

REPORT

PREPARED BY HEMSON FOR THE TOWNSHIP OF ST. CLAIR



DEVELOPMENT CHARGES BACKGROUND STUDY

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EXECUTIVE SUMMARY

The *Development Charges Act, 1997 (DCA)* and its associated *Ontario Regulation 82/98 (O. Reg. 82/98)* allow municipalities to recover development-related capital costs from new development. This 2020 Township of St. Clair Development Charges Background Study is presented as part of a process to establish a development charges by-law that complies with this legislation.

A. PURPOSE OF THE 2020 DEVELOPMENT CHARGES (DC) BACKGROUND STUDY

i. Legislative Context

The Township of St. Clair 2020 Development Charges Background Study is presented as part of the process to lead to the approval of a new DC by-law in compliance with the DCA. The study is prepared in accordance with the DCA and associated regulations, including amendments that came into force on January 1, 2016 and through Bill 108, the *More Homes, More Choice Act* and Bill 197 the *COVID-19 Economic Recovery Act*.

ii. Key Steps in Determining Future Development-Related Projects

In accordance with the *DCA* and associated regulations, several key steps are required to calculate development charges. This includes preparing a development forecast, establishing historical service levels, determining the increase in need for services arising from development and appropriate shares of costs, attribution to development types (i.e. residential and non-residential) and the final adjustment to the calculated rate using a cash flow analysis.

iii. DC Eligible and Ineligible Costs

Development charges are intended to pay for the initial round of capital costs needed to service new development over an identified planning period. This is based on the overarching principle that “growth pays for growth”. However, the DCA and associated regulation includes several statutory adjustments and deductions that prevent these costs from fully being recovered by growth. Such adjustments include, but are not limited to: ineligible costs (e.g. computer equipment and vehicles with a replacement life of less than seven years); ineligible services, including tourism facilities, parkland acquisition, etc.; deductions for costs that exceed historical service level caps; and statutory exemptions for specific uses (e.g. industrial expansions).

iv. The Development-Related Capital Program is Subject to Change

It is recommended that Council adopt the development-related capital program developed for the purposes of the 2020 DC Background Study. However, it is recognized that the DC Background Study is a point-in-time analysis and there may be changes to project timing, scope and costs through the Township’s normal annual budget process.

B. DEVELOPMENT FORECAST

The tables below provides a summary of the anticipated residential and non-residential growth over the 2021-2031 planning period. Details on the development forecast are provided in Appendix A.

Residential Development Forecast	2020 Estimate	Planning Period 2021-2031	
		Growth	Total at 2031
Households	5,992	696	6,688
Population			
Census	14,230	549	14,779
In New Households		1,950	

Non-Residential Development Forecast	2020 Estimate	2021-2031	
		Growth	Total at 2031
Employment	4,955	704	5,659
Non-Residential Building Space (sq.m.)		68,086	

C. CALCULATED DEVELOPMENT CHARGES

The table below provides the Township-wide development charges for residential and non-residential development based on the aforementioned forecast.

Service	Residential Charge (Per Unit)			Non-Residential Charge (Per Square Metre)
	Singles & Semi Detached	Multiples	Apartment	
General Services	\$2,046	\$1,971	\$1,019	\$4.54
Engineered Services	\$2,479	\$2,388	\$1,234	\$8.95
Subtotal Township Wide	\$4,525	\$4,359	\$2,253	\$13.49
Sewer Services – Plant	\$2,354	\$2,268	\$1,172	\$8.25
Total Charge with Plant	\$6,879	\$6,627	\$3,425	\$21.74
Sewer Services – Lagoon	\$726	\$699	\$361	\$3.50
Total Charge with Lagoon	\$5,251	\$5,058	\$2,614	\$16.99

D. LONG-TERM CAPITAL AND OPERATING COSTS

An overview of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the DC by-law is provided in the study. This examination is required by the DCA. Additional details on the long-term capital and operating impact analysis are found in Appendix F. By 2031, the Township’s annual net operating costs arising from the development-related infrastructure are estimated at about \$418,800.

About \$22.3 million of development-related project costs will need to be funded from non-development charges sources over the next 11 years. In addition, \$196,300 in interim financing may be required for projects related to both general and engineered services that provide benefit post-2031.

E. ASSET MANAGEMENT PLAN

A key purpose of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. The DC recoverable annual asset management contributions for the 2021-2031 planning period has been calculated. The year 2032 has been included to calculate the annual contribution for the 2021-2031 period as the expenditures in 2031 will not trigger asset management contributions until 2032.

By 2032, the Township will need to fund an additional \$100,698 per annum to properly fund the full life cycle costs of all assets supported under the by-law.

**F. TOWNSHIP'S DEVELOPMENT CHARGES BY-LAW TO BE
RELEASED UNDER SEPARATE COVER**

The Township's proposed DC by-law will be made available under separate cover a minimum of two weeks in advance of the statutory public meeting.

1. INTRODUCTION

The *Development Charges Act, 1997 (DCA)* and its associated *Ontario Regulation 82/98 (O. Reg. 82/98)* allow municipalities to recover development-related capital costs from new development. The Township of St. Clair Development Charges Background Study is presented as part of a process to establish a development charges by-law that complies with this legislation.

Anticipated growth in the Township of St. Clair will increase the demand for all services. The Township wishes to implement development charges to fund capital projects related to growth in St. Clair so that development continues to be serviced in a fiscally responsible manner.

When a development charges by-law is proposed, the *DCA* and *O. Reg. 82/98* require that a development charges background study be prepared in support of the proposed changes with reference to:

- A forecast of the amount, type and location of development anticipated in the Township;
- The average capital service levels provided in the Township over the 10-year period immediately preceding the preparation of the background study;
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the Township or its local boards to provide for the expected development, including the determination of the development and non-development related components of the capital projects;
- An asset management plan that demonstrates that all assets are financially sustainable over their full life cycle; and
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

The study identifies the development-related net capital costs attributable to development that is forecast to occur in the Township. The costs are apportioned to types of development (residential and non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development.

The *DCA* provides for a period of public review and comment regarding the calculated development charges. This process includes considering and responding to comments received by members of the public about the calculated charges. Following completion of this process, and in accordance with the *DCA* and Council's review of this study, it is intended that Council will pass new development charges for the Town.

The remainder of this study sets out the information and analysis upon which the calculated development charges are based.

Section II designates the services for which the development charges are calculated and the areas within the Township to which the development charges will apply. It also briefly reviews the methodologies that have been used in this background study.

Section III presents a summary of the forecast residential and non-residential development which is expected to occur within the Township over a planning period from 2021 to 2031.

Section IV summarizes the 10-year historical average capital service levels that have been attained in the Township, which form the basis for the development charges calculations.

In Section V, the development-related capital program that has been developed by various Township departments is reviewed.

Section VI summarizes the calculation of applicable development charges and the resulting calculated development charges by class and type of development.

Section VII provides a comparison of the development charges currently levied in the Township and the proposed calculated charges determined in this study.

Section VIII presents a cost of growth analysis, which considers an Asset Management Plan for the Township, demonstrating the financial sustainability of assets over the life cycle of the 2020 Development Charges By-law and satisfying the requirements of the recent amendments to the *DCA*. Additionally, the long-term operating impacts of the projects considered under this study are reviewed.

Section IX provides a review of development charges administrative matters, consideration of area rating and the Township's local service definitions.

2. A TOWNSHIP-WIDE COST APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS IS PROPOSED

Several key steps are required when calculating any DC. However, specific circumstances arise in each municipality that must be reflected in the calculation. Therefore, the study has been tailored specifically for the Township of St. Clair. The approach to calculating the proposed DCs is focused on providing a reasonable alignment of development-related costs with the development that necessitates them.

A. A TOWNSHIP-WIDE DEVELOPMENT CHARGE IS PROPOSED FOR MOST SERVICES

St. Clair provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The *DCA* provides municipalities with flexibility to define services that will be included in a DC by-law, provided that the other provisions of the *Act* and its associated regulations are met. The *DCA* also requires the by-law to designate the areas within which the DCs shall be imposed. DCs may apply to all lands in the municipality or to other designated development areas as specified in the by-law.

For the services that the Township provides, a range of capital facilities, land, equipment and infrastructure is available throughout St. Clair: community centres, fire stations, arterial roads, parks and so on. As new development occurs, new facilities will need to be added so that overall service levels do not decline. A widely accepted method for sharing the development-related capital costs for such services is to apportion them over all new development anticipated in the Township.

The following services are included in the Township-wide DC calculation:

- Library Service;
- Fire Department;
- Police Service;
- Indoor Recreation
- Park Development & Facilities;
- Public Works;
- General Government;

- Roads and Related;
- Storm Drainage;
- Sewer; and
- Water.

These services form a reasonable basis upon which to plan and administer the Township-wide DCs. It is noted that the analysis of each of these services examines the individual capital facilities and equipment currently in place. The resulting DC for these services is to be imposed against all development anywhere in the Township.

B. AREA-SPECIFIC CHARGE IS CALCULATED FOR SEWER SERVICES

Section 10 (2) (c.1) of the DCA requires that the background study include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas.

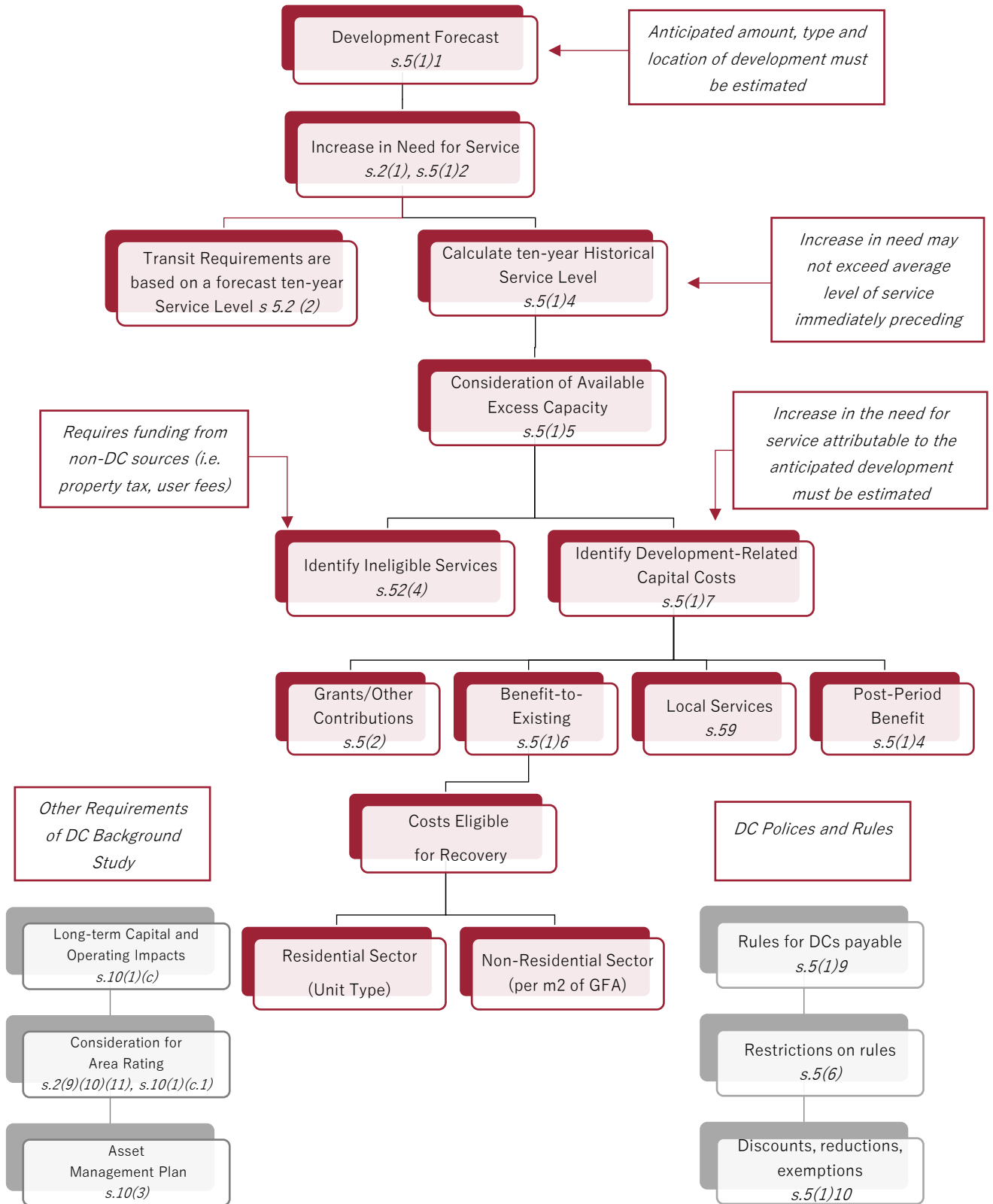
Since Sewer Services are not available to all areas of the Township, development charges for these services only apply to the urban areas of the community where these services are available. Sewer Servicing is provided in two separate systems: either from the main Sewage Treatment Plant in Courtwright; or from three lagoons in Brigden, Wilkesport/Sombra, and Port Lambton. The servicing areas from each system are geographically distinct. Costs associated with both sewer systems have been analysed as part of this study and distinct DCs for development receiving servicing from each system have been calculated.

As an alternative approach, a combined sewer development charge has also been calculated as shown in Appendix D.3.

C. KEY STEPS IN DETERMINING DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS

Several key steps are required in calculating DCs for future development-related projects. These are summarized in Figure 1 below and discussed further in the following sections.

Figure 1 Key Steps in Calculating Development Charges



i. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the study period 2021-2031 for all general and engineered services.

The development forecast is broadly based on the Township achieving average annual growth in occupied dwellings of 63 units, slightly higher growth than what has been experienced in recent years. Most housing growth will be in Corunna. After a long period of job decline, the Township's employment is forecast to increase over the time horizon, fuelled in part by population growth and several large industrial developments.

For the residential portion of the forecast, both net (or Census) population growth and population growth in new units is estimated. The use of net population growth is one approach to determining the increased need for servicing, infrastructure and facilities arising from development.

When calculating the DC however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which DCs will be collected.

The non-residential portion of the forecast estimates the Gross Floor Area (GFA) of building space to be developed over the 11-year period, 2021 to 2031. The forecast of GFA is based on the employment forecast for the Township. Factors for floor space per worker are used to convert the employment forecast into gross floor area for the purposes of the DC Study.

ii. Service Categories and Historical Service Levels

The *DCA* provides that the increase in the need for service attributable to anticipated development:

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the Municipality over the 10-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical 10-year average service levels thus form the basis for development charges. A review of Township's capital service levels for buildings, land, vehicles and so on, has therefore been prepared as a reference for the calculation, so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2011–2020.

iii. **Development-Related Capital Program and Analysis of Net Capital Costs to be included in the Development Charges**

A development-related capital program has been prepared by Township staff as part of the present study. The program identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the Act (*DCA*, s. 5. (2)). The capital program provides another cornerstone upon which development charges are based. The *DCA* requires that the increase in the need for service attributable to the anticipated development may include an increase:

... only if the council of the Municipality has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)

In conjunction with *DCA*, s. 5. (1) 4. referenced above, these sections have the effect of requiring that the development charge be calculated on the lesser of the historical 10-year average service levels or the service levels embodied in future plans of the Township. The development-related capital forecast prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, *Ontario Regulation 82/98*, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the *Act*, the council of a Municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an Official Plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing (a “BTE”) residents. As required by the *DCA*, s. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the Township from non-development charges sources. The amount of Township funding for such non-development shares of projects is also identified as part of the preparation of the development-related capital forecast.

There is also 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 future servicing requirements. Adjustments are made in the analysis to meet this requirement of the *Act*.

iv. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and the non-residential sectors. This is done by using different apportionments for different services in accordance with the demands which the two sectors would be expected to place on the various services and the different benefits derived from those services.

Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by each sector (e.g. based on shares of population in new units and employment growth).

Finally, the residential component of the Township-wide charge is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres. Sewer Plant and Sewer Lagoon services are calculated based on growth occurring in areas benefiting from these services while other remaining services are calculated on a Township-wide forecast.

v. Final Adjustment

The final determination of the development charge results from adjustments made to development-related net capital costs for each service and sector resulting from the application of any unallocated reserve fund balances available to finance the development-related capital costs in the capital forecast. A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges for Township-wide services. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the *DCA*.

3. DEVELOPMENT FORECAST

This section provides the basis for the development forecasts used in calculating the DCs, as well as a summary of the forecast results. A more detailed summary of the forecasts, including tables illustrating historical trends and forecast results is provided in Appendix A

A. RESIDENTIAL FORECAST

DCs are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*¹ as well as the *population in new units* is required.

- The *population growth* determines the need for additional facilities and provides the foundation for the development-related capital program.
- When calculating the DC, however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which DCs will be collected.

Table 1 provides a summary of the residential forecast over the 11-year planning period, from 2021 to 2031. As noted in Section II, for DC calculation purposes the 11-year planning period is applicable to all services considered in this study.

The Township's Census population is expected to increase by 549 people over the next 11 years, reaching 14,779 by 2031. An additional 696 occupied dwelling units are forecast to be built between 2021 and 2031 and the additional population residing in these units is expected to be 1,950.

B. NON-RESIDENTIAL FORECAST

DCs are levied on non-residential development as a charge per square metre of GFA. As with the residential forecast, the non-residential forecast requires both a projection of *employment growth* as well as a projection of the *employment growth associated with new floor space* in the Township.

¹ Commonly referred to as "net population growth" in the context of development charges.

The non-residential forecast projects an increase of 704 employees to 2031, which is anticipated to be accommodated in 68,086 square metres of new non-residential building space.

Table 1 also provides a summary of the non-residential development forecasts used in this analysis.

TABLE 1
TOWNSHIP OF ST. CLAIR
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
DEVELOPMENT FORECAST

Residential Development Forecast	2020 Estimate	Planning Period 2021-2031	
		Growth	Total at 2031
Households	5,992	696	6,688
Population			
Census	14,230	549	14,779
In New Households		1,950	

Non-Residential Development Forecast	2020 Estimate	2021-2031	
		Growth	Total at 2031
Employment	4,955	704	5,659
Non-Residential Building Space (sq.m.)		68,086	

4. SUMMARY OF HISTORICAL CAPITAL SERVICE LEVELS

The *DCA* and *Ontario Regulation 82/98* require that DCs be set at a level no higher than the average level of service provided in the municipality over the 10-year period immediately preceding the preparation of the Background Study, on a service by service basis.

For non-engineered services (library, fire, indoor recreation, etc.) the legislative requirement is met by documenting historic service levels for the preceding 10 years, in this case, for the period from 2011 to 2020. Typically, service levels for non-engineered services are measured as a ratio of inputs per capita, or per capita plus employment.

O. Reg. 82/98 requires that, when determining historical service levels, both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new development reflect not only the quantity (number and size) but also the quality (value or replacement cost) of service provided historically by the town. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by municipal staff, based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure as of 2020.

The service levels are expressed as a dollar value per capita (\$/capita) or a dollar value per capita plus employment (\$/capita & employment) of infrastructure value. This service level expression is a construction to meet the requirement of Section 5(1) of the *DCA* and does not directly reflect the utilization of infrastructure or the way municipalities plan for services.

Table 2 summarizes service levels for all applicable services included in the DC calculation. Appendix B provides the detailed historical inventory data upon which the calculation of service levels for the general services is based.

TABLE 2

TOWNSHIP OF ST. CLAIR
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS

Service	2011-2020 Service Level Indicator
1.0 LIBRARY SERVICE Buildings Land	\$56.55 per capita \$54.05 per capita \$2.50 per capita
2.0 FIRE DEPARTMENT Buildings Land Vehicles Furniture and Equipment	\$1,100.88 per capita & emp \$335.80 per capita & emp \$31.05 per capita & emp \$536.44 per capita & emp \$197.59 per capita & emp
3.0 POLICE SERVICE Buildings Land Vehicles	\$121.65 per capita & emp \$91.27 per capita & emp \$1.24 per capita & emp \$29.14 per capita & emp
4.0 INDOOR RECREATION Buildings Land Furniture and Equipment	\$3,079.26 per capita \$2,879.64 per capita \$145.90 per capita \$53.72 per capita
5.0 PARK DEVELOPMENT & FACILITIES Parkland Park Facilities Special Facilities	\$2,139.19 per capita \$1,230.84 per capita \$263.21 per capita \$645.14 per capita
6.0 PUBLIC WORKS Buildings Land Furniture and Equipment Fleet	\$568.68 per capita & emp \$141.67 per capita & emp \$44.24 per capita & emp \$13.83 per capita & emp \$368.94 per capita & emp
8.0 ROADS & RELATED Roadways Roads Infrastructure	\$13,086.65 per capita & emp \$9,628.82 per capita & emp \$3,457.83 per capita & emp

5. THE DEVELOPMENT-RELATED CAPITAL FORECAST

The *DCA* requires the Council of a municipality to express its intent to provide future capital facilities at the level reflected by the capital program incorporated in the DC calculation and recovered through the proposed rates. As noted in Section II, *Ontario Regulation 82/98*, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

A. A DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the development forecasts summarized in Section III and detailed in Appendix A, municipal staff, in collaboration with the consultants have created a development-related capital forecast setting out those projects that are required to service anticipated development. For all services, the capital plan covers the 11-year period from 2021 to 2031.

One of the recommendations contained in this Background Study is for Council to adopt the capital forecast created for the purposes of the DC calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the development-related projects contained herein, that are consistent with the development occurring in St. Clair. It is acknowledged that changes to the forecast presented herein may occur through the Township's normal capital budget process.

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR GENERAL SERVICES

A summary of the development-related capital forecast for general services is presented in Table 3.

The table provides a total for all general services analysed over the 11-year planning period. Further details on the capital plans for each individual service category are available in Appendix B.

The development-related capital forecast for general services amounts to a total gross cost of \$6.1 million. No alternative funding sources have been identified for any of the services considered. Therefore, the net municipal cost of the capital program remains unchanged at \$6.1 million.

Of the \$6.1 million 11-year net municipal capital costs for general services, \$2.9 million (48 per cent) is related to the Park Development & Facilities capital program. The forecast includes new park facilities such as a splash pad and BMX park, additional outdoor buildings on campsites and a new golf clubhouse, as well as campground and golf course parkland development.

The Fire Department program includes \$2.3 million in net capital costs (37 per cent of the program) and includes the recovery of the department's portion of the new Emergency Services Building, as well as various vehicles & equipment and the recovery for fire communication equipment.

The Public Works development-related capital program, which totals \$410,000, accounts for 7 per cent of the overall forecast. Included in the program an annual provision for additional equipment, as well as a new dump truck

The next largest portion of the total net cost is \$227,300 and is associated with Police Services. The program recovers for the Police share of the Emergency Services Building debenture payments.

The next largest portion of the capital forecast relates to Indoor Recreation. The net cost of \$170,000 million accounts for 3 per cent of the overall costs. The forecast provides for a new storage/first aid room as well as a master plan.

The 11-year capital forecast for General Government totals \$104,000 and accounts for 2 per cent of the total program for general services. The program includes various development-related studies, including two 5-year updates to the DC Study and two strategic plans or needs studies as required throughout the planning period.

The Library Service development-related capital program considered under this DC study does not have any development-related capital works as it is anticipated that the Township's Library services will be able to provide the same level of service to new and

existing residents over the 11-year planning period without requiring any additional capital works.

The capital forecast incorporates those projects identified to be related to development anticipated in the next 11 years. It is not implied that all of these costs are to be recovered from new development by way of DCs (see Section VI for the method and determination of net capital costs attributable to development). Portions of this capital forecast may relate to providing servicing for development which has occurred prior to 2021 (for which DC reserve fund balances exist), for replacement of existing capital facilities or for development anticipated to occur beyond the 2021–2031 planning period.

