Ha) <sup>2,3</sup>

Area #	Transportation Levies	Water Levies	Sanitary Levies	Stormwater Levies	Recreation Levies	Fire	Total
1	\$120,100	\$57,022	\$42,524	\$-	\$34,618	\$17,392	\$271,656
2	\$120,100	\$57,022	\$84,258	\$71,997	\$34,618	\$17,392	\$385,388
3	\$120,100	\$57,022	\$67,713	\$78,000	\$34,618	\$17,392	\$374,845
4	\$120,100	\$57,022	\$42,524	\$-	\$34,618	\$17,392	\$271,656
5	\$120,100	\$57,022	\$42,524	\$71,972	\$34,618	\$17,392	\$343,628
6	\$120,100	\$57,022	\$83,158	\$63,859	\$34,618	\$17,392	\$376,150
7	\$120,100	\$57,022	\$31,871	\$-	\$34,618	\$17,392	\$261,003
8	\$120,100	\$57,022	\$83,158	\$96,520	\$34,618	\$17,392	\$408,810
9	\$120,100	\$57,022	\$83,158	\$96,520	\$34,618	\$17,392	\$408,810
10	\$120,100	\$57,022	\$91,021	\$96,520	\$34,618	\$17,392	\$416,673
11	\$120,100	\$57,022	\$42,524	\$-	\$34,618	\$17,392	\$271,656
12	\$120,100	\$57,022	\$31,871	\$-	\$34,618	\$17,392	\$261,003
13	\$120,100	\$57,022	\$84,258	\$71,997	\$34,618	\$17,392	\$385,388
14	\$120,100	\$57,022	\$42,524	\$78,000	\$34,618	\$17,392	\$349,656
15	\$120,100	\$57,022	\$67,713	\$-	\$34,618	\$17,392	\$296,845
16	\$120,100	\$57,022	\$84,258	\$71,997	\$34,618	\$17,392	\$385,388
17	\$120,100	\$57,022	\$42,524	\$78,000	\$34,618	\$17,392	\$349,656
18	\$120,100	\$57,022	\$83,158	\$97,523	\$34,618	\$17,392	\$409,814
19	\$120,100	\$57,022	\$73,605	\$78,904	\$34,618	\$17,392	\$381,641
20	\$120,100	\$57,022	\$83,158	\$65,766	\$34,618	\$17,392	\$378,057

<sup>3</sup> Area # refers to areas outline on the figure presented in Appendix A.

## 4 RECOMMENDATIONS

City Administration recommends the following:

1. Implement the updated offsite levy rates outlined in Section 3.
2. Amend the offsite levy account balances in City documentation to align with Appendices B8, C8, D8, E8, F8, and G8. In so doing, remove excess cash from reserves (if any) to pay down front-ending debts.
3. In advance of the next rate update, consider if the City wishes to include new offsite infrastructure in the bylaw in alignment with changes to the MGA (i.e., police stations, libraries).

### Acknowledgements

Chestermere Administration would like to thank all Stakeholder including City of Chestermere staff, developers, landowner, and BILD who supported the work of this rate update. Chestermere also acknowledges that Chestermere's off-site levy model and reporting is based on offsite levy model and report template developed by CORVUS Business Advisors Inc. and is used in the development of this report.

### Disclaimer

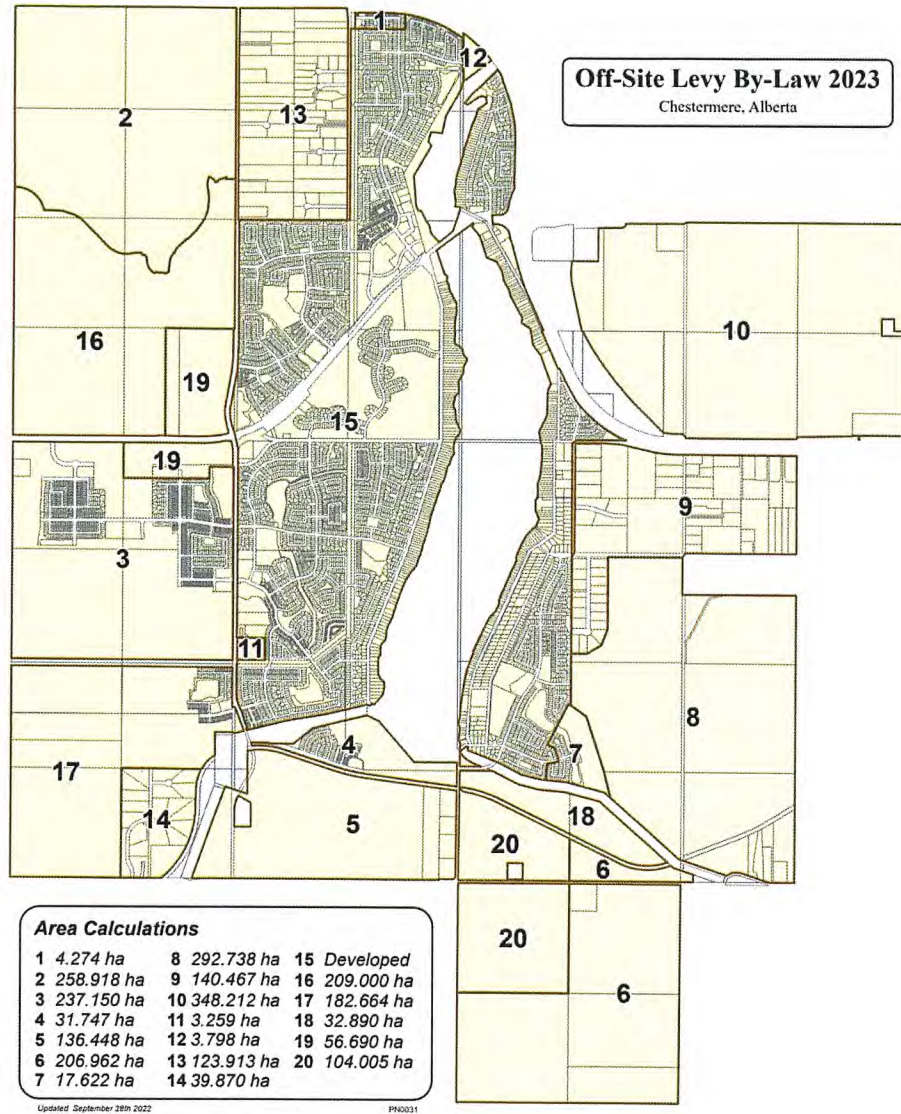
City of Chestermere has relied upon many third-party reports provided by engineering/consulting advisors to provide most of the data and information used to construct the offsite levy model and create the rates, such as planning data and assumptions, development forecasts and assumptions, infrastructure costs and costs estimates, allocations to benefitting parties, allocation to benefitting areas, historical financial details, and other assumptions etc. As such, City of Chestermere 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 upon educated assumptions and the best available information of the day. Planning assumptions, cost estimates etc. can change each year. Accordingly, the Municipal Government Act requires that offsite levy rates be updated with the most available information on a regular basis and a status report provided to Council annually. When information changes, it will be reflected in a future update, and rates adjusted accordingly.

### A1. Offsite Levy Areas

The City is parsed into **20** offsite levy areas, as shown in the map below. Areas take into consideration existing/planned infrastructure basins as well as natural and man-made barriers (e.g., rivers, highways, etc.). All offsite levy infrastructure costs are allocated to one or more areas.

Offsite Levy Areas



Total net development area, the amount of land available for development across all offsite levy areas, is approximately **2053 net ha**. In calculating net development area only, those lands remaining to be developed (at Dec 31, 2016) that have not previously paid offsite levies have been considered (as required by legislation/regulation). Further, allowances have been made to net development area calculations for environmental reserves, municipal reserves, and arterial road right of way.

City of Chestermere Offsite Levy Rates Update

Offsite Levy Net Development Area

Area Ref. #	Development Area Location	Land Use	Gross Area (ha.)	Environmental Reserves (ha.)	Sub-total	Municipal Reserves	Arterial Right of Way	Net Development Area (ha.)
1.1	Westmere	Residential - Low Density	3.79		3.79	-		3.79
1.2	Westmere	Residential - Medium/High Density			-	-		-
1.3	Westmere	Commercial	0.47		0.47	-		0.47
1.4	Westmere	Industrial			-	-		-
1.5	Westmere	Other			-	-		-
2.1	North Waterbridge	Residential - Low Density	115.53		115.53	11.55		103.98
2.2	North Waterbridge	Residential - Medium/High Density			-	-		-
2.3	North Waterbridge	Commercial	24.87		24.87	-		24.87
2.4	North Waterbridge	Industrial	118.60		118.60	-		118.60
2.5	North Waterbridge	Other			-	-		-
3.1	Chelsea & Dawson's Landing	Residential - Low Density	217.28	15.57	201.71	28.03		173.68
3.2	Chelsea & Dawson's Landing	Residential - Medium/High Density	14.05		14.05	1.41		12.65
3.3	Chelsea & Dawson's Landing	Commercial	10.45		10.45	-		10.45
3.4	Chelsea & Dawson's Landing	Industrial			-	-		-
3.5	Chelsea & Dawson's Landing	Other			-	-		-
4.1	South Shore	Residential - Low Density	31.75		31.75	3.18	0.02	28.56
4.2	South Shore	Residential - Medium/High Density			-	-		-
4.3	South Shore	Commercial			-	-		-
4.4	South Shore	Industrial			-	-		-
4.5	South Shore	Other			-	-		-
5.1	Edgewater	Residential - Low Density	134.29	6.50	127.79	12.78	1.71	113.30
5.2	Edgewater	Residential - Medium/High Density			-	-		-
5.3	Edgewater	Commercial	2.16		2.16	-		2.16
5.4	Edgewater	Industrial			-	-		-
5.5	Edgewater	Other			-	-		-
6.1	South Industrial	Residential - Low Density			-	-		-
6.2	South Industrial	Residential - Medium/High Density			-	-		-
6.3	South Industrial	Commercial			-	-		-
6.4	South Industrial	Industrial	211.53	14.00	197.53	19.75	4.20	173.58
6.5	South Industrial	Other			-	-		-
7.1	Kinniburgh	Residential - Low Density	11.35		11.35	1.18		10.17
7.2	Kinniburgh	Residential - Medium/High Density			-	-		-
7.3	Kinniburgh	Commercial			-	-		-
7.4	Kinniburgh	Industrial			-	-		-
7.5	Kinniburgh	Other			-	-		-
8.1	Sierra Vista	Residential - Low Density	292.74	39.00	253.74	25.37		228.37
8.2	Sierra Vista	Residential - Medium/High Density			-	-		-
8.3	Sierra Vista	Commercial			-	-		-
8.4	Sierra Vista	Industrial			-	-		-
8.5	Sierra Vista	Other			-	-		-
9.1	East Acreages	Residential - Low Density	67.60	21.80	45.80	-		45.80
9.2	East Acreages	Residential - Medium/High Density	51.70	12.50	39.20	-		39.20
9.3	East Acreages	Commercial	21.30	1.70	19.60	-		19.60
9.4	East Acreages	Industrial			-	-		-
9.5	East Acreages	Other	6.54		6.54	-		6.54

City of Chestermere Offsite Levy Rates Update

10.1	Mountain View Park	Residential - Low Density	99.77		99.77	9.98		89.79
10.2	Mountain View Park	Residential - Medium/High Density	81.19		81.19	8.12		73.07
10.3	Mountain View Park	Commercial	40.00		40.00	4.00		36.00
10.4	Mountain View Park	Industrial	122.44		122.44	12.24		110.20
10.5	Mountain View Park	Other	4.86		4.86	0.49		4.37
11.1	Goodacre	Residential - Low Density				-		-
11.2	Goodacre	Residential - Medium/High Density	3.26		3.26	-		3.26
11.3	Goodacre	Commercial				-		-
11.4	Goodacre	Industrial				-		-
11.5	Goodacre	Other				-		-
12.1	North East Westmere	Residential - Low Density	3.80		3.80	0.38	0.20	3.22
12.2	North East Westmere	Residential - Medium/High Density				-		-
12.3	North East Westmere	Commercial				-		-
12.4	North East Westmere	Industrial				-		-
12.5	North East Westmere	Other				-		-
13.1	North Acreages	Residential - Low Density	122.66	4.00	118.66	11.87	1.20	105.59
13.2	North Acreages	Residential - Medium/High Density				-		-
13.3	North Acreages	Commercial				-		-
13.4	North Acreages	Industrial	1.25		1.25	-		1.25
13.5	North Acreages	Other				-		-
14.1	Paradise Meadows	Residential - Low Density	36.53		36.53	3.65		32.88
14.2	Paradise Meadows	Residential - Medium/High Density				-		-
14.3	Paradise Meadows	Commercial				-		-
14.4	Paradise Meadows	Industrial				-		-
14.5	Paradise Meadows	Other				-		-
15.1	Existing Development	Residential - Low Density	2.17		2.17	-		2.17
15.2	Existing Development	Residential - Medium/High Density				-		-
15.3	Existing Development	Commercial				-		-
15.4	Existing Development	Industrial				-		-
15.5	Existing Development	Other				-		-
16.1	BridgePort	Residential - Low Density	198.23	7.70	190.53	24.12	1.36	165.05
16.2	BridgePort	Residential - Medium/High Density				-		-
16.3	BridgePort	Commercial	5.46		5.46	-	0.128	5.33
16.4	BridgePort	Industrial				-		-
16.5	BridgePort	Other				-		-
17.1	Waterford	Residential - Low Density	174.56	2.60	171.96	18.69	5.03	148.24
17.2	Waterford	Residential - Medium/High Density				-		-
17.3	Waterford	Commercial	8.19		8.19	-		8.19
17.4	Waterford	Industrial				-		-
17.5	Waterford	Other				-		-

City of Chestermere Offsite Levy Rates Update

18.1	South East Chestermere	Residential - Low Density	29.02	3.32	25.70	2.57	-	23.13
18.2	South East Chestermere	Residential - Medium/High Density	-	-	-	-	-	-
18.3	South East Chestermere	Commercial	3.87	-	3.87	-	-	3.87
18.4	South East Chestermere	Industrial	-	-	-	-	-	-
18.5	South East Chestermere	Other	-	-	-	-	-	-
19.1	BridgePort-East	Residential - Low Density	26.12	1.44	26.12	6.07	1.44	18.61
19.2	BridgePort-East	Residential - Medium/High Density	-	-	-	-	-	-
19.3	BridgePort-East	Commercial	30.78	-	30.78	-	-	30.78
19.4	BridgePort-East	Industrial	-	-	-	-	-	-
19.5	BridgePort-East	Other	-	-	-	-	-	-
20.1	Webster	Residential - Low Density	40.00	-	40.00	4.00	-	36.00
20.2	Webster	Residential - Medium/High Density	-	-	-	-	-	-
20.3	Webster	Commercial	4.00	-	4.00	-	-	4.00
20.4	Webster	Industrial	60.00	-	60.00	6.00	21.30	32.70
20.5	Webster	Other	-	-	-	-	-	-
<b>Total</b>			<b>2,434.14</b>	<b>128.69</b>	<b>2,305.47</b>	<b>215.42</b>	<b>36.59</b>	<b>2,053.45</b>

Summary of Offsite Levy Net Development Area

Description	ha.
Gross Development Area	2,434.14
Less Environment Reserve	128.69
Less Municipal Reserve	215.42
Less ROW Allowance	36.59
Net Development Area	2,053.45

\*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 the City of Chestermere. 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.
  - Less: Any environmental reserves contained within the development area.
  - Less: A 10% allowance for Municipal Reserves.
  - Less: Arterial road right of way that bisects the development lands.
- Equals: Net Developable Area, which is the area subject to offsite levies.

## **A2. Development Staging**

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 **2053.5 net ha.** of development area available across all offsite levy development areas, planners estimate that approximately **754 net ha. (37%)** 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 Since Model Created	238.75	11.6%
Developed In Next 25 Years	754.02	36.7%
Developed Beyond 25 Years	1,060.68	51.7%
Net Development Area	2,053.45	

City of Chestermere Offsite Levy Rates Update

Anticipated Development During the 25-year Rate Planning Period

Area Ref. #	Area Developed in Next 25 years (Net ha.)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048						
1.1	-																															
1.2	-																															
1.3	-																															
1.4	-																															
1.5	-																															
2.1	95,000													10.00	10.00	10.00	10.00	15.00	10.00	15.00	15.00											
2.2	-																				5.00											
2.3	24,870																					7.00							10.00			
2.4	-																															
2.5	-																															
3.1	66,720	20.00	5.51	6.10	6.50	7.00	6.90	6.90	6.90	0.91																						
3.2	7,600		4.69	0.91						2.00																						
3.3	-																															
3.4	-																															
3.5	-																															
4.1	6,500	6.50																														
4.2	-																															
4.3	-																															
4.4	-																															
4.5	-																															
5.1	82,500											8.30	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.24	10.46	10.49	8.01						
5.2	-																															
5.3	2,160											2.16																				
5.4	-																															
5.5	-																															
6.1	-																															
6.2	-																															
6.3	-																															
6.4	-																															
6.5	-																															
7.1	4,540	4.54																														
7.2	-																															
7.3	-																															
7.4	-																															
7.5	-																															
8.1	-																															
8.2	-																															
8.3	-																															
8.4	-																															
8.5	-																															
9.1	45,000	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	2.07	2.43	4.50	4.50	4.50	4.50	4.50	4.50	4.50		
9.2	13,500								4.50					4.50					4.50													
9.3	-																															
9.4	-																															
9.5	-																															



## APPENDIX B: WATER OFFSITE INFRASTRUCTURE

### B1. Water Offsite Infrastructure Costs

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 **\$76.87 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by City staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support future development during the 25- year review period. The remainder of this section outlines how the “net” costs for future development are determined.

Summary of Water Offsite Infrastructure

Item	Project Description	Cost of Completed Work & Historical Interest	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	East Calgary Regional Water Line - Tie-In and Oversizing	\$ 2,126,144	\$ -	\$ -	\$ 2,126,144
2	Water Reservoir Expansion & ECRW Line Tie-In to Reservoir	\$ 15,864,673	\$ 1,164,399	\$ -	\$ 17,029,071
3	NW Water Reservoir & Pump Station	\$ -	\$ -	\$ 9,675,000	\$ 9,675,000
4	New Water Supply Main from Calgary	\$ -	\$ -	\$ 10,800,000	\$ 10,800,000
5	Main Pump Station Upgrade	\$ 1,697,531	\$ -	\$ 1,843,462	\$ 3,540,993
6	Distribution Trunk in Chestermere Blvd (North)	\$ -	\$ -	\$ 14,560,140	\$ 14,560,140
7	Distribution trunk in Rainbow Road (West)	\$ -	\$ -	\$ 6,653,287	\$ 6,653,287
8	Distribution trunk in Twp Rd. 240 (South)	\$ 1,737,594	\$ -	\$ -	\$ 1,737,594
9	Distribution trunk in Range Rd. 281 (East)	\$ -	\$ -	\$ 4,050,000	\$ 4,050,000
10	Main Pump Station Upgrade Phase 2	\$ -	\$ -	\$ 2,430,000	\$ 2,430,000
11	Main Pump Station Upgrade Phase 3	\$ -	\$ -	\$ 405,000	\$ 405,000
12	Distribution trunk in Twp Rd. 240 (South) Phase 2 (from stub	\$ -	\$ -	\$ 1,358,200	\$ 1,358,200
13	Water Reservoir Supply Main (Chestermere Blvd. to NW Resv	\$ -	\$ -	\$ 2,505,400	\$ 2,505,400
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		<b>\$ 21,425,941</b>	<b>\$ 1,164,399</b>	<b>\$ 54,280,489</b>	<b>\$ 76,870,829</b>

\*Costs estimates are reflected in current dollars.

\*\*Estimates include engineering costs and contingencies.

