

City of Ottawa
Draft 2022 Amendment
Village of Manotick
Area-Specific Development Charges
Background Study

July 18, 2022

TABLE OF CONTENTS

Executive Summary

A.	2022 Village of Manotick.....	3
B.	Calculated Rates.....	3
C.	Policy Considerations	3
D.	Cost of Growth Analysis	4
E.	Consultation on DC Background Study	4
I	Introduction	
A.	Background	5
B.	Calculated Assumptions	5
C.	Study Structure	6
II	Calculation Methodology	
A.	Development Forecast.....	8
B.	Development-related Capital Program.....	8
C.	Attribution to Types of Development.....	10
D.	Calculation of Development Charges.....	10
III	Summary of Capital Costs and Calculated Development Charge Rates	
A.	Summary of DC Eligible and Ineligible Costs.....	11
B.	2022 Calculated Rates.....	12
C.	Comparison of Current versus Calculated Rates.....	14
IV	Development Charge Policy Considerations	
A.	Consideration of Area Rating.....	15
B.	Local Service Guidelines.....	15
C.	Draft DC By-Law.....	15
V	Cost of Growth Analysis	
A.	Asset Management Plan Requirements.....	16
B.	Long-Term Capital and Operating Impacts.....	17

EXECUTIVE SUMMARY

A. 2022 Village of Manotick

The development charge rates listed within this study are based on updates to the various assumptions included in the City's recent 2019 Development Charges Background Study (DC Study). The revisions presented in this amendment, undertaken in advance of the five-year maximum legislative requirement, relate to the underlying assumptions, development-related costs and growth forecasts identified for servicing the Village of Manotick.

Consistent with the methodology presented as part of the 2019 DC Study, the underlying assumptions used to calculate the revised development charge rates utilize the same approach presented in previous studies.

As part of the 2022 amendment to the rates, revisions have been made to the growth forecast and outstanding committed reserve fund balances, which has resulted in adjustments to the residential and non-residential rates.

B. Calculated Rates

A summary of the current and calculated residential and non-residential development charge rates by development type are shown below in Tables 3 and 4.

C. Policy Considerations

1. Consideration of Area Rating

As required by the *Development Charges Act (DCA)*, consideration was given to the use of area rating. In line with the City's historical practice, water and sanitary sewer (wastewater) servicing expansions identified within rural areas are deemed to provide a localized benefit and are therefore recovered on an area-specific basis.

2. Local Service Guidelines

The City has Local Service Guidelines related to growth-related infrastructure. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the DC calculation. Functions or services deemed to be local in nature are not included in the determination of the development charge rates. The

provision of local services is a direct developer funding responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer. Local Service Guidelines for infrastructure is based on the City's prevailing practices.

3. Draft DC By-law

The draft DC By-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*.

D. Cost of Growth Analysis

Long-term operating impacts and asset management requirements have been examined as part of this DC Study. It is expected that the City will incur increased operating costs as additional infrastructure has yet to be constructed. In particular, it is recognized that the increase in rate funding associated with new development is anticipated to partially or fully offset the increased costs identified, depending on the nature of the new development.

The calculated provisions identified are considered to be financially sustainable, as it is expected that the increased capital asset management requirements can be absorbed by the rate base over the long-term.

Importantly, the City's ongoing review of asset management policies and long-range financial planning analysis will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

E. Consultation on DC Background Study

Prior to and following the release of the revised DC Study consultation will continue to occur with the development industry and stakeholders prior to the passage of the new DC By-law for the Village of Manotick. Council must also hold a statutory public meeting in accordance with the *DCA*. Any person who attends such a meeting may make representations related to the proposed by-law.

I INTRODUCTION

A. Background

The City of Ottawa has historically established area-specific development charges for infrastructure where the costs are more localized and do not provide a benefit external to the defined area. For infrastructure that is intended to meet the increase in need for service arising from development on a broader basis a city-wide development charge is calculated. This study deals specifically with the Village of Manotick (herein referred to as the “Village”). The City’s 2019 DC Study also provides an analysis that supports the current development charge rates for the various special areas.