TABLE 3

**TOWNSHIP OF ST. CLAIR
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR GENERAL SERVICES 2021-2031**

Service	Gross Cost (\$000)	Grants/ Subsidies (\$000)	Net Cost (\$000)
1.0 LIBRARY SERVICE	\$0.0	\$0.0	\$0.0
1.1 No Development-Related Projects to 2031	\$0.0	\$0.0	\$0.0
2.0 FIRE DEPARTMENT	\$2,254.0	\$0.0	\$2,254.0
2.1 Buildings	\$377.4	\$0.0	\$377.4
2.2 Vehicles & Equipment	\$1,662.8	\$0.0	\$1,662.8
2.3 Fire Communication Equipment	\$213.8	\$0.0	\$213.8
3.0 POLICE SERVICE	\$227.3	\$0.0	\$227.3
3.1 New Police Administration Space	\$227.3	\$0.0	\$227.3
4.0 INDOOR RECREATION	\$170.0	\$0.0	\$170.0
4.1 Buildings, Land & Furnishings	\$120.0	\$0.0	\$120.0
4.2 Studies	\$50.0	\$0.0	\$50.0
5.0 PARK DEVELOPMENT & FACILITIES	\$2,920.0	\$0.0	\$2,920.0
5.1 Park Facilities & Land Development	\$2,920.0	\$0.0	\$2,920.0
6.0 PUBLIC WORKS	\$410.0	\$0.0	\$410.0
6.1 Buildings, Land & Equipment	\$50.0	\$0.0	\$50.0
6.2 Development-Related Equipment	\$360.0	\$0.0	\$360.0
7.0 GENERAL GOVERNMENT	\$104.0	\$0.0	\$104.0
7.1 Development-Related Studies	\$104.0	\$0.0	\$104.0
TOTAL - 11 YEAR GENERAL SERVICES	\$6,085.2	\$0.0	\$6,085.2

C. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR ENGINEERED SERVICES

Table 4 provides the development-related capital costs for the engineered services of Roads & Related, Storm Drainage, Water and the Lagoon and Plant Sewer Systems. The capital program totals \$44.0 million and provides servicing for anticipated development over the planning period from 2021 to 2031. Further details on the capital plans for each individual service are available in Appendices C and D.

Non-Township funding sources have been identified for the capital projects related to Water totalling \$22.7 million. The remaining \$21.3 million is to be paid by the Township.

Of the total net capital costs, 44 per cent, or \$9.3 million is associated with Water services. The capital program provides for the Township's portion of the upcoming Twinning of the West Lambton Subsystem that is being undertaken for the Lambton Area Water Supply System (LAWSS).

An additional 24 per cent, or \$65.1 million is associated with Plant-related sewer servicing. The capital program provides for the ongoing recovery of costs associated with works at the Wastewater Treatment Plant.

The next largest share of the engineered services capital program relates to Roads & Related infrastructure. At \$4.0 million, or 19 per cent, the 11-year capital program includes various road widenings, improvements, and urbanizations, as well as improvements to two Township bridges.

The Lagoon-based sewer services capital program totals \$1.6 million and accounts for 8 per cent of the overall net costs. Included in the capital forecast is the recovery of a Lagoon Study Environmental Assessment and biosolids cell improvements.

The development-related capital program for Storm Drainage provides for an upgrade to the Paget Street storm drainage infrastructure and a stormwater master plan. The program totals \$1.3 million, which accounts for 6 per cent of the total program cost.

TABLE 4

**TOWNSHIP OF ST. CLAIR
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR ENGINEERED SERVICES**

Service	Gross Cost (\$000)	Grants/ Subsidies (\$000)	Net Cost (\$000)
1.0 ROADS & RELATED	\$4,025.0	\$0.0	\$4,025.0
1.1 Roads and Related Infrastructure	\$3,145.0	\$0.0	\$3,145.0
1.2 Bridges	\$880.0	\$0.0	\$880.0
2.0 STORM DRAINAGE	\$1,250.0	\$0.0	\$1,250.0
2.1 Development-Related Storm Projects	\$1,250.0	\$0.0	\$1,250.0
3.0 SEWER SERVICES - PLANT	\$5,055.2	\$0.0	\$5,055.2
3.1 Development-Related Works	\$5,055.2	\$0.0	\$5,055.2
4.0 SEWER SERVICES - LAGOON	\$1,620.0	\$0.0	\$1,620.0
4.1 Development-Related Works	\$1,620.0	\$0.0	\$1,620.0
5.0 WATER	\$32,000.0	\$22,662.4	\$9,337.6
5.1 Lambton Area Water Supply System (LAWSS): Twinning of West Lambton Subsystem	\$32,000.0	\$22,662.4	\$9,337.6
TOTAL - ENGINEERED SERVICES	\$43,950.2	\$22,662.4	\$21,287.8

6. CALCULATED DEVELOPMENT CHARGES

This section summarizes the calculation of DCs for each service category and the resulting total charges by sector. For all municipal services, the calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) charges is reviewed.

Adjustments to these amounts resulting from a cash flow analysis that takes interest earnings and borrowing costs into account are also discussed.

For residential development, the adjusted total per capita amount is converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development, the charges are based on gross floor area of building space.

It is noted that the calculation of the municipal-wide DCs does not include any provision for exemptions required under the *DCA*, such as the exemption from the payment of DCs for industrial buildings. Such legislated exemptions, or other exemptions that Council may choose to provide, will result in loss of DC revenue for the affected types of development. However, any such revenue loss may not be made up by offsetting increases in other portions of the calculated charge.

A. UNADJUSTED DEVELOPMENT CHARGES CALCULATION

A summary of the “unadjusted” residential and non-residential DCs is presented in Tables 5 and 6 for general and engineered services respectively. Further details of the calculations for each individual service category are available in Appendices B, C and D.

i. General Services

A summary of the “unadjusted” residential and non-residential DCs for general services is presented in Table 5.

The net capital forecast for the general services totals \$6.1 million and incorporates those projects identified to be related to the development anticipated in the next 11 years. However, not all of the capital costs are to be recovered from new development by way of DCs. As shown on Table 5, \$4.2 million relates to replacement of existing capital facilities or for shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from non-DC revenue sources, largely property taxes.

A share of \$74,800 million is attributable to development beyond 2031. This development-related share has been removed from the calculation though may be recovered under future DC studies. It is important to note that reserve fund balances have been applied in the cash flow analysis and as a result are not included in the unadjusted charge analysis.

The total costs eligible for recovery through DCs for general services is \$1.8 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted DCs. Library Indoor Recreation and Park Development & Facilities are deemed to benefit residential development only, while the remaining services are allocated between both sectors based on shares of population in new units and employment growth in new space. The allocation to the residential sector for these services is calculated at 73 per cent with 27 per cent to the non-residential sector.

Approximately \$1.5 million of the general services DC eligible capital program is deemed to benefit residential development. When this amount is divided by the 11-year growth in population in new dwelling units (1,950), an unadjusted charge of \$782.26 per capita results. The non-residential share totals \$249,600, which yields an unadjusted charge of \$3.66 per square metre when divided by the 11-year increase in non-residential building space (68,086).

TABLE 5

TOWNSHIP OF ST. CLAIR
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
11-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES

11 Year Growth in Population in New Units	1,950
11 Year Growth in Square Meters	68,086

Service	Development-Related Capital Program (2021-2031)				Residential Share		Non-Residential Share	
	Net Municipal Cost	Replacement & Benefit to Existing	Post-2031 Benefit	Total DC Eligible Costs for Recovery	%	(\$000)	%	(\$000)
	(\$000)	(\$000)	(\$000)	(\$000)				
1.0 LIBRARY SERVICE	\$0.0	\$0.0	\$0.0	\$0.0	100%	\$0.0	0%	\$0.00
Unadjusted Development Charge Per Capita						\$0.00		
Unadjusted Development Charge Per Sq.M								\$0.00
2.0 FIRE DEPARTMENT	\$2,254.0	\$1,949.2	\$0.0	\$304.8	73%	\$222.5	27%	\$82.28
Unadjusted Development Charge Per Capita						\$114.11		
Unadjusted Development Charge Per Sq.M								\$1.21
3.0 POLICE SERVICE	\$227.3	\$0.0	\$74.8	\$152.5	73%	\$111.3	27%	\$41.17
Unadjusted Development Charge Per Capita						\$57.09		
Unadjusted Development Charge Per Sq.M								\$0.60
4.0 INDOOR RECREATION	\$170.0	\$25.0	\$0.0	\$145.0	100%	\$145.0	0%	\$0.00
Unadjusted Development Charge Per Capita						\$74.37		
Unadjusted Development Charge Per Sq.M								\$0.00
5.0 PARK DEVELOPMENT & FACILITIES	\$2,920.0	\$2,214.6	\$0.0	\$705.4	100%	\$705.4	0%	\$0.00
Unadjusted Development Charge Per Capita						\$361.81		
Unadjusted Development Charge Per Sq.M								\$0.00
6.0 PUBLIC WORKS	\$410.0	\$46.9	\$0.0	\$363.1	73%	\$265.0	27%	\$98.03
Unadjusted Development Charge Per Capita						\$135.94		
Unadjusted Development Charge Per Sq.M								\$1.44
7.0 GENERAL GOVERNMENT	\$104.0	\$0.0	\$0.0	\$104.0	73%	\$75.9	27%	\$28.08
Unadjusted Development Charge Per Capita						\$38.94		
Unadjusted Development Charge Per Sq.M								\$0.41
TOTAL 11 YEAR GENERAL SERVICES	\$6,085.2	\$4,235.7	\$74.8	\$1,774.7		\$1,525.2		\$249.6
Unadjusted Development Charge Per Capita						\$782.26		
Unadjusted Development Charge Per Sq.M								\$3.66

Note: Reserve funds are applied in the cash-flows and are not included in the unadjusted charge analysis

ii. Engineered Services

Table 6 displays the calculation of the DC rates for the engineered services of Roads & Related, Storm, Sewer (Plant and Lagoon) and Water Services. The development-related engineering infrastructure will be used to service development in St. Clair between 2021 and 2031.

Not all of the total \$28.0 million net municipal cost of all engineered services development-related projects is to be recovered from new development by way of DCs. Table 6 shows that \$23.7 million of the capital program relates to replacement of existing capital works or for shares of projects that provide benefit to the existing community. This amount has been netted off the chargeable capital costs.

Post-period shares have been calculated at \$243,000 and represent the shares of projects that will provide benefit to development beyond the planning period under review. These shares have also been removed from the DC calculation. The remaining \$4.0 million is related to development in the 2021 to 2031 planning period and has been included in the DC calculation.

Like the general services, the capital program eligible for recovery through DCs is allocated to the residential and non-residential sectors based on future shares of population in new units and employment growth over the planning period. The forecast residential and non-residential development figures differ for each service, as the benefitting population and employment base uses each service differently. Township-wide development from 2021 to 2031 will benefit from Roads & Related, Storm Drainage and Water servicing. For the sanitary sewer system, development to 2031 is eligible, however the forecast development within the geographic areas that will benefit from each system, either the Treatment Plant or Lagoon System, are incorporated into each calculation.

As a result, \$2.3 million of the engineered services capital program is deemed to benefit residential development. When this amount is divided by the growth in population in new dwelling units for each service, a charge of \$1,463.35 per capita is the result.

The non-residential share totals \$840,300 and, when this amount is divided by the long-term forecast of non-residential space growth for each service a charge of \$15.23 per square metre results.

Table 6 also shows the breakdown of costs and resulting unadjusted DCs per capita and per square metre for the combined Sewer Services charge.

TABLE 6

TOWNSHIP OF ST. CLAIR
 SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
 ENGINEERED SERVICES (2021-2031)

Roads & Related	
2021-2031 Township-wide Growth in Population in New Units	1,950
2021-2031 Township-wide Growth in Square Meters	68,086
Storm Drainage	
2021-2031 Township-wide Growth in Population in New Units	1,950
2021-2031 Township-wide Growth in Square Meters	68,086
Sewer Services - Combined	
2021-2031 Growth in Population in New Units Served by Plant	1,950
2021-2031 Growth in Square Meters Served by Plant	68,086
Sewer Services - Plant	
2021-2031 Growth in Population in New Units Served by Plant	1,560
2021-2031 Growth in Square Meters Served by Plant	64,681
Sewer Services - Lagoon	
2021-2031 Growth in Population in New Units Served by Lagoon	390
2021-2031 Growth in Square Meters Served by Lagoon	3,404
Water	
2021-2031 Township-wide Growth in Population in New Units	1,950
2021-2031 Township-wide Growth in Square Meters	68,086

Service	Development-Related Capital Program (2021-2031)				Residential Share		Non-Residential Share	
	Net Municipal Cost	Replacement & Benefit to Existing	Post-Period Benefit	Total DC Eligible Costs for Recovery	%	(\$000)	%	(\$000)
	(\$000)	(\$000)	(\$000)	(\$000)				
1.0 ROADS & RELATED	\$4,025.0	\$2,440.4	\$0.0	\$1,584.6	73%	\$1,156.7	27%	\$427.83
Unadjusted Development Charge Per Capita						\$593.29		
Unadjusted Development Charge Per Sq.M								\$6.28
2.0 STORM DRAINAGE	\$1,250.0	\$1,173.3	\$0.0	\$76.7	73%	\$56.0	27%	\$20.70
Unadjusted Development Charge Per Capita						\$28.70		
Unadjusted Development Charge Per Sq.M								\$0.30
3.0 SEWER SERVICES - PLANT	\$5,055.2	\$4,296.9	\$0.0	\$758.3	70%	\$530.8	30%	\$227.48
Unadjusted Development Charge Per Capita						\$340.31		
Unadjusted Development Charge Per Sq.M								\$3.52
4.0 SEWER SERVICES - LAGOON	\$1,620.0	\$1,377.0	\$121.5	\$121.5	92%	\$111.8	8%	\$9.72
Unadjusted Development Charge Per Capita						\$286.66		
Unadjusted Development Charge Per Sq.M								\$2.86
5.0 WATER	\$9,337.6	\$8,765.0	\$0.0	\$572.6	73%	\$418.0	27%	\$154.60
Unadjusted Development Charge Per Capita						\$214.39		
Unadjusted Development Charge Per Sq.M								\$2.27
TOTAL ENGINEERED SERVICES	\$21,287.8	\$18,052.7	\$121.5	\$3,113.6		\$2,273.3		\$840.3
Unadjusted Development Charge Per Capita						\$1,463.35		
Unadjusted Development Charge Per Sq.M								\$15.23
SEWER SERVICES - COMBINED	\$6,675.2	\$5,673.9	\$121.5	\$879.8	73%	\$642.2	27%	\$237.54
Unadjusted Development Charge Per Capita						\$329.41		
Unadjusted Development Charge Per Sq.M								\$3.49

Note: Reserve funds are applied in the cash-flows and are not included in the unadjusted charge analysis

iii. **Adjusted Residential and Non-Residential Development Charges**

Final adjustments to the “unadjusted” DC rates are made through a cash flow analysis for all services. The analysis, details of which are included in the appendices, considers the borrowing cost and interest earnings associated with the timing of expenditures and DC receipts for each service category.

Table 7 summarizes the results of the cash flow adjustments for the residential DC rates. The adjusted per capita rate for development receiving sewer services from the sewage treatment plant increases by \$364.04 from \$1,958.96 per capita to \$2,323.00 per capita after the cash flow analysis for the residential DC. The adjusted per capita rate for development receiving sewer services from the lagoon decreases by \$132.31 from \$1,905.31 per capita to \$1,773.00 per capita after the cash flow analysis for the residential DC.

Table 7 also provides the calculated rates by residential unit. As shown in the table, the proposed residential charge for dwelling units serviced by the sewage treatment plant ranges from \$6,879 for a single- or semi-detached unit to \$3,425 for an apartment unit. The proposed charge for other multiple unit types is \$6,627 per unit. The charges for fully serviced units receiving sanitary sewer servicing from the lagoons totals \$5,251 per single or semi-detached unit, \$5,058 per multiple residential unit, and \$2,614 per apartment unit.

The plant-serviced non-residential DC experiences an increase after cash flow considerations of \$5.70, from \$16.04 to \$21.74 per square. Non-residential development serviced by the lagoons will be charged \$16.99 per square metre. These charges are displayed on Table 8.

TABLE 7

TOWNSHIP OF ST. CLAIR
MUNICIPAL-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge by Unit Type (1)		
			Single & Semi-Detached	Multiples	Apartments
Library Service	\$0.00	\$0.00	\$0	\$0	\$0
Fire Department	\$114.11	\$149.00	\$441	\$425	\$220
Police Service	\$57.09	\$65.00	\$192	\$185	\$96
Indoor Recreation	\$74.37	\$0.00	\$0	\$0	\$0
Park Development & Facilities	\$361.81	\$340.00	\$1,007	\$970	\$501
Public Works	\$135.94	\$112.00	\$332	\$320	\$165
General Government	\$38.94	\$25.00	\$74	\$71	\$37
Subtotal General Services	\$782.26	\$691.00	\$2,046	\$1,971	\$1,019
Roads & Related	\$593.29	\$620.00	\$1,836	\$1,769	\$914
Storm Drainage	\$28.70	\$0.00	\$0	\$0	\$0
Water	\$214.39	\$217.00	\$643	\$619	\$320
Subtotal Township Wide	\$1,618.65	\$1,528.00	\$4,525	\$4,359	\$2,253
Sewer Services - Plant	\$340.31	\$795.00	\$2,354	\$2,268	\$1,172
TOTAL CHARGE WITH PLANT	\$1,958.96	\$2,323.00	\$6,879	\$6,627	\$3,425
Sewer Services - Lagoon	\$286.66	\$245.00	\$726	\$699	\$361
TOTAL CHARGE WITH LAGOON	\$1,905.31	\$1,773.00	\$5,251	\$5,058	\$2,614
Based on Persons Per Unit Of:			2.96	2.85	1.47

TABLE 8

**TOWNSHIP OF ST. CLAIR
MUNICIPAL-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE**

Service	Non-Residential	
	Unadjusted Charge per Square Metre	Calculated Charge per Square Metre
Library Service	\$0.00	\$0.00
Fire Department	\$1.21	\$1.57
Police Service	\$0.60	\$0.90
Indoor Recreation	\$0.00	\$0.00
Park Development & Facilities	\$0.00	\$0.00
Public Works	\$1.44	\$1.60
General Government	\$0.41	\$0.47
Subtotal General Services	\$3.67	\$4.54
Roads & Related	\$6.28	\$6.60
Storm Drainage	\$0.30	\$0.00
Water	\$2.27	\$2.35
Subtotal Township Wide	\$12.52	\$13.49
Sewer Services - Plant	\$3.52	\$8.25
TOTAL CHARGE WITH PLANT	\$16.04	\$21.74
Sewer Services - Lagoon	\$2.86	\$3.50
TOTAL CHARGE WITH LAGOON	\$15.38	\$16.99

7. COMPARISON OF CALCULATED AND CURRENT DEVELOPMENT CHARGES

Tables 9 and 10 present a comparison of the newly calculated residential and non-residential DCs with currently imposed development charge rates. The current rates are consistent with those passed under the 2016 by-law as the Township has not indexed the DC rates throughout the five-year term. Additionally, as part of the 2016 DC by-law adoption, Council opted to use the combined sewer charge as opposed to the split Plant and Lagoon charge, and therefore this section of the analysis will provide a comparison of the combined sewer charge determined in this study.

Table 9 shows that the calculated residential DC for a single- or semi-detached unit receiving sewer services is \$2,333 greater than the Township's current residential charge of \$4,250. The increase results from additional capital needs to meet service levels in the Township for various services and the addition of a Water charge.

Table 9 also compares the calculated rates with what the current rates would have been should they have been indexed to inflation since 2016. The table shows that the newly calculated rate is \$1,592 greater than the 2016 indexed rate.

The comparison of calculated non-residential DCs with current rates is shown on Table 10. The calculated non-residential charge of \$20.84 is \$16.01 higher than the Township's current charge of \$4.83.

Upon adoption of the 2016 DC by-law, Council decided not to impose the fully calculated non-residential rate. For comparative purposes, Table 10 shows the difference between the newly calculated rates and the calculated rates from the 2015 DC study (indexed to current dollars). The newly calculated charge is \$2.10 lower than what the DC would be today if Council adopted the fully calculated rate in 2016 and indexed the rates over the term of the by-law.

TABLE 9

TOWNSHIP OF ST. CLAIR
 COMPARISON OF CURRENT AND CALCULATED
 RESIDENTIAL DEVELOPMENT CHARGES

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	Current Indexed Residential Charge / SDU	Difference in Charge
Library Service	\$50	\$0	(\$50)	\$59	(\$59)
Fire Department	\$605	\$441	(\$164)	\$711	(\$270)
Police Service	\$100	\$192	\$92	\$117	\$75
Indoor Recreation	\$250	\$0	(\$250)	\$294	(\$294)
Park Development & Facilities	\$250	\$1,007	\$757	\$294	\$713
Public Works	\$195	\$332	\$137	\$229	\$103
General Government	\$100	\$74	(\$26)	\$117	(\$43)
Subtotal General Services	\$1,550	\$2,046	\$496	\$1,820	\$226
Roads & Related	\$1,457	\$1,836	\$379	\$1,711	\$125
Storm Drainage	\$100	\$0	(\$100)	\$117	(\$117)
Water	\$0	\$643	\$643	\$0	\$643
Subtotal Township Wide	\$3,107	\$4,525	\$1,418	\$3,649	\$876
Sewer Services	\$1,143	\$2,058	\$915	\$1,342	\$716
TOTAL CHARGE WITH SEWER	\$4,250	\$6,583	\$2,333	\$4,991	\$1,592

Note: Current charges from By-law

TABLE 10

TOWNSHIP OF ST. CLAIR
 COMPARISON OF CURRENT AND CALCULATED
 NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Current Non-Residential Charge / Sq.M	Calculated Non-Residential Charge / Sq.M	Difference in Charge	2015 Calculated Non-Residential Charge / Sq.M	Difference in Charge
Library Service	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fire Department	\$0.16	\$1.57	\$1.41	\$6.06	(\$4.49)
Police Service	\$0.02	\$0.90	\$0.88	\$1.09	(\$0.19)
Indoor Recreation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Park Development & Facilities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Public Works	\$0.10	\$1.60	\$1.50	\$0.83	\$0.77
General Government	\$0.04	\$0.47	\$0.43	\$0.55	(\$0.08)
Subtotal General Services	\$0.32	\$4.54	\$4.22	\$8.54	(\$4.00)
Roads & Related	\$1.13	\$6.60	\$5.47	\$7.88	(\$1.28)
Storm Drainage	\$0.32	\$0.00	(\$0.32)	\$1.76	(\$1.76)
Water	\$0.00	\$2.35	\$2.35	\$0.00	\$2.35
Subtotal Township Wide	\$1.77	\$13.49	\$11.72	\$18.18	(\$4.69)
Sewer Services	\$3.06	\$7.35	\$4.29	\$4.76	\$2.59
TOTAL CHARGE WITH SEWER	\$4.83	\$20.84	\$16.01	\$22.94	(\$2.10)

Note: Current Charges are from By-law. 2015 Calculated charges have been indexed to current dollars.

8. COST OF GROWTH ANALYSIS

This section summarizes the 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 DC By-law. This examination is required as one of the provisions of the *DCA*. Additional details on the cost of growth analysis, including asset management analysis, is included in Appendix F.