\*\*\*Offsite levy project details, allocations, etc. were determined by City staff and their engineering/consulting advisors.

\*\*\*\*Financing interest costs to date are included in the cost of work completed for Project #2.

\*\*\*\*\* Project numbering may be out of sequence as rows containing deleted projects are hidden.

### B2. Water Offsite Infrastructure Grants & Contributions to Date

The MGA enables the City to allocate the costs of offsite infrastructure to future development, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). The City has/will receive approximately **\$3.50 million** in special grants and contributions for water offsite levy infrastructure as shown in the table below (note, if the City receives other 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 **\$73.37 million**.

Special Grants and Contributions for Water Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Other Contributions	Reduced Project Estimated Cost
1	East Calgary Regional Water Line - Tie-In and Oversizing	\$ 2,126,144	\$ -	\$ -	\$ -	\$ 2,126,144
2	Water Reservoir Expansion & ECRW Line Tie-In to Reservoir	\$ 17,029,071	\$ 1,850,941	\$ -	\$ -	\$ 15,178,130
3	NW Water Reservoir & Pump Station	\$ 9,675,000	\$ -	\$ -	\$ -	\$ 9,675,000
4	New Water Supply Main from Calgary	\$ 10,800,000	\$ -	\$ -	\$ -	\$ 10,800,000
5	Main Pump Station Upgrade	\$ 3,540,993	\$ -	\$ -	\$ -	\$ 3,540,993
6	Distribution Trunk in Chestermere Blvd (North)	\$ 14,560,140	\$ -	\$ -	\$ -	\$ 14,560,140
7	Distribution trunk in Rainbow Road (West)	\$ 6,653,287	\$ -	\$ -	\$ -	\$ 6,653,287
8	Distribution trunk in Twp Rd. 240 (South)	\$ 1,737,594	\$ 1,648,596	\$ -	\$ -	\$ 88,998
9	Distribution trunk in Range Rd. 281 (East)	\$ 4,050,000	\$ -	\$ -	\$ -	\$ 4,050,000
10	Main Pump Station Upgrade Phase 2	\$ 2,430,000	\$ -	\$ -	\$ -	\$ 2,430,000
11	Main Pump Station Upgrade Phase 3	\$ 405,000	\$ -	\$ -	\$ -	\$ 405,000
12	Distribution trunk in Twp Rd. 240 (South) Phase 2 (from stub	\$ 1,358,200	\$ -	\$ -	\$ -	\$ 1,358,200
13	Water Reservoir Supply Main (Chestermere Blvd. to NW Resv	\$ 2,505,400	\$ -	\$ -	\$ -	\$ 2,505,400
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -	\$ -
		<b>\$ 76,870,829</b>	<b>\$ 3,499,537</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 73,371,293</b>

**B3. Water Infrastructure Staging**

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve 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 annual rate/bylaw updates.

Water Infrastructure Staging

Item	Project Description	Year of Construction
1	East Calgary Regional Water Line - Tie-In and Oversizing	
2	Water Reservoir Expansion & ECRW Line Tie-In to Reservoir	
3	NW Water Reservoir & Pump Station	2031
4	New Water Supply Main from Calgary	2046
5	Main Pump Station Upgrade	2024
6	Distribution Trunk in Chestermere Blvd (North)	2024
7	Distribution trunk in Rainbow Road (West)	2025
8	Distribution trunk in Twp Rd. 240 (South)	2018
9	Distribution trunk in Range Rd. 281 (East)	2044
10	Main Pump Station Upgrade Phase 2	2033
11	Main Pump Station Upgrade Phase 3	2038
12	Distribution trunk in Twp Rd. 240 (South) Phase 2 (from stub to RR281)	2044
13	Water Reservoir Supply Main (Chestermere Blvd. to NW Resvoir Site)	2031

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

\*\*Costs are inflated to the year of construction using an inflation rate of 4% for the next year, and 3% thereafter.

#### B4. Water Offsite Infrastructure Benefiting Parties

The water offsite infrastructure previously outlined will benefit various parties to varying degrees as determined by City staff and engineering advisors. The potential benefiting parties include:

- City of Chestermere – that portion of cost which is required to service existing residents.
- Other Stakeholders - other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Chestermere Future Development (Financial Oversizing) - that portion of cost which benefits future development beyond the 25-year review period.
- City of Chestermere Future Development (in Rates) - all growth-related infrastructure (i.e., leviable water infrastructure costs) during the 25-year rate planning 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	East Calgary Regional Water Line - Tie-In and Oversizing	\$ 2,126,144			0.0%	100.0%
2	Water Reservoir Expansion & ECRW Line Tie-In to Reservoir	\$ 15,178,130			0.0%	100.0%
3	NW Water Reservoir & Pump Station	\$ 9,675,000			28.0%	72.0%
4	New Water Supply Main from Calgary	\$ 10,800,000			88.0%	12.0%
5	Main Pump Station Upgrade	\$ 3,540,993			0.0%	100.0%
6	Distribution Trunk in Chestermere Blvd (North)	\$ 14,560,140			0.0%	100.0%
7	Distribution trunk in Rainbow Road (West)	\$ 6,653,287			4.0%	96.0%
8	Distribution trunk in Twp Rd. 240 (South)	\$ 88,998			0.0%	100.0%
9	Distribution trunk in Range Rd. 281 (East)	\$ 4,050,000			80.0%	20.0%
10	Main Pump Station Upgrade Phase 2	\$ 2,430,000			36.0%	64.0%
11	Main Pump Station Upgrade Phase 3	\$ 405,000			56.0%	44.0%
12	Distribution trunk in Twp Rd. 240 (South) Phase 2 (from stub	\$ 1,358,200			80.0%	20.0%
13	Water Reservoir Supply Main (Chestermere Blvd. to NW Resv	\$ 2,505,400			28.0%	72.0%
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -			0.0%	100.0%
		<b>\$ 73,371,293</b>				

\*Allocations to future development (vs municipal share etc.) were determined by City staff and their engineering/consulting advisors.

\*\*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

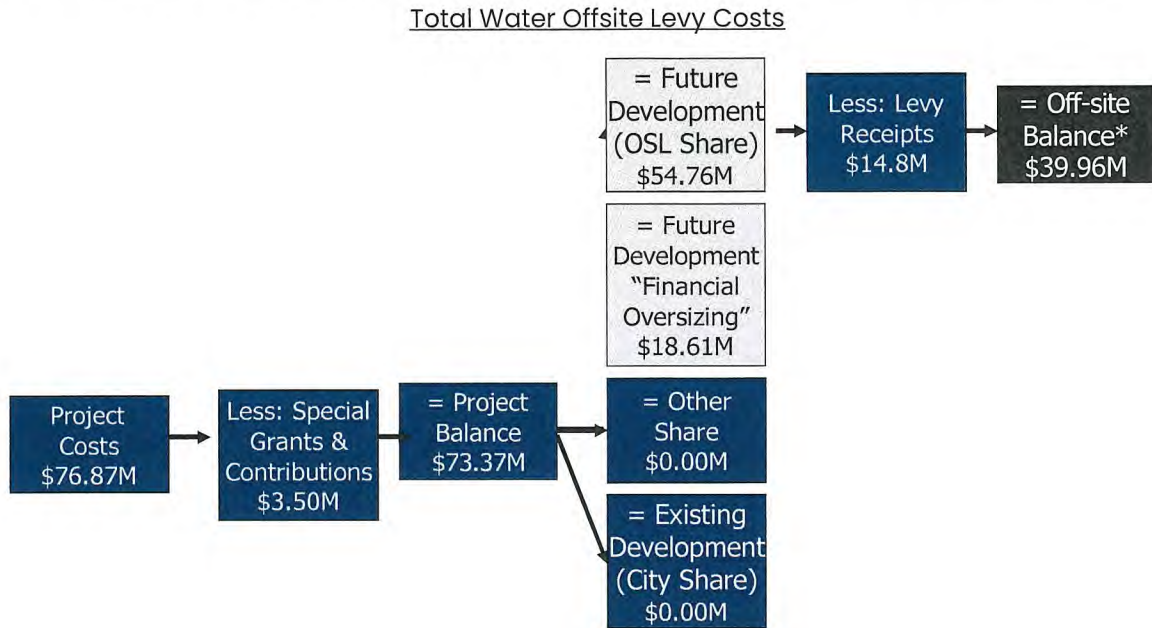
Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately **\$54.76 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. The City has collected **\$14.8 million** (\$7.97 million + \$6.83 million) in offsite levies to date and results in an adjusted offsite levy cost of approximately **\$39.96 million**.

### Offsite Levy Funds Collected to Date & Adjusted Levy Cost

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2016	Offsite Levy Funds Collected Starting Jan 1, 2017	Adjusted Developer (Levy) Cost
1	East Calgary Regional Water Line - Tie-In and Oversizing	\$ 2,126,144	\$ -	\$ 366,928	\$ 1,759,216
2	Water Reservoir Expansion & ECRW Line Tie-In to Reservoir	\$ 15,178,130	\$ 6,440,676	\$ 1,507,904	\$ 7,229,551
3	NW Water Reservoir & Pump Station	\$ 6,966,000	\$ -	\$ 1,092,596	\$ 5,873,404
4	New Water Supply Main from Calgary	\$ 1,296,000	\$ -	\$ 217,551	\$ 1,078,449
5	Main Pump Station Upgrade	\$ 3,540,993	\$ -	\$ 405,131	\$ 3,135,863
6	Distribution Trunk in Chestermere Blvd (North)	\$ 14,560,140	\$ -	\$ 1,543,971	\$ 13,016,169
7	Distribution trunk in Rainbow Road (West)	\$ 6,387,156	\$ -	\$ 1,055,682	\$ 5,331,474
8	Distribution trunk in Twp Rd. 240 (South)	\$ 88,998	\$ -	\$ 76,808	\$ 12,189
9	Distribution trunk in Range Rd. 281 (East)	\$ 810,000	\$ -	\$ 89,576	\$ 720,424
10	Main Pump Station Upgrade Phase 2	\$ 1,555,200	\$ -	\$ 198,781	\$ 1,356,419
11	Main Pump Station Upgrade Phase 3	\$ 178,200	\$ -	\$ 21,504	\$ 156,696
12	Distribution trunk in Twp Rd. 240 (South) Phase 2 (from stub to RR281)	\$ 271,640	\$ -	\$ 21,325	\$ 250,315
13	Water Reservoir Supply Main (Chestermere Blvd. to NW Resvoir Site)	\$ 1,803,888	\$ -	\$ 229,413	\$ 1,574,475
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ 1,531,052	\$ -	\$ (1,531,052)
		<b>\$ 54,762,489</b>	<b>\$ 7,971,727</b>	<b>\$ 6,827,171</b>	<b>\$ 39,963,591</b>

### B6. 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 **\$39.96 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in Section B4. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).



### B7. Water 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 and their engineering advisors. The lands anticipated to develop over the 25-years in each offsite levy benefitting area are used to determine rates.

Benefitting Areas for Water Offsite Infrastructure

Item	Project Description	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	East Calgary Regional Water Line - Tie-in and Oversizing	\$1,759,216	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Water Reservoir Expansion & ECRW Line Tie-in to Reservoir	\$7,229,551	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	NW Water Reservoir & Pump Station	\$5,873,404	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	New Water Supply Main from Calgary	\$1,078,449	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Main Pump Station Upgrade	\$3,135,863	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Distribution Trunk in Chestermere Blvd (North)	\$13,016,169	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Distribution trunk in Rainbow Road (West)	\$5,331,474	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Distribution trunk in Twp Rd. 240 (South)	\$12,189	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Distribution trunk in Range Rd. 281 (East)	\$720,424	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Main Pump Station Upgrade Phase 2	\$1,356,419	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Main Pump Station Upgrade Phase 3	\$156,696	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Distribution trunk in Twp Rd. 240 (South) Phase 2 (from stub to RR28)	\$250,315	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Water Reservoir Supply Main (Chestermere Blvd. to NW Reservoir Site)	\$1,574,475	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$(1,531,052)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		\$39,963,591																				

## B8. Reserve Balance

The balance of the City's water reserve at December 31<sup>st</sup>, 2023 is **\$(4,549,176)**. This updated balance takes into consideration expenditures up to end-2023 and assumes that front-ending debts will be drawn down via a withdrawal of all available cash in the account.

### Water Offsite Levy Reserve Balance

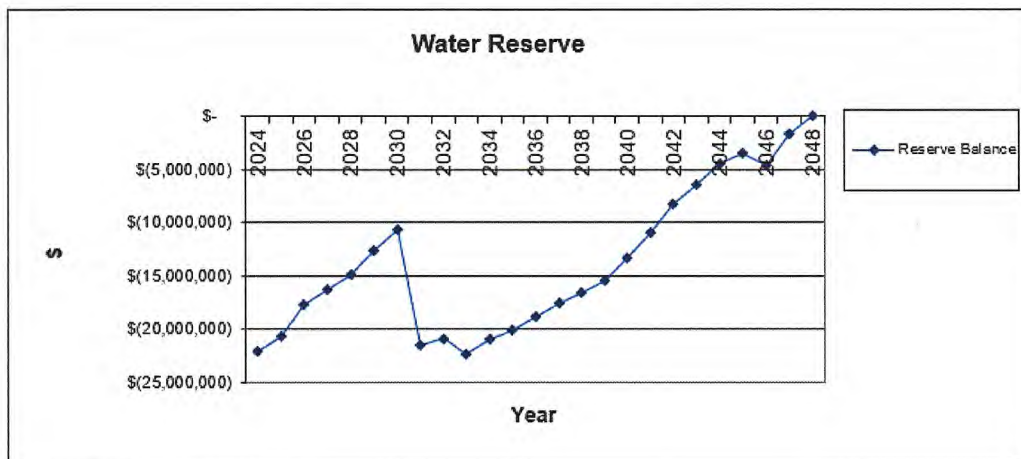
Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016		\$ 14,803,503.78	\$(14,803,503.78)
Offsite Levy Receipt Allocations to December 31, 2016	\$ 6,440,675.57		\$ (8,362,828.21)
Debenture Interest Expenditure to December 31, 2016		\$ -	\$ (8,362,828.21)
Unallocated Receipts to December 31, 2016	\$ 1,531,051.62		\$ (6,831,776.59)
<b>Opening Balance</b>			<b>\$ (6,831,776.59)</b>
<b>2017</b>			<b>\$ (6,831,776.59)</b>
Interest on Opening Balance		\$ 204,953.30	\$ (7,036,729.89)
Project Expenditures (OSL Share) As Reflected by City		\$ 210,820.89	\$ (7,247,550.78)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ 5,741.00	\$ (7,253,291.78)
Offsite Levy Receipts	\$ 203,415.22		\$ (7,049,876.56)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (7,049,876.56)
Debenture Interest Expenditure		\$ -	\$ (7,049,876.56)
Interest on Project Expenditure		\$ 1,624.21	\$ (7,051,500.77)
Interest on Offsite Levy Receipts	\$ 1,017.08		\$ (7,050,483.70)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (7,050,483.70)
Interest on Debenture Expenditure		\$ -	\$ (7,050,483.70)
<b>2018</b>			<b>\$ (7,050,483.70)</b>
Interest on Opening Balance		\$ 218,564.99	\$ (7,269,048.69)
Project Expenditures (OSL Share) As Reflected by City		\$ 219,168.97	\$ (7,488,217.66)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ (5,741.01)	\$ (7,482,476.65)
Offsite Levy Receipts	\$ 432,178.89		\$ (7,050,297.76)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (7,050,297.76)
Debenture Interest Expenditure		\$ -	\$ (7,050,297.76)
Interest on Project Expenditure		\$ 1,654.07	\$ (7,051,951.83)
Interest on Offsite Levy Receipts	\$ 4,321.79		\$ (7,047,630.04)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (7,047,630.04)
Interest on Debenture Expenditure		\$ -	\$ (7,047,630.04)
<b>2019</b>			<b>\$ (7,047,630.04)</b>
Interest on Opening Balance		\$ 218,476.53	\$ (7,266,106.57)
Project Expenditures (OSL Share) As Reflected by City		\$ 201,952.99	\$ (7,468,059.56)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ (0.99)	\$ (7,468,058.57)
Offsite Levy Receipts	\$ 299,903.32		\$ (7,168,155.25)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (7,168,155.25)
Debenture Interest Expenditure		\$ -	\$ (7,168,155.25)
Interest on Project Expenditure		\$ 1,565.13	\$ (7,169,720.38)
Interest on Offsite Levy Receipts	\$ 2,999.03		\$ (7,166,721.34)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (7,166,721.34)
Interest on Debenture Expenditure		\$ -	\$ (7,166,721.34)



To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **4.99%** interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **2.00%** interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph and table below outline the forecast water levy reserve balances over the 25-year development period.

If necessary, an interest staging adjustment has been applied to rates (slightly positive or slightly negative) to ensure that the forecast reserve 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 Reserve Balances<sup>4</sup>



Anticipated Water Offsite Levy Reserve Balances

Year	Receipts	Expenditure	Opening Balance	Interest	Balance
					\$(4,549,177)
2024	\$ 3,661,932	\$ 20,111,988	\$ (1,047,862)	\$ (22,047,094)	
2025	\$ 4,547,545	\$ 2,167,234	\$ (981,373)	\$ (20,648,156)	
2026	\$ 3,950,579	\$ 114,693	\$ (838,932)	\$ (17,651,203)	
2027	\$ 2,291,311	\$ 118,593	\$ (772,376)	\$ (16,250,861)	
2028	\$ 2,138,875	\$ 87,589	\$ (708,559)	\$ (14,908,134)	
2029	\$ 2,987,357	\$ 90,567	\$ (599,366)	\$ (12,610,710)	
2030	\$ 2,526,025	\$ 74,917	\$ (506,964)	\$ (10,666,567)	
2031	\$ 1,498,756	\$ 11,267,147	\$ (1,019,704)	\$ (21,454,662)	
2032	\$ 1,677,603	\$ 60,074	\$ (989,873)	\$ (20,827,006)	
2033	\$ 1,711,305	\$ 2,183,655	\$ (1,062,838)	\$ (22,362,194)	
2034	\$ 2,490,154	\$ 42,819	\$ (993,751)	\$ (20,908,610)	
2035	\$ 1,871,235	\$ 44,275	\$ (952,174)	\$ (20,033,824)	
2036	\$ 2,106,844	\$ 22,890	\$ (895,698)	\$ (18,845,568)	
2037	\$ 2,178,477	\$ 23,668	\$ (832,869)	\$ (17,523,628)	
2038	\$ 2,068,664	\$ 287,326	\$ (785,540)	\$ (16,527,830)	
2039	\$ 1,853,799	\$ -	\$ (732,234)	\$ (15,406,266)	
2040	\$ 2,690,440	\$ -	\$ (634,520)	\$ (13,350,345)	
2041	\$ 2,947,590	\$ -	\$ (519,097)	\$ (10,921,853)	
2042	\$ 3,100,356	\$ -	\$ (390,293)	\$ (8,211,789)	
2043	\$ 2,072,339	\$ -	\$ (306,359)	\$ (6,445,808)	
2044	\$ 2,745,075	\$ 535,284	\$ (211,377)	\$ (4,447,395)	
2045	\$ 1,131,645	\$ -	\$ (165,456)	\$ (3,481,206)	
2046	\$ 1,797,229	\$ 2,730,466	\$ (220,281)	\$ (4,634,724)	
2047	\$ 3,104,263	\$ -	\$ (76,370)	\$ (1,606,831)	
2048	\$ 1,606,831	\$ -	\$ (0)	\$ (0)	

<sup>4</sup>In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

## APPENDIX C: SANITARY OFFSITE INFRASTRUCTURE

### C1. Sanitary Offsite Infrastructure Costs

To support future growth, sanitary 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 **\$92.02 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by City staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support future development during the 25-year review period. The remainder of this section outlines how the “net” costs for future development are determined.

