

Sturgeon Industrial Park: 2019 Offsite Levy Update

May 8th, 2019

Prepared by:

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May 8th, 2019

Chris Pullen Senior Infrastructure Engineering Officer Sturgeon County 9613 – 100 Street Morinville, Alberta T8R 1L9

RE: Sturgeon Industrial Park 2019 Offsite Levy Update

Chris:

Enclosed is our report in support of the Sturgeon Industrial Park 2019 offsite levy rate update.

I look forward to discussing the results with Council and Administration. In the meantime, if you have any questions do not hesitate to contact me.

Yours truly,

Greg Weiss President

1 DOCUMENT INFORMATION

Version Number	Revision Date	Summary of Changes and Author
1.0	February 12 th , 2019	DRAFT: Created by CORVUS Business Advisors.
2.0	February 21 st , 2019	FINAL
3.0	April 9 th , 2019	FINAL: Reviewed by Finance
4.0	May 8 th , 2019	FINAL

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3 INTRODUCTION

3.1 Introduction

Bylaw 1363-16, established by Sturgeon County ("the County") in 2016 defines offsite levy charges pertaining to roads, water, sanitary, and drainage offsite infrastructure in the Sturgeon Industrial Park ("SIP"). The County wishes to update this bylaw, amending offsite infrastructure included in the bylaw in alignment with the County's 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 SIP.

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:

- Provision of the new CORVUS offsite levy model, including 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 roads, water, sanitary, and drainage levy rates.
- Presentation of levies and background information to Administration and Council.
- Provision of training to staff.

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, 2018 was established, and so the review period stems from **2019 to 2043**. 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

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.

cut-off date, all financial details are estimates. When the County completes its next rate update, information from January 1st, 2019 up to the new cut-off date will be converted from estimates to actuals.

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 2043 will gradually be included in rates.

4 KEY FINDINGS

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

Offsite Infrastructure Costs. Offsite infrastructure costs to be included in the offsite levy bylaw total approximately **\$121.46 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, new development, other municipalities etc.), financing provided by way of special ear-marked grants and other contributions are deducted from offsite infrastructure costs. For this review, the County has identified approximately \$7.99 million in grants and contributions. An overview of 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 **\$19.24 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 \$94.23 million (\$57.22 million + \$37.01 million) and is based on the allocations shown in Appendices B4, C4, D4, and E4. However, \$57.22 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 E3.²

Of the **\$94.23 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 **\$37.01 million**, as shown in the table below. A complete summary of offsite infrastructure net cost "flow-thru" is provided in Appendices B6, C6, D6, and E6.

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² Previously, financial oversizing was limited to only those projects whose start year was beyond the 25-year review period. Now, financial oversizing also includes a pro-rating of all costs based on the anticipated start year of projects.

Infrastructure	ecial Grants ontributions	uni Share of Costs	 Other akeholders' are of Costs	Ве	eveloper Cost eyond 25 Yrs (Financial Oversizing)	Developer Costs (In Rates)	7	Fotal Costs
Transportation	\$ 7,903,297	\$ 13,784,041	\$ -	\$	35,038,462	\$ 19,443,697	\$	76,169,496
Water	\$ 50,500	\$ 5,452,087	\$ -	\$	12,575,265	\$ 12,408,955	\$	30,486,807
Sanitary	\$ 23,799	\$ -	\$ -	\$	7,129,009	\$ 3,878,211	\$	11,031,020
Stormwater	\$ 14,360	\$ -	\$ -	\$	2,478,874	\$ 1,276,409	\$	3,769,644
Total	\$ 7,991,956	\$ 19,236,128	\$ -	\$	57,221,610	\$ 37,007,273	\$	121,456,967

Summary of Infrastructure Costs & Allocations

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, 2018, the County has collected approximately **\$7.77 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	\$	4,755,470
Water	\$	1,388,076
Sanitary	\$	1,051,116
Stormwater	\$	571,954
Total	\$	7,766,617

Offsite Levy Areas and Forecast Development. To facilitate the allocation of infrastructure costs to those lands that benefit from the infrastructure, the SIP 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 undercollection 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 **603 ha.** over the 25-year review period (the land development forecast is shown in Appendix A). This is an increase of approximately **3%** 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 via three reserves/accounts (i.e., one reserve/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.). During the project, several amendments to historical information were identified. Accordingly, the County's offsite levy reserve balances require amendment as discussed further below and shown in Appendices B8, C8, D8, E8 and G.

Interest. Offsite levy reserve/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 the project, several amendments to interest calculations were identified. An overview of reserve/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, E9 and G.

Front-ending Approach. Front-ending is an extremely important concept that underpins rigorous management of offsite levies. Front-ending represents debts 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 <u>in addition to that portion of the project which benefits future development</u> 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.

When a <u>FIFO</u> approach is used, claims are reimbursed based on the order they are incurred. For example, Developer A³ front-ends 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 FIFO approach, all offsite levy collections flow entirely to Developer A until it is fully repaid before any levy collections flow to Developer B. As a result, in could take many years before Developer B is fully repaid. Developer C, if it chooses to front-end in 2019, would not see any claim reimbursement until both Developer A and Developer B were repaid. This model is good for earlier claimants as they will be reimbursed before future claimants. However, use of this model acts as a disincentive for developers (like Developer C) to front-end in the future (why front-end if there is no chance of reimbursement in a reasonable time-frame?). As a result, the FIFO approach can create: (a) stagnation of development, and (b) increased pressure on the municipality (i.e., taxpayers) to front-end. Accordingly, the FIFO approach is not recommended.

When the AOC approach is used, claimants share distributions based on their proportionate

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³ A municipality can also be a front-ending party (and claimant).

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 repaid⁴. 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 repaid⁵. This approach is preferred, as it ensures regular positive cash flow to all claimants, and therefore no disincentive to future front-ending. In 2017, the County adopted the AOC approach as part of its broader offsite levy policy framework.

In the SIP, 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 2018, the <u>transportation</u> account reflected a surplus balance of \$338,973. However, after adjustments and front-ending claim repayments, the new balance in the transportation account should be amended to a deficit of approximately \$(2,307,006)⁶ at end 2018. A complete reconciliation of the transportation account balance is provided in Appendices B8 and G.

At end 2018, the <u>water</u> account reflected a surplus balance of **\$0**. However, after adjustments and front-ending claim repayments, the new balance in the water account should be amended to a deficit of approximately **\$(4,926,443)**⁷ at end 2018. A complete reconciliation of the water account balance is provided in Appendices C8 and G.

At end 2018, the <u>sanitary</u> account reflected a surplus balance of **\$0**. However, after adjustments and front-ending claim repayments, the new balance in the sanitary account should be amended to a deficit of approximately **\$(2,347,045)**⁸ at end 2018. A complete reconciliation of the sanitary account balance is provided in Appendices D8 and G.

At end 2018, the <u>stormwater</u> account reflected a surplus balance of approximately **\$176,997**. However, after adjustments and front-ending claim repayments, the new balance in the stormwater account should be amended to a surplus of approximately **\$196,627** at end 2018. A complete reconciliation of the stormwater account balance is provided in Appendices E8 and G.

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⁴ \$1,000,000 / (\$1,000,000 + \$500,000) = **66.6%**. \$500,000 / (\$1,000,000 + \$500,000) = **33.3%**.

⁵ \$1,000,000 / (\$1,000,000 + \$500,000 + \$500,000) = **50%**. \$500,000 / (\$1,000,000 + \$500,000 + \$500,000) = **25%**.

⁶ Unofficial internal County documentation shows a transportation front-ending balance of \$(1,997,285).

⁷ Unofficial internal County documentation shows a water front-ending balance of \$(4,015,597).

⁸ Unofficial internal County documentation shows a sanitary front-ending balance of \$(1,957,471).

5 RATE UPDATES

For future development to pay for its share of the **\$121.46 million** offsite infrastructure costs contained in the County's capital plans for the SIP, rates are approximately **\$53,291** per net hectare on a weighted average basis, as shown in the tables below.

Since the last update, rates have decreased from an average of \$80,668 per net hectare to \$53,291 per net hectare. The primary reason for the decrease in rates is the decrease in infrastructure costs allocated to development within the 25-year review period from \$56.49 million to \$37.07 million. This decrease stems from: (1) the allocation of certain costs to Alberta Transportation; and (2) the enhanced use of "financial oversizing" to limit the costs included in rates to only those which fall within the 25-year review period. In both cases, a decrease in costs means lower rates all other things being equal.

Offsite Levy Rates: High, Low, & Averages9

	_	sportation harges	Wat	er Charges	Sanitary Charges	Sto	rm Charges	Total			
High	\$	26,767	\$	26,600	\$ 15,138	\$	6,550	\$	75,055		
Low	\$	26,767	\$	9,920	\$ -	\$	-	\$	36,688		
Weighted Average	\$	26,767	\$	20,087	\$ 5,382	\$	1,054	\$	53,291		

Summary of Offsite Levy Rates by Area

Area #	Transporta Levies	tion	Water Levies	Sanitary Levies		Stormwater Levies	Total
1.0	\$ 26,	,767	\$ 20,673	\$ -	\$	6,550	\$ 53,990
2.0	\$ 26,		\$ 20,673	\$ 3,050	\$	6,550	\$ 57,040
3.0			\$ 20,673	\$ 3,050	\$	6,550	\$ 57,040
4.0			\$ 20,673	\$ -	\$	6,550	\$ 53,990
5.0		,	\$ 20,673	\$ •	\$	6,550	\$ 53,990
6.0			\$ 20,673	\$ •	(\$	-	\$ 47,440
7.0			\$ 20,673	\$ 3,050	\$	6,550	\$ 57,040
8.0			\$ 20,673	\$ 8,929	\$	6,550	\$ 62,918
9.0	\$ 26	,767	\$ 20,673	\$ 5,837	\$	6,550	\$ 59,827
10.0			\$ 21,073	\$ 5,837	\$	100	\$ 53,777
11.0		,767	\$ 21,073	\$ 5,837	\$	100	\$ 53,777
12.0		,767	\$ 18,782	\$ 3,435	\$	100	\$ 49,085
13.0	\$ 26		\$ 18,782	\$	\$	-	\$ 45,550
14.0	\$ 26		\$ 18,782	\$ -	\$	-	\$ 45,550
15.0	\$ 26	,767	\$ 9,920	\$ 3,435	\$	100	\$ 40,223
16.0	\$ 26	,767	\$ 12,211	\$ 5,837	\$	100	\$ 44,915
17.0	\$ 26,	,767	\$ 12,211	\$ 5,837	\$	100	\$ 44,915
18.0	\$ 26,	,767	\$ 26,600	\$ -	\$	100	\$ 53,467
19.0		,767	\$ 26,600	\$ -	\$	-	\$ 53,367
20.0	\$ 26	,767	\$ 26,600	\$ 10,552	\$	-	\$ 63,919
21.0			\$ 26,600	\$ 10,552	\$	-	\$ 63,919
22.0			\$ 26,600	\$ 10,552	\$	-	\$ 63,919
23.0		,767	\$ 26,600	\$ 10,552	\$	-	\$ 63,919
24.0		,767	\$ 26,600	\$ 9,713	\$	-	\$ 63,080
25.0	\$ 26		\$ 26,600	\$ 9,713	\$	-	\$ 63,080
26.0		,767	\$ 26,600	\$ 9,713	\$	-	\$ 63,080
27.0	\$ 26	,767	\$ 26,600	\$ 15,138	\$	-	\$ 68,506
28.0	\$ 26	,767	\$ 26,600	\$ -	\$	-	\$ 53,367
29.0	\$ 26	,767	\$ 26,600	\$ -	\$	-	\$ 53,367

6 RECOMMENDATIONS

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

⁹ Highs, Lows, and Averages are shown for information purposes only. Developers pay the actual rate applicable to their specific development area and development type.

recommends the following:

- 1. <u>Amend the balances</u> of each offsite levy account as reflected in Appendices B8/G-transportation: \$(2,307,006)¹⁰, C8/G-water: \$(4,926,443)¹¹, D8/G-sanitary: \$(2,347,045)¹², and E8/G-stormwater: \$196,628; and in so doing, withdraw (or deposit) excess funds and repay front-ending claimants.
- 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.
- Establish <u>sub-ledgers</u> for each account to track amounts owed to each front-ending party. In so doing, ensure the same interest charging rate that is reflected in the offsite levy model (in any given year) is used to calculate interest on outstanding front-ending balances.
- 4. During the reconciliation of future reserve balances, ensure the <u>interest earning and charge rates that underpin the offsite levy bylaw</u> for that time period are used to determine reserve interest impacts. This is outlined in the offsite levy model user guide and instructions for the annual rate update.
- 5. Limit withdrawals from offsite levy accounts to <u>only that portion of project cost for which future development is responsible</u> (i.e., Project Cost X Developer Share %).
- 6. <u>Amend the offsite levy bylaw</u> to include the requirement for an <u>annual report</u> to Council outlining the status of levies (monies collected, remaining front-ending debts, etc.). This is a newly amended requirement of the MGA.
- 7. Recent changes to the MGA enable municipalities to charge offsite levies for recreation, fire, police, library, and interchange facilities. Accordingly, the County 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.

¹⁰ Unofficial internal County documentation shows a transportation front-ending balance of \$(1,997,285).

¹¹ Unofficial internal County documentation shows a water front-ending balance of \$(4,015,597).

¹² Unofficial internal County documentation shows a sanitary front-ending balance of \$(1,957,471).

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.

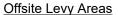
8 DISCLAIMER

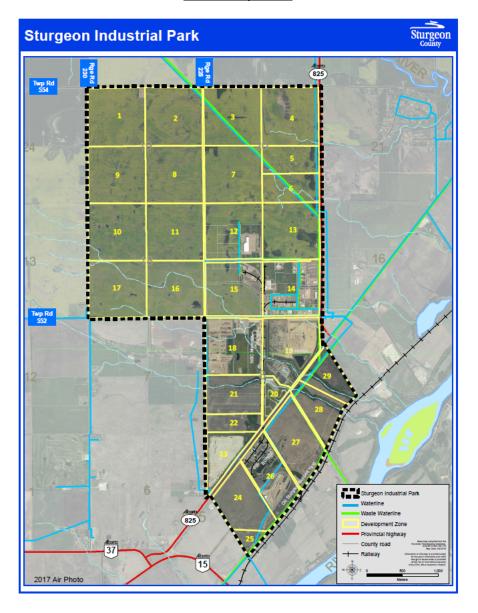
CORVUS Business Advisor has relied upon Sturgeon County and its advisors to provide all of the data and information used to construct the offsite levy model and create the rates, such as planning data and assumptions, development forecasts and assumptions, infrastructure costs and costs estimates, allocations 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 <u>annually</u>). 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. These areas remain unchanged from the previous bylaw. Areas are approximately a quarter section in size but also take into consideration various natural and man-made barriers (e.g., rivers, highways, etc.), as well as existing/planned infrastructure basins (e.g., water and sanitary basins). All offsite levy infrastructure costs are allocated to one or more areas.





Total net development area, the amount of land available for development in all offsite levy areas, is approximately 1039 ha. In calculating net development area only those lands remaining to be developed¹³ within the area that have not previously paid offsite levies have been considered (as required by legislation/regulation). Further, allowances have been made to net development area calculations for environmental reserves, municipal reserves, and arterial road right of way.

Offsite Levy Net Development Area¹⁴

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	31.33	-	31.33	1.93	-	29.40
19.0	NE-8-55-22-4	Industrial	-	-	-	-	-	-
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	-		-	-	-	
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	1,250.88	65.82	1,185.06	117.30	28.59	1,039.17

Summary of Offsite Levy Net Development Area

Description	ha.
Gross Development Area	1,250.88
Less Environment Reserve	65.82
Less Municipal Reserve	117.30
Less ROW Allowance	28.59
Net Development Area	1,039.17

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

Net development area definitions will be applied in determining offsite levy obligations of

¹³ The measurement of net development area was undertaken when the model was originally instituted in 2013. Lands developed since 2013 are also deducted within overall rate calculations.

