

BYLAW 1548/21
STURGEON INDUSTRIAL PARK AREA OFF-SITE LEVY BYLAW
STURGEON COUNTY, MORINVILLE, ALBERTA

A BYLAW OF STURGEON COUNTY, IN THE PROVINCE OF ALBERTA FOR THE PURPOSE OF ESTABLISHING OFF-SITE LEVIES FOR LAND THAT IS TO BE SUBDIVIDED OR DEVELOPED WITHIN THE STURGEON INDUSTRIAL PARK AREA.

WHEREAS, section 648 of the *Municipal Government Act*, RSA 2000, c M-26, as amended (the MGA), provides that a Council of a municipality may enact a bylaw to provide for the imposition and payment of Off-Site Levies in respect to lands that are to be developed or subdivided and to authorize agreements to be entered into in respect of the payment of those levies;

AND WHEREAS, the Council of Sturgeon County deems it necessary to establish Off-Site Levies to pay for the capital costs of new and expanded roads, for new or expanded water and wastewater facilities, and for new or expanded stormwater facilities, and the land required in connection with those facilities, all of which will be required as a result of anticipated subdivision and development within the Sturgeon Industrial Park Area;

AND WHEREAS, Sturgeon County has and continues to consult in good faith with affected landowners and representatives of the development industry in order to address and define existing and future infrastructure and facility requirements within the Sturgeon Industrial Park Area and the benefit to new development from such infrastructure and facilities;

AND WHEREAS, the Council of Sturgeon County has received advice and reports respecting existing and future infrastructure and facility requirements within the Sturgeon Industrial Park Area and the benefit to new development from such infrastructure and facilities, which advice and reports set out a fair and equitable calculation of Off-Site Levies in relation to benefit, in accordance with the purpose of the MGA and the principles of the *Off-Site Levies Regulation*, Alta Reg 187/2017;

AND WHEREAS, notice of intention to pass this bylaw has been given in accordance with the MGA;

NOW THEREFORE, the Council of Sturgeon County, in the Province of Alberta, duly assembled, hereby enacts as follows:

PART I: BYLAW TITLE

1. This bylaw may be cited as the “Sturgeon Industrial Park Area Off-Site Levy Bylaw”.

PART II: DEFINITIONS

2. For the purposes of this bylaw the following words will have the following meanings:
 - a. “Act” or “MGA” means the *Municipal Government Act*, RSA 2000, c M-26, as amended.
 - b. “Benefitting Area” means each of the 29 areas within the Off-Site Levy Area that will benefit from Off-Site Infrastructure, as more specifically identified in Schedule “A” to this bylaw.

- c. "Bylaw" means this off-site levy bylaw.
- d. "County Commissioner" means the Chief Administrative Officer of Sturgeon County; "County" means Sturgeon County.
- e. "Council" means the Council of Sturgeon County.
- f. "Construction Cost" means the capital cost, incurred or as estimated and adjusted annually by the Engineer, to complete the construction of the Off-Site Infrastructure and all necessary improvements forming part of the Off-Site Infrastructure. Construction costs shall include design, engineering, land costs, surveying costs, contingency costs and carrying costs. Estimated Construction Costs and Actual Construction Costs must be verified to the satisfaction of the Engineer.
- g. "Developable Land" means the area of land, in hectares, within the Off-Site Levy Area being developed or subdivided, excluding land designated as municipal reserve, environmental reserve, school reserve, road right-of-way for arterial roadways, and any land owned by a school board that is to be developed for a special building project within the meaning of the *Education Act*, SA 2012, c E-0.3.
- h. "Development Agreement" means an agreement entered into as a condition of subdivision approval or a development permit between the County and the applicant for subdivision approval or a development permit that provides for the construction of municipal improvements required to service the lands and to allow development to proceed.
- i. "Development Permit" means a permit issued in accordance with the Sturgeon County Land Use Bylaw by a Development Authority for the County or the Subdivision and Development Appeal Board.
- j. "Engineer" means the County Commissioner or his/her delegate.
- k. "Off-Site Infrastructure" means:
 - i. new or expanded facilities for the storage, transmission, treatment or supplying of water;
 - ii. new or expanded facilities for the treatment, movement or disposal of wastewater;
 - iii. new or expanded stormwater drainage facilities,
 - iv. new or expanded roads required for or impacted by a subdivision or development; and
 - v. land required for or in connection with any of the above-described facilities.
- l. "Off-Site Levy" means the levy imposed on lands within the Off-Site Levy Area payable to the County upon entering into a Development Agreement as a contribution towards the Construction Cost of the Off-Site Infrastructure.

- m. "Off-Site Levy Area" means those lands within the Sturgeon Industrial Park Area as shown in Schedule "A" to this bylaw.
- n. "Off-Site Levy Regulation" means the *Off-Site Levies Regulation*, Alta Reg 187/2017, as amended or repealed and replaced from time to time.

PART III: APPLICATION

- 3. An Off-Site Levy is hereby imposed and shall be collected in respect of all Developable Land within the Off-Site Levy Area as shown in Schedule "A" to this bylaw, which lands respectively benefit from one or more of the Off-Site Infrastructure facilities installed or to be installed by the County.
- 4. The Off-Site Levy payable shall be the sum of all the Off-Site Levies imposed upon the Developable Land within the relevant Benefitting Area for each of the following Off-Site Infrastructure facilities:
 - a. Transportation Infrastructure;
 - b. Water Infrastructure;
 - c. Sanitary (Wastewater) Infrastructure; and
 - d. Stormwater Infrastructure;multiplied by the area of Developable Land, in hectares, using the Off-Site Levy rates set out in Schedule "B" to this bylaw.
- 5. Off-Site Levies are deemed imposed whether or not the imposition of Off-Site Levies is made a specific condition of subdivision approval or the development permit.
- 6. Applicants for subdivision approval or the issuance of a development permit in relation to lands within the Off-Site Levy Area shall be required to enter into a Development Agreement with the County as a condition of subdivision approval or the development permit requiring, among other things, payment of the Off-Site Levy.
- 7. The Developable Land in respect of which the Off-Site Levy is being imposed and collected shall be identified in the subdivision approval or development permit.
- 8. The supporting technical information which identifies the impact of proposed subdivision and development within the Off-Site Levy Area and each Benefitting Area, estimates the Construction Costs of the Off-Site Infrastructure and identifies how the Off-Site Levy is calculated is contained in the Sturgeon Industrial Park: 2021 Off-Site Levy Update, dated March 1, 2021, prepared by Corvus Business Advisors, attached as Schedule "C" to this bylaw.
- 9. On or before May 31 in each calendar year, the County shall prepare a written report, which report shall be made publicly available in its entirety, on the Off-Site Levies and shall include in the report the details of all Off-Site Levies received and utilized for each of the Off-Site Infrastructure facilities within the Off-Site Levy Area and each Benefitting Area, including:

- a. Off-Site Infrastructure constructed during the previous calendar year;
 - b. Construction Costs of the Off-Site Infrastructure;
 - c. Amounts paid from the Off-Site Levies towards Construction Costs for the Off-Site Infrastructure and details as to whom the payments have been made;
 - d. Estimated Construction Costs for the Off-Site Infrastructure yet to be constructed and an explanation as to any adjustments to the estimates since the previous annual report;
 - e. Details as to the amounts collected in Off-Site Levies;
 - f. The total value of Off-Site Levies held by the County which are yet to be expended, including the amount of interest earned and information regarding any commitments made for the expenditure of Off-Site Levies that have not yet been paid out; and
 - g. Information regarding any changes to the assumptions related to the staging or timing of development and the projected construction date for the Off-Site Infrastructure.
10. Any Off-Site Levies collected under this bylaw, and any interest earned from the investment of such Off-Site Levies, shall be accounted for separately for each of the Off-Site Infrastructure facilities and must be used only for the specific type of Off-Site Infrastructure facility for which it was collected or for land required for or in connection with that purpose.
 11. The County shall review the Off-Site Infrastructure and the Off-Site Levy rates every three years after the year this bylaw is adopted or as otherwise determined by the Engineer. After the review has been completed, Council may amend the bylaw to update the Off-Site Infrastructure and the Off-Site Levy rates.
 12. Except as otherwise provided herein, each Development Agreement entered into by the County with respect to any subdivision approval or development permit shall make provision for payment of all Off-Site Levies imposed by this bylaw within the times specified by County policy or guideline, as amended from time to time.
 13. In the event that any of the Off-Site Levies imposed by this bylaw are not paid at the time specified in a Development Agreement, the County Commissioner is or designate hereby authorized to take whatever action deemed necessary to collect the unpaid Off-Site Levies.
 14. No Off-Site Levies shall be required to be paid where Off-Site Levies have been previously collected in respect of the Developable Lands for the same type of Off-Site Infrastructure facility.
 15. Except as otherwise provided herein, a Development Agreement entered into by the County with respect to any subdivision approval or development permit may require the applicant to fund the entire Construction Cost of an Off-Site Infrastructure facility to be funded by the Off-Site Levy, subject to terms and conditions agreed to by both parties, including but not limited to, provisions for the reimbursement of the cost incurred or payment made in excess of the applicant's proportional benefit of the Off-Site Infrastructure, together with interest calculated at a rate fixed by the County for the amount of the cost of the Off-Site

Infrastructure, until all land in the Benefitting Area for the specific Off-Site Infrastructure is developed or subdivided.

1. Council may from time to time adopt policies or guidelines for the assistance and direction of County Administration in determining when an applicant for subdivision approval or a development permit may be required to fund the entire Construction Cost of an Off-Site Infrastructure facility to be funded by the Off-Site Levy.
2. Nothing contained in this bylaw precludes the County from imposing such further or other charges, costs, fees, or levies as may be lawfully authorized.

PART IV: SEVERABILITY

3. If any portion of this Bylaw is declared invalid by a court of competent jurisdiction, then the invalid portion must be severed and the remainder of the Bylaw is deemed valid.

PART V: ENACTMENT

4. Bylaw 1445/19 and any amendments are repealed upon this bylaw coming into force and effect.
5. This Bylaw shall come into force and take effect upon being passed.

Read a first time this 13th day of April, 2021.

Read a second time this 27th day of April, 2021.

Read a third time this 27th day of April, 2021.

"Original Signed"

Alanna Hnatiw
MAYOR

"Original Signed"

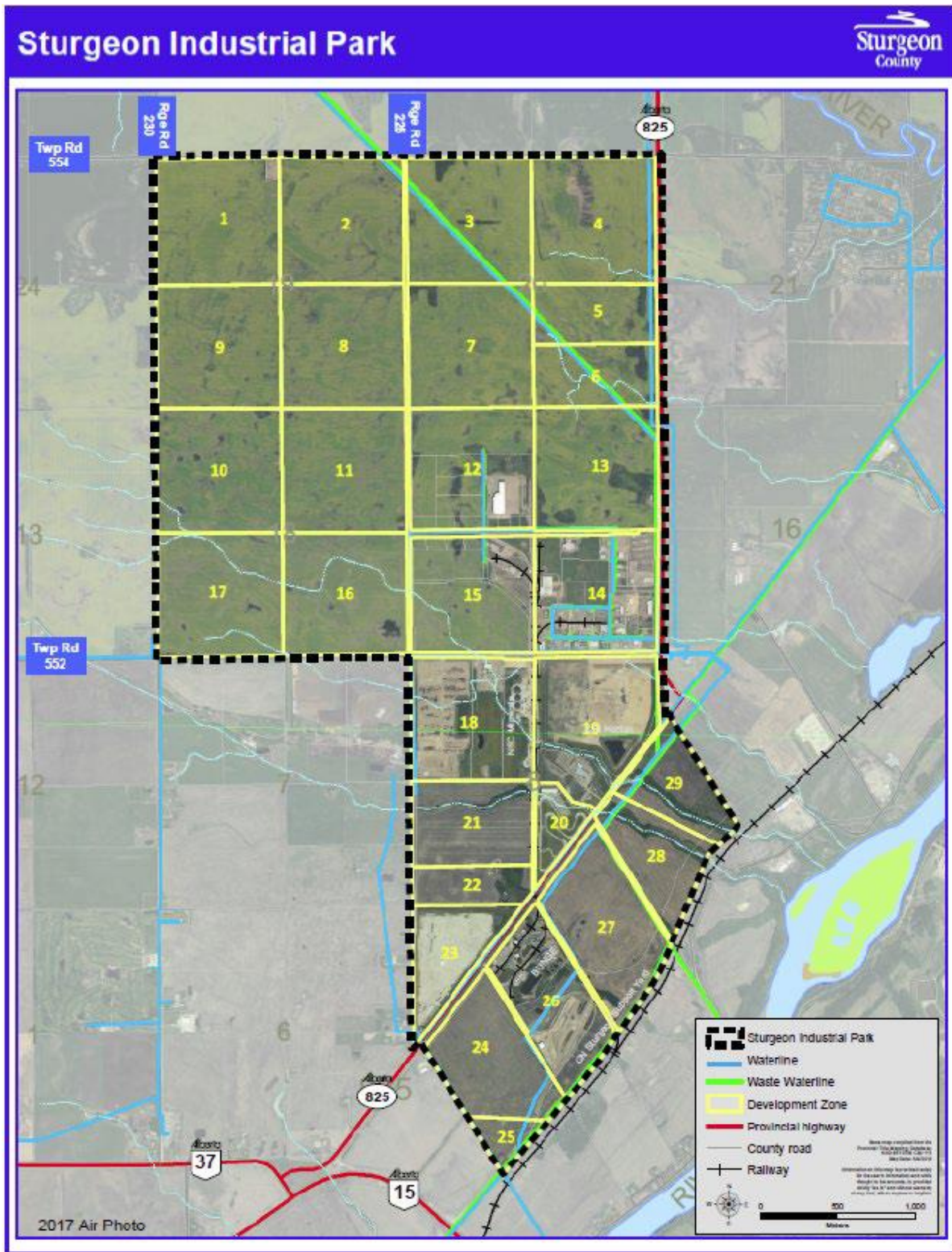
Reegan McCullough
COUNTY COMMISSIONER (CAO)

April 27, 2021

DATE SIGNED

Schedule "A"

Off-Site Levy Areas



Schedule "B"

Summary of Off-Site Levy Rates by Area (Per Net Hectare)

Area #	Transportation Levies	Water Levies	Sanitary Levies	Stormwater Levies	Total
1.0	\$ 27,337	\$ 19,421	\$ -	\$ 3,491	\$ 50,248
2.0	\$ 27,337	\$ 19,421	\$ 2,145	\$ 3,491	\$ 52,393
3.0	\$ 27,337	\$ 19,421	\$ 2,145	\$ 3,491	\$ 52,393
4.0	\$ 27,337	\$ 19,421	\$ -	\$ 3,491	\$ 50,248
5.0	\$ 27,337	\$ 19,421	\$ -	\$ 3,491	\$ 50,248
6.0	\$ 27,337	\$ 19,421	\$ -	\$ -	\$ 46,757
7.0	\$ 27,337	\$ 19,421	\$ 2,145	\$ 3,491	\$ 52,393
8.0	\$ 27,337	\$ 19,421	\$ 8,260	\$ 3,491	\$ 58,508
9.0	\$ 27,337	\$ 19,421	\$ 5,266	\$ 3,491	\$ 55,514
10.0	\$ 27,337	\$ 20,276	\$ 5,266	\$ 1,484	\$ 54,363
11.0	\$ 27,337	\$ 20,276	\$ 5,266	\$ 1,484	\$ 54,363
12.0	\$ 27,337	\$ 17,681	\$ 2,415	\$ 1,484	\$ 48,917
13.0	\$ 27,337	\$ 17,681	\$ -	\$ -	\$ 45,017
14.0	\$ 27,337	\$ 17,681	\$ -	\$ -	\$ 45,017
15.0	\$ 27,337	\$ 9,825	\$ 2,415	\$ 1,484	\$ 41,061
16.0	\$ 27,337	\$ 12,420	\$ 5,266	\$ 1,484	\$ 46,507
17.0	\$ 27,337	\$ 12,420	\$ 5,266	\$ 1,484	\$ 46,507
18.0	\$ 27,337	\$ 23,261	\$ -	\$ 1,484	\$ 52,082
19.0	\$ 27,337	\$ 23,261	\$ -	\$ -	\$ 50,597
20.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
21.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
22.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
23.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
24.0	\$ 27,337	\$ 23,261	\$ 9,365	\$ -	\$ 59,962
25.0	\$ 27,337	\$ 23,261	\$ 9,365	\$ -	\$ 59,962
26.0	\$ 27,337	\$ 23,261	\$ 9,365	\$ -	\$ 59,962
27.0	\$ 27,337	\$ 23,261	\$ 15,208	\$ -	\$ 65,805
28.0	\$ 27,337	\$ 23,261	\$ -	\$ -	\$ 50,597
29.0	\$ 27,337	\$ 23,261	\$ -	\$ -	\$ 50,597



Sturgeon Industrial Park: 2021 Offsite Levy Update

March 1st, 2021

Prepared by:

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March 1st, 2021

Sturgeon County
9613 – 100 Street
Morinville, Alberta
T8R 1L9

RE: Sturgeon Industrial Park 2021 Offsite Levy Update

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

Sincerely,

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

Greg Weiss
President

1 DOCUMENT INFORMATION

Version Number	Revision Date	Summary of Changes and Author
1.0	March 1 st , 2021	FINAL. Created by CORVUS Business Advisors.

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3 INTRODUCTION

3.1 Overview

Bylaw 1445-19, established by Sturgeon County (“the County”) in 2019 defines offsite levy charges for transportation, water, sanitary, and stormwater offsite infrastructure in the Sturgeon Industrial Park. The County wishes to update this bylaw, amending offsite infrastructure included in the bylaw in alignment with the County’s recent actual expenditures, receipts, latest capital/master plans, and ensuring updated costs and development forecasts are reflected fairly and equitably in new rates, thereby ensuring a financially sustainable community.

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

3.2 Methodology

The County has various infrastructure capital/master plans, and these plans have been used by County staff as a start point for developing key information for this offsite levy review. County staff reviewed existing plans and verified offsite projects for roads, water, sanitary, and drainage infrastructure¹. The County's review also included verification of benefits to existing development, future development, and benefiting areas.

Support provided by CORVUS Business Advisors (“CORVUS”) included:

- Update of the offsite levy model—configuration, priming, and data loading.
- Incorporation of area measurements and land development forecasts (provided by County staff).
- Incorporation of infrastructure costs and allocation percentages for existing development, new development, and other parties (provided by County staff).
- Reconciliation of reserve opening balances (historical reconciliation details provided by County staff).
- Determination of transportation, water, sanitary, and stormwater levy rates.
- Presentation of results to Administration.

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

¹ It was not within CORVUS' scope of work to review the County's capital/master plans. Plans were reviewed and refined by County staff.

update, information from January 1st, 2021 up to the new cut-off date will be converted from estimates to actuals, and the rolling 25-year review period will move further out.

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

4 KEY FINDINGS

The following provides a summary of key findings pertaining to the updating of Sturgeon Industrial Park offsite levy rates:

Offsite Infrastructure Costs. Offsite infrastructure costs to be included in the offsite levy bylaw total approximately **\$122.89 million**. An overview of offsite infrastructure costs and maps is provided in Appendices B1 (Transportation), C1 (Water), D1 (Sanitary), and E1 (Stormwater); and a definition of each offsite infrastructure type is provided in Appendix F.

Before determining how the infrastructure costs will be allocated to parties that benefit (e.g., existing/residual development, future development, other municipalities etc.), financing provided by way of special ear-marked grants and other contributions are deducted from offsite infrastructure costs. For this review, the County has identified approximately **\$8.01 million** in ear-marked grants and contributions. An overview of ear-marked grants and contributions and resulting net costs is provided in Appendices B2, C2, D2, and E2.