Summary of Sanitary Offsite Infrastructure

Item	Project Description	Cost of Completed Work & Historical Interest	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Lift Station #13	\$ 14,233,544	\$ 2,189,376	\$ -	\$ 16,422,920
2	Lift Station #13 Forcemain	\$ 10,003,320	\$ 1,293,435	\$ -	\$ 11,296,755
3	Great Plains Sanitary Trunk	\$ 7,134,961	\$ 335,466	\$ -	\$ 7,470,427
4	Rainbow Road Gravity Sewer Trunk Phase 1	\$ 7,524,045	\$ 1,185,256	\$ -	\$ 8,709,301
5	Rainbow Road Gravity Sewer Trunk Phase 2	\$ 134,056	\$ -	\$ 10,896,536	\$ 11,030,592
6	Lift Station #14 Phase 1	\$ 9,088	\$ -	\$ 2,987,000	\$ 2,996,088
7	Lift Station #14 Forcemain	\$ 1,038,927	\$ -	\$ -	\$ 1,038,927
8	Lift Station #13 - Pump Upgrade 1	\$ -	\$ -	\$ 875,000	\$ 875,000
9	Rainbow Road Gravity Sewer Trunk Phase 3	\$ -	\$ -	\$ 5,625,000	\$ 5,625,000
10	Rainbow Road Gravity Sewer Trunk Phase 4	\$ -	\$ -	\$ 838,000	\$ 838,000
11	Lift Station #10 to LS #13 & H2S System Upgrade	\$ 1,309,381	\$ -	\$ 696,700	\$ 2,006,081
12	Lift Station #14 Phase 2	\$ -	\$ -	\$ 9,545,000	\$ 9,545,000
13	Lift Station #14 New Forcemain to Calgary	\$ -	\$ -	\$ 9,545,000	\$ 9,545,000
14	Rainbow Road Gravity Sewer Trunk Phase 5	\$ -	\$ -	\$ 3,375,000	\$ 3,375,000
15	LS#10 connection to RRST 3	\$ -	\$ -	\$ 1,250,000	\$ 1,250,000
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		<b>\$ 41,387,322</b>	<b>\$ 5,003,533</b>	<b>\$ 45,633,237</b>	<b>\$ 92,024,092</b>

\*Costs estimates are reflected in current dollars.

\*\*Estimates include engineering costs and contingencies.

\*\*\*Offsite levy project details, allocations, etc. were determined by City staff and their engineering/consulting advisors.

\*\*\*\*Financing interest costs to date are included in the cost of work completed for Projects #1, #2, #3, and #4.

\*\*\*\*\* Project numbering may be out of sequence as rows containing deleted projects are hidden.

## C2. Sanitary Offsite Infrastructure Grants & Contributions to Date

The MGA enables the City to allocate the costs of offsite infrastructure to future development, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). The City has/will receive **\$4.40 million** in special grants and contributions (\$3.30 million + \$1.10 million) for sanitary offsite levy infrastructure as shown in the table below (note, if the City receives additional 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 **\$87.62 million**.

### Special Grants and Contributions for Sanitary Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Grants	Developer Agreement Contributions	Other Contributions	Reduced Project Estimated Cost
1	Lift Station #13	\$ 16,422,920	\$ -	\$ -	\$ -	\$ 16,422,920
2	Lift Station #13 Forcemain	\$ 11,296,755	\$ 2,261,781	\$ -	\$ -	\$ 9,034,974
3	Great Plains Sanitary Trunk	\$ 7,470,427	\$ -	\$ -	\$ 1,100,000	\$ 6,370,427
4	Rainbow Road Gravity Sewer Trunk Phase 1	\$ 8,709,301	\$ -	\$ -	\$ -	\$ 8,709,301
5	Rainbow Road Gravity Sewer Trunk Phase 2	\$ 11,030,592	\$ -	\$ -	\$ -	\$ 11,030,592
6	Lift Station #14 Phase 1	\$ 2,996,088	\$ -	\$ -	\$ -	\$ 2,996,088
7	Lift Station #14 Forcemain	\$ 1,038,927	\$ 1,037,493	\$ -	\$ -	\$ 1,434
8	Lift Station #13 - Pump Upgrade 1	\$ 875,000	\$ -	\$ -	\$ -	\$ 875,000
9	Rainbow Road Gravity Sewer Trunk Phase 3	\$ 5,625,000	\$ -	\$ -	\$ -	\$ 5,625,000
10	Rainbow Road Gravity Sewer Trunk Phase 4	\$ 838,000	\$ -	\$ -	\$ -	\$ 838,000
11	Lift Station #10 to LS #13 & H2S System Upgrade	\$ 2,006,081	\$ -	\$ -	\$ -	\$ 2,006,081
12	Lift Station #14 Phase 2	\$ 9,545,000	\$ -	\$ -	\$ -	\$ 9,545,000
13	Lift Station #14 New Forcemain to Calgary	\$ 9,545,000	\$ -	\$ -	\$ -	\$ 9,545,000
14	Rainbow Road Gravity Sewer Trunk Phase 5	\$ 3,375,000	\$ -	\$ -	\$ -	\$ 3,375,000
15	LS#10 connection to RRST 3	\$ 1,250,000	\$ -	\$ -	\$ -	\$ 1,250,000
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -	\$ -
		<b>\$ 92,024,092</b>	<b>\$ 3,299,274</b>	<b>\$ -</b>	<b>\$ 1,100,000</b>	<b>\$ 87,624,818</b>

\*The contribution of \$1.1 million for Project #3 was provided by the City of Calgary.

## C3. Sanitary Infrastructure Staging

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve 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 annual rate/bylaw updates.

Sanitary Infrastructure Staging

Item	Project Description	Year of Construction
1	Lift Station #13	2015
2	Lift Station #13 Forcemain	2017
3	Great Plains Sanitary Trunk	2016
4	Rainbow Road Gravity Sewer Trunk Phase 1	2017
5	Rainbow Road Gravity Sewer Trunk Phase 2	2019
6	Lift Station #14 Phase 1	2028
7	Lift Station #14 Forcemain	2020
8	Lift Station #13 - Pump Upgrade 1	2029
9	Rainbow Road Gravity Sewer Trunk Phase 3	2027
10	Rainbow Road Gravity Sewer Trunk Phase 4	2024
11	Lift Station #10 to LS #13 & H2S System Upgrade	2023
12	Lift Station #14 Phase 2	2047
13	Lift Station #14 New Forcemain to Calgary	2047
14	Rainbow Road Gravity Sewer Trunk Phase 5	2049
15	LS#10 connection to RRST 3	2027
100	Unallocated Offsite Levies Collected to Dec 31, 2016	

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

\*\*Costs are inflated to the year of construction using an inflation rate of 4% for the next year, and 3% thereafter.

**C4. Sanitary Offsite Infrastructure Benefiting Parties**

The sanitary offsite infrastructure previously outlined will benefit various parties to varying degrees as determined by City staff and engineering advisors. The potential benefiting parties include:

- City of Chestermere – that portion of cost which is required to service existing residents.
- Other Stakeholders - other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Chestermere Future Development (Financial Oversizing) - that portion of cost which benefits future development beyond the 25-year review period.
- City of Chestermere Future Development (in Rates) – all growth-related infrastructure (i.e., leviable sanitary infrastructure costs) during the 25-year rate planning period.

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

Allocation of Sanitary 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	Lift Station #13	\$ 16,422,920	20.0%		0.0%	80.0%
2	Lift Station #13 Forcemain	\$ 9,034,974	20.0%		0.0%	80.0%
3	Great Plains Sanitary Trunk	\$ 6,370,427			0.0%	100.0%
4	Rainbow Road Gravity Sewer Trunk Phase 1	\$ 8,709,301	20.0%		0.0%	80.0%
5	Rainbow Road Gravity Sewer Trunk Phase 2	\$ 11,030,592			0.0%	100.0%
6	Lift Station #14 Phase 1	\$ 2,996,088			16.0%	84.0%
7	Lift Station #14 Forcemain	\$ 1,434			0.0%	100.0%
8	Lift Station #13 - Pump Upgrade 1	\$ 875,000			20.0%	80.0%
9	Rainbow Road Gravity Sewer Trunk Phase 3	\$ 5,625,000			12.0%	88.0%
10	Rainbow Road Gravity Sewer Trunk Phase 4	\$ 838,000			0.0%	100.0%
11	Lift Station #10 to LS #13 & H2S System Upgrade	\$ 2,006,081			0.0%	100.0%
12	Lift Station #14 Phase 2	\$ 9,545,000			92.0%	8.0%
13	Lift Station #14 New Forcemain to Calgary	\$ 9,545,000			92.0%	8.0%
14	Rainbow Road Gravity Sewer Trunk Phase 5	\$ 3,375,000			100.0%	0.0%
15	LS#10 connection to RRST 3	\$ 1,250,000			12.0%	88.0%
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -			0.0%	100.0%
		<b>\$ 87,624,818</b>				

\*Allocations to future development (vs municipal share etc.) were determined by City staff and their engineering/consulting advisors.

\*\*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 **\$58.37 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. The City has collected **\$10.27 million** (\$6.69 million + \$3.58 million) in offsite levies to date and results in an adjusted offsite levy cost of approximately **\$48.11 million**.

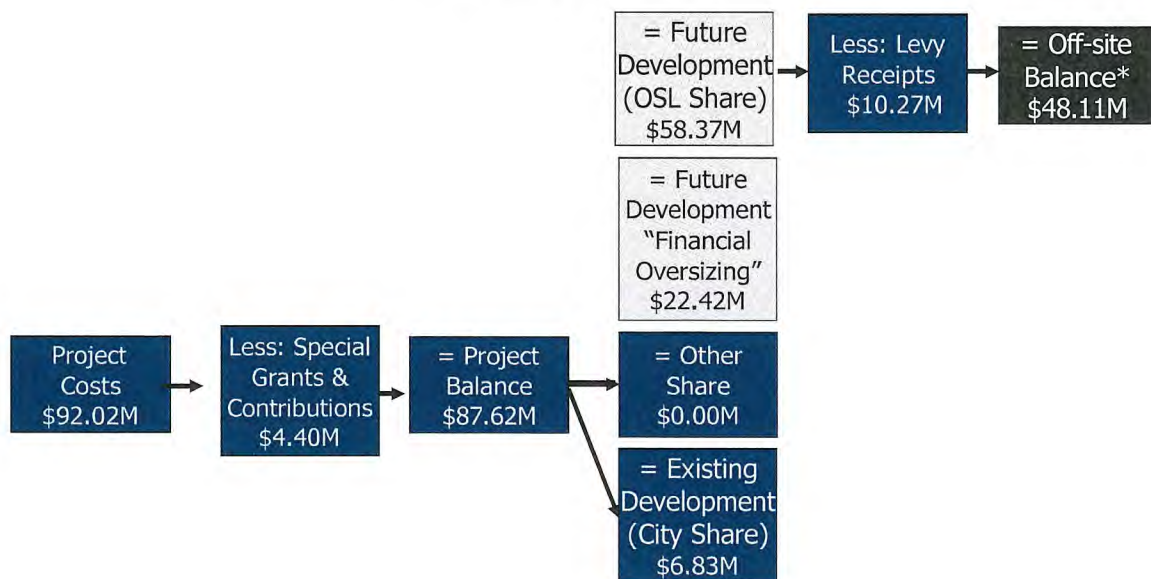
Offsite Levy Funds Collected to Date & Adjusted Levy Cost

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2016	Offsite Levy Funds Collected Starting Jan 1, 2017	Adjusted Developer (Levy) Cost
1	Lift Station #13	\$ 13,138,336	\$ 2,724,818	\$ 1,169,192	\$ 9,244,326
2	Lift Station #13 Forcemain	\$ 7,227,979	\$ 240,241	\$ 773,798	\$ 6,213,940
3	Great Plains Sanitary Trunk	\$ 6,370,427	\$ 3,379,289	\$ 335,702	\$ 2,655,437
4	Rainbow Road Gravity Sewer Trunk Phase 1	\$ 6,967,441	\$ 347,258	\$ 667,214	\$ 5,952,969
5	Rainbow Road Gravity Sewer Trunk Phase 2	\$ 11,030,592	\$ -	\$ 254,997	\$ 10,775,594
6	Lift Station #14 Phase 1	\$ 2,516,714	\$ -	\$ -	\$ 2,516,714
7	Lift Station #14 Forcemain	\$ 1,434	\$ -	\$ 1,289	\$ 145
8	Lift Station #13 - Pump Upgrade 1	\$ 700,000	\$ -	\$ 70,578	\$ 629,422
9	Rainbow Road Gravity Sewer Trunk Phase 3	\$ 4,950,000	\$ -	\$ 116,828	\$ 4,833,172
10	Rainbow Road Gravity Sewer Trunk Phase 4	\$ 838,000	\$ -	\$ -	\$ 838,000
11	Lift Station #10 to LS #13 & H2S System Upgrade	\$ 2,006,081	\$ -	\$ 136,430	\$ 1,869,652
12	Lift Station #14 Phase 2	\$ 763,600	\$ -	\$ -	\$ 763,600
13	Lift Station #14 New Forcemain to Calgary	\$ 763,600	\$ -	\$ -	\$ 763,600
14	Rainbow Road Gravity Sewer Trunk Phase 5	\$ -	\$ -	\$ -	\$ -
15	LS#10 connection to RRST 3	\$ 1,100,000	\$ -	\$ 51,064	\$ 1,048,936
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		<b>\$ 58,374,204</b>	<b>\$ 6,691,606</b>	<b>\$ 3,577,093</b>	<b>\$ 48,105,505</b>

6. Summary of Sanitary Offsite Levy Cost Flow-through

As shown in the figure below, the total costs for sanitary infrastructure that forms the basis of the rate is approximately **\$48.11 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in Section C4. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Sanitary Offsite Levy Costs



### C7. Sanitary 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 benefitting area are used to determine rates.

#### Benefiting Areas for Sanitary Offsite Infrastructure

Item	Project Description	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Lift Station #13	\$9,244,326	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Lift Station #13 Forcemain	\$6,213,940	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Great Plains Sanitary Trunk	\$2,655,437	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Rainbow Road Gravity Sewer Trunk Phase 1	\$5,952,969	1	1	1	1	1					1	1		1	1	1	1	1			
5	Rainbow Road Gravity Sewer Trunk Phase 2	\$10,775,594		1	1							1			1		1	1			1	1
6	Lift Station #14 Phase 1	\$2,516,714						1		1	1										1	1
7	Lift Station #14 Forcemain	\$145						1		1	1										1	1
8	Lift Station #13 - Pump Upgrade 1	\$629,422	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Rainbow Road Gravity Sewer Trunk Phase 3	\$4,833,172		1								1			1						1	1
10	Rainbow Road Gravity Sewer Trunk Phase 4	\$838,000		1											1							1
11	Lift Station #10 to LS #13 & H2S System Upgrade	\$1,869,652	1	1	1	1	1		1			1	1	1	1	1	1	1	1	1	1	1
12	Lift Station #14 Phase 2	\$763,600						1		1	1										1	1
13	Lift Station #14 New Forcemain to Calgary	\$763,600						1		1	1										1	1
14	Rainbow Road Gravity Sewer Trunk Phase 5	\$-		1																		
15	LS#10 connection to RRST 3	\$1,048,936										1										
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		\$48,105,505																				

### C8. Reserve Balance

The balance of the City's sanitary reserve at December 31<sup>st</sup>, 2023 is **\$(35,105,663)**. This updated balance takes into consideration expenditures up to end-2023 and assumes that front-ending debts will be drawn down via a withdrawal of all available cash in the account.

#### Sanitary Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016		\$ 15,968,042.91	\$(15,968,042.91)
Offsite Levy Receipt Allocations to December 31, 2016	\$ 405,561.30		\$(15,562,481.61)
Debenture Interest Expenditure to December 31, 2016		\$ -	\$(15,562,481.61)
Unallocated Receipts to December 31, 2016	\$ -		\$(15,562,481.61)
<b>Opening Balance</b>			<b>\$(15,562,481.61)</b>
<b>2017</b>			
Interest on Opening Balance		\$ 466,874.45	\$(16,029,356.06)
Project Expenditures (OSL Share) As Reflected by City		\$ 8,289,228.79	\$(24,318,584.85)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ (1.31)	\$(24,318,583.54)
Offsite Levy Receipts	\$ 52,496.69		\$(24,266,086.85)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$(24,266,086.85)
Debenture Interest Expenditure		\$ -	\$(24,266,086.85)
Interest on Project Expenditure		\$ 62,169.21	\$(24,328,256.05)
Interest on Offsite Levy Receipts	\$ 262.48		\$(24,327,993.57)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$(24,327,993.57)
Interest on Debenture Expenditure		\$ -	\$(24,327,993.57)



<b>2023</b>			\$(35,211,274.28)
Interest on Opening Balance			\$(36,629,344.27)
Project Expenditures (OSL Share) As Reflected by City	\$	1,418,069.99	\$(36,717,717.23)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected by City		\$ 88,372.96	\$(36,717,717.23)
Offsite Levy Receipts	\$	1,599,301.87	\$(35,118,415.36)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$(35,118,415.36)
Interest on Project Expenditure	\$	3,240.99	\$(35,121,656.35)
Interest on Offsite Levy Receipts	\$	15,993.02	\$(35,105,663.33)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$(35,105,663.33)

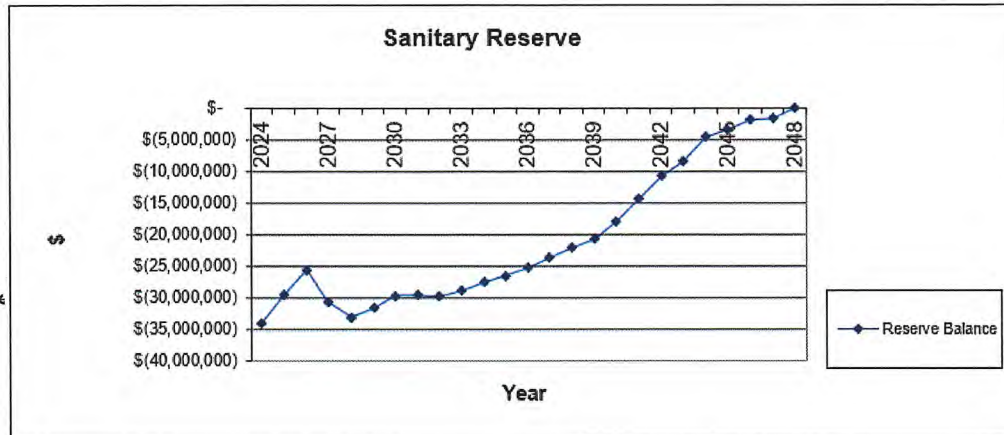
### C9. Development and Sanitary Infrastructure Staging Impacts

Sanitary 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 reserve funds will not be sufficient to pay for construction of sanitary 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. The front-ender (be it a municipality or a developer) is reimbursed over time as levies are collected, and in accordance with the municipality’s front-ending repayment policies.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **4.99%** interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **2.00%** interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph and table below outline the forecast sanitary levy reserve balances over the 25-year development period.