A. ASSET MANAGEMENT PLAN

Table 10 provides the calculated annual asset management contribution for the gross capital expenditures and the share related to the 2021-2031 DC recoverable portion. The year 2032 has been included to calculate the annual contribution for the 2021-2031 period as the expenditures in 2031 will not trigger asset management contributions until 2032. As shown in Table 10, by 2032, the Township should fund an additional \$100,698 per annum in order to fund the full life cycle costs of the new assets related to the Township-wide 11-year services supported under the development charges by-law.

TABLE 10
CALCULATED ANNUAL PROVISION BY 2032

Service	2021 - 2031 Capital Program		Calculated AMP Annual Provision by 2032	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Library Service	\$ -	\$ -	\$ -	\$ -
Fire Department	\$ 304,754	\$ 1,949,213	\$ 348	\$ 5,335
Police Service	\$ 152,481	\$ 74,770	\$ -	\$ -
Indoor Recreation	\$ 145,000	\$ 25,000	\$ 3,343	\$ -
Park Development & Facilities	\$ 705,423	\$ 2,214,577	\$ 35,112	\$ 84,216
Public Works	\$ 363,066	\$ 46,934	\$ 9,563	\$ 1,184
General Government	\$ 104,000	\$ -	\$ -	\$ -
Roads & Related	\$ 1,584,566	\$ 2,440,434	\$ 34,237	\$ 52,845
Sewer Services (Combined)	\$ 879,779	\$ 5,795,416	\$ 2,722	\$ 33,577
Storm Drainage	\$ 76,653	\$ 1,173,347	\$ 1,515	\$ 23,196
Water	\$ 572,605	\$ 31,427,395	\$ 13,857	\$ 760,526
Total	\$ 4,888,327	\$ 45,147,086	\$ 100,698	\$ 960,879

B. LONG-TERM CAPITAL AND OPERATING COSTS

Appendix F summarizes the estimated increase in net operating costs that the Township will experience for additions associated with the planned capital forecast. Table 11 summarizes the estimated increase in net operating costs that the Township will experience for additions associated with the planned capital program.

By 2031, the Township's net operating costs are estimated to increase by \$418,800.

Appendix F also summarizes the components of the development related capital program that will require funding from non-development charge sources. Of the \$27.4 million in the 2021-2031 net capital program cost, about \$22.3 million will need to be financed from non-development charge sources over the next 11 years. This is entirely related to shares of projects related to capital replacement and for non-development shares of projects that provide benefit to the existing (BTE) community.

Council is made aware of these factors so that they understand the financial implications of the quantum and timing of the projects included in the development related capital forecast in this study.

TABLE 11

TOWNSHIP OF ST. CLAIR
SUMMARY OF LONG-TERM CAPITAL AND
OPERATING COST IMPACTS FOR TAX SUPPORTED SERVICES
 (in \$000 of constant dollars)

	2031
Net Operating Impacts (1)	
Library Service	\$0.0
Fire Department	\$20.0
Police Service	\$0.0
Indoor Recreation	\$12.0
Park Development & Facilities	\$140.0
Public Works	\$58.5
General Government	\$0.0
Roads & Related	\$188.3
NET OPERATING IMPACTS	\$ 418.8

	2031
Long-term Capital Impact (1)	
Total Net Cost	\$27,373.0
Net Cost from Development Charges	\$4,244.3
Prior Growth Share from DC Reserve Balances (2)	\$663.1
Portion for Post-2031 Development (3)	\$196.3
Funding from Non-DC Sources	
Replacement/Benefit to Existing	\$22,288.4
FUNDING FROM NON-DC SOURCES	\$ 22,288.4

C. THE PROGRAM IS DEEMED TO BE FINANCIALLY SUSTAINABLE

In summary, the asset management plan and long-term capital and operating analysis contained in Appendix F demonstrates that the Township can afford to invest and operate the identified general and engineered services infrastructure over the 11-year planning period to 2031.

Importantly, the Township's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.

9. OTHER ISSUES AND CONSIDERATIONS

A. DEVELOPMENT CHARGES ADMINISTRATION

No significant changes are recommended to the Township's current policies and practices regarding DC administration. In this regard:

- It is recommended that practices regarding collection of DCs and by-law administration continue to the extent possible.
- As required under the *DCA*, the Township should codify any rules regarding application of the by-law and exemptions within the DC by-law proposed for adoption.
- It is recommended that Council adopt the development-related capital forecast included in this Background Study, subject to annual review through the Township's normal capital budget process.
- It is recommended that limited exemptions, other than those required in the *DCA*, be formally adopted in the by-laws.
- It is recommended that the Township adopt indexing provisions in the by-law so as to ensure that the DC rates incorporate inflationary increases over the by-law term.

B. LOCAL SERVICE POLICY

The following provides the definition of "local service", under the *DCA*, for a number of services provided by the Township of St. Clair. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the development charge calculation for the Township. The 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 considered to be a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the land owner or developer. The issue of "local services" is being specifically considered for the services of:

- Roads and Related
- Stormwater Services
- Water & Wastewater
- Parkland Development

i. Roads and Related

a) Collector Roads:

Collector roads internal to a development are a direct developer responsibility under s.59 of the DCA as a local service;

- Collector roads external to a development are a local service if the works are within the area to which the plan relates and therefore a direct developer responsibility under s.59 of the DCA. Otherwise the works are included in the DC calculation to the extent permitted under s.5(1) of the DCA;
- Collector roads may be subject to planning policies or prior agreement;
- New arterial roads and arterial road improvements are included as part of road costing funded through DCs;
- Local streets and entrances to a development are local services and a direct developer responsibility under s.59 of the DCA;
- Some local streets serve a role as part of a broader road network or system and are impacted by growth and development. These road segments may be funded, in part, by development charges.

b) Traffic Signals, Intersection Improvements and Street Lighting:

- If required, are usually considered a direct developer responsibility through local service provisions (s.59 of DCA);
- Some traffic signals may be included in the development charge calculation with possibility of development charge credits if a developer is required to emplace the specified signals.

c) Sidewalks:

- Sidewalks on Area Municipal Roads - linked to road funding source;
- Other sidewalks external to development but related to the subject lands are a direct developer responsibility as a local service provision (s.59 of DCA).

ii. **Stormwater Management (SWM) Facilities**

The costs of stormwater management facilities internal to subdivision and related to a plan of subdivision are considered to be a local service under the DCA and the associated costs are not included in the development charges calculation. Local SWM facilities would typically include:

- Stormwater management facilities servicing local drainage areas;
- Storm sewer oversizing associated with local drainage areas;
- Storm sewer works on existing roads related to a development.

iii. **Water and Wastewater**

- Major external trunk watermains and sanitary sewers, being those with sizes over 200mm diameter for watermains and over 300mm diameter for sanitary sewers, major water booster pumping stations, and major sewage pumping stations are to be included within the DC;
- Oversizing of watermains or sewers within subdivisions that is sized to service another subdivision or other lands may also to be included within the DC for future recovery where there is benefit to more than adjacent or adjoining subdivisions (if facilities are oversized to accommodate internal subdivision needs no oversizing will not be included in the DC);
- There may be short localized watermains and sanitary sewers within service areas which do not benefit the whole of those service areas and therefore have not been included within the DC; there are limited exceptions;
- Connections to trunk watermains and sanitary sewers and minor pumping stations, individual pumping stations, and lower pressure forcemains to service specific areas are to be a direct responsibility of the developer as a local service provision (s.59 of DCA); minor pumping stations are those that service only a single subdivision or that service adjacent or adjoining subdivisions.

iv. **Parkland Development**

For the purpose of parkland development, local service includes the requirement for the owner to undertake preparation of a conceptual park plan including proposed grading to demonstrate that the proposed park size, configuration and topography will allow for the

construction of park facilities to the satisfaction of the Township. In addition, the owner is required to provide the park site graded in accordance with the park concept plan including storm water servicing. The park site must be fenced and seeded with a minimum cover of 200mm of topsoil. Servicing such as hydro, sanitary sewer and water should be stubbed at the property line along the park frontage.

The Township also requires the owner to dedicate parkland or provide cash-in-lieu, consistent with Planning Act provisions. All of these costs are deemed a direct responsibility of the owner and have not been included in the development charge calculation.

With respect to other parkland development costs, the municipal policy is to include all other components of parkland development in the DC calculation, including detailed design and contract administration, finished grading, sodding, park furniture, electrical, water, sanitary sewer, signage, plant material, walkways, play courts, parking lots, sports fields, playground equipment, water play equipment, recreational trails, park shelters and lighting.

APPENDIX A

DEVELOPMENT FORECAST

DEVELOPMENT FORECAST

This appendix summarizes the development forecast used to prepare the 2020 Development Charges Background Study for the Township of St. Clair. The forecast results are presented in the following tables:

Historical Development

Table 1	Population, Household & Employment Summary
Table 2	Housing Completions (CMHC)
Table 3	Occupied Households by Unit Type
Table 4	Households by Period of Construction Showing Household Size
Table 5	Place of Work Employment

Forecast Development

Table 6	Population, Household & Employment Forecast Summary
Table 7	Occupied Households by Unit Type
Table 8	Growth in Occupied Households by Unit Type
Table 9	Population Growth in New Households by Unit Type
Table 10	Place of Work Employment
Table 11	Non-Residential Space

A. FORECAST APPROACH AND KEY ASSUMPTIONS

The *Development Charges Act* (DCA) requires the Township to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The forecast must cover both residential and non-residential development and be specific enough with regards to the quantum, type, location and timing of such development to allow the Township to prepare a reasonable development-related capital program.

An 11-year development time horizon, from 2021 to 2031, has been used to calculate the development charges for all development charge-eligible services.

The development forecast is broadly based on the Township achieving average annual growth in occupied dwellings of 63 units, slightly higher growth than what has been experienced in recent years. Most housing growth will be in Corunna.

After a long period of job decline, the Township's employment is forecast to increase over the time horizon, fuelled in part by population growth and several large industrial developments.

B. HISTORICAL DEVELOPMENT IN THE TOWNSHIP

Historical growth figures presented here are based on Statistics Canada Census data, Canada Mortgage Housing Corporation (CMHC) housing market information, and Township building permit and development application data. A "Census-based" definition of population is used for the purposes of the development charges study. This definition does not include the Census net undercoverage, which represents those who were missed or double-counted by the Census. For development charges purposes, a ten year historical period of 2011 to 2020 is used for calculating historical service levels. Since 2016 was the last year of the Census, figures from 2017 to 2020 are estimated.

Historical data indicate that the Township's population fell by 311 over the last decade, from 14,451 in 2010 to 14,230 in 2020.¹ Total occupied dwellings increased from 5,714 to 5,992 over the same period, with most growth occurring since 2016 (see Table 1). The difference between the rates of population and occupied dwelling unit growth is the result of a decline in the average number of persons residing in existing housing units.

Historical employment figures are also shown in Table 1 and are based on Statistics Canada place of work data. Place of work data records where people work rather than the place of residence. It includes all employment with a regular or no fixed work place of work. However, work-at-home employment is excluded from the figures as, for development charge purposes, this type of employment is considered not to require building floorspace for its activities.

Employment is divided into three land-use based categories:

- Population-related employment is employment that primarily serves a resident population and includes retail, education, healthcare, and local government. This generally grows in line with population growth.
- Employment-land employment refers to traditional industrial-type employment primarily accommodated in low-rise industrial buildings in business parks and

¹ For the Township's historical growth in the context of County trends see County of Lambton Planning and Development Services Staff Report, *Jul 1, 2019 Population Estimates*, dated 17 July, 2020.

employment areas. Given the spatial and operational needs of these types of jobs, they are almost exclusively located in lands zoned for industrial employment uses.

- Rural-based employment refers to jobs scattered throughout the rural area, primarily related to agricultural, recreational and primary industries. This is the smallest component of the employment base in St. Clair.

The Township's employment has decreased over the historical ten-year period—by about 500 jobs—despite growth in recent years (see Table 1). The Township's activity rate (the ratio of employment to population) is about 34 per cent in 2020.

Details on housing growth in the Township are provided in Table 2. This information is sourced from Canada Mortgage and Housing Corporation *Housing Market Information*. The dominant type of new housing in St. Clair constructed since 2006 has been single-detached homes. The overall housing mix in the Township since 2006 is set out in Table 3. Variations shown in rowhouse and apartment units since 2006 are likely due to enumeration alterations by Statistics Canada and data discontinuity errors.

Table 4 provides details on historical occupancy patterns in the Township. The overall average occupancy level in St. Clair for all units is 2.39 persons per housing unit (PPU). Occupancy levels for recently constructed units, between 2006 and 2016, are higher than the overall average and are generally used to support the development charges calculations since they better reflect the number of people that are likely to reside in new development.

Table 5 summarizes the growth in place of work employment in the Township between 2006 and 2020 by employment category. Growth in population-related employment has been static or negative in recent years. This contrasts to growth in the employment land (industrial) sector where employment increased in recent years following declines experienced during the global recessionary period from 2006 to 2011. Rural employment has increased modestly. Although displayed in the table, work at home employment is not included in the development charges study calculations since the increased need for services associated with these employees is accounted for within the residential forecast.

C. FORECAST METHOD AND RESULTS

This section describes the method used to establish the 11-year development charges forecast for the planning period 2021 to 2031.

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*² as well as the *population in new housing units* is required.

- The *population growth* determines the need for additional facilities and provides the foundation for the development-related capital program.
- When calculating the development charge, however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This *population in new units* represents the population from which development charges will be collected.

Development charges are levied on non-residential development as a charge per square metre of gross floor area (GFA). As with the residential forecast, the non-residential forecast requires both a projection of *employment growth* as well as a projection of the *employment growth associated with new floor space* in the Township.

i. Residential Forecast

The residential development forecast incorporates anticipated growth in population and occupied dwelling units by type. As detailed in Table 6, the Township's Census population is forecast to grow from 14,230 in 2020 to 14,779 in 2031. The 11-year population growth (549 persons) represents a four per cent increase over the existing base.

The number of occupied housing units is forecast to increase from 5,992 in 2020 to 6,688 in 2031. This reflects an average annual increase of 63 occupied dwelling units per year or a nine per cent increase in occupied dwelling units over the time horizon to 2031.

A breakdown of anticipated housing by unit type in the Township is shown in Table 7. As shown in Table 8, the long-term type of new housing forecasted in the Township is to be composed largely of single and semi-detached units (80 per cent), followed by rows (10 per cent) and apartments (10 per cent). The main point of difference between the shares of total occupied dwelling units (Table 7) and new occupied dwelling units (Table 8) is that is

² Commonly referred to as "net population growth" in the context of development charges.

that more row and apartment units are expected in the future, compared to the Township's existing base.

Population growth in the new units is estimated by initially applying the following PPUs to the housing unit forecast: 3.00 for single and semi-detached units; 2.90 for rows; and 1.50 for apartments. Over the planning period, the PPUs are forecast to slightly decline. The forecast of population expected to reside in these new housing units over the 2020 to 2031 period is 1,950 additional persons. This population growth by unit type is shown in Table 9.

ii. **Non-Residential Forecast**

Table 10 shows the forecast of total employment in the Township by employment category to 2031. Of the employment growth used in the study, which excludes growth in the "work at home" category, 7 per cent is anticipated to occur within the population-related category which includes retail and institutional employment. No net growth is expected in the rural sector. The largest growth share of 93 per cent is anticipated within the employment land sector, which is largely industrial. For the purposes of the Study, 704 employees are anticipated to be added over the 11-year period to 2031.³

Non-residential development charges are calculated on a per unit of gross floor area basis. Therefore, as per the DCA, a forecast of future non-residential building space has been developed. As with the residential forecast, the GFA forecast covers the 11-year period from 2020 to 2031 for all services. This forecast is shown in Table 11.

An assumed floor space per worker (FSW) is applied to the employment forecast numbers by category in order to project growth in new non-residential space in the Township. The FSW assumptions used are 50 square metres per employee for population-related employment and 100 square metres per employee for employment land employment.

The overall growth in new non-residential building space across the Township of St. Clair between 2020 and 2031 is 68,086 square metres, 97 per cent of which will be in the industrial sector.

iii. **Area-Specific Forecast for Sewer Serviced Areas**

The forecast presented above covers growth in all areas of the Township. However, the Township has two sewer systems requiring the forecast to be broken out into two components.

³ The forecast accounts for the 150 full-time manufacturing jobs, and associated temporary construction jobs, associated with the new Nova Chemicals plant set for construction starting in late 2021.

For residential growth it is assumed that 80 per cent of growth would be located in Sewer Plant serviced areas while 20 per cent would be in Lagoon serviced areas. For non-residential development, it is assumed that 95 per cent would be in Plant areas while 5 per cent would be in Lagoon areas.

These area specific forecasts can be used should Council will to implement area-specific development charges for sewer services. Consideration of the use of more than one development charge by-law to reflect different needs for services in different areas is a requirement of the DCA.

**APPENDIX A - TABLE 1
TOWNSHIP OF ST. CLAIR
HISTORICAL POPULATION, HOUSEHOLDS & EMPLOYMENT SUMMARY**

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2006	14,649		5,590		2.62	5,881		40.1%
2007	14,622	(27)	5,621	31	2.60	5,772	(109)	39.5%
2008	14,595	(27)	5,652	31	2.58	5,665	(107)	38.8%
2009	14,568	(27)	5,683	31	2.56	5,562	(103)	38.2%
2010	14,541	(27)	5,714	31	2.54	5,461	(101)	37.6%
2011	14,515	(26)	5,745	31	2.53	5,363	(98)	37.0%
2012	14,428	(87)	5,753	8	2.51	5,210	(153)	36.1%
2013	14,342	(86)	5,761	8	2.49	5,071	(139)	35.4%
2014	14,256	(86)	5,769	8	2.47	4,946	(125)	34.7%
2015	14,171	(85)	5,777	8	2.45	4,833	(113)	34.1%
2016	14,086	(85)	5,785	8	2.43	4,733	(100)	33.6%
2017	14,141	55	5,836	51	2.42	4,787	54	33.7%
2018	14,278	137	5,884	48	2.41	4,842	54	33.8%
2019	14,452	174	5,937	53	2.40	4,898	56	33.9%
2020	14,230	(222)	5,992	55	2.39	4,955	57	34.0%
Growth 2011-2020		(311)		278			(506)	

Source: Statistics Canada, Census of Canada 2006, 2011, 2016; Annual Demographic Statistics 2017-2019; Hemson estimates for 2020.

**APPENDIX A - TABLE 2
TOWNSHIP OF ST. CLAIR
HISTORICAL ANNUAL HOUSING COMPLETIONS (CMHC)**

Year	CMHC Annual Housing Completions				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006	31	0	0					
2007	58	0	0	58				
2008	50	12	0	62	81%	19%	0%	100%
2009	48	0	0	48	100%	0%	0%	100%
2010	32	0	0	32	100%	0%	0%	100%
2011	51	0	0	51	100%	0%	0%	100%
2012	34	0	0	34	100%	0%	0%	100%
2013	27	0	0	27	100%	0%	0%	100%
2014	58	0	0	58	100%	0%	0%	100%
2015	35	0	0	35	100%	0%	0%	100%
2016	36	0	0	36	100%	0%	0%	100%
2017	51	0	0	51	100%	0%	0%	100%
2018	48	0	0	48	100%	0%	0%	100%
2019	53	0	0	53	100%	0%	0%	100%
2020 estimate	55	0	0	55	100%	0%	0%	100%
Growth 2011-2020	448	0	0	448	100%	0%	0%	100%

Source: Canada Mortgage and Housing Corporation (CMHC), Housing Market Information

**APPENDIX A - TABLE 3
TOWNSHIP OF ST. CLAIR
HISTORICAL OCCUPIED HOUSEHOLDS BY UNIT TYPE**

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2006	5,015	265	310	5,590	90%	5%	6%	100%
2007	5,044	272	305	5,621	90%	5%	5%	100%
2008	5,073	279	300	5,652	90%	5%	5%	100%
2009	5,102	286	295	5,683	90%	5%	5%	100%
2010	5,131	293	290	5,714	90%	5%	5%	100%
2011	5,160	300	285	5,745	90%	5%	5%	100%
2012	5,175	289	288	5,752	90%	5%	5%	100%
2013	5,190	279	291	5,760	90%	5%	5%	100%
2014	5,205	269	294	5,768	90%	5%	5%	100%
2015	5,220	259	297	5,776	90%	4%	5%	100%
2016	5,235	250	300	5,785	90%	4%	5%	100%
2017	5,286	250	300	5,836	91%	4%	5%	100%
2018	5,334	250	300	5,884	91%	4%	5%	100%
2019	5,387	250	300	5,937	91%	4%	5%	100%
2020	5,442	250	300	5,992	91%	4%	5%	100%

Source: Statistics Canada, Census of Canada and Canada Mortgage and Housing Corporation (CMHC), Housing Market Information

APPENDIX A - TABLE 4
TOWNSHIP OF ST. CLAIR
HISTORIC HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
<i>Singles & Semis</i>													
Household Population	2,160	1,540	1,635	2,970	1,305	815	755	525	745	585	11,705	1,330	13,035
Households	905	730	700	1,175	485	325	270	200	260	205	4,790	465	5,255
Household Size	2.39	2.11	2.34	2.53	2.69	2.51	2.80	2.63	2.87	2.85	2.44	2.86	2.48
<i>Rows</i>													
Household Population	0	0	95	240	65	0	0	20	0	0	420	0	420
Households	15	10	35	110	35	0	10	15	10	0	230	10	240
Household Size	0.00	0.00	2.71	2.18	1.86	n/a	0.00	1.33	0.00	n/a	1.83	0.00	1.75
<i>Apartments</i>													
Household Population	70	55	55	70	130	35	0	0	0	0	415	0	415
Households	30	40	50	65	100	20	0	0	10	0	305	10	315
Household Size	2.33	1.38	1.10	1.08	1.30	1.75	n/a	n/a	0.00	n/a	1.36	0.00	1.32
<i>Total</i>													
Household Population	2,230	1,595	1,785	3,280	1,500	850	755	545	745	585	12,540	1,330	13,870
Households	950	780	785	1,350	620	345	280	215	280	205	5,325	485	5,810
Household Size	2.35	2.04	2.27	2.43	2.42	2.46	2.70	2.53	2.66	2.85	2.35	2.74	2.39

Source: Statistics Canada, 2016 Census Special Run.