The share of costs which benefits existing/residual development (the County’s share) is **\$19.49 million**; and, the share of costs which benefits other stakeholders (e.g., neighbouring municipalities) is **\$0.00**.

The share of costs which benefits future development totals approximately **\$95.39 million (\$55.08 million + \$40.31 million)** and is based on the allocations shown in Appendices B4, C4, D4, and E4. However, **\$55.08 million** of the cost which benefits future development is beyond the 25-year review period (called “financial oversizing”). Financial oversizing is determined based on the anticipated year of construction (construction staging) which is provided in Appendices B3, C3, D3, and E3.

Of the **\$95.39 million** in total offsite infrastructure costs which benefits future development, the portion that is within the 25-year review period and included in rates today (the offsite levy share) is approximately **\$40.31 million**, as shown in the table below. This is an increase of approximately **9%** since the last update. An increase in costs puts upward pressure on rates, all other things being equal. A complete summary of offsite infrastructure net cost “flow-thru” is provided in Appendices B6, C6, D6, and E6.

Summary of Infrastructure Costs & Allocations

Infrastructure	Special Grants & Contributions	Muni Share of Costs	Other Stakeholders' Share of Costs	Developer Cost Beyond 25 Yrs (Financial Oversizing)	Developer Costs (In Rates)	Total Costs
Transportation	\$ 7,249,294	\$ 13,989,696	\$ -	\$ 33,276,651	\$ 22,632,132	\$ 77,147,773
Water	\$ -	\$ 5,505,053	\$ -	\$ 12,547,227	\$ 12,779,526	\$ 30,831,806
Sanitary	\$ 475,680	\$ -	\$ -	\$ 7,015,093	\$ 3,639,831	\$ 11,130,604
Stormwater	\$ 286,965	\$ -	\$ -	\$ 2,237,211	\$ 1,260,426	\$ 3,784,602
Total	\$ 8,011,939	\$ 19,494,749	\$ -	\$ 55,076,182	\$ 40,311,915	\$ 122,894,786

Offsite Levy Collections. Before allocating infrastructure costs to benefitting lands, offsite levy costs must be reduced by the total levies collected to date. Up to **December 31st, 2020**, the County collected approximately **\$7.99 million** in offsite levies as summarized in the table below. Details associated with levy collections are shown in Appendices B5, C5, D5, and E5.

Summary of Levies Collected to Date

Levies Collected To Date	
Transportation	\$ 5,569,994
Water	\$ 1,474,328
Sanitary	\$ 639,234
Stormwater	\$ 302,769
Total	\$ 7,986,325

Offsite Levy Areas and Forecast Development. To facilitate the allocation of infrastructure costs to those lands that benefit from the infrastructure, the Sturgeon Industrial Park is parsed into **29** offsite levy areas. The area boundaries, numbering schema, and area measurements are described in Appendix A along with an offsite levy map. An overview of offsite infrastructure allocations to each benefitting area is provided in Appendices B7, C7, D7, and E7.

To calculate offsite levy rates, it is necessary to forecast the amount of land that will develop during the 25-year review period. Land development forms the denominator of the rate calculation. A larger denominator reduces rates but could potentially result in under-collection thereby placing an increased burden on 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 review, the County is forecasting development of approximately **637 ha.** during the 25-year review period (the land development forecast is shown in Appendix A). This is an increase of approximately **6%** since the last update. An increase in land development puts downward pressure on rates, all other things being equal.

Offsite Levy Reserves. The County is currently managing offsite levy receipts and withdrawals in the Sturgeon Industrial Park via four accounts (i.e., one account for each infrastructure type), and this in alignment with MGA requirements. The reason the MGA stipulates the requirement for separate accounts is because offsite levies can only be used for the type of infrastructure for which they were collected (e.g., water levies can only be used to construct water offsite infrastructure, not sanitary infrastructure etc.). In addition to account updates, during this review County staff identified several amendments to historic account information. Accordingly, the County's offsite levy account balances require amendment as discussed further below and shown in Appendices B8, C8, D8, and E8.

Interest. Offsite levy account balances (both actual and forecast) are impacted by interest. Actual reserve inflows and forecast reserve balances that are in a positive/surplus position earn interest (as required by the MGA). Actual reserve outflows and forecast reserve balances that are in a negative/deficit position are charged interest (forecast balances that are negative indicate the requirement for front-ending). During this review, several amendments to interest calculations were identified. An overview of account adjustments is discussed further below, and interest rates and forecast balances over the 25-year review period are shown in Appendices B9, C9, D9, and E9.

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

There are 2 alternatives for repaying front-ending debts to claimants: (1) the First-In First-Out (FIFO) approach, and (2) the Average Outstanding Claim (AOC) approach. The FIFO approach can create: (a) stagnation of development, and (b) increased pressure on the municipality (i.e., taxpayers) to front-end. Accordingly, in 2017 the County adopted the AOC approach as part of its broader offsite levy policy framework.

Under the AOC approach, claimants share distributions based on their proportionate share of outstanding claims. For example, Developer A fronts a \$1 million piece of infrastructure in 2016. Developer B front-ends a \$0.5 million piece of infrastructure in 2017. And Developer C is contemplating front-ending a \$0.5 million piece of infrastructure in the future. Using the AOC approach, offsite levy collections are shared between Developer A (66.6% of distributions) and Developer B (33.3% of distributions) until fully repaid². If Developer C chooses to front-end in the future, then future claim reimbursements would be shared amongst Developer A (50% of distributions) and Developer B (25% of distributions) and Developer C (25% of distributions) until repaid³. This approach is preferred, as it ensures

² $\$1,000,000 / (\$1,000,000 + \$500,000) = 66.6\%$. $\$500,000 / (\$1,000,000 + \$500,000) = 33.3\%$.

³ $\$1,000,000 / (\$1,000,000 + \$500,000 + \$500,000) = 50\%$. $\$500,000 / (\$1,000,000 + \$500,000 + \$500,000) = 25\%$.

regular positive cash flow to all claimants, and therefore no disincentive to future front-ending.

In the Sturgeon Industrial Park, it is our understanding that the County is the only front-ending party currently. As such, all excess cash in reserve accounts should always be used to pay-down the County's front-ending debt (described below).

Offsite Levy Account Adjustments. At end 2020, County records for the transportation account reflected a surplus balance of **\$1,062,928**. However, after adjustments and front-ending claim repayments, the balance in the transportation account should be amended to reflect a deficit of approximately **\$(2,352,390)** at end 2020. A complete reconciliation of the transportation account balance is provided in Appendix B8.

At end 2020, County records for the water account reflected a surplus balance of **\$705,399**. However, after adjustments and front-ending claim repayments, the balance in the water account should be amended to a deficit of approximately **\$(4,986,254)** at end 2020. A complete reconciliation of the water account balance is provided in Appendix C8.

At end 2020, County records for the sanitary account reflected a surplus balance of **\$1,071,617**. However, after adjustments and front-ending claim repayments, the balance in the sanitary account should be amended to a deficit of approximately **\$(2,530,709)** at end 2020. A complete reconciliation of the sanitary account balance is provided in Appendix D8.

At end 2020, County records for the stormwater account reflected a surplus balance of **\$219,593**. However, after adjustments and front-ending claim repayments, the balance in the stormwater account should be amended to a surplus of approximately **\$232,505** at end 2020. A complete reconciliation of the stormwater account balance is provided in Appendix E8.

5 RATE UPDATES

For future development to pay for its share of the **\$122.89 million** offsite infrastructure costs contained in the County's capital plans for the Sturgeon Industrial Park, rates are approximately **\$52,462** per net hectare on a weighted average basis, as shown in the tables below. A comparison of rates to other municipalities is shown in Appendix G.

Rates are decreasing slightly from an average of approximately \$53,291 per net hectare (contained in the current bylaw) to an average of \$52,462 per net hectare.

Offsite Levy Rates (Per Net Hectare): High, Low, & Averages⁴

	Transportation Levies	Water Levies	Sanitary Levies	Storm Levies	Total
High	\$ 27,337	\$ 23,261	\$ 15,208	\$ 3,491	\$ 69,296
Low	\$ 27,337	\$ 9,825	\$ -	\$ -	\$ 37,162
Weighted Average	\$ 27,337	\$ 18,633	\$ 5,232	\$ 1,262	\$ 52,462

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

Area #	Transportation Levies	Water Levies	Sanitary Levies	Stormwater Levies	Total
1.0	\$ 27,337	\$ 19,421	\$ -	\$ 3,491	\$ 50,248
2.0	\$ 27,337	\$ 19,421	\$ 2,145	\$ 3,491	\$ 52,393
3.0	\$ 27,337	\$ 19,421	\$ 2,145	\$ 3,491	\$ 52,393
4.0	\$ 27,337	\$ 19,421	\$ -	\$ 3,491	\$ 50,248
5.0	\$ 27,337	\$ 19,421	\$ -	\$ 3,491	\$ 50,248
6.0	\$ 27,337	\$ 19,421	\$ -	\$ -	\$ 46,757
7.0	\$ 27,337	\$ 19,421	\$ 2,145	\$ 3,491	\$ 52,393
8.0	\$ 27,337	\$ 19,421	\$ 8,260	\$ 3,491	\$ 58,508
9.0	\$ 27,337	\$ 19,421	\$ 5,266	\$ 3,491	\$ 55,514
10.0	\$ 27,337	\$ 20,276	\$ 5,266	\$ 1,484	\$ 54,363
11.0	\$ 27,337	\$ 20,276	\$ 5,266	\$ 1,484	\$ 54,363
12.0	\$ 27,337	\$ 17,681	\$ 2,415	\$ 1,484	\$ 48,917
13.0	\$ 27,337	\$ 17,681	\$ -	\$ -	\$ 45,017
14.0	\$ 27,337	\$ 17,681	\$ -	\$ -	\$ 45,017
15.0	\$ 27,337	\$ 9,825	\$ 2,415	\$ 1,484	\$ 41,061
16.0	\$ 27,337	\$ 12,420	\$ 5,266	\$ 1,484	\$ 46,507
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19.0	\$ 27,337	\$ 23,261	\$ -	\$ -	\$ 50,597
20.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
21.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
22.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
23.0	\$ 27,337	\$ 23,261	\$ 10,438	\$ -	\$ 61,035
24.0	\$ 27,337	\$ 23,261	\$ 9,365	\$ -	\$ 59,962
25.0	\$ 27,337	\$ 23,261	\$ 9,365	\$ -	\$ 59,962
26.0	\$ 27,337	\$ 23,261	\$ 9,365	\$ -	\$ 59,962
27.0	\$ 27,337	\$ 23,261	\$ 15,208	\$ -	\$ 65,805
28.0	\$ 27,337	\$ 23,261	\$ -	\$ -	\$ 50,597
29.0	\$ 27,337	\$ 23,261	\$ -	\$ -	\$ 50,597

⁴ Highs, Lows, and Averages are shown for information purposes only. Developers pay the actual rate applicable to their specific development area.

6 RECOMMENDATIONS

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

1. Amend the County account records and balances to align with the account balances in the offsite levy model and described in Appendices B8, C8, D8, and E8; and in so doing, withdraw excess funds to pay down front-ending claims, or top-up account shortfalls as required.
2. Establish a formal and regular communication and documentation process between the Finance, Planning, and Engineering departments to enable the accurate documentation of offsite levy expenditure and front-ending details.
3. Limit future withdrawals from offsite levy accounts to only that portion of project cost for which future development is responsible (i.e., Project Cost X Developer Share %).
4. During the reconciliation of account balances in the future, ensure the interest earning and charge rates that underpin the offsite levy bylaw for that time period are used to determine reserve interest impacts.
5. Changes to the MGA in 2017 enable municipalities to charge offsite levies for recreation, fire, police, library, and interchange facilities. County Administration and Council should consider whether it wishes to adopt such levies in the future and, if so, begin developing the necessary supporting documentation that will be needed to support such levies. Support documentation requirements for these new levies are more stringent (see *MGA Section 648* and *Regulation AR 187/2017*).

7 ACKNOWLEDGEMENTS

CORVUS Business Advisors would like to thank all Sturgeon County staff from Engineering, Planning, and Finance who supported the work of this review.

8 DISCLAIMER

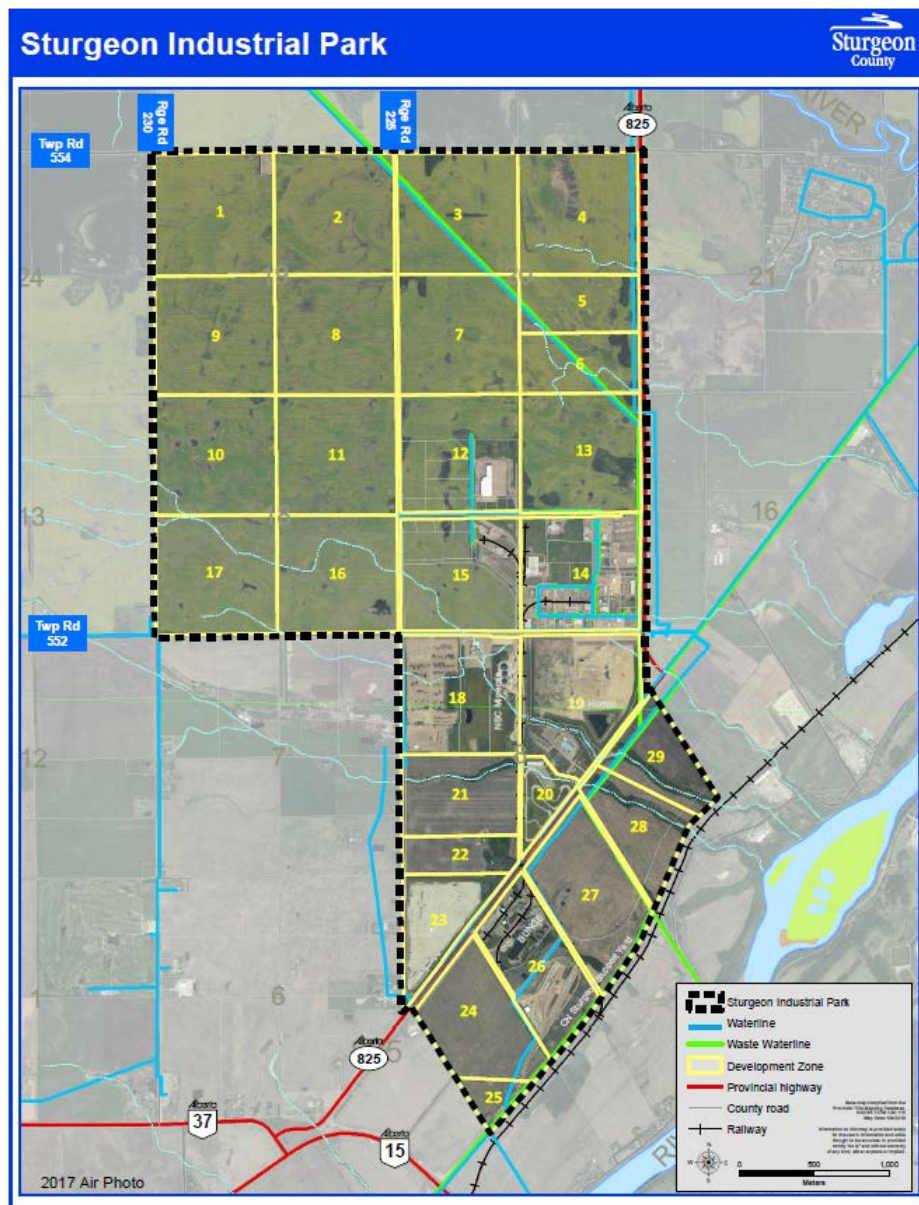
CORVUS Business Advisor has relied upon Sturgeon County and its advisors to provide all of the data and information used to construct the offsite levy model and create the rates, such as planning data and assumptions, development forecasts and assumptions, infrastructure costs and costs estimates, allocations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

Offsite levy rates are not intended to stay static; they are based upon 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 (usually annually). When information changes, it will be reflected in a future update, and rates adjusted accordingly.

APPENDIX A: OFFSITE LEVY AREAS AND LAND STAGING

The Sturgeon Industrial Park is parsed into **29** offsite levy areas, as shown in the map below. Areas take into consideration the intersection points of existing/planned infrastructure basins (e.g., water and sanitary basins), and also various natural and man-made barriers (e.g., rivers, highways, etc.). All offsite levy infrastructure costs are allocated to one or more areas.

Offsite Levy Areas



Total net development area, the amount of land available for development in all offsite levy areas, is approximately **1126 ha**. In calculating net development area, allowances have been made for environmental reserves, municipal reserves, and arterial road right of way.

Offsite Levy Net Development Area⁵

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.)
1.0	NW-19-55-22-4	Industrial	64.70	1.60	63.10	6.31	2.98	53.81
2.0	NE-19-55-22-4	Industrial	64.70	0.81	63.89	6.39	2.78	54.72
3.0	NW-20-55-22-4	Industrial	64.70	3.87	60.83	6.08	2.41	52.34
4.0	NE-20-55-22-4	Industrial	64.70	0.73	63.97	6.40	2.40	55.17
5.0	SE-20-55-22-4 (North Half)	Industrial	32.35	2.38	29.97	3.00	0.41	26.56
6.0	SE-20-55-22-4 (South Half)	Industrial	32.35	7.20	25.15	2.52	0.41	22.23
7.0	SW-20-55-22-4	Industrial	64.70	4.61	60.09	6.01	0.81	53.27
8.0	SE-19-55-22-4	Industrial	64.70	1.46	63.24	6.32	1.20	55.72
9.0	SW-19-55-22-4	Industrial	64.70	3.07	61.63	6.16	1.61	53.86
10.0	NW-18-55-22-4	Industrial	64.70	3.19	61.51	6.15	1.61	53.75
11.0	NE-18-55-22-4	Industrial	64.70	2.21	62.49	6.25	1.18	55.06
12.0	NW-17-55-22-4	Industrial	43.40	8.50	34.90	3.49	0.78	30.63
13.0	NE-17-55-22-4	Industrial	64.10	4.01	60.09	6.01	1.03	53.05
14.0	SE-17-55-22-4	Industrial	12.90	-	12.90	1.29	-	11.61
15.0	SW-17-55-22-4	Industrial	54.05	-	54.05	5.41	1.49	47.16
16.0	SE-18-55-22-4	Industrial	64.70	-	64.70	6.47	2.76	55.47
17.0	SW-18-55-22-4	Industrial	64.70	-	64.70	6.47	3.16	55.07
18.0	NW-8-55-22-4	Industrial	47.34	-	47.34	1.93	-	45.41
19.0	NE-8-55-22-4	Industrial	48.48	-	48.48	4.85	-	43.63
20.0	SE-8-55-22-4	Industrial	-	-	-	-	-	-
21.0	SW-8-55-22-4 (North Portion)	Industrial	44.50	2.83	41.67	4.17	0.52	36.98
22.0	SW-8-55-22-4 (South Portion)	Industrial	19.70	-	19.70	1.97	0.25	17.48
23.0	NW-5-55-22-4	Industrial	29.87	-	29.87	2.99	-	26.88
24.0	RL22-55-22-4 (North Portion)	Industrial	49.00	1.08	47.92	4.79	-	43.13
25.0	RL22-55-22-4 (South Portion)	Industrial	8.30	0.12	8.18	0.82	-	7.36
26.0	RL16&18-55-22-4	Industrial	28.70	1.47	27.23	2.72	-	24.51
27.0	RL14-55-22-4	Industrial	54.80	2.91	51.89	5.19	-	46.70
28.0	RL12-55-22-4 (West Portion)	Industrial	33.80	6.32	27.48	2.75	0.19	24.54
29.0	RL12-55-22-4 (East Portion)	Industrial	29.90	7.45	22.45	2.25	0.61	19.60
Total			1,345.23	65.82	1,279.42	125.14	28.59	1,125.69

Summary of Offsite Levy Net Development Area

Description	ha.
Gross Development Area	1,345.23
Less Environment Reserve	65.82
Less Municipal Reserve	125.14
Less ROW Allowance	28.59
Net Development Area	1,125.69

*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 Sturgeon County. 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 Including environmental reserves and environmental easements.