If necessary, an interest staging adjustment has been applied to rates (slightly positive or slightly negative) to ensure that the forecast reserve 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 Offsite Levy Reserve Balances<sup>5</sup>



Anticipated Sanitary Offsite Levy Reserve Balances

Year	Receipts	Expenditure	Interest	Opening Balance	Balance
				\$ (35,105,663)	
2024	\$ 3,884,661	\$ 1,195,684	\$ (1,617,593)	\$	(34,034,278)
2025	\$ 6,214,977	\$ 292,094	\$ (1,402,759)	\$	(29,514,155)
2026	\$ 5,471,592	\$ 286,702	\$ (1,214,030)	\$	(25,543,295)
2027	\$ 3,340,641	\$ 7,041,676	\$ (1,459,292)	\$	(30,703,622)
2028	\$ 2,424,754	\$ 3,194,810	\$ (1,570,536)	\$	(33,044,214)
2029	\$ 4,104,803	\$ 1,118,443	\$ (1,499,887)	\$	(31,557,741)
2030	\$ 3,577,651	\$ 275,177	\$ (1,409,938)	\$	(29,665,204)
2031	\$ 1,771,050	\$ 284,533	\$ (1,406,116)	\$	(29,584,804)
2032	\$ 1,552,808	\$ 275,479	\$ (1,412,543)	\$	(29,720,018)
2033	\$ 2,521,965	\$ 265,481	\$ (1,370,430)	\$	(28,833,964)
2034	\$ 2,981,714	\$ 274,507	\$ (1,303,725)	\$	(27,430,482)
2035	\$ 2,460,694	\$ 263,136	\$ (1,259,123)	\$	(26,492,047)
2036	\$ 2,791,029	\$ 250,675	\$ (1,195,189)	\$	(25,146,882)
2037	\$ 2,893,645	\$ 259,198	\$ (1,123,371)	\$	(23,635,806)
2038	\$ 2,712,333	\$ 44,937	\$ (1,046,324)	\$	(22,014,734)
2039	\$ 2,391,379	\$ 46,465	\$ (981,524)	\$	(20,651,343)
2040	\$ 3,607,283	\$ 36,033	\$ (852,297)	\$	(17,932,389)
2041	\$ 4,355,523	\$ 24,839	\$ (678,725)	\$	(14,280,431)
2042	\$ 4,187,531	\$ 25,683	\$ (504,917)	\$	(10,623,500)
2043	\$ 2,660,184	\$ 13,278	\$ (398,032)	\$	(8,374,627)
2044	\$ 4,051,006	\$ -	\$ (215,749)	\$	(4,539,369)
2045	\$ 1,226,592	\$ -	\$ (165,308)	\$	(3,478,085)
2046	\$ 1,725,533	\$ -	\$ (87,452)	\$	(1,840,004)
2047	\$ 3,633,314	\$ 3,326,965	\$ (76,529)	\$	(1,610,185)
2048	\$ 1,610,185	\$ -	\$ (0)	\$	(0)

<sup>5</sup> In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

## APPENDIX D: TRANSPORTATION OFFSITE INFRASTRUCTURE

### D1. Transportation Offsite Infrastructure Costs

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 **\$243.13 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by City staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support future development during the 25-year review period. The remainder of this section outlines how the “net” costs for future development are determined.

Summary of Transportation Offsite Infrastructure

Item	Project Description	Cost of Completed Work & Historical Interest	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Cost
1	Rainbow Rd Twinning - Chestermere Blvd to Merganser Drive West	\$ 1,045,273	\$ -	\$ -	\$ 1,045,273
2	Rainbow Rd 2 lane rural to 2 lane urban at Goodacre location	\$ 581,327	\$ -	\$ -	\$ 581,327
3	Rainbow Rd Tie in and Signalization at Chestermere Blvd	\$ 570,000	\$ -	\$ -	\$ 570,000
5	TWP Rd 240 2 lane rural to 2 lane urban (Phase 1,2,3) Rainbow Rd to East City boundary (includes 1 cannal crossing)	\$ 11,131,136	\$ -	\$ 795,150	\$ 11,926,286
6	Rainbow Rd 2 lane rural to 2 lane urban Western Headworks cannal crossing to TWP Rd 240 (includes rail crossing upgrade)	\$ -	\$ -	\$ 9,497,000	\$ 9,497,000
7	Rainbow Rd 2 lane rural bridge to 2 lane urban bridge (Western Headworks crossing)	\$ 387,789	\$ -	\$ 6,432,000	\$ 6,819,789
9	Chestermere Blvd 2 lane rural to 4 lane rural Range Rd 284 to Rainbow Rd (potential for 2 lane urban included in scope)	\$ -	\$ -	\$ 5,250,000	\$ 5,250,000
10	Rainbow Rd 2 lane urban to 4 lane urban Merganser Drive West to Waterford Blvd	\$ 2,834,574	\$ -	\$ 7,400,000	\$ 10,234,574
11	Rainbow Rd 2 lane urban to 4 lane urban Waterford Blvd to TWP Rd 240	\$ -	\$ -	\$ 4,101,000	\$ 4,101,000
12	Chestermere Blvd 2 lane urban to 4 lane urban bridge over Chestermere Lake	\$ -	\$ -	\$ 32,189,500	\$ 32,189,500
13	Rainbow Rd 2 lane rural to 2 lane urban Windermere Drive to Highway 1	\$ -	\$ -	\$ 11,278,000	\$ 11,278,000
14	Highway 1 & Rainbow Rd interchange (50% of half diamond)	\$ -	\$ -	\$ 8,750,000	\$ 8,750,000
18	Highway 1 & Highway 791 1 interchange (1/4 share)	\$ -	\$ -	\$ 41,308,500	\$ 41,308,500
22	TWP Rd 240 2 lane rural to 2 lane urban (Phase 4) Rainbow Rd to West City boundary (includes 1 cannal crossing and 1 rail crossing)	\$ -	\$ -	\$ 5,180,000	\$ 5,180,000
23	Rainbow Rd 2 lane urban to 4 lane urban Highway 1 to Windermere Drive	\$ -	\$ -	\$ 5,747,000	\$ 5,747,000

City of Chestermere Offsite Levy Rates Update

24	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to AltaLink ROW	\$ -	\$ -	\$ 8,670,000	\$ 8,670,000
25	Range Rd 284 2 lane rural to 2 lane urban TWP Rd 240 to AltaLink ROW	\$ -	\$ -	\$ 7,896,000	\$ 7,896,000
26	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Memorial Drive/Windermere Drive	\$ -	\$ -	\$ 8,518,000	\$ 8,518,000
28	Highway 1 & Range Rd 284 interchange (1/4 share)	\$ -	\$ -	\$ 15,967,000	\$ 15,967,000
29	Chestermere Blvd 2 lane rural to 4 lane rural Rainbow Rd to Highway 1 (potential for 2 lane urban included in scope)	\$ -	\$ -	\$ 1,716,000	\$ 1,716,000
31	Rainbow Rd 2 lane urban bridge to 4 lane urban bridge (Western Headworks crossing)	\$ -	\$ -	\$ 5,924,000	\$ 5,924,000
32	Rainbow Rd 2 lane urban to 4 lane urban Chestermere Blvd to Windermere Drive	\$ -	\$ -	\$ 4,676,000	\$ 4,676,000
33	Chestermere Blvd 4 lane rural to 4 lane urban Range Rd 284 to	\$ -	\$ -	\$ 9,604,000	\$ 9,604,000
34	Chestermere Blvd 4 lane rural to 4 lane urban Rainbow Rd to M	\$ -	\$ -	\$ 6,003,000	\$ 6,003,000
35	Chestermere Blvd 4 lane rural to 4 lane urban Marina Drive to V	\$ -	\$ -	\$ 4,978,000	\$ 4,978,000
36	Range Road 281, TWP Road 241A to TWP Road 240	\$ -	\$ -	\$ 4,801,000	\$ 4,801,000
37	Township Road 240, Railroad Crossing to Western Headworks	\$ -	\$ -	\$ 2,003,000	\$ 2,003,000
38	Township Road 240, Railroad Crossing to Western Headworks	\$ -	\$ -	\$ 1,468,000	\$ 1,468,000
39	Range Road 281, TWP Road 241A to TWP Road 240 Canal Cro	\$ -	\$ -	\$ 6,432,000	\$ 6,432,000
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		\$ 16,550,099	\$ -	\$ 226,584,150	\$ 243,134,249

\*Costs estimates are reflected in current dollars.

\*\*Estimates include engineering costs and contingencies.

\*\*\*Offsite levy project details, allocations, etc. were determined by City staff and their engineering/consulting advisors.

\*\*\*\* Project numbering may be out of sequence as rows containing deleted projects are hidden.

## D2. Transportation Offsite Infrastructure Grants & Contributions to Date

The MGA enables the City to allocate the costs of offsite infrastructure to future development, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). The City has/will receive **\$6.45 million** in special grants and contributions (\$4.64 million + \$1.81 million) for transportation offsite levy infrastructure as shown in the table below (note, if the City receives other 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 **\$236.69 million**.

### Special Grants and Contributions for Transportation Offsite Infrastructure

Item	Project Description	Total Project Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Cost
1	Rainbow Rd Twinning - Chestermere Blvd to Merganser Drive West	\$ 1,045,273	\$ -	\$ -	\$ 1,045,273
2	Rainbow Rd 2 lane rural to 2 lane urban at Goodacre location	\$ 581,327	\$ -	\$ -	\$ 581,327
3	Rainbow Rd Tie in and Signalization at Chestermere Blvd	\$ 570,000	\$ -	\$ -	\$ 570,000
5	TWP Rd 240 2 lane rural to 2 lane urban (Phase 1,2,3) Rainbow Rd to East City boundary (includes 1 cannal crossing)	\$ 11,926,286	\$ 4,635,923	\$ 1,811,323	\$ 5,479,039

City of Chestermere Offsite Levy Rates Update

6	Rainbow Rd 2 lane rural to 2 lane urban Western Headworks cannal crossing to TWP Rd 240 (includes rail crossing upgrade)	\$ 9,497,000	\$ -	\$ -	\$ 9,497,000
7	Rainbow Rd 2 lane rural bridge to 2 lane urban bridge (Western Headworks crossing)	\$ 6,819,789	\$ -	\$ -	\$ 6,819,789
9	Chestermere Blvd 2 lane rural to 4 lane rural Range Rd 284 to Rainbow Rd (potential for 2 lane urban included in scope)	\$ 5,250,000	\$ -	\$ -	\$ 5,250,000
10	Rainbow Rd 2 lane urban to 4 lane urban Merganser Drive West to Waterford Blvd	\$ 10,234,574	\$ -	\$ -	\$ 10,234,574
11	Rainbow Rd 2 lane urban to 4 lane urban Waterford Blvd to TWP Rd 240	\$ 4,101,000	\$ -	\$ -	\$ 4,101,000
12	Chestermere Blvd 2 lane urban to 4 lane urban bridge over Chestermere Lake	\$ 32,189,500	\$ -	\$ -	\$ 32,189,500
13	Rainbow Rd 2 lane rural to 2 lane urban Windermere Drive to Highway 1	\$ 11,278,000	\$ -	\$ -	\$ 11,278,000
14	Highway 1 & Rainbow Rd interchange (50% of half diamond)	\$ 8,750,000	\$ -	\$ -	\$ 8,750,000
18	Highway 1 & Highway 791 1 interchange (1/4 share)	\$ 41,308,500	\$ -	\$ -	\$ 41,308,500
22	TWP Rd 240 2 lane rural to 2 lane urban (Phase 4) Rainbow Rd to West City boundary (includes 1 cannal crossing and 1 rail crossing)	\$ 5,180,000	\$ -	\$ -	\$ 5,180,000
23	Rainbow Rd 2 lane urban to 4 lane urban Highway 1 to Windermere Drive	\$ 5,747,000	\$ -	\$ -	\$ 5,747,000
24	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to AltaLink ROW	\$ 8,670,000	\$ -	\$ -	\$ 8,670,000
25	Range Rd 284 2 lane rural to 2 lane urban TWP Rd 240 to AltaLink ROW	\$ 7,896,000	\$ -	\$ -	\$ 7,896,000
26	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Memorial Drive/Windermere Drive	\$ 8,518,000	\$ -	\$ -	\$ 8,518,000
28	Highway 1 & Range Rd 284 interchange (1/4 share)	\$ 15,967,000	\$ -	\$ -	\$ 15,967,000
29	Chestermere Blvd 2 lane rural to 4 lane rural Rainbow Rd to Highway 1 (potential for 2 lane urban included in scope)	\$ 1,716,000	\$ -	\$ -	\$ 1,716,000
31	Rainbow Rd 2 lane urban bridge to 4 lane urban bridge (Western Headworks crossing)	\$ 5,924,000	\$ -	\$ -	\$ 5,924,000
32	Rainbow Rd 2 lane urban to 4 lane urban Chestermere Blvd to Windermere Drive	\$ 4,676,000	\$ -	\$ -	\$ 4,676,000
33	Chestermere Blvd 4 lane rural to 4 lane urban Range Rd 284 to	\$ 9,604,000	\$ -	\$ -	\$ 9,604,000
34	Chestermere Blvd 4 lane rural to 4 lane urban Rainbow Rd to M	\$ 6,003,000	\$ -	\$ -	\$ 6,003,000
35	Chestermere Blvd 4 lane rural to 4 lane urban Marina Drive to V	\$ 4,978,000	\$ -	\$ -	\$ 4,978,000
36	Range Road 281, TWP Road 241A to TWP Road 240	\$ 4,801,000	\$ -	\$ -	\$ 4,801,000
37	Township Road 240, Railroad Crossing to Western Headworks	\$ 2,003,000	\$ -	\$ -	\$ 2,003,000
38	Township Road 240, Railroad Crossing to Western Headworks	\$ 1,468,000	\$ -	\$ -	\$ 1,468,000
39	Range Road 281, TWP Road 241A to TWP Road 240 Canal Cro	\$ 6,432,000	\$ -	\$ -	\$ 6,432,000
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		<b>\$ 243,134,249</b>	<b>\$ 4,635,923</b>	<b>\$ 1,811,323</b>	<b>\$ 236,687,002</b>

### D3. Transportation Infrastructure Staging

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve 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 annual rate/bylaw updates.

## Transportation Infrastructure Staging

Item	Project Description	Year of Construction
1	Rainbow Rd Twinning - Chestermere Blvd to Merganser Drive West	2006
2	Rainbow Rd 2 lane rural to 2 lane urban at Goodacre location	2012
3	Rainbow Rd Tie in and Signalization at Chestermere Blvd	2014
5	TWP Rd 240 2 lane rural to 2 lane urban (Phase 1,2,3) Rainbow Rd to East City boundary (includes 1 cannal crossing)	2024
6	Rainbow Rd 2 lane rural to 2 lane urban Western Headworks cannal crossing to TWP Rd 240 (includes rail crossing upgrade)	2031
7	Rainbow Rd 2 lane rural bridge to 2 lane urban bridge (Western Headworks crossing)	2024
9	Chestermere Blvd 2 lane rural to 4 lane rural Range Rd 284 to Rainbow Rd (potential for 2 lane urban included in scope)	2025
10	Rainbow Rd 2 lane urban to 4 lane urban Merganser Drive West to Waterford Blvd	2024
11	Rainbow Rd 2 lane urban to 4 lane urban Waterford Blvd to TWP Rd 240	2036
12	Chestermere Blvd 2 lane urban to 4 lane urban bridge over Chestermere Lake	2028
13	Rainbow Rd 2 lane rural to 2 lane urban Windermere Drive to Highway 1	2030
14	Highway 1 & Rainbow Rd interchange (50% of half diamond)	2048
18	Highway 1 & Highway 791 1 interchange (1/4 share)	2049
22	TWP Rd 240 2 lane rural to 2 lane urban (Phase 4) Rainbow Rd to West City boundary (includes 1 cannal crossing and 1 rail crossing)	2032
23	Rainbow Rd 2 lane urban to 4 lane urban Highway 1 to Windermere Drive	2036
24	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to AltaLink ROW	2026
25	Range Rd 284 2 lane rural to 2 lane urban TWP Rd 240 to AltaLink ROW	2038
26	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Memorial Drive/Windermere Drive	2042
28	Highway 1 & Range Rd 284 interchange (1/4 share)	2049
29	Chestermere Blvd 2 lane rural to 4 lane rural Rainbow Rd to Highway 1 (potential for 2 lane urban included in scope)	2029
31	Rainbow Rd 2 lane urban bridge to 4 lane urban bridge (Western Headworks crossing)	2034
32	Rainbow Rd 2 lane urban to 4 lane urban Chestermere Blvd to Windermere Drive	2026

City of Chestermere Offsite Levy Rates Update

33	Chestermere Blvd 4 lane rural to 4 lane urban Range Rd 284 to Rainbow Rd Phase 2	2028
34	Chestermere Blvd 4 lane rural to 4 lane urban Rainbow Rd to Marina Drive Phase 2	2039
35	Chestermere Blvd 4 lane rural to 4 lane urban Marina Drive to West Chestermere Dr	2030
36	Range Road 281, TWP Road 241A to TWP Road 240	2035
37	Township Road 240, Railroad Crossing to Western Headworks Canal Including Crossings, 2-lane urban	2032
38	Township Road 240, Railroad Crossing to Western Headworks Canal to Rainbow Road	2038
39	Range Road 281, TWP Road 241A to TWP Road 240 Canal Crossing Bridge	2035

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

\*\*Costs are inflated to the year of construction using an inflation rate of 4% for the next year, and 3% thereafter.

#### **D4. Transportation Offsite Infrastructure Benefiting Parties**

The transportation offsite infrastructure previously outlined will benefit various parties to varying degrees as determined by the City's staff and engineering advisors. The potential benefiting parties include:

- City of Chestermere – that portion of cost which is required to service existing residents.
- Other Stakeholders - other parties (such as neighboring municipalities) that benefit from the infrastructure.\*
- City of Chestermere Future Development (Financial Oversizing) – that portion of cost which benefits future development beyond the 25-year review period.
- City of Chestermere Future Development (in Rates) – all growth-related infrastructure (i.e., leviable transportation infrastructure costs) during the 25-year rate planning period.

The table below outlines the allocation of transportation offsite levy infrastructure costs to benefiting parties. Project allocations were determined by City staff.

\*Other Stakeholder share removed from total project cost and is not included in the offsite levy model.