APPENDIX A - TABLE 5
TOWNSHIP OF ST. CLAIR
HISTORICAL PLACE OF WORK EMPLOYMENT

Mid-Year	Population- Related	Annual Growth	Employment Land	Annual Growth	Rural	Annual Growth	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2006	2,195		3,163		523		5,881		815		6,696	
2007	2,138	(57)	3,101	(62)	533	10	5,772	(109)	828	13	6,600	(96)
2008	2,082	(56)	3,040	(61)	543	10	5,665	(107)	841	13	6,506	(94)
2009	2,028	(54)	2,980	(60)	554	11	5,562	(103)	854	13	6,416	(90)
2010	1,975	(53)	2,921	(59)	565	11	5,461	(101)	867	13	6,328	(88)
2011	1,923	(52)	2,864	(57)	576	11	5,363	(98)	880	13	6,243	(85)
2012	1,753	(170)	2,875	11	582	6	5,210	(153)	783	(97)	5,993	(250)
2013	1,598	(155)	2,885	10	588	6	5,071	(139)	696	(87)	5,767	(226)
2014	1,457	(141)	2,895	10	594	6	4,946	(125)	619	(77)	5,565	(202)
2015	1,328	(129)	2,905	10	600	6	4,833	(113)	551	(68)	5,384	(181)
2016	1,211	(117)	2,916	11	606	6	4,733	(100)	490	(61)	5,223	(161)
2017	1,214	3	2,967	51	606	0	4,787	54	491	1	5,279	55
2018	1,216	2	3,019	52	606	0	4,842	54	492	1	5,334	55
2019	1,219	3	3,072	53	606	0	4,898	56	494	1	5,391	57
2020	1,223	4	3,126	54	606	0	4,955	57	495	1	5,450	59
Growth 2011-2020		(752)		205		41		(506)		(372)		(878)

Note: Employment figures include No Fixed Place of Work Employment

Source: Statistics Canada, Census of Canada

**APPENDIX A - TABLE 6
TOWNSHIP OF ST. CLAIR
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST SUMMARY**

Mid-Year	Census Population	Annual Growth	Total Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2016	14,086		5,785		2.43	4,733		33.6%
2017	14,123	37	5,836	51	2.42	4,787	54	33.9%
2018	14,151	28	5,884	48	2.40	4,842	54	34.2%
2019	14,189	38	5,937	53	2.39	4,898	56	34.5%
2020	14,230	41	5,992	55	2.37	4,955	57	34.8%
2021	14,270	40	6,047	55	2.36	5,013	58	35.1%
2022	14,312	42	6,103	57	2.34	5,072	59	35.4%
2023	14,356	44	6,162	58	2.33	5,133	60	35.8%
2024	14,403	46	6,222	60	2.31	5,195	62	36.1%
2025	14,451	48	6,283	62	2.30	5,257	63	36.4%
2026	14,501	50	6,347	63	2.28	5,321	64	36.7%
2027	14,554	52	6,411	65	2.27	5,386	65	37.0%
2028	14,607	54	6,478	67	2.25	5,453	66	37.3%
2029	14,663	56	6,546	68	2.24	5,521	68	37.6%
2030	14,720	57	6,616	70	2.22	5,589	69	38.0%
2031	14,779	59	6,688	71	2.21	5,659	70	38.3%
Growth 2017-2020		144		207			222	
Growth 2021-2025		221		291			302	
Growth 2021-2031		549		696			704	

Source: Hemson Consulting

APPENDIX A - TABLE 7
TOWNSHIP OF ST. CLAIR
FORECAST OF OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2016	5,235	250	300	5,785	90%	4%	5%	100%
2017	5,286	250	300	5,836	91%	4%	5%	100%
2018	5,334	250	300	5,884	91%	4%	5%	100%
2019	5,387	250	300	5,937	91%	4%	5%	100%
2020	5,442	250	300	5,992	91%	4%	5%	100%
2021	5,489	252	306	6,047	91%	4%	5%	100%
2022	5,537	255	311	6,103	91%	4%	5%	100%
2023	5,586	259	317	6,162	91%	4%	5%	100%
2024	5,635	263	323	6,222	91%	4%	5%	100%
2025	5,686	269	329	6,283	90%	4%	5%	100%
2026	5,737	274	335	6,347	90%	4%	5%	100%
2027	5,788	281	342	6,411	90%	4%	5%	100%
2028	5,841	289	349	6,478	90%	4%	5%	100%
2029	5,894	297	355	6,546	90%	5%	5%	100%
2030	5,947	306	362	6,616	90%	5%	5%	100%
2031	6,001	317	370	6,688	90%	5%	6%	100%

Source: Hemson Consulting

APPENDIX A - TABLE 8
TOWNSHIP OF ST. CLAIR
FORECAST OF ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Annual Growth in Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apts.	Total
2016								
2017	51	0	0	51	100%	0%	0%	100%
2018	48	0	0	48	100%	0%	0%	100%
2019	53	0	0	53	100%	0%	0%	100%
2020	55	0	0	55	100%	0%	0%	100%
2021	47	2	6	55	86%	4%	10%	100%
2022	48	3	6	57	85%	5%	10%	100%
2023	49	4	6	58	84%	6%	10%	100%
2024	50	4	6	60	83%	7%	10%	100%
2025	50	5	6	62	82%	8%	10%	100%
2026	51	6	6	63	81%	9%	10%	100%
2027	52	7	6	65	80%	10%	10%	100%
2028	52	8	7	67	79%	11%	10%	100%
2029	53	8	7	68	78%	12%	10%	100%
2030	54	9	7	70	77%	13%	10%	100%
2031	54	10	7	71	76%	14%	10%	100%
Growth 2017-2020	207	0	0	207	100%	0%	0%	100%
Growth 2021-2025	244	19	29	291	84%	6%	10%	100%
Growth 2021-2031	560	67	70	696	80%	10%	10%	100%

Source: Hemson Consulting

APPENDIX A - TABLE 9
TOWNSHIP OF ST. CLAIR
FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE

Mid-Year	Assumed Average Occupancies (PPU)				Forecast Population in New Households			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2021	3.00	2.90	1.50	2.85	141	7	8	157
2022	2.99	2.89	1.50	2.84	144	9	8	161
2023	2.99	2.89	1.49	2.83	146	11	9	165
2024	2.98	2.88	1.49	2.82	148	13	9	169
2025	2.97	2.87	1.48	2.81	149	15	9	173
2026	2.96	2.86	1.48	2.80	151	17	9	177
2027	2.96	2.86	1.47	2.80	153	19	10	181
2028	2.95	2.85	1.47	2.79	154	21	10	186
2029	2.94	2.84	1.46	2.78	156	24	10	190
2030	2.93	2.83	1.46	2.77	157	26	10	194
2031	2.93	2.83	1.45	2.76	158	29	10	198
Growth 2021-2025	2.98	2.88	1.49	2.83	728	54	43	825
Growth 2021-2031	2.96	2.85	1.47	2.80	1,657	190	103	1,950

Source: Hemson Consulting

APPENDIX A - TABLE 10
TOWNSHIP OF ST. CLAIR
FORECAST OF PLACE OF WORK EMPLOYMENT

Mid-Year	Population-Related	Annual Growth	Employment Land	Annual Growth	Rural	Annual Growth	Total For DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work At Home	Annual Growth
2016	1,211		2,916		606		4,733		490		5,223	
2017	1,214	3	2,967	51	606	0	4,787	54	491	1	5,279	55
2018	1,216	2	3,019	52	606	0	4,842	54	492	1	5,334	55
2019	1,219	3	3,072	53	606	0	4,898	56	494	1	5,391	57
2020	1,223	4	3,126	54	606	0	4,955	57	495	1	5,450	59
2021	1,226	3	3,181	55	606	0	5,013	58	496	1	5,510	60
2022	1,230	4	3,236	56	606	0	5,072	59	498	1	5,570	61
2023	1,234	4	3,293	57	606	0	5,133	60	499	2	5,632	62
2024	1,238	4	3,351	58	606	0	5,195	62	501	2	5,696	63
2025	1,242	4	3,409	59	606	0	5,257	63	503	2	5,760	64
2026	1,246	4	3,469	60	606	0	5,321	64	504	2	5,826	66
2027	1,251	4	3,530	61	606	0	5,386	65	506	2	5,893	67
2028	1,255	5	3,591	62	606	0	5,453	66	508	2	5,961	68
2029	1,260	5	3,654	63	606	0	5,521	68	510	2	6,031	70
2030	1,265	5	3,718	64	606	0	5,589	69	512	2	6,101	71
2031	1,270	5	3,783	65	606	0	5,659	70	514	2	6,174	72
Growth 2017-2020		12		210		0		222		5		227
Growth 2021-2025		19		283		0		302		8		310
Growth 2021-2031		47		657		0		704		19		724

Source: Hemson Consulting

**APPENDIX A - TABLE 11
TOWNSHIP OF ST. CLAIR
NON-RESIDENTIAL SPACE FORECAST**

Employment Density Assumptions	
Population-Related	50 m ² per employee
Employment Land	100 m ² per employee
Rural	- m ² per employee

Mid-Year	Non-Residential Space in m ²			Total For DC Study
	Population-Related	Employment Land	Rural	
2021	172	5,470	0	5,642
2022	181	5,566	0	5,747
2023	190	5,664	0	5,854
2024	199	5,763	0	5,962
2025	208	5,864	0	6,071
2026	216	5,966	0	6,182
2027	224	6,071	0	6,295
2028	232	6,177	0	6,408
2029	239	6,285	0	6,524
2030	246	6,395	0	6,641
2031	253	6,507	0	6,759
Growth 2021-2025	950	28,327	0	38,809
Growth 2021-2031	2,359	65,727	0	68,086

Source: Hemson Consulting

APPENDIX B
GENERAL SERVICES
TECHNICAL APPENDIX

GENERAL SERVICES TECHNICAL APPENDIX

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the general services provided by the Township of St. Clair. Seven services have been analysed as part of this Development Charges (DC) Background Study:

- Appendix B.1 Library Services
- Appendix B.2 Fire Department
- Appendix B.3 Police Services
- Appendix B.4 Indoor Recreation
- Appendix B.5 Park Development & Facilities
- Appendix B.6 Public Works
- Appendix B.7 General Government

Each sub-section, with the exception of General Government and Library Services, contains a set of three tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in a municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis. For the purpose of this study, the historical inventory period is defined as 2011-2020.

O. Reg. 82/98 requires that when defining and determining historical service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be funded by new growth reflect not only the quantity (number and size), but also the quality (replacement value or cost) of service provided by the Township in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by municipal staff in consultation with Hemson

Consulting Ltd. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

Table 1 also shows the calculation of the maximum allowable funding envelope and the legislated ten per cent reduction (for all applicable services). The maximum allowable funding envelope is defined as the ten-year historical service level (expressed as \$/capita or \$/population and employment) multiplied by the forecast increase in net population or net population and employment over the future planning period. The resulting figure is the value of capital infrastructure that would have to be constructed for that particular service so that the ten-year historical service level is maintained.

For services with only a residential impact (Library, Indoor Recreation and Park Development), a service level measure of net population has been utilized. For the remaining services where a residential and non-residential charge has been calculated, a service level measure of net population + employment has been used.

There is also a requirement in the *DCA* to consider “excess capacity” within the Township’s existing infrastructure that may be available to partially meet future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recover the cost of providing the capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery. The requirement to consider uncommitted excess capacity has been addressed through the use of “net” population and employment in the determination of maximum allowable funding envelopes.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The *DCA* requires that Council express its intent to provide capital facilities to support future development. Based on the development forecasts presented in Appendix A staff, in collaboration with consultants, have created a development-related capital forecast that sets out the projects required to service anticipated development for the 11-year period from 2021 to 2031.

To determine the share of the program that is eligible for recovery through development charges, the project costs are reduced by any anticipated grants, subsidies or other recoveries, “replacement” shares and benefit to existing shares, and the legislated “ten per cent reduction” for eligible services.

A replacement share represents the portion of a capital project that will benefit the existing community. It could for example, represent a portion of a new facility that will, at least in part, replace a facility that is demolished, redeployed or will otherwise not be available to serve its former function. The replacement share of the capital program is not deemed to be development-related and is therefore removed from the development charge calculation. The capital cost for replacement will require funding from non-development charge sources, typically property taxes or user fees.

The capital program less any replacement shares or benefit to existing yields the development-related costs. However, not all of the net development-related capital program may be recoverable from development charges in the period from 2021 to 2031. For some services, reserve fund balances may be available to fund a share of the program. In addition, a portion of the capital program may service development occurring beyond 2031. This portion of the capital program is deemed “pre-built” service capacity and is considered as committed excess capacity to be recovered under future development charges, or a service level increase.

The remaining portion of the net capital program represents the development-related cost that may be included in the DC calculation. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital costs eligible for recovery against growth over the forecast period from 2012 to 2031.

Calculation of the Unadjusted Development Charges Rates

The section below the capital program displays the calculation of the “unadjusted” development charge rates. The term “unadjusted” development charge is used to distinguish the charge that is calculated prior to cash flow financing considerations. The cash flow analysis is shown in Table 3.

The first step in determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Library Services, Indoor Recreation and Park Development, the development-related costs have been apportioned as 73 per cent residential and 27 per cent non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth in new space over the ten-year forecast period.

The development-related costs associated with Library, Indoor Recreation and Park Development, have been allocated 100 per cent to the residential sector as the need for these services is driven by residential development.

The residential share of the 2021–2031 DC eligible costs is then divided by the forecasted population growth in new dwelling units. This gives the unadjusted residential development charge per capita. The non-residential development-related net capital costs are divided by the forecasted increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are accounted for in the calculation as allowed under the *DCA*. Based on the development forecast, the analysis calculates the DC rate required to finance the net development-related capital spending plan, including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate development charge rates reflecting borrowing and earnings necessary to support the net development-related funding requirement, assumptions are used for the inflation rate and interest rate. An inflation rate of 2.0 per cent is used for the funding requirements, an interest rate of 5.5 per cent is used for borrowing on the funds and an interest rate of 3.5 per cent is applied to positive balances.

Table 3 displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per square metre (of GFA) non-residential development charges.

APPENDIX B.1

LIBRARY SERVICES

LIBRARY SERVICES

The Township is responsible for providing space for libraries in the Township that are operated by Lambton County Libraries. The Township’s inventory and capital program contains only buildings and land as all other capital items, including materials, equipment and furniture are the responsibility of the County. Lambton County Libraries currently operate four branches within the Township.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings and land for Library Services provided by the Township. The four branches total just over 4,000 square feet and are valued at \$772,300. The library buildings occupy 0.20 hectares of Township land, which is worth approximately \$35,800.

The 2020 combined replacement value of the inventory of capital assets for Library Services is \$808,100, resulting in a ten-year historical average service level of \$56.56 per capita. This historical service level, multiplied by the 11-year net population growth (549), results in a maximum allowable funding envelope of \$31,046.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

Upon discussion with staff regarding upcoming projects for Library services for the period 2021 – 2031, it was determined that no growth-related capital works are expected as the current Library services infrastructure will be able to support growth in the Township to 2031. Therefore, no development charge rate for Library services is proposed for under this background study. The Township’s Library needs will be re-examined in the next development charges update in five years.

The following table summarizes the calculation of the Library Services development charge:

LIBRARY SERVICE SUMMARY						
10-year Hist.	2021-2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$56.56	\$0	\$0	\$0.00	\$0.00	\$0.00	\$0.00

APPENDIX B.1
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICE

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Corunna Library, 417 Lyndock	761	761	761	761	761	761	761	761	761	761	\$210
Courtright Library / Seniors Room	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$140
Sombra Library, 3536 St. Clair Parkway	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	\$210
Wilkesport Library, 1349 Wilkesport Line	750	750	750	750	750	750	750	750	750	750	\$210
Total (sq.ft.)	4,011	4,011	4,011	4,011	4,011	4,011	4,011	4,011	4,011	4,011	
Total (\$000)	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Corunna Library, 417 Lyndock	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$176,200
Courtright Library / Seniors Room	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$176,200
Sombra Library, 3536 St. Clair Parkway	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$176,200
Wilkesport Library, 1349 Main Street	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$176,200
Total (ha)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Total (\$000)	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8

MATERIALS Type of Collection	# of Collection Materials										UNIT COST (\$/item)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
County Service											
Total (#)	-	-	-	-	-	-	-	-	-	-	
Total (\$000)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

FURNITURE AND EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
County Service										
Total (\$000)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0



**APPENDIX B.1
TABLE 1**

**TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICE**

Historical Population	2011 14,515	2012 14,428	2013 14,342	2014 14,256	2015 14,171	2016 14,086	2017 14,141	2018 14,278	2019 14,452	2020 14,230
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INVENTORY SUMMARY (\$000)

Buildings	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3	\$772.3
Land	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8
Materials	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Furniture and Equipment	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total (\$000)	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1	\$808.1

SERVICE LEVEL (\$/capita)												Average Service Level
Buildings	\$53.21	\$53.53	\$53.85	\$54.17	\$54.50	\$54.83	\$54.62	\$54.09	\$53.44	\$54.27	\$54.05	
Land	\$2.47	\$2.48	\$2.50	\$2.51	\$2.53	\$2.54	\$2.53	\$2.51	\$2.48	\$2.52	\$2.50	
Materials	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Furniture and Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total (\$/capita)	\$55.67	\$56.01	\$56.35	\$56.69	\$57.03	\$57.37	\$57.15	\$56.60	\$55.92	\$56.79	\$56.56	

**TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICE**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$56.56
Net Population Growth 2021 - 2031	549
Discounted Maximum Allowable Funding Envelope	\$31,046



APPENDIX B.2

FIRE DEPARTMENT

FIRE DEPARTMENT

The St. Clair Fire Department is responsible for the provision of fire prevention and suppression, inspections, public education, and emergency response services. The department operates out of seven stations throughout the Township.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land, vehicles, furniture and equipment for the Fire Department. The department operates out of seven fire stations, with the most recent station, located in the Emergency Service Building (ESB) constructed in 2009. The buildings total 26,026 square feet. A share of the ESB that is available for future use is being funded in the capital program and is excluded from the inventory. The total replacement value of the inventory \$7.5 million. The land associated with all facilities totals 3.4 hectares and, at \$176,200 per hectare, is valued at \$599,100. The 2020 Fire Department fleet totals 31 vehicles with a replacement value of \$11.0 million. Finally, the furniture and equipment included in the inventory, which incorporates personal protective equipment, office equipment, and station equipment, totals \$3.9 million.

The 2020 combined replacement value of the inventory of capital assets for the Fire Department is \$23.0 million, resulting in a ten-year historical average service level of \$1,100.88 per population and employment. The historical service level, multiplied by the net population and employment growth to 2031 (1,253), results in a maximum allowable funding envelope of \$1.4 million.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 2021 to 2031 development-related capital program includes the ongoing recovery of outstanding debentures, including the Fire Department’s share of the ESB, fire vehicles and building additions and communication equipment. There is also additional storage space planned for in 2027.

In total, the Fire Department capital program amounts to \$2.3 million. Non-growth shares relating to replacement and benefit to the existing community total \$1.9 million. No

replacement shares have been deducted from the new emergency services space as the construction was a net addition to the fire buildings.

No post-period shares have been identified for Fire services. The remaining \$304,754 is related to development in the 2021–2031 planning period and is eligible for DC recovery.

The development-related net capital cost is allocated 73 per cent to residential development (\$222,470) and 27 per cent (\$82,284) to non-residential development. The residential share of the net development-related capital cost is divided by the growth in population in new dwelling units to 2031 (1,950) to derive an unadjusted charge of \$114.11 per capita. The non-residential share of the net development-related capital cost is divided by the forecast growth in floor space to 2031 (68,086), resulting in an unadjusted charge of \$1.21 per square metre.

TABLE 3 CASH FLOW ANALYSIS

The cash flow is opened with the Fire Department reserve fund balance of \$44,171, split between residential and non-residential development. After cash flow consideration, both the residential and non-residential calculated charges increase to \$149.00 per capita and \$1.57 per square metre, respectively. This increase is due to the interest on Fire debentures being recovered through the cash flow analysis. The following table summarizes the calculation of the Fire Department development charge:

FIRE DEPARTMENT SUMMARY						
10-year Hist.	2021-2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop&emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$1,100.88	\$2,253,966	\$304,754	\$114.11	\$1.21	\$149.00	\$1.57

APPENDIX B.2
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
FIRE DEPARTMENT

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Becher Station - 442 Kimball Road	2,150	2,150	2,150	2,150	3,950	5,750	5,750	5,750	5,750	5,750	5,750	\$290
Brigden Station - Jane Street	2,506	2,506	2,506	2,506	3,706	4,906	4,906	4,906	4,906	4,906	4,906	\$290
Corunna Station - 249 Hill Street	2,260	2,260	2,260	2,260	2,260	2,260	2,260	2,260	2,260	2,260	2,260	\$290
Courtright Station - 1550 Eighth Street	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	\$290
Emergency Service Bdg-192 Hill Street	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	\$290
Emergency Service Bdg-Excess Capacity	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	(1,301)	\$290
Port Lambton Station - 362 W. Broadway	2,300	2,300	2,300	2,300	3,500	4,700	4,700	4,700	4,700	4,700	4,700	\$290
Wilkesport Station - 1343 Main Street	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	\$290
Total (sq.ft.)	17,626	17,626	17,626	17,626	21,826	26,026	26,026	26,026	26,026	26,026	26,026	
Total (\$000)	\$5,111.4	\$5,111.4	\$5,111.4	\$5,111.4	\$6,329.4	\$7,547.4	\$7,547.4	\$7,547.4	\$7,547.4	\$7,547.4	\$7,547.4	

LAND Station Name	# of Hectares										UNIT COST (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Becher Station - 442 Kimball Road	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$176,200
Brigden Station - Jane Street	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	\$176,200
Corunna Station - 249 Hill Street	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	\$176,200
Courtright Station - 1550 Eighth Street	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	\$176,200
Emergency Service Bdg-192 Hill Street	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$176,200
Port Lambton Station - 362 W. Broadway	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$176,200
Wilkesport Station - 1343 Main Street	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$176,200
Total (ha)	3.38	3.38	3.38	3.38	3.40	3.40	3.40	3.40	3.40	3.40	3.40	
Total (\$000)	\$595.5	\$595.5	\$595.5	\$595.5	\$599.1	\$599.1	\$599.1	\$599.1	\$599.1	\$599.1	\$599.1	



**APPENDIX B.2
TABLE 1**

**TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
FIRE DEPARTMENT**

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Staff Vehicles, Sedans, Wagons, Vans, Pick-ups	6	6	6	6	6	6	6	6	6	6	6	\$58,700
Tankers	5	5	5	5	5	5	5	5	5	5	5	\$352,300
Pumpers	6	6	6	6	7	7	7	7	7	7	7	\$469,800
Pumper Tanker	2	2	2	2	1	1	1	1	1	1	1	\$493,200
Rescue	6	6	6	6	6	6	6	6	6	6	6	\$352,300
Lighting	1	1	1	1	-	-	-	-	-	-	-	\$63,400
Aerial	1	1	1	1	1	2	2	2	2	2	2	\$1,291,800
Trailer	3	3	3	3	4	4	4	4	4	4	4	\$94,000
Total (#)	30	30	30	30	30	31	31	31	31	31	31	
Total (\$000)	\$9,669.9	\$9,669.9	\$9,669.9	\$9,669.9	\$9,677.1	\$10,968.9	\$10,968.9	\$10,968.9	\$10,968.9	\$10,968.9	\$10,968.9	

FURNITURE & EQUIPMENT Station Name	Total Value of Furniture & Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brigden Station - Jane Street	\$281,200	\$281,200	\$281,200	\$281,200	\$281,200	\$281,200	\$281,200	\$281,200	\$281,200	\$281,200
Corunna Station - 249 Hill Street	\$294,200	\$294,200	\$294,200	\$294,200	\$294,200	\$294,200	\$294,200	\$294,200	\$294,200	\$294,200
Courtright Station - 1550 Eighth Street	\$287,700	\$287,700	\$287,700	\$287,700	\$287,700	\$287,700	\$287,700	\$287,700	\$287,700	\$287,700
Wilkesport Station - 1343 Main Street	\$222,300	\$222,300	\$222,300	\$222,300	\$222,300	\$222,300	\$222,300	\$222,300	\$222,300	\$222,300
Port Lambton Station - 362 W. Broadway	\$274,600	\$274,600	\$274,600	\$274,600	\$333,300	\$333,300	\$333,300	\$333,300	\$333,300	\$333,300
Becher Station - 442 Kimball Road	\$222,300	\$222,300	\$222,300	\$222,300	\$281,000	\$281,000	\$281,000	\$281,000	\$281,000	\$281,000
Emergency Service Bdg-192 Hill Street	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500
Personal Fire Fighter Equipment	\$627,700	\$627,700	\$627,700	\$627,700	\$627,700	\$627,700	\$627,700	\$627,700	\$627,700	\$627,700
Communications Equipment	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100
Office Equipment	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500	\$57,500
Carbon Fibre Cylinders-Air bottles	\$186,120	\$186,120	\$186,120	\$186,120	\$186,120	\$186,120	\$186,120	\$186,120	\$186,120	\$186,120
Breathing Apparatus	\$919,980	\$919,980	\$919,980	\$919,980	\$919,980	\$919,980	\$919,980	\$919,980	\$919,980	\$919,980
Face Masks	\$105,141	\$105,141	\$105,141	\$105,141	\$105,141	\$105,141	\$105,141	\$105,141	\$105,141	\$105,141
Total (\$000)	\$3,732.3	\$3,732.3	\$3,732.3	\$3,732.3	\$3,849.7	\$3,849.7	\$3,849.7	\$3,849.7	\$3,849.7	\$3,849.7