⁵ Area measurements were provided by County staff.

- Less: A 10% allowance for Municipal Reserves.
- Less: The measurement of arterial road right of way that bisects the development lands.
- Equals: Net Developable Area, which is the area subject to offsite levies.

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

Of the **1126 ha.** of net land available across all offsite levy areas, approximately **156 ha. (14%)** have been developed to date, and planners estimate that approximately **637 ha. (57%)** 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	156.39	13.9%
Developed In Next 25 Years	637.33	56.6%
Developed Beyond 25 Years	331.98	29.5%
Net Development Area	1,125.70	

Anticipated Development during the 25 Year Rate Planning Period

Area Ref. #	Area Developed in Next 25 years (Net ha.)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.0	26,560	-	-	-	-	-	-	-	-	-	6.64	6.64	6.64	6.64	-	-	-	-	-	-	-	-	-	-	-	-
6.0	22,213	-	-	-	-	-	5.54	5.56	5.56	5.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.0	53,265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.32	13.32	13.32	13.32	-	-	-	-	-
8.0	55,060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.77	13.77	13.77	13.77	-
9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.0	55,060	-	-	-	-	-	-	-	-	-	-	13.77	13.77	13.77	13.77	-	-	-	-	-	-	-	-	-	-	-
12.0	18,160	-	-	6.05	6.05	6.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.0	53,040	-	-	13.26	13.26	13.26	13.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.0	6,940	-	-	-	-	-	3.47	3.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.0	40,800	-	-	13.60	13.60	13.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.0	55,460	-	-	-	-	-	-	-	-	-	-	13.87	13.87	13.87	13.87	-	-	-	-	-	-	-	-	-	-	-
17.0	55,040	-	-	-	-	-	-	-	-	-	-	-	-	-	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	-	-	-
18.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.0	36,960	-	-	-	-	-	9.24	9.24	9.24	9.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.0	17,480	-	-	-	-	-	4.37	4.37	4.37	4.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.0	43,110	-	-	-	-	14.37	14.37	14.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.0	7,350	-	-	-	-	-	2.45	2.45	2.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.0	46,700	-	-	-	-	11.68	11.68	11.68	11.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.0	24,540	-	-	-	-	-	-	-	6.14	6.14	6.14	6.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.0	19,590	-	-	-	-	-	-	-	-	-	-	-	-	4.90	4.90	4.90	4.89	-	-	-	-	-	-	-	-	-
	637.33	-	-	32.91	32.91	58.97	61.93	51.14	33.28	27.75	12.78	40.41	40.41	39.17	39.41	11.78	11.77	20.20	20.20	20.20	20.20	20.65	13.77	13.77	13.77	-

APPENDIX B: TRANSPORTATION

B1. Transportation Offsite Infrastructure

To support future growth, transportation offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) future debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$77.15 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Transportation Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Cost
1	Twp 552/Hwy 825 (Grading and Paving)	\$ 1,269,489	\$ 49,658	\$ -	\$ 1,319,147
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$ 1,364,260	\$ 18,311	\$ -	\$ 1,382,570
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$ 2,475,432	\$ 34,507	\$ -	\$ 2,509,939
4	Twp 552/RR 225 (Grading and Paving)	\$ -	\$ -	\$ 477,421	\$ 477,421
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$ 1,827,051	\$ -	\$ 246,192	\$ 2,073,243
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$ -	\$ -	\$ 3,807,648	\$ 3,807,648
7	Hwy 825/RR 225 (Grading and Paving)	\$ 2,376,447	\$ -	\$ 1,154,469	\$ 3,530,915
8	Hwy 825/RR 224A (Grading and Paving)	\$ 278,114	\$ -	\$ 7,515,044	\$ 7,793,158
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	\$ -	\$ -	\$ 146,250	\$ 146,250
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	\$ -	\$ -	\$ 234,000	\$ 234,000
11	Boysdale Road/Twp 552 (Grading and Paving)	\$ -	\$ -	\$ 469,962	\$ 469,962
12	Twp 552 from RR 225 to RR 230 (Grading)	\$ -	\$ -	\$ 1,606,050	\$ 1,606,050
13	Twp 552 from RR 225 to RR 230 (Paving)	\$ -	\$ -	\$ 1,903,824	\$ 1,903,824
14	Twp 552/RR 230 (Grading and Paving)	\$ -	\$ -	\$ 477,421	\$ 477,421
15	RR 225 from Estates Way - Twp 554 (Grading)	\$ -	\$ -	\$ 1,847,259	\$ 1,847,259
16	RR 225 from Estates Way - Twp 554 (Paving)	\$ -	\$ -	\$ 2,855,736	\$ 2,855,736
17	Hwy 825/Twp 553 (Grading and Paving)	\$ -	\$ -	\$ 3,718,674	\$ 3,718,674
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$ -	\$ -	\$ 1,606,050	\$ 1,606,050
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$ -	\$ -	\$ 1,903,824	\$ 1,903,824
20	Hwy 825/Twp 554 (Grading and Paving)	\$ -	\$ -	\$ 3,780,830	\$ 3,780,830
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$ -	\$ -	\$ 1,606,050	\$ 1,606,050
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$ -	\$ -	\$ 1,903,824	\$ 1,903,824
23	Twp 554/RR 225 (Grading and Paving)	\$ -	\$ -	\$ 477,421	\$ 477,421
24	Twp 554 from RR 230 - RR 225 (Grading)	\$ -	\$ -	\$ 1,606,050	\$ 1,606,050
25	Twp 554 from RR 230 - RR 225 (Paving)	\$ -	\$ -	\$ 1,903,824	\$ 1,903,824
26	RR 230/Twp 554 (Grading and Paving)	\$ -	\$ -	\$ 477,421	\$ 477,421
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$ -	\$ -	\$ 4,818,150	\$ 4,818,150
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$ -	\$ -	\$ 5,711,472	\$ 5,711,472
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$ -	\$ -	\$ 4,818,150	\$ 4,818,150
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$ -	\$ -	\$ 5,711,472	\$ 5,711,472
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$ -	\$ -	\$ 1,606,050	\$ 1,606,050
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$ -	\$ -	\$ 1,903,824	\$ 1,903,824
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$ -	\$ -	\$ 1,160,143	\$ 1,160,143
100	Transfer From Arterial Road Fee Account	\$ -	\$ -	\$ -	\$ -
		\$ 9,590,792	\$ 102,476	\$ 67,454,504	\$ 77,147,773

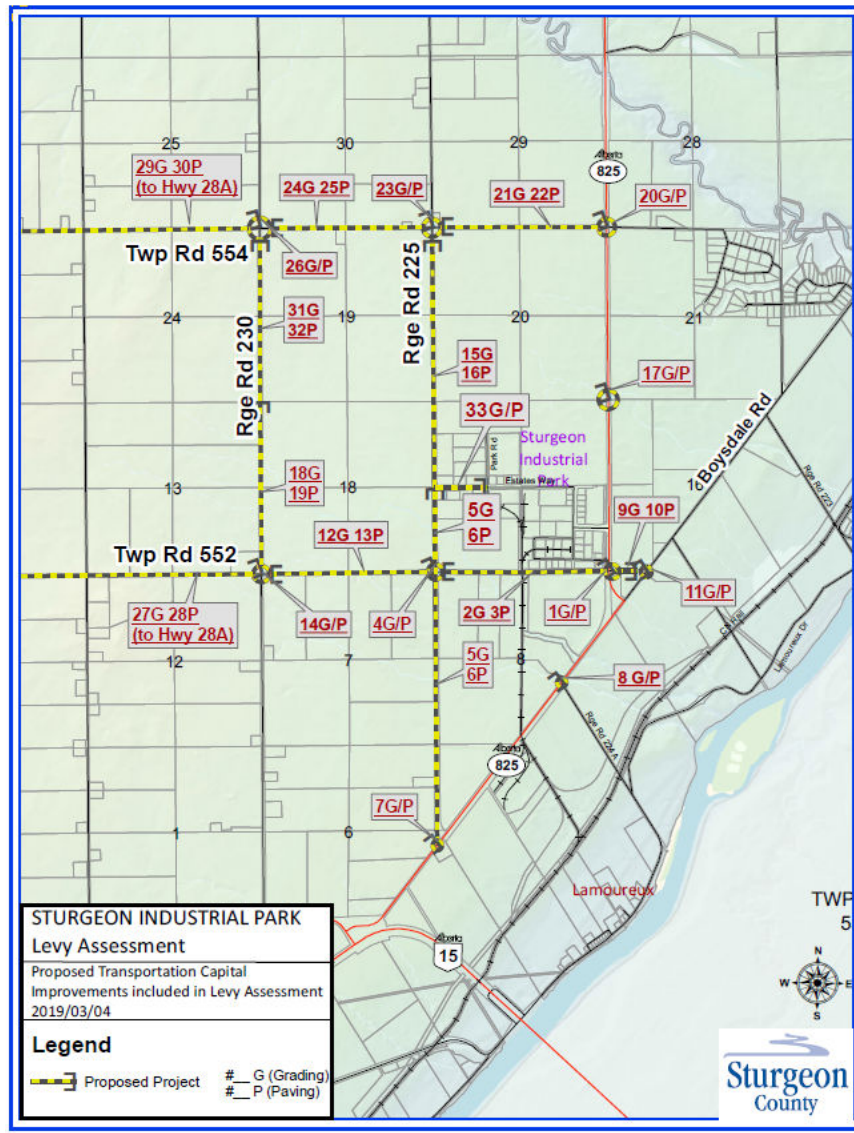
*Past expenditures include past financing expenditures (interest) if any.

**Costs estimates provided by County staff.

***Estimates include engineering and contingencies.

****Transfers or contributions stemming from Development Agreements were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas (see Section B5).

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



B2. Transportation Offsite Infrastructure Grants & Contributions to Date

The MGA enables the County to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). Sturgeon County has/will receive **\$7.25 million** in special ear-marked grants or contributions for transportation offsite levy infrastructure as shown in the table below (note, if the County receives other ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$69.90 million**.

Special Grants and Contributions for Transportation Offsite Infrastructure

Item	Project Description	Total Project Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Other Contributions (Historic & Future)	Reduced Project Cost
1	Twp 552/Hwy 825 (Grading and Paving)	\$ 1,319,147	\$ 100,000	\$ -	\$ -	\$ 1,219,147
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$ 1,382,570	\$ -	\$ -	\$ -	\$ 1,382,570
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$ 2,509,939	\$ -	\$ -	\$ -	\$ 2,509,939
4	Twp 552/RR 225 (Grading and Paving)	\$ 477,421	\$ -	\$ -	\$ -	\$ 477,421
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$ 2,073,243	\$ -	\$ -	\$ -	\$ 2,073,243
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$ 3,807,648	\$ -	\$ -	\$ -	\$ 3,807,648
7	Hwy 825/RR 225 (Grading and Paving)	\$ 3,530,915	\$ 865,852	\$ -	\$ -	\$ 2,665,064
8	Hwy 825/RR 224A (Grading and Paving)	\$ 7,793,158	\$ 5,636,283	\$ -	\$ -	\$ 2,156,875
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	\$ 146,250	\$ 109,688	\$ -	\$ -	\$ 36,563
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	\$ 234,000	\$ 135,000	\$ -	\$ -	\$ 99,000
11	Boysdale Road/Twp 552 (Grading and Paving)	\$ 469,962	\$ 352,472	\$ -	\$ -	\$ 117,491
12	Twp 552 from RR 225 to RR 230 (Grading)	\$ 1,606,050	\$ -	\$ -	\$ -	\$ 1,606,050
13	Twp 552 from RR 225 to RR 230 (Paving)	\$ 1,903,824	\$ -	\$ -	\$ -	\$ 1,903,824
14	Twp 552/RR 230 (Grading and Paving)	\$ 477,421	\$ -	\$ -	\$ -	\$ 477,421
15	RR 225 from Estates Way - Twp 554 (Grading)	\$ 1,847,259	\$ -	\$ -	\$ -	\$ 1,847,259
16	RR 225 from Estates Way - Twp 554 (Paving)	\$ 2,855,736	\$ -	\$ -	\$ -	\$ 2,855,736
17	Hwy 825/Twp 553 (Grading and Paving)	\$ 3,718,674	\$ -	\$ -	\$ -	\$ 3,718,674
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$ 1,606,050	\$ -	\$ -	\$ -	\$ 1,606,050
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$ 1,903,824	\$ -	\$ -	\$ -	\$ 1,903,824
20	Hwy 825/Twp 554 (Grading and Paving)	\$ 3,780,830	\$ -	\$ -	\$ -	\$ 3,780,830
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$ 1,606,050	\$ -	\$ -	\$ -	\$ 1,606,050
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$ 1,903,824	\$ -	\$ -	\$ -	\$ 1,903,824
23	Twp 554/RR 225 (Grading and Paving)	\$ 477,421	\$ -	\$ -	\$ -	\$ 477,421
24	Twp 554 from RR 230 - RR 225 (Grading)	\$ 1,606,050	\$ -	\$ -	\$ -	\$ 1,606,050
25	Twp 554 from RR 230 - RR 225 (Paving)	\$ 1,903,824	\$ -	\$ -	\$ -	\$ 1,903,824
26	RR 230/Twp 554 (Grading and Paving)	\$ 477,421	\$ -	\$ -	\$ -	\$ 477,421
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$ 4,818,150	\$ -	\$ -	\$ -	\$ 4,818,150
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$ 5,711,472	\$ -	\$ -	\$ -	\$ 5,711,472
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$ 4,818,150	\$ -	\$ -	\$ -	\$ 4,818,150
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$ 5,711,472	\$ -	\$ -	\$ -	\$ 5,711,472
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$ 1,606,050	\$ -	\$ -	\$ -	\$ 1,606,050
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$ 1,903,824	\$ -	\$ -	\$ -	\$ 1,903,824
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$ 1,160,143	\$ -	\$ -	\$ -	\$ 1,160,143
100	Transfer From Arterial Road Fee Account	\$ -	\$ -	\$ -	\$ 50,000	\$ (50,000)
		\$ 77,147,773	\$ 7,199,294	\$ -	\$ 50,000	\$ 69,898,479

B3. Year of Construction

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 County 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 County's annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	Twp 552/Hwy 825 (Grading and Paving)	2012
2	Twp 552 from Hwy 825 - RR 225 (Grading)	2012
3	Twp 552 from Hwy 825 - RR 225 (Paving)	2013
4	Twp 552/RR 225 (Grading and Paving)	2023
5	RR 225 from Hwy 825 - Estates Way (Grading)	2013
6	RR 225 from Hwy 825 - Estates Way (Paving)	2023
7	Hwy 825/RR 225 (Grading and Paving)	2014
8	Hwy 825/RR 224A (Grading and Paving)	2015
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	2020
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	2020
11	Boysdale Road/Twp 552 (Grading and Paving)	2020
12	Twp 552 from RR 225 to RR 230 (Grading)	2033
13	Twp 552 from RR 225 to RR 230 (Paving)	2034
14	Twp 552/RR 230 (Grading and Paving)	2050
15	RR 225 from Estates Way - Twp 554 (Grading)	2030
16	RR 225 from Estates Way - Twp 554 (Paving)	2031
17	Hwy 825/Twp 553 (Grading and Paving)	2020
18	RR 230 from Twp 552 - Twp 553 (Grading)	2050
19	RR 230 from Twp 552 - Twp 553 (Paving)	2050
20	Hwy 825/Twp 554 (Grading and Paving)	2050
21	Twp 554 from RR 225 - Hwy 825 (Grading)	2050
22	Twp 554 from RR 225 - Hwy 825 (Paving)	2050
23	Twp 554/RR 225 (Grading and Paving)	2050
24	Twp 554 from RR 230 - RR 225 (Grading)	2050
25	Twp 554 from RR 230 - RR 225 (Paving)	2050
26	RR 230/Twp 554 (Grading and Paving)	2050
27	Twp 552 from RR 230 - Hwy 28A (Grading)	2039
28	Twp 552 from RR 230 - Hwy 28A (Paving)	2040
29	Twp 554 from RR 230 - Hwy 28A (Grading)	2050
30	Twp 554 from RR 230 - Hwy 28A (Paving)	2050
31	RR 230 from Twp 553 - Twp 554 (Grading)	2050
32	RR 230 from Twp 553 - Twp 554 (Paving)	2050
33	Estate Way from Park Road to RR 225 (Grading and Paving)	2023

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

**Project costs are inflated by 2% per annum to 2022 and 3% per annum thereafter to the year of construction.

B4. Transportation Offsite Infrastructure Benefiting Parties

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

1. Sturgeon County – a portion of the transportation infrastructure which is required to service existing residents. This residual benefit is determined at the point in time when the project is added to the bylaw (i.e., it does not fluctuate from year-to-year).
2. Other Stakeholders – other municipalities that benefit from the infrastructure.
3. Future Development:
 - o Financial Oversizing – that portion of cost (i.e., levyable transportation

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

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

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

Allocation of Transportation Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Twp 552/Hwy 825 (Grading and Paving)	\$ 1,219,147	20.0%		0.0%	80.0%
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$ 1,382,570	20.0%		0.0%	80.0%
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$ 2,509,939	20.0%		0.0%	80.0%
4	Twp 552/RR 225 (Grading and Paving)	\$ 477,421	20.0%		6.4%	73.6%
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$ 2,073,243	20.0%		0.0%	80.0%
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$ 3,807,648	20.0%		6.4%	73.6%
7	Hwy 825/RR 225 (Grading and Paving)	\$ 2,665,064	20.0%		0.0%	80.0%
8	Hwy 825/RR 224A (Grading and Paving)	\$ 2,156,875	20.0%		0.0%	80.0%
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	\$ 36,563	20.0%		0.0%	80.0%
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	\$ 99,000	20.0%		0.0%	80.0%
11	Boysdale Road/Twp 552 (Grading and Paving)	\$ 117,491	20.0%		0.0%	80.0%
12	Twp 552 from RR 225 to RR 230 (Grading)	\$ 1,606,050	20.0%		38.4%	41.6%
13	Twp 552 from RR 225 to RR 230 (Paving)	\$ 1,903,824	20.0%		41.6%	38.4%
14	Twp 552/RR 230 (Grading and Paving)	\$ 477,421	20.0%		80.0%	0.0%
15	RR 225 from Estates Way - Twp 554 (Grading)	\$ 1,847,259	20.0%		28.8%	51.2%
16	RR 225 from Estates Way - Twp 554 (Paving)	\$ 2,855,736	20.0%		32.0%	48.0%
17	Hwy 825/Twp 553 (Grading and Paving)	\$ 3,718,674	20.0%		0.0%	80.0%
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$ 1,606,050	20.0%		80.0%	0.0%
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$ 1,903,824	20.0%		80.0%	0.0%
20	Hwy 825/Twp 554 (Grading and Paving)	\$ 3,780,830	20.0%		80.0%	0.0%
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$ 1,606,050	20.0%		80.0%	0.0%
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$ 1,903,824	20.0%		80.0%	0.0%
23	Twp 554/RR 225 (Grading and Paving)	\$ 477,421	20.0%		80.0%	0.0%
24	Twp 554 from RR 230 - RR 225 (Grading)	\$ 1,606,050	20.0%		80.0%	0.0%
25	Twp 554 from RR 230 - RR 225 (Paving)	\$ 1,903,824	20.0%		80.0%	0.0%
26	RR 230/Twp 554 (Grading and Paving)	\$ 477,421	20.0%		80.0%	0.0%
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$ 4,818,150	20.0%		57.6%	22.4%
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$ 5,711,472	20.0%		60.8%	19.2%
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$ 4,818,150	20.0%		80.0%	0.0%
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$ 5,711,472	20.0%		80.0%	0.0%
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$ 1,606,050	20.0%		80.0%	0.0%
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$ 1,903,824	20.0%		80.0%	0.0%
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$ 1,160,143	20.0%		6.4%	73.6%
100	Transfer From Arterial Road Fee Account	\$ (50,000)			0.0%	100.0%
		\$ 69,898,479				

*Allocations were determined by County staff.