¹⁴ Area measurements were provided by County staff.

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.
 - 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 1039 net ha. of land available across all offsite levy areas, approximately 56 ha. (5%) have been developed to date, and planners estimate that approximately 603 ha. (58%) 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	56.39	5.4%
Developed In Next 25 Years	603.49	58.1%
Developed Beyond 25 Years	379.30	36.5%
Net Development Area	1,039.18	

Anticipated Development during the 25 Year Rate Planning Period

Area Ref. #	Area Developed in Next 25 years (Net ha.)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.0	26.560	-	-	-	-	-	-	-	-	6.64	6.64	6.64	6.64	-	-	-	-	-	-	-	-	-	-	-	-	-
6.0	22.213	-	-	-	-	5.56	5.56	5.56	5.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.0	53.265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.32	13.32	13.32	13.32	-
8.0	13.765	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.77
9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.0	55.060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.77	13.77	13.77	13.77	-	-	-	-	-
12.0	24.670	1.06	-	-	7.87	7.87	7.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.0	53.040	-	13.26	13.26	13.26	13.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.0	7.880	3.94	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
	603.48	18.60	30.80	26.86	21.13	26.69	30.25	34.06	34.04	29.36	29.34	31.29	31.28	27.48	27.48	13.87	20.75	20.65	20.65	20.65	20.65	20.20	20.20	20.20	13.32	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) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately **\$76.17 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

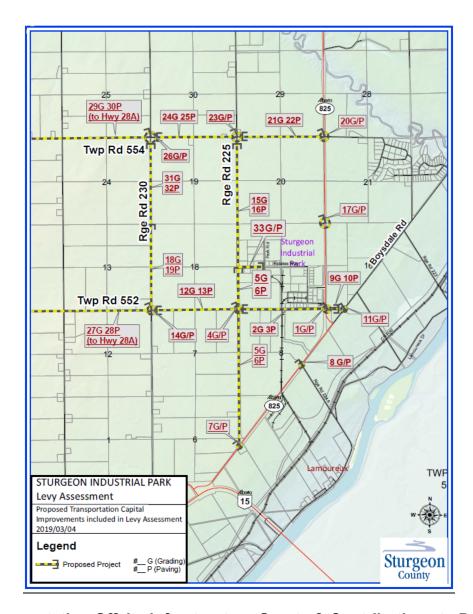
ltem	Project Description	Cost of pleted Work	Debenture Interest	1	stimated Cost of Work Yet to be Completed	tal Project Cost
1	Twp 552/Hwy 825 (Grading and Paving)	\$ 1,042,152	\$ 276,994	\$	_	\$ 1,319,146
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$ 1,175,029	\$ 102,071	\$	-	\$ 1,277,101
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$ 2,309,341	\$ 192,550	\$	-	\$ 2,501,891
4	Twp 552/RR 225 (Grading and Paving)	\$ -	\$ -	\$	469,962	\$ 469,962
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$ 1,893,783	\$ -	\$	246,192	\$ 2,139,975
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$ -	\$ -	\$	3,744,000	\$ 3,744,000
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)	\$ 168,082	\$ -	\$	7,515,044	\$ 7,683,126
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)	\$ -	\$ -	\$	1,586,160	\$ 1,586,160
13	Twp 552 from RR 225 to RR 230 (Paving)	\$ -	\$ -	\$	1,872,000	\$ 1,872,000
14	Twp 552/RR 230 (Grading and Paving)	\$ -	\$ -	\$	469,962	\$ 469,962
15	RR 225 from Estates Way - Twp 554 (Grading)	\$ -	\$ -	\$	1,817,424	\$ 1,817,424
16	RR 225 from Estates Way - Twp 554 (Paving)	\$ -	\$ -	\$	2,808,000	\$ 2,808,000
17	Hwy 825/Twp 553 (Grading and Paving)	\$ -	\$ -	\$	3,718,674	\$ 3,718,674
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$ -	\$ -	\$	1,586,160	\$ 1,586,160
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$ -	\$ -	\$	1,872,000	\$ 1,872,000
20	Hwy 825/Twp 554 (Grading and Paving)	\$ -	\$ -	\$	3,718,674	\$ 3,718,674
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$ -	\$ -	\$	1,586,160	\$ 1,586,160
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$ -	\$ -	\$	1,872,000	\$ 1,872,000
23	Twp 554/RR 225 (Grading and Paving)	\$ -	\$ -	\$	469,962	\$ 469,962
24	Twp 554 from RR 230 - RR 225 (Grading)	\$ -	\$ -	\$	1,586,160	\$ 1,586,160
25	Twp 554 from RR 230 - RR 225 (Paving)	\$ -	\$ -	\$	1,872,000	\$ 1,872,000
26	RR 230/Twp 554 (Grading and Paving)	\$ -	\$ -	\$	469,962	\$ 469,962
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$ -	\$ -	\$	4,758,480	\$ 4,758,480
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$ -	\$ _	\$	5,616,000	\$ 5.616.000
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$ -	\$ -	\$	4,758,480	\$ 4,758,480
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$ -	\$ -	\$	5,616,000	\$ 5,616,000
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$ -	\$ -	\$	1,586,160	\$ 1,586,160
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$ -	\$ -	\$	1,872,000	\$ 1,872,000
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$ -	\$ -	\$	1,140,750	\$ 1,140,750
100	Contributions collected under old development agreements	\$ -	\$ -	\$	-	\$ -
	·	\$ 8.964.834	\$ 571.616	\$	66,633,047	\$ 76.169.496

^{*}Costs estimates provided by County staff.

^{**}Estimates include engineering and contingencies.

^{***}Contributions stemming from old development are not technically "receipts". Instead, they have been set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

^{****}Offsite infrastructure definitions are contained in Appendix F.



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 grant or contribution (i.e., contributed infrastructure). Sturgeon County has/will receive approximately \$7.90 million in special grants or contributions for transportation offsite levy infrastructure as shown in the table below (note, if the County receives other grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is \$68.27 million.

Special Grants and Contributions for Transportation Offsite Infrastructure

Item	Project Description	То	tal Project Cost	Sp	pecial Provincial Grants	Agre	eloper ement ibutions	C	Other ontributions	Re	duced Project Cost
	Twp 552/Hwy 825 (Grading and Paving)	\$		\$	100,000		-	\$	-	\$	1,219,146
	Twp 552 from Hwy 825 - RR 225 (Grading)	\$	1,277,101		-	\$	-	\$	-	\$	1,277,101
	Twp 552 from Hwy 825 - RR 225 (Paving)	\$	2,501,891	\$	-	\$	-	\$	-	\$	2,501,891
4	Twp 552/RR 225 (Grading and Paving)	\$	469,962	\$	-	\$	-	\$	-	\$	469,962
	RR 225 from Hwy 825 - Estates Way (Grading)	\$	2,139,975	\$	-	\$	-	\$	-	\$	2,139,975
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$	3,744,000	\$	-	\$	-	\$	-	\$	3,744,000
7	Hwy 825/RR 225 (Grading and Paving)	\$	3,530,915	\$	865,852	\$	50,000	\$	-	\$	2,615,064
8	Hwy 825/RR 224A (Grading and Paving)	\$	7,683,126	\$	5,636,283	\$	-	\$	-	\$	2,046,843
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)	\$	1,586,160	\$	-	\$	-	\$	-	\$	1,586,160
13	Twp 552 from RR 225 to RR 230 (Paving)	\$	1,872,000	\$	-	\$	-	\$	-	\$	1,872,000
14	Twp 552/RR 230 (Grading and Paving)	\$	469,962	\$	-	\$	-	\$	-	\$	469,962
15	RR 225 from Estates Way - Twp 554 (Grading)	\$	1,817,424	\$	-	\$	-	\$	-	\$	1,817,424
16	RR 225 from Estates Way - Twp 554 (Paving)	\$	2,808,000	\$	-	\$	-	\$	-	\$	2,808,000
17	Hwy 825/Twp 553 (Grading and Paving)	\$	3,718,674	\$	-	\$	-	\$	-	\$	3,718,674
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$	1,586,160	\$	-	\$	-	\$	-	\$	1,586,160
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$	1,872,000	\$	-	\$	-	\$	-	\$	1,872,000
20	Hwy 825/Twp 554 (Grading and Paving)	\$	3,718,674	\$	-	\$	-	\$	-	\$	3,718,674
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$	1,586,160	\$	-	\$	-	\$	-	\$	1,586,160
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$	1,872,000	\$	-	\$	-	\$	-	\$	1,872,000
23	Twp 554/RR 225 (Grading and Paving)	\$	469,962	\$	-	\$	-	\$	-	\$	469,962
24	Twp 554 from RR 230 - RR 225 (Grading)	\$	1,586,160	\$	-	\$	-	\$	-	\$	1,586,160
25	Twp 554 from RR 230 - RR 225 (Paving)	\$	1,872,000	\$	-	\$	-	\$	-	\$	1,872,000
26	RR 230/Twp 554 (Grading and Paving)	\$	469,962	\$	-	\$	-	\$	-	\$	469,962
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$	4,758,480	\$	-	\$	-	\$	-	\$	4,758,480
	Twp 552 from RR 230 - Hwy 28A (Paving)	\$	5,616,000	\$	-	\$	-	\$	-	\$	5,616,000
	Twp 554 from RR 230 - Hwy 28A (Grading)	\$	4,758,480	\$	-	\$	-	\$	-	\$	4,758,480
	Twp 554 from RR 230 - Hwy 28A (Paving)	\$	5,616,000	\$	-	\$	-	\$	-	\$	5,616,000
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$	1,586,160	\$	-	\$	-	\$	-	\$	1,586,160
	RR 230 from Twp 553 - Twp 554 (Paving)	\$	1,872,000	\$	-	\$	-	\$	-	\$	1,872,000
	Estate Way from Park Road to RR 225 (Grading and Paving)	\$	1,140,750	\$	-	\$	-	\$	-	\$	1,140,750
	Contributions collected under old development agreements	\$	-	\$	-	\$	440,836	\$	213,167	\$	(654,003)
		\$	76,169,496	\$	7,199,294	\$	490,836	\$	213,167	\$	68,266,200

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.

Construction Start Item **Project Description** Year Twp 552/Hwy 825 (Grading and Paving) 2012 Twp 552 from Hwy 825 - RR 225 (Grading) 2012 Twp 552 from Hwy 825 - RR 225 (Paving) 2013 Twp 552/RR 225 (Grading and Paving) 2022 RR 225 from Hwy 825 - Estates Way (Grading) 2013 RR 225 from Hwy 825 - Estates Way (Paving) 2022 Hwy 825/RR 225 (Grading and Paving) 2014 Hwy 825/RR 224A (Grading and Paving) 2015 Twp 552 from Boysdale Rd to Hwy 825 (Grading) 2020 Twp 552 from Boysdale Rd to Hwy 825 (Paving) 2020 Boysdale Road/Twp 552 (Grading and Paving) Twp 552 from RR 225 to RR 230 (Grading) 2032 Twp 552 from RR 225 to RR 230 (Paving) 2033 Twp 552/RR 230 (Grading and Paving) 2050 15 RR 225 from Estates Way - Twp 554 (Grading) 2037 RR 225 from Estates Way - Twp 554 (Paving) 17 Hwy 825/Twp 553 (Grading and Paving) 2020 RR 230 from Twp 552 - Twp 553 (Grading) RR 230 from Twp 552 - Twp 553 (Paving) Hwy 825/Twp 554 (Grading and Paving) 18 2050 19 2050 20 2050 Twp 554 from RR 225 - Hwy 825 (Grading) Twp 554 from RR 225 - Hwy 825 (Paving) 2050 Twp 554/RR 225 (Grading and Paving) 2050 Twp 554 from RR 230 - RR 225 (Grading) Twp 554 from RR 230 - RR 225 (Paving) 2050 2050 RR 230/Twp 554 (Grading and Paving) Twp 552 from RR 230 - Hwy 28A (Grading) 2039 Twp 552 from RR 230 - Hwy 28A (Paving) 2040 Twp 554 from RR 230 - Hwy 28A (Grading) 2050 Twp 554 from RR 230 - Hwy 28A (Paving) 2050 RR 230 from Twp 553 - Twp 554 (Grading) 2050 RR 230 from Twp 553 - Twp 554 (Paving) Estate Way from Park Road to RR 225 (Grading and Paving)

Forecast Year of Construction

B4. Transportation Offsite Infrastructure Benefiting Parties

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

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

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

^{*}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.

Allocation of Transportation Infrastructure to Benefiting Parties

Item	Project Description	 ced 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)	\$ 1,219,146	20.0%		0.0%	80.0%
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$ 1,277,101	20.0%		0.0%	80.0%
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$ 2,501,891	20.0%		0.0%	80.0%
4	Twp 552/RR 225 (Grading and Paving)	\$ 469,962	20.0%		9.6%	70.4%
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$ 2,139,975	20.0%		0.0%	80.0%
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$ 3,744,000	20.0%		9.6%	70.4%
7	Hwy 825/RR 225 (Grading and Paving)	\$ 2,615,064	20.0%		0.0%	80.0%
8	Hwy 825/RR 224A (Grading and Paving)	\$ 2,046,843	20.0%		0.0%	80.0%
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	\$ 36,563	20.0%		3.2%	76.8%
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	\$ 99,000	20.0%		3.2%	76.8%
11	Boysdale Road/Twp 552 (Grading and Paving)	\$ 117,491	20.0%		3.2%	76.8%
12	Twp 552 from RR 225 to RR 230 (Grading)	\$ 1,586,160	20.0%		41.6%	38.4%
13	Twp 552 from RR 225 to RR 230 (Paving)	\$ 1,872,000	20.0%		44.8%	35.2%
14	Twp 552/RR 230 (Grading and Paving)	\$ 469,962	20.0%		80.0%	0.0%
15	RR 225 from Estates Way - Twp 554 (Grading)	\$ 1,817,424	20.0%		57.6%	22.4%
16	RR 225 from Estates Way - Twp 554 (Paving)	\$ 2,808,000	20.0%		54.4%	25.6%
17	Hwy 825/Twp 553 (Grading and Paving)	\$ 3,718,674	20.0%		3.2%	76.8%
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$ 1,586,160	20.0%		80.0%	0.0%
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$ 1,872,000	20.0%		80.0%	0.0%
20	Hwy 825/Twp 554 (Grading and Paving)	\$ 3,718,674	20.0%		80.0%	0.0%
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$ 1,586,160	20.0%		80.0%	0.0%
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$ 1,872,000	20.0%		80.0%	0.0%
23	Twp 554/RR 225 (Grading and Paving)	\$ 469,962	20.0%		80.0%	0.0%
24	Twp 554 from RR 230 - RR 225 (Grading)	\$ 1,586,160	20.0%		80.0%	0.0%
25	Twp 554 from RR 230 - RR 225 (Paving)	\$ 1,872,000	20.0%		80.0%	0.0%
26	RR 230/Twp 554 (Grading and Paving)	\$ 469,962	20.0%		80.0%	0.0%
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$ 4,758,480	20.0%		64.0%	16.0%
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$ 5,616,000	20.0%		67.2%	12.8%
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$ 4,758,480	20.0%		80.0%	0.0%
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$ 5,616,000	20.0%		80.0%	0.0%
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$ 1,586,160	20.0%		80.0%	0.0%
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$ 1,872,000	20.0%		80.0%	0.0%
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$ 1,140,750	20.0%		12.8%	67.2%
100	Contributions collected under old development agreements	\$ (654,003)			0.0%	100.0%
		\$ 68,266,200				

^{*}Allocations were determined by County staff.

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 \$19.44 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 \$4.76 million in transportation levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately \$14.69 million.