Allocation of Transportation Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Cost	Muni Share %	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Rainbow Rd Twinning - Chestermere Blvd to Merganser Drive West	\$ 1,045,273		0.0%	100.0%
2	Rainbow Rd 2 lane rural to 2 lane urban at Goodacre location	\$ 581,327		0.0%	100.0%
3	Rainbow Rd Tie in and Signalization at Chestermere Blvd	\$ 570,000		0.0%	100.0%
4	Project removed and cost estimate added to Item 10	\$ -		0.0%	100.0%
5	TWP Rd 240 2 lane rural to 2 lane urban (Phase 1,2,3) Rainbow Rd to East City boundary (includes 1 cannal crossing)	\$ 5,479,039		0.0%	100.0%
6	Rainbow Rd 2 lane rural to 2 lane urban Western Headworks cannal crossing to TWP Rd 240 (includes rail crossing upgrade)	\$ 9,497,000		28.0%	72.0%
7	Rainbow Rd 2 lane rural bridge to 2 lane urban bridge (Western Headworks crossing)	\$ 6,819,789	50.0%	0.0%	50.0%
9	Chestermere Blvd 2 lane rural to 4 lane rural Range Rd 284 to Rainbow Rd (potential for 2 lane urban included in scope)	\$ 5,250,000		4.0%	96.0%
10	Rainbow Rd 2 lane urban to 4 lane urban Merganser Drive West to Waterford Blvd	\$ 10,234,574		0.0%	100.0%
11	Rainbow Rd 2 lane urban to 4 lane urban Waterford Blvd to TWP Rd 240	\$ 4,101,000		48.0%	52.0%
12	Chestermere Blvd 2 lane urban to 4 lane urban bridge over Chestermere Lake	\$ 32,189,500	75.0%	4.0%	21.0%
13	Rainbow Rd 2 lane rural to 2 lane urban Windermere Drive to Highway 1	\$ 11,278,000		24.0%	76.0%
14	Highway 1 & Rainbow Rd interchange (50% of half diamond)	\$ 8,750,000		96.0%	4.0%
18	Highway 1 & Highway 791 1 interchange (1/4 share)	\$ 41,308,500		100.0%	0.0%
22	TWP Rd 240 2 lane rural to 2 lane urban (Phase 4) Rainbow Rd to West City boundary (includes 1 cannal crossing and 1 rail crossing)	\$ 5,180,000		32.0%	68.0%
23	Rainbow Rd 2 lane urban to 4 lane urban Highway 1 to Windermere Drive	\$ 5,747,000		48.0%	52.0%
24	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to AltaLink ROW	\$ 8,670,000		8.0%	92.0%
25	Range Rd 284 2 lane rural to 2 lane urban TWP Rd 240 to AltaLink ROW	\$ 7,896,000		56.0%	44.0%
26	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Memorial Drive/Windermere Drive	\$ 8,518,000		72.0%	28.0%
28	Highway 1 & Range Rd 284 interchange (1/4 share)	\$ 15,967,000		100.0%	0.0%
29	Chestermere Blvd 2 lane rural to 4 lane rural Rainbow Rd to Highway 1 (potential for 2 lane urban included in scope)	\$ 1,716,000		20.0%	80.0%
31	Rainbow Rd 2 lane urban bridge to 4 lane urban bridge (Western Headworks crossing)	\$ 5,924,000		40.0%	60.0%
32	Rainbow Rd 2 lane urban to 4 lane urban Chestermere Blvd to Windermere Drive	\$ 4,676,000		8.0%	92.0%
33	Chestermere Blvd 4 lane rural to 4 lane urban Range Rd 284 to	\$ 9,604,000		16.0%	84.0%
34	Chestermere Blvd 4 lane rural to 4 lane urban Rainbow Rd to M	\$ 6,003,000		60.0%	40.0%
35	Chestermere Blvd 4 lane rural to 4 lane urban Marina Drive to V	\$ 4,978,000		24.0%	76.0%
36	Range Road 281, TWP Road 241A to TWP Road 240	\$ 4,801,000		44.0%	56.0%
37	Township Road 240, Railroad Crossing to Western Headworks	\$ 2,003,000		32.0%	68.0%
38	Township Road 240, Railroad Crossing to Western Headworks	\$ 1,468,000		56.0%	44.0%
39	Range Road 281, TWP Road 241A to TWP Road 240 Canal Cro	\$ 6,432,000		44.0%	56.0%
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -		0.0%	100.0%
		<b>\$ 236,687,002</b>			

\*Allocations to future development (vs municipal share etc.) were determined by City staff and their engineering/consulting advisors.

\*\*Financial oversizing is determined by separating out the pro rata portion of developer cost beyond the 25-year

## City of Chestermere Offsite Levy Rates Update

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.

### 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 **\$106.00 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. The City has collected **\$19.90 million** (\$4.93 million + \$14.98 million) in offsite levies to date, and results in an adjusted offsite levy cost of approximately **\$83.23 million**.

Offsite Levy Funds Collected to Date & Adjusted Levy Cost

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2016	Offsite Levy Funds Collected Starting Jan 1, 2017	Adjusted Developer (Levy) Cost
1	Rainbow Rd Twinning - Chestermere Blvd to Merganser Drive West	\$ 1,045,273	\$ 1,044,741	\$ 118	\$ 413
2	Rainbow Rd 2 lane rural to 2 lane urban at Goodacre location	\$ 581,327	\$ 581,327	\$ -	\$ -
3	Rainbow Rd Tie in and Signalization at Chestermere Blvd	\$ 570,000	\$ 444,000	\$ 27,895	\$ 98,105
5	TWP Rd 240 2 lane rural to 2 lane urban (Phase 1,2,3) Rainbow Rd to East City boundary (includes 1 canal crossing)	\$ 5,479,039	\$ 150,730	\$ 834,495	\$ 4,493,814
6	Rainbow Rd 2 lane rural to 2 lane urban Western Headworks canal crossing to TWP Rd 240 (includes rail crossing upgrade)	\$ 6,837,840	\$ -	\$ 667,788	\$ 6,170,052
7	Rainbow Rd 2 lane rural bridge to 2 lane urban bridge (Western Headworks crossing)	\$ 3,409,895	\$ -	\$ 499,196	\$ 2,910,699
9	Chestermere Blvd 2 lane rural to 4 lane rural Range Rd 284 to Rainbow Rd (potential for 2 lane urban included in)	\$ 5,040,000	\$ -	\$ 3,411,179	\$ 1,628,821
10	Rainbow Rd 2 lane urban to 4 lane urban Merganser Drive West to Waterford Blvd	\$ 10,234,574	\$ -	\$ 1,082,693	\$ 9,151,882
11	Rainbow Rd 2 lane urban to 4 lane urban Waterford Blvd to TWP Rd 240	\$ 2,132,520	\$ -	\$ 335,915	\$ 1,796,605
12	Chestermere Blvd 2 lane urban to 4 lane urban bridge over Chestermere Lake	\$ 6,759,795	\$ -	\$ 550,140	\$ 6,209,655
13	Rainbow Rd 2 lane rural to 2 lane urban Windermere Drive to Highway 1	\$ 8,571,280	\$ -	\$ 690,957	\$ 7,880,323
14	Highway 1 & Rainbow Rd interchange (50% of half diamond)	\$ 350,000	\$ -	\$ 155,074	\$ 194,926
18	Highway 1 & Highway 791 1 interchange (1/4 share)	\$ -	\$ -	\$ 52,929	\$ (52,929)
22	TWP Rd 240 2 lane rural to 2 lane urban (Phase 4) Rainbow Rd to West City boundary (includes 1 canal crossing and 1 rail crossing)	\$ 3,522,400	\$ -	\$ 1,000,205	\$ 2,522,195
23	Rainbow Rd 2 lane urban to 4 lane urban Highway 1 to Windermere Drive	\$ 2,988,440	\$ -	\$ -	\$ 2,988,440
24	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to AltaLink ROW	\$ 7,976,400	\$ -	\$ 582,290	\$ 7,394,110
25	Range Rd 284 2 lane rural to 2 lane urban TWP Rd 240 to AltaLink ROW	\$ 3,474,240	\$ -	\$ 539,023	\$ 2,935,217
26	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Memorial Drive/Windermere Drive	\$ 2,385,040	\$ -	\$ 468,966	\$ 1,916,074

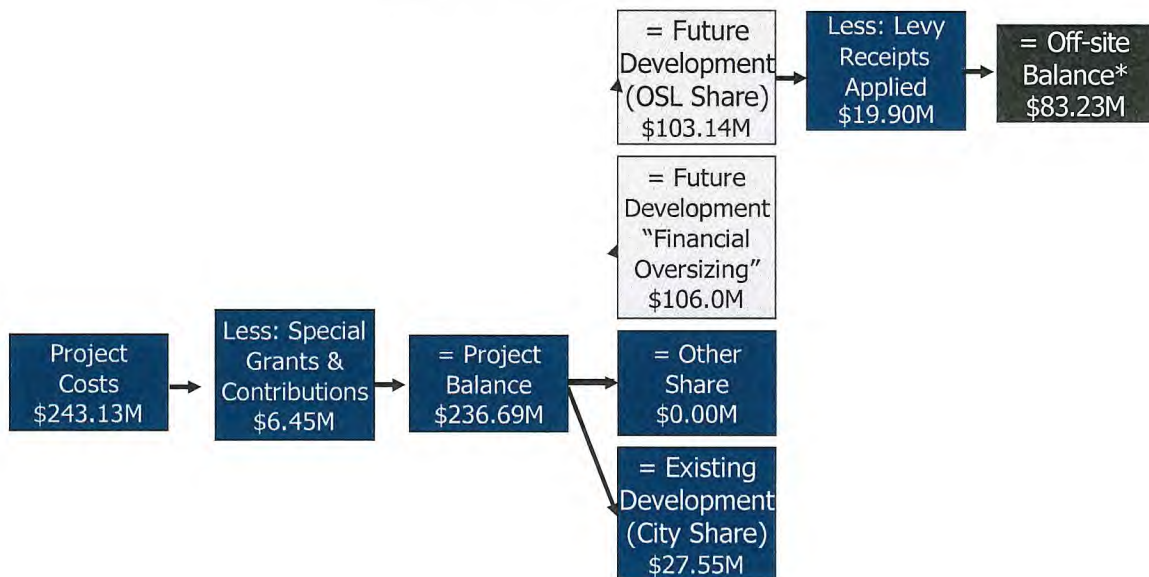
City of Chestermere Offsite Levy Rates Update

28	Highway 1 & Range Rd 284 interchange (1/4 share)	\$ -	\$ -	\$ 194,732	\$ (194,732)
29	Chestermere Blvd 2 lane rural to 4 lane rural Rainbow Rd to Highway 1 (potential for 2 lane urban included in scope)	\$ 1,372,800	\$ -	\$ 1,105,341	\$ 267,459
30	Project Removed	\$ -	\$ -	\$ 711,470	\$ (711,470)
31	Rainbow Rd 2 lane urban bridge to 4 lane urban bridge (Western Headworks crossing)	\$ 3,554,400	\$ -	\$ 195,654	\$ 3,358,746
32	Rainbow Rd 2 lane urban to 4 lane urban Chestermere Blvd to Windermere Drive	\$ 4,301,920	\$ -	\$ 1,016,851	\$ 3,285,069
33	Chestermere Blvd 4 lane rural to 4 lane urban Range Rd 284	\$ 8,067,360	\$ -	\$ -	\$ 8,067,360
34	Chestermere Blvd 4 lane rural to 4 lane urban Rainbow Rd	\$ 2,401,200	\$ -	\$ -	\$ 2,401,200
35	Chestermere Blvd 4 lane rural to 4 lane urban Marina Drive	\$ 3,783,280	\$ -	\$ -	\$ 3,783,280
36	Range Road 281, TWP Road 241A to TWP Road 240	\$ 2,688,560	\$ -	\$ -	\$ 2,688,560
37	Township Road 240, Railroad Crossing to Western Headworks	\$ 1,362,040	\$ -	\$ -	\$ 1,362,040
38	Township Road 240, Railroad Crossing to Western Headworks	\$ 645,920	\$ -	\$ -	\$ 645,920
39	Range Road 281, TWP Road 241A to TWP Road 240 Canal	\$ 3,601,920	\$ -	\$ -	\$ 3,601,920
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ 2,704,322	\$ -	\$ (2,704,322)
		\$ 103,137,463	\$ 4,925,120	\$ 14,978,441	\$ 83,233,901

**D6. 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 **\$64.37 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in Section D4. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Transportation Offsite Levy Costs



### D7. 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 benefitting area are used to determine rates.

Benefiting Areas for Transportation Offsite Infrastructure

Item	Project Description	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Rainbow Rd Twinning - Chestermere Blvd to Merganser Drive West	\$413	1																			
2	Rainbow Rd 2 lane rural to 2 lane urban at Goodacre location	\$-	1																			
3	Rainbow Rd Tie in and Signalization at Chestermere Blvd	\$98,105	1																			
5	TWP Rd 240 2 lane rural to 2 lane urban (Phase 1,2,3) Rainbow Rd to East City boundary	\$4,493,814	1																			
6	Rainbow Rd 2 lane rural to 2 lane urban Western Headworks canal crossing to TW	\$6,170,052	1																			
7	Rainbow Rd 2 lane rural bridge to 2 lane urban bridge (Western Headworks crossing)	\$2,910,699	1																			
9	Chestermere Blvd 2 lane rural to 4 lane rural Range Rd 284 to Rainbow Rd (potential)	\$1,628,821	1																			
10	Rainbow Rd 2 lane urban to 4 lane urban Merganser Drive West to Western Headwork	\$9,151,882	1																			
11	Rainbow Rd 2 lane urban to 4 lane urban Western Headworks canal to TWP Rd 24	\$1,796,605	1																			
12	Chestermere Blvd 2 lane urban to 4 lane urban bridge over Chestermere Lake	\$6,209,655	1																			
13	Rainbow Rd 2 lane rural to 2 lane urban Windermere Drive to Highway 1	\$7,880,323	1																			
14	Highway 1 & Rainbow Rd interchange (50% of half diamond)	\$194,926	1																			
18	Highway 1 & Highway 7911 interchange (1/4 share)	\$(52,929)	1																			
22	TWP Rd 240 2 lane rural to 2 lane urban (Phase 4) Rainbow Rd to West City boundary	\$2,522,195	1																			
23	Rainbow Rd 2 lane urban to 4 lane urban Highway 1 to Windermere Drive	\$2,988,440	1																			
24	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Altalink ROW	\$7,394,110	1																			
25	Range Rd 284 2 lane rural to 2 lane urban TWP Rd 240 to Altalink ROW	\$2,935,217	1																			
26	Range Rd 284 2 lane rural to 2 lane urban Chestermere Blvd to Memorial Drive/Wind	\$1,916,074	1																			
28	Highway 1 & Range Rd 284 interchange (1/4 share)	\$(194,732)	1																			
29	Chestermere Blvd 2 lane rural to 4 lane rural Rainbow Rd to Highway 1 (potential for	\$267,459	1																			
31	Rainbow Rd 2 lane urban bridge to 4 lane urban bridge (Western Headworks crossing)	\$3,358,746	1																			
32	Rainbow Rd 2 lane urban to 4 lane urban Chestermere Blvd to Windermere Drive	\$3,285,069	1																			
33	Chestermere Blvd 4 lane rural to 4 lane urban Range Rd 284 to Rainbow Rd Phase 2	\$8,067,360	1																			
34	Chestermere Blvd 4 lane rural to 4 lane urban Rainbow Rd to Marina Drive Phase 2	\$2,401,200	1																			
35	Chestermere Blvd 4 lane rural to 4 lane urban Marina Drive to West Chestermere Dr	\$3,783,280	1																			
36	Range Road 281, TWP Road 241A to TWP Road 240	\$2,688,560	1																			
37	Township Road 240, Railroad Crossing to Western Headworks Canal Including Crossings, 2-lane urban	\$1,362,040	1																			
38	Township Road 240, Railroad Crossing to Western Headworks Canal to Rainbow Road	\$645,920	1																			
39	Range Road 281, TWP Road 241A to TWP Road 240 Canal Crossing Bridge	\$3,601,920	1																			
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$(2,704,322)	1																			
		\$ 83,233,901																				

**D8. Reserve Balance**

The balance of the City's transportation reserve at December 31<sup>st</sup>, 2023 is **\$8,419,924** This updated balance takes into consideration expenditures up to end-2023 and assumes that front-ending debts will be drawn down via a withdrawal of all available cash in the account.

Transportation Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016		\$ 2,221,329.74	\$ (2,221,329.74)
Offsite Levy Receipt Allocations to December 31, 2016	\$ 2,220,798.53		\$ (531.21)
Debenture Interest Expenditure to December 31, 2016		\$ -	\$ (531.21)
Unallocated Receipts to December 31, 2016	\$ 2,704,321.55		\$ 2,703,790.34
<b>Opening Balance</b>			<b>\$ 2,703,790.34</b>
<b>2017</b>			\$ 2,703,790.34
Interest on Opening Balance	\$ 27,037.90		\$ 2,730,828.24
Project Expenditures (OSL Share) As Reflected by City		\$ 3,298,011.83	\$ (567,183.59)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ (143,227.94)	\$ (423,955.65)
Offsite Levy Receipts	\$ 84,552.03		\$ (339,403.62)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (339,403.62)
Debenture Interest Expenditure		\$ -	\$ (339,403.62)
Interest on Project Expenditure		\$ 23,660.88	\$ (363,064.50)
Interest on Offsite Levy Receipts	\$ 422.76		\$ (362,641.74)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (362,641.74)
Interest on Debenture Expenditure		\$ -	\$ (362,641.74)
<b>2018</b>			\$ (362,641.74)
Interest on Opening Balance		\$ 11,241.89	\$ (373,883.63)
Project Expenditures (OSL Share) As Reflected by City		\$ 708,001.90	\$ (1,081,885.53)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ 18,788.10	\$ (1,100,673.63)
Offsite Levy Receipts	\$ 184,398.64		\$ (916,274.99)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (916,274.99)
Debenture Interest Expenditure		\$ -	\$ (916,274.99)
Interest on Project Expenditure		\$ 5,632.62	\$ (921,907.61)
Interest on Offsite Levy Receipts	\$ 1,843.99		\$ (920,063.63)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (920,063.63)
Interest on Debenture Expenditure		\$ -	\$ (920,063.63)
<b>2019</b>			\$ (920,063.63)
Interest on Opening Balance		\$ 28,521.97	\$ (948,585.60)
Project Expenditures (OSL Share) As Reflected by City		\$ 1,678,261.16	\$ (2,626,846.76)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ 35,185.42	\$ (2,662,032.18)
Offsite Levy Receipts	\$ 333,135.66		\$ (2,328,896.52)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (2,328,896.52)
Debenture Interest Expenditure		\$ -	\$ (2,328,896.52)
Interest on Project Expenditure		\$ 13,279.21	\$ (2,342,175.73)
Interest on Offsite Levy Receipts	\$ 3,331.36		\$ (2,338,844.37)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (2,338,844.37)
Interest on Debenture Expenditure		\$ -	\$ (2,338,844.37)
<b>2020</b>			\$ (2,338,844.37)
Interest on Opening Balance		\$ 72,504.18	\$ (2,411,348.55)
Project Expenditures (OSL Share) As Reflected by City		\$ 208,769.05	\$ (2,620,117.60)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ (0.05)	\$ (2,620,117.55)
Offsite Levy Receipts	\$ 1,442,110.57		\$ (1,178,006.98)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -	\$ 96,691.73	\$ (1,274,698.71)

## City of Chestermere Offsite Levy Rates Update

Interest on Project Expenditure		\$1,617.96	\$(1,276,316.67)
Interest on Offsite Levy Receipts	\$14,421.11		\$(1,261,895.56)
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$(1,261,895.56)

<b>2021</b>			\$(1,261,895.56)
Interest on Opening Balance		\$32,809.28	\$(1,294,704.85)
Project Expenditures (OSL Share) As Reflected by City		\$341,661.79	\$(1,636,366.64)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$0.21	\$(1,636,366.85)
Offsite Levy Receipts	\$3,141,436.84		\$1,505,069.99
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$1,505,069.99
Interest on Project Expenditure		\$2,220.80	\$1,502,849.19
Interest on Offsite Levy Receipts	\$15,707.18		\$1,518,556.37
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$1,518,556.37

<b>2022</b>			\$1,518,556.37
Interest on Opening Balance	\$30,523.46		\$1,549,079.83
Project Expenditures (OSL Share) As Reflected by City		\$240,751.77	\$1,308,328.06
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$(66,088.11)	\$1,374,416.17
Offsite Levy Receipts	\$2,585,122.63		\$3,959,538.81
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$3,959,538.81
Interest on Project Expenditure		\$3,141.81	\$3,956,397.00
Interest on Offsite Levy Receipts	\$25,851.23		\$3,982,248.23
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$3,982,248.23

<b>2023</b>			\$3,982,248.23
Interest on Opening Balance	\$79,797.29		\$4,062,045.52
Project Expenditures (OSL Share) As Reflected by City		\$3,012,113.00	\$1,049,932.52
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$(127,806.00)	\$1,177,738.52
Offsite Levy Receipts	\$7,207,685.08		\$8,385,423.60
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$8,385,423.60
Interest on Project Expenditure		\$37,576.11	\$8,347,847.49
Interest on Offsite Levy Receipts	\$72,076.85		\$8,419,924.34
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$8,419,924.34

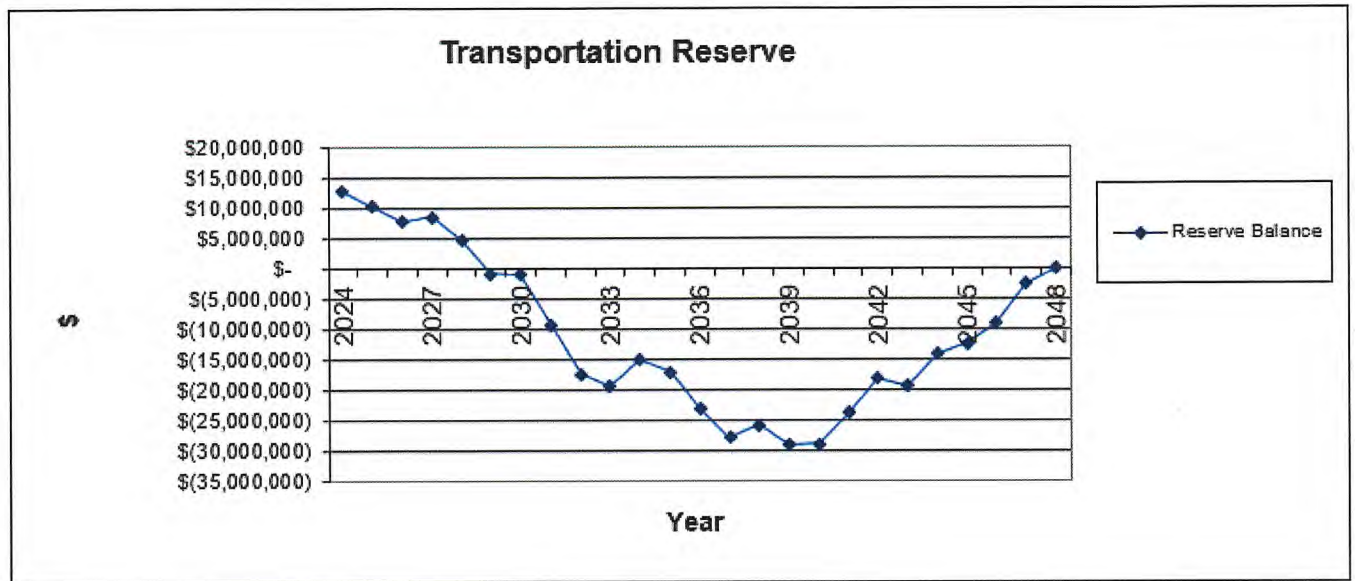
## D9. Development and Transportation Infrastructure Staging Impacts

Transportation 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 reserve funds will not be sufficient to pay for construction of transportation 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. The front-ender (be it a municipality or a developer) is reimbursed over time as levies are collected, and in accordance with the municipality's front-ending repayment policies.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **4.99%** interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **2.00%** interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph and table below outline the forecast transportation levy reserve balances over the 25-year development period.