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

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 **\$22.63 million**. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers (if any) need to be considered in determining the residual/net costs to developers. County staff have advised that **\$5.57 million** in transportation levies have been applied/collected as shown in the table below. This results in an adjusted offsite

levy cost of approximately **\$17.06 million**.

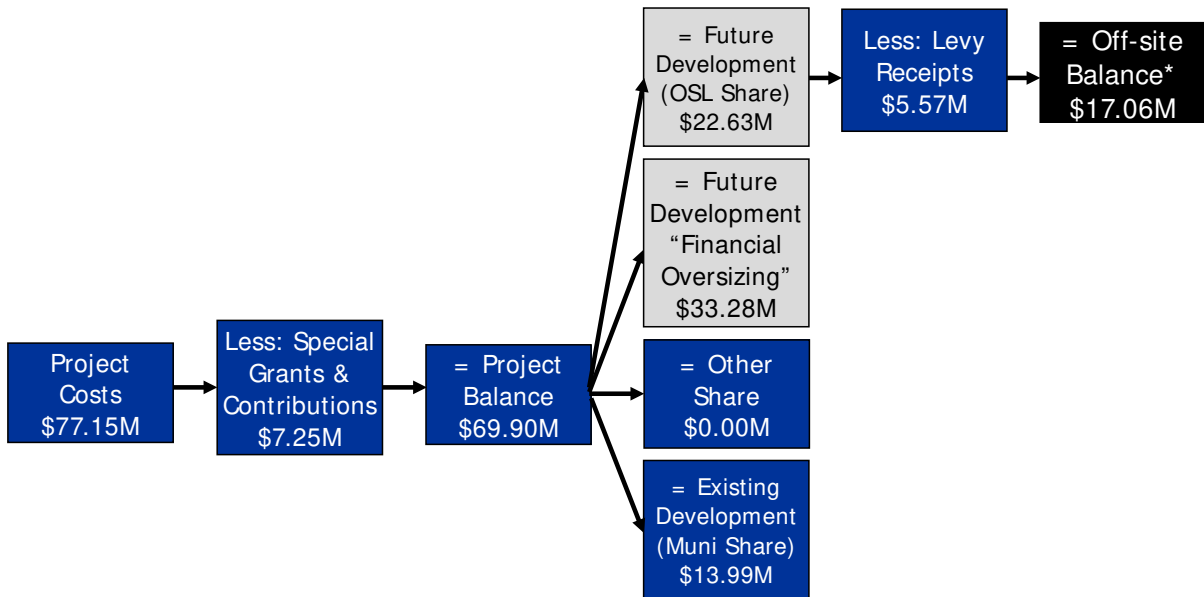
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected	Adjusted Developer (Levy) Cost
1	Twp 552/Hwy 825 (Grading and Paving)	\$ 975,318	\$ (281)	\$ 975,599
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$ 1,106,056	\$ 110,838	\$ 995,218
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$ 2,007,951	\$ 326,250	\$ 1,681,702
4	Twp 552/RR 225 (Grading and Paving)	\$ 351,382	\$ 81,373	\$ 270,009
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$ 1,658,594	\$ 438,415	\$ 1,220,179
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$ 2,802,429	\$ 635,071	\$ 2,167,358
7	Hwy 825/RR 225 (Grading and Paving)	\$ 2,132,051	\$ 523,234	\$ 1,608,817
8	Hwy 825/RR 224A (Grading and Paving)	\$ 1,725,500	\$ 432,986	\$ 1,292,515
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	\$ 29,250	\$ 11,239	\$ 18,011
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	\$ 79,200	\$ 21,785	\$ 57,415
11	Boysdale Road/Twp 552 (Grading and Paving)	\$ 93,992	\$ 31,212	\$ 62,780
12	Twp 552 from RR 225 to RR 230 (Grading)	\$ 668,117	\$ 167,517	\$ 500,600
13	Twp 552 from RR 225 to RR 230 (Paving)	\$ 731,068	\$ 184,514	\$ 546,555
14	Twp 552/RR 230 (Grading and Paving)	\$ -	\$ 12,997	\$ (12,997)
15	RR 225 from Estates Way - Twp 554 (Grading)	\$ 945,797	\$ 149,023	\$ 796,773
16	RR 225 from Estates Way - Twp 554 (Paving)	\$ 1,370,753	\$ 222,353	\$ 1,148,400
17	Hwy 825/Twp 553 (Grading and Paving)	\$ 2,974,939	\$ 678,959	\$ 2,295,981
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$ -	\$ 44,561	\$ (44,561)
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$ -	\$ 51,492	\$ (51,492)
20	Hwy 825/Twp 554 (Grading and Paving)	\$ -	\$ 102,428	\$ (102,428)
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$ -	\$ 44,561	\$ (44,561)
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$ -	\$ 51,492	\$ (51,492)
23	Twp 554/RR 225 (Grading and Paving)	\$ -	\$ 12,997	\$ (12,997)
24	Twp 554 from RR 230 - RR 225 (Grading)	\$ -	\$ 44,561	\$ (44,561)
25	Twp 554 from RR 230 - RR 225 (Paving)	\$ -	\$ 51,492	\$ (51,492)
26	RR 230/Twp 554 (Grading and Paving)	\$ -	\$ 12,997	\$ (12,997)
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$ 1,079,266	\$ 287,378	\$ 791,888
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$ 1,096,603	\$ 299,591	\$ 797,011
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$ -	\$ 133,682	\$ (133,682)
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$ -	\$ 154,477	\$ (154,477)
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$ -	\$ 44,561	\$ (44,561)
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$ -	\$ 51,492	\$ (51,492)
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$ 853,865	\$ 154,751	\$ 699,114
100	Transfer From Arterial Road Fee Account	\$ (50,000)	\$ -	\$ (50,000)
		\$ 22,632,132	\$ 5,569,994	\$ 17,062,137

B6. Summary of Transportation Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for transportation infrastructure that forms the basis of the rate is approximately **\$17.06 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in previous section. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Transportation Offsite Levy Costs



B8. Reserve Balance

At December 31st, 2020 the transportation reserve balance was in a deficit of **\$(2,352,389.98)**. This amount takes into consideration expenditures and front-ending repayments up to end-2020. A negative balance indicates the presence of front-ending—i.e., this amount is owed to the County from the levy account via future collections. The County's ledgers should be amended to reflect this balance as it includes expenditures to date. This balance assumes that all remaining cash in the account is withdrawn and used to pay down a portion of front-ending obligations owed to the County.

Transportation Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Levies Collected to Dec 31, 2012	\$ 2,481,376.13		\$ 2,481,376.13
Levies Applied to Project Expenditures to Dec 31, 2012		\$ 213,348.11	\$ 2,268,028.02
Account Balance Per County GL Dec 31, 2012			\$ 2,268,028.02
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ (42,669.62)	\$ 2,310,697.64
Closing Balance Dec 31, 2012			\$ 2,310,697.64
2013			\$ 2,310,697.64
Interest on Opening Balance	\$ 46,213.95		\$ 2,356,911.59
Withdrawal Applied to Project Expenditures		\$ 1,576,521.66	\$ 780,389.93
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ (267,966.36)	\$ 1,048,356.30
Offsite Levy Receipts	\$ 1,259,757.84		\$ 2,308,114.14
Other Receipts	\$ -		\$ 2,308,114.14
Debenture Interest Expenditure		\$ -	\$ 2,308,114.14
Interest on Project Expenditure		\$ 9,814.16	\$ 2,298,299.97
Interest on Offsite Levy Receipts	\$ 12,597.58		\$ 2,310,897.55
Interest on Other Receipts	\$ -		\$ 2,310,897.55
Interest on Debenture Accrual		\$ -	\$ 2,310,897.55
2014			\$ 2,310,897.55
Interest on Opening Balance	\$ 46,217.95		\$ 2,357,115.50
Withdrawal Applied to Project Expenditures		\$ 1,982,195.95	\$ 374,919.55
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 3,343,767.10	\$ (2,968,847.54)
Offsite Levy Receipts	\$ 414,131.75		\$ (2,554,715.79)
Other Receipts	\$ -		\$ (2,554,715.79)
Debenture Interest Expenditure		\$ -	\$ (2,554,715.79)
Interest on Project Expenditure		\$ 39,944.72	\$ (2,594,660.52)
Interest on Offsite Levy Receipts	\$ 4,141.32		\$ (2,590,519.20)
Interest on Other Receipts	\$ -		\$ (2,590,519.20)
Interest on Debenture Accrual		\$ -	\$ (2,590,519.20)
2015			\$ (2,590,519.20)
Interest on Opening Balance		\$ 77,715.58	\$ (2,668,234.78)
Withdrawal Applied to Project Expenditures		\$ 220,517.38	\$ (2,888,752.16)
Other Receipts		\$ 50,319.95	\$ (2,939,072.10)
Offsite Levy Receipts	\$ 425,513.45		\$ (2,513,558.65)
Other Receipts	\$ 50,000.00		\$ (2,463,558.65)
Debenture Interest Expenditure		\$ -	\$ (2,463,558.65)
Interest on Project Expenditure		\$ 2,031.28	\$ (2,465,589.93)
Interest on Offsite Levy Receipts	\$ 2,127.57		\$ (2,463,462.37)
Interest on Other Receipts	\$ -		\$ (2,463,462.37)
Interest on Debenture Accrual		\$ -	\$ (2,463,462.37)

2016			\$ (2,463,462.37)
Interest on Opening Balance		\$ 73,903.87	\$ (2,537,366.24)
Withdrawal Applied to Project Expenditures		\$ 74,743.72	\$ (2,612,109.96)
Other Receipts		\$ 62,049.14	\$ (2,674,159.09)
Offsite Levy Receipts	\$ 65,194.82		\$ (2,608,964.27)
Other Receipts	\$ -		\$ (2,608,964.27)
Debenture Interest Expenditure		\$ -	\$ (2,608,964.27)
Interest on Project Expenditure		\$ 1,025.95	\$ (2,609,990.22)
Interest on Offsite Levy Receipts	\$ 325.97		\$ (2,609,664.24)
Interest on Other Receipts	\$ -		\$ (2,609,664.24)
Interest on Debenture Accrual		\$ -	\$ (2,609,664.24)
2017			\$ (2,609,664.24)
Interest on Opening Balance		\$ 78,289.93	\$ (2,687,954.17)
Withdrawal Applied to Project Expenditures		\$ 53,552.69	\$ (2,741,506.86)
Other Receipts		\$ 59,715.90	\$ (2,801,222.76)
Offsite Levy Receipts	\$ 679,372.97		\$ (2,121,849.79)
Interest on Other Receipts	\$ -		\$ (2,121,849.79)
Debenture Interest Expenditure		\$ -	\$ (2,121,849.79)
Interest on Project Expenditure		\$ 849.51	\$ (2,122,699.31)
Interest on Offsite Levy Receipts	\$ 3,396.86		\$ (2,119,302.44)
Interest on Other Receipts	\$ -		\$ (2,119,302.44)
Interest on Debenture Accrual		\$ -	\$ (2,119,302.44)
2018			\$ (2,119,302.44)
Interest on Opening Balance		\$ 63,579.07	\$ (2,182,881.52)
Withdrawal Applied to Project Expenditures		\$ 29,199.43	\$ (2,212,080.95)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 54,949.50	\$ (2,267,030.44)
Offsite Levy Receipts	\$ 69,711.99		\$ (2,197,318.45)
Other Receipts	\$ -		\$ (2,197,318.45)
Debenture Interest Expenditure		\$ -	\$ (2,197,318.45)
Interest on Project Expenditure		\$ 631.12	\$ (2,197,949.57)
Interest on Offsite Levy Receipts	\$ 348.56		\$ (2,197,601.01)
Interest on Other Receipts	\$ -		\$ (2,197,601.01)
Interest on Debenture Accrual		\$ -	\$ (2,197,601.01)
2019			\$ (2,197,601.01)
Interest on Opening Balance		\$ 71,422.03	\$ (2,269,023.04)
Withdrawal Applied to Project Expenditures		\$ 119,257.37	\$ (2,388,280.41)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 28,550.93	\$ (2,416,831.35)
Offsite Levy Receipts	\$ 100,431.73		\$ (2,316,399.61)
Other Receipts	\$ -		\$ (2,316,399.61)
Debenture Interest Expenditure		\$ -	\$ (2,316,399.61)
Interest on Project Expenditure		\$ 1,200.94	\$ (2,317,600.56)
Interest on Offsite Levy Receipts	\$ 502.16		\$ (2,317,098.40)
Interest on Other Receipts	\$ -		\$ (2,317,098.40)
Interest on Debenture Accrual		\$ -	\$ (2,317,098.40)
2020			\$ (2,317,098.40)
Interest on Opening Balance		\$ 75,305.70	\$ (2,392,404.10)
Withdrawal Applied to Project Expenditures		\$ (11,550.00)	\$ (2,380,854.10)
Other Receipts		\$ 46,131.10	\$ (2,426,985.20)
Offsite Levy Receipts	\$ 74,503.67		\$ (2,352,481.53)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (2,352,481.53)
Debenture Interest Expenditure		\$ -	\$ (2,352,481.53)
Interest on Project Expenditure		\$ 280.97	\$ (2,352,762.50)
Interest on Offsite Levy Receipts	\$ 372.52		\$ (2,352,389.98)
Interest on Other Receipts	\$ -		\$ (2,352,389.98)
Interest on Debenture Accrual		\$ -	\$ (2,352,389.98)

B9. 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.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.09%**⁶ interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00%**⁷ 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 County, nor are they charged too little thereby placing an unequitable burden on taxpayers).

Anticipated Transportation Offsite Levy Reserve Balances



⁶ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%. Historic charge rates used in the model are 3.00% (2013-2018), 3.25% (2019-2020).

⁷ Historic earning rates used in the model are 2.00% (2013-2014), 1.00% (2015-2020).

Anticipated Transportation Offsite Levy Reserve Balances

			Reserve Balance	\$ (2,352,390)
Year	Receipts	Expenditure	Interest	Balance
2021	\$ -	\$ 3,190,670	\$ (115,850)	\$ (5,658,910)
2022	\$ -	\$ 24,643	\$ (118,786)	\$ (5,802,340)
2023	\$ 935,992	\$ 4,393,480	\$ (193,530)	\$ (9,453,358)
2024	\$ 964,072	\$ 6,472	\$ (177,561)	\$ (8,673,321)
2025	\$ 1,779,303	\$ 2,626,896	\$ (198,987)	\$ (9,719,901)
2026	\$ 1,924,673	\$ -	\$ (162,920)	\$ (7,958,148)
2027	\$ 1,636,940	\$ -	\$ (132,113)	\$ (6,453,321)
2028	\$ 1,097,188	\$ -	\$ (111,943)	\$ (5,468,076)
2029	\$ 942,475	\$ -	\$ (94,585)	\$ (4,620,187)
2030	\$ 446,854	\$ 1,210,204	\$ (112,516)	\$ (5,496,053)
2031	\$ 1,455,718	\$ 1,806,581	\$ (122,201)	\$ (5,969,117)
2032	\$ 1,499,389	\$ -	\$ (93,417)	\$ (4,563,145)
2033	\$ 1,497,166	\$ 934,168	\$ (83,603)	\$ (4,083,749)
2034	\$ 1,551,530	\$ 1,052,853	\$ (74,928)	\$ (3,660,000)
2035	\$ 477,679	\$ -	\$ (66,511)	\$ (3,248,832)
2036	\$ 491,592	\$ -	\$ (57,626)	\$ (2,814,866)
2037	\$ 868,779	\$ -	\$ (40,673)	\$ (1,986,761)
2038	\$ 894,842	\$ -	\$ (22,821)	\$ (1,114,739)
2039	\$ 921,688	\$ 1,801,873	\$ (41,694)	\$ (2,036,619)
2040	\$ 949,573	\$ 1,885,743	\$ (62,131)	\$ (3,034,920)
2041	\$ 999,607	\$ -	\$ (42,538)	\$ (2,077,851)
2042	\$ 686,480	\$ -	\$ (29,080)	\$ (1,420,451)
2043	\$ 707,074	\$ -	\$ (14,910)	\$ (728,286)
2044	\$ 728,286	\$ -	\$ (0)	\$ (0)
2045	\$ -	\$ -	\$ (0)	\$ (0)

APPENDIX C: WATER

C1. Water Offsite Infrastructure

In order to support future growth, water offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) future debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$30.83 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Water Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	SIP Pumpstation Improvement	\$ 1,508,467	\$ -	\$ -	\$ 1,508,467
2	SIP Reservoir Expansion 3000m3	\$ 2,107,272	\$ -	\$ -	\$ 2,107,272
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$ 1,980,100	\$ -	\$ -	\$ 1,980,100
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	\$ 246,984	\$ 28,274	\$ -	\$ 275,258
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	\$ 187,107	\$ 21,421	\$ -	\$ 208,529
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	\$ 82,328	\$ 9,425	\$ -	\$ 91,753
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	\$ 149,683	\$ 17,140	\$ -	\$ 166,823
8	RR225 350mm Pipe (South of Twp Rd 552 to Existing Pipe)	\$ 416,685	\$ -	\$ -	\$ 416,685
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$ 416,685	\$ -	\$ -	\$ 416,685
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$ -	\$ -	\$ 753,033	\$ 753,033
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$ -	\$ -	\$ 753,033	\$ 753,033
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$ -	\$ -	\$ 1,129,549	\$ 1,129,549
13	Twp 553 350mm Pipe (Park Road to RR225)	\$ -	\$ -	\$ 376,516	\$ 376,516
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$ -	\$ -	\$ 753,033	\$ 753,033
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$ -	\$ -	\$ 753,033	\$ 753,033
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$ -	\$ -	\$ 753,033	\$ 753,033
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$ -	\$ -	\$ 753,033	\$ 753,033
18	Twp 552 150mm Pipe (RR225 to RR230)	\$ -	\$ -	\$ 753,033	\$ 753,033
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$ -	\$ -	\$ 1,694,324	\$ 1,694,324
20	SIP Reservoir Expansion	\$ -	\$ -	\$ 5,499,936	\$ 5,499,936
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$ -	\$ -	\$ 4,188,745	\$ 4,188,745
22	SIP Reservoir Expansion - Stage 3	\$ -	\$ -	\$ 5,499,936	\$ 5,499,936
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ -
		\$ 7,095,311	\$ 76,260	\$ 23,660,235	\$ 30,831,806

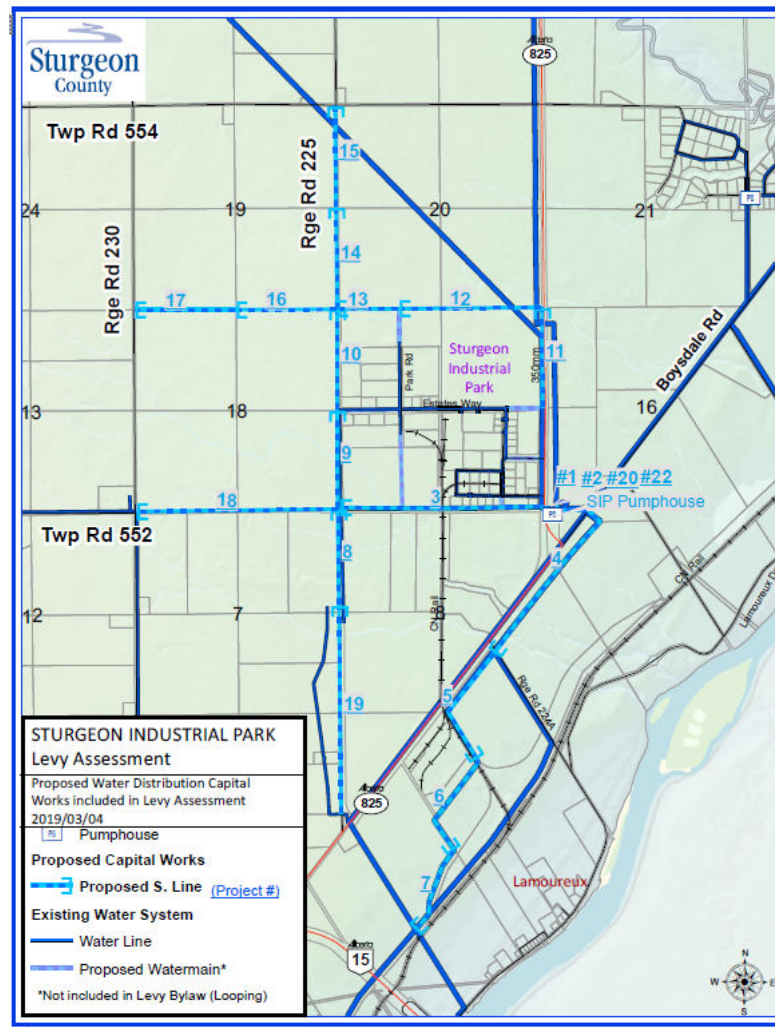
*Past expenditures include past financing expenditures (interest) if any.