In keeping with the previous cost recovery for servicing the Village, Minto has agreed to pre-pay the growth-related component of the proposed watermain extension. The installation of the infrastructure is part of the overall master servicing plan for the community. The proposed repayment using development charge credits is recommended as being ideal in terms of cost recovery since the revenues produced will be directed to offset the actual servicing for this area. In addition, the installation of this infrastructure will provide the opportunity for other property owners to utilize these services.

As a result, Minto will be seeking to enter into a crediting arrangement to offset the upfront growth-related capital expenditure of \$12.48M. Under the proposed funding arrangement, Minto will be provided a credit of the component of development charges imposed to offset the costs of constructing the watermain extension.

B. Calculation Assumptions

There is a requirement to proceed with the previously identified extension to the Phase 1 project from the north end of Long Island to the southern part of the Village (Manotick Supply Watermain – Phase 2) at an overall total revised cost of \$24M. This project is designed to improve the reliability of water supply and provide capacity to the Village to support future growth. The DC recoverable cost estimate has also been revised for this item to \$12.48M (52% of the total project cost) to reflect the requirement for additional growth-related funding. The development forecast has been updated to reflect current forecasted growth resulting in revisions to the residential and non-residential rates. The construction and funding of this project warranted that a new by-law be brought forward at this time. The revised DC rates will also be adjusted by 8.6% on April 1, 2023.

C. Study Structure

This study includes a summary of the detailed calculation inputs used to arrive at the area-specific DC rates. An overview of the tables included in this study is provided below:

Table 1: Projected Growth to Build-Out (Development Forecast)

Table 1 provides a summary of the residential and non-residential development forecast within the Village. The forecast identifies the total anticipated projected increases in population and employment, which are converted to the number of new dwelling units and projected gross floor area by use.

Table 2: Development-Related Capital Program

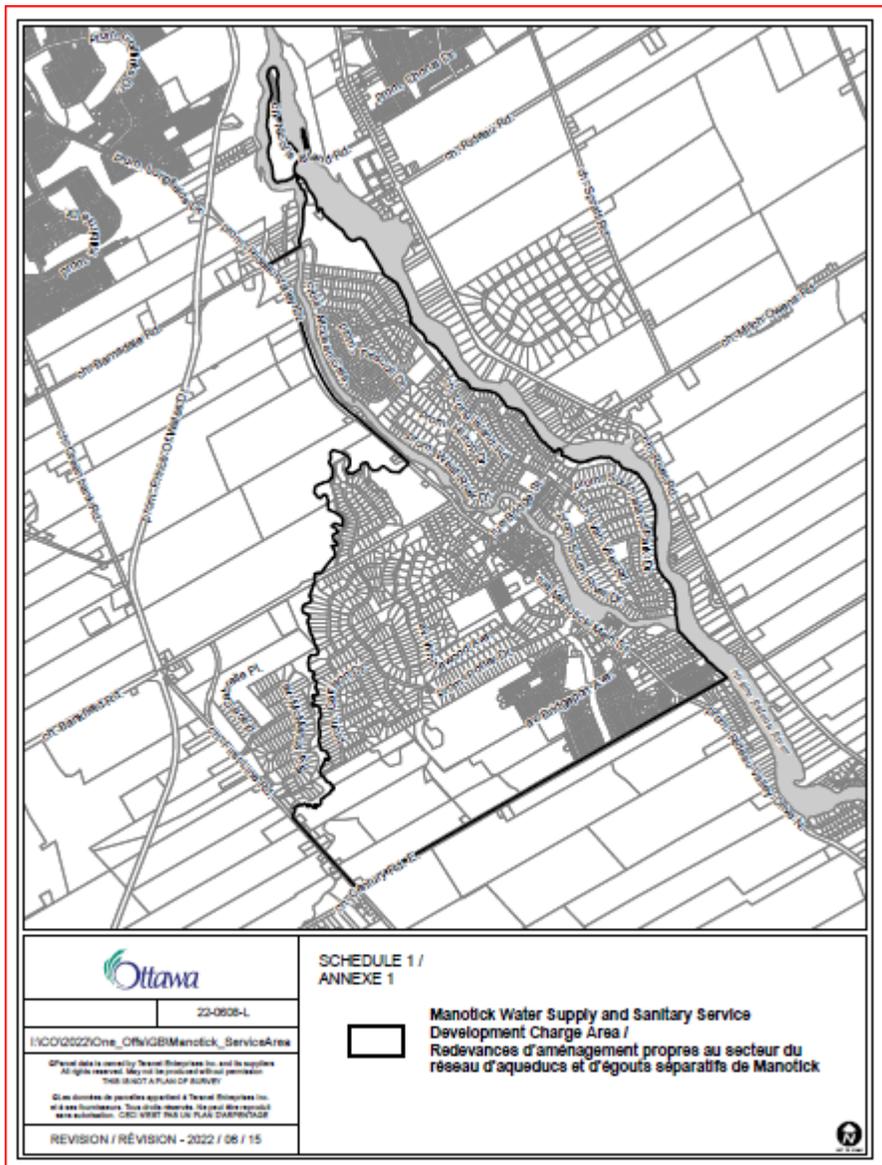
Table 2 identifies the recoverable capital costs required to service development occurring within the Village over the planning period. The table provides the identified development charge recoverable costs, available project balances, ineligible costs not included in the calculation and any post-period benefit.