If necessary, an interest staging adjustment has been applied to rates (slightly positive or slightly negative) to ensure that the forecast reserve 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 Transportation Offsite Levy Reserve Balances<sup>6</sup>



<sup>6</sup> In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

Anticipated Transportation Offsite Levy Reserve Balances

Year	Receipts	Expenditure	Reserve Balance	
			Interest	Balance
				\$ 8,419,924
2024	\$7,712,847	\$3,409,895	\$254,458	\$12,977,334
2025	\$9,578,145	\$12,473,894	\$201,632	\$10,283,217
2026	\$8,320,801	\$10,932,445	\$153,431	\$7,825,005
2027	\$4,826,013	\$4,257,361	\$167,873	\$8,561,530
2028	\$4,504,949	\$8,556,378	\$90,202	\$4,600,304
2029	\$6,292,042	\$11,651,285	\$(37,871)	\$(796,811)
2030	\$5,320,373	\$5,515,433	\$(49,494)	\$(1,041,366)
2031	\$3,156,715	\$10,936,275	\$(440,164)	\$(9,261,090)
2032	\$3,533,406	\$10,818,119	\$(825,636)	\$(17,371,439)
2033	\$3,604,391	\$4,805,112	\$(926,751)	\$(19,498,910)
2034	\$5,244,821	\$-	\$(711,279)	\$(14,965,368)
2035	\$3,941,239	\$5,184,086	\$(808,790)	\$(17,017,004)
2036	\$4,437,485	\$9,486,592	\$(1,101,099)	\$(23,167,210)
2037	\$4,588,360	\$7,985,431	\$(1,325,558)	\$(27,889,839)
2038	\$4,357,069	\$1,041,469	\$(1,226,254)	\$(25,800,493)
2039	\$3,904,515	\$5,792,257	\$(1,381,643)	\$(29,069,879)
2040	\$5,666,668	\$4,139,395	\$(1,374,376)	\$(28,916,982)
2041	\$6,208,283	\$-	\$(1,133,164)	\$(23,841,863)
2042	\$6,530,044	\$-	\$(863,860)	\$(18,175,679)
2043	\$4,364,810	\$4,545,335	\$(915,975)	\$(19,272,178)
2044	\$5,781,741	\$-	\$(673,173)	\$(14,163,611)
2045	\$2,383,497	\$-	\$(587,828)	\$(12,367,941)
2046	\$3,785,365	\$-	\$(428,271)	\$(9,010,846)
2047	\$6,538,272	\$-	\$(123,381)	\$(2,595,955)
2048	\$3,384,345	\$788,390	\$(0)	\$(0)

<sup>5</sup> In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

## APPENDIX E: STORMWATER OFFSITE INFRASTRUCTURE

### E1. Stormwater Offsite Infrastructure Costs

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 **\$75.29 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by City staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support future development during the 25-year review period. The remainder of this section outlines how the “net” costs for future development are determined.

Summary of Stormwater Offsite Infrastructure

Item	Project Description	Cost of Completed Work & Historical Interest	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
6	Phase 0 - Storm outfall prelim engineering	\$ 692,773	\$ -	\$ 785,000	\$ 1,477,773
7	Phase 1 - Centralized stormwater reservoir Phase 1	\$ -	\$ -	\$ 5,846,000	\$ 5,846,000
8	Phase 2 - Outlet forcemain & pump station Phase 1	\$ -	\$ -	\$ 29,150,000	\$ 29,150,000
9	Phase 3 - Centralized stormwater reservoir expansion Phase 2	\$ -	\$ -	\$ 13,328,800	\$ 13,328,800
10	NW Storm Trunk Phase A	\$ -	\$ -	\$ 687,240	\$ 687,240
11	NW Storm Trunk Phase B1	\$ 1,536,056	\$ -	\$ -	\$ 1,536,056
12	NW Storm Trunk Phase C-Waterford to Rainbow Fall UnderDrain	\$ -	\$ -	\$ 1,378,140	\$ 1,378,140
13	NW Storm Trunk Phase D - Project Deleted	\$ -	\$ -	\$ -	\$ -
14	NW Storm Trunk Phase E - Splitter MH and Pipe to Southshore	\$ -	\$ -	\$ 685,460	\$ 685,460
15	NW Storm Trunk Phase F	\$ -	\$ -	\$ -	\$ -
16	SW Storm Trunk Phase A	\$ -	\$ -	\$ 1,788,000	\$ 1,788,000
17	SE Storm Trunk Phase A	\$ -	\$ -	\$ 7,984,000	\$ 7,984,000
18	NE Storm Trunk Phase A-E	\$ -	\$ -	\$ 6,818,000	\$ 6,818,000
19	NW Stormwater Trunk Phase B2	\$ -	\$ -	\$ 1,507,200	\$ 1,507,200
20	Land for Centralized facility	\$ -	\$ -	\$ 3,100,000	\$ 3,100,000
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		\$ 2,228,829	\$ -	\$ 73,057,840	\$ 75,286,669

\*Costs estimates are reflected in current dollars.

\*\*Estimates include engineering costs and contingencies.

\*\*\*Offsite levy project details, allocations, etc. were determined by City staff and their engineering/consulting advisors.

\*\*\*\* Project numbering may be out of sequence as rows containing deleted projects are hidden.

### E2. Stormwater Offsite Infrastructure Grants & Contributions to Date

The MGA enables the City to allocate the costs of offsite infrastructure to future development, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). The City has/will receive **\$0.00** in special grants and contributions for stormwater offsite levy infrastructure as shown in the table below (note, if the City receives other 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 **\$75.29 million**.

Special Grants and Contributions for Stormwater Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
6	Phase 0 - Storm outfall prelim engineering	\$ 1,477,773	\$ -	\$ -	\$ 1,477,773
7	Phase 1 - Centralized stormwater reservoir Phase 1	\$ 5,846,000	\$ -	\$ -	\$ 5,846,000
8	Phase 2 - Outlet forcemain & pump station Phase 1	\$ 29,150,000	\$ -	\$ -	\$ 29,150,000
9	Phase 3 - Centralized stormwater reservoir expansion Phase 2	\$ 13,328,800	\$ -	\$ -	\$ 13,328,800
10	NW Storm Trunk Phase A	\$ 687,240	\$ -	\$ -	\$ 687,240
11	NW Storm Trunk Phase B1	\$ 1,536,056	\$ -	\$ -	\$ 1,536,056
12	NW Storm Trunk Phase C-Waterford to Rainbow Fall UnderDrain	\$ 1,378,140	\$ -	\$ -	\$ 1,378,140
13	NW Storm Trunk Phase D - Project Deleted	\$ -	\$ -	\$ -	\$ -
14	NW Storm Trunk Phase E - Splitter MH and Pipe to Southshore	\$ 685,460	\$ -	\$ -	\$ 685,460
15	NW Storm Trunk Phase F	\$ -	\$ -	\$ -	\$ -
16	SW Storm Trunk Phase A	\$ 1,788,000	\$ -	\$ -	\$ 1,788,000
17	SE Storm Trunk Phase A	\$ 7,984,000	\$ -	\$ -	\$ 7,984,000
18	NE Storm Trunk Phase A-E	\$ 6,818,000	\$ -	\$ -	\$ 6,818,000
19	NW Stormwater Trunk Phase B2	\$ 1,507,200	\$ -	\$ -	\$ 1,507,200
20	Land for Centralized facility	\$ 3,100,000	\$ -	\$ -	\$ 3,100,000
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ -	\$ -	\$ -
		<b>\$ 75,286,669</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 75,286,669</b>

**E3. Stormwater Infrastructure Staging**

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve 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 annual rate/bylaw updates.

Stormwater Infrastructure Staging

Item	Project Description	Year of Construction
6	Phase 0 - Storm outfall prelim engineering	2024
7	Phase 1 - Centralized stormwater reservoir Phase 1	2025
8	Phase 2 - Outlet forcemain & pump station Phase 1	2027
9	Phase 3 - Centralized stormwater reservoir expansion Phase 2	2030
10	NW Storm Trunk Phase A	2026
11	NW Storm Trunk Phase B1	2022
12	NW Storm Trunk Phase C-Waterford to Rainbow Fall UnderDrain	2025
13	NW Storm Trunk Phase D - Project Deleted	
14	NW Storm Trunk Phase E - Splitter MH and Pipe to Southshore	2025
15	NW Storm Trunk Phase F	
16	SW Storm Trunk Phase A	2040
17	SE Storm Trunk Phase A	2050
18	NE Storm Trunk Phase A-E	2028
19	NW Stormwater Trunk Phase B2	2024
20	Land for Centralized facility	2024

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

\*\*Costs are inflated to the year of construction using an inflation rate of 4% for the next year, and 3% thereafter.

#### E4. Stormwater Offsite Infrastructure Benefiting Parties

The stormwater offsite infrastructure previously outlined will benefit various parties to varying degrees as determined by City staff and engineering advisors. The potential benefiting parties include:

- City of Chestermere – that portion of cost which is required to service existing residents.
- Other Stakeholders - other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Chestermere Future Development (Financial Oversizing) – that portion of cost which benefits future development beyond the 25-year review period.
- City of Chestermere Future Development (in Rates) – all growth-related infrastructure (i.e., leviable stormwater infrastructure costs) during the 25-year rate planning period.

The table below outlines the allocation of stormwater offsite levy infrastructure costs to benefiting parties. Project allocations were determined by City staff.

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 %
6	Phase 0 - Storm outfall prelim engineering	\$ 1,477,773			0.0%	100.0%
7	Phase 1 - Centralized stormwater reservoir Phase 1	\$ 5,846,000			0.0%	100.0%
8	Phase 2 - Outlet forcemain & pump station Phase 1	\$ 29,150,000			0.0%	100.0%
9	Phase 3 - Centralized stormwater reservoir expansion Phase 2	\$ 13,328,800			24.0%	76.0%
10	NW Storm Trunk Phase A	\$ 687,240			0.0%	100.0%
11	NW Storm Trunk Phase B1	\$ 1,536,056			0.0%	100.0%
12	NW Storm Trunk Phase C-Waterford to Rainbow Fall UnderDrain	\$ 1,378,140			0.0%	100.0%
13	NW Storm Trunk Phase D - Project Deleted	\$ -			0.0%	100.0%
14	NW Storm Trunk Phase E - Splitter MH and Pipe to Southshore	\$ 685,460			0.0%	100.0%
15	NW Storm Trunk Phase F	\$ -			0.0%	100.0%
16	SW Storm Trunk Phase A	\$ 1,788,000			64.0%	36.0%
17	SE Storm Trunk Phase A	\$ 7,984,000			100.0%	0.0%
18	NE Storm Trunk Phase A-E	\$ 6,818,000			16.0%	84.0%
19	NW Stormwater Trunk Phase B2	\$ 1,507,200			0.0%	100.0%
20	Land for Centralized facility	\$ 3,100,000			0.0%	100.0%
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -				100.0%
		<b>\$ 75,286,669</b>				

\*Allocations to future development (vs municipal share etc.) were determined by City staff and their engineering/consulting advisors.

\*\*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

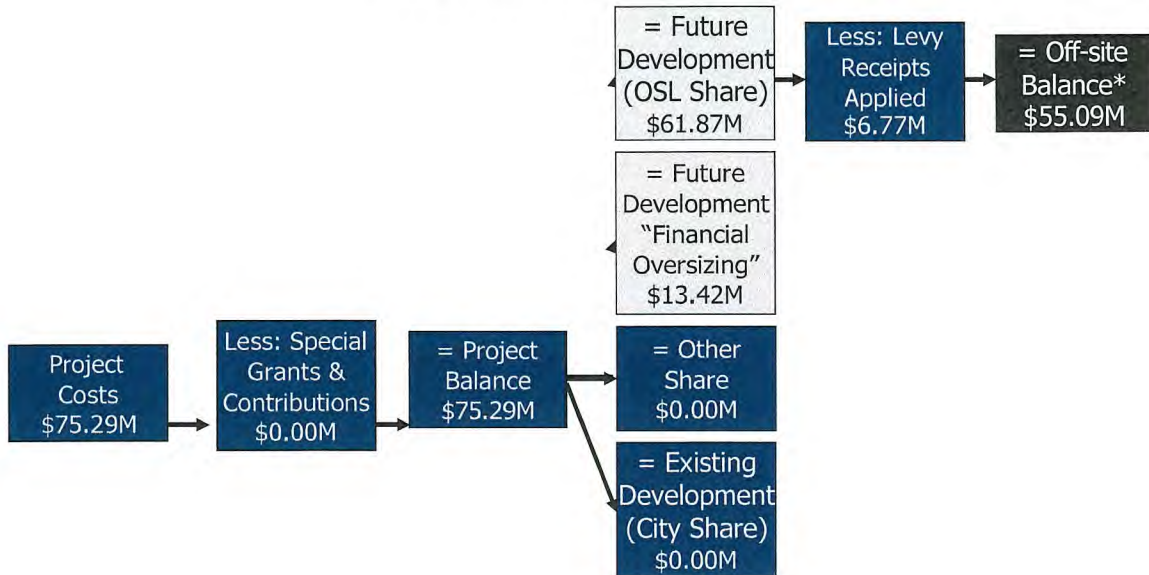
Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately **\$61.87 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. The City has collected **\$6.77 million** in offsite levies to date (0.59 million + \$6.19 million), and results in an adjusted offsite levy cost of approximately **\$55.09 million**.

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2016	Offsite Levy Funds Collected Starting Jan 1, 2017	Adjusted Developer (Levy) Cost
6	Phase 0 - Storm outfall preliim engineering	\$ 1,477,773	\$ -	\$ 203,265	\$ 1,274,508
7	Phase 1 - Centralized stormwater reservoir Phase 1	\$ 5,846,000	\$ -	\$ 848,980	\$ 4,997,020
8	Phase 2 - Outlet forcemain & pump station Phase 1	\$ 29,150,000	\$ -	\$ 2,583,361	\$ 26,566,639
9	Phase 3 - Centralized stormwater reservoir expansion Phase 2	\$ 10,129,888	\$ -	\$ 662,809	\$ 9,467,079
10	NW Storm Trunk Phase A	\$ 687,240	\$ -	\$ 236,766	\$ 450,474
11	NW Storm Trunk Phase B1	\$ 1,536,056	\$ -	\$ 356,093	\$ 1,179,963
12	NW Storm Trunk Phase C-Waterford to Rainbow Fall UnderDrain	\$ 1,378,140	\$ -	\$ 398,471	\$ 979,669
13	NW Storm Trunk Phase D - Project Deleted	\$ -	\$ -	\$ -	\$ -
14	NW Storm Trunk Phase E - Splitter MH and Pipe to Southshore	\$ 685,460	\$ -	\$ 66,445	\$ 619,015
15	NW Storm Trunk Phase F	\$ -	\$ -	\$ -	\$ -
16	SW Storm Trunk Phase A	\$ 643,680	\$ -	\$ -	\$ 643,680
17	SE Storm Trunk Phase A	\$ -	\$ -	\$ -	\$ -
18	NE Storm Trunk Phase A-E	\$ 5,727,120	\$ -	\$ 237,701	\$ 5,489,419
19	NW Stormwater Trunk Phase B2	\$ 1,507,200	\$ -	\$ 284,010	\$ 1,223,190
20	Land for Centralized facility	\$ 3,100,000	\$ -	\$ 174,898	\$ 2,925,102
100	Unallocated Offsite Levies Collected to Dec 31, 2016	\$ -	\$ 589,476	\$ -	\$ (589,476)
		\$ 61,868,557	\$ 589,476	\$ 6,185,275	\$ 55,093,806

### 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 approximately **\$55.09 million**. The cost allocations to each benefiting party are based on the benefiting percentages shown in Section E4. The offsite levy balance (due from developers) is allocated to various benefiting areas (as described in the next section).

Total Stormwater Offsite Levy Costs



**E7. Stormwater 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.

Item	Project Description	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	CSMI - Stage 1	\$(28,453)	1	1		1	1		1	1	1				1	1		1	1	1	1	1
2	CSMI - Stage 2	\$(44,195)	1	1		1	1		1	1	1				1	1		1	1	1	1	1
3	CSMI - Stage 3	\$(38,059)	1	1		1	1		1	1	1				1	1		1	1	1	1	1
4	CSMI - Stage 4	\$(19,943)	1	1		1	1		1	1	1				1	1		1	1	1	1	1
5	CSMI - Stage 5	\$(1,826)	1	1		1	1		1	1	1				1	1		1	1	1	1	1
6	Phase 0 - Storm outfall prelim engineering	\$1,274,508	1	1		1	1		1	1	1				1	1		1	1	1	1	1
7	Phase 1 - Centralized stormwater reservoir Option 2	\$4,997,020	1	1		1	1		1	1	1				1	1		1	1	1	1	1
8	Phase 2 - Outlet forcemain & pump station	\$26,566,639	1	1		1	1		1	1	1				1	1		1	1	1	1	1
9	Phase 3 - Centralized stormwater reservoir expansion	\$9,467,079	1	1		1	1		1	1	1				1	1		1	1	1	1	1
10	NW Storm Trunk Phase A	\$450,474	1	1											1	1		1	1	1	1	1
11	NW Storm Trunk Phase B	\$1,179,963	1	1											1	1		1	1		1	1
12	NW Storm Trunk Phase C	\$979,669	1	1											1			1	1		1	
13	NW Storm Trunk Phase D	\$-	1												1			1				
14	NW Storm Trunk Phase E	\$619,015	1												1			1				1
15	NW Storm Trunk Phase F	\$-	1	1																		
16	SW Storm Trunk Phase A	\$643,680					1															
17	SE Storm Trunk Phase A	\$-						1														
18	NE Storm Trunk Phase A-E	\$5,489,419								1	1	1									1	
19	NW Stormwater Trunk Phase B2	\$1,223,190	1	1											1	1		1	1		1	
20	Land for Centralized facility	\$2,925,102	1	1		1	1					1			1	1		1	1	1	1	1
100	Unallocated Offsite Levies Collected to Dec 31, 201	\$(589,476)	1	1		1	1		1	1	1				1	1		1	1	1	1	
		\$ 55,093,806																				

**E8. Reserve Balance**

The balance of the City's water reserve at December 31<sup>st</sup>, 2023 is **\$4,605,815**. This updated balance takes into consideration expenditures up to end-2023.