**Costs estimates provided by County staff.

***Estimates include engineering and contingencies.

****Transfers or contributions stemming from Development Agreements were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas (see Section C5).

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



C2. Water Offsite Infrastructure Grants & Contributions to Date

The MGA enables the County to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). The County has/will receive approximately **\$0.00** in special ear-marked grants and contributions for water offsite levy infrastructure as shown in the table below (note, if the County receives other ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$30.83 million**.

Special Grants and Contributions for Water Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Other Contributions (Historic & Future)	Reduced Project Estimated Cost
1	SIP Pumpstation Improvement	\$ 1,508,467	\$ -	\$ -	\$ -	\$ 1,508,467
2	SIP Reservoir Expansion 3000m3	\$ 2,107,272	\$ -	\$ -	\$ -	\$ 2,107,272
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$ 1,980,100	\$ -	\$ -	\$ -	\$ 1,980,100
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	\$ 275,258	\$ -	\$ -	\$ -	\$ 275,258
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	\$ 208,529	\$ -	\$ -	\$ -	\$ 208,529
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	\$ 91,753	\$ -	\$ -	\$ -	\$ 91,753
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	\$ 166,823	\$ -	\$ -	\$ -	\$ 166,823
8	RR225 350mm Pipe (South of Twp Rd 552 to Existing Pipe)	\$ 416,685	\$ -	\$ -	\$ -	\$ 416,685
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$ 416,685	\$ -	\$ -	\$ -	\$ 416,685
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$ 1,129,549	\$ -	\$ -	\$ -	\$ 1,129,549
13	Twp 553 350mm Pipe (Park Road to RR225)	\$ 376,516	\$ -	\$ -	\$ -	\$ 376,516
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
18	Twp 552 150mm Pipe (RR225 to RR230)	\$ 753,033	\$ -	\$ -	\$ -	\$ 753,033
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$ 1,694,324	\$ -	\$ -	\$ -	\$ 1,694,324
20	SIP Reservoir Expansion	\$ 5,499,936	\$ -	\$ -	\$ -	\$ 5,499,936
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$ 4,188,745	\$ -	\$ -	\$ -	\$ 4,188,745
22	SIP Reservoir Expansion - Stage 3	\$ 5,499,936	\$ -	\$ -	\$ -	\$ 5,499,936
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ -	\$ -
		\$ 30,831,806	\$ -	\$ -	\$ -	\$ 30,831,806

C3. Year of Construction

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 County 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 County's annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	SIP Pumpstation Improvement	2012
2	SIP Reservoir Expansion 3000m3	2012
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	2012
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	2013
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	2013
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	2013
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	2013
8	RR225 350mm Pipe (South of Twp Rd 552 to Existing Pipe)	2013
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	2013
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	2033
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	2026
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	2026
13	Twp 553 350mm Pipe (Park Road to RR225)	2033
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	2037
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	2050
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	2050
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	2050
18	Twp 552 150mm Pipe (RR225 to RR230)	2032
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	2025
20	SIP Reservoir Expansion	2034
21	Replace CRNWSC Line Projects 4-7 Oversizing	2029
22	SIP Reservoir Expansion - Stage 3	2050

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

**Project costs are inflated by 2% per annum to 2022 and 3% per annum thereafter to the year of construction.

C4. Water Offsite Infrastructure Benefiting Parties

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

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

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

Allocation of Water Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	SIP Pumpstation Improvement	\$ 1,508,467	20.0%		0.0%	80.0%
2	SIP Reservoir Expansion 3000m3	\$ 2,107,272	20.0%		0.0%	80.0%
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$ 1,980,100	20.0%		0.0%	80.0%
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	\$ 275,258	39.0%		0.0%	61.0%
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	\$ 208,529	39.0%		0.0%	61.0%
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	\$ 91,753	39.0%		0.0%	61.0%
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	\$ 166,823	39.0%		0.0%	61.0%
8	RR225 350mm Pipe (South of Twp Rd 552 to Existing Pipe)	\$ 416,685	39.0%		0.0%	61.0%
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$ 416,685	12.0%		0.0%	88.0%
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$ 753,033	12.0%		42.2%	45.8%
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$ 753,033	12.0%		17.6%	70.4%
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$ 1,129,549	12.0%		17.6%	70.4%
13	Twp 553 350mm Pipe (Park Road to RR225)	\$ 376,516	12.0%		42.2%	45.8%
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$ 753,033	4.0%		61.4%	34.6%
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$ 753,033	4.0%		96.0%	0.0%
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$ 753,033	3.0%		97.0%	0.0%
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$ 753,033	3.0%		97.0%	0.0%
18	Twp 552 150mm Pipe (RR225 to RR230)	\$ 753,033	3.0%		42.7%	54.3%
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$ 1,694,324	39.0%		9.8%	51.2%
20	SIP Reservoir Expansion	\$ 5,499,936	20.0%		41.6%	38.4%
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$ 4,188,745	39.0%		19.5%	41.5%
22	SIP Reservoir Expansion - Stage 3	\$ 5,499,936			100.0%	0.0%
100	Contributions collected under old development agreements	\$ -			0.0%	100.0%
		\$ 30,831,806				

*Allocations were determined by County staff.

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

C5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately **\$12.78 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. County staff have advised that approximately **\$1.47 million** in water levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately **\$11.31 million**.

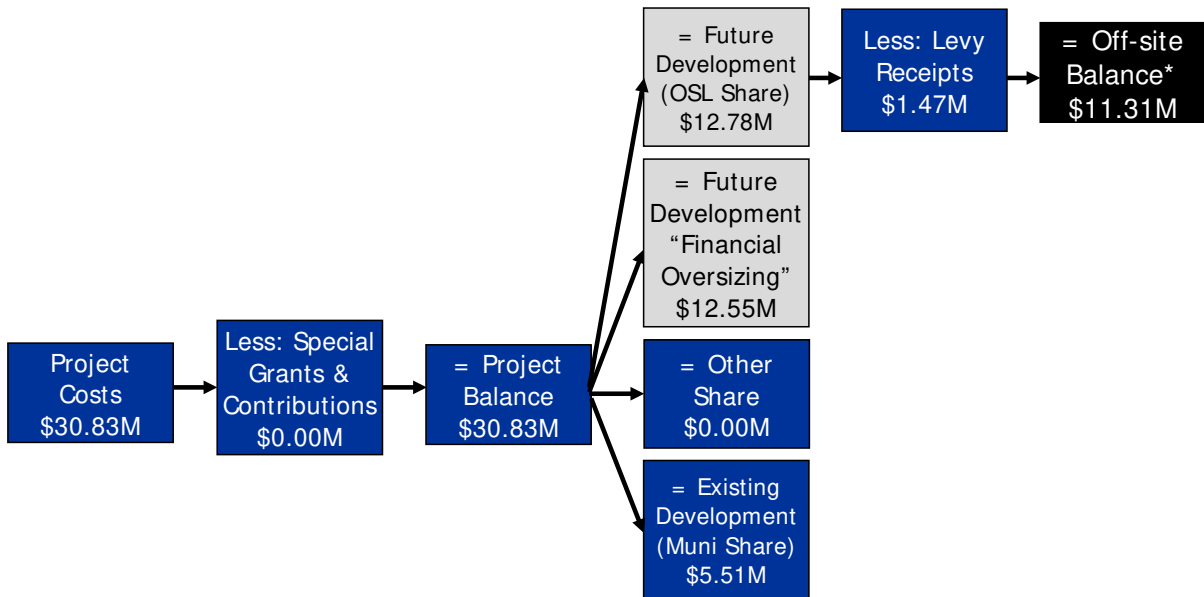
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected	Adjusted Developer (Levy) Cost
1	SIP Pumpstation Improvement	\$ 1,206,774	\$ 88,391	\$ 1,118,383
2	SIP Reservoir Expansion 3000m3	\$ 1,685,818	\$ 125,488	\$ 1,560,330
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$ 1,584,080	\$ 119,605	\$ 1,464,475
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	\$ 167,907	\$ 38,751	\$ 129,156
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	\$ 127,202	\$ 29,357	\$ 97,845
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	\$ 55,969	\$ 12,917	\$ 43,052
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	\$ 101,762	\$ 23,486	\$ 78,276
8	RR225 350mm Pipe (South of Twp Rd 552 to Existing Pipe)	\$ 254,178	\$ 64,893	\$ 189,285
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$ 366,683	\$ 6,240	\$ 360,442
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$ 344,588	\$ 6,083	\$ 338,505
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$ 530,135	\$ 8,996	\$ 521,139
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$ 795,203	\$ 13,494	\$ 781,709
13	Twp 553 350mm Pipe (Park Road to RR225)	\$ 172,294	\$ 3,041	\$ 169,252
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$ 260,248	-	\$ 260,248
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$ -	\$ -	\$ -
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$ -	\$ -	\$ -
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$ -	\$ -	\$ -
18	Twp 552 150mm Pipe (RR225 to RR230)	\$ 409,047	\$ -	\$ 409,047
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$ 868,171	\$ 218,653	\$ 649,518
20	SIP Reservoir Expansion	\$ 2,111,975	\$ 236,399	\$ 1,875,576
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$ 1,737,491	\$ 421,068	\$ 1,316,423
22	SIP Reservoir Expansion - Stage 3	\$ -	\$ 57,465	\$ (57,465)
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -
		\$ 12,779,526	\$ 1,474,328	\$ 11,305,198

C6. Summary of Water Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for water infrastructure that forms the basis of the rate is approximately **\$11.31 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in previous section. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Water Offsite Levy Costs



C8. Reserve Balance

At December 31st, 2020 the water reserve balance was in a deficit of **\$(4,986,253.60)**. This amount takes into consideration expenditures and front-ending repayments up to end-2020. A negative balance indicates the presence of front-ending—i.e., this amount is owed to the County from the levy account via future collections. The County's ledgers should be amended to reflect this balance as it includes expenditures to date. This balance assumes that all remaining cash in the account is withdrawn and used to pay down a portion of front-ending obligations owed to the County.

Water Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Levies Collected to Dec 31, 2012	\$ 774,213.84		\$ 774,213.84
Levies Applied to Project Expenditures to Dec 31, 2012		\$ 607,036.83	\$ 167,177.01
Account Balance Per County GL Dec 31, 2012			\$ 167,177.01
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ (121,769.76)	\$ 288,946.77
Closing Balance Dec 31, 2012			\$ 288,946.77
2013			\$ 288,946.77
Interest on Opening Balance	\$ 5,778.94		\$ 294,725.71
Withdrawal Applied to Project Expenditures		\$ 2,503,515.21	\$ (2,208,789.50)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 890,784.24	\$ (3,099,573.74)
Offsite Levy Receipts	\$ 253,872.84		\$ (2,845,700.90)
Other Receipts	\$ -		\$ (2,845,700.90)
Debenture Interest Expenditure		\$ -	\$ (2,845,700.90)
Interest on Project Expenditure		\$ 25,457.25	\$ (2,871,158.15)
Interest on Offsite Levy Receipts	\$ 2,538.73		\$ (2,868,619.42)
Interest on Other Receipts	\$ -		\$ (2,868,619.42)
Interest on Debenture Accrual		\$ -	\$ (2,868,619.42)
2014			\$ (2,868,619.42)
Interest on Opening Balance		\$ 86,058.58	\$ (2,954,678.00)
Withdrawal Applied to Project Expenditures		\$ (2,314,629.83)	\$ (640,048.17)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 3,796,977.31	\$ (4,437,025.48)
Offsite Levy Receipts	\$ 128,384.35		\$ (4,308,641.13)
Other Receipts	\$ -		\$ (4,308,641.13)
Debenture Interest Expenditure		\$ -	\$ (4,308,641.13)
Interest on Project Expenditure		\$ 11,117.61	\$ (4,319,758.73)
Interest on Offsite Levy Receipts	\$ 1,283.84		\$ (4,318,474.89)
Interest on Other Receipts	\$ -		\$ (4,318,474.89)
Interest on Debenture Accrual		\$ -	\$ (4,318,474.89)
2015			\$ (4,318,474.89)
Interest on Opening Balance		\$ 129,554.25	\$ (4,448,029.14)
Withdrawal Applied to Project Expenditures		\$ 510.70	\$ (4,448,539.84)
Other Receipts		\$ 45,846.87	\$ (4,494,386.71)
Offsite Levy Receipts	\$ 131,912.78		\$ (4,362,473.93)
Other Receipts	\$ -		\$ (4,362,473.93)
Debenture Interest Expenditure		\$ -	\$ (4,362,473.93)
Interest on Project Expenditure		\$ 347.68	\$ (4,362,821.61)
Interest on Offsite Levy Receipts	\$ 659.56		\$ (4,362,162.04)
Interest on Other Receipts	\$ -		\$ (4,362,162.04)
Interest on Debenture Accrual		\$ -	\$ (4,362,162.04)

2016			\$ (4,362,162.04)
Interest on Opening Balance		\$ 130,864.86	\$ (4,493,026.91)
Withdrawal Applied to Project Expenditures		\$ -	\$ (4,493,026.91)
Other Receipts		\$ 43,961.17	\$ (4,536,988.08)
Offsite Levy Receipts	\$ 20,210.98		\$ (4,516,777.10)
Other Receipts	\$ -		\$ (4,516,777.10)
Debenture Interest Expenditure		\$ -	\$ (4,516,777.10)
Interest on Project Expenditure		\$ 329.71	\$ (4,517,106.81)
Interest on Offsite Levy Receipts	\$ 101.05		\$ (4,517,005.75)
Interest on Other Receipts	\$ -		\$ (4,517,005.75)
Interest on Debenture Accrual		\$ -	\$ (4,517,005.75)
2017			\$ (4,517,005.75)
Interest on Opening Balance		\$ 135,510.17	\$ (4,652,515.93)
Withdrawal Applied to Project Expenditures		\$ -	\$ (4,652,515.93)
Other Receipts		\$ 14,455.96	\$ (4,666,971.89)
Offsite Levy Receipts	\$ 78,782.40		\$ (4,588,189.49)
Interest on Other Receipts	\$ -		\$ (4,588,189.49)
Debenture Interest Expenditure		\$ -	\$ (4,588,189.49)
Interest on Project Expenditure		\$ 108.42	\$ (4,588,297.91)
Interest on Offsite Levy Receipts	\$ 393.91		\$ (4,587,904.00)
Interest on Other Receipts	\$ -		\$ (4,587,904.00)
Interest on Debenture Accrual		\$ -	\$ (4,587,904.00)
2018			\$ (4,587,904.00)
Interest on Opening Balance		\$ 137,637.12	\$ (4,725,541.12)
Withdrawal Applied to Project Expenditures		\$ -	\$ (4,725,541.12)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 13,446.80	\$ (4,738,987.92)
Offsite Levy Receipts	\$ 21,605.77		\$ (4,717,382.15)
Other Receipts	\$ -		\$ (4,717,382.15)
Debenture Interest Expenditure		\$ -	\$ (4,717,382.15)
Interest on Project Expenditure		\$ 100.85	\$ (4,717,483.00)
Interest on Offsite Levy Receipts	\$ 108.03		\$ (4,717,374.97)
Interest on Other Receipts	\$ -		\$ (4,717,374.97)
Interest on Debenture Accrual		\$ -	\$ (4,717,374.97)
2019			\$ (4,717,374.97)
Interest on Opening Balance		\$ 153,314.69	\$ (4,870,689.65)
Withdrawal Applied to Project Expenditures		\$ -	\$ (4,870,689.65)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 12,401.12	\$ (4,883,090.77)
Offsite Levy Receipts	\$ 42,247.77		\$ (4,840,843.00)
Other Receipts	\$ -		\$ (4,840,843.00)
Debenture Interest Expenditure		\$ -	\$ (4,840,843.00)
Interest on Project Expenditure		\$ 100.76	\$ (4,840,943.76)
Interest on Offsite Levy Receipts	\$ 211.24		\$ (4,840,732.52)
Interest on Other Receipts	\$ -		\$ (4,840,732.52)
Interest on Debenture Accrual		\$ -	\$ (4,840,732.52)
2020			\$ (4,840,732.52)
Interest on Opening Balance		\$ 157,323.81	\$ (4,998,056.33)
Withdrawal Applied to Project Expenditures		\$ -	\$ (4,998,056.33)
Other Receipts		\$ 11,317.60	\$ (5,009,373.93)
Offsite Levy Receipts	\$ 23,096.80		\$ (4,986,277.13)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (4,986,277.13)
Debenture Interest Expenditure		\$ -	\$ (4,986,277.13)
Interest on Project Expenditure		\$ 91.96	\$ (4,986,369.09)
Interest on Offsite Levy Receipts	\$ 115.48		\$ (4,986,253.60)
Interest on Other Receipts	\$ -		\$ (4,986,253.60)
Interest on Debenture Accrual		\$ -	\$ (4,986,253.60)

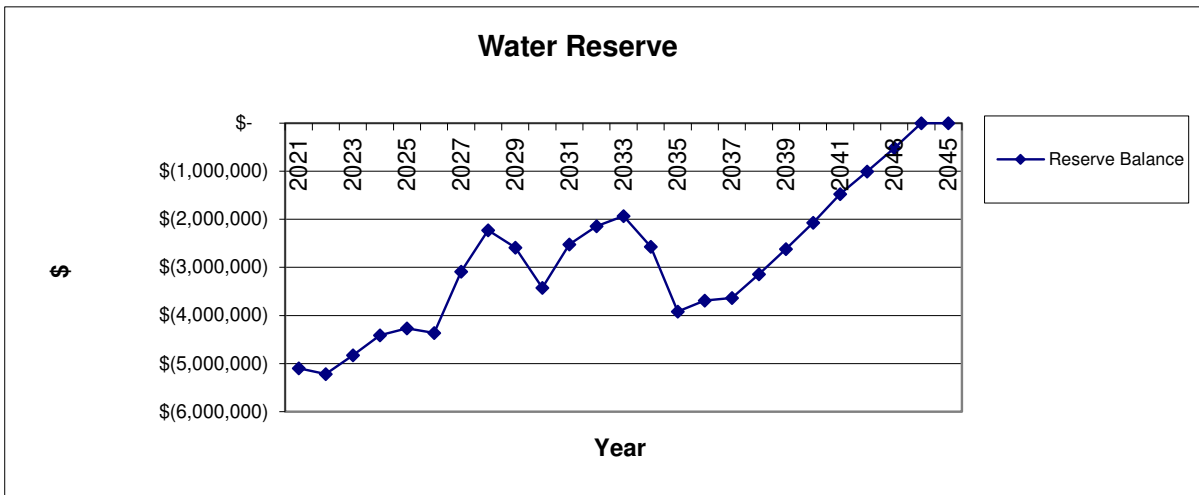
C9. Development and Water Infrastructure Staging Impacts

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

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.09%**⁸ interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00%**⁹ 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 County, nor are they charged too little thereby placing an unequitable burden on taxpayers).