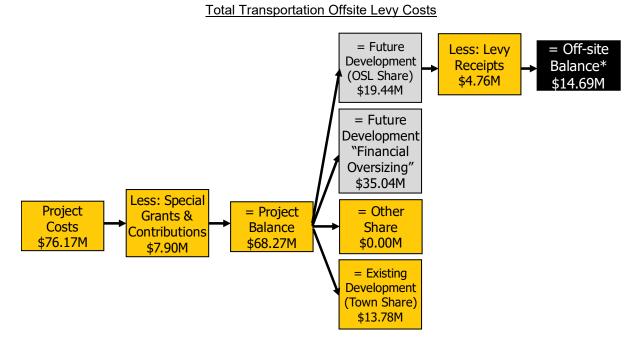
^{**}Financial oversizing is determined by separating out the pro rata portion of developer cost beyond the 25-year review period, in comparison with the anticipated year of construction. In future, as the 25-year review period moves further out these additional developer costs will gradually be included in future rate calculations.

Offsite Levy Funds Applied to Date

ltem	Project Description	osi	L / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2012			Offsite Levy Funds Collected Starting Jan 1, 2013	Adjusted Developer (Levy) Cost		
1	Twp 552/Hwy 825 (Grading and Paving)	\$	975,317	\$	1,266,540	\$	67,159	\$	(358,382)	
2	Twp 552 from Hwy 825 - RR 225 (Grading)	\$	1,021,681	\$	570,424	\$	21,967	\$	429,289	
3	Twp 552 from Hwy 825 - RR 225 (Paving)	\$	2,001,513	\$	618,594	\$	55,984	\$	1,326,936	
4	Twp 552/RR 225 (Grading and Paving)	\$	330,853	\$	-	\$	16,680	\$	314,174	
5	RR 225 from Hwy 825 - Estates Way (Grading)	\$	1,711,980	\$	-	\$	106,583	\$	1,605,396	
6	RR 225 from Hwy 825 - Estates Way (Paving)	\$	2,635,776	\$	-	\$	117,813	\$	2,517,963	
7	Hwy 825/RR 225 (Grading and Paving)	\$	2,092,051	\$	-	\$	115,444	\$	1,976,607	
8	Hwy 825/RR 224A (Grading and Paving)	\$	1,637,474	\$	-	\$	117,176	\$	1,520,298	
9	Twp 552 from Boysdale Rd to Hwy 825 (Grading)	\$	28,080	\$	-	\$	6,372	\$	21,708	
10	Twp 552 from Boysdale Rd to Hwy 825 (Paving)	\$	76,032	\$	-	\$	7,363	\$	68,669	
11	Boysdale Road/Twp 552 (Grading and Paving)	\$	90,233	\$	-	\$	14,868	\$	75,364	
12	Twp 552 from RR 225 to RR 230 (Grading)	\$	609,085	\$	-	\$	50,977	\$	558,109	
13	Twp 552 from RR 225 to RR 230 (Paving)	\$	658,944	\$	-	\$	58,907	\$	600,037	
14	Twp 552/RR 230 (Grading and Paving)	\$	-	\$	-	\$	14,868	\$	(14,868)	
15	RR 225 from Estates Way - Twp 554 (Grading)	\$	407,103	\$	-	\$	76,465	\$	330,638	
16	RR 225 from Estates Way - Twp 554 (Paving)	\$	718,848	\$	-	\$	88,360	\$	630,488	
17	Hwy 825/Twp 553 (Grading and Paving)	\$	2,855,942	\$	-	\$	117,176	\$	2,738,765	
18	RR 230 from Twp 552 - Twp 553 (Grading)	\$	-	\$	-	\$	50,977	\$	(50,977)	
19	RR 230 from Twp 552 - Twp 553 (Paving)	\$	-	\$	-	\$	58,907	\$	(58,907)	
20	Hwy 825/Twp 554 (Grading and Paving)	\$	-	\$	-	\$	117,176	\$	(117,176)	
21	Twp 554 from RR 225 - Hwy 825 (Grading)	\$	-	\$	-	\$	50,977	\$	(50,977)	
22	Twp 554 from RR 225 - Hwy 825 (Paving)	\$	-	\$	-	\$	58,907	\$	(58,907)	
23	Twp 554/RR 225 (Grading and Paving)	\$	-	\$	-	\$	14,868	\$	(14,868)	
24	Twp 554 from RR 230 - RR 225 (Grading)	\$	-	\$	-	\$	50,977	\$	(50,977)	
25	Twp 554 from RR 230 - RR 225 (Paving)	\$	-	\$	-	\$	58,907	\$	(58,907)	
26	RR 230/Twp 554 (Grading and Paving)	\$	-	\$	-	\$	14,868	\$	(14,868)	
27	Twp 552 from RR 230 - Hwy 28A (Grading)	\$	761,357	\$	-	\$	152,931	\$	608,426	
28	Twp 552 from RR 230 - Hwy 28A (Paving)	\$	718,848	\$	-	\$	176,720	\$	542,128	
29	Twp 554 from RR 230 - Hwy 28A (Grading)	\$		\$	-	\$		\$	(152,931)	
30	Twp 554 from RR 230 - Hwy 28A (Paving)	\$	-	\$	-	\$	176,720	\$	(176,720)	
31	RR 230 from Twp 553 - Twp 554 (Grading)	\$	-	\$	-	\$	50,977	\$	(50,977)	
32	RR 230 from Twp 553 - Twp 554 (Paving)	\$	-	\$	-	\$	58,907	\$	(58,907)	
33	Estate Way from Park Road to RR 225 (Grading and Paving)	\$	766,584	\$	-	\$	-	\$	766,584	
100	Contributions collected under old development agreements	\$	(654,003)	\$	-	\$	-	\$	(654,003)	
		\$	19,443,697	\$	2,455,558	\$	2,299,912	\$	14,688,228	

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 **\$14.69 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).



B7. Transportation Infrastructure Benefiting Areas

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

Item	Dev	veloper Cost	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
1	\$	(358,382)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	\$	429.289	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	\$	1,326,936	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	\$	314,174	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	\$	1,605,396	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	\$	2,517,963	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	\$	1,976,607	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	\$	1,520,298	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	\$	21,708	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	\$	68,669	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	\$	75,364	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	\$	558,109	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	\$	600,037	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	\$	(14,868)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	\$	330,638	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	\$	630,488	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	\$	2,738,765	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	\$	(50,977)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	\$	(58,907)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	\$	(117,176)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	\$	(50,977)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	\$	(58,907)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	\$	(14,868)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	\$	(50,977)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	\$	(58,907)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	\$	(14,868)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	\$	608,426	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28	\$	542,128	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	\$	(152,931)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	\$	(176,720)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31	\$	(50,977)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	\$	(58,907)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	\$	766,584	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	\$	(654,003)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	\$	14,688,228																													

Transportation Allocations to Benefitting Areas

B8. Reserve Balance

As at December 31st, 2018 the transportation reserve balance was in a deficit of \$(2,307,006). This amount takes into consideration expenditures and front-ending repayments up to end-2018. A negative balance indicates the presence of front-ending—i.e., this amount is owed to the County by the reserve. This balance assumes that all remaining cash in the reserve is withdrawn and used to pay down front-ending debts owed to the County. In addition to maintaining a dedicated transportation offsite levy reserve (required by the MGA), it is also recommended that the County develop a set of "sub-ledgers" to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time. A detailed reserve continuity schedule is also provided in Appendix G.

Transportation Offsite Levy Reserve Balance

Description		Dr		Cr		Balance
Offsite Levy Expenditures to December 31, 2012			\$	243,658.11	\$	(243,658.11
					Ė	,
Old Levies Collected to December 31, 2012, but not allocated						
to projects, but applied in Column R on Facilities page	\$	2,455,557.72			\$	2,211,899.61
			\$	-	\$	2,211,899.61
	\$	-			\$	2,211,899.61
Opening Balance					\$	2,211,899.61
2013					\$	2,211,899.61
Interest on Opening Balance	\$	44,237.99			\$	2,256,137.60
Project Expenditures			\$	1,308,555.30	\$	947,582.31
Offsite Levy Receipts	\$	605,754.81			\$	1,553,337.12
Offsite Levy Receipts Collected Under Old Agreement or Old						
Bylaw (if any)	\$	654,003.02			\$	2,207,340.14
Debenture Interest Accrued This Year			\$	-		2,207,340.14
Interest on Project Expenditure			\$	9,814.16		2,197,525.97
Interest on Offsite Levy Receipts	\$	6,057.55			\$	2,203,583.52
Interest on Offsite Levy Receipts Collected Under Old						
Agreement or Old Bylaw (if any)	\$	-				2,203,583.52
Interest on Debenture Accrual			\$	-	\$	2,203,583.52
2014					\$	2,203,583.52
Interest on Opening Balance	\$	44,071.67			\$	2,247,655.19
Project Expenditures			\$	5,539,938.23		(3,292,283.04
Offsite Levy Receipts	\$	454,363.74			\$	(2,837,919.30
Offsite Levy Receipts Collected Under Old Agreement or Old						
Bylaw (if any)	\$	-			\$	(2,837,919.30
Debenture Interest Accrued This Year			\$	-		(2,837,919.30
Interest on Project Expenditure			\$	41,549.54		(2,879,468.84
Interest on Offsite Levy Receipts	\$	4,543.64			\$	(2,874,925.20
Interest on Offsite Levy Receipts Collected Under Old						
Agreement or Old Bylaw (if any)	\$	-				(2,874,925.20
Interest on Debenture Accrual			\$	-	\$	(2,874,925.20
2015					\$	(2,874,925.20
Interest on Opening Balance			\$	86,247.76		(2,961,172.96
Project Expenditures			\$	(23,418.85)		(2,937,754.11
Offsite Levy Receipts	\$	425,513.45	Ť	(-,,		(2,512,240.66
Offsite Levy Receipts Collected Under Old Agreement or Old		,			Ť	, , , , , , , , , , , , , , , , , , , ,
Bylaw (if any)	\$	-			\$	(2,512,240.66
Debenture Interest Accrued This Year	, ·		\$	102,706.28		(2,614,946.93
Interest on Project Expenditure			\$	(175.64)		(2,614,771.29
Interest on Offsite Levy Receipts	\$	2,127.57		, ,		(2,612,643.73
Interest on Offsite Levy Receipts Collected Under Old						
Agreement or Old Bylaw (if any)	\$	-			\$	(2,612,643.73
Interest on Debenture Accrual			\$	3,081.19	\$	(2,615,724.91

Interest on Opening Balance	2016					\$ (2,615,724.91)
Offsite Levy Receipts \$ 65,194.82 \$ (2,656,585.39) Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,656,585.39) Debenture Interest Accrued This Year \$ 93,199.94 \$ (2,749,785.33) Interest on Project Expenditure \$ 206.88 \$ (2,749,982.21) Interest on Offsite Levy Receipts \$ 325.97 \$ (2,749,982.21) Interest on Offsite Levy Receipts Collected Under Old \$ 2,796.00 \$ (2,749,666.23) Interest on Debenture Accrual \$ 2,796.00 \$ (2,752,462.23) Interest on Debenture Accrual \$ 82,573.87 \$ (2,752,462.23) Interest on Opening Balance \$ 82,573.87 \$ (2,835,303.10) Project Expenditures \$ 82,573.87 \$ (2,835,303.10) Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ (2,199,945.28) Debenture Interest Accrued This Year \$ 83,472.36 \$ (2,283,749.60 Interest on Project Expenditure \$ 33.396.86 \$ (2,283,749.60 Interest on Offsite Levy Receipts Collected Under Old \$ (2,280,352.89) Interest on Offsite Levy Receipts Collected Under Old \$ (2,280,352.89) Interest on Opening Balance <td>Interest on Opening Balance</td> <td></td> <td></td> <td>\$</td> <td>78,471.75</td> <td>\$ (2,694,196.66)</td>	Interest on Opening Balance			\$	78,471.75	\$ (2,694,196.66)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,656,585.39) \$ (2,749,785.33) Interest on Project Expenditure \$ 93,199.94 \$ (2,749,785.33) Interest on Offsite Levy Receipts \$ 206.88 \$ (2,749,785.33) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ 2,749,686.23 \$ (2,749,686.23) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,749,686.23) \$ (2,752,462.23) \$ (2,763,423.77) \$ (2,752,462.23) \$	Project Expenditures			\$	27,583.54	\$ (2,721,780.21)
Bylaw (if any) \$ -	Offsite Levy Receipts	\$	65,194.82			\$ (2,656,585.39)
Debenture Interest Accrued This Year \$ 93,199.94 \$ (2,749,785.33)	Offsite Levy Receipts Collected Under Old Agreement or Old					
Interest on Project Expenditure \$ 206.88 \$ (2,749,992.21) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ -	Bylaw (if any)	\$	-			\$ (2,656,585.39)
Interest on Offsite Levy Receipts \$ 325.97 \$ (2,749,666.23) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,796.00) \$ (2,752,462.23) Interest on Debenture Accrual \$ 2,796.00 \$ (2,752,462.23) Interest on Depining Balance \$ 82,573.87 \$ (2,835,036.10) Project Expenditures \$ 44,282.15 \$ (2,879,318.25) Offsite Levy Receipts \$ 679,372.97 \$ (2,199,945.28) Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,283,749.76) Interest on Project Expenditure \$ 332.12 \$ (2,283,749.76) Interest on Offsite Levy Receipts \$ 3,396.86 \$ (2,280,352.89) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,280,352.89) Interest on Debenture Accrual \$ 2,504.17 \$ (2,282,857.06) 2018 \$ (2,282,857.06) 2018 \$ (2,282,857.06) Interest on Opening Balance \$ 68,485.71 \$ (2,351,342.77) Project Expenditures \$ 69,711.99 \$ (2,281,630.78) Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ 50,000.00 \$ (2,231,630.78) Debenture Interest Accrued This Year \$ 73,518.38 \$ (2,305,149.16) Interest on Project Expenditure \$ 5 (2,305,149.16) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ 50,000.00 \$ (2,231,630.78) Debenture Interest Accrued This Year \$ 73,518.38 \$ (2,305,149.16) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ 50,000.00 \$ (2,231,630.78) Debenture Interest Accrued This Year \$ 348.56 \$ (2,304,800.60) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,304,800.60)	Debenture Interest Accrued This Year			\$	93,199.94	\$ (2,749,785.33)
Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	Interest on Project Expenditure			\$	206.88	\$ (2,749,992.21)
Agreement or Old Bylaw (if any) \$ - \$ (2,749,666.23) Interest on Debenture Accrual \$ 2,796.00 \$ (2,752,462.23) 2017 \$ (2,752,462.23) Interest on Opening Balance \$ 82,573.87 \$ (2,835,036.10) Project Expenditures \$ 44,282.15 \$ (2,879,318.25) Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,199,945.28) Debenture Interest Accrued This Year \$ 83,472.36 \$ (2,283,417.64) Interest on Project Expenditure \$ 332.12 \$ (2,283,749.76) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,280,352.89) Interest on Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ - \$ (2,280,352.89) Interest on Debenture Accrual \$ 2,504.17 \$ (2,282,857.06) 2018 \$ (2,282,857.06) 2018 \$ (2,282,857.06) Interest on Opening Balance \$ 68,485.71 \$ (2,351,342.77) Project Expenditures \$ - \$ (2,351,342.77) Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) \$ 50,000.00 Solution \$ 50,000.00 Solution \$ 73,518.38 \$ (2,305,149.16) Interest on Project Expenditure \$ - \$ (2,305,149.16) Interest on Offsite Levy Receipts \$ 348.56 \$ (2,304,800.60) Interest on Offsite Levy Receipts \$ 348.56 \$ (2,304,800.60) Interest on Offsite Levy Receipts \$ 348.56 \$ (2,304,800.60) Agreement or Old Bylaw (if any) \$ - \$ (2,304,800.60)	Interest on Offsite Levy Receipts	\$	325.97			\$ (2,749,666.23)
State Stat	Interest on Offsite Levy Receipts Collected Under Old					
2017	Agreement or Old Bylaw (if any)	\$	-			\$ (2,749,666.23)
Interest on Opening Balance	Interest on Debenture Accrual			\$	2,796.00	\$ (2,752,462.23)
Interest on Opening Balance	0047					Φ (O 7EO 4CO OO)
Project Expenditures				Φ.	00 570 07	
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Agreement or Old Bylaw (if any) \$ - \$ (2,304,800.60)	·	Ė				, , , , , , , , , , , , , , , , , , , ,
		\$	_			\$ (2,304,800.60)
		Ė		\$	2,205.55	

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 **3.25%**¹⁵ interest allowance has been charged to the reserve when it is

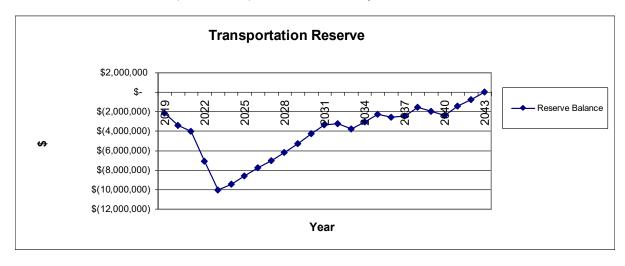
Version 4 – May 8th, 2019 CORVUS Business Advisors

 $^{^{15}}$ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~3.25%. Historical charge rates used in the model are 3% (2015-2018).

forecast to be in a negative balance. Further, a **1.00**%¹⁶ 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).