Table 3: Summary of Unadjusted Residential and Non-Residential Development Charges

Table 3 summarizes the residential and non-residential development charge calculations. The process used to calculate the various rates is the same as those used in the 2019 DC Study. Furthermore, allocation of costs between the various residential unit types (single/semi-detached, multiple/row/ mobile dwelling, apartment types) are based on the persons per unit assumptions for the rural area. A similar approach is employed in calculating the non-residential charge, which is based on a per square foot of gross floor area for industrial and non-industrial uses.

Map of Benefitting Area

A map of the benefitting area has been provided and will be included in the revised DC By-law. The collection area will encompass the serviced Village. The methodology for applying the area-specific components will be based on the existing process used for allocating water and sanitary sewer development charges within the overall Rural area of the City. This provides for an equitable collection arrangement since only new developments requesting a connection to the City's water distribution or sanitary sewer processing system will be required to pay this additional funding component.



II CALCULATION METHODOLOGY

The overall approach utilized in the 2022 update has remained relatively unchanged from the City's past development charge processes. The calculation methodology presented in this DC Study is compatible to the requirements of the *DCA*.

A. Development Forecast

The *DCA* requires that a development forecast be prepared, which identifies the anticipated amount, type and location of development. In line with historical practice, the development forecast for each special area charge is based on the potential development. Consistent with historical practice, the 2022 development forecast identifies the projected amount of population growth and non-residential gross floor area over the planning period, which is from 2022 to mid-2046. A summary for this amendment is shown as **Table 1**.

Table 1					
Residential Development Forecast Summary (2022-01-1 to 2046-06-30)					
	Singles	Semis	Towns/Rows	Apts	Total
Unit Growth	1,431	-	308	-	1,739
Pop in New Units	4,578	-	688	-	5,266

Non-residential Development Forecast Summary (2022-01-01 to 2046-06-30)				
	Industrial	Commercial	Institutional	Total
Employment Growth	11	216	170	397
Non-Res GFA (sq.m)	407	5,616	13,600	19,623

B. Development-related Capital Program

The development-related capital program includes area-specific water and sanitary sewer servicing for the Village. This expenditure forecast is a point-in-time analysis and may be subject to future revisions based on development timing, scope and overall capital project costs.