Anticipated Water Offsite Levy Reserve Balances



⁸ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%. Historic charge rates used in the model are 3.00% (2013-2018), 3.25% (2019-2020).

⁹ Historic earning rates used in the model are 2.00% (2013-2014), 1.00% (2015-2020).

Anticipated Water Offsite Levy Reserve Balances

			Opening Balance	\$ (4,986,254)
Year	Receipts	Expenditure	Interest	Balance
2021	\$ -	\$ 9,057	\$ (104,402)	\$ (5,099,712)
2022	\$ -	\$ 9,238	\$ (106,777)	\$ (5,215,727)
2023	\$ 494,227	\$ 4,711	\$ (98,778)	\$ (4,824,990)
2024	\$ 509,053	\$ 4,853	\$ (90,304)	\$ (4,411,094)
2025	\$ 1,193,334	\$ 963,252	\$ (87,383)	\$ (4,268,394)
2026	\$ 1,507,391	\$ 1,511,889	\$ (89,303)	\$ (4,362,196)
2027	\$ 1,345,211	\$ 5,303	\$ (63,166)	\$ (3,085,453)
2028	\$ 907,860	\$ 5,462	\$ (45,626)	\$ (2,228,681)
2029	\$ 775,442	\$ 1,084,861	\$ (53,046)	\$ (2,591,147)
2030	\$ 347,604	\$ 1,111,613	\$ (70,123)	\$ (3,425,279)
2031	\$ 952,829	\$ -	\$ (51,674)	\$ (2,524,124)
2032	\$ 981,414	\$ 555,276	\$ (43,848)	\$ (2,141,834)
2033	\$ 970,690	\$ 722,709	\$ (39,582)	\$ (1,933,436)
2034	\$ 937,160	\$ 1,520,788	\$ (52,607)	\$ (2,569,670)
2035	\$ 295,826	\$ 1,566,412	\$ (80,261)	\$ (3,920,517)
2036	\$ 304,345	\$ -	\$ (75,578)	\$ (3,691,750)
2037	\$ 541,414	\$ 409,552	\$ (74,402)	\$ (3,634,290)
2038	\$ 557,657	\$ -	\$ (64,302)	\$ (3,140,935)
2039	\$ 574,386	\$ -	\$ (53,641)	\$ (2,620,189)
2040	\$ 591,785	\$ -	\$ (42,394)	\$ (2,070,798)
2041	\$ 624,846	\$ -	\$ (30,220)	\$ (1,476,173)
2042	\$ 487,697	\$ -	\$ (20,659)	\$ (1,009,134)
2043	\$ 502,328	\$ -	\$ (10,592)	\$ (517,398)
2044	\$ 517,398	\$ -	\$ (0)	\$ (0)
2045	\$ -	\$ -	\$ (0)	\$ (0)

APPENDIX D: SANITARY

D1. Sanitary Offsite Infrastructure

In order 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) future debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$11.13 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Sanitary Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	300mm Twp Rd 552 (1)	\$ 642,704	\$ -	\$ -	\$ 642,704
2	250mm South of Hwy 825 (2)	\$ 758,733	\$ 37,825	\$ -	\$ 796,558
3	250mm South of Hwy 825 (3)	\$ 446,913	\$ 23,069	\$ -	\$ 469,982
4	250mm South of Hwy 825 (4)	\$ 493,926	\$ 25,639	\$ -	\$ 519,565
5	600mm Estate Way across RR225	\$ 848,580	\$ -	\$ -	\$ 848,580
6	375mm West of Estate Way	\$ -	\$ -	\$ 864,042	\$ 864,042
7	375mm North 3-10 to 3-09	\$ -	\$ -	\$ 864,042	\$ 864,042
8	250mm West	\$ -	\$ -	\$ 712,835	\$ 712,835
9	250mm NorthWest	\$ -	\$ -	\$ 723,635	\$ 723,635
10	Forcemain North	\$ -	\$ -	\$ 1,450,053	\$ 1,450,053
11	250mm Gravity North of Forcemain	\$ -	\$ -	\$ 1,160,042	\$ 1,160,042
12	250mm Gravity Far North	\$ -	\$ -	\$ 648,032	\$ 648,032
13	Lift Station along Highway 825	\$ -	\$ -	\$ 1,430,533	\$ 1,430,533
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ -
		\$ 3,190,856	\$ 86,534	\$ 7,853,214	\$ 11,130,604

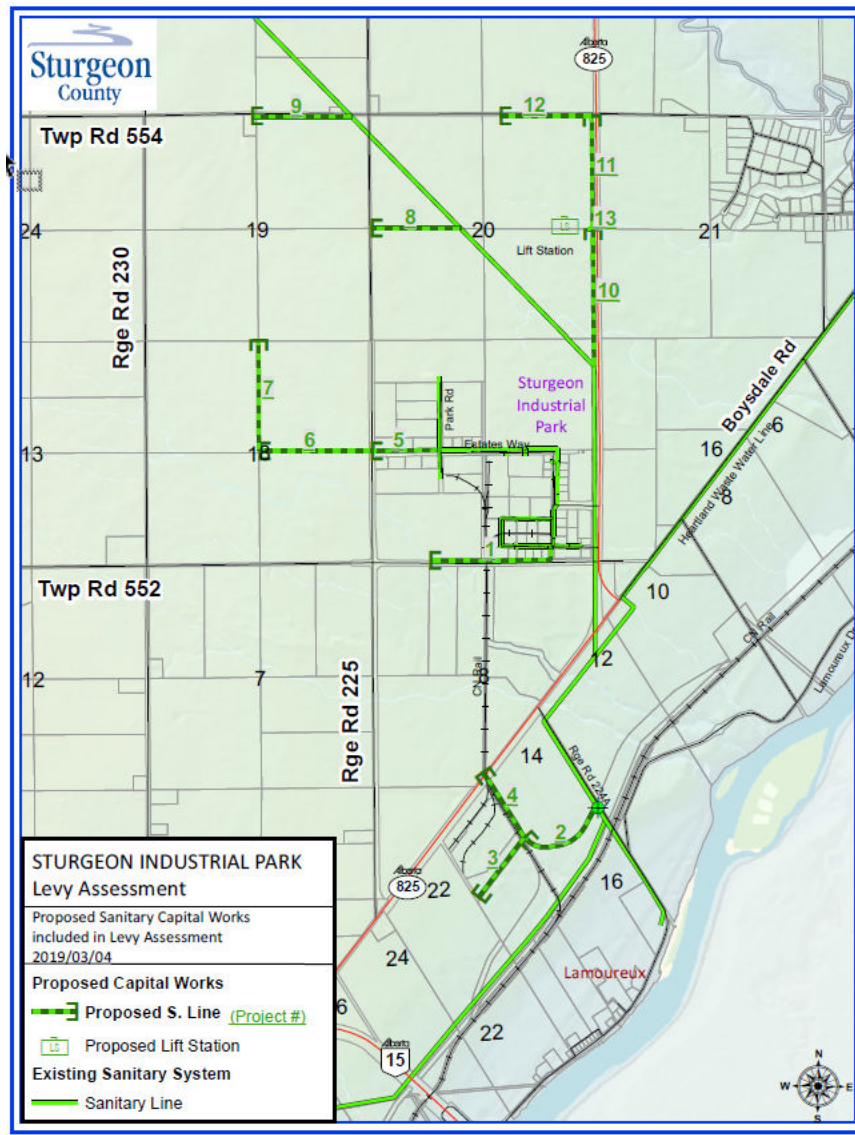
*Past expenditures include past financing expenditures (interest) if any.

**Costs estimates provided by County staff.

***Estimates include engineering and contingencies.

****Transfers or contributions stemming from Development Agreements were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas (see *Section D5*).

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



D2. Sanitary Offsite Infrastructure Grants & Contributions to Date

The MGA enables the County to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). Sturgeon County has/will receive approximately **\$0.48 million** in special ear-marked grants and contributions for sanitary offsite levy infrastructure as shown in the table below (note, if the County receives additional ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$10.65 million**.

Special Grants and Contributions for Sanitary Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Other Contributions (Historic & Future)	Reduced Project Estimated Cost
1	300mm Twp Rd 552 (1)	\$ 642,704	\$ -	\$ -	\$ -	\$ 642,704
2	250mm South of Hwy 825 (2)	\$ 796,558	\$ -	\$ -	\$ -	\$ 796,558
3	250mm South of Hwy 825 (3)	\$ 469,982	\$ -	\$ -	\$ -	\$ 469,982
4	250mm South of Hwy 825 (4)	\$ 519,565	\$ -	\$ -	\$ -	\$ 519,565
5	600mm Estate Way across RR225	\$ 848,580	\$ -	\$ -	\$ -	\$ 848,580
6	375mm West of Estate Way	\$ 864,042	\$ -	\$ -	\$ -	\$ 864,042
7	375mm North 3-10 to 3-09	\$ 864,042	\$ -	\$ -	\$ -	\$ 864,042
8	250mm West	\$ 712,835	\$ -	\$ -	\$ -	\$ 712,835
9	250mm NorthWest	\$ 723,635	\$ -	\$ -	\$ -	\$ 723,635
10	Forcemain North	\$ 1,450,053	\$ -	\$ -	\$ -	\$ 1,450,053
11	250mm Gravity North of Forcemain	\$ 1,160,042	\$ -	\$ -	\$ -	\$ 1,160,042
12	250mm Gravity Far North	\$ 648,032	\$ -	\$ -	\$ -	\$ 648,032
13	Lift Station along Highway 825	\$ 1,430,533	\$ -	\$ -	\$ -	\$ 1,430,533
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ 475,680	\$ (475,680)
		\$ 11,130,604	\$ -	\$ -	\$ 475,680	\$ 10,654,924

D3. Year of Construction

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 County 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 County's annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	300mm Twp Rd 552 (1)	2013
2	250mm South of Hwy 825 (2)	2013
3	250mm South of Hwy 825 (3)	2013
4	250mm South of Hwy 825 (4)	2013
5	600mm Estate Way across RR225	2014
6	375mm West of Estate Way	2030
7	375mm North 3-10 to 3-09	2050
8	250mm West	2036
9	250mm NorthWest	2050
10	Forcemain North	2050
11	250mm Gravity North of Forcemain	2050
12	250mm Gravity Far North	2050
13	Lift Station along Highway 825	2050

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

**Project costs are inflated by 2% per annum to 2022 and 3% per annum thereafter to the year of construction.

D4. Sanitary Offsite Infrastructure Benefiting Parties

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

1. Sturgeon County – a portion of the sanitary infrastructure which is required to service

existing residents. This residual benefit is determined at the point in time when the project is added to the bylaw (i.e., it does not fluctuate from year-to-year).

2. Other Stakeholders – other municipalities that benefit from the infrastructure.
3. Future Development:
 - Financial Oversizing – that portion of cost (i.e., levyable sanitary infrastructure costs) which benefits future development beyond the 25-year review period.
 - **In Rates – that portion of cost (i.e., levyable sanitary infrastructure costs) which benefits future development within the 25-year review 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	300mm Twp Rd 552 (1)	\$ 642,704			0.0%	100.0%
2	250mm South of Hwy 825 (2)	\$ 796,558			0.0%	100.0%
3	250mm South of Hwy 825 (3)	\$ 469,982			0.0%	100.0%
4	250mm South of Hwy 825 (4)	\$ 519,565			0.0%	100.0%
5	600mm Estate Way across RR225	\$ 848,580			0.0%	100.0%
6	375mm West of Estate Way	\$ 864,042			36.0%	64.0%
7	375mm North 3-10 to 3-09	\$ 864,042			100.0%	0.0%
8	250mm West	\$ 712,835			60.0%	40.0%
9	250mm NorthWest	\$ 723,635			100.0%	0.0%
10	Forcemain North	\$ 1,450,053			100.0%	0.0%
11	250mm Gravity North of Forcemain	\$ 1,160,042			100.0%	0.0%
12	250mm Gravity Far North	\$ 648,032			100.0%	0.0%
13	Lift Station along Highway 825	\$ 1,430,533			100.0%	0.0%
100	Contributions collected under old development agreements	\$ (475,680)			0.0%	100.0%
		\$ 10,654,924				

*Allocations were determined by County staff.

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

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 **\$3.64 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. County staff have advised that approximately **\$0.64 million** in sanitary levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately **\$3.00 million**.

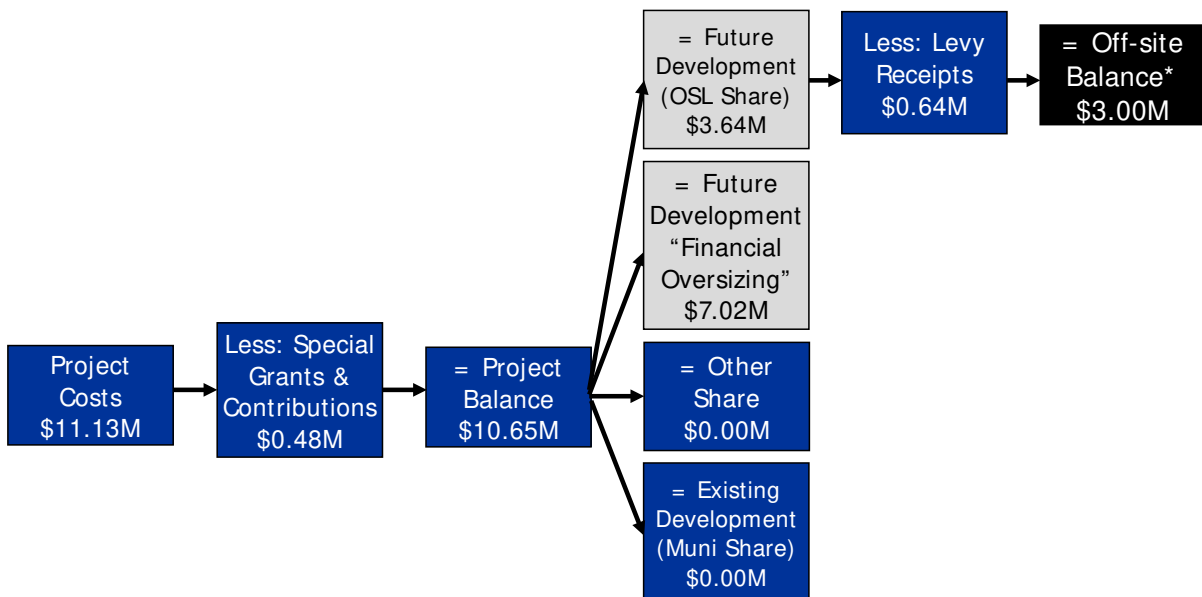
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected	Adjusted Developer (Levy) Cost
1	300mm Twp Rd 552 (1)	\$ 642,704	\$ 459,485	\$ 183,220
2	250mm South of Hwy 825 (2)	\$ 796,558	\$ 70,941	\$ 725,617
3	250mm South of Hwy 825 (3)	\$ 469,982	\$ 62,528	\$ 407,455
4	250mm South of Hwy 825 (4)	\$ 519,565	\$ -	\$ 519,565
5	600mm Estate Way across RR225	\$ 848,580	\$ 46,281	\$ 802,300
6	375mm West of Estate Way	\$ 552,987	\$ -	\$ 552,987
7	375mm North 3-10 to 3-09	\$ -	\$ -	\$ -
8	250mm West	\$ 285,134	\$ -	\$ 285,134
9	250mm NorthWest	\$ -	\$ -	\$ -
10	Forcemain North	\$ -	\$ -	\$ -
11	250mm Gravity North of Forcemain	\$ -	\$ -	\$ -
12	250mm Gravity Far North	\$ -	\$ -	\$ -
13	Lift Station along Highway 825	\$ -	\$ -	\$ -
100	Contributions collected under old development agreements	\$ (475,680)	\$ -	\$ (475,680)
		\$ 3,639,831	\$ 639,234	\$ 3,000,597

D6. 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 **\$3.00 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in the previous section. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Sanitary Offsite Levy Costs



D8. Reserve Balance

At December 31st, 2020 the sanitary reserve balance was at a deficit of **\$(2,530,708.89)**. This amount takes into consideration expenditures and front-ending repayments up to end-2020. A negative balance indicates the presence of front-ending—i.e., this amount is owed to the County from the levy account via future collections. The County's ledgers should be amended to reflect this balance as it includes expenditures to date. This balance assumes that all remaining cash in the account is withdrawn and used to pay down a portion of front-ending obligations owed to the County.