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¹⁶ Historical earning rates used in the model are 1% (2015-2018).

Sturgeon Industrial Park 2019 Offsite Levy Update

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Anticipated Transportation Offsite Levy Reserve Balances

	Reserve Balance					\$ (2,307,006)	
Year		Receipts		Expenditure		Interest	Balance
2019	\$	497,873	\$	272,926	\$	(67,667)	\$ (2,149,726)
2020	\$	840,924	\$	1,991,310	\$	(107,254)	\$ (3,407,366)
2021	\$	748,018	\$	1,246,092	\$	(126,927)	\$ (4,032,366)
2022	\$	606,098	\$	3,435,386	\$	(223,004)	\$ (7,084,658)
2023	\$	788,476	\$	3,394,211	\$	(314,938)	\$ (10,005,330)
2024	\$	920,465	\$	18,073	\$	(295,845)	\$ (9,398,784)
2025	\$	1,067,500	\$	6,966	\$	(270,993)	\$ (8,609,243)
2026	\$	1,098,960	\$	-	\$	(244,084)	\$ (7,754,368)
2027	\$	976,139	\$	-	\$	(220,292)	\$ (6,998,522)
2028	\$	1,004,738	\$	-	\$	(194,798)	\$ (6,188,582)
2029	\$	1,103,672	\$	-	\$	(165,260)	\$ (5,250,169)
2030	\$	1,136,419	\$	-	\$	(133,697)	\$ (4,247,447)
2031	\$	1,028,291	\$	-	\$	(104,623)	\$ (3,323,779)
2032	\$	1,059,140	\$	877,179	\$	(102,109)	\$ (3,243,927)
2033	\$	550,519	\$	977,452	\$	(119,303)	\$ (3,790,162)
2034	\$	848,405	\$	-	\$	(95,607)	\$ (3,037,364)
2035	\$	869,645	\$	-	\$	(70,451)	\$ (2,238,170)
2036	\$	895,735	\$	1,165,187	\$	(81,498)	\$ (2,589,120)
2037	\$	922,607	\$	679,673	\$	(76,251)	\$ (2,422,438)
2038	\$	950,285	\$	-	\$	(47,845)	\$ (1,519,998)
2039	\$	957,459	\$	1,348,524	\$	(62,110)	\$ (1,973,173)
2040	\$	986,182	\$	1,311,429	\$	(74,699)	\$ (2,373,118)
2041	\$	1,015,768	\$	-	\$	(44,114)	\$ (1,401,464)
2042	\$	690,068	\$	-	\$	(23,120)	\$ (734,516)
2043	\$	734,516	\$	-	\$	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) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately \$30.49 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

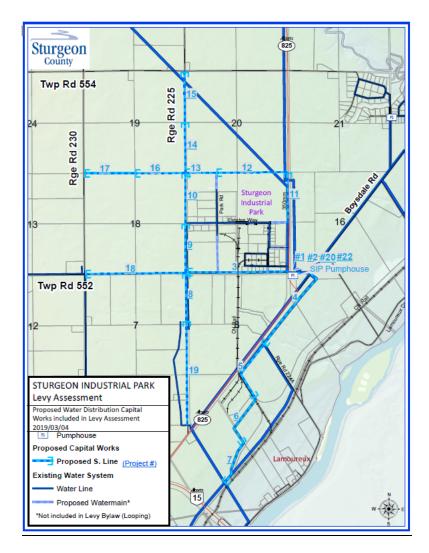
Item	Project Description	Cost	of Completed Work	Deb	enture Interest	timated Cost of /ork Yet to be Completed	Total Project stimated Cost
1	SIP Pumpstation Improvement	\$	1,508,468	\$	-	\$ -	\$ 1,508,468
2	SIP Reservoir Expansion 3000m3	\$	2,107,272	\$	-	\$ -	\$ 2,107,272
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$	1,996,865	\$	-	\$ -	\$ 1,996,865
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	\$	185,773	\$	89,485	\$ -	\$ 275,258
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	\$	140,737	\$	67,792	\$ -	\$ 208,529
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	\$	61,924	\$	29,828	\$ -	\$ 91,753
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	\$	112,589	\$	54,233	\$ -	\$ 166,823
8	RR225 350mm Pipe (South of Twp Rd 552 to Exisitng Pipe)	\$	433,552	\$	-	\$ -	\$ 433,552
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$	433,552	\$	-	\$ -	\$ 433,552
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$	-	\$	-	\$ 740,445	\$ 740,445
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$	-	\$		\$ 740,445	\$ 740,445
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$	-	\$	-	\$ 1,110,668	\$ 1,110,668
13	Twp 553 350mm Pipe (Park Road to RR225)	\$	-	\$		\$ 370,223	\$ 370,223
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$	-	\$	-	\$ 740,445	\$ 740,445
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$	-	\$		\$ 740,445	\$ 740,445
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$	-	\$		\$ 740,445	\$ 740,445
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$	-	\$	-	\$ 740,445	\$ 740,445
18	Twp 552 150mm Pipe (RR225 to RR230)	\$	-	\$		\$ 740,445	\$ 740,445
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$	-	\$		\$ 1,666,002	\$ 1,666,002
20	SIP Reservoir Expansion	\$	-	\$	-	\$ 5,408,000	\$ 5,408,000
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$	-	\$	-	\$ 4,118,726	\$ 4,118,726
22	SIP Reservoir Expansion - Stage 3	\$	-	\$		\$ 5,408,000	\$ 5,408,000
100	Contributions collected under old development agreements	\$	-	\$	-	\$ -	\$ -
		\$	6,980,733	\$	241,339	\$ 23,264,735	\$ 30,486,807

^{*}Costs estimates provided by County staff.

^{**}Estimates include engineering and contingencies.

^{***}Contributions stemming from old development are not technically "receipts". Instead, they have been set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

^{****}Offsite infrastructure definitions are contained in Appendix F.



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 grant or contribution (i.e., contributed infrastructure). The County has/will receive approximately **\$0.05 million** in special grants and contributions for water offsite levy infrastructure as shown in the table below (note, if the County receives other grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$30.44 million**.

Item	Project Description	Total Project stimated Cost	ecial Provincial Grants	Developer Agreement Contributions	Ó	Other Contributions	uced Project imated Cost
1	SIP Pumpstation Improvement	\$ 1,508,468	\$ -	\$ -	\$	-	\$ 1,508,468
2	SIP Reservoir Expansion 3000m3	\$ 2,107,272	\$ -	\$ -	\$	-	\$ 2,107,272
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$ 1,996,865	\$ -	\$ -	\$	-	\$ 1,996,865
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 Exisitng Pipe)	\$ 433,552	\$ -	\$ -	\$	-	\$ 433,552
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$ 433,552	\$ -	\$ -	\$	-	\$ 433,552
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$ 1,110,668	\$ -	\$ -	\$	-	\$ 1,110,668
13	Twp 553 350mm Pipe (Park Road to RR225)	\$ 370,223	\$ -	\$ -	\$	-	\$ 370,223
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
18	Twp 552 150mm Pipe (RR225 to RR230)	\$ 740,445	\$ -	\$ -	\$	-	\$ 740,445
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$ 1,666,002	\$ -	\$ -	\$	-	\$ 1,666,002
20	SIP Reservoir Expansion	\$ 5,408,000	\$ -	\$ -	\$	-	\$ 5,408,000
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$ 4,118,726	\$ -	\$ -	\$	-	\$ 4,118,726
22	SIP Reservoir Expansion - Stage 3	\$ 5,408,000	\$ -	\$ -	\$	-	\$ 5,408,000
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$	50,500.00	\$ (50,500)
		\$ 30,486,807	\$ -	\$ -	\$	50,500	\$ 30,436,307

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

ltem	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 Exisitng 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)	2037
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	2022
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	2022
13	Twp 553 350mm Pipe (Park Road to RR225)	2037
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)	2021
20	SIP Reservoir Expansion	2032
21	Replace CRNWSC Line Projects 4-7 Oversizing	2028
22	SIP Reservoir Expansion - Stage 3	2050

C4. Water Offsite Infrastructure Benefiting Parties

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

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

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

Allocation of Water	Infrastructure to	Benefiting	Parties
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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	\$ 1,508,468	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)	\$ 1,996,865	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 Exisitng Pipe)	\$ 433,552	39.0%		0.0%	61.0%
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$ 433,552	12.0%		0.0%	88.0%
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$ 740,445	12.0%		63.4%	24.6%
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$ 740,445	12.0%		10.6%	77.4%
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$ 1,110,668	12.0%		10.6%	77.4%
13	Twp 553 350mm Pipe (Park Road to RR225)	\$ 370,223	12.0%		63.4%	24.6%
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$ 740,445	4.0%		69.1%	26.9%
15	RR225 400mm Pipe Twp 553 (North 0.5 to 1 mile)	\$ 740,445	4.0%		96.0%	0.0%
16	Twp 553 400mm Pipe (RR225 West 0.5 miles)	\$ 740,445	3.0%		97.0%	0.0%
17	Twp 553 400mm Pipe (West 0.5-1.0 mile)	\$ 740,445	3.0%		97.0%	0.0%
18	Twp 552 150mm Pipe (RR225 to RR230)	\$ 740,445	3.0%		50.4%	46.6%
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$ 1,666,002	39.0%		4.9%	56.1%
20	SIP Reservoir Expansion	\$ 5,408,000	20.0%		41.6%	38.4%
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$ 4,118,726	39.0%		22.0%	39.0%
22	SIP Reservoir Expansion - Stage 3	\$ 5,408,000			100.0%	0.0%
100	Contributions collected under old development agreements	\$ (50,500))		0.0%	100.0%
		\$ 30,436,307				

^{*}Allocations were determined by County staff.

C5. Existing Receipts & Adjusted Levy Cost

^{*}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.

^{**}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. In future, as the 25-year review period moves further out these additional developer costs will gradually be included in future rate calculations.

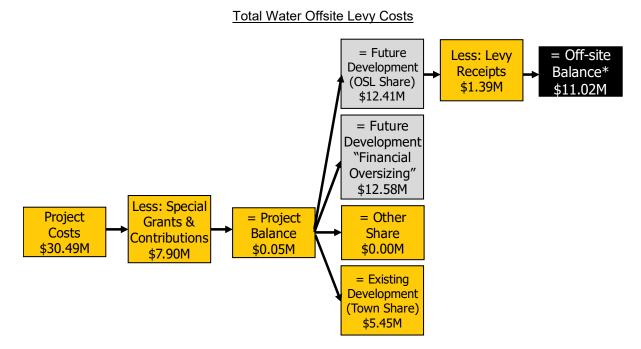
Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately \$12.41 million. However, prior to allocating these costs to benefiting areas, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. County staff have advised that approximately \$1.39 million in water levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately \$11.02 million.

Offsite Levy Funds Applied to Date

Item	Project Description	OSL	. / Developer Cost	-	Offsite Levy unds Collected o Dec 31, 2012	Offsite Levy funds Collected Starting Jan 1, 2013	Adjusted Developer (Levy) Cost		
1	SIP Pumpstation Improvement	\$	1,206,775	\$	163,834	\$ 29,337	\$	1,013,604	
2	SIP Reservoir Expansion 3000m3	\$	1,685,818	\$	300,322	\$ 46,832	\$	1,338,663	
3	Twp Road 552 350mm Boundary (Hwy 825-RR225)	\$	1,597,492	\$	297,179	\$ 45,809	\$	1,254,504	
4	South Of Hwy 825 350mm Pipe (SIP Reservoir to RR224A)	\$	167,907	\$	-	\$ 11,735	\$	156,172	
5	South of Hwy 825 350mm Pipe (RR224A to Rail Crossing)	\$	127,202	\$	-	\$ 8,890	\$	118,312	
6	South of Hwy 825 350mm Pipe (Railcrossing to CN Lands)	\$	55,969	\$	-	\$ 3,912	\$	52,057	
7	South of Hwy 825 350mm Pipe (CN Lands to Existing Pipe)	\$	101,762	\$	-	\$ 7,112	\$	94,650	
8	RR225 350mm Pipe (South of Twp Rd 552 to Exisitng Pipe)	\$	264,467	\$	-	\$ 22,315	\$	242,152	
9	RR225 350mm Pipe (North of Twp Rd 552 to Estate Way)	\$	381,526	\$	-	\$ 3,423	\$	378,103	
10	RR225 350mm Pipe (North of Estate Way to Twp 553)	\$	182,446	\$	-	\$ 4,759	\$	177,687	
11	Highway 825 350mm Pipe (North of Estate Way to Twp 553)	\$	573,401	\$	-	\$ 4,759	\$	568,642	
12	Twp 553 350mm Pipe (Highway 825 to Park Road)	\$	860,101	\$	-	\$ 7,139	\$	852,963	
13	Twp 553 350mm Pipe (Park Road to RR225)	\$	91,223	\$	-	\$ 2,380	\$	88,843	
14	RR225 400mm Pipe (Twp 553 North 0.5 mile)	\$	199,032	\$	-	\$ -	\$	199,032	
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)	\$	344,751	\$	-	\$ -	\$	344,751	
19	RR225 350mm Pipe(South replacing Herder Co-op Line)	\$	934,960	\$	-	\$ 68,603	\$	866,357	
20	SIP Reservoir Expansion	\$	2,076,672	\$	-	\$ 122,265	\$	1,954,407	
21	Replace CRNWSC Line Projects 4-7 Oversizing	\$	1,607,951	\$	-	\$ 169,603	\$	1,438,348	
22	SIP Reservoir Expansion - Stage 3	\$	-	\$	-	\$ 67,869	\$	(67,869)	
100	Contributions collected under old development agreements	\$	(50,500)	\$	-	\$ -	\$	(50,500)	
		\$	12,408,955	\$	761,335	\$ 626,741	\$	11,020,878	

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 **\$11.02 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).