1. Identification of Capital Costs

The list of capital projects is the same as those shown in the 2019 DC Study dated March 15, 2019, however, the cost of the watermain extension has increased to reflect an updated functional design. Based on the current average cost calculations, the growth-related infrastructure is anticipated to provide services to development

occurring over the planning period to mid-2046. A cash-flow model, which factors in the anticipated timing of expenditures, inflation, interest earnings and long-term debt has not been used as the calculation methodology. As a result, net financing costs and any potential indexing of outstanding amounts have not been incorporated in the calculation of the charges given the variability that exists in terms of when anticipated development will occur over the planning period.

2. Deductions for Ineligible Costs

In accordance with the requirements of the *DCA*, deductions have been made to the identified gross capital project costs. This includes adjustments for capital grants, subsidies or other contributions as required by the *DCA* (s. 5. (2)) and the portion of projects that confer benefits to existing (BTE) residents (s.5.(1)6). These portions of projects and their associated net costs are the funding responsibility of the City. The required contribution for non-growth shares of projects have been identified as part of the preparation of the development-related capital forecast.

3. Adjustments for Uncommitted Excess Capacity

There is a requirement in the *DCA* to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Such capacity is available to partially meet the future servicing requirements. Individual projects that have been previously identified are related to the increase in need for servicing arising from development occurring within the benefitting area. As such, no uncommitted excess capacity has been identified.

4. Adjustments for Prior Growth

Consistent with the City’s historical practice, reserve fund balances have been incorporated into the rate calculation. The committed reserve fund deficits of approximately \$9.6M for Sanitary Sewers and \$11M for Water Services have been deemed to be committed excess capacity and have been included in the calculation.

5. Post-2046 Benefit

No post-period allocations have been made for the provision of either the Sanitary Sewer or Water infrastructure.

6. Legislated Discount

In accordance with the *DCA*, growth-related infrastructure is no longer subject to the statutory ten per cent adjustment, therefore, no such deduction has been made to the infrastructure identified in the capital program.

C. Attribution to Types of Development

The next step in the determination of the area-specific charge is the allocation of development-related net eligible capital costs between residential and non-residential uses. The apportionment is based on the expected demand for, and use of, the service by each sector. The capital costs are allocated 93 per cent residential and 7 per cent non-residential (.19 per cent industrial and 6.81 per cent non-industrial). These costs allocations and DC rate calculations are presented in **Tables 2A and 2B**.

In accordance with the City's historical approach and for the purposes of this calculation, total residential and non-residential growth is used to determine the apportionment of costs between development types.

The village-wide charges result in properties within the benefitting area absorbing the actual servicing cost, with no impact on the balance of the City. In order for this to occur only those new residential dwelling units and additional non-residential gross floor areas that connect to central services will result in the payment of the area-specific development charges at building permit issuance. It is recommended that this collection practice be applied to the recovery of area-specific growth-related costs within the Village.

This is consistent with the City's longstanding practice in which the application of sanitary sewer and water development charges is determined based on site specific servicing applicability within the Rural area. In addition, it allows the major landowner who agreed to fund growth-related costs in advance of development, which allowed for the initial expansion of central services, to recover their upfront infrastructure investments from future development.

D. Calculation of Development Charges

1. Residential and Non-residential Allocations

In accordance with the methodology used in past studies, an average cost methodology has been used to calculate development charges for the Village.

III SUMMARY OF CAPITAL COSTS & CALCULATED DEVELOPMENT CHARGE RATES

A. Summary of DC Eligible and Ineligible Costs

Tables 2A and 2B below provide a summary of the DC eligible and ineligible costs and the residential and non-residential cost allocations. As shown, \$20.6M is related to the recovery of committed negative reserve fund balances. These balances are proposed to be recovered from future residential and non-residential development occurring until mid-2046.