Sanitary Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Levies Collected to Dec 31, 2012	\$ 613,949.83		\$ 613,949.83
Levies Applied to Project Expenditures to Dec 31, 2012		\$ 34,687.62	\$ 579,262.21
Account Balance Per County GL Dec 31, 2012			\$ 579,262.21
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 33,179.88	\$ 546,082.33
Closing Balance Dec 31, 2012			\$ 546,082.33
2013			\$ 546,082.33
Interest on Opening Balance	\$ 10,921.65		\$ 557,003.98
Withdrawal Applied to Project Expenditures		\$ 457,640.63	\$ 99,363.35
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 1,390,829.17	\$ (1,291,465.82)
Offsite Levy Receipts	\$ 177,544.90		\$ (1,113,920.92)
Other Receipts	\$ 23,799.18		\$ (1,090,121.74)
Debenture Interest Expenditure		\$ -	\$ (1,090,121.74)
Interest on Project Expenditure		\$ 13,863.52	\$ (1,103,985.27)
Interest on Offsite Levy Receipts	\$ 1,775.45		\$ (1,102,209.82)
Interest on Other Receipts	\$ -		\$ (1,102,209.82)
Interest on Debenture Accrual		\$ -	\$ (1,102,209.82)
2014			\$ (1,102,209.82)
Interest on Opening Balance		\$ 33,066.29	\$ (1,135,276.11)
Withdrawal Applied to Project Expenditures		\$ (406,979.00)	\$ (728,297.11)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 1,261,342.25	\$ (1,989,639.36)
Offsite Levy Receipts	\$ 101,820.41		\$ (1,887,818.95)
Other Receipts	\$ -		\$ (1,887,818.95)
Debenture Interest Expenditure		\$ -	\$ (1,887,818.95)
Interest on Project Expenditure		\$ 6,407.72	\$ (1,894,226.68)
Interest on Offsite Levy Receipts	\$ 1,018.20		\$ (1,893,208.47)
Interest on Other Receipts	\$ -		\$ (1,893,208.47)
Interest on Debenture Accrual		\$ -	\$ (1,893,208.47)
2015			\$ (1,893,208.47)
Interest on Opening Balance		\$ 56,796.25	\$ (1,950,004.73)
Withdrawal Applied to Project Expenditures		\$ -	\$ (1,950,004.73)
Other Receipts		\$ 294,536.39	\$ (2,244,541.12)
Offsite Levy Receipts	\$ 104,618.76		\$ (2,139,922.36)
Other Receipts	\$ -		\$ (2,139,922.36)
Debenture Interest Expenditure		\$ -	\$ (2,139,922.36)
Interest on Project Expenditure		\$ 2,209.02	\$ (2,142,131.38)
Interest on Offsite Levy Receipts	\$ 523.09		\$ (2,141,608.29)
Interest on Other Receipts	\$ -		\$ (2,141,608.29)
Interest on Debenture Accrual		\$ -	\$ (2,141,608.29)

2016			\$ (2,141,608.29)
Interest on Opening Balance		\$ 64,248.25	\$ (2,205,856.53)
Withdrawal Applied to Project Expenditures		\$ -	\$ (2,205,856.53)
Other Receipts		\$ 28,974.19	\$ (2,234,830.72)
Offsite Levy Receipts	\$ 16,029.12		\$ (2,218,801.60)
Other Receipts	\$ -		\$ (2,218,801.60)
Debenture Interest Expenditure		\$ -	\$ (2,218,801.60)
Interest on Project Expenditure		\$ 217.31	\$ (2,219,018.91)
Interest on Offsite Levy Receipts	\$ 80.15		\$ (2,218,938.76)
Interest on Other Receipts	\$ -		\$ (2,218,938.76)
Interest on Debenture Accrual		\$ -	\$ (2,218,938.76)
2017			\$ (2,218,938.76)
Interest on Opening Balance		\$ 66,568.16	\$ (2,285,506.93)
Withdrawal Applied to Project Expenditures		\$ -	\$ (2,285,506.93)
Other Receipts		\$ 27,111.93	\$ (2,312,618.86)
Offsite Levy Receipts	\$ 20,340.49		\$ (2,292,278.37)
Interest on Other Receipts	\$ -		\$ (2,292,278.37)
Debenture Interest Expenditure		\$ -	\$ (2,292,278.37)
Interest on Project Expenditure		\$ 203.34	\$ (2,292,481.71)
Interest on Offsite Levy Receipts	\$ 101.70		\$ (2,292,380.00)
Interest on Other Receipts	\$ -		\$ (2,292,380.00)
Interest on Debenture Accrual		\$ -	\$ (2,292,380.00)
2018			\$ (2,292,380.00)
Interest on Opening Balance		\$ 68,771.40	\$ (2,361,151.40)
Withdrawal Applied to Project Expenditures		\$ -	\$ (2,361,151.40)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 25,187.81	\$ (2,386,339.21)
Offsite Levy Receipts	\$ 17,135.32		\$ (2,369,203.89)
Other Receipts	\$ -		\$ (2,369,203.89)
Debenture Interest Expenditure		\$ -	\$ (2,369,203.89)
Interest on Project Expenditure		\$ 188.91	\$ (2,369,392.80)
Interest on Offsite Levy Receipts	\$ 85.68		\$ (2,369,307.13)
Interest on Other Receipts	\$ -		\$ (2,369,307.13)
Interest on Debenture Accrual		\$ -	\$ (2,369,307.13)
2019			\$ (2,369,307.13)
Interest on Opening Balance		\$ 77,002.48	\$ (2,446,309.61)
Withdrawal Applied to Project Expenditures		\$ -	\$ (2,446,309.61)
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ 23,199.76	\$ (2,469,509.37)
Offsite Levy Receipts	\$ 21,357.82		\$ (2,448,151.55)
Other Receipts	\$ -		\$ (2,448,151.55)
Debenture Interest Expenditure		\$ -	\$ (2,448,151.55)
Interest on Project Expenditure		\$ 188.50	\$ (2,448,340.05)
Interest on Offsite Levy Receipts	\$ 106.79		\$ (2,448,233.26)
Interest on Other Receipts	\$ -		\$ (2,448,233.26)
Interest on Debenture Accrual		\$ -	\$ (2,448,233.26)
2020			\$ (2,448,233.26)
Interest on Opening Balance		\$ 79,567.58	\$ (2,527,800.84)
Withdrawal Applied to Project Expenditures		\$ -	\$ (2,527,800.84)
Other Receipts		\$ 21,145.67	\$ (2,548,946.52)
Offsite Levy Receipts	\$ 18,317.85		\$ (2,530,628.67)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ (2,530,628.67)
Debenture Interest Expenditure		\$ -	\$ (2,530,628.67)
Interest on Project Expenditure		\$ 171.81	\$ (2,530,800.48)
Interest on Offsite Levy Receipts	\$ 91.59		\$ (2,530,708.89)
Interest on Other Receipts	\$ -		\$ (2,530,708.89)
Interest on Debenture Accrual		\$ -	\$ (2,530,708.89)

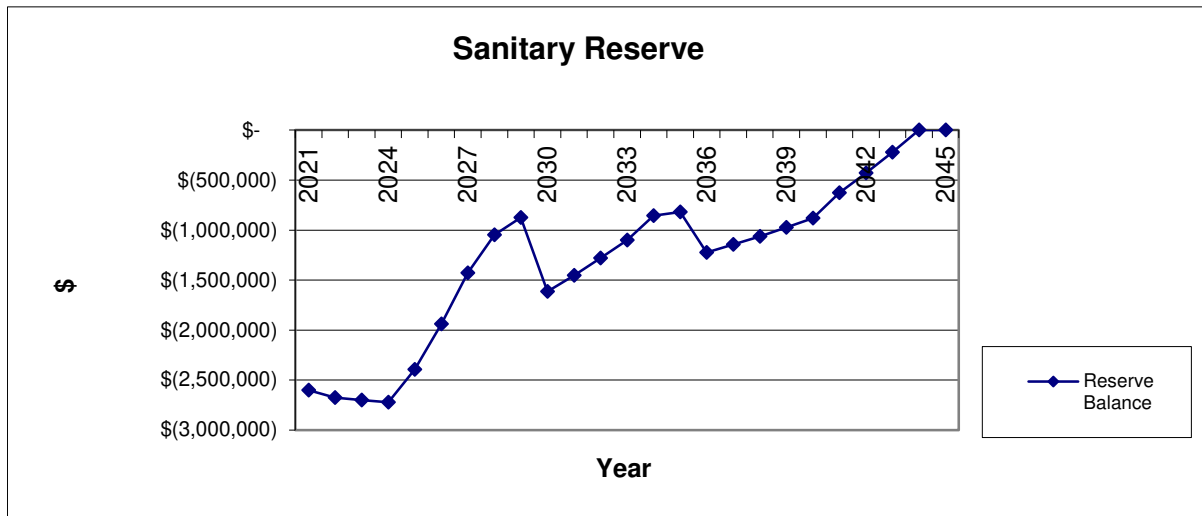
D9. Development and Sanitary Infrastructure Staging Impacts

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.

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.09%**¹⁰ interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00%**¹¹ 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 County, nor are they charged too little thereby placing an unequitable burden on taxpayers).

Anticipated Sanitary Offsite Levy Reserve Balances



¹⁰ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%. Historic charge rates used in the model are 3.00% (2013-2018), 3.25% (2019-2020).

¹¹ Historic earning rates used in the model are 2.00% (2013-2014), 1.00% (2015-2020).

Anticipated Sanitary Offsite Levy Reserve Balances

Year	Receipts	Opening Balance		Balance
		Expenditure	Interest	
				\$ (2,530,709)
2021	\$ -	\$ 17,861	\$ (53,265)	\$ (2,601,835)
2022	\$ -	\$ 18,218	\$ (54,759)	\$ (2,674,812)
2023	\$ 49,372	\$ 18,583	\$ (55,260)	\$ (2,699,283)
2024	\$ 50,854	\$ 19,140	\$ (55,752)	\$ (2,723,322)
2025	\$ 397,001	\$ 19,714	\$ (49,032)	\$ (2,395,067)
2026	\$ 516,438	\$ 20,306	\$ (39,688)	\$ (1,938,622)
2027	\$ 558,798	\$ 20,915	\$ (29,275)	\$ (1,430,014)
2028	\$ 412,885	\$ 10,771	\$ (21,483)	\$ (1,049,384)
2029	\$ 204,984	\$ 11,094	\$ (17,880)	\$ (873,374)
2030	\$ -	\$ 707,580	\$ (33,042)	\$ (1,613,996)
2031	\$ 191,758	\$ -	\$ (29,725)	\$ (1,451,963)
2032	\$ 197,510	\$ -	\$ (26,218)	\$ (1,280,671)
2033	\$ 203,436	\$ -	\$ (22,514)	\$ (1,099,750)
2034	\$ 261,715	\$ -	\$ (17,515)	\$ (855,550)
2035	\$ 53,741	\$ -	\$ (16,758)	\$ (818,566)
2036	\$ 55,354	\$ 435,645	\$ (25,056)	\$ (1,223,914)
2037	\$ 101,956	\$ -	\$ (23,449)	\$ (1,145,407)
2038	\$ 105,015	\$ -	\$ (21,744)	\$ (1,062,137)
2039	\$ 108,165	\$ -	\$ (19,938)	\$ (973,909)
2040	\$ 111,429	\$ -	\$ (18,026)	\$ (880,507)
2041	\$ 265,546	\$ -	\$ (12,853)	\$ (627,814)
2042	\$ 207,417	\$ -	\$ (8,786)	\$ (429,183)
2043	\$ 213,639	\$ -	\$ (4,505)	\$ (220,049)
2044	\$ 220,049	\$ -	\$ -	\$ (0)
2045	\$ -	\$ -	\$ -	\$ (0)

APPENDIX E: STORMWATER

E1. Stormwater Offsite Infrastructure

In order to support future growth, stormwater offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) future debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$3.78 million** as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff. It is important to note that these costs represent “gross” costs, of which only a portion will go to support development during the 25-year review period. The remainder of this section outlines how the “net” costs for development are determined.

Summary of Stormwater Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Future Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Storm Ditch Twp 552 (1)	\$ 292,938	\$ -	\$ -	\$ 292,938
2	Storm Ditch RR 225 (2)	\$ 86,119	\$ -	\$ 87,575	\$ 173,694
3	Storm Ditch Twp 552A (3)	\$ -	\$ -	\$ 275,704	\$ 275,704
4	Storm Ditch Twp 552A (4)	\$ -	\$ -	\$ 413,556	\$ 413,556
5	Storm Ditch Twp 553A (5)	\$ -	\$ -	\$ 413,556	\$ 413,556
6	Storm Ditch Twp 553 (6)	\$ -	\$ -	\$ 413,556	\$ 413,556
7	Storm Ditch Twp 553 (7)	\$ -	\$ -	\$ 275,704	\$ 275,704
8	Storm Ditch Twp 553 (8)	\$ -	\$ -	\$ 275,704	\$ 275,704
9	Storm Ditch Hwy 825 (9)	\$ -	\$ -	\$ 171,664	\$ 171,664
10	Storm Ditch Twp 554 (10)	\$ -	\$ -	\$ 171,664	\$ 171,664
11	Storm Ditch Twp 554 (11)	\$ -	\$ -	\$ 171,664	\$ 171,664
12	Storm Ditch Twp 554 (12)	\$ -	\$ -	\$ 171,664	\$ 171,664
13	Storm Ditch Twp 554 (13)	\$ -	\$ -	\$ 171,664	\$ 171,664
14	Storm Ditch RR 230 (14)	\$ -	\$ -	\$ 82,499	\$ 82,499
15	Storm Ditch Hwy 825 (15)	\$ -	\$ -	\$ 309,371	\$ 309,371
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ -
		\$ 379,057	\$ -	\$ 3,405,545	\$ 3,784,602

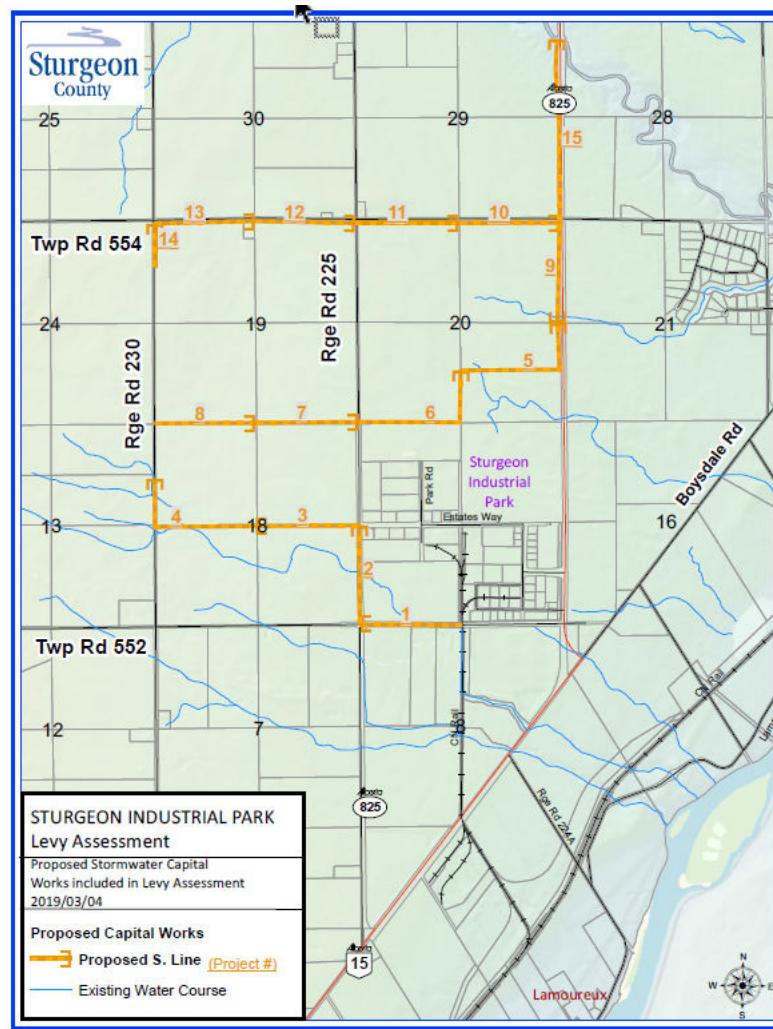
*Past expenditures include past financing expenditures (interest) if any.

**Costs estimates provided by County staff.

***Estimates include engineering and contingencies.

****Transfers or contributions stemming from Development Agreements were set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas (see *Section E5*).

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



E2. Stormwater Offsite Infrastructure Grants & Contributions to Date

The MGA enables the County to allocate the costs of offsite infrastructure to development, other than those costs that have been provided by way of special ear-marked grant or contribution (i.e., contributed infrastructure). Sturgeon County has/will receive approximately **\$0.29 million** in special ear-marked grants and contributions for stormwater offsite levy infrastructure as shown in the table below (note, if the County receives other ear-marked grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$3.50 million**.

Special Grants and Contributions for Stormwater Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants (Historic & Future)	Developer Agreement Contributions (Historic & Future)	Other Contributions (Historic & Future)	Reduced Project Estimated Cost
1	Storm Ditch Twp 552 (1)	\$ 292,938	\$ -	\$ -	\$ -	\$ 292,938
2	Storm Ditch RR 225 (2)	\$ 173,694	\$ -	\$ -	\$ -	\$ 173,694
3	Storm Ditch Twp 552A (3)	\$ 275,704	\$ -	\$ -	\$ -	\$ 275,704
4	Storm Ditch Twp 552A (4)	\$ 413,556	\$ -	\$ -	\$ -	\$ 413,556
5	Storm Ditch Twp 553A (5)	\$ 413,556	\$ -	\$ -	\$ -	\$ 413,556
6	Storm Ditch Twp 553 (6)	\$ 413,556	\$ -	\$ -	\$ -	\$ 413,556
7	Storm Ditch Twp 553 (7)	\$ 275,704	\$ -	\$ -	\$ -	\$ 275,704
8	Storm Ditch Twp 553 (8)	\$ 275,704	\$ -	\$ -	\$ -	\$ 275,704
9	Storm Ditch Hwy 825 (9)	\$ 171,664	\$ -	\$ -	\$ -	\$ 171,664
10	Storm Ditch Twp 554 (10)	\$ 171,664	\$ -	\$ -	\$ -	\$ 171,664
11	Storm Ditch Twp 554 (11)	\$ 171,664	\$ -	\$ -	\$ -	\$ 171,664
12	Storm Ditch Twp 554 (12)	\$ 171,664	\$ -	\$ -	\$ -	\$ 171,664
13	Storm Ditch Twp 554 (13)	\$ 171,664	\$ -	\$ -	\$ -	\$ 171,664
14	Storm Ditch RR 230 (14)	\$ 82,499	\$ -	\$ -	\$ -	\$ 82,499
15	Storm Ditch Hwy 825 (15)	\$ 309,371	\$ -	\$ -	\$ -	\$ 309,371
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ 286,965	\$ (286,965)
		\$ 3,784,602	\$ -	\$ -	\$ 286,965	\$ 3,497,637

E3. Year of Construction

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 County 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 County’s annual rate/bylaw updates.

Forecast Year of Construction

Item	Project Description	Construction Start Year
1	Storm Ditch Twp 552 (1)	2012
2	Storm Ditch RR 225 (2)	2013
3	Storm Ditch Twp 552A (3)	2029
4	Storm Ditch Twp 552A (4)	2034
5	Storm Ditch Twp 553A (5)	2025
6	Storm Ditch Twp 553 (6)	2025
7	Storm Ditch Twp 553 (7)	2050
8	Storm Ditch Twp 553 (8)	2050
9	Storm Ditch Hwy 825 (9)	2050
10	Storm Ditch Twp 554 (10)	2050
11	Storm Ditch Twp 554 (11)	2050
12	Storm Ditch Twp 554 (12)	2050
13	Storm Ditch Twp 554 (13)	2050
14	Storm Ditch RR 230 (14)	2050
15	Storm Ditch Hwy 825 (15)	2050

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

**Project costs are inflated by 2% per annum to 2022 and 3% per annum thereafter to the year of construction.

E4. Stormwater Offsite Infrastructure Benefiting Parties

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

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

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

Allocation of Stormwater Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Storm Ditch Twp 552 (1)	\$ 292,938			0.0%	100.0%
2	Storm Ditch RR 225 (2)	\$ 173,694			0.0%	100.0%
3	Storm Ditch Twp 552A (3)	\$ 275,704			32.0%	68.0%
4	Storm Ditch Twp 552A (4)	\$ 413,556			52.0%	48.0%
5	Storm Ditch Twp 553A (5)	\$ 413,556			16.0%	84.0%
6	Storm Ditch Twp 553 (6)	\$ 413,556			16.0%	84.0%
7	Storm Ditch Twp 553 (7)	\$ 275,704			100.0%	0.0%
8	Storm Ditch Twp 553 (8)	\$ 275,704			100.0%	0.0%
9	Storm Ditch Hwy 825 (9)	\$ 171,664			100.0%	0.0%
10	Storm Ditch Twp 554 (10)	\$ 171,664			100.0%	0.0%
11	Storm Ditch Twp 554 (11)	\$ 171,664			100.0%	0.0%
12	Storm Ditch Twp 554 (12)	\$ 171,664			100.0%	0.0%
13	Storm Ditch Twp 554 (13)	\$ 171,664			100.0%	0.0%
14	Storm Ditch RR 230 (14)	\$ 82,499			100.0%	0.0%
15	Storm Ditch Hwy 825 (15)	\$ 309,371			100.0%	0.0%
100	Contributions collected under old development agreements	\$ (286,965)			0.0%	100.0%
		\$ 3,497,637				

*Allocations were determined by County staff.

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

E5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of **\$1.26 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. County staff have advised that **\$0.30 million** in stormwater levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of **\$0.96 million**.