**APPENDIX B.2
TABLE 1**

**TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
FIRE DEPARTMENT**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historical Population	14,515	14,428	14,342	14,256	14,171	14,086	14,141	14,278	14,452	14,230
Historical Employment	5,363	5,210	5,071	4,946	4,833	4,733	4,787	4,842	4,898	4,955
Historical Population + Employment	19,878	19,638	19,413	19,202	19,004	18,819	18,928	19,120	19,350	19,185

INVENTORY SUMMARY (\$000)

Buildings	\$5,111.4	\$5,111.4	\$5,111.4	\$5,111.4	\$6,329.4	\$7,547.4	\$7,547.4	\$7,547.4	\$7,547.4	\$7,547.4
Land	\$595.5	\$595.5	\$595.5	\$595.5	\$599.1	\$599.1	\$599.1	\$599.1	\$599.1	\$599.1
Vehicles	\$9,669.9	\$9,669.9	\$9,669.9	\$9,669.9	\$9,677.1	\$10,968.9	\$10,968.9	\$10,968.9	\$10,968.9	\$10,968.9
Furniture and Equipment	\$3,732.3	\$3,732.3	\$3,732.3	\$3,732.3	\$3,849.7	\$3,849.7	\$3,849.7	\$3,849.7	\$3,849.7	\$3,849.7
Total (\$000)	\$19,109.1	\$19,109.1	\$19,109.1	\$19,109.1	\$20,455.3	\$22,965.1	\$22,965.1	\$22,965.1	\$22,965.1	\$22,965.1

SERVICE LEVEL (\$/pop+empl)

**Average
Service
Level**

Buildings	\$257.13	\$260.28	\$263.30	\$266.19	\$333.06	\$401.05	\$398.74	\$394.75	\$390.05	\$393.40	\$335.80
Land	\$29.96	\$30.32	\$30.67	\$31.01	\$31.52	\$31.83	\$31.65	\$31.33	\$30.96	\$31.23	\$31.05
Vehicles	\$486.45	\$492.41	\$498.11	\$503.59	\$509.21	\$582.86	\$579.50	\$573.70	\$566.87	\$571.74	\$536.44
Furniture and Equipment	\$187.76	\$190.06	\$192.26	\$194.37	\$202.58	\$204.57	\$203.39	\$201.35	\$198.95	\$200.66	\$197.59
Total (\$/pop+empl)	\$961.30	\$973.07	\$984.35	\$995.16	\$1,076.37	\$1,220.31	\$1,213.28	\$1,201.13	\$1,186.83	\$1,197.03	\$1,100.88

**TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
FIRE DEPARTMENT**

10-Year Funding Envelope Calculation

10 Year Average Service Level 2011 - 2020	\$1,100.88
Net Population & Employment Growth 2021 - 2031	1,253
Net Maximum Allowable Funding Envelope	\$1,379,777



APPENDIX B.2

TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
2.0 FIRE DEPARTMENT									
2.1 Buildings									
	2.1.1 Fire Share of Emergency Services Bldg Debenture (Principal)	2021	\$ 16,259	\$ -	\$ 16,259	\$ -	\$ 16,259	\$ 16,259	\$ -
	2.1.2 Fire Share of Emergency Services Bldg Debenture (Principal)	2022	\$ 17,031	\$ -	\$ 17,031	\$ -	\$ 17,031	\$ 17,031	\$ -
	2.1.3 Fire Share of Emergency Services Bldg Debenture (Principal)	2023	\$ 17,839	\$ -	\$ 17,839	\$ -	\$ 17,839	\$ 17,839	\$ -
	2.1.4 Fire Share of Emergency Services Bldg Debenture (Principal)	2024	\$ 18,686	\$ -	\$ 18,686	\$ -	\$ 18,686	\$ 18,686	\$ -
	2.1.5 Fire Share of Emergency Services Bldg Debenture (Principal)	2025	\$ 19,572	\$ -	\$ 19,572	\$ -	\$ 19,572	\$ 19,572	\$ -
	2.1.6 Fire Share of Emergency Services Bldg Debenture (Principal)	2026	\$ 20,501	\$ -	\$ 20,501	\$ -	\$ 20,501	\$ 20,501	\$ -
	2.1.7 Fire Share of Emergency Services Bldg Debenture (Principal)	2027	\$ 21,474	\$ -	\$ 21,474	\$ -	\$ 21,474	\$ 21,474	\$ -
	2.1.8 Storage Space	2027	\$ 200,000	\$ -	\$ 200,000	\$ 187,735	\$ 12,265	\$ 12,265	\$ -
	2.1.9 Fire Share of Emergency Services Bldg Debenture (Principal)	2028	\$ 22,493	\$ -	\$ 22,493	\$ -	\$ 22,493	\$ 22,493	\$ -
	2.1.10 Fire Share of Emergency Services Bldg Debenture (Principal)	2029	\$ 23,560	\$ -	\$ 23,560	\$ -	\$ 23,560	\$ 23,560	\$ -
	Subtotal Buildings		\$ 377,414	\$ -	\$ 377,414	\$ 187,735	\$ 189,679	\$ 189,679	\$ -
2.2 Vehicles & Equipment									
	2.2.1 Fire Vehicles & Building Additions Debenture (Principal)	2021	\$ 356,686	\$ -	\$ 356,686	\$ 334,813	\$ 21,873	\$ 21,873	\$ -
	2.2.2 Fire Vehicles & Building Additions Debenture (Principal)	2022	\$ 363,891	\$ -	\$ 363,891	\$ 341,576	\$ 22,315	\$ 22,315	\$ -
	2.2.3 Fire Vehicles & Building Additions Debenture (Principal)	2023	\$ 371,242	\$ -	\$ 371,242	\$ 348,477	\$ 22,765	\$ 22,765	\$ -
	2.2.4 Fire Vehicles & Building Additions Debenture (Principal)	2024	\$ 378,741	\$ -	\$ 378,741	\$ 355,516	\$ 23,225	\$ 23,225	\$ -
	2.2.5 Fire Vehicles & Building Additions Debenture (Principal)	2025	\$ 192,230	\$ -	\$ 192,230	\$ 180,442	\$ 11,788	\$ 11,788	\$ -
	Subtotal Vehicles & Equipment		\$ 1,662,790	\$ -	\$ 1,662,790	\$ 1,560,824	\$ 101,966	\$ 101,966	\$ -



APPENDIX B.2

TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	DC Eligible Costs	
								2021 - 2031	Post 2031
2.0 FIRE DEPARTMENT									
2.1 Buildings									
2.3 Fire Communication Equipment									
	2.3.1 Fire Communication Equipment Debenture (Principal)	2021	\$ 105,441	\$ -	\$ 105,441	\$ 98,975	\$ 6,466	\$ 6,466	\$ -
	2.3.2 Fire Communication Equipment Debenture (Principal)	2022	\$ 108,321	\$ -	\$ 108,321	\$ 101,678	\$ 6,643	\$ 6,643	\$ -
	Subtotal Fire Communication Equipment		\$ 213,762	\$ -	\$ 213,762	\$ 200,654	\$ 13,108	\$ 13,108	\$ -
	TOTAL FIRE DEPARTMENT		\$ 2,253,966	\$ -	\$ 2,253,966	\$ 1,949,213	\$ 304,754	\$ 304,754	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$222,470
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$114.11
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$82,284
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$1.21

2021-2031 Discounted DC Funding Envelope	\$1,379,777
Reserve Fund Balance	
Balance as at December 31, 2020	\$44,171

APPENDIX B.2
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE DEPARTMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE DEPARTMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$32.2	(\$8.6)	(\$42.9)	(\$66.6)	(\$85.5)	(\$90.0)	(\$83.3)	(\$85.2)	(\$75.6)	(\$64.2)	(\$32.6)	
2021-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Fire Department: Non Inflated	\$0.00	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$9.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.0
- Fire Department: Debenture Principal Payments	\$32.6	\$33.6	\$29.6	\$30.6	\$22.9	\$15.0	\$15.7	\$16.4	\$17.2	\$0.0	\$0.0	\$213.5
- Fire Department: Inflated (1)	\$32.6	\$33.6	\$29.6	\$30.6	\$22.9	\$15.0	\$25.8	\$16.4	\$17.2	\$0.0	\$0.0	\$223.6
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$23.3	\$24.4	\$25.6	\$26.7	\$27.9	\$29.2	\$30.5	\$31.8	\$33.1	\$34.5	\$35.9	\$322.9
INTEREST												
- Interest on Opening Balance	\$1.1	(\$0.5)	(\$2.4)	(\$3.7)	(\$4.7)	(\$5.0)	(\$4.6)	(\$4.7)	(\$4.2)	(\$3.5)	(\$1.8)	(\$33.8)
- Interest on In-year Transactions	(\$0.3)	(\$0.3)	(\$0.1)	(\$0.1)	\$0.1	\$0.2	\$0.1	\$0.3	\$0.3	\$0.6	\$0.6	\$1.5
- Interest on Debenture	(\$32.5)	(\$24.4)	(\$17.3)	(\$11.2)	(\$4.9)	(\$2.8)	(\$2.1)	(\$1.4)	(\$0.6)	\$0.0	\$0.0	(\$97.1)
TOTAL REVENUE	(\$8.3)	(\$0.7)	\$5.9	\$11.8	\$18.4	\$21.7	\$23.9	\$26.0	\$28.6	\$31.6	\$34.7	\$193.5
CLOSING CASH BALANCE	(\$8.6)	(\$42.9)	(\$66.6)	(\$85.5)	(\$90.0)	(\$83.3)	(\$85.2)	(\$75.6)	(\$64.2)	(\$32.6)	\$2.1	

Note 1: Debenture principal payments not inflated.

2021 Adjusted Charge Per Capita	\$149.00
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.2
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE DEPARTMENT
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE DEPARTMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$11.9	(\$2.9)	(\$15.4)	(\$24.0)	(\$30.9)	(\$32.6)	(\$30.1)	(\$31.0)	(\$27.6)	(\$23.6)	(\$12.2)	
2021-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Fire Department: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.3	\$0.0	\$0.0	\$0.0	\$0.0	\$3.3
- Fire Department: Debenture Principal Payments	\$12.0	\$12.4	\$11.0	\$11.3	\$8.5	\$5.5	\$5.8	\$6.1	\$6.4	\$0.0	\$0.0	\$79.0
- Fire Department: Inflated (1)	\$12.04	\$12.42	\$10.96	\$11.32	\$8.5	\$5.5	\$9.5	\$6.1	\$6.4	\$0.0	\$0.0	\$82.7
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$8.9	\$9.2	\$9.6	\$9.9	\$10.3	\$10.7	\$11.1	\$11.6	\$12.0	\$12.5	\$12.9	\$118.7
INTEREST												
- Interest on Opening Balance	\$0.4	(\$0.2)	(\$0.8)	(\$1.3)	(\$1.7)	(\$1.8)	(\$1.7)	(\$1.7)	(\$1.5)	(\$1.3)	(\$0.7)	(\$12.2)
- Interest on In-year Transactions	(\$0.1)	(\$0.1)	(\$0.0)	(\$0.0)	\$0.0	\$0.1	\$0.0	\$0.1	\$0.1	\$0.2	\$0.2	\$0.5
- Interest on Debenture	(\$12.0)	(\$9.0)	(\$6.4)	(\$4.1)	(\$1.8)	(\$1.1)	(\$0.8)	(\$0.5)	(\$0.2)	\$0.0	\$0.0	(\$35.9)
TOTAL REVENUE	(\$2.8)	(\$0.1)	\$2.3	\$4.4	\$6.8	\$7.9	\$8.7	\$9.5	\$10.4	\$11.4	\$12.5	\$71.1
CLOSING CASH BALANCE	(\$2.9)	(\$15.4)	(\$24.0)	(\$30.9)	(\$32.6)	(\$30.1)	(\$31.0)	(\$27.6)	(\$23.6)	(\$12.2)	\$0.3	

Note 1: Debenture principal payments not inflated.

2021 Adjusted Charge Per Square Metre	\$1.57
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.3

POLICE SERVICES

POLICE SERVICES

Police Services in St. Clair are provided by the Ontario Provincial Police (OPP). As per a service arrangement, the municipality provides space for the OPP at the recently completed Emergency Services Building (ESB).

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land and vehicles of the Police Services. The OPP operates out of 6,940 square feet of the newly constructed ESB. The share of the ESB that is available for future use and being recovered in the capital program, 784 square feet, has been removed from the inventory. The total replacement value eligible inventory is \$1.8 million. The land associated with the Police Services' share of the facility totals 0.14 hectares and, at \$176,200 per hectare, is valued at \$23,900. The value of the 2020 Police Services fleet totals \$569,500.

The 2020 combined replacement value of the inventory of capital assets for Police Services is \$2.4 million, resulting in a ten-year historical average service level of \$121.66 per population and employment. The historical service level, multiplied by the net population and employment growth to 2031 (1.253), results in a ten-year maximum allowable funding envelope of \$152,481.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 2021 to 2031 development-related capital program includes only the ongoing recovery of the OPP's share of the new Emergency Services Building, which represents about 40 per cent of the building.

In total, the capital program amounts to \$227,251. No non-growth shares relating to replacement and benefit to the existing community have been identified.

Given that \$74,770 is the amount by which the DC eligible costs exceed the maximum allowable funding envelope, this amount is deemed to provide benefit to development beyond 2031. This share may be eligible for funding under subsequent development charge

studies. The remaining \$152,481 is related to development in the 2021–2031 planning period and is eligible for DC recovery.

The development-related net capital cost is allocated 73 per cent to residential development (\$111,311) and 27 per cent (\$41,170) to non-residential development. The residential share of the net development-related capital cost is divided by the growth in population in new dwelling units (1,950) to derive an unadjusted charge of \$57.09 per capita. The non-residential share of the net development-related capital cost is divided by the forecast growth in floor space (68,086), resulting in an unadjusted charge of \$0.60 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$65.00 per capita and \$0.90 per square metre, respectively. The cash flow accounts for the reserve fund balance for Police Services. This increase is due to the interest being recovered through the cashflow analysis, whereas the principal payments recovered in the capital program is restricted by the funding envelope constraints. The following table summarizes the calculation of the Police Services development charge:

10-year Hist. Service Level per pop&emp	POLICE SERVICE SUMMARY					
	2021-2031		Unadjusted		Adjusted	
	Development-Related Total	Capital Program Net DC Recoverable	Development Charge \$/capita	Development Charge \$/sq.m	Development Charge \$/capita	Development Charge \$/sq.m
\$121.66	\$227,251	\$152,481	\$57.09	\$0.60	\$65.00	\$0.90

APPENDIX B.3
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
POLICE SERVICE

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Emergency Service Bdg-192 Hill Street	6,776	6,776	6,776	6,776	6,776	6,776	6,940	6,940	6,940	6,940	\$290
Emergency Service Bdg-Excess Capacity	(784)	(784)	(784)	(784)	(784)	(784)	(784)	(784)	(784)	(784)	\$290
Total (sq.ft.)	5,992	5,992	5,992	5,992	5,992	5,992	6,156	6,156	6,156	6,156	
Total (\$000)	\$1,737.8	\$1,737.8	\$1,737.8	\$1,737.8	\$1,737.8	\$1,737.8	\$1,785.3	\$1,785.3	\$1,785.3	\$1,785.3	

LAND Station Name	# of Hectares										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Emergency Service Bdg-192 Hill Street	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$176,200
Total (ha)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	
Total (\$000)	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	

VEHICLES Vehicle Type	# of Vehicles									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Police vehicles	\$550,000	\$550,000	\$550,000	\$550,000	\$550,000	\$550,000	\$550,000	\$550,000	\$560,000	\$560,000
Cost per vehicle (per officer)	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$9,500	\$9,500
Total (\$000)	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$569.5	\$569.5

**APPENDIX B.3
TABLE 1**

**TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
POLICE SERVICE**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historical Population	14,515	14,428	14,342	14,256	14,171	14,086	14,141	14,278	14,452	14,230
Historical Employment	<u>5,363</u>	<u>5,210</u>	<u>5,071</u>	<u>4,946</u>	<u>4,833</u>	<u>4,733</u>	<u>4,787</u>	<u>4,842</u>	<u>4,898</u>	<u>4,955</u>
Historical Population + Employment	19,878	19,638	19,413	19,202	19,004	18,819	18,928	19,120	19,350	19,185

INVENTORY SUMMARY (\$000)

Buildings	\$1,737.8	\$1,737.8	\$1,737.8	\$1,737.8	\$1,737.8	\$1,737.8	\$1,785.3	\$1,785.3	\$1,785.3	\$1,785.3
Land	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9	\$23.9
Vehicles	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$558.8	\$569.5	\$569.5
Total (\$000)	\$2,320.5	\$2,320.5	\$2,320.5	\$2,320.5	\$2,320.5	\$2,320.5	\$2,368.1	\$2,368.1	\$2,378.8	\$2,378.8

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Buildings	\$87.4	\$88.5	\$89.5	\$90.5	\$91.4	\$92.3	\$94.3	\$93.4	\$92.3	\$93.1	\$91.27
Land	\$1.2	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3	\$1.3	\$1.3	\$1.2	\$1.2	\$1.24
Vehicles	\$28.1	\$28.5	\$28.8	\$29.1	\$29.4	\$29.7	\$29.5	\$29.2	\$29.4	\$29.7	\$29.14
Total (\$/pop+empl)	\$116.73	\$118.16	\$119.53	\$120.85	\$122.11	\$123.31	\$125.11	\$123.86	\$122.93	\$123.99	\$121.66

**TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
POLICE SERVICE**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$121.66
Net Population & Employment Growth 2021 - 2031	1,253
Net Maximum Allowable Funding Envelope	\$152,481

APPENDIX B.3

TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	DC Eligible Costs	
								2021 - 2031	Post 2031
3.0 POLICE SERVICE									
3.1 New Police Administration Space									
3.1.1	Police Share of Emergency Services Bldg Debenture (Principal)	2021	\$ 20,827	\$ -	\$ 20,827	\$ -	\$ 20,827	\$ 20,827	\$ -
3.1.2	Police Share of Emergency Services Bldg Debenture (Principal)	2022	\$ 21,815	\$ -	\$ 21,815	\$ -	\$ 21,815	\$ 21,815	\$ -
3.1.3	Police Share of Emergency Services Bldg Debenture (Principal)	2023	\$ 22,850	\$ -	\$ 22,850	\$ -	\$ 22,850	\$ 22,850	\$ -
3.1.4	Police Share of Emergency Services Bldg Debenture (Principal)	2024	\$ 23,934	\$ -	\$ 23,934	\$ -	\$ 23,934	\$ 23,934	\$ -
3.1.5	Police Share of Emergency Services Bldg Debenture (Principal)	2025	\$ 25,070	\$ -	\$ 25,070	\$ -	\$ 25,070	\$ 25,070	\$ -
3.1.6	Police Share of Emergency Services Bldg Debenture (Principal)	2026	\$ 26,260	\$ -	\$ 26,260	\$ -	\$ 26,260	\$ 26,260	\$ -
3.1.7	Police Share of Emergency Services Bldg Debenture (Principal)	2027	\$ 27,506	\$ -	\$ 27,506	\$ -	\$ 27,506	\$ 11,725	\$ 15,781
3.1.8	Police Share of Emergency Services Bldg Debenture (Principal)	2028	\$ 28,811	\$ -	\$ 28,811	\$ -	\$ 28,811	\$ -	\$ 28,811
3.1.9	Police Share of Emergency Services Bldg Debenture (Principal)	2029	\$ 30,178	\$ -	\$ 30,178	\$ -	\$ 30,178	\$ -	\$ 30,178
Subtotal New Police Administration Space			\$ 227,251	\$ -	\$ 227,251	\$ -	\$ 227,251	\$ 152,481	\$ 74,770
TOTAL POLICE SERVICE			\$ 227,251	\$ -	\$ 227,251	\$ -	\$ 227,251	\$ 152,481	\$ 74,770

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$111,311
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$57.09
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$41,170
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$0.60

2021-2031 Discounted DC Funding Envelope	\$152,481
Reserve Fund Balance	
Balance as at December 31, 2020	\$37,930



APPENDIX B.3
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
POLICE SERVICE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

POLICE SERVICE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$27.7	\$15.9	\$4.2	(\$7.4)	(\$19.1)	(\$30.9)	(\$42.9)	(\$43.1)	(\$33.1)	(\$21.1)	(\$7.0)	
2021-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Police Service: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Police Service: Debenture Principal Payments	\$15.2	\$15.9	\$16.7	\$17.5	\$18.3	\$19.2	\$8.6	\$0.0	\$0.0	\$0.0	\$0.0	\$111.3
- Police Service: Inflated (1)	\$15.2	\$15.9	\$16.7	\$17.5	\$18.3	\$19.2	\$8.6	\$0.0	\$0.0	\$0.0	\$0.0	\$111.3
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$10.2	\$10.7	\$11.2	\$11.7	\$12.2	\$12.7	\$13.3	\$13.9	\$14.4	\$15.0	\$15.7	\$141.0
INTEREST												
- Interest on Opening Balance	\$1.0	\$0.6	\$0.1	(\$0.4)	(\$1.0)	(\$1.7)	(\$2.4)	(\$2.4)	(\$1.8)	(\$1.2)	(\$0.4)	(\$9.6)
- Interest on In-year Transactions	(\$0.1)	(\$0.1)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	\$0.1	\$0.2	\$0.3	\$0.3	\$0.3	\$0.2
- Interest on Debenture	(\$7.6)	(\$6.9)	(\$6.1)	(\$5.3)	(\$4.5)	(\$3.6)	(\$2.7)	(\$1.8)	(\$0.8)	\$0.0	\$0.0	(\$39.4)
TOTAL REVENUE	\$3.4	\$4.2	\$5.1	\$5.8	\$6.5	\$7.2	\$8.3	\$10.0	\$12.1	\$14.1	\$15.6	\$92.2
CLOSING CASH BALANCE	\$15.9	\$4.2	(\$7.4)	(\$19.1)	(\$30.9)	(\$42.9)	(\$43.1)	(\$33.1)	(\$21.1)	(\$7.0)	\$8.6	

Note 1: Debenture principal payments not inflated.