Item Number	Project Description	Gross Capital Cost Estimate	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			93%	7%
			Benefit to Existing Development	Grants, Subsidies & Contributions		Prior Growth	2022-2046 Growth Cost	Post 2046	Residential Share	Non-Residential Share
421	DC Reserve Fund Balance - Deficit ¹				\$9,610,263	-	\$9,610,263	-	\$8,937,545	\$672,718
10.1BM4	Stonebridge Sanitary Sewer Oversizing	\$108,250	\$51,960	-	\$56,290	-	\$56,290	-	\$52,350	\$3,940
Total		\$108,250	\$51,960	\$0	\$9,666,553	\$0	\$9,666,553	\$0	\$8,989,894	\$676,659

Residential Calculation		
Residential Share of Eligible Costs	93.00%	\$8,989,894
Population Growth		5,271
Unadjusted Per Unit Charge		\$1,705.54
Non-residential Calculation		
Non-residential Share of Eligible Costs	7.00%	\$676,659
Industrial		
Non-residential Share of Eligible Costs	0.19%	\$18,763
Non-residential Growth in Square Feet		4,381
Charge per Square Foot		\$4.28
Non-industrial		
Non-residential Share of Eligible Costs	6.81%	\$658,292
Ten Year Non-residential Growth in Square Feet		206,841
Charge per Square Foot		\$3.18

December 31, 2021	
Outstanding Capital Cost Balances	\$ 4,111,300
DC Reserve Fund Cash Balance	\$ 5,498,963
Total DC Reserve Fund Balance ¹	\$ 9,610,263

TABLE 2B
DEVELOPMENT-RELATED CAPITAL PROGRAM
SPECIAL AREA CHARGE - WATER
VILLAGE OF MANOTICK

Item Number	Project Description	Gross Capital Cost Estimate	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			93% Residential Share	7% Non-Residential Share
			Benefit to Existing Development	Grants, Subsidies & Contributions		Prior Growth	2022-2046 Growth Cost	Post 2046		
420	DC Reserve Fund Balance - Deficit ¹				\$10,988,154	-	\$10,988,154	-	\$10,218,983	\$769,171
11.0694	Manotick Supply Watermain Phase 2 - Additional Funding	\$3,692,000	1,772,160		1,919,840	-	\$1,919,840	-	\$1,785,451	\$134,389
	Total	\$3,692,000			\$12,907,994	\$0	\$12,907,994	\$0	\$12,004,434	\$903,560

Area-specific Cost Allocations - Residential and Non-residential

Residential Calculation		
Residential Share of Eligible Costs	93.00%	\$12,004,434
Population Growth		5,271
Unadjusted Per Unit Charge		\$2,277.45
Non-residential Calculation		
Non-residential Share of Eligible Costs	7.00%	\$903,560
Industrial		
Non-residential Share of Eligible Costs	0.19%	\$24,525
Non-residential Growth in Square Feet		4,381
Charge per Square Foot		\$5.60
Non-industrial		
Non-residential Share of Eligible Costs	6.81%	\$879,034
Ten Year Non-residential Growth in Square Feet		206,841
Charge per Square Foot		\$4.25

December 31, 2021

Outstanding Capital Cost Balances	\$11,575,600
DC Reserve Fund Cash Balance	\$ (587,446)
Total DC Reserve Fund Balance ¹	\$10,988,154

B. 2022 Calculated Rates

Tables 3 and 4 provides a summary of the calculated residential and non-residential rates.

TABLE 3
SPECIAL AREA DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE
VILLAGE OF MANOTICK

	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)				
		Singles & Semis	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Room
Manotick (Sanitary Sewer)	\$1,706	\$5,407	\$3,837	\$3,104	\$2,200	\$1,706
Manotick (Water)	\$1,939	\$6,146	\$4,362	\$3,528	\$2,501	\$1,939
TOTAL ¹	\$3,644	\$11,552	\$8,200	\$6,633	\$4,701	\$3,644
Based on Persons Per Unit: *		3.17	2.25	1.82	1.29	1.00

* Based on Rural Area PPU's consistent with 2019 DC Study

¹ DC Rates to be adjusted on April 1, 2023

TABLE 4
SPECIAL AREA DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES BY SQUARE METRE/SQUARE FOOT
VILLAGE OF MANOTICK