Stormwater Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016		\$ -	\$ -
Offsite Levy Receipt Allocations to December 31, 2016	\$ -		\$ -
Debenture Interest Expenditure to December 31, 2016		\$ -	\$ -
Unallocated Receipts to December 31, 2016	\$ 589,475.63		\$ 589,475.63
<b>Opening Balance</b>			<b>\$ 589,475.63</b>
<b>2017</b>			
Interest on Opening Balance	\$ 5,894.76		\$ 595,370.39
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 595,370.39
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 595,370.39
Offsite Levy Receipts	\$ 13,786.32		\$ 609,156.71
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 609,156.71
Debenture Interest Expenditure		\$ -	\$ 609,156.71
Interest on Project Expenditure		\$ -	\$ 609,156.71
Interest on Offsite Levy Receipts	\$ 68.93		\$ 609,225.64
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 609,225.64
Interest on Debenture Expenditure		\$ -	\$ 609,225.64
<b>2018</b>			
Interest on Opening Balance	\$ 12,184.51		\$ 621,410.15
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 621,410.15
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 621,410.15
Offsite Levy Receipts	\$ -		\$ 621,410.15
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 621,410.15
Debenture Interest Expenditure		\$ -	\$ 621,410.15
Interest on Project Expenditure		\$ -	\$ 621,410.15
Interest on Offsite Levy Receipts	\$ -		\$ 621,410.15
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 621,410.15
Interest on Debenture Expenditure		\$ -	\$ 621,410.15

City of Chestermere Offsite Levy Rates Update

<b>2019</b>			\$ 621,410.15
Interest on Opening Balance	\$ 12,428.20		\$ 633,838.35
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 633,838.35
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 633,838.35
Offsite Levy Receipts	\$ 142,624.03		\$ 776,462.38
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 776,462.38
Debenture Interest Expenditure		\$ -	\$ 776,462.38
Interest on Project Expenditure		\$ -	\$ 776,462.38
Interest on Offsite Levy Receipts	\$ 1,426.24		\$ 777,888.62
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 777,888.62
Interest on Debenture Expenditure		\$ -	\$ 777,888.62
<b>2020</b>			\$ 777,888.62
Interest on Opening Balance	\$15,557.77		\$793,446.40
Project Expenditures (OSL Share) As Reflected by City		\$161,084.14	\$632,362.26
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$(0.14)	\$632,362.40
Offsite Levy Receipts	\$280,547.84		\$912,910.24
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$912,910.24
Interest on Project Expenditure		\$1,248.40	\$911,661.84
Interest on Offsite Levy Receipts	\$2,805.48		\$914,467.31
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$914,467.31
<b>2021</b>			\$914,467.31
Interest on Opening Balance	\$9,144.67		\$923,611.99
Project Expenditures (OSL Share) As Reflected by City		\$1,179,246.73	\$(255,634.74)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$0.27	\$(255,635.01)
Offsite Levy Receipts	\$523,788.59		\$268,153.58
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$268,153.58
Interest on Project Expenditure		\$7,665.11	\$260,488.47
Interest on Offsite Levy Receipts	\$2,618.94		\$263,107.41
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$263,107.41
<b>2022</b>			\$263,107.41
Interest on Opening Balance	\$5,262.15		\$268,369.56
Project Expenditures (OSL Share) As Reflected by City		\$432,824.00	\$(164,454.44)
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$-	\$(164,454.44)
Offsite Levy Receipts	\$706,338.26		\$541,883.82
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$541,883.82
Interest on Project Expenditure		\$5,648.35	\$536,235.47
Interest on Offsite Levy Receipts	\$7,063.38		\$543,298.85
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$543,298.85
<b>2023</b>			\$543,298.85
Interest on Opening Balance	\$10,865.98		\$554,164.83
Project Expenditures (OSL Share) As Reflected by City		\$511,721.88	\$42,442.95
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$(56,047.88)	\$98,490.83
Offsite Levy Receipts	\$4,518,190.22		\$4,616,681.05
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$4,616,681.05
Interest on Project Expenditure		\$56,047.88	\$4,560,633.17
Interest on Offsite Levy Receipts	\$45,181.90		\$4,605,815.07
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$-		\$4,605,815.07

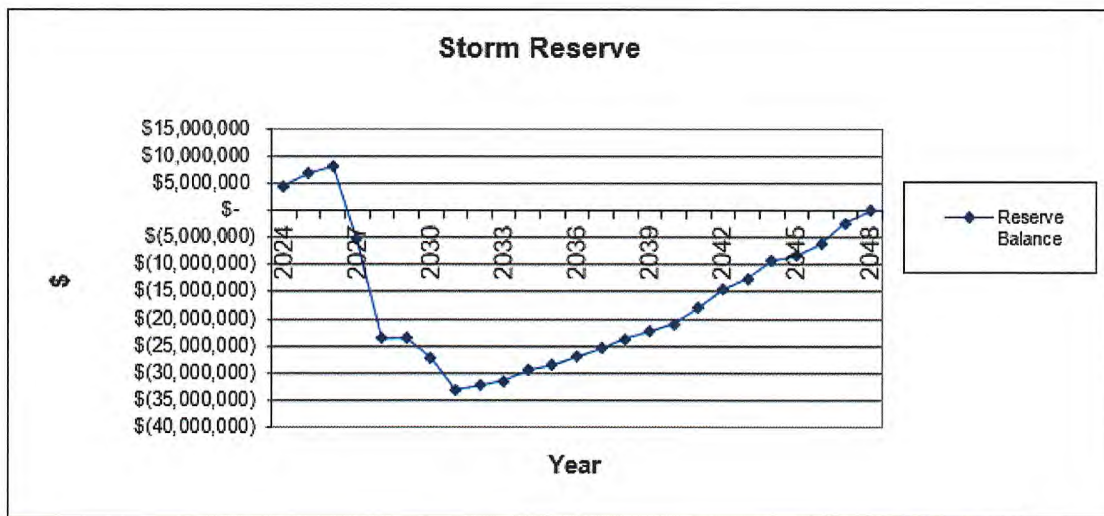
### E9. Development and Stormwater Infrastructure Staging Impacts

Stormwater 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 reserve funds will not be sufficient to pay for construction of stormwater 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. The front-ender (be it a municipality or a developer) is reimbursed over time as levies are collected, and in accordance with the municipality’s front-ending repayment policies.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **4.99%** interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **2.00%** interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph and table below outline the forecast stormwater levy reserve balances over the 25-year development period.

If necessary, an interest staging adjustment has been applied to rates (slightly positive or slightly negative) to ensure that the forecast reserve 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 Reserve Balances<sup>7</sup>



Anticipated Stormwater Offsite Levy Reserve Balances

Year	Receipts	Expenditure	Interest	Opening Balance	Balance
				\$ 4,605,815	
2024	\$ 4,414,726	\$ 4,577,773	\$ 88,855		\$ 4,531,624
2025	\$ 6,429,294	\$ 4,128,811	\$ 136,642		\$ 6,968,748
2026	\$ 5,572,215	\$ 4,640,127	\$ 158,017		\$ 8,058,853
2027	\$ 3,702,760	\$ 16,652,147	\$ (244,038)		\$ (5,134,571)
2028	\$ 2,835,700	\$ 20,126,707	\$ (1,119,036)		\$ (23,544,616)
2029	\$ 4,556,843	\$ 3,417,346	\$ (1,118,015)		\$ (23,523,134)
2030	\$ 3,966,151	\$ 6,249,969	\$ (1,287,767)		\$ (27,094,719)
2031	\$ 2,162,249	\$ 6,462,468	\$ (1,566,607)		\$ (32,961,544)
2032	\$ 2,300,756	\$ -	\$ (1,529,973)		\$ (32,190,761)
2033	\$ 2,311,272	\$ -	\$ (1,490,986)		\$ (31,370,475)
2034	\$ 3,348,122	\$ -	\$ (1,398,315)		\$ (29,420,668)
2035	\$ 2,362,480	\$ -	\$ (1,350,204)		\$ (28,408,392)
2036	\$ 2,826,382	\$ -	\$ (1,276,542)		\$ (26,858,552)
2037	\$ 2,750,398	\$ -	\$ (1,202,997)		\$ (25,311,151)
2038	\$ 2,789,670	\$ -	\$ (1,123,822)		\$ (23,645,303)
2039	\$ 2,340,438	\$ -	\$ (1,063,113)		\$ (22,367,977)
2040	\$ 3,587,030	\$ 1,109,631	\$ (992,540)		\$ (20,883,118)
2041	\$ 3,721,695	\$ -	\$ (856,355)		\$ (18,017,778)
2042	\$ 4,117,741	\$ -	\$ (693,612)		\$ (14,593,649)
2043	\$ 2,713,084	\$ -	\$ (592,840)		\$ (12,473,405)
2044	\$ 3,583,422	\$ -	\$ (443,610)		\$ (9,333,593)
2045	\$ 1,428,571	\$ -	\$ (394,461)		\$ (8,299,483)
2046	\$ 2,501,162	\$ -	\$ (289,336)		\$ (6,087,658)
2047	\$ 3,918,937	\$ -	\$ (108,219)		\$ (2,276,940)
2048	\$ 2,276,940	\$ -	\$ 0		\$ 0

<sup>6</sup> In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

## APPENDIX F: RECREATION OFFSITE INFRASTRUCTURE

### F1. Recreation Offsite Infrastructure Costs

To support future growth, recreation 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 **\$112.88 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by City staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support future development during the 25-year review period. The remainder of this section outlines how the “net” costs for future development are determined.

Summary of Recreation Offsite Infrastructure

Item	Project Description	Cost of Completed Work & Historical Interest	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Land, Phase 1	\$ -	\$ -	\$ 179,048	\$ 179,048
2	Rec Facility Phase 1	\$ -	\$ -	\$ 45,483,916	\$ 45,483,916
3	Rec Facility Phase 2, Arenas (3 sheets)	\$ -	\$ -	\$ 67,218,007	\$ 67,218,007
100	Additional Public Facility Fees	\$ -	\$ -	\$ -	\$ -
		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 112,880,971</b>	<b>\$ 112,880,971</b>

\*Costs estimates are reflected in current dollars.

\*\*Estimates include engineering costs and contingencies.

\*\*\*Offsite levy project details, allocations, etc. were determined by City staff and their engineering/consulting advisors.

\*\*\*\* Project numbering may be out of sequence as rows containing deleted projects are hidden.

### F2. Recreation Offsite Infrastructure Grants & Contributions to Date

The MGA enables the City to allocate the costs of offsite infrastructure to future development, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). The City has/will receive **\$2.64 million** in special grants and contributions for recreation offsite levy infrastructure as shown in the table below (note, if the City receives other 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 **\$110.24 million**.

Special Grants and Contributions for Recreation Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
1	Land, Phase 1	\$ 179,048	\$ -	\$ -	\$ 179,048
2	Rec Facility Phase 1	\$ 45,483,916	\$ -	\$ 2,644,885	\$ 42,839,031
3	Rec Facility Phase 2, Arenas (3 sheets)	\$ 67,218,007	\$ -	\$ -	\$ 67,218,007
100	Additional Public Facility Fees	\$ -	\$ -	\$ -	\$ -
		<b>\$ 112,880,971</b>	<b>\$ -</b>	<b>\$ 2,644,885</b>	<b>\$ 110,236,086</b>

**F3. Recreation Infrastructure Staging**

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve 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 annual rate/bylaw updates.

Recreation Infrastructure Staging

Item	Project Description	Year of Construction
1	Land, Phase 1	2027
2	Rec Facility Phase 1	2028
3	Rec Facility Phase 2, Arenas (3 sheets)	2043

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

\*\*Costs are inflated to the year of construction using an inflation rate of 4% for the next year, and 3% thereafter.

**F4. Recreation Offsite Infrastructure Benefiting Parties**

The recreation offsite infrastructure previously outlined will benefit various parties to varying degrees as determined by City staff and engineering advisors. The potential benefiting parties include:

- City of Chestermere – that portion of cost which is required to service existing residents.
- Other Stakeholders – other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Chestermere Future Development (Financial Oversizing) – that portion of cost

which benefits future development beyond the 25-year review period.

- City of Chestermere Future Development (in Rates) – all growth-related infrastructure (i.e., leviable recreation infrastructure costs) during the 25-year rate planning period.

The table below outlines the allocation of recreation offsite levy infrastructure costs to benefiting parties. Project allocations were determined by City staff.

Allocation of Recreation 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	Land, Phase 1	\$ 179,048	38.0%		7.4%	54.6%
2	Rec Facility Phase 1	\$ 42,839,031	38.0%		9.9%	52.1%
3	Rec Facility Phase 2, Arenas (3 sheets)	\$ 67,218,007	27.0%		55.5%	17.5%
100	Additional Public Facility Fees	\$ -				100.0%
		<b>\$ 110,236,086</b>				

\*Allocations to future development (vs municipal share etc.) were determined by City staff and their engineering/consulting advisors.

\*\*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.

**F5. 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 **\$34.18 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. The City has collected **\$9.49 million** (\$2.24 million + \$7.25 million) in offsite levies and park facility fees to date, and results in an adjusted offsite levy cost of approximately **\$24.69 million**.

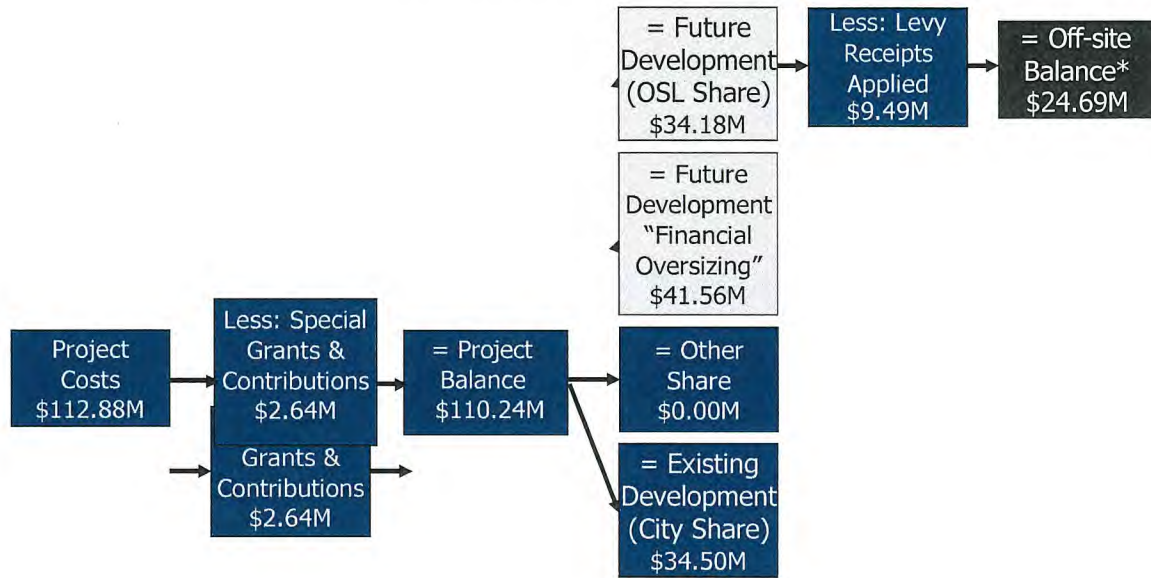
Offsite Levy Funds Collected to Date & Adjusted Levy Cost

Item	Project Description	OSL / Developer Cost	Public Facility Fees Collected to Dec 31, 2021	Offsite Levy Funds Collected Starting Jan 1, 2019	Adjusted Developer (Levy) Cost
1	Land, Phase 1	\$ 97,689	\$ -	\$ 47,906	\$ 49,783
2	Rec Facility Phase 1	\$ 22,310,567	\$ 2,244,088	\$ 4,285,149	\$ 15,781,331
3	Rec Facility Phase 2, Arenas (3 sheets)	\$ 11,776,595	\$ -	\$ 2,917,602	\$ 8,858,993
100	Additional Public Facility Fees	\$ -	\$ -	\$ -	\$ -
		<b>\$ 34,184,851</b>	<b>\$ 2,244,088</b>	<b>\$ 7,250,657</b>	<b>\$ 24,690,106</b>

### F6. Summary of Recreation Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for recreation infrastructure that forms the basis of the rate is approximately **\$24.69 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in Section F4. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Recreation Offsite Levy Costs



### F7. Recreation 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.

Benefitting Areas for Recreation Offsite Infrastructure

Item	Project Description	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Land, Phase 1	\$49,783	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Rec Facility Phase 1	\$15,781,331	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Rec Facility Phase 2, Arenas (3 sheets)	\$8,858,993	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		\$24,690,106																				

**F8. Reserve Balance**

The balance of the City’s recreation reserve at December 31<sup>st</sup>, 2023 is approximately **\$9.91**. This updated balance takes into consideration public facilities fees collected and transferred to the recreation account, and expenditures up to end-2023.