2021 Adjusted Charge Per Capita	\$65.00
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.3

TABLE 3

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 POLICE SERVICE
 NON-RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

POLICE SERVICE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.0	(\$3.4)	(\$6.7)	(\$10.0)	(\$13.3)	(\$16.6)	(\$19.9)	(\$18.7)	(\$13.7)	(\$7.7)	(\$0.9)	
2021-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Police Service: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Police Service: Debenture Principal Payments	\$5.6	\$5.9	\$6.2	\$6.5	\$6.8	\$7.1	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$41.2
- Police Service: Inflated (1)	\$5.62	\$5.89	\$6.17	\$6.46	\$6.8	\$7.1	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$41.2
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$5.1	\$5.3	\$5.5	\$5.7	\$5.9	\$6.1	\$6.4	\$6.6	\$6.9	\$7.1	\$7.4	\$68.0
INTEREST												
- Interest on Opening Balance	\$0.0	(\$0.2)	(\$0.4)	(\$0.6)	(\$0.7)	(\$0.9)	(\$1.1)	(\$1.0)	(\$0.8)	(\$0.4)	(\$0.0)	(\$6.1)
- Interest on In-year Transactions	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.4
- Interest on Debenture	(\$2.8)	(\$2.5)	(\$2.3)	(\$2.0)	(\$1.7)	(\$1.3)	(\$1.0)	(\$0.7)	(\$0.3)	\$0.0	\$0.0	(\$14.6)
TOTAL REVENUE	\$2.3	\$2.6	\$2.8	\$3.2	\$3.5	\$3.8	\$4.4	\$5.0	\$6.0	\$6.8	\$7.5	\$47.8
CLOSING CASH BALANCE	(\$3.4)	(\$6.7)	(\$10.0)	(\$13.3)	(\$16.6)	(\$19.9)	(\$18.7)	(\$13.7)	(\$7.7)	(\$0.9)	\$6.6	

Note 1: Debenture principal payments not inflated.

2021 Adjusted Charge Per Square Metre	\$0.90
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.4

INDOOR RECREATION

INDOOR RECREATION

The St. Clair Community Services department is responsible for providing indoor recreation programs throughout the Township. Indoor recreation services are primarily delivered through community centres, arenas and community halls.

TABLE 1 HISTORICAL SERVICE LEVELS

The ten-year historical inventory of capital assets for indoor recreation facilities includes 132,410 square feet of building space nine buildings. The total value of these facilities is more than \$41.4 million. The land associated with the indoor recreation centres totals 11.95 hectares, and is valued at \$2.1 million.

The Township owns and maintains a substantial amount of furniture and equipment used to provide indoor recreation services at all facilities. The total replacement value of all indoor recreation equipment in 2020 is \$767,600.

The total combined value of capital assets for Indoor Recreation in the Township of St. Clair amounts to \$44.3 million. The ten-year historical average service level is \$3,079.26 per capita, and this, multiplied by the net population growth to 2031 (549), results in a maximum allowable funding envelope of \$1.7 million.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 2021 - 2031 development-related capital program for Indoor Recreation totals \$170,000. The first portion of the program relates to new building space and a new hall and medical offices, an expansion to the complex, as well as a new storage and first aid room. Also included in the capital program is a provision for an Indoor Recreation Master plan in 2026.

A share of \$25,000 has been identified as replacement shares, which represents the benefit to the existing community for the upcoming master plan.

As the capital program does not exceed the maximum allowing funding envelope for the period to 2031, no post-period shares have been identified. The remaining DC costs eligible for recovery amount to \$145,000, which is allocated entirely against future residential

development in the Township. This results in an unadjusted development charge of \$74.37 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, which includes the current reserve fund balance for Indoor Recreation of \$135,100, no charge can be justified under the DCA for this service. As can be seen in the cash flow analysis, by the time funds are needed to support the Indoor Recreation capital program, the reserve funds will cover the entirety of the costs. The following table summarizes the calculation of the Indoor Recreation development charge:

INDOOR RECREATION SUMMARY						
10-year Hist.	2021-2031		Unadjusted		Adjusted	
Service Level	Development-Related	Capital Program	Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$3,079.26	\$170,000	\$145,000	\$74.37	\$0.00	\$0.00	\$0.00

**APPENDIX B.4
TABLE 1**

**TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION**

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Courtright Community Hall, 1596 Third St Street	7,435	7,435	7,435	7,435	7,435	7,435	7,435	7,435	7,435	7,435	7,435	\$210
Brigden Community Hall, 3016 Brigden Rd	10,716	10,716	10,716	10,716	10,716	10,716	10,716	10,716	10,716	10,716	10,716	\$290
Sombra Community Hall, 152 Smith Street	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	\$260
Port Lambton Community Hall, 507 Stoddard	3,874	3,874	3,874	3,874	3,874	3,874	3,874	3,874	3,874	3,874	3,874	\$260
Wilkesport Community Hall, 3134 Baby Road	8,995	8,995	8,995	8,995	8,995	8,995	8,995	8,995	8,995	8,995	8,995	\$260
Mooretown Arena, 1166 Emily Street	83,390	83,390	83,390	83,390	83,390	83,390	83,390	83,390	83,390	83,390	83,390	\$350
Mooretown Complex Workshop/ Storage Building	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	3,900	\$230
Mooretown Complex Storage Building #2	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	\$230
Community Centre, 3536 St. Clair Pwk, Sombra	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	\$230
Wilkesport Field House	-	-	-	-	-	-	-	-	-	1,500	1,500	\$230
Total (sq.ft.)	130,910	130,910	130,910	130,910	130,910	130,910	130,910	130,910	130,910	132,410	132,410	
Total (\$000)	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,422.4	\$41,422.4	

**APPENDIX B.4
TABLE 1**

**TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION**

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Courtright Community Hall, 1596 Third Street	0.05	0.05	0.05	0.05	0.35	0.35	0.35	0.35	0.35	0.35	\$176,200
Brigden Community Hall, 3016 Brigden Rd	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$176,200
Sombra Community Hall, 152 Smith Street	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$176,200
Port Lambton Community Hall, 507 Stoddard	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$176,200
Wilkesport Community Hall, 3134 Baby Road	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	\$176,200
Mooretown Arena, 1166 Emily Street	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	\$176,200
Municipal Building, 3536 St. Clair Pwk, Sombra	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$176,200
Total (ha)	11.65	11.65	11.65	11.65	11.95	11.95	11.95	11.95	11.95	11.95	
Total (\$000)	\$2,053.0	\$2,053.0	\$2,053.0	\$2,053.0	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Courtright Community Hall, 1596 Third Street	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300
Brigden Community Hall, 3016 Brigden Rd	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200
Sombra Community Hall, 152 Smith Street	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200	\$39,200
Port Lambton Community Hall, 507 Stoddard	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800
Wilkesport Community Hall, 3134 Baby Road	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400
Mooretown Arena, 1166 Emily Street	\$523,100	\$523,100	\$523,100	\$523,100	\$523,100	\$523,100	\$523,100	\$523,100	\$523,100	\$523,100
Municipal Building, 3536 St. Clair Pwk, Sombra	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300
Mooretown Campground	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300
Total (\$000)	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6



**APPENDIX B.4
TABLE 1**

**TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
INDOOR RECREATION**

Historical Population	2011 14,515	2012 14,428	2013 14,342	2014 14,256	2015 14,171	2016 14,086	2017 14,141	2018 14,278	2019 14,452	2020 14,230
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INVENTORY SUMMARY (\$000)

Buildings	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,077.4	\$41,422.4	\$41,422.4
Land	\$2,053.0	\$2,053.0	\$2,053.0	\$2,053.0	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5	\$2,105.5
Furniture and Equipment	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6	\$767.6
Total (\$000)	\$43,898.1	\$43,898.1	\$43,898.1	\$43,898.1	\$43,950.6	\$43,950.6	\$43,950.6	\$43,950.6	\$44,295.6	\$44,295.6

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Buildings	\$2,830.00	\$2,847.06	\$2,864.14	\$2,881.41	\$2,898.70	\$2,916.19	\$2,904.89	\$2,876.99	\$2,866.15	\$2,910.90	\$2,879.64
Land	\$141.44	\$142.29	\$143.15	\$144.01	\$148.58	\$149.48	\$148.90	\$147.47	\$145.69	\$147.96	\$145.90
Furniture and Equipment	\$52.88	\$53.20	\$53.52	\$53.84	\$54.17	\$54.49	\$54.28	\$53.76	\$53.11	\$53.94	\$53.72
Total (\$/capita)	\$3,024.32	\$3,042.56	\$3,060.80	\$3,079.27	\$3,101.44	\$3,120.16	\$3,108.07	\$3,078.22	\$3,064.95	\$3,112.80	\$3,079.26

**TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
INDOOR RECREATION**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$3,079.26
Net Population Growth 2021 - 2031	549
Net Maximum Allowable Funding Envelope	\$1,690,199



APPENDIX B.4

TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
4.0 INDOOR RECREATION									
4.1 Buildings, Land & Furnishings									
	4.1.1 Storage/First Aid Room	2026	\$ 120,000	\$ -	\$ 120,000	\$ -	\$ 120,000	\$ 120,000	\$ -
	Subtotal Buildings, Land & Furnishings		\$ 120,000	\$ -	\$ 120,000	\$ -	\$ 120,000	\$ 120,000	\$ -
4.2 Studies									
	4.2.1 Indoor Recreation Master Plan	2026	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -
	Subtotal Studies		\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -
	TOTAL INDOOR RECREATION		\$ 170,000	\$ -	\$ 170,000	\$ 25,000	\$ 145,000	\$ 145,000	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	100%	\$145,000
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$74.37
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	0%	\$0
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$0.00

2021-2031 Discounted DC Funding Envelope	\$1,690,199
Reserve Fund Balance	
Balance as at December 31, 2020	\$135,091



APPENDIX B.4
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
INDOOR RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

INDOOR RECREATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$135.1	\$139.8	\$144.7	\$149.8	\$155.0	\$160.4	\$1.6	\$1.6	\$1.7	\$1.7	\$1.8	
2021-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Indoor Recreation: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$145.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$145.0
- Indoor Recreation: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$160.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$160.1
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
INTEREST												
- Interest on Opening Balance	\$4.7	\$4.9	\$5.1	\$5.2	\$5.4	\$5.6	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$31.3
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$4.4)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$4.4)
TOTAL REVENUE	\$4.7	\$4.9	\$5.1	\$5.2	\$5.4	\$1.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$26.9
CLOSING CASH BALANCE	\$139.8	\$144.7	\$149.8	\$155.0	\$160.4	\$1.6	\$1.6	\$1.7	\$1.7	\$1.8	\$1.9	

2021 Adjusted Charge Per Capita	\$0.00
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Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.5

PARK DEVELOPMENT & FACILITIES

PARK DEVELOPMENT & FACILITIES

The St. Clair Parks Community Services Department is also responsible for providing outdoor recreation throughout the Township. Outdoor recreation opportunities are delivered through the Township’s inventory of parks and park facilities.

TABLE 1 HISTORICAL SERVICE LEVELS

The ten-year historical inventory of capital assets for St. Clair’s parks includes 163.6 hectares of developed parkland. The combined value of the development of all municipal parks amounts to \$17.6 million. Parkland development costs have been identified for various types of parks, which represent the site preparation and servicing costs to the Township to develop basic land into a useable park. Costs for park furniture, electrical and lighting servicing, soft landscaping and tree planting are included in this figure. Costs directly funded by private developers through agreements or land acquisition have been netted out of the unit cost.

The Township also owns and maintains many park facilities, including 21 baseball diamonds, 8 soccer fields, 2 tennis courts, 1 outdoor pool, and 19 playground structures. The combined value of all park facilities in 2020 was \$3.6 million. Special park facilities, including park buildings, splash pads, skate parks, picnic shelters, parking lots, boat ramps, trails and lighting total \$9.4 million.

The total combined value of capital assets for Park Development & Facilities in the Township of St. Clair amounts to \$30.6 million. The ten-year historical average service level is \$2,139.19 per capita, and this, multiplied by the net population growth to 2031 (549), results in a maximum allowable funding envelope of \$1.2 million.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 2021 – 2031 development-related capital program for Park Development & Facilities totals \$2.9 million. The program includes various park facilities projects, including a new campground building, golf course, including the course and a clubhouse, as well as an expansion to the Township’s campgrounds.

Of the gross capital costs, \$2.2 million has been identified as replacement shares. The replacement shares applied to the golf course and clubhouse development represent the benefit of the expansion to the existing population of St. Clair, who will be able to make use of the facility.

The remaining DC costs eligible for recovery amount to \$705,423, which is allocated entirely against future residential development in the Township. This results in an unadjusted development charge of \$361.81 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge decreases to \$340.00 per capita. The following table summarizes the calculation of the Park Development and Facilities development charge:

PARK DEVELOPMENT & FACILITIES SUMMARY						
10-year Hist.	2021-2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$2,139.19	\$2,920,000	\$705,423	\$361.81	\$0.00	\$340.00	\$0.00

APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES

PARKLAND Park Name	# of Hectares of Developed Area										Devel. Cost (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Corunna											
Astor Park, 336 Astor Park	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$12,600
Parkdale Park, 507 Parkdale Crescent	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	\$94,300
Sifton Park, 323 Cameron Street	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	\$12,600
Stewart Park, 234 Hill Street	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	\$157,200
Vroom Park, 312 Paget Street	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$157,200
CAP, Queen Street	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	\$125,700
Paddock Green, St. Clair Boulevard	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	\$12,600
St. Clair Heights	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$12,600
Odell Park, Cameron	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	\$94,300
Duggan Field, Hill Street	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	\$94,300
Earth Day Park, Cameron Street	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	\$94,300
St. Georges Square	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$94,300
Courtright											
Ball Park, 1596 Third Street	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	\$157,200
Emi Park, 124 Templeton	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$94,300
Brigden											
Optimist Park, 1591 Mill Street	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	\$125,700
East End Park, 2465 Jane Street	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$12,600

APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES

PARKLAND Park Name	# of Hectares of Developed Area										Devel. Cost (\$/ha)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
St. Clair Parkway Parks												
Gutherie Park - 237 St. Clair Parkway	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	\$125,700
Mooretowns Centennial park-1157 St. Clair Parkway	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	\$125,700
Courtright Park- 1557 St. Clair Parkway	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	\$125,700
Willow Park - 10965 St. Clair Parkway	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	\$125,700
Seager Park - 2217 St. Clair Parkway	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	\$125,700
Brandon/Cundick River Side- 2307 St. Clair Parkway	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	\$125,700
Sombra Parkette- 3441 St. Clair Parkway	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$125,700
Regan Park - 3609 St. Clair Parkway	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$125,700
Marshy Creek - 3929 St. Clair Parkway	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	\$125,700
Port Lambton Park "Dedecker Park"-4349 St Clair Pwky	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	\$125,700
Brander Park- 4555 St. Clair Parkway	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	\$125,700
Wilkesport												
Ball Park, 1622 Baby Road	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	\$94,300
Port Lambton												
Van Damm Park, 4420 Hill Street	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$94,300
MacDonald Park, 4310 Reedy Street	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	\$157,200
Rural												
Waubuna Park, 1803 Oil Springs Line	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	\$94,300
Moore Centre, 1590 Moore Line	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	-	\$12,600
Sombra												
Sombra Athletic Park, 152 Smith Street	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$94,300
Campgrounds												
Mooretown Campground, 1094 Emily	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	\$94,300
Brandon/Cundick Campground- 65 Wilkesport	21.57	21.57	21.57	21.57	21.57	21.57	21.57	21.57	21.57	21.57	21.57	\$94,300
Cartcart Campground-2959 St Clair Parkway	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	\$94,300
Total (ha)	165.65	165.65	165.65	165.65	165.65	165.65	165.65	165.65	165.65	165.65	163.63	
Total (\$000)	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,564.2	

APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARK FACILITIES

BASEBALL DIAMONDS Park Name	# of Diamonds										UNIT COST (\$/diamond)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Brigden	2	2	2	2	2	2	2	2	2	2	\$63,400
CAP	4	4	4	4	4	4	4	4	4	4	\$94,000
Cameron	1	1	1	1	1	1	1	1	1	1	\$75,200
Courtright	4	4	4	4	4	4	4	4	4	4	\$112,700
Duggan	1	1	1	1	1	1	1	1	1	1	\$94,000
Moore Centre	1	1	1	1	1	1	1	1	-	-	\$63,400
Port Lambton	3	3	3	3	3	3	3	3	3	3	\$63,400
Sombra	2	2	2	2	2	2	2	2	2	2	\$63,400
Stewart	2	2	2	2	2	2	2	2	2	2	\$63,400
Wabuno	1	1	1	1	1	1	1	1	1	-	\$63,400
Wilkesport	2	2	2	2	2	2	2	2	2	2	\$50,500
Total (#)	23	23	23	23	23	23	23	23	22	21	
Total (\$000)	\$1,794.4	\$1,794.4	\$1,794.4	\$1,794.4	\$1,794.4	\$1,794.4	\$1,794.4	\$1,794.4	\$1,731.0	\$1,667.6	

APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARK FACILITIES

SOCCER FIELDS	# of Soccer Fields										UNIT COST (\$/field)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Park Name											
CAP	4	4	4	4	4	4	4	4	4	4	\$97,500
Parkdale	2	2	2	2	3	3	3	3	3	3	\$176,200
Port Lambton (Van Damm)	1	1	1	1	1	-	-	-	-	-	\$88,100
Wilkesport	1	1	1	1	1	1	1	1	1	1	\$63,400
Total (#)	8	8	8	8	9	8	8	8	8	8	
Total (\$000)	\$893.9	\$893.9	\$893.9	\$893.9	\$1,070.1	\$982.0	\$982.0	\$982.0	\$982.0	\$982.0	

TENNIS COURTS	# of Tennis Courts										UNIT COST (\$/court)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Park Name											
Brigden	1	1	1	1	1	1	1	1	1	1	\$63,400
Corunna CAP	1	1	1	1	1	1	1	1	1	1	\$82,200
Moore Centre	1	1	1	1	1	1	1	1	-	-	\$63,400
Total (#)	3	3	3	3	3	3	3	3	2	2	
Total (\$000)	\$209.0	\$209.0	\$209.0	\$209.0	\$209.0	\$209.0	\$209.0	\$209.0	\$145.6	\$145.6	

SWIMMING POOL	# of Pools										UNIT COST (\$/pool)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Park Name											
Mooretown Campground Pool	1	1	1	1	1	1	1	1	1	1	\$163,200
Total (#)	1	1	1	1	1	1	1	1	1	1	
Total (\$000)	\$163.2	\$163.2	\$163.2	\$163.2	\$163.2	\$163.2	\$163.2	\$163.2	\$163.2	\$163.2	



APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARK FACILITIES

PLAYGROUNDS Park Name	# of Playgrounds										UNIT COST
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/playground)
Astor Park	1	1	1	1	1	1	1	1	-	-	\$37,600
Branton Cundick Campground	1	1	1	1	1	1	1	1	1	1	\$37,600
Brigden	1	1	1	1	1	1	1	1	1	1	\$37,600
Bridgen East	1	1	1	1	1	1	1	1	1	1	\$37,600
CAP	1	1	1	1	1	1	1	1	1	1	\$50,500
Cathcart Campground	1	1	1	1	1	1	1	1	1	1	\$37,600
Emi Park, Courtright	1	1	1	1	1	1	1	1	1	1	\$37,600
Macdonald Park	2	2	2	2	2	2	2	2	2	2	\$37,600
Marshy Creek Park	1	1	1	1	1	1	1	1	1	1	\$37,600
Mooretown, Complex	1	1	1	1	1	1	1	2	2	2	\$37,600
Parkdale Park	1	1	1	1	1	1	1	1	1	1	\$35,000
Stewart Park	1	1	1	1	1	1	1	1	1	1	\$35,000
Sifton Park	1	1	1	1	1	1	1	1	1	1	\$13,500
Sombra Park	1	1	1	1	1	1	1	1	1	1	\$37,600
St. Clair Heights	1	1	1	1	1	1	1	1	1	1	\$37,600
Van Damm Park	1	1	1	1	1	1	1	1	1	1	\$37,600
Vroom Park	1	1	1	1	1	1	1	1	1	1	\$5,900
Wilkesport	1	1	1	1	1	1	1	1	1	1	\$37,600
Total (#)	19	19	19	19	19	19	19	20	19	19	
Total (\$000)	\$666.3	\$666.3	\$666.3	\$666.3	\$666.3	\$666.3	\$666.3	\$703.9	\$666.3	\$666.3	

APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
OUTDOOR BUILDINGS & SPECIAL FACILITIES

PARK BUILDINGS Park Name	Total Value of Park Buildings (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Booth/Change House/Gazebo, Port Lambton	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400	\$65,400
Brander Park- Washroom	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
Branton Cundick Campground Washroom	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000
Cathcart Campground Washroom	\$211,400	\$211,400	\$211,400	\$211,400	\$211,400	\$211,400	\$211,400	\$211,400	\$211,400	\$211,400
Centennial Park Washroom	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
Complex Equipment Building	\$60,100	\$60,100	\$60,100	\$60,100	\$60,100	\$60,100	\$60,100	\$60,100	\$60,100	\$60,100
Dugouts/Bleachers, Various Locations	\$259,000	\$259,000	\$259,000	\$259,000	\$259,000	\$259,000	\$259,000	\$259,000	\$259,000	\$259,000
Electrical Building, Wilkesport	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200
Fieldhouse, E/S Third Street, Courtright	\$166,100	\$166,100	\$166,100	\$166,100	\$166,100	\$166,100	\$166,100	\$166,100	\$166,100	\$166,100
Gutherie Park - Washroom	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
Mooretown Campground - Canopy	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200
Office/Washrooms/Showers, Mooretown Campground	\$116,400	\$116,400	\$116,400	\$116,400	\$116,400	\$116,400	\$116,400	\$116,400	\$116,400	\$116,400
Sir John Moore Community School - Corunna	\$654,700	\$654,700	\$654,700	\$654,700	\$654,700	\$654,700	\$654,700	\$654,700	\$654,700	\$654,700
Sombra Athletic Storage Shed	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000
Storage/Washroom, N/S Hill Street, Corunna	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600
Van Damme Park Storage Building, Port Lambton	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200
Washrooms and Pavillion, Sombra Park	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
Washrooms, 3470 St. Clair Parkway, Sombra	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900
Washroom/Storage, N/S Cameron Street, Corunna	\$61,400	\$61,400	\$61,400	\$61,400	\$61,400	\$61,400	\$61,400	\$61,400	\$61,400	\$61,400
Washroom/Concession/Storage, Optimist Park, Brigden	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400
Washroom/Concession/Storage, CAP Park, Corunna	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400	\$99,400
Washroom/Gazebo, Centennial Park, Mooretown	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800
Willow Park Washroom	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
Wilkesport Washroom	\$165,000									
Total (\$000)	\$2,496.6	\$2,331.6	\$2,331.6	\$2,331.6	\$2,331.6	\$2,331.6	\$2,331.6	\$2,331.6	\$2,331.6	\$2,331.6



APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
OUTDOOR BUILDINGS & SPECIAL FACILITIES

SPECIAL FACILITIES Park Name	Total Value of Special Facilities (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brander Park Splash Pad	\$0	\$0	\$0	\$0	\$234,900	\$234,900	\$234,900	\$234,900	\$234,900	\$234,900
Brigden Park Splash Pad	\$0	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900
CAP Splash Pad	\$191,500	\$191,500	\$191,500	\$191,500	\$191,500	\$191,500	\$191,500	\$191,500	\$191,500	\$191,500
CAP Skate Park	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
CAP Volleyball Pitch	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900
Port Lambton Skateboard	\$129,200	\$129,200	\$129,200	\$129,200	\$129,200	\$129,200	\$129,200	\$129,200	\$129,200	\$129,200
Port Lambton Park Seating Area	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
Seager Park- Board walk	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000
Sombra Park Seating Area	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900
Sombra Park - Splash Pad	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900
Wilksport Park Splash Pad	\$0	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900	\$140,900
Total (\$000)	\$590.8	\$872.6	\$872.6	\$872.6	\$1,107.5	\$1,107.5	\$1,107.5	\$1,107.5	\$1,107.5	\$1,107.5