C7. Water Infrastructure Benefiting Areas

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

lé a ma	D	eveloper	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
Item		Cost	1.0	2.0	3.0	4.0	5.0	6.0	7.0	6.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	16.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	20.0	29.0
1	\$	1,013,604	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	\$	1,338,663	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	\$	1,254,504	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	\$	156,172																		1	1	1	1	1	1	1	1	1	1	1	1
5	\$	118,312																		1	1	1	1	1	1	1	1	1	1	1	1
6	\$	52,057																		1	1	1	1	1	1	1	1	1	1	1	1
7	\$	94,650																		1	1	1	1	1	1	1	1	1	1	1	1
8	\$	242,152																		1	1	1	1	1	1	1	1	1	1	1	1
9	\$	378,103	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
10	\$	177,687	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
11	\$	568,642	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
12	\$	852,963	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
13	\$	88,843	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
14	\$	199,032	1	1	1	1	1	1	1	1	1																				
15	\$	-	1	1	1	1	1	1	1	1	1																				
16	\$	-	1	1						1	1	1	1					1	1												
17	\$		1	1						1	1	1	1					1	1												
18	\$	344,751										1	1					1	1												
19	\$	866,357																		1	1	1	1	1	1	1	1	1	1	1	1
20	\$	1,954,407	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	\$	1,438,348																		1	1	1	1	1	1	1	1	1	1	1	1
22	\$	(67,869)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	\$	(50,500)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	\$	11,020,878																													

Water Allocations to Benefitting Areas

C8. Reserve Balance

As at December 31st, 2018 the water reserve balance was in a deficit of \$(4,926,443). This amount takes into consideration expenditures and front-ending repayments up to end-2018. A negative balance indicates the presence of front-ending—i.e., this amount is owed to the County by the reserve. 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 reserve is withdrawn and used to pay down front-ending debts owed to the County. In addition to maintaining a dedicated water offsite levy reserve (required by the MGA), it is also recommended that the County develop a set of "sub-ledgers" to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time. A detailed reserve continuity schedule is also provided in Appendix G.

Water Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2012		\$ 607,037.83	\$ (607,037.83)
Old Levies Collected to December 31, 2012, but not allocated to projects, but applied in Column R on Facilities page	\$ 761,334.96		\$ 154,297.13
		\$ -	\$ 154,297.13
	\$ -		\$ 154,297.13
Opening Balance	\$ 154,297.13		

2013		1			\$	154,297.13
Interest on Opening Balance	\$	3,085.94			\$	157,383.07
Project Expenditures	Ψ	0,000.01	\$	3,394,299.35		(3,236,916.28
Offsite Levy Receipts	\$	203,372.84	Ψ	0,004,200.00		(3,033,543.44
Offsite Levy Receipts Collected Under Old Agreement or Old	Ψ	200,012.01			Ψ	(0,000,010.11
Bylaw (if any)	\$	50,500.00			\$	(2,983,043.44
Debenture Interest Accrued This Year	Ψ	30,300.00	\$	_		(2,983,043.44
Interest on Project Expenditure			\$	25,457.25		(3,008,500.68
Interest on Offsite Levy Receipts	_	0.000.70	Ψ	20,407.20		•
·	\$	2,033.73			\$	(3,006,466.96
Interest on Offsite Levy Receipts Collected Under Old	_				•	(0.000.400.00
Agreement or Old Bylaw (if any)	\$	-	Φ.			(3,006,466.96
Interest on Debenture Accrual			\$	- `	\$	(3,006,466.96
2014					\$	(3,006,466.96
Interest on Opening Balance			\$	90,194.01	\$	(3,096,660.96
Project Expenditures			\$	1,465,070.56		(4,561,731.53
Offsite Levy Receipts	\$	140,856.62		-		(4,420,874.91
Offsite Levy Receipts Collected Under Old Agreement or Old					Ė	
Bylaw (if any)	\$	-			\$	(4,420,874.91
Debenture Interest Accrued This Year			\$	28,322.81		(4,449,197.72
Interest on Project Expenditure			\$	10,988.03		(4,460,185.75
Interest on Offsite Levy Receipts	\$	1,408.57		.,		(4,458,777.19
Interest on Offsite Levy Receipts Collected Under Old	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				(1,100,1111
Agreement or Old Bylaw (if any)	\$	_			\$	(4,458,777.19
Interest on Debenture Accrual	— •		\$	849.68		(4,459,626.87
2015			Φ.	400 700 04		(4,459,626.87
Interest on Opening Balance	-		\$	133,788.81		(4,593,415.68
Project Expenditures	_	404 040 70	\$	29,987.75		(4,623,403.43
Offsite Levy Receipts	\$	161,912.78			\$	(4,461,490.65
Offsite Levy Receipts Collected Under Old Agreement or Old	_				Φ.	(4.404.400.05
Bylaw (if any)	\$	-	Φ.	00 005 70		(4,461,490.65
Debenture Interest Accrued This Year			\$	26,835.76		(4,488,326.41
Interest on Project Expenditure		222 52	\$	224.91		(4,488,551.32
Interest on Offsite Levy Receipts	\$	809.56			\$	(4,487,741.76
Interest on Offsite Levy Receipts Collected Under Old						// /0// -0
Agreement or Old Bylaw (if any)	\$	-		225.27		(4,487,741.76
Interest on Debenture Accrual			\$	805.07	\$	(4,488,546.83
2016					\$	(4,488,546.83
Interest on Opening Balance			\$	134,656.40		(4,623,203.24
Project Expenditures			\$	28,531.28		(4,651,734.52
Offsite Levy Receipts	\$	20,210.98				(4,631,523.54
Offsite Levy Receipts Collected Under Old Agreement or Old	1				_	(1,001,0001
Bylaw (if any)	\$	_			\$	(4,631,523.54
	- '		\$	25,294.91		(4,656,818.44
			*	_		
Debenture Interest Accrued This Year			\$	213.98	D	(4.65/.032.43
Debenture Interest Accrued This Year Interest on Project Expenditure	\$	101.05	\$	213.98		(4,657,032.43 (4.656.931.37
Debenture Interest Accrued This Year Interest on Project Expenditure Interest on Offsite Levy Receipts	\$	101.05	\$	213.98		(4,657,032.43
Debenture Interest Accrued This Year Interest on Project Expenditure	\$	101.05	\$	213.98	\$	•

2017					\$ (4,657,690.22)
Interest on Opening Balance			\$	139,730.71	\$ (4,797,420.93)
Project Expenditures			\$	-	\$ (4,797,420.93)
Offsite Levy Receipts	\$	78,782.40			\$ (4,718,638.53)
Offsite Levy Receipts Collected Under Old Agreement or Old					
Bylaw (if any)	\$	-			\$ (4,718,638.53)
Debenture Interest Accrued This Year			\$	23,698.30	\$ (4,742,336.83)
Interest on Project Expenditure			\$	-	\$ (4,742,336.83)
Interest on Offsite Levy Receipts	\$	393.91			\$ (4,741,942.92)
Interest on Offsite Levy Receipts Collected Under Old					
Agreement or Old Bylaw (if any)	\$	-			\$ (4,741,942.92)
Interest on Debenture Accrual			\$	710.95	\$ (4,742,653.87)
	1				
2018					\$ (4,742,653.87)
2018 Interest on Opening Balance			\$	142,279.62	
			\$	142,279.62 40,216.53	\$ (4,884,933.48)
Interest on Opening Balance	\$	21,605.77	,		\$ (4,884,933.48)
Interest on Opening Balance Project Expenditures	\$	21,605.77	,		\$ (4,884,933.48) \$ (4,925,150.01)
Interest on Opening Balance Project Expenditures Offsite Levy Receipts	\$	21,605.77	,		\$ (4,884,933.48) \$ (4,925,150.01)
Interest on Opening Balance Project Expenditures Offsite Levy Receipts Offsite Levy Receipts Collected Under Old Agreement or Old		21,605.77	,		\$ (4,884,933.48) \$ (4,925,150.01) \$ (4,903,544.24) \$ (4,903,544.24)
Interest on Opening Balance Project Expenditures Offsite Levy Receipts Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)		21,605.77	\$	40,216.53	\$ (4,884,933.48) \$ (4,925,150.01) \$ (4,903,544.24) \$ (4,903,544.24) \$ (4,925,588.17)
Interest on Opening Balance Project Expenditures Offsite Levy Receipts Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) Debenture Interest Accrued This Year		21,605.77	\$	40,216.53 22,043.93	\$ (4,884,933.48) \$ (4,925,150.01) \$ (4,903,544.24) \$ (4,903,544.24) \$ (4,925,588.17)
Interest on Opening Balance Project Expenditures Offsite Levy Receipts Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) Debenture Interest Accrued This Year Interest on Project Expenditure	\$	<u>-</u>	\$	40,216.53 22,043.93	\$ (4,884,933.48) \$ (4,925,150.01) \$ (4,903,544.24) \$ (4,903,544.24) \$ (4,925,588.17) \$ (4,925,889.79)
Interest on Opening Balance Project Expenditures Offsite Levy Receipts Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any) Debenture Interest Accrued This Year Interest on Project Expenditure Interest on Offsite Levy Receipts	\$	<u>-</u>	\$	40,216.53 22,043.93	\$ (4,884,933.48) \$ (4,925,150.01) \$ (4,903,544.24) \$ (4,903,544.24) \$ (4,925,588.17) \$ (4,925,889.79)

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.

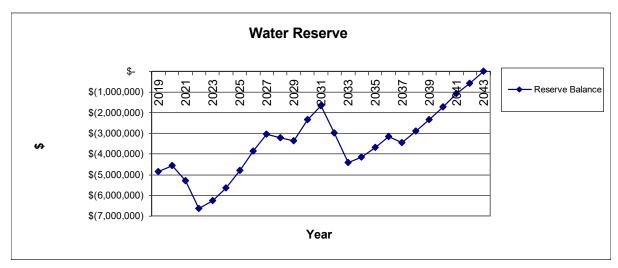
To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **3.25**%¹⁷ interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00**%¹⁸ interest credit has been provided to the reserve when it is forecast 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).

 $^{^{17}}$ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~3.25%. Historical charge rates used in the model are 3% (2015-2018).

¹⁸ Historical earning rates used in the model are 1% (2015-2018).

Anticipated Water Offsite Levy Reserve Balances



Anticipated Water Offsite Levy Reserve Balances

			Op	pening Balance	\$ (4,926,443)
Year	Receipts	Expenditure		Interest	Balance
2019	\$ 228,829	\$ 13,585	\$	(153,114)	\$ (4,864,314)
2020	\$ 467,134	\$ 13,857	\$	(143,359)	\$ (4,554,396)
2021	\$ 399,484	\$ 982,155	\$	(166,955)	\$ (5,304,022)
2022	\$ 425,293	\$ 1,545,863	\$	(208,799)	\$ (6,633,391)
2023	\$ 564,862	\$ 4,998	\$	(197,390)	\$ (6,270,917)
2024	\$ 807,315	\$ 5,148	\$	(177,734)	\$ (5,646,485)
2025	\$ 1,022,253	\$ 5,303	\$	(150,460)	\$ (4,779,994)
2026	\$ 1,052,484	\$ 5,462	\$	(121,322)	\$ (3,854,293)
2027	\$ 921,143	\$ 5,626	\$	(95,510)	\$ (3,034,286)
2028	\$ 948,097	\$ 1,034,530	\$	(101,423)	\$ (3,222,142)
2029	\$ 1,044,902	\$ 1,065,566	\$	(105,391)	\$ (3,348,197)
2030	\$ 1,075,888	\$ -	\$	(73,850)	\$ (2,346,160)
2031	\$ 742,910	\$ -	\$	(52,106)	\$ (1,655,355)
2032	\$ 765,198	\$ 1,991,863	\$	(93,666)	\$ (2,975,686)
2033	\$ 251,138	\$ 1,540,228	\$	(138,605)	\$ (4,403,381)
2034	\$ 387,028	\$ -	\$	(130,531)	\$ (4,146,885)
2035	\$ 588,687	\$ -	\$	(115,641)	\$ (3,673,839)
2036	\$ 606,347	\$ -	\$	(99,693)	\$ (3,167,185)
2037	\$ 624,538	\$ 789,190	\$	(108,285)	\$ (3,440,123)
2038	\$ 643,274	\$ -	\$	(90,898)	\$ (2,887,746)
2039	\$ 636,341	\$ -	\$	(73,171)	\$ (2,324,576)
2040	\$ 655,431	\$ -	\$	(54,247)	\$ (1,723,393)
2041	\$ 675,094	\$ -	\$	(34,070)	\$ (1,082,369)
2042	\$ 532,949	\$ -	\$	(17,856)	\$ (567,276)
2043	\$ 567,276	\$ -	\$	(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) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately \$11.03 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		Cost of Debenture Completed Work Interest		Cost of Debenture Ompleted Work Interest Completed Completed		Debenture Interest		Estimated Cost of Work Yet to be Completed		otal Project timated Cost
1	300mm Twp Rd 552 (1)	\$	663,260	\$	-	\$		\$	663,260		
2	250mm South of Hwy 825 (2)	\$	676,176	\$	120,382	\$		\$	796,558		
3	250mm South of Hwy 825 (3)	\$	396,529	\$	73,454	\$		\$	469,982		
4	250mm South of Hwy 825 (4)	\$	437,950	\$	81,615	\$		\$	519,565		
5	600mm Estate Way across RR225	\$	848,580	\$	-	\$		\$	848,580		
6	375mm West of Estate Way	\$	-	\$	-	\$	849,599	\$	849,599		
7	375mm North 3-10 to 3-09	\$	-	\$	-	\$	849,599	\$	849,599		
8	250mm West	\$	-	\$	-	\$	700,919	\$	700,919		
9	250mm NorthWest	\$	-	\$	-	\$	711,539	\$	711,539		
10	Forcemain North	\$	-	\$	-	\$	1,431,999	\$	1,431,999		
11	250mm Gravity North of Forcemain	\$	-	\$	-	\$	1,145,599	\$	1,145,599		
12	250mm Gravity Far North	\$	-	\$	-	\$	637,199	\$	637,199		
13	Lift Station along Highway 825	\$	-	\$	-	\$	1,406,621	\$	1,406,621		
100	Contributions collected under old development agreements	\$	-	\$	-	\$	-	\$	-		
		\$	3,022,495	\$	275,451	\$	7,733,074	\$	11,031,020		

^{*}Costs estimates provided by County staff.

^{**}Estimates include engineering and contingencies.

^{***}Contributions stemming from old development are not technically "receipts". Instead, they have been set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

^{****}Offsite infrastructure definitions are contained in Appendix F.



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 grant or contribution (i.e., contributed infrastructure). Sturgeon County has/will receive approximately **\$0.02 million** in special grants and contributions for sanitary offsite levy infrastructure as shown in the table below (note, if the County receives additional grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$11.01 million**.

ltem	Project Description	Total Project Estimated Cost	Special Grants	Developer Agreement Contributions	Other Contributions	Reduced Project Estimated Cost
1	300mm Twp Rd 552 (1)		\$	\$ -	\$ -	\$ 663,260
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	\$ 849,599	\$ -	\$ -	\$ -	\$ 849,599
7	375mm North 3-10 to 3-09	\$ 849,599	\$ -	\$ -	\$ -	\$ 849,599
8	250mm West	\$ 700,919	\$ -	\$ -	\$ -	\$ 700,919
9	250mm NorthWest	\$ 711,539	\$ -	\$ -	\$ -	\$ 711,539
10	Forcemain North	\$ 1,431,999	\$ -	\$ -	\$ -	\$ 1,431,999
11	250mm Gravity North of Forcemain	\$ 1,145,599	\$ -	\$ -	\$ -	\$ 1,145,599
12	250mm Gravity Far North	\$ 637,199	\$ -	\$ -	\$ -	\$ 637,199
13	Lift Station along Highway 825	\$ 1,406,621	\$ -	\$ -	\$ -	\$ 1,406,621
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ 23,799	\$ (23,799)
		\$ 11,031,020	\$ -	\$ -	\$ 23,799	\$ 11,007,220

Special Grants and Contributions for Sanitary Offsite Infrastructure

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	2032
7	375mm North 3-10 to 3-09	2050
8	250mm West	2037
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).

D4. Sanitary Offsite Infrastructure Benefiting Parties

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

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

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

- Other Stakeholders other parties (such as neighboring municipalities) that benefit from the infrastructure.
- Sturgeon County Future Development (Financial Oversizing) that portion of cost which benefits future development beyond the 25-year review period.
- Sturgeon County Future Development (In Rates) all growth-related infrastructure (i.e., levyable sanitary infrastructure costs) during the 25-year rate planning period.