Recreation Offsite Levy Reserve Balance

<b>2019</b>			\$ -
Interest on Opening Balance	\$ -		\$ -
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ -
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ -
Offsite Levy Receipts	\$ 305,200.23		\$ 305,200.23
Public Facilities Fees Added To Rec Levy Account	\$ 2,243,289.63	\$ -	\$ 2,548,489.86
Debenture Interest Expenditure		\$ -	\$ 2,548,489.86
Interest on Project Expenditure		\$ -	\$ 2,548,489.86
Interest on Offsite Levy Receipts	\$ 3,052.00		\$ 2,551,541.86
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ 22,432.90		\$ 2,573,974.76
Interest on Debenture Expenditure		\$ -	\$ 2,573,974.76
<b>2020</b>			\$ 2,573,974.76
Interest on Opening Balance	\$ 51,479.50		\$ 2,625,454.25
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 2,625,454.25
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 2,625,454.25
Offsite Levy Receipts	\$ 644,729.83		\$ 3,270,184.08
Public Facilities Fees Added To Rec Levy Account	\$ 278,797.50		\$ 3,548,981.58
Interest on Project Expenditure		\$ -	\$ 3,548,981.58
Interest on Offsite Levy Receipts	\$ 6,447.30		\$ 3,555,428.88
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ 2,787.98		\$ 3,558,216.86
<b>2021</b>			\$ 3,558,216.86
Interest on Opening Balance	\$ 35,582.17		\$ 3,593,799.03
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 3,593,799.03
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 3,593,799.03
Offsite Levy Receipts	\$ 1,246,776.78		\$ 4,840,575.81
Public Facilities Fees Added To Rec Levy Account	\$ 122,000.00		\$ 4,962,575.81
Interest on Project Expenditure		\$ -	\$ 4,962,575.81
Interest on Offsite Levy Receipts	\$ 6,233.88		\$ 4,968,809.69
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ 610.00		\$ 4,969,419.69
<b>2022</b>			\$ 4,969,419.69
Interest on Opening Balance	\$ 99,388.39		\$ 5,068,808.08
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 5,068,808.08
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 5,068,808.08
Offsite Levy Receipts	\$ 1,474,636.67		\$ 6,543,444.76
Public Facilities Fees Added To Rec Levy Account			\$ 6,543,444.76
Interest on Project Expenditure	\$ -		\$ 6,543,444.76
Interest on Offsite Levy Receipts	\$ 14,746.37		\$ 6,558,191.12
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$ 6,558,191.12
<b>2023</b>			\$ 6,558,191.12
Interest on Opening Balance	\$ 137,982.28		\$ 6,696,173.40
Project Expenditures (OSL Share) As Reflected by City		\$ -	\$ 6,696,173.40
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City		\$ -	\$ 6,696,173.40
Offsite Levy Receipts	\$ 3,178,515.85		\$ 9,874,689.25
Public Facilities Fees Added To Rec Levy Account			\$ 9,874,689.25
Interest on Project Expenditure		\$ -	\$ 9,874,689.25
Interest on Offsite Levy Receipts	\$ 31,785.16		\$ 9,906,474.41
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)			\$ 9,906,474.41

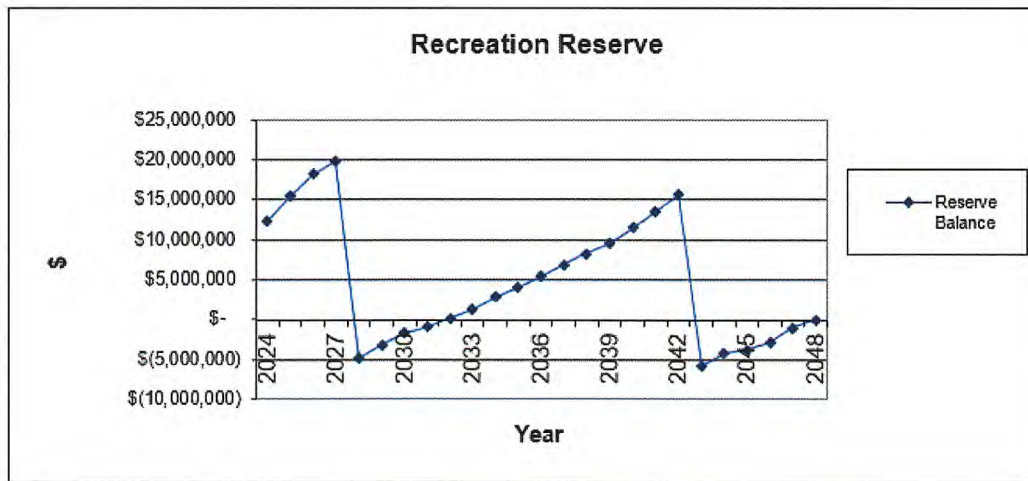
### F9. Development and Recreation Infrastructure Staging Impacts

Recreation 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 reserve funds will not be sufficient to pay for construction of recreation 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. The front-ender (be it a municipality or a developer) is reimbursed over time as levies are collected, and in accordance with the municipality’s front-ending repayment policies.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **4.99%** interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **2.00%** interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph and table below outline the forecast recreation levy reserve balances over the 25-year development period.

If necessary, an interest staging adjustment has been applied to rates (slightly positive or slightly negative) to ensure that the forecast reserve 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 Recreation Offsite Levy Reserve Balances<sup>8</sup>



Anticipated Recreation Offsite Levy Reserve Balances

Year	Receipts	Expenditure	Opening Balance		
			Interest	Balance	
				\$ 9,906,474	
2024	\$ 2,223,192	\$ -	\$ 242,593	\$ 12,372,260	
2025	\$ 2,760,856	\$ -	\$ 302,662	\$ 15,435,778	
2026	\$ 2,398,432	\$ -	\$ 356,684	\$ 18,190,894	
2027	\$ 1,391,076	\$ 109,040	\$ 389,459	\$ 19,862,389	
2028	\$ 1,298,531	\$ 25,749,733	\$ (228,982)	\$ (4,817,795)	
2029	\$ 1,813,652	\$ -	\$ (149,907)	\$ (3,154,051)	
2030	\$ 1,533,573	\$ -	\$ (80,862)	\$ (1,701,340)	
2031	\$ 909,908	\$ -	\$ (39,492)	\$ (830,924)	
2032	\$ 1,018,488	\$ -	\$ 3,751	\$ 191,315	
2033	\$ 1,038,949	\$ -	\$ 24,605	\$ 1,254,869	
2034	\$ 1,511,795	\$ -	\$ 55,333	\$ 2,821,998	
2035	\$ 1,136,044	\$ -	\$ 79,161	\$ 4,037,203	
2036	\$ 1,279,084	\$ -	\$ 106,326	\$ 5,422,613	
2037	\$ 1,322,573	\$ -	\$ 134,904	\$ 6,880,090	
2038	\$ 1,255,905	\$ -	\$ 162,720	\$ 8,298,714	
2039	\$ 1,125,458	\$ -	\$ 188,483	\$ 9,612,656	
2040	\$ 1,633,391	\$ -	\$ 224,921	\$ 11,470,968	
2041	\$ 1,789,509	\$ -	\$ 265,210	\$ 13,525,686	
2042	\$ 1,882,255	\$ -	\$ 308,159	\$ 15,716,099	
2043	\$ 1,258,136	\$ 22,443,466	\$ (272,915)	\$ (5,742,146)	
2044	\$ 1,666,560	\$ -	\$ (203,372)	\$ (4,278,958)	
2045	\$ 687,032	\$ -	\$ (179,237)	\$ (3,771,163)	
2046	\$ 1,091,114	\$ -	\$ (133,734)	\$ (2,813,783)	
2047	\$ 1,884,627	\$ -	\$ (46,365)	\$ (975,522)	
2048	\$ 975,522	\$ -	\$ 0	\$ 0	

<sup>8</sup> In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

## APPENDIX G: FIRE STATIONS OFFSITE INFRASTRUCTURE

### G1. Fire Offsite Infrastructure Costs

To support future growth, recreation 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 **\$12.5 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by City staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support future development during the 25-year review period. The remainder of this section outlines how the “net” costs for future development are determined.

Summary of Fire Offsite Infrastructure

Item	Project Description	Cost of Completed Work & Historical Interest	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Purchase Land	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000
2	Fire Hall West	\$ -	\$ -	\$ 10,500,000	\$ 10,500,000
100	Unallocated Offsite Levies	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ 12,500,000	\$ 12,500,000

\*Costs estimates are reflected in current dollars.

\*\*Estimates include engineering costs and contingencies.

\*\*\*Offsite levy project details, allocations, etc. were determined by City staff and their engineering/consulting advisors.

\*\*\*\* Project numbering may be out of sequence as rows containing deleted projects are hidden.

### G2. Fire Offsite Infrastructure Grants & Contributions to Date

The MGA enables the City to allocate the costs of offsite infrastructure to future development, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). The City has/will receive **\$0** million in special grants and contributions for fire offsite levy infrastructure as shown in the table below (note, if the City receives other 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 **\$12.50 million**.

Special Grants and Contributions for Recreation Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
1	Land	\$ 2,000,000	\$ -	\$ -	\$ 2,000,000
2	Fire Hall West	\$ 10,500,000	\$ -	\$ -	\$ 10,500,000
100	Unallocated Offsite Levies	\$ -	\$ -	\$ -	\$ -
		<b>\$ 12,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 12,500,000</b>

**G3. Fire Infrastructure Staging**

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve 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 annual rate/bylaw updates.

Fire Infrastructure Staging

Item	Project Description	Construction Start Year
1	Land	2025
2	Fire Hall West	2025
100	Unallocated Offsite Levies	-

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

\*\*Costs are inflated to the year of construction using an inflation rate of 4% for the next year, and 3% thereafter.

**G4. Fire Offsite Infrastructure Benefiting Parties**

The fire offsite infrastructure previously outlined will benefit various parties to varying degrees as determined by City staff and engineering advisors. The potential benefiting parties include:

- City of Chestermere – that portion of cost which is required to service existing residents.
- Other Stakeholders – other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Chestermere Future Development (Financial Oversizing) – that portion of cost which benefits future development beyond the 25-year review period.

- City of Chestermere Future Development (in Rates) – all growth-related infrastructure (i.e., leviable recreation infrastructure costs) during the 25-year rate planning period.

The table below outlines the allocation of fire offsite levy infrastructure costs to benefiting parties. Project allocations were determined by City staff.

Allocation of Fire 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	Purchase Land	\$ 2,000,000			4.0%	96.0%
2	Fire Hall West	\$ 10,500,000			4.0%	96.0%
100	Unallocated Offsite Levies	\$ -				100.0%
		<b>\$ 12,500,000</b>				

\*Allocations to future development (vs municipal share etc.) were determined by City staff and their engineering/consulting advisors.

\*\*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.

**G5. 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 **\$12.50 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. The City has collected **\$0.357 million** in offsite levies to date, and results in an adjusted offsite levy cost of approximately **\$11.64 million**.

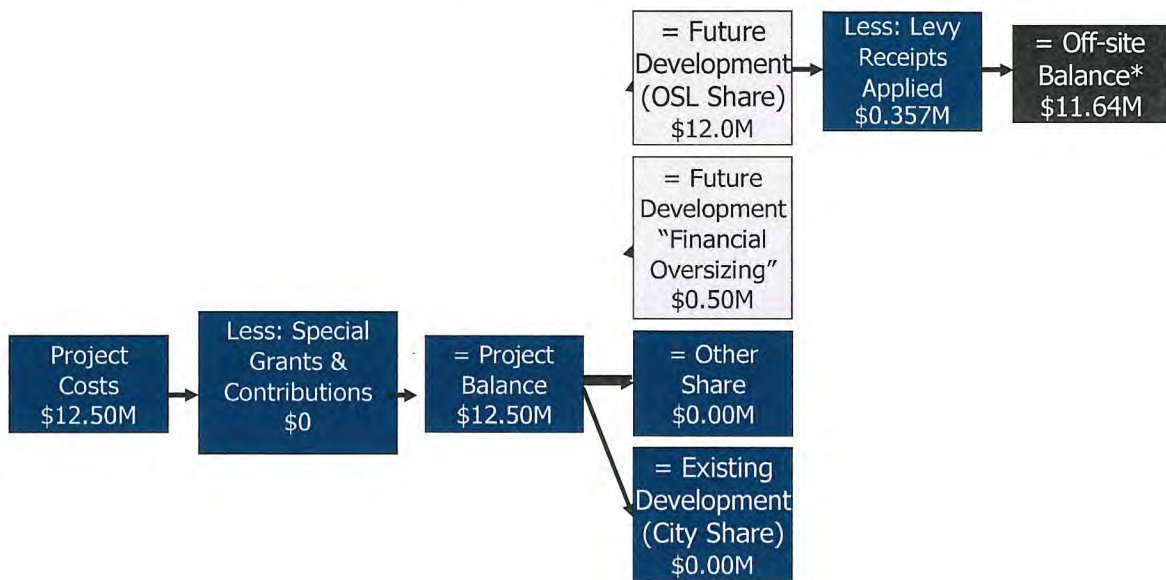
Offsite Levy Funds Collected to Date & Adjusted Levy Cost

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2016	Offsite Levy Funds Collected Starting Jan 1, 2017	Adjusted Developer (Levy) Cost
1	Purchase Land	\$ 1,920,000	\$ -	\$ 14,883	\$ 1,905,117
2	Fire Hall West	\$ 10,080,000	\$ -	\$ 342,306	\$ 9,737,694
100	Unallocated Offsite Levies	\$ -	\$ -	\$ -	\$ -
		<b>\$ 12,000,000</b>	<b>\$ -</b>	<b>\$ 357,189</b>	<b>\$ 11,642,811</b>

### G6. Summary of Fire Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for fire infrastructure that forms the basis of the rate is approximately **\$11.64 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in Section F4. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Fire Offsite Levy Costs



### G7. Fire Infrastructure Benefiting 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.

Benefiting Areas for Fire Offsite Infrastructure

Item	Project Description	Developer Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Purchase Land	\$1,905,117	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Fire Hall West	\$9,737,694	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		\$11,642,811																				

**G8. Reserve Balance**

The balance of the City’s fire reserve at December 31<sup>st</sup>, 2023 is approximately **\$360,761**. This updated balance takes into consideration public facilities fees collected and transferred to the fire account, and expenditures up to end-2023.

Fire Offsite Levy Reserve Balance

<b>2023</b>			
Interest on Opening Balance			\$-
Project Expenditures (OSL Share) As Reflected by City		\$-	\$-
Net Project Expenditures (OSL Share) In Addition to Amount Reflected By City	\$357,188.92		\$357,188.92
Offsite Levy Receipts	\$-		\$357,188.92
Public Facilities Fees Added To Rec Levy Account		\$-	\$357,188.92
Interest on Project Expenditure		\$-	\$357,188.92
Interest on Offsite Levy Receipts	\$3,571.89		\$360,760.81
Interest on Receipts Collected Under Old Agreement or Old Bylaw (if any)		\$-	\$360,760.81

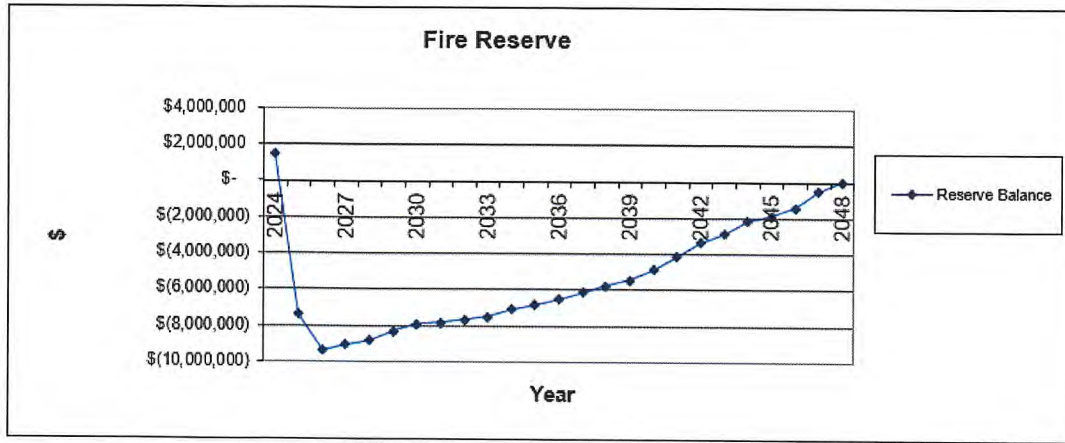
**G9. Development and Fire Infrastructure Staging Impacts**

Fire 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 reserve funds will not be sufficient to pay for construction of fire 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. The front-ender (be it a municipality or a developer) is reimbursed over time as levies are collected, and in accordance with the municipality’s front-ending repayment policies.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **4.99%** interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **2.00%** interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph and table below outline the forecast fire levy reserve balances over the 25-year development period.

If necessary, an interest staging adjustment has been applied to rates (slightly positive or slightly negative) to ensure that the forecast reserve 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 Fire Offsite Levy Reserve Balances<sup>8</sup>



Anticipated Fire Offsite Levy Reserve Balances

Year	Receipts	Expenditure	Interest	Balance
			Opening Balance	\$ 360,761
2024	\$ 1,116,901	\$ -	\$ 29,553	\$ 1,507,215
2025	\$ 1,387,016	\$ 9,897,120	\$ (349,444)	\$ (7,352,333)
2026	\$ 1,204,939	\$ 2,720,330	\$ (442,499)	\$ (9,310,223)
2027	\$ 698,857	\$ -	\$ (429,707)	\$ (9,041,073)
2028	\$ 652,364	\$ -	\$ (418,597)	\$ (8,807,306)
2029	\$ 911,154	\$ -	\$ (394,018)	\$ (8,290,171)
2030	\$ 770,446	\$ -	\$ (375,234)	\$ (7,894,959)
2031	\$ 457,125	\$ -	\$ (371,148)	\$ (7,808,982)
2032	\$ 511,674	\$ -	\$ (364,136)	\$ (7,661,443)
2033	\$ 521,954	\$ -	\$ (356,261)	\$ (7,495,750)
2034	\$ 759,505	\$ -	\$ (336,139)	\$ (7,072,384)
2035	\$ 570,733	\$ -	\$ (324,432)	\$ (6,826,083)
2036	\$ 642,594	\$ -	\$ (308,556)	\$ (6,492,045)
2037	\$ 664,443	\$ -	\$ (290,797)	\$ (6,118,400)
2038	\$ 630,949	\$ -	\$ (273,824)	\$ (5,761,275)
2039	\$ 565,415	\$ -	\$ (259,273)	\$ (5,455,133)
2040	\$ 820,593	\$ -	\$ (231,264)	\$ (4,865,804)
2041	\$ 899,024	\$ -	\$ (197,942)	\$ (4,164,722)
2042	\$ 945,619	\$ -	\$ (160,633)	\$ (3,379,736)
2043	\$ 632,070	\$ -	\$ (137,109)	\$ (2,884,775)
2044	\$ 837,257	\$ -	\$ (102,171)	\$ (2,149,689)
2045	\$ 345,155	\$ -	\$ (90,046)	\$ (1,894,580)
2046	\$ 548,161	\$ -	\$ (67,186)	\$ (1,413,606)
2047	\$ 946,810	\$ -	\$ (23,293)	\$ (490,089)
2048	\$ 490,089	\$ -	\$ -	\$ -

<sup>8</sup> In determining staging adjustments, the offsite levy model also applies inflation to future rates. In so doing it acknowledges that rates must keep pace with inflation just as costs do. Also, it acknowledges that an offsite levy rate of \$X paid today is not worth the same as the equivalent \$X rate paid in the future (i.e., it is discounted).

## APPENDIX H: RATE COMPARISON

The table below compares the City of Chestermere offsite levy rates to rates in other municipalities.

Municipality / Area	Average Per Ha.
City of Beaumont Residential (roads, water, sewer)	\$53,951 - \$77,595 (2022)
City of Beaumont Commercial/ Industrial (roads, water, sewer)	\$80,900 - \$116,390 (2019)
City of Lacombe (roads, water, sewer, storm)	\$33,572 - \$95,491 (2024)
City of Brooks (roads, water, sewer, storm)	\$81,414 (2024)
City of Spruce Grove (roads, water, sewer)	\$128,994 (2023)
City of Fort Saskatchewan (South Fort) (roads, water, sewer, storm)	\$104,140 (2019)
City of Cold Lake (roads, water, sewer, storm)	\$137,000 (2016)
City of Lloydminster (roads, water, sewer, storm)	\$169,367 (2021)
City of Medicine Hat (roads, sewer, storm, water)	\$48,813 - \$168,307(2022)
Town of Strathmore (roads, water, sewer, storm)	\$114,000 - \$168,000 (2021)
City of Leduc (roads, water, sewer, Fire)	\$151,330-\$227,679 (2023)
Town of Okotoks (roads, water, sewer)	\$272,793 (2023)
Town of Cochrane (roads, water, sewer, storm, recreation)	\$297,869 (2021)
Red Deer (roads, water, sewer, storm)	\$237,000 (2019)
Rocky view County (transportation)	36,327
Town of High River (roads, water, sewer, facilities)	\$97,400-\$256,700 (2023)
Strathcona County (New Growth Areas) (roads, water, sewer, storm)	\$251,000 (2021)
City of Lethbridge (roads, water, sewer, storm)	\$299,000 (2022)
City of Airdrie (roads, water, sewer, storm)	\$366,600 (2022)
<b>City of Chestermere (roads, water, sewer, storm, recreation, fire)</b>	\$271,656-\$416,673 (2024)
City of St. Albert (roads, water, sewer, storm)	\$324,691-\$467,744 (2023)
City of Edmonton (roads, water, sewer, storm)	\$400,000+
City of Edmonton (fire)	\$12,051 - \$34,665 (2023)
City of Calgary Green Field Area (roads, water, sewer, storm, library, emergency services, transit)	\$609,059 (2024)

Information adapted from recent online sources. Note, some municipalities have updated (or are in the process of updating) levy rates, but these rates were not available online at the time of writing.