PICNIC SHELTERS Park Name	Total Value of Picnic Shelters (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Brander Park Pavilion	\$0	\$0	\$0	\$0	\$88,100	\$88,100	\$88,100	\$88,100	\$88,100	\$88,100
Brandon Cundick Campground	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000
Cathcart Campground-Pavillon	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000	\$47,000
Concession/Picnic Shelter, 417 Queen St, Corunna	\$86,300	\$86,300	\$86,300	\$86,300	\$86,300	\$86,300	\$86,300	\$86,300	\$86,300	\$86,300
Picnic Shelter, First Street Park, Port Lambton	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300	\$52,300
Picnic Shelter, Macdonald Park, Port Lambton	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600	\$36,600
Picnic Shelter, 3134 Baby Lane, Wilksport	\$26,200	\$26,200	\$26,200	\$26,200	\$26,200	\$26,200	\$26,200	\$26,200	\$26,200	\$26,200
Picnic Shelter and Booth, W/S Mill Street, Bridgen	\$88,900	\$88,900	\$88,900	\$88,900	\$88,900	\$88,900	\$88,900	\$88,900	\$88,900	\$88,900
Picnic Shelter, Smith Street Park, Sombra	\$35,300	\$35,300	\$35,300	\$35,300	\$35,300	\$35,300	\$35,300	\$35,300	\$35,300	\$35,300
Picnic Shelter, 1803 Oil Springs Line (Wabuno)	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200	\$22,200
Picnic Shelter, Mooretown Campground	\$27,500	\$27,500	\$27,500	\$27,500	\$27,500	\$27,500	\$27,500	\$27,500	\$27,500	\$27,500
Total (\$000)	\$469.3	\$469.3	\$469.3	\$469.3	\$557.4	\$557.4	\$557.4	\$557.4	\$557.4	\$557.4



APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
OUTDOOR BUILDINGS & SPECIAL FACILITIES

PARKING LOTS Park Name	Total Value of Parking Lots (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Asphalt										
Brander Park	\$33,100	\$33,100	\$33,100	\$33,100	\$33,100	\$33,100	\$33,100	\$33,100	\$33,100	\$33,100
Centennial Park	\$23,100	\$23,100	\$23,100	\$23,100	\$23,100	\$23,100	\$23,100	\$23,100	\$23,100	\$23,100
Gutherie Park	\$117,400	\$117,400	\$117,400	\$117,400	\$117,400	\$117,400	\$117,400	\$117,400	\$117,400	\$117,400
Paddock Green	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100	\$196,100
Parkdale	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800	\$28,800
Van Dam	\$47,100	\$47,100	\$47,100	\$47,100	\$47,100	\$47,100	\$47,100	\$47,100	\$47,100	\$47,100
Willow Park	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
Gravel										
Brandton Cundick Park	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
CAP 1	\$588,500	\$588,500	\$588,500	\$588,500	\$588,500	\$588,500	\$588,500	\$588,500	\$588,500	\$588,500
CAP 2	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100
Courtright	\$125,500	\$125,500	\$125,500	\$125,500	\$125,500	\$125,500	\$125,500	\$125,500	\$125,500	\$125,500
Seager Park	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200
Grass										
Brigden 1	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800
Brigden 2	\$32,600	\$32,600	\$32,600	\$32,600	\$32,600	\$32,600	\$32,600	\$32,600	\$32,600	\$32,600
Total (\$000)	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7	\$1,396.7

APPENDIX B.5
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
OUTDOOR BUILDINGS & SPECIAL FACILITIES

BOAT RAMPS Park Name	Total Value of Boat Ramps (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corunna	\$54,600	\$54,600	\$54,600	\$54,600	\$54,600	\$54,600	\$54,600	\$54,600	\$54,600	\$54,600
Mooretown	\$135,111	\$135,111	\$135,111	\$135,111	\$135,111	\$135,111	\$135,111	\$135,111	\$135,111	\$135,111
Total (\$000)	\$189.7	\$189.7	\$189.7	\$189.7	\$189.7	\$189.7	\$189.7	\$189.7	\$189.7	\$189.7

PARK TRAILS Park Name	Total Value of Park Trails (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
St. Clair River Trail	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000	\$3,099,000
Total (\$000)	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0	\$3,099.0

FLOODLIGHTS Park Name	Total Value of Floodlights (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All locations (Brigden, Corunna, Courtright, Wilkesport)	\$676,100	\$676,100	\$676,100	\$676,100	\$676,100	\$676,100	\$676,100	\$676,100	\$676,100	\$676,100
Total (\$000)	\$676.1	\$676.1	\$676.1	\$676.1	\$676.1	\$676.1	\$676.1	\$676.1	\$676.1	\$676.1



**APPENDIX B.5
TABLE 1**

**TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
PARK DEVELOPMENT & FACILITIES**

Historical Population	2011 14,515	2012 14,428	2013 14,342	2014 14,256	2015 14,171	2016 14,086	2017 14,141	2018 14,278	2019 14,452	2020 14,230
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INVENTORY SUMMARY (\$000)

Parkland	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,589.6	\$17,564.2
Park Facilities	\$3,726.8	\$3,726.8	\$3,726.8	\$3,726.8	\$3,903.0	\$3,814.9	\$3,814.9	\$3,852.5	\$3,688.1	\$3,624.7
Special Facilities	\$8,918.2	\$9,035.0	\$9,035.0	\$9,035.0	\$9,358.0	\$9,358.0	\$9,358.0	\$9,358.0	\$9,358.0	\$9,358.0
Total (\$000)	\$30,234.7	\$30,351.5	\$30,351.5	\$30,351.5	\$30,850.7	\$30,762.6	\$30,762.6	\$30,800.2	\$30,635.8	\$30,546.9

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Parkland	\$1,211.83	\$1,219.13	\$1,226.44	\$1,233.84	\$1,241.24	\$1,248.73	\$1,243.89	\$1,231.95	\$1,217.08	\$1,234.30	\$1,230.84
Park Facilities	\$256.76	\$258.30	\$259.85	\$261.42	\$275.42	\$270.83	\$269.78	\$269.82	\$255.19	\$254.72	\$263.21
Special Facilities	\$614.41	\$626.21	\$629.97	\$633.77	\$660.36	\$664.35	\$661.77	\$655.42	\$647.51	\$657.62	\$645.14
Total (\$/capita)	\$2,082.99	\$2,103.65	\$2,116.26	\$2,129.03	\$2,177.03	\$2,183.91	\$2,175.45	\$2,157.19	\$2,119.79	\$2,146.64	\$2,139.19

**TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
PARK DEVELOPMENT & FACILITIES**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$2,139.19
Net Population Growth 2021 - 2031	549
Net Maximum Allowable Funding Envelope	\$1,174,199



APPENDIX B.5
TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	DC Eligible Costs	
								2021 - 2031	Post 2031
5.0 PARK DEVELOPMENT & FACILITIES									
5.1 Park Facilities & Land Development									
	5.1.1 Campground Building	2025	\$ 120,000	\$ -	\$ 120,000	\$ -	\$ 120,000	\$ 120,000	\$ -
	5.1.2 New 9 Holes at Golf Course	2026	\$ 800,000	\$ -	\$ 800,000	\$ 770,288	\$ 29,712	\$ 29,712	\$ -
	5.1.3 New Golf Clubhouse	2027	\$ 1,500,000	\$ -	\$ 1,500,000	\$ 1,444,289	\$ 55,711	\$ 55,711	\$ -
	5.1.4 Campground Expansion	2027	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 500,000	\$ 500,000	\$ -
	Sub-total Park Facilities & Land Development		\$ 2,920,000	\$ -	\$ 2,920,000	\$ 2,214,577	\$ 705,423	\$ 705,423	\$ -
	TOTAL PARK DEVELOPMENT & FACILITIES		\$ 2,920,000	\$ -	\$ 2,920,000	\$ 2,214,577	\$ 705,423	\$ 705,423	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	100%	\$705,423
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$361.81
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	0%	\$0
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$0.00

2021-2031 Discounted DC Funding Envelope	\$1,174,199
Reserve Fund Balance	
Balance as at December 31, 2020	\$53,204

APPENDIX B.5
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARK DEVELOPMENT & FACILITIES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PARK DEVELOPMENT & FACILITIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$53.2	\$109.2	\$169.7	\$235.0	\$305.2	\$248.0	\$291.1	(\$270.3)	(\$211.4)	(\$146.3)	(\$74.2)	
2021-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Park Development & Facilities: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$120.0	\$29.7	\$555.7	\$0.0	\$0.0	\$0.0	\$0.0	\$705.4
- Park Development & Facilities: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$129.9	\$32.8	\$625.8	\$0.0	\$0.0	\$0.0	\$0.0	\$788.5
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$53.2	\$55.7	\$58.3	\$61.0	\$63.8	\$66.6	\$69.5	\$72.5	\$75.5	\$78.7	\$81.9	\$736.7
INTEREST												
- Interest on Opening Balance	\$1.9	\$3.8	\$5.9	\$8.2	\$10.7	\$8.7	\$10.2	(\$14.9)	(\$11.6)	(\$8.0)	(\$4.1)	\$10.8
- Interest on In-year Transactions	\$0.9	\$1.0	\$1.0	\$1.1	(\$1.8)	\$0.6	(\$15.3)	\$1.3	\$1.3	\$1.4	\$1.4	(\$7.1)
TOTAL REVENUE	\$56.0	\$60.5	\$65.3	\$70.3	\$72.7	\$75.9	\$64.4	\$58.9	\$65.2	\$72.0	\$79.3	\$740.3
CLOSING CASH BALANCE	\$109.2	\$169.7	\$235.0	\$305.2	\$248.0	\$291.1	(\$270.3)	(\$211.4)	(\$146.3)	(\$74.2)	\$5.0	

2021 Adjusted Charge Per Capita	\$340.00
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Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.6

PUBLIC WORKS

PUBLIC WORKS

The Public Works and Operations Department provides Public Works Services to the Township, including transportation and utilities infrastructure, water and road maintenance services. The department is split into three functional units; the administrative division, the engineering department, and an operations and maintenance division. This section deals with the capital infrastructure of Public Works buildings, land, and related furniture and equipment, and municipal fleet. The engineered components of roads, storm and sewer are discussed in Appendices C and D.

TABLE 1 HISTORICAL SERVICE LEVELS

The Township of St. Clair conducts Public Works from two main sites; one in Wilkesport and another in Mooretown. All buildings on both sites were worth \$2.8 million in 2020. The land occupies a combined 21.47 hectares, which is valued at \$851,500. The cumulative value of all furniture and equipment located within the works buildings totals \$335,000. Finally, the operations fleet and associated required equipment includes 45 vehicles and 31 pieces of small equipment. These items add an additional \$7.6 million to the value of the inventory.

The total value of the Public Works inventory of capital assets is \$11.6 million. The resulting ten-year historical average service level is \$568.68 per population and employment, and this, multiplied by the growth in population and employment to 2031 (1,253), results in a maximum allowable funding envelope of \$712,750.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The development-related capital program for Public Works totals \$410,000. This accounts for the provision of additional development-related equipment to service new development in the Township, a heated pad for salt clearing, new pickup trucks, and a new trailer early in the planning period.

A share of \$46,934 has been identified and removed from the calculation for the heated pad for salt clearing as it will benefit existing residents. Therefore, the remaining \$363,066 is related to development in the 2021 to 2031 planning period.

This development-related cost is allocated 73 per cent (\$265,038) against new residential development and 27 per cent (\$98,028) to non-residential development. This yields an unadjusted residential development charge of \$135.94 per capita and \$1.44 per square metre of new non-residential building space.

TABLE 3 CASH FLOW ANALYSIS

After cash flow considerations, the residential development charge decreases to \$112.00 per capita. The non-residential development charge increases to \$1.60 per square metre. This is due to the timing of the cash flow, as well as the inclusion of the Public Works reserve fund balance to open the cash flow analyses.

The following table summarizes the calculation of the Public Works development charge:

PUBLIC WORKS SUMMARY						
10-year Hist.	2021-2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop&emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$568.68	\$410,000	\$363,066	\$135.94	\$1.44	\$112.00	\$1.60

APPENDIX B.6
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Roads Depot Garage, Wilkesport	5,003	5,003	5,003	5,003	5,003	5,003	5,003	5,003	5,003	5,003	5,003	\$120
Sand/Salt Storage, Wilkesport	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	\$60
Equipment Storage, Wilkesport	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	\$75
Office/Garage/Water Station, Mooretown	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	\$120
Equipment Storage, Mooretown	4,648	4,648	4,648	4,648	4,648	4,648	4,648	4,648	4,648	4,648	4,648	\$75
Salt Storage, Mooretown	2,561	2,561	2,561	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	\$60
Total (sq.ft.)	28,463	28,463	28,463	30,702	30,702	30,702	30,702	30,702	30,702	30,702	30,702	
Total (\$000)	\$2,632.1	\$2,632.1	\$2,632.1	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	

APPENDIX B.6
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Wilkesport Location	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	\$200,000
Roads Depot Garage, Wilkesport											
Sand/Salt Storage, Wilkesport											
Equipment Storage, Wilkesport											
Mooretown Location											
Office/Garage/Water Station, Mooretown											
Equipment Storage, Mooretown	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	20.25	\$30,000
Salt Storage, Mooretown											
Total (ha)	21.47	21.47	21.47	21.47	21.47	21.47	21.47	21.47	21.47	21.47	
Total (\$000)	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	

FURNITURE AND EQUIPMENT Facility Name	Total Value of Furniture and Equipment (\$)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Roads Depot Garage, Wilkesport	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$60,000	\$65,000	\$65,000	\$70,000
Equipment Storage, Wilkesport	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$40,000	\$45,000	\$45,000	\$50,000
Office/Garage/Water Station, Mooretown	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$40,000	\$45,000	\$45,000	\$50,000
Equipment Storage, Mooretown	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$40,000	\$45,000	\$45,000	\$50,000
Fuel Pumps/Tanks, Mooretown	\$33,400	\$33,400	\$33,400	\$33,400	\$33,400	\$33,400	\$33,400	\$33,400	\$40,000	\$40,000
Machinery Shed	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$55,000	\$60,000	\$65,000	\$75,000
Total (\$000)	\$243.4	\$243.4	\$243.4	\$243.4	\$243.4	\$243.4	\$268.4	\$293.4	\$305.0	\$335.0



APPENDIX B.6
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

MUNICIPAL FLEET Facility Name	# of Municipal Fleet and Equipment										UNIT COST (\$/vehicle)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Vehicles											
Pickup	8	8	11	11	11	12	12	12	12	12	\$38,000
Grader	3	3	3	3	3	3	3	3	3	3	\$600,000
Hopper Trailer	2	2	2	2	2	2	2	2	2	3	\$85,000
Tag Trailer	1	1	1	1	1	1	1	1	1	1	\$40,000
Utility Trailer	1	1	4	4	4	4	6	6	7	8	\$15,000
Tandem Truck	3	3	3	3	3	3	3	3	3	3	\$350,000
Single Combination Truck	1	1	2	2	2	3	3	3	3	3	\$290,000
Vactor (Sewage Cleaner)	1	1	1	1	1	1	1	1	1	1	\$750,000
Single 1 Ton Truck	2	2	2	2	2	2	2	2	2	2	\$95,000
Van (Water/Sewage)	1	1	1	1	1	-	-	-	-	-	
Water/Sewage Utility Truck	2	2	2	2	2	2	2	2	2	2	\$110,000
Tractor - Grass Cutting	2	2	2	2	2	2	2	2	2	2	\$150,000
Backhoe	2	2	2	2	2	2	2	2	2	2	\$140,000
Loader for Gravel / Salt	2	2	1	1	1	1	1	1	1	2	\$250,000
Sterling/Elgin Sweeper	1	1	1	1	1	1	1	1	1	1	\$400,000
Small Equipment											
Disk Mowers	5	5	4	4	4	4	4	4	4	4	\$13,000
Packers	1	1	1	1	1	-	-	2	2	2	\$7,500
Tractor Blade	1	1	1	1	1	2	2	2	2	2	\$4,000
One way Plow	10	10	8	8	8	4	4	4	4	4	\$15,000
Snow Wing	12	12	10	10	10	9	9	9	9	9	\$12,000
V-Plows	4	4	3	3	3	3	3	3	3	3	\$20,000
Ditching Buckets	1	1	1	1	1	1	1	1	1	1	\$2,000
Reversible Plow	2	2	6	6	6	6	6	6	6	6	\$13,000
Total (#)	68	68	72	72	72	68	70	72	73	76	
Total (\$000)	\$6,787.5	\$6,787.5	\$6,951.5	\$6,951.5	\$6,951.5	\$7,204.0	\$7,234.0	\$7,249.0	\$7,264.0	\$7,614.0	



APPENDIX B.6
TABLE 1

TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historical Population	14,515	14,428	14,342	14,256	14,171	14,086	14,141	14,278	14,452	14,230
Historical Employment	<u>5,363</u>	<u>5,210</u>	<u>5,071</u>	<u>4,946</u>	<u>4,833</u>	<u>4,733</u>	<u>4,787</u>	<u>4,842</u>	<u>4,898</u>	<u>4,955</u>
Historical Population + Employment	19,878	19,638	19,413	19,202	19,004	18,819	18,928	19,120	19,350	19,185

INVENTORY SUMMARY (\$000)

Buildings	\$2,632.1	\$2,632.1	\$2,632.1	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5	\$2,766.5
Land	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5	\$851.5
Furniture and Equipment	\$243.4	\$243.4	\$243.4	\$243.4	\$243.4	\$243.4	\$268.4	\$293.4	\$305.0	\$335.0
Fleet	\$6,787.5	\$6,787.5	\$6,951.5	\$6,951.5	\$6,951.5	\$7,204.0	\$7,234.0	\$7,249.0	\$7,264.0	\$7,614.0
Total (\$000)	\$10,514.5	\$10,514.5	\$10,678.5	\$10,812.9	\$10,812.9	\$11,065.4	\$11,120.4	\$11,160.4	\$11,187.0	\$11,567.0

SERVICE LEVEL (\$/capita)

Average
Service
Level

Buildings	\$132.41	\$134.03	\$135.59	\$144.07	\$145.57	\$147.00	\$146.16	\$144.69	\$142.97	\$144.20	\$141.67
Land	\$42.84	\$43.36	\$43.86	\$44.34	\$44.81	\$45.25	\$44.99	\$44.54	\$44.01	\$44.38	\$44.24
Furniture and Equipment	\$12.24	\$12.39	\$12.54	\$12.68	\$12.81	\$12.93	\$14.18	\$15.35	\$15.76	\$17.46	\$13.83
Fleet	\$341.45	\$345.63	\$358.08	\$362.02	\$365.79	\$382.80	\$382.18	\$379.14	\$375.40	\$396.87	\$368.94
Total (\$/capita)	\$528.94	\$535.42	\$550.07	\$563.11	\$568.98	\$587.99	\$587.51	\$583.72	\$578.14	\$602.91	\$568.68

TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$568.68
Net Population & Employment Growth 2021 - 2031	1,253
Net Maximum Allowable Funding Envelope	\$712,750



APPENDIX B.6

TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	DC Eligible Costs	
								2021 - 2031	Post 2031
6.0 PUBLIC WORKS									
6.1 Buildings, Land & Equipment									
	6.1.1 Heated Pad for Salt Clearing	2021	\$ 50,000	\$ -	\$ 50,000	\$ 46,934	\$ 3,066	\$ 3,066	\$ -
	Sub-total Buildings, Land & Equipment		\$ 50,000	\$ -	\$ 50,000	\$ 46,934	\$ 3,066	\$ 3,066	\$ -
6.2 Development-Related Equipment									
	6.2.1 Provision for New Equipment	Various	\$ 220,000	\$ -	\$ 220,000	\$ -	\$ 220,000	\$ 220,000	\$ -
	6.2.2 Trailer with Valve Turner	2021	\$ 64,000	\$ -	\$ 64,000	\$ -	\$ 64,000	\$ 64,000	\$ -
	6.2.3 New Pickup Truck	2021	\$ 38,000	\$ -	\$ 38,000	\$ -	\$ 38,000	\$ 38,000	\$ -
	6.2.4 New Pickup Truck	2022	\$ 38,000	\$ -	\$ 38,000	\$ -	\$ 38,000	\$ 38,000	\$ -
	Sub-total Development-Related Equipment		\$ 360,000	\$ -	\$ 360,000	\$ -	\$ 360,000	\$ 360,000	\$ -
	TOTAL PUBLIC WORKS		\$ 410,000	\$ -	\$ 410,000	\$ 46,934	\$ 363,066	\$ 363,066	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$265,038
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$135.94
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$98,028
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$1.44

2021-2031 Discounted DC Funding Envelope	\$712,750
Reserve Fund Balance	
Balance as at December 31, 2020	\$79,405

APPENDIX B.6
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PUBLIC WORKS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$58.0	(\$15.8)	(\$42.2)	(\$40.4)	(\$37.9)	(\$34.7)	(\$30.8)	(\$25.9)	(\$20.1)	(\$13.2)	(\$5.4)	
2021-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Public Works: Non Inflated	\$91.3	\$42.3	\$14.6	\$14.6	\$14.6	\$14.6	\$14.6	\$14.6	\$14.6	\$14.6	\$14.6	\$265.0
- Public Works: Inflated	\$91.3	\$43.2	\$15.2	\$15.5	\$15.8	\$16.1	\$16.4	\$16.8	\$17.1	\$17.4	\$17.8	\$282.7
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$17.5	\$18.4	\$19.2	\$20.1	\$21.0	\$21.9	\$22.9	\$23.9	\$24.9	\$25.9	\$27.0	\$242.7
INTEREST												
- Interest on Opening Balance	\$2.0	(\$0.9)	(\$2.3)	(\$2.2)	(\$2.1)	(\$1.9)	(\$1.7)	(\$1.4)	(\$1.1)	(\$0.7)	(\$0.3)	(\$12.6)
- Interest on In-year Transactions	(\$2.0)	(\$0.7)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	(\$1.7)
TOTAL REVENUE	\$17.5	\$16.8	\$17.0	\$18.0	\$19.0	\$20.1	\$21.3	\$22.6	\$23.9	\$25.3	\$26.9	\$228.4
CLOSING CASH BALANCE	(\$15.8)	(\$42.2)	(\$40.4)	(\$37.9)	(\$34.7)	(\$30.8)	(\$25.9)	(\$20.1)	(\$13.2)	(\$5.4)	\$3.7	

2021 Adjusted Charge Per Capita	\$112.00
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.5
TABLE 3

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PUBLIC WORKS	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.0	(\$25.4)	(\$33.6)	(\$31.3)	(\$28.6)	(\$25.4)	(\$21.8)	(\$17.7)	(\$12.9)	(\$7.7)	(\$1.7)	
2021-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Public Works: Non Inflated	\$33.8	\$15.7	\$5.4	\$5.4	\$5.4	\$5.4	\$5.4	\$5.4	\$5.4	\$5.4	\$5.4	\$98.0
- Public Works: Inflated	\$33.8	\$16.0	\$5.6	\$5.7	\$5.8	\$6.0	\$6.1	\$6.2	\$6.3	\$6.5	\$6.6	\$104.5
NON-RESIDENTIAL SPACE GROWTH												
- Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$9.0	\$9.4	\$9.7	\$10.1	\$10.5	\$10.9	\$11.3	\$11.8	\$12.2	\$12.7	\$13.2	\$120.8
INTEREST												
- Interest on Opening Balance	\$0.0	(\$1.4)	(\$1.8)	(\$1.7)	(\$1.6)	(\$1.4)	(\$1.2)	(\$1.0)	(\$0.7)	(\$0.4)	(\$0.1)	(\$11.3)
- Interest on In-year Transactions	(\$0.7)	(\$0.2)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.0)
TOTAL REVENUE	\$8.3	\$7.8	\$7.9	\$8.5	\$9.0	\$9.6	\$10.2	\$10.9	\$11.6	\$12.4	\$13.2	\$109.4
CLOSING CASH BALANCE	(\$25.4)	(\$33.6)	(\$31.3)	(\$28.6)	(\$25.4)	(\$21.8)	(\$17.7)	(\$12.9)	(\$7.7)	(\$1.7)	\$4.9	

2021 Adjusted Charge Per Square Metre	\$1.60
---------------------------------------	--------

Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.7

GENERAL GOVERNMENT

GENERAL GOVERNMENT

The *DCA* allows the cost of development-related studies and other general government functions to be included in the calculation of development charges. This section details the various development-related studies that will occur in the planning period to 2031 for the Township.