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

Allocation of Sanitary	/ Infrastructure to Benefiting Parties

Item	Project Description	uced Project imated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	300mm Twp Rd 552 (1)	\$ 663,260			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	\$ 849,599			52.0%	48.0%
7	375mm North 3-10 to 3-09	\$ 849,599			100.0%	0.0%
8	250mm West	\$ 700,919			72.0%	28.0%
9	250mm NorthWest	\$ 711,539			100.0%	0.0%
10	Forcemain North	\$ 1,431,999			100.0%	0.0%
11	250mm Gravity North of Forcemain	\$ 1,145,599			100.0%	0.0%
12	250mm Gravity Far North	\$ 637,199			100.0%	0.0%
13	Lift Station along Highway 825	\$ 1,406,621			100.0%	0.0%
100	Contributions collected under old development agreements	\$ (23,799)			0.0%	100.0%
		\$ 11,007,220				

^{*}Allocations were determined by County staff.

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 \$3.88 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 \$1.05 million in sanitary levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately \$2.83 million.

^{**}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. In future, as the 25-year review period moves further out these additional developer costs will gradually be included in future rate calculations.

Item	Project Description	Cost			Offsite Levy unds Collected Dec 31, 2012	F	Offsite Levy unds Collected Starting Jan 1, 2013	De	Adjusted veloper (Levy) Cost
1	300mm Twp Rd 552 (1)	\$,	\$	603,736	\$	302,055	\$	(242,530)
2	250mm South of Hwy 825 (2)	\$	796,558	\$	-	\$	54,637	\$	741,921
3	250mm South of Hwy 825 (3)	\$	469,982	\$	-	\$	48,049	\$	421,933
4	250mm South of Hwy 825 (4)	\$	519,565	\$	-	\$	-	\$	519,565
5	600mm Estate Way across RR225	\$	848,580	\$		\$	42,640	\$	805,940
6	375mm West of Estate Way	\$	407,808	\$	-	\$	-	\$	407,808
7	375mm North 3-10 to 3-09	\$	-	\$	-	\$	-	\$	-
8	250mm West	\$	196,257	\$	-	\$	-	\$	196,257
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	\$	(23,799)	\$	-	\$	-	\$	(23,799)
		\$	3,878,211	\$	603,736	\$	447,381	\$	2,827,095

Offsite Levy Funds Applied to Date

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 \$2.83 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).

= Future Less: Levy = Off-site Development Receipts Balance* (OSL Share) \$1.05M \$2.83M \$3.88M = Future Development "Financial Oversizing" \$7.13M Less: Special Project = Project = Other Grants & Balance Costs Share Contributions \$11.03M \$11.01M \$0.00M \$0.02M = Existing Development (Town Share) \$0.00M

Total Sanitary Offsite Levy Costs

D7. Sanitary Infrastructure Benefiting Areas

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

100 \$

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

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 1 (242.530)741,921 519 565 1 1 1 1 1 805,940 407,808 1 7 \$ 8 \$ 1 1 1 1 196.257 1 1 1 9 \$ 10 \$ 11 \$ 1 1 12 \$ 1 | 1 1 1 1

1 1

1

Sanitary Allocations to Benefitting Areas

D8. Reserve Balance

(23,799)

As at December 31st, 2018 the sanitary reserve balance was at a deficit of \$(2,347,045). This amount takes into consideration expenditures and front-ending repayments up to end-2018. A negative balance indicates the presence of front-ending—i.e., this amount is owed to the County by the reserve. 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 reserve is withdrawn and used to pay down front-ending debts owed to the County. In addition to maintaining a dedicated sanitary offsite levy reserve (required by the MGA), it is also recommended that the County develop a set of "sub-ledgers" to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time. A detailed reserve continuity schedule is also provided in Appendix G.

Sanitary Offsite Levy Reserve Balance

Description	Dr Cr		Cr		Balance
Offsite Levy Expenditures to December 31, 2012		\$	67,959.00	\$	(67,959.00)
Old Levies Collected to December 31, 2012, but not allocated to projects, but applied in Column R on Facilities page	\$ 603,735.72			\$	535,776.72
		\$	-	\$	535,776.72
	\$ -			\$	535,776.72
Opening Balance				\$	535,776.72

2013					\$	535	776.72
Interest on Opening Balance	\$	10,715.53			\$		492.25
Project Expenditures	Ψ	10,7 10.00	\$	1,818,272.13			779.88)
Offsite Levy Receipts	\$	180,788.42	Ψ	1,010,272.10			991.46)
Offsite Levy Receipts Collected Under Old Agreement or Old	Ψ	100,700.42			Ψ (1,000,	331.40)
Bylaw (if any)	\$	20,555.67			¢ /	1 070	435.79)
Debenture Interest Accrued This Year	Ψ	20,555.07	\$				435.79) 435.79)
Interest on Project Expenditure	-		\$	13,637.04			072.83)
Interest on Offsite Levy Receipts	-		φ	13,037.04			
	\$	-			\$ (1,084,	072.83)
Interest on Offsite Levy Receipts Collected Under Old					. .		
Agreement or Old Bylaw (if any)	\$	-					072.83)
Interest on Debenture Accrual			\$	-	\$ (1,084,	072.83)
2014					\$ (1,084,	072.83)
Interest on Opening Balance			\$	32,522.18			595.01)
Project Expenditures			\$	768,069.57			664.58)
Offsite Levy Receipts	\$	111,712.04	Ť	,			952.54)
Offsite Levy Receipts Collected Under Old Agreement or Old		,			Ψ (.,,	002.0.,
Bylaw (if any)	\$	_			\$ (1.772	952.54)
Debenture Interest Accrued This Year	Ψ		\$	_			952.54)
Interest on Project Expenditure	_		\$	5,760.52			713.06)
Interest on Offsite Levy Receipts	\$	1,117.12	Ψ	0,700.02			595.94)
Interest on Offsite Levy Receipts Collected Under Old	Ψ	1,117.12			Ψ (1,777,	J3J.34)
Agreement or Old Bylaw (if any)	\$	_			¢ /	1 777	595.94)
Interest on Debenture Accrual	Ψ	-	\$	_			595.94)
interest on Dependre Accidal			Ψ	-			
2015							595.94)
Interest on Opening Balance			\$	53,327.88			923.82)
Project Expenditures			\$	263,759.82			683.64)
Offsite Levy Receipts	\$	104,618.76			\$ (1,990,	064.88)
Offsite Levy Receipts Collected Under Old Agreement or Old							
Bylaw (if any)	\$	-					064.88)
Debenture Interest Accrued This Year			\$	30,776.57	\$ (2,020,	841.44)
Interest on Project Expenditure			\$	1,978.20	\$ (2,022,	819.64)
Interest on Offsite Levy Receipts	\$	523.09			\$ (2,022,	296.55)
Interest on Offsite Levy Receipts Collected Under Old							
Agreement or Old Bylaw (if any)	\$	-			\$ (2,022,	296.55)
Interest on Debenture Accrual			\$	923.30	\$ (2,023,	219.84)
2016					\$ (2 023	219.84)
Interest on Opening Balance	+		\$	60,696.60			916.44)
Project Expenditures	_		\$	-			916.44)
	Φ.	16,029.12	Ψ				887.32)
Offsite Levy Receipts Offsite Levy Receipts Collected Under Old Agreement or Old	\$	10,029.12			Φ (2,007,	001.32
,	d.				ተ /	2 067	007 22)
Bylaw (if any) Deberture Interest Aperued This Year	\$	-	φ	28,974.19			887.32)
Debenture Interest Accrued This Year	-		\$ \$	20,974.19			861.51)
Interest on Project Expenditure	ф.	00.45	Ф	-			861.51)
Interest on Offsite Levy Receipts	\$	80.15			Þ (∠,096,	781.36)
Interest on Offsite Levy Receipts Collected Under Old					ተ /	2 000	704.00
Agreement or Old Bylaw (if any)	\$	-	<u>_</u>	000 00	_ ` `		781.36)
Interest on Debenture Accrual			\$	869.23	SS (ン.097.	650.59)

2017				\$ (2,097,650.59)
Interest on Opening Balance			\$ 62,929.52	\$ (2,160,580.10)
Project Expenditures			\$ -	\$ (2,160,580.10)
Offsite Levy Receipts	\$	20,340.49		\$ (2,140,239.61)
Offsite Levy Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-		\$ (2,140,239.61)
Debenture Interest Accrued This Year			\$ 27,111.93	\$ (2,167,351.54)
Interest on Project Expenditure			\$ -	\$ (2,167,351.54)
Interest on Offsite Levy Receipts	\$	101.70		\$ (2,167,249.84)
Interest on Offsite Levy Receipts Collected Under Old				
Agreement or Old Bylaw (if any)	\$	-		\$ (2,167,249.84)
Interest on Debenture Accrual			\$ 813.36	\$ (2,168,063.20)
2018				\$ (2,168,063.20)
Interest on Opening Balance			\$ 65,041.90	\$ (2,233,105.10)
Project Expenditures			\$ 104,434.43	\$ (2,337,539.53)
Offsite Levy Receipts	\$	47 405 00		
	Ψ	17,135.32		\$ (2,320,404.21)
Offsite Levy Receipts Collected Under Old Agreement or Old	Ψ	17,135.32		\$ (2,320,404.21)
Offsite Levy Receipts Collected Under Old Agreement or Old Bylaw (if any)	\$	-		\$ (2,320,404.21) \$ (2,320,404.21)
	1	-	\$ 25,187.81	,
Bylaw (if any)	1	-	\$	\$ (2,320,404.21)
Bylaw (if any) Debenture Interest Accrued This Year	1	- 85.68		\$ (2,320,404.21) \$ (2,345,592.02)
Bylaw (if any) Debenture Interest Accrued This Year Interest on Project Expenditure	\$	-		\$ (2,320,404.21) \$ (2,345,592.02) \$ (2,346,375.27)
Bylaw (if any) Debenture Interest Accrued This Year Interest on Project Expenditure Interest on Offsite Levy Receipts	\$	-		\$ (2,320,404.21) \$ (2,345,592.02) \$ (2,346,375.27)

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.

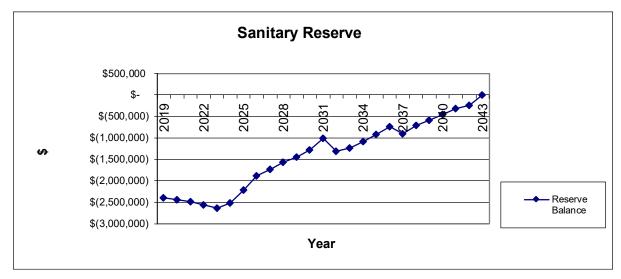
To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **3.25**%¹⁹ interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00**%²⁰ interest credit has been provided to the reserve when it is forecast 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).

¹⁹ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~3.25%. Historical charge rates used in the model are 3% (2015-2018).

²⁰ Historical earning rates used in the model are 1% (2015-2018).

Anticipated Sanitary Offsite Levy Reserve Balances



Anticipated Sanitary Offsite Levy Reserve Balances

	Opening Balance							
Year		Receipts	Ex	penditure		Interest		Balance
2019	\$	50,197	\$	17,861	\$	(75,228)	\$	(2,389,937)
2020	\$	46,923	\$	18,218	\$	(76,740)	\$	(2,437,973)
2021	\$	48,032	\$	18,583	\$	(78,277)	\$	(2,486,800)
2022	\$	28,380	\$	19,140	\$	(80,521)	\$	(2,558,081)
2023	\$	28,976	\$	19,714	\$	(82,837)	\$	(2,631,656)
2024	\$	216,208	\$	20,306	\$	(79,162)	\$	(2,514,916)
2025	\$	398,084	\$	20,915	\$	(69,477)	\$	(2,207,224)
2026	\$	410,027	\$	21,542	\$	(59,109)	\$	(1,877,848)
2027	\$	218,742	\$	22,189	\$	(54,642)	\$	(1,735,937)
2028	\$	224,917	\$	11,427	\$	(49,480)	\$	(1,571,927)
2029	\$	188,305	\$	11,770	\$	(45,350)	\$	(1,440,742)
2030	\$	193,954	\$	-	\$	(40,521)	\$	(1,287,308)
2031	\$	313,957	\$	-	\$	(31,634)	\$	(1,004,985)
2032	\$	323,375	\$	587,307	\$	(41,240)	\$	(1,310,157)
2033	\$	120,046	\$	-	\$	(38,679)	\$	(1,228,789)
2034	\$	185,003	\$	-	\$	(33,923)	\$	(1,077,709)
2035	\$	189,635	\$	-	\$	(28,862)	\$	(916,937)
2036	\$	195,324	\$	-	\$	(23,452)	\$	(745,066)
2037	\$	201,183	\$	327,659	\$	(28,325)	\$	(899,866)
2038	\$	207,219	\$	-	\$	(22,511)	\$	(715,159)
2039	\$	143,059	\$	-	\$	(18,593)	\$	(590,693)
2040	\$	147,351	\$	-	\$	(14,409)	\$	(457,751)
2041	\$	151,771	\$	-	\$	(9,944)	\$	(315,924)
2042	\$	78,630	\$	-	\$	(7,712)	\$	(245,006)
2043	\$	245,006	\$	-	\$	0	\$	0

APPENDIX E: STORMWATER

E1. Stormwater Offsite Infrastructure

In order to support future growth, stormwater offsite infrastructure is required. The estimated cost of this infrastructure is based upon: (a) actual construction costs to the cut-off date, (b) debenture interest associated with financing, and (c) future cost estimates. Total cost is approximately \$3.77 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

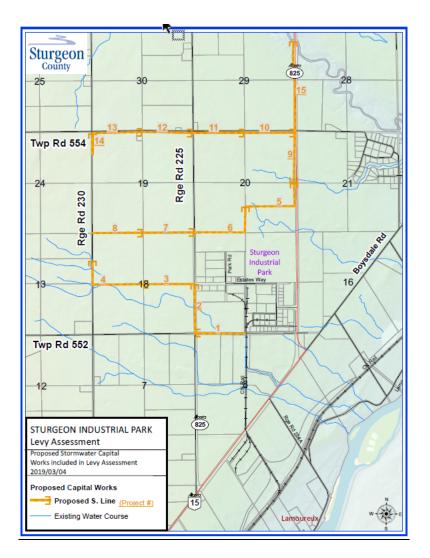
Item	Project Description	Cost of Completed Work	Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Storm Ditch Twp 552 (1)	\$ 292,938	\$ -	\$ -	\$ 292,938
2	Storm Ditch RR 225 (2)	\$ 113,580	\$ -	\$ 87,575	\$ 201,154
3	Storm Ditch Twp 552A (3)	\$ -	\$ -	\$ 272,834	\$ 272,834
4	Storm Ditch Twp 552A (4)	\$ -	\$ -	\$ 409,252	\$ 409,252
5	Storm Ditch Twp 553A (5)	\$ -	\$ -	\$ 409,252	\$ 409,252
6	Storm Ditch Twp 553 (6)	\$ -	\$ -	\$ 409,252	\$ 409,252
7	Storm Ditch Twp 553 (7)	\$ -	\$ -	\$ 272,834	\$ 272,834
8	Storm Ditch Twp 553 (8)	\$ -	\$ -	\$ 272,834	\$ 272,834
9	Storm Ditch Hwy 825 (9)	\$ -	\$ -	\$ 168,794	\$ 168,794
10	Storm Ditch Twp 554 (10)	\$ -	\$ -	\$ 168,794	\$ 168,794
11	Storm Ditch Twp 554 (11)	\$ -	\$ -	\$ 168,794	\$ 168,794
12	Storm Ditch Twp 554 (12)	\$ -	\$ -	\$ 168,794	\$ 168,794
13	Storm Ditch Twp 554 (13)	\$ -	\$ -	\$ 168,794	\$ 168,794
14	Storm Ditch RR 230 (14)	\$ -	\$ -	\$ 81,120	\$ 81,120
15	Storm Ditch Hwy 825 (15)	\$ -	\$ -	\$ 304,200	\$ 304,200
100	Contributions collected under old development agreements	\$ -	\$ -	\$ -	\$ -
		\$ 406,518	\$ -	\$ 3,363,126	\$ 3,769,644

^{*}Costs estimates provided by County staff.