	Industrial		Non-Industrial	
	Per Square Metre of GFA	Per Square Foot of GFA	Per Square Metre of GFA	Per Square Foot of GFA
Manotick (Sanitary Sewer)	\$46.10	\$4.28	\$34.26	\$3.18
Manotick (Water)	\$60.26	\$5.60	\$45.74	\$4.25
TOTAL ¹	\$106.36	\$9.88	\$80.00	\$7.43

¹ DC Rates to be adjusted on April 1, 2023 by 3.6%

C. Comparison of Current versus Calculated Rates

Table 5 provides a comparison of the calculated residential and non-residential rates drafted under the 2022 update versus the current rates implemented as part of the 2019 DC By-law, indexed to current dollars. As stated in Section I of this report, the draft rates that are proposed reflect revised information related to the development cost assumptions concerning the construction of the watermain extension.

As shown, the proposed residential rates represent an increase from the current rates. For example, the proposed rate of \$12,626 per single and semi-detached unit represents an increase of \$159 over the current enacted rate of \$12,467 per unit.

For the non-industrial service category, the proposed rate of \$7.43 per square foot represents a decrease of \$9.67 per square foot from the current calculated rate. This adjustment is based on the overall share of non-residential eligible costs decreasing from 17% to 7% with this update.

	Residential Charge By Unit Type					Non-Residential Charges - Per Square Foot	
	Singles & Semi-detached	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Room	Industrial	Non-Industrial
Current ¹	\$12,467	\$8,828	\$7,155	\$5,086	\$3,930	\$6.95	\$17.10
Calculated	\$12,626	\$8,962	\$7,249	\$5,138	\$3,983	\$9.88	\$7.43

¹ DC Rates to be indexed on October 1

IV DEVELOPMENT CHARGE POLICY CONSIDERATIONS

A. Consideration of Area Rating

As required by the *DCA*, consideration was given to the use of area rating. Consistent with the City's historical practice, the infrastructure identified for various special areas are deemed to provide a localized benefit and is, therefore, recovered for on an area-specific basis. This practice is aligning with the charges calculated for the Village.

For growth-related infrastructure that is intended to meet the increase in need for service arising from development on a broader basis, a city-wide development charge is calculated.

B. Local Service Guidelines

The City has Local Service Guidelines related to infrastructure. The purpose of establishing these definitions is to determine the growth-related capital costs for inclusion in the development charges calculation for the City of Ottawa. Functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is a direct developer funding responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer. Local Service Guidelines for infrastructure is based on the City's prevailing practices.

C. Draft DC By-law

The draft DC By-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*. Once the City carries out the public process and passes a new by-law, the emphasis shifts to implementation matters. These include notice of passage, potential appeals, complaints, front-ending agreements, subdivision agreement conditions and finally the collection of revenues and the funding of growth-related recoverable costs.

V COST OF GROWTH ANALYSIS

This section provides an examination of the long-term capital and operating costs as well as the asset management related annual provisions for the capital facilities and infrastructure to be included in the by-law. This examination is required as one of the provisions of the *DCA*.

A. Asset Management Plan Requirements

The *DCA* now requires that municipalities complete an Asset Management Plan before passing a DC By-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the by-law are financially sustainable over their full life cycle.

1. Calculated Annual Provision

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are, therefore, not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions from the required annual capital provision. In calculating the annual provisions, several assumptions are made to account for inflation and interest.

2. Assets are Deemed to be Financially Sustainable

The City has internal asset management policies and practices which are supported through the City's Comprehensive AMP, long range financial plan and annual budgeting exercises.

The assets identified in this DC Study are deemed to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user rate base over the long-term. Importantly, the City's ongoing review of asset management policies will allow staff to continue to monitor and implement mitigating measures should the program become less financially sustainable.

B. Long-Term Capital and Operating Impacts

The City will incur increased operating costs once the infrastructure is constructed. Increases in user rate revenues associated with new development are anticipated to offset partially or fully operating costs, depending on the nature of the new development. The financial plan analysis indicates that the City's user rates have been structured to align with current and anticipated operating expenditures. Importantly, Council is required to review and adopt operating budgets on an annual basis which ensures the financial sustainability of the program.