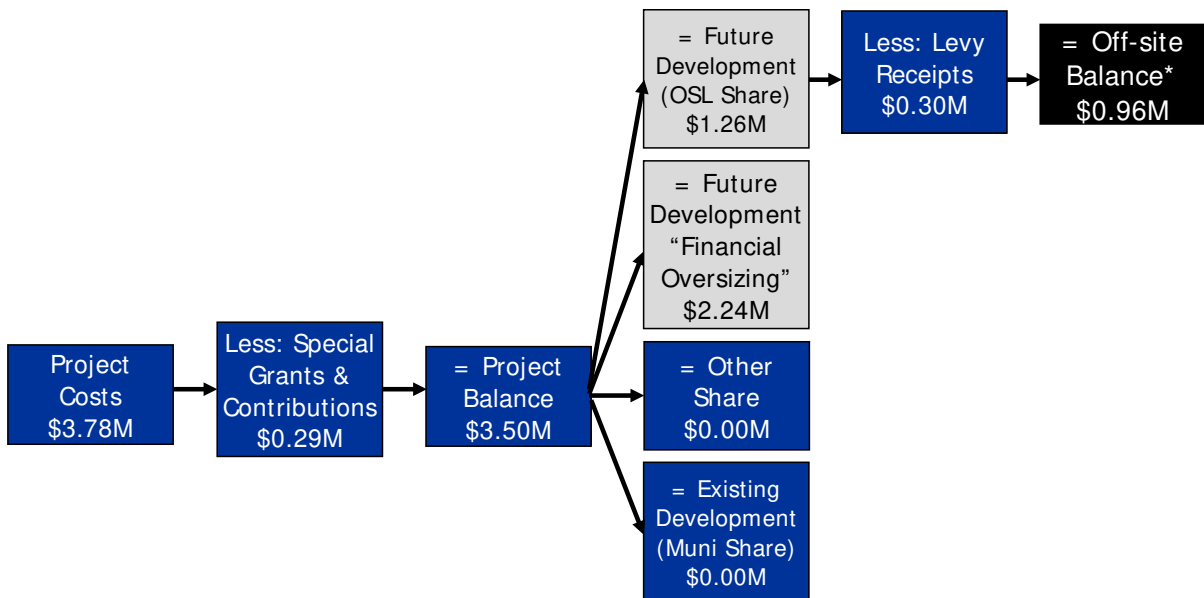
Offsite Levy Funds Applied to Date

Item	Project Description	OSL / Developer Cost	Offsite Levy Funds Collected	Adjusted Developer (Levy) Cost
1	Storm Ditch Twp 552 (1)	\$ 292,938	\$ (136,801)	\$ 429,740
2	Storm Ditch RR 225 (2)	\$ 173,694	\$ 520,611	\$ (346,917)
3	Storm Ditch Twp 552A (3)	\$ 187,479	\$ 162,612	\$ 24,867
4	Storm Ditch Twp 552A (4)	\$ 198,507	\$ (243,652)	\$ 442,159
5	Storm Ditch Twp 553A (5)	\$ 347,387	\$ -	\$ 347,387
6	Storm Ditch Twp 553 (6)	\$ 347,387	\$ -	\$ 347,387
7	Storm Ditch Twp 553 (7)	\$ -	\$ -	\$ -
8	Storm Ditch Twp 553 (8)	\$ -	\$ -	\$ -
9	Storm Ditch Hwy 825 (9)	\$ -	\$ -	\$ -
10	Storm Ditch Twp 554 (10)	\$ -	\$ -	\$ -
11	Storm Ditch Twp 554 (11)	\$ -	\$ -	\$ -
12	Storm Ditch Twp 554 (12)	\$ -	\$ -	\$ -
13	Storm Ditch Twp 554 (13)	\$ -	\$ -	\$ -
14	Storm Ditch RR 230 (14)	\$ -	\$ -	\$ -
15	Storm Ditch Hwy 825 (15)	\$ -	\$ -	\$ -
100	Contributions collected under old development agreements	\$ (286,965)	\$ -	\$ (286,965)
		\$ 1,260,426	\$ 302,769	\$ 957,657

E6. Summary of Stormwater Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for stormwater infrastructure that forms the basis of the rate is **\$0.96**. The cost allocations to each benefitting party are based on the benefitting percentages shown in previous section. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Stormwater Offsite Levy Costs



E8. Reserve Balance

At December 31st, 2020 the stormwater reserve balance was in a surplus of **\$232,505.10**. This amount takes into consideration expenditures and front-ending repayments up to end-2020. This balance assumes that cash in the reserve below this amount is topped-up.

Stormwater Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Levies Collected to Dec 31, 2012	\$ 370,394.62		\$ 370,394.62
Levies Applied to Project Expenditures to Dec 31, 2012		\$ 59,077.28	\$ 311,317.34
Account Balance Per County GL Dec 31, 2012			\$ 311,317.34
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ -	\$ 311,317.34
Closing Balance Dec 31, 2012			\$ 311,317.34
2013			\$ 311,317.34
Interest on Opening Balance	\$ 6,226.35		\$ 317,543.69
Withdrawal Applied to Project Expenditures		\$ 259,952.07	\$ 57,591.62
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ -	\$ 57,591.62
Offsite Levy Receipts	\$ 96,749.34		\$ 154,340.96
Other Receipts	\$ 14,359.91		\$ 168,700.87
Debenture Interest Expenditure		\$ -	\$ 168,700.87
Interest on Project Expenditure		\$ 1,949.64	\$ 166,751.23
Interest on Offsite Levy Receipts	\$ 967.49		\$ 167,718.72
Interest on Other Receipts	\$ -		\$ 167,718.72
Interest on Debenture Accrual		\$ -	\$ 167,718.72
2014			\$ 167,718.72
Interest on Opening Balance	\$ 3,354.37		\$ 171,073.09
Withdrawal Applied to Project Expenditures		\$ 60,027.89	\$ 111,045.20
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ -	\$ 111,045.20
Offsite Levy Receipts	\$ 52,389.01		\$ 163,434.21
Other Receipts	\$ -		\$ 163,434.21
Debenture Interest Expenditure		\$ -	\$ 163,434.21
Interest on Project Expenditure		\$ 450.21	\$ 162,984.00
Interest on Offsite Levy Receipts	\$ 523.89		\$ 163,507.89
Interest on Other Receipts	\$ -		\$ 163,507.89
Interest on Debenture Accrual		\$ -	\$ 163,507.89
2015			\$ 163,507.89
Interest on Opening Balance	\$ 1,635.08		\$ 165,142.97
Withdrawal Applied to Project Expenditures		\$ -	\$ 165,142.97
Other Receipts		\$ -	\$ 165,142.97
Offsite Levy Receipts	\$ 53,770.51		\$ 218,913.48
Other Receipts	\$ -		\$ 218,913.48
Debenture Interest Expenditure		\$ -	\$ 218,913.48
Interest on Project Expenditure		\$ -	\$ 218,913.48
Interest on Offsite Levy Receipts	\$ 268.85		\$ 219,182.34
Interest on Other Receipts	\$ -		\$ 219,182.34
Interest on Debenture Accrual		\$ -	\$ 219,182.34

2016			\$ 219,182.34
Interest on Opening Balance	\$ 2,191.82		\$ 221,374.16
Withdrawal Applied to Project Expenditures		\$ -	\$ 221,374.16
Other Receipts		\$ -	\$ 221,374.16
Offsite Levy Receipts	\$ -		\$ 221,374.16
Other Receipts	\$ -		\$ 221,374.16
Debenture Interest Expenditure		\$ -	\$ 221,374.16
Interest on Project Expenditure		\$ -	\$ 221,374.16
Interest on Offsite Levy Receipts	\$ -		\$ 221,374.16
Interest on Other Receipts	\$ -		\$ 221,374.16
Interest on Debenture Accrual		\$ -	\$ 221,374.16
2017			\$ 221,374.16
Interest on Opening Balance	\$ 2,213.74		\$ 223,587.90
Withdrawal Applied to Project Expenditures		\$ -	\$ 223,587.90
Other Receipts		\$ -	\$ 223,587.90
Offsite Levy Receipts	\$ 1,965.00		\$ 225,552.90
Interest on Other Receipts	\$ -		\$ 225,552.90
Debenture Interest Expenditure		\$ -	\$ 225,552.90
Interest on Project Expenditure		\$ -	\$ 225,552.90
Interest on Offsite Levy Receipts	\$ 9.83		\$ 225,562.73
Interest on Other Receipts	\$ -		\$ 225,562.73
Interest on Debenture Accrual		\$ -	\$ 225,562.73
2018			\$ 225,562.73
Interest on Opening Balance	\$ 2,255.63		\$ 227,818.35
Withdrawal Applied to Project Expenditures		\$ -	\$ 227,818.35
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ -	\$ 227,818.35
Offsite Levy Receipts	\$ -		\$ 227,818.35
Other Receipts	\$ -		\$ 227,818.35
Debenture Interest Expenditure		\$ -	\$ 227,818.35
Interest on Project Expenditure		\$ -	\$ 227,818.35
Interest on Offsite Levy Receipts	\$ -		\$ 227,818.35
Interest on Other Receipts	\$ -		\$ 227,818.35
Interest on Debenture Accrual		\$ -	\$ 227,818.35
2019			\$ 227,818.35
Interest on Opening Balance	\$ 2,278.18		\$ 230,096.54
Withdrawal Applied to Project Expenditures		\$ -	\$ 230,096.54
OSL Share of Expenditures in Addition to Allocations (Front-ending)		\$ -	\$ 230,096.54
Offsite Levy Receipts	\$ 106.00		\$ 230,202.54
Other Receipts	\$ -		\$ 230,202.54
Debenture Interest Expenditure		\$ -	\$ 230,202.54
Interest on Project Expenditure		\$ -	\$ 230,202.54
Interest on Offsite Levy Receipts	\$ 0.53		\$ 230,203.07
Interest on Other Receipts	\$ -		\$ 230,203.07
Interest on Debenture Accrual		\$ -	\$ 230,203.07
2020			\$ 230,203.07
Interest on Opening Balance	\$ 2,302.03		\$ 232,505.10
Withdrawal Applied to Project Expenditures		\$ -	\$ 232,505.10
Other Receipts		\$ -	\$ 232,505.10
Offsite Levy Receipts	\$ -		\$ 232,505.10
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$ -		\$ 232,505.10
Debenture Interest Expenditure		\$ -	\$ 232,505.10
Interest on Project Expenditure		\$ -	\$ 232,505.10
Interest on Offsite Levy Receipts	\$ -		\$ 232,505.10
Interest on Other Receipts	\$ -		\$ 232,505.10
Interest on Debenture Accrual		\$ -	\$ 232,505.10

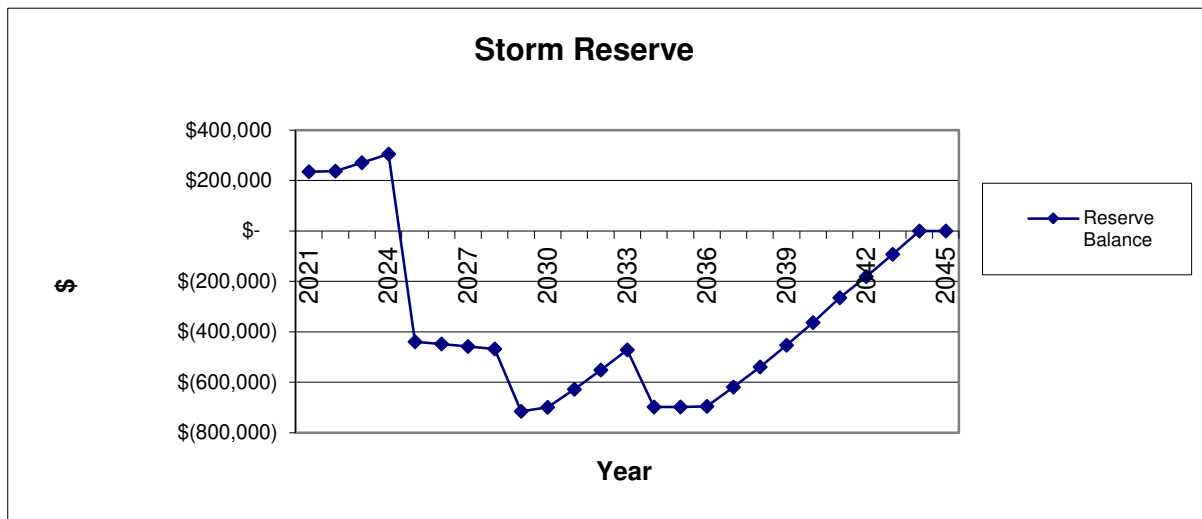
E9. Development and Stormwater Infrastructure Staging Impacts

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

To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **2.09%**¹² interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00%**¹³ 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 County, nor are they charged too little thereby placing an unequitable burden on taxpayers)¹⁴.

Anticipated Stormwater Offsite Levy Reserve Balances



¹² The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~2.09%. Historic charge rates used in the model are 3.00% (2013-2018), 3.25% (2019-2020).

¹³ Historic earning rates used in the model are 2.00% (2013-2014), 1.00% (2015-2020).

¹⁴ In this case, the stormwater account cannot reach zero at the end of the 25-year review period because there are no projects within the 25-year review period and, therefore, no rates currently.

Anticipated Stormwater Offsite Levy Reserve Balances

		Opening Balance		\$ 232,505
Year	Receipts	Expenditure	Interest	Balance
2021	\$ -	\$ -	\$ 2,325	\$ 234,830
2022	\$ -	\$ -	\$ 2,348	\$ 237,178
2023	\$ 30,347	\$ -	\$ 2,675	\$ 270,200
2024	\$ 31,257	\$ -	\$ 3,015	\$ 304,472
2025	\$ 32,211	\$ 766,864	\$ (8,991)	\$ (439,172)
2026	\$ -	\$ -	\$ (9,179)	\$ (448,351)
2027	\$ -	\$ -	\$ (9,371)	\$ (457,721)
2028	\$ -	\$ -	\$ (9,566)	\$ (467,287)
2029	\$ -	\$ 232,903	\$ (14,634)	\$ (714,825)
2030	\$ 29,659	\$ -	\$ (14,320)	\$ (699,486)
2031	\$ 84,603	\$ -	\$ (12,851)	\$ (627,734)
2032	\$ 87,141	\$ -	\$ (11,298)	\$ (551,892)
2033	\$ 89,755	\$ -	\$ (9,659)	\$ (471,796)
2034	\$ 73,774	\$ 285,881	\$ (14,294)	\$ (698,197)
2035	\$ 15,149	\$ -	\$ (14,276)	\$ (697,323)
2036	\$ 15,603	\$ -	\$ (14,248)	\$ (695,968)
2037	\$ 89,218	\$ -	\$ (12,681)	\$ (619,431)
2038	\$ 91,894	\$ -	\$ (11,026)	\$ (538,563)
2039	\$ 94,651	\$ -	\$ (9,278)	\$ (453,190)
2040	\$ 97,520	\$ -	\$ (7,433)	\$ (363,103)
2041	\$ 103,197	\$ -	\$ (5,432)	\$ (265,337)
2042	\$ 87,662	\$ -	\$ (3,713)	\$ (181,389)
2043	\$ 90,292	\$ -	\$ (1,904)	\$ (93,001)
2044	\$ 93,001	\$ -	\$ (0)	\$ (0)
2045	\$ -	\$ -	\$ (0)	\$ (0)

APPENDIX F: OFFSITE INFRASTRUCTURE DEFINITIONS

F1. Roadways

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

Arterial Roadways are typically designed as free flowing, with controlled intersection spacing and providing connectivity to the Provincial highway network therefore, Arterials are considered a benefit to the County at large. The cost of such facilities is then assessed proportionately against all benefiting lands through an offsite levy charge.

Collector roads are intended to address interregional travel demands, as secondary connections to the Provincial highway network and origin – destinations. These roadways are typically the second highest volume of traffic which is usually between 200 vehicles per day and 500 vehicles per day and are typically paved. Collectors are considered a benefit to the County at large. The cost of such facilities is then assessed proportionately against all benefiting lands through an offsite levy charge.

Local roads are any roadway which is not classified as either an Arterial, or Collector. Local roads within new development area are constructed by developers, at their cost, in conjunction with the developments.

F2. Water

Sturgeon County's philosophy regarding its waterworks system improvements is that development is responsible, at their cost, for the construction of all new distribution mains up to and including 300 mm diameter in size. Primary feeder mains (water mains larger than 300 mm diameter), treated water, storage reservoirs, pumping facilities and water quality monitoring stations benefit the entire water distribution system and thus, the cost of such facilities is then assessed proportionately against all benefiting lands through an offsite levy charge.

Capital improvements to the water supply system are the responsibility of EPCOR. The cost of such improvements are assessed proportionately against the County through the Commission's water utility rate structure and these costs are not included in the County's offsite levy charge.

F3. Sanitary

The sanitary sewage collection system in Sturgeon County provides wastewater servicing to its residential and non-residential customers through local collection, conveyance, and treatment via wastewater lagoons, or through the Alberta Capital Region Wastewater Commission (ACRWC) infrastructure. The communities / locations serviced by the ACRWC include: Cardiff, Sturgeon Valley, Sturgeon Industrial Park, and the Alberta Industrial Heartland.

Sanitary Sewer systems typically have a hierarchical classification based primarily upon the

size of diameter of pipe and the area they serve. In the case of the sanitary sewer system in Sturgeon County, laterals (locals) are typically 200 mm and 250 mm diameter in size, collectors are 300 mm and 375 mm diameter in size, and trunks are sewer pipe systems greater than 375 mm in diameter.

Trunks, forcemains, and lift stations, benefit the entire sanitary collection system. The cost of such facilities is then assessed proportionately against all benefiting lands through an offsite levy charge.

Development shall be fully responsible for the construction of lateral and collectors for the sanitary sewer system at their entire cost.

Capital improvements to the Regional Treatment Plant and Transmission Line are the responsibility of the ACRWC of which Sturgeon County is a member. The cost of such capital improvements are assessed proportionately against Sturgeon County through the ACRWC sewage utility rate structure and are not included in the Sturgeon County offsite levy charge.

F4. Stormwater

Sturgeon County's storm drainage networks primarily consists of a system of drainage ditches, swales and culverts. The networks also includes sewer pipes in some residential subdivisions, and a few stormwater management facilities. Most drainage from the Sturgeon Valley flows into the Sturgeon River, and the majority of the existing residential developments rely on road ditches, drainage channels and natural swales to convey runoff to the River.

Storm drainage networks have a hierarchical classification based primarily upon the size of diameter of pipe. Sturgeon County storm drainage networks consist of laterals between 300 mm and 1050 mm diameter in size which discharges into a trunk line. Trunk lines are greater than 1200 mm in diameter (or equivalent to in capacity, e.g. 2 x 600 mm) and discharge into an outfall. Outfalls can be any structure (man-made or natural) where stormwater is discharged into a river.

Trunks, forcemains, lift stations, and outfalls benefit the entire collection system and the cost of such facilities are assessed proportionately against all benefiting land through an offsite levy charge.

Development shall be fully responsible for the construction of laterals for the storm sewer system at their entire cost.

For rural cross-sections that utilize overland ditching, drainage corridors will be established and the cost of certain rural ditches will be funded by offsite levy charge. Development shall be fully responsible for the construction of other ditches, ponds, etc for the storm sewer system at their entire cost.

APPENDIX G: COMPARISON OF RATES

The table below compares the new Sturgeon Industrial Park offsite levy rates to non-residential rates in other municipalities.

Municipality / Area	Average Per Ha.
City of Fort Saskatchewan – LMIA* (roads, water, sewer, storm)	\$46,100 (2017)
Sturgeon Industrial Park* (roads, water, sewer,)	\$52,462
Strathcona County – Industrial Area 1* (roads, water, sewer, storm)	\$63,000 (2020)
City of Spruce Grove* (roads, water, sewer)	\$83,000 (2020)
City of Beaumont* Industrial (roads, water, sewer)	\$80,900 - \$116,390 (2019)
Parkland County – Acheson / Fifth Meridian*	\$92,500 (2018)
Leduc County* - Nisku (roads, water, sewer))	\$109,000 (2017)
Red Deer County (Gasoline Alley) (roads, water, sewer, storm)	\$220,000 (2017)
Strathcona County – Industrial Area 2* (roads, water, sewer, storm)	\$250,000 (2020)
City of St. Albert – Campbell Business Park* (roads, water, sewer, storm)	\$250,000 (2020)
City of Edmonton (roads, water, sewer, storm)	+\$300,000 (2020)
City of Calgary (roads, water, sewer, storm)	+\$350,000 (2020)

*CORVUS clients

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