^{**}Estimates include engineering and contingencies.

^{***}Contributions stemming from old development are not technically "receipts". Instead, they have been set-up as an individual project (#100) and credited 100% to future development and to all offsite levy areas.

^{****}Offsite infrastructure definitions are contained in Appendix F.



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 grant or contribution (i.e., contributed infrastructure). Sturgeon County has/will receive approximately **\$0.01 million** in special grants and contributions for stormwater offsite levy infrastructure as shown in the table below (note, if the County receives other grants or contributions in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is **\$3.76 million**.

(14.360)

Item	Project Description			Developer Agreement Contributions	Other Contributions	Reduced Project Estimated Cost
	Storm Ditch Twp 552 (1)	\$ 292,938		\$ -	\$ -	\$ 292,938
2	Storm Ditch RR 225 (2)	\$ 201,154	\$ -	\$ -	\$ -	\$ 201,154
3	Storm Ditch Twp 552A (3)	\$ 272,834	\$ -	\$ -	\$ -	\$ 272,834
4	Storm Ditch Twp 552A (4)	\$ 409,252	\$ -	\$ -	\$ -	\$ 409,252
5	Storm Ditch Twp 553A (5)	\$ 409,252	\$ -	\$ -	\$ -	\$ 409,252
6	Storm Ditch Twp 553 (6)	\$ 409,252	\$ -	\$ -	\$ -	\$ 409,252
7	Storm Ditch Twp 553 (7)	\$ 272,834	\$ -	\$ -	\$ -	\$ 272,834
8	Storm Ditch Twp 553 (8)	\$ 272,834	\$ -	\$ -	\$ -	\$ 272,834
9	Storm Ditch Hwy 825 (9)	\$ 168,794	\$ -	\$ -	\$ -	\$ 168,794
10	Storm Ditch Twp 554 (10)	\$ 168,794	\$ -	\$ -	\$ -	\$ 168,794
11	Storm Ditch Twp 554 (11)	\$ 168,794	\$ -	\$ -	\$ -	\$ 168,794
	Storm Ditch Twp 554 (12)	\$ 168,794	\$ -	\$ -	\$ -	\$ 168,794
13	Storm Ditch Twp 554 (13)	\$ 168,794	\$ -	\$ -	\$ -	\$ 168,794
14	Storm Ditch RR 230 (14)	\$ 81,120	\$ -	\$ -	\$ -	\$ 81,120

Special Grants and Contributions for Stormwater Offsite Infrastructure

E3. Year of Construction

100 Contributions collected under old development agreements

Storm Ditch Hwy 825 (15)

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)	2034
4	Storm Ditch Twp 552A (4)	2050
5	Storm Ditch Twp 553A (5)	2023
6	Storm Ditch Twp 553 (6)	2023
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).

E4. Stormwater Offsite Infrastructure Benefiting Parties

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

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

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

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

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)	\$ 201,154			0.0%	100.0%
3	Storm Ditch Twp 552A (3)	\$ 272,834			60.0%	40.0%
4	Storm Ditch Twp 552A (4)	\$ 409,252			100.0%	0.0%
5	Storm Ditch Twp 553A (5)	\$ 409,252			16.0%	84.0%
6	Storm Ditch Twp 553 (6)	\$ 409,252			16.0%	84.0%
7	Storm Ditch Twp 553 (7)	\$ 272,834			100.0%	0.0%
8	Storm Ditch Twp 553 (8)	\$ 272,834			100.0%	0.0%
9	Storm Ditch Hwy 825 (9)	\$ 168,794			100.0%	0.0%
10	Storm Ditch Twp 554 (10)	\$ 168,794			100.0%	0.0%
11	Storm Ditch Twp 554 (11)	\$ 168,794			100.0%	0.0%
12	Storm Ditch Twp 554 (12)	\$ 168,794			100.0%	0.0%
13	Storm Ditch Twp 554 (13)	\$ 168,794			100.0%	0.0%
14	Storm Ditch RR 230 (14)	\$ 81,120			100.0%	0.0%
15	Storm Ditch Hwy 825 (15)	\$ 304,200			100.0%	0.0%
100	Contributions collected under old development agreements	\$ (14,360)			0.0%	100.0%
		\$ 3,755,284				

^{*}Allocations were determined by County staff.

E5. Existing Receipts & Adjusted Levy Cost

Using the offsite levy share percentages shown in the previous section and applying those percentages to project costs results in an offsite levy cost of approximately \$1.28 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 \$0.57 million in stormwater levies have been applied/collected as shown in the table below. This results in an adjusted offsite levy cost of approximately \$0.70 million.

^{**}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. In future, as the 25-year review period moves further out these additional developer costs will gradually be included in future rate calculations.

ltem	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	OSL / Developer Cost	Offsite Levy Funds Collected to Dec 31, 2012	Offsite Levy Funds Collected Starting Jan 1, 2013	Adjusted Developer (Levy) Cost
1	Storm Ditch Twp 552 (1)	\$ 292,938	\$ 364,281	\$ (40,289)	
2	Storm Ditch RR 225 (2)	\$ 201,154	\$ -	\$ 50,864	\$ 150,291
3	Storm Ditch Twp 552A (3)	\$ 109,134	\$ -	\$ 83,468	\$ 25,665
4	Storm Ditch Twp 552A (4)	\$ -	\$ -	\$ 113,631	\$ (113,631)
5	Storm Ditch Twp 553A (5)	\$ 343,771	\$ -	\$ -	\$ 343,771
6	Storm Ditch Twp 553 (6)	\$ 343,771	\$ -	\$ -	\$ 343,771
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	\$ (14,360)	\$ -	\$ -	\$ (14,360)

Offsite Levy Funds Applied to Date

E6. Summary of Stormwater Offsite Levy Cost Flow-through

As shown in the figure below, the total cost for stormwater infrastructure that forms the basis of the rate is approximately **\$0.70 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).

1,276,409 \$

364,281 \$

207,673 \$

= Future = Off-site Less: Levy Development Receipts Balance* (OSL Share) \$0.57M \$0.70M \$1.28M = Future Development "Financial Oversizing" \$2.48M Less: Special Project = Project = Other **Grants &** Costs Share Balance Contributions \$3.77M \$3.75M \$0.00M \$0.01M = Existing Development (Town Share) \$0.00M

Total Stormwater Offsite Levy Costs

E7. Stormwater Infrastructure Benefiting Areas

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

Developer 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0 10.0 Cost 1 (31,054) 1 1 1 1 1 1 \$ 150,291 1 1 1 1 25.665 1 1 1 1 1 1 1 (113,631) 1 7 \$ 1 1 1 8 \$ 1 1 1 1 1 1 1 1 1 1 10 \$ 12 \$ 1 1 14 \$ 1 1 1 1 1 1 1 15 \$ 1 1 1 1 1 1 1 1 100 \$ (14.360)1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Stormwater Allocations to Benefitting Areas

E8. Reserve Balance

As at December 31st, 2018 the stormwater reserve balance was a surplus of \$196,628. This amount takes into consideration expenditures and front-ending repayments up to end-2018. The County's ledgers should be amended to reflect this balance as it includes expenditures to date. This balance assumes that cash in the reserve is excess of this amount is withdrawn and used to pay down front-ending debts owed to the County. In addition to maintaining a dedicated stormwater offsite levy reserve/account (required by the MGA), it is also recommended that the County develop a set of "sub-ledgers" to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time. A detailed reserve continuity schedule is also provided in Appendix G.

Stormwater Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2012		\$ 59,077.28	\$ (59,077.28)
Old Levies Collected to December 31, 2012, but not allocated to			
projects, but applied in Column R on Facilities page	\$ 364,281.12		\$ 305,203.84
		\$ -	\$ 305,203.84
	\$ -		\$ 305,203.84
Opening Balance			\$ 305,203.84

2013					\$	305,203.84
Interest on Opening Balance	\$	6,104.08			\$	311,307.92
Project Expenditures			\$	259,951.67	\$	51,356.25
Offsite Levy Receipts	\$	111,109.25			\$	162,465.50
Offsite Levy Receipts Collected Under Old Agreement or Old						
Bylaw (if any)	\$	-			\$	162,465.50
Debenture Interest Accrued This Year			\$	-	\$	162,465.50
Interest on Project Expenditure			\$	1,949.64	\$	160,515.86
Interest on Offsite Levy Receipts	\$	1,111.09			\$	161,626.95
Interest on Offsite Levy Receipts Collected Under Old						
Agreement or Old Bylaw (if any)	\$	-			\$	161,626.95
Interest on Debenture Accrual			\$	-	\$	161,626.95
2014					\$	161,626.95
Interest on Opening Balance	\$	3,232.54			\$	164,859.49
Project Expenditures	Ψ	0,202.01	\$	60,028.29	\$	104,831.20
Offsite Levy Receipts	\$	55,188.44	Ψ	00,020.20	\$	160,019.64
Offsite Levy Receipts Collected Under Old Agreement or Old	Ψ	33, .33. 17			Ť	
Bylaw (if any)	\$	_			\$	160,019.64
Debenture Interest Accrued This Year	—		\$		\$	160,019.64
Interest on Project Expenditure			\$	450.21	\$	159,569.42
Interest on Offsite Levy Receipts	\$	551.88	Ψ	100.21	\$	160,121.31
Interest on Offsite Levy Receipts Collected Under Old	Ψ	001.00			Ψ	100,121.01
Agreement or Old Bylaw (if any)	\$	_			\$	160,121.31
Interest on Debenture Accrual	Ψ		\$	_	\$	160,121.31
			Ť			
2015					\$	160,121.31
Interest on Opening Balance	\$	1,601.21			\$	161,722.52
Project Expenditures			\$	-	\$	161,722.52
Offsite Levy Receipts	\$	53,770.51			\$	215,493.03
Offsite Levy Receipts Collected Under Old Agreement or Old						
Bylaw (if any)	\$	-			\$	215,493.03
Debenture Interest Accrued This Year			\$	-	\$	215,493.03
Interest on Project Expenditure			\$	-	\$	215,493.03
Interest on Offsite Levy Receipts	\$	268.85			\$	215,761.88
Interest on Offsite Levy Receipts Collected Under Old						
Agreement or Old Bylaw (if any)	\$	-			\$	215,761.88
Interest on Debenture Accrual			\$	-	\$	215,761.88
2016					\$	215,761.88
Interest on Opening Balance	\$	2,157.62			\$	217,919.50
Project Expenditures	, ·	,	\$	-	\$	217,919.50
Offsite Levy Receipts	\$	-	Ť		\$	217,919.50
Offsite Levy Receipts Collected Under Old Agreement or Old						
Bylaw (if any)	\$	-			\$	217,919.50
Debenture Interest Accrued This Year			\$	-	\$	217,919.50
Interest on Project Expenditure			\$	-	\$	217,919.50
Interest on Offsite Levy Receipts	\$	-	Ť		\$	217,919.50
Interest on Offsite Levy Receipts Collected Under Old	7	•			-	,,,,,,,,,
Agreement or Old Bylaw (if any)	\$	-			\$	217,919.50
Interest on Debenture Accrual			\$	_	\$	217,919.50

2017			\$ 217,919.50
Interest on Opening Balance	\$ 2,179.20		\$ 220,098.70
Project Expenditures		\$ -	\$ 220,098.70
Offsite Levy Receipts	\$ 1,965.00		\$ 222,063.70
Offsite Levy Receipts Collected Under Old Agreement or Old			
Bylaw (if any)	\$ -		\$ 222,063.70
Debenture Interest Accrued This Year		\$ -	\$ 222,063.70
Interest on Project Expenditure		\$ -	\$ 222,063.70
Interest on Offsite Levy Receipts	\$ 9.83		\$ 222,073.52
Interest on Offsite Levy Receipts Collected Under Old			
Agreement or Old Bylaw (if any)	\$ -		\$ 222,073.52
Interest on Debenture Accrual		\$ -	\$ 222,073.52
2018			\$ 222,073.52
Interest on Opening Balance	\$ 2,220.74		\$ 224,294.26
Project Expenditures		\$ 27,460.43	\$ 196,833.83
Offsite Levy Receipts	\$ -		\$ 196,833.83
Offsite Levy Receipts Collected Under Old Agreement or Old			
Bylaw (if any)	\$ -		\$ 196,833.83
Debenture Interest Accrued This Year		\$ -	\$ 196,833.83
Interest on Project Expenditure		\$ 205.95	\$ 196,627.88
Interest on Offsite Levy Receipts	\$ -		\$ 196,627.88
Interest on Offsite Levy Receipts Collected Under Old			
Agreement or Old Bylaw (if any)	\$ -		\$ 196,627.88
Interest on Debenture Accrual		\$ 	\$ 196,627.88

E9. Development and Stormwater Infrastructure Staging Impacts

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 stormwater infrastructure from time to time—front ending of infrastructure will be required. A front-ender is the party that constructs and pays up front for infrastructure that benefits other parties.

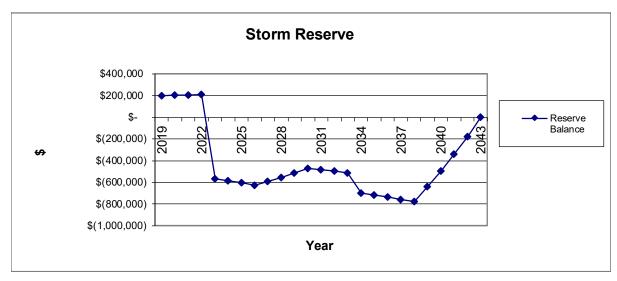
To compensate parties for capital they provide in front-ending offsite infrastructure construction, a **3.25**%²¹ interest allowance has been charged to the reserve when it is forecast to be in a negative balance. Further, a **1.00**%²² interest credit has been provided to the reserve when it is forecast 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).

²¹ The 20-year debenture rate at the Alberta Capital Finance Authority at the time of writing was ~3.25%. Historical charge rates used in the model are 3% (2015-2018).

²² Historical earning rates used in the model are 1% (2015-2018).

Anticipated Stormwater Offsite Levy Reserve Balances



Anticipated Stormwater Offsite Levy Reserve Balances

			(Оре	ning Balance	\$ 196,628
Year	Receipts	E	cpenditure		Interest	Balance
2019	\$ 1,379	\$	-	\$	1,980	\$ 199,987
2020	\$ 1,011	\$	-	\$	2,010	\$ 203,008
2021	\$ 1,118	\$	-	\$	2,041	\$ 206,168
2022	\$ 539	\$	-	\$	2,067	\$ 208,774
2023	\$ 425	\$	758,883	\$	(17,865)	\$ (567,548)
2024	\$ 351	\$	-	\$	(18,434)	\$ (585,631)
2025	\$ (849)	\$	-	\$	(19,061)	\$ (605,540)
2026	\$ (874)	\$	-	\$	(19,708)	\$ (626,123)
2027	\$ 53,427	\$	-	\$	(18,613)	\$ (591,308)
2028	\$ 55,030	\$	-	\$	(17,429)	\$ (553,707)
2029	\$ 56,627	\$	-	\$	(16,155)	\$ (513,236)
2030	\$ 58,326	\$	-	\$	(14,785)	\$ (469,694)
2031	\$ 1,530	\$	-	\$	(15,215)	\$ (483,380)
2032	\$ 1,576	\$	-	\$	(15,659)	\$ (497,463)
2033	\$ 2,053	\$	-	\$	(16,101)	\$ (511,512)
2034	\$ 3,163	\$	166,741	\$	(21,940)	\$ (697,030)
2035	\$ 3,242	\$	-	\$	(22,548)	\$ (716,336)
2036	\$ 3,340	\$	-	\$	(23,172)	\$ (736, 169)
2037	\$ 3,440	\$	-	\$	(23,814)	\$ (756,542)
2038	\$ 3,543	\$	-	\$	(24,472)	\$ (777,472)
2039	\$ 155,683	\$	-	\$	(20,208)	\$ (641,997)
2040	\$ 160,354	\$	-	\$	(15,653)	\$ (497,296)
2041	\$ 165,164	\$	-	\$	(10,794)	\$ (342,926)
2042	\$ 168,854	\$	-	\$	(5,657)	\$ (179,730)
2043	\$ 179,730	\$	-	\$	(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 then 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: RESERVE CONTINUITY SCHEDULES

Reflected As Originally Captured in Model at That Time
Included Historial Amendments Added During 2019 Update (2015-1018)
Information Only. Not Included in Reserve Totals
Reserve Balance Per GL
Amended Reserve Balance Per Offsite Levy Model

ds				20	12 & Prior		2013		2014		2015		2016		2017		2018		Total
	Opening E	Balance		\$	-	\$	2,306,524	\$	1,989,760	\$	421,697	\$	558,826	\$	549,277	\$	1,228,650		
	Receipts			\$	2,519,872	\$	1,259,758	\$	414,132	\$	425,513	\$	65,195	\$	679,373	\$	69,712	\$	5,433,5
	Withdraw	rals		\$	213,348	\$	1,576,522	\$	1,982,195	\$	288,384	\$	74,744	\$	-	\$	959,389	\$	5,094,5
	Closing Ba	alance		\$	2,306,524	\$	1,989,760	\$	421,697	\$	558,826	\$	549,277	\$	1,228,650	\$	338,973		
Vlode	el																		
	Opening E	3alance		\$	-	\$	2,211,900	\$	2,203,584	\$	(2,874,925)	\$	(2,615,725)	\$	(2,752,462)	\$	(2,282,857)		
	Revenues																		
		Old Levies Collected to December 31, 2012		\$	2,455,558													\$	2,455,5
		Offsite Levies				\$	605,754.81	\$	454,363.74	\$	425,513.45	\$	65,195	\$	679,373	\$	69,712		2,299,
		Other Contributions				\$	654,003.02									\$	50,000	\$	704,
		S	ub-Total	\$	2,455,558	\$	1,259,758	\$	454,364	\$	425,513	\$	65,195	\$	679,373	\$	119,712	\$	5,459,
	Total Expe	enditures																	
		Twp 552/Hwy 825 (Grading and Paving)		\$		\$	474,908		519,206	\$	(48,921)							\$	1,042,
		Twp 552 from Hwy 825 - RR 225 (Grading)		\$	94,424	\$	489,760		59,727							\$	531,118		1,175,
		Twp 552 from Hwy 825 - RR 225 (Paving)				\$	531,118	\$	2,295,086	\$	14,255					\$	(531,118)		2,309,
		Twp 552/RR 225 (Grading and Paving)		\$	52,276											\$	(52,276)		
		RR 225 from Hwy 825 - Estates Way (Grading)		\$	-	\$	192,242	\$	1,724,359	\$	(84,499)	\$	7,605	\$	1,800	\$	52,276	\$	1,893,
		RR 225 from Hwy 825 - Estates Way (Paving)																\$	
		Hwy 825/RR 225 (Grading and Paving)				\$	47,666	\$	2,326,544		2,237							\$	2,376,
		Hwy 825/RR 224A (Grading and Paving)				\$	-	\$	-	\$	87,655	_	26,874	-	53,553			\$	168,
			ub-Total	\$	243,658	\$	1,735,694	\$	6,924,923	\$	(29,274)	\$	34,479	\$	55,353	\$	-	\$	8,964,
	Develope	r Share of Expenditures																	
		Developer Share of Expenditures		\$	243,658	÷	1,308,555	<u> </u>	5,539,938	<u> </u>	(23,419)	_	27,584	<u> </u>	44,282			\$	7,140,
			ub-Total	\$	243,658	\$	1,308,555	\$	5,539,938	\$	(23,419)	\$	27,584	\$	44,282	\$	-	\$	7,140,
	Debentur	es																	
		Debenture Accrual								\$	102,706	_	93,200	<u> </u>	83,472	<u> </u>	73,518	<u> </u>	352,
		S	ub-Total	\$	-	\$	-	\$	-	\$	102,706	\$	93,200	\$	83,472	\$	73,518	\$	352,
	Interest																		
		Interest Earned				\$	50,296	-	48,615		2,128	•	326	-	3,397		349		105,
		Interest Charged				\$	(9,814)	_	(41,550)	_	(89,153)	_	(81,475)	_	(85,410)	_	(70,691)	_	(378,
		S	ub-Total	\$	-	\$	40,481	\$	7,066	\$	(87,026)	\$	(81,149)	\$	(82,013)	\$	(70,343)	\$	(272,
	D	losing Balance (Also Equals Front-ending Balance if Nega		Ś	2,211,900	Ś	2,203,584	Ś	(2,874,925)		(2,615,725)	_	(2,752,462)	_	(2,282,857)		(2,307,006)	<u> </u>	

Sturgeon Industrial Park 2019 Offsite Levy Update

er			201	L2 & Prior		2013		2014		2015		2016		2017		2018	Total
0	pening Ba	lance	\$	-	\$	154,298	\$	227,949	\$	348,181	\$	509,583	\$	529,794	\$	608,576	
R	eceipts		\$	761,335	\$	253,873	\$	128,384	\$	161,913	\$	20,211	\$	78,782	\$	21,606	\$ 1,426,104
W	Vithdrawa	ls	\$	607,037	\$	180,222	\$	8,153	\$	511					\$	630,182	\$ 1,426,104
С	losing Bala	ance	\$	154,298	\$	227,949	\$	348,181	\$	509,583	\$	529,794	\$	608,576	\$	(0)	
/lodel																	
0	pening Ba	lance	\$	-	\$	154,297	\$	(3,006,467)	\$	(4,459,627)	\$	(4,488,547)	\$	(4,657,690)	\$	(4,742,654)	
R	evenues																
	(Old Levies Collected to December 31, 2012	\$	761,335													\$ 761,335
	C	Offsite Levies			\$	203,372.84	\$	140,856.62	\$	161,912.78	\$	20,211	\$	78,782	\$	21,606	\$ 626,741
	C	Other Contributions			\$	50,500.00											\$ 50,500
		Sub-Total	\$	761,335	\$	253,873	\$	140,857	\$	161,913	\$	20,211	\$	78,782	\$	21,606	\$ 1,438,576
To	otal Expen	ditures															
		SIP Pumpstation Improvement	\$	120,516	\$	798,988	\$	566,538	\$	19,873	\$	2,554	\$	-	\$	-	\$ 1,508,468
	9	SIP Reservoir Expansion 3000m3	\$	54,011	\$	1,415,388	\$	589,414	\$	15,349	\$	33,110	\$	-	\$	-	\$ 2,107,272
	7	Twp Road 552 400mm Boundary (Hwy 825-RR225)	\$	432,512	\$	1,545,514	\$	8,153	\$	511	\$	-	\$	-	\$	10,175	\$ 1,996,865
		South Of Hwy 825 400mm Pipe (SIP Reservoir to RR224A)	\$	-	\$	185,773	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 185,773
	9	South of Hwy 825 400mm Pipe (RR224A to Rail Crossing)	\$	-	\$	140,737	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 140,737
	9	South of Hwy 825 400mm Pipe (Railcrossing to CN Lands)	\$	-	\$	61,924	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 61,924
	9	South of Hwy 825 400mm Pipe (CN Lands to Existing Pipe)	\$	-	\$	112,589	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 112,589
	F	RR225 400mm Pipe (South of Twp Rd 552 to Exisitng Pipe)	\$	-	\$	54,204	\$	358,246	\$	941	\$	-	\$	-	\$	20,162	\$ 433,552
		RR225 400mm Pipe (North of Twp Rd 552 to Estate Way)	\$	-	\$	54,204	\$	358,246	\$	941	\$	-	\$	-	\$	20,162	\$ 6,547,181
		Sub-Total	\$	607,039	\$	4,369,320	\$	1,880,597	\$	37,614	\$	35,664	\$	-	\$	50,499	\$ 13,094,362
D	eveloper S	Share of Expenditures															
	[Developer Share of Expenditures	\$	607,038	\$	3,394,299	\$	1,465,071	\$	29,988	\$	28,531			\$	40,217	\$ 5,565,143
		Sub-Total	\$	607,038	\$	3,394,299	\$	1,465,071	\$	29,988	\$	28,531	\$	-	\$	40,217	\$ 5,565,143
D	ebentures	3															
	[Debenture Accrual					\$	28,323	\$	26,836	\$	25,295	\$	23,698	\$	22,044	\$ 126,196
		Sub-Total	\$	-	\$	-	\$	28,323	\$	26,836	\$	25,295	\$	23,698	\$	22,044	\$ 126,196
Ir	nterest																
	I	nterest Earned			\$	5,120	\$	1,409	\$	810	\$	101	\$	394	\$	108	\$ 7,941
	I	nterest Charged			\$	(25,457)	\$	(102,032)	\$	(134,819)	\$	(135,629)	\$	(140,442)	\$	(143,243)	\$ (681,621
		Sub-Total	\$	-	\$	(20,338)	\$	(100,623)	\$	(134,009)	\$	(135,528)	\$	(140,048)	\$	(143,135)	\$ (673,680
D	eserve Clo	osing Balance (Also Equals Front-ending Balance if Negative)	Ś	154,297	Ś	(3.006.467)	Ś	(4.459.627)	Ś	(4,488,547)	Ś	(4.657.690)	Ś	(4.742.654)	Ś	(4,926,443)	

Sturgeon Industrial Park 2019 Offsite Levy Update

anitar	y		201	12 & Prior		2013		2014		2015		2016		2017		2018		Total
L																		
	Opening B	alance	\$	-	\$	569,048	\$	312,752	\$	821,551	\$	926,170	\$	942,199	\$	962,540		
	Receipts		\$	603,736	\$	201,344	\$	101,820	\$	104,619	\$	16,029	\$	20,340	\$	17,135	\$	1,065,024
	Withdrawa	als	\$	34,688	\$	457,640	\$	(406,979)							\$	979,675	\$	1,065,024
	Closing Ba	lance	\$	569,048	\$	312,752	\$	821,551	\$	926,170	\$	942,199	\$	962,540	\$	0		
SL Mod	el																	
	Opening B	alance	\$	-	\$	535,777	\$	(1,084,073)	\$	(1,777,596)	\$	(2,023,220)	\$	(2,097,651)	\$	(2,168,063)		
	Revenues																	
		Old Levies Collected to December 31, 2012	\$	603,736													\$	603,73
		Offsite Levies			\$	180,788	\$	111,712.04	\$	104,618.76	\$	16,029	\$	20,340	\$	17,135	\$	450,62
		Other Contributions			\$	20,556											\$	20,55
		Sub-Total	\$	603,736	\$	201,344	\$	111,712	\$	104,619	\$	16,029	\$	20,340	\$	17,135	\$	1,074,91
	Total Expe	nditures																
		300mm Twp Rd 552 (1)	\$	40,990	\$	601,714									\$	20,556	\$	663,26
		250mm South of Hwy 825 (2)	\$	26,969	\$	531,681		1,472		116,054							\$	676,17
		250mm South of Hwy 825 (3)			\$	324,415		898		71,215							\$	396,52
		250mm South of Hwy 825 (4)			\$	360,462	\$	998	\$	76,490							\$	437,95
		600mm Estate Way across RR225					\$	764,702	\$	-					\$	83,878	\$	848,58
		Sub-Total	\$	67,959	\$	1,818,272	\$	768,070	\$	263,760	\$	-	\$	-	\$	104,434	\$	3,022,49
	Developer	Share of Expenditures																
		Developer Share of Expenditures	\$	67,959	\$	1,818,272	<u> </u>	768,070	\$	263,760					\$	104,434	\$	3,022,49
		Sub-Total	\$	67,959	\$	1,818,272	\$	768,070	\$	263,760	\$	-	\$	-	\$	104,434	\$	3,022,49
	Debenture																	
		Debenture Accrual							\$	30,777	_	28,974	_	27,112	_	25,188		112,05
		Sub-Total	\$	-	\$	-	\$	-	\$	30,777	\$	28,974	\$	27,112	\$	25,188	\$	112,05
	Interest																	
		Interest Earned			\$	10,716	-	1,117		523		80		102		86	-	12,62
		Interest Charged			\$	(13,637)	_	(38,283)	-	(56,229)	_	(61,566)	_	(63,743)	_	(66,581)	_	(300,03
		Sub-Total	\$	-	\$	(2,922)	\$	(37,166)	\$	(55,706)	\$	(61,486)	\$	(63,641)	\$	(66,495)	\$	(287,41
	Pacamia Cl	osing Balance (Also Equals Front-ending Balance if Negative)	Ś	535.777	ć	(1,084,073)	¢	(1,777,596)	¢	(2,023,220)	ć	(2,097,651)	¢	(2,168,063)	Ś	(2.347.045)		

Sturgeon Industrial Park 2019 Offsite Levy Update

Storm			2012	& Prior	2013		2014	2015	2016	2017	2018	Total
GL												
	Opening E	Balance	\$	-	\$ 305,204	\$	156,361	\$ 148,722	\$ 201,982	\$ 201,982	\$ 203,947	
	Receipts		\$	364,281	\$ 111,109	\$	52,389	\$ 53,771		\$ 1,965		\$ 583,515
	Withdraw	rals	\$	59,077	\$ 259,952	\$	60,028	\$ 511			\$ 26,950	\$ 406,518
	Closing Ba	alance	\$	305,204	\$ 156,361	\$	148,722	\$ 201,982	\$ 201,982	\$ 203,947	\$ 176,997	
OSL Mod	el											
	Opening E	Balance	\$	-	\$ 305,204	\$	161,627	\$ 160,121	\$ 215,762	\$ 217,920	\$ 222,074	
	Revenues											
		Old Levies Collected to December 31, 2012	\$	364,281								\$ 364,28
		Offsite Levies			\$ 111,109	\$	55,188	\$ 53,771		\$ 1,965		\$ 222,033
		Other Contributions										\$ -
		Sub-Total	\$	364,281	\$ 111,109	\$	55,188	\$ 53,771	\$ -	\$ 1,965	\$ -	\$ 586,314
	Total Expe	enditures										
		Storm Ditch Twp 552 (1)	\$	59,077	\$ 241,884						\$ (8,023)	292,938
		Storm Ditch RR 225 (2)	\$	-	\$ 18,068	\$	60,028				\$ 35,484	\$ 113,580
		Sub-Total	\$	59,077	\$ 259,952	\$	60,028	\$ -	\$ -	\$ -	\$ 27,460	\$ 406,518
	Develope	r Share of Expenditures										
		Developer Share of Expenditures	\$	59,077	\$ 259,952	\$	60,028				\$ 27,460	\$ 406,51
		Sub-Total	\$	59,077	\$ 259,952	\$	60,028	\$ -	\$ -	\$ -	\$ 27,460	\$ 406,518
	Debentur	es										
		Debenture Accrual										\$ -
		Sub-Total	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
	Interest											
		Interest Earned			\$ 7,215		3,784	 1,870	\$ 2,158	\$ 2,189	\$ 2,221	19,43
		Interest Charged			\$ (1,950)	_	(450)				\$ (206)	 (2,606
		Sub-Total	\$	-	\$ 5,266	\$	3,334	\$ 1,870	\$ 2,158	\$ 2,189	\$ 2,015	\$ 16,831
	Reserve C	losing Balance (Also Equals Front-ending Balance if Negative)	\$	305,204	\$ 161,627	\$	160,121	\$ 215,762	\$ 217,920	\$ 222,074	\$ 196,628	