TABLE 1 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATIO OF THE “UNADJUSTED” DEVELOPMENT CHARGES

As shown in Table 1, the 2021-2031 development-related gross cost for General Government is \$104,000. The capital program relates to various development-related studies, including two five-year updates to the development charges study at a cost of \$27,000 each, as well as a provision for two strategic plans or needs studies to properly service future development in the Township.

As these studies are related to development in the Township of St. Clair, no “benefit to existing” shares have been deducted. Therefore, the remaining DC eligible share totals \$104,000, all of which is eligible for recovery over the planning period under review.

This amount is apportioned 73 per cent (\$75,920) to residential development and 27 per cent (\$28,080) to non-residential development. The resulting unadjusted charges for General Government are \$38.94 per capita and \$0.41 per square metre of new non-residential development.

TABLE 2 CASH FLOW ANALYSIS

The cash-flow analysis is displayed in Table 2 and considers the timing of the development charges revenues to determine the adjusted rates. After cash flow considerations, residential development charge decreases to \$25.00 per capita the non-residential charge increases slightly to \$0.47 per square metre.

GENERAL GOVERNMENT SUMMARY

2021-2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$104,000	\$104,000	\$38.94	\$0.41	\$25.00	\$0.47

APPENDIX B.7

TABLE 1

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		DC Eligible Costs	
						Replacement & BTE Shares	Total DC Eligible Costs	2021 - 2031	Post 2031
7.0 GENERAL GOVERNMENT									
7.1 Development-Related Studies									
7.1.1	Development Charges Study	2025	\$ 27,000	\$ -	\$ 27,000	\$ -	\$ 27,000	\$ 27,000	\$ -
7.1.2	Strategic Study	2026	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ 40,000	\$ -
7.1.3	Development Charges Study	2030	\$ 27,000	\$ -	\$ 27,000	\$ -	\$ 27,000	\$ 27,000	\$ -
7.1.4	Misc. Strategic Plans and Needs Studies	2031	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ 10,000	\$ -
Sub-total Development-Related Studies			\$ 104,000	\$ -	\$ 104,000	\$ -	\$ 104,000	\$ 104,000	\$ -
TOTAL GENERAL GOVERNMENT			\$ 104,000	\$ -	\$ 104,000	\$ -	\$ 104,000	\$ 104,000	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$75,920
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$38.94
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$28,080
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$0.41

Reserve Fund Balance	
Balance as at December 31, 2020	\$38,966

APPENDIX B.7
TABLE 2

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

GENERAL GOVERNMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$28.4	\$33.4	\$38.7	\$44.5	\$50.6	\$35.3	\$8.4	\$13.9	\$19.8	\$26.2	\$8.9	
2021-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$19.7	\$29.2	\$0.0	\$0.0	\$0.0	\$19.7	\$7.3	\$75.9
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$21.3	\$32.2	\$0.0	\$0.0	\$0.0	\$23.6	\$8.9	\$86.0
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$3.9	\$4.1	\$4.3	\$4.5	\$4.7	\$4.9	\$5.1	\$5.3	\$5.6	\$5.8	\$6.0	\$54.2
INTEREST												
- Interest on Opening Balance	\$1.0	\$1.2	\$1.4	\$1.6	\$1.8	\$1.2	\$0.3	\$0.5	\$0.7	\$0.9	\$0.3	\$10.8
- Interest on In-year Transactions	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.5)	(\$0.8)	\$0.1	\$0.1	\$0.1	(\$0.5)	(\$0.1)	(\$1.2)
TOTAL REVENUE	\$5.0	\$5.3	\$5.7	\$6.1	\$6.0	\$5.4	\$5.5	\$5.9	\$6.4	\$6.2	\$6.2	\$63.8
CLOSING CASH BALANCE	\$33.4	\$38.7	\$44.5	\$50.6	\$35.3	\$8.4	\$13.9	\$19.8	\$26.2	\$8.9	\$6.2	

2021 Adjusted Charge Per Capita	\$25.00
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.7
TABLE 2

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

GENERAL GOVERNMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.0	\$2.7	\$5.7	\$8.8	\$12.2	\$7.7	(\$1.0)	\$2.3	\$6.0	\$9.8	\$5.0	
2021-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$7.3	\$10.8	\$0.0	\$0.0	\$0.0	\$7.3	\$2.7	\$28.1
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$7.9	\$11.9	\$0.0	\$0.0	\$0.0	\$8.7	\$3.3	\$31.8
NON-RESIDENTIAL SPACE GROWTH												
- Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$2.7	\$2.8	\$2.9	\$3.0	\$3.1	\$3.2	\$3.3	\$3.5	\$3.6	\$3.7	\$3.9	\$35.7
INTEREST												
- Interest on Opening Balance	\$0.0	\$0.1	\$0.2	\$0.3	\$0.4	\$0.3	(\$0.1)	\$0.1	\$0.2	\$0.3	\$0.2	\$2.1
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.1	\$0.1	(\$0.1)	(\$0.2)	\$0.1	\$0.1	\$0.1	(\$0.1)	\$0.0	(\$0.1)
TOTAL REVENUE	\$2.7	\$2.9	\$3.1	\$3.4	\$3.4	\$3.2	\$3.3	\$3.6	\$3.9	\$3.9	\$4.1	\$37.6
CLOSING CASH BALANCE	\$2.7	\$5.7	\$8.8	\$12.2	\$7.7	(\$1.0)	\$2.3	\$6.0	\$9.8	\$5.0	\$5.8	

2021 Adjusted Charge Per Square Metre	\$0.47
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Allocation of Capital Program	
Residential Sector	73%
Non-Residential Sector	27%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C

ROADS AND STORM TECHNICAL APPENDIX

APPENDIX C.1

ROADS AND RELATED TECHNICAL APPENDIX

ROADS & RELATED TECHNICAL APPENDIX

This appendix provides the detailed analysis undertaken to establish the development charge rates for the Roads & Related service in the Township of St. Clair. The service category includes the road network as well as bridges and culverts, streetlights, intersection improvements, studies, and other related expenditures.

The capital planning and management of all transportation infrastructure in the Township is carried out by the Public Works Department.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the 10-year historical inventory for Roads & Related infrastructure. The total value of road, streetlight, sidewalk, bridges and culvert infrastructure is approximately \$253.2 million. The resulting 10-year historical average service level of \$13,086.65 per capita and employment. The historical service level, multiplied by the net population growth and employment growth in new space growth to 2031 (1,253), results in a maximum allowable funding envelope of \$16.4 million.

TABLE 2 2021 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAMS & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

Table 2 sets out the 2021 to 2031 development-related capital forecast and the calculation of the development charges for Roads and Related. The development-related capital program was prepared by Township staff. The projects identified in the capital program are required to service the demands of new development between 2021 and 2031 subject to annual capital budget reviews.

The total cost of the capital program is \$4.0 million and provides for the undertaking of projects throughout the Township. Approximately \$3.1 million of this amount relates to road infrastructure and \$880,000 relates to bridge infrastructure.

The entire \$4.0 million development-related capital program is not to be fully recovered from future development charges; approximately \$2.4 million of the program has been identified as a non-growth or benefit to existing share. For road projects, 57 per cent of the projects costs were deemed to be a replacement share which reflects the base

reconstruction cost of the facility excluding the urbanizing or widening components. This percentage is consistent with the 2011 and 2015 Development Charge Background Studies. Bridge projects have been allocated 75 per cent to replacement and 25 per cent to growth to reflect the additional bridge capacity arising from moderate widening of the bridges.

The development charge recoverable share of the capital program is \$1.6 million. The development-related cost has been allocated 73 per cent (\$1.2 million) to new residential development and 27 per cent (\$427,833) to new non-residential development. The allocation of costs is based on shares of population growth in new households and employment growth over the planning period. When the residential share is divided by the forecast increase in population in new units to 2031 (1,950) a per capita charge of \$593.29 is derived. Similarly, when the non-residential share is divided by the forecast increase in floor space (68,086) a charge of \$6.28 per square metre is derived.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$620.00 per capita and \$6.60 per square metre, respectively. The following table summarizes the calculation of the Roads & Related development charge:

ROADS & RELATED SUMMARY						
10-year Hist.	2021-2031		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop&emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$13,086.65	\$4,025,000	\$1,584,566	\$593.29	\$6.28	\$620.00	\$6.60

APPENDIX C.1
TABLE 1

TOWNSHIP OF ST. CLAIR
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED

ROADWAYS Asset Type	# of Kilometres										UNIT COST (\$/km)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Total Paved Lane KM (incl. sidewalks, trails)	531	537	543	545	545	548	548	548	548	548	\$284,000
Total Unpaved Lane KM	659	658	660	658	658	652	652	652	652	652	\$47,000
Total (units)	1,190	1,195	1,203	1,203	1,203	1,200	1,200	1,200	1,200	1,200	
Total (\$000)	\$181,777.0	\$183,434.0	\$185,232.0	\$185,706.0	\$185,706.0	\$186,276.0	\$186,276.0	\$186,276.0	\$186,276.0	\$186,276.0	\$186,276.0

ROADS INFRASTRUCTURE Asset Type	Unit Amount										UNIT COST (\$/unit)
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Active Streetlights (# of streetlights)	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	1,542	\$1,500
Bridges and Culverts (square metres)	13,425	13,990	13,942	14,041	14,041	14,041	14,041	14,041	14,041	14,041	\$4,600
Total (units)	14,967	15,532	15,484	15,583	15,583	15,583	15,583	15,583	15,583	15,583	
Total (\$000)	\$64,068.0	\$66,667.0	\$66,446.2	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6

APPENDIX C.1
TABLE 1

TOWNSHIP OF ST. CLAIR
CALCULATION OF SERVICE LEVELS
ROADS & RELATED

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historical Population	14,515	14,428	14,342	14,256	14,171	14,086	14,141	14,278	14,452	14,230
Historical Employment	<u>5,363</u>	<u>5,210</u>	<u>5,071</u>	<u>4,946</u>	<u>4,833</u>	<u>4,733</u>	<u>4,787</u>	<u>4,842</u>	<u>4,898</u>	<u>4,955</u>
Historical Population + Employment	19,878	19,638	19,413	19,202	19,004	18,819	18,928	19,120	19,350	19,185

INVENTORY SUMMARY (\$000)

Roadways	\$181,777.0	\$183,434.0	\$185,232.0	\$185,706.0	\$185,706.0	\$186,276.0	\$186,276.0	\$186,276.0	\$186,276.0	\$186,276.0
Roads Infrastructure	\$64,068.0	\$66,667.0	\$66,446.2	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6	\$66,901.6
Total (\$000)	\$245,845.0	\$250,101.0	\$251,678.2	\$252,607.6	\$252,607.6	\$253,177.6	\$253,177.6	\$253,177.6	\$253,177.6	\$253,177.6

SERVICE LEVEL (\$/pop+empl)

Average
Service
Level

Roadways	\$9,144.5	\$9,340.8	\$9,541.6	\$9,671.2	\$9,771.9	\$9,898.2	\$9,841.3	\$9,742.7	\$9,626.7	\$9,709.4	\$9,628.82
Roads Infrastructure	\$3,223.0	\$3,394.8	\$3,422.8	\$3,484.1	\$3,520.4	\$3,555.0	\$3,534.5	\$3,499.1	\$3,457.4	\$3,487.2	\$3,457.83
Total (\$/pop+empl)	\$12,367.4	\$12,735.6	\$12,964.4	\$13,155.3	\$13,292.3	\$13,453.2	\$13,375.8	\$13,241.8	\$13,084.1	\$13,196.5	\$13,086.65

TOWNSHIP OF ST. CLAIR
CALCULATION OF MAXIMUM ALLOWABLE
ROADS & RELATED

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$13,086.65
Net Population & Employment Growth 2021 - 2031	1,253
Net Maximum Allowable Funding Envelope	\$16,402,026

APPENDIX C.1
TABLE 2

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
8.0	ROADS & RELATED								
	8.1 Roads and Related Infrastructure								
	8.1.1 Beckwith Street - Corunna	2022 - 2026	\$ 400,000	\$ -	\$ 400,000	\$ 226,446	\$ 173,554	\$ 173,554	\$ -
	8.1.2 McGregor Road - LaSalle to Township Limit	2023 - 2026	\$ 95,000	\$ -	\$ 95,000	\$ 53,781.00	\$ 41,219	\$ 41,219	\$ -
	8.1.6 Traffic Signal at Hill Street & Queen Street	2021 - 2025	\$ 300,000	\$ -	\$ 300,000	\$ 169,834.75	\$ 130,165	\$ 130,165	\$ -
	8.1.7 Murray & Cameron Street Reconstruction	2021 - 2025	\$ 1,250,000	\$ -	\$ 1,250,000	\$ 707,644.79	\$ 542,355	\$ 542,355	\$ -
	8.1.8 Oil Springs Line Rehabilitation	2021 - 2025	\$ 1,100,000	\$ -	\$ 1,100,000	\$ 622,727.42	\$ 477,273	\$ 477,273	\$ -
	Subtotal Roads and Related Infrastructure		\$ 3,145,000	\$ -	\$ 3,145,000	\$ 1,780,434	\$ 1,364,566	\$ 1,364,566	\$ -
	8.2 Bridges								
	8.2.1 St. Clair Parkway Marshy Creek Bridge 44	2022 - 2026	\$ 440,000	\$ -	\$ 440,000	\$ 330,000	\$ 110,000	\$ 110,000	\$ -
	8.2.2 St. Clair Parkway Marshy Creek Bridge 50	2022 - 2026	\$ 440,000	\$ -	\$ 440,000	\$ 330,000	\$ 110,000	\$ 110,000	\$ -
	Subtotal Bridges		\$ 880,000	\$ -	\$ 880,000	\$ 660,000	\$ 220,000	\$ 220,000	\$ -
	TOTAL ROADS & RELATED		\$ 4,025,000	\$ -	\$ 4,025,000	\$ 2,440,434	\$ 1,584,566	\$ 1,584,566	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$1,156,733
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$593.29
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$427,833
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$6.28

2021-2031 Discounted DC Funding Envelope	\$16,402,026
Reserve Fund Balance	
Balance as at December 31, 2020	\$90,002

APPENDIX C.1

TABLE 3

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 ROADS AND RELATED
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

ROADS & RELATED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$65.70	(\$4.8)	(\$136.7)	(\$283.9)	(\$439.0)	(\$602.6)	(\$585.3)	(\$488.5)	(\$381.0)	(\$261.8)	(\$130.3)	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Roads & Related: Non Inflated	\$167.9	\$225.3	\$232.9	\$232.9	\$232.9	\$65.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,156.7
- Roads & Related: Inflated	\$167.9	\$229.8	\$242.3	\$247.1	\$252.0	\$71.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,210.9
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$97.0	\$101.7	\$106.4	\$111.3	\$116.3	\$121.4	\$126.7	\$132.1	\$137.7	\$143.4	\$149.3	\$1,343.3
INTEREST												
- Interest on Opening Balance	\$2.3	(\$0.3)	(\$7.5)	(\$15.6)	(\$24.1)	(\$33.1)	(\$32.2)	(\$26.9)	(\$21.0)	(\$14.4)	(\$7.2)	(\$180.0)
- Interest on In-year Transactions	(\$1.9)	(\$3.5)	(\$3.7)	(\$3.7)	(\$3.7)	\$0.9	\$2.2	\$2.3	\$2.4	\$2.5	\$2.6	(\$3.7)
TOTAL REVENUE	\$97.4	\$97.9	\$95.1	\$92.0	\$88.4	\$89.1	\$96.7	\$107.5	\$119.2	\$131.5	\$144.7	\$1,159.6
CLOSING CASH BALANCE	(\$4.8)	(\$136.7)	(\$283.9)	(\$439.0)	(\$602.6)	(\$585.3)	(\$488.5)	(\$381.0)	(\$261.8)	(\$130.3)	\$14.4	

2021 Adjusted Charge Per Capita	\$620.00
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.1

TABLE 3

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 ROADS AND RELATED
 NON-RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

ROADS & RELATED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$24.3	(\$0.4)	(\$48.0)	(\$101.4)	(\$158.0)	(\$217.8)	(\$211.0)	(\$175.0)	(\$135.2)	(\$91.4)	(\$43.1)	
2021 - 2025 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Roads & Related: Non Inflated	\$62.1	\$83.3	\$86.1	\$86.1	\$86.1	\$24.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$427.8
- Roads & Related: Inflated	\$62.1	\$85.0	\$89.6	\$91.4	\$93.2	\$26.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$447.9
NON-RESIDENTIAL GROWTH												
- Non-Residential Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$37.2	\$38.7	\$40.2	\$41.8	\$43.4	\$45.0	\$46.8	\$48.6	\$50.4	\$52.4	\$54.4	\$498.9
INTEREST												
- Interest on Opening Balance	\$0.9	(\$0.0)	(\$2.6)	(\$5.6)	(\$8.7)	(\$12.0)	(\$11.6)	(\$9.6)	(\$7.4)	(\$5.0)	(\$2.4)	(\$64.1)
- Interest on In-year Transactions	(\$0.7)	(\$1.3)	(\$1.4)	(\$1.4)	(\$1.4)	\$0.3	\$0.8	\$0.9	\$0.9	\$0.9	\$1.0	(\$1.3)
TOTAL REVENUE	\$37.4	\$37.4	\$36.2	\$34.9	\$33.3	\$33.3	\$36.0	\$39.8	\$43.8	\$48.3	\$53.0	\$433.5
CLOSING CASH BALANCE	(\$0.4)	(\$48.0)	(\$101.4)	(\$158.0)	(\$217.8)	(\$211.0)	(\$175.0)	(\$135.2)	(\$91.4)	(\$43.1)	\$9.9	

2021 Adjusted Charge Per Square Metre	\$6.60
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.2

STORM DRAINAGE TECHNICAL APPENDIX

STORM DRAINAGE TECHNICAL APPENDIX

The capital planning of Storm Drainage infrastructure in St. Clair is carried out by the Public Works Department.

TABLE 1 2021 – 2031 DEVELOPMENT RELATED CAPITAL PROGRAM & CALCULATON OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The Storm Drainage 2021–2031 capital program contains only two projects: a Stormwater Master Plan for Corunna for \$100,000 and the Paget Street storm upgrade with a cost of \$1.2 million. A deduction of \$1.2 million is made to the gross value to account for benefits to existing residents. The percentage deduction (57%) is consistent with the approach used for the Roads and Related service.

After the necessary deductions, the remaining \$76,653 is brought forward to the development charges calculation. Of this amount, \$55,957 or 73 per cent is allocated to residential development yielding an unadjusted charge of \$28.70. The remaining \$20,696, or 27 per cent is allocated to non-residential development yielding an unadjusted charge of \$0.30 per square metre. The apportionment between sectors is based on shares of population growth in units and employment growth between 2021 and 2031.

TABLE 2 CASH FLOW ANALYSIS

After cash flow consideration, which accounts for the existing reserve fund balances for Storm Drainage in the Township, no development charges can be justified under the DCA for this service. As can be seen in the cash flow analysis, the reserve fund balance will be able to cover the upcoming costs of the two Storm Drainage projects considered in this study. This will be re-examined in five years time when the Township undertakes its next development charges study.

STORM DRAINAGE SUMMARY					
2021-2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$1,250,000	\$76,653	\$28.70	\$0.30	\$0.00	\$0.00

APPENDIX C.2

TABLE 1

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
9.0 STORM DRAINAGE									
9.0 Development-Related Storm Projects									
9.1.1	Stormwater Master Plan (Corunna)	2026 - 2026	\$ 100,000	\$ -	\$ 100,000	\$ 93,868	\$ 6,132	\$ 6,132	\$ -
9.1.2	Paget Street Storm Upgrade	2021 - 2025	\$ 1,150,000	\$ -	\$ 1,150,000	\$ 1,079,479	\$ 70,521	\$ 70,521	\$ -
Subtotal Development-Related Storm Projects			\$ 1,250,000	\$ -	\$ 1,250,000	\$ 1,173,347	\$ 76,653	\$ 76,653	\$ -
TOTAL STORM DRAINAGE			\$ 1,250,000	\$ -	\$ 1,250,000	\$ 1,173,347	\$ 76,653	\$ 76,653	\$ -

Residential Development Charge Calculation			
Residential Share of 2021-2031 DC Eligible Costs	73%	\$	55,957
2021-2031 Growth in Population in New Units			1,950
Unadjusted Development Charge Per Capita			\$28.70
Non-Residential Development Charge Calculation			
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$	20,696
2021-2031 Growth in Square Metres			68,086
Unadjusted Development Charge Per Square Metre			\$0.30

Reserve Fund Balance	
Balance as at December 31, 2020	\$96,516



APPENDIX C.2

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 STORM DRAINAGE
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

STORM DRAINAGE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$70.5	\$62.3	\$53.7	\$44.6	\$34.9	\$24.7	\$20.5	\$21.2	\$22.0	\$22.7	\$23.5	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Storm Drainage: Non Inflated	\$10.3	\$10.3	\$10.3	\$10.3	\$10.3	\$4.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$56.0
- Storm Drainage: Inflated	\$10.3	\$10.5	\$10.7	\$10.9	\$11.1	\$4.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$58.5
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
INTEREST												
- Interest on Opening Balance	\$2.5	\$2.2	\$1.9	\$1.6	\$1.2	\$0.9	\$0.7	\$0.7	\$0.8	\$0.8	\$0.8	\$14.0
- Interest on In-year Transactions	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$1.6)
TOTAL REVENUE	\$2.2	\$1.9	\$1.6	\$1.3	\$0.9	\$0.7	\$0.7	\$0.7	\$0.8	\$0.8	\$0.8	\$12.4
CLOSING CASH BALANCE	\$62.3	\$53.7	\$44.6	\$34.9	\$24.7	\$20.5	\$21.2	\$22.0	\$22.7	\$23.5	\$24.3	

2021 Adjusted Charge Per Capita	\$0.00
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX C.2

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 STORM DRAINAGE
 NON-RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

STORM DRAINAGE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$26.1	\$23.1	\$19.9	\$16.5	\$12.9	\$9.1	\$7.6	\$7.8	\$8.1	\$8.4	\$8.7	
2021 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Storm Drainage: Non Inflated	\$3.81	\$3.81	\$3.81	\$3.81	\$3.81	\$1.66	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.7
- Storm Drainage: Inflated	\$3.8	\$3.9	\$4.0	\$4.0	\$4.1	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$21.6
NEW RESIDENTIAL DEVELOPMENT												
- Non-Residential Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
INTEREST												
- Interest on Opening Balance	\$0.9	\$0.8	\$0.7	\$0.6	\$0.5	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$5.2
- Interest on In-year Transactions	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.6)
TOTAL REVENUE	\$0.8	\$0.7	\$0.6	\$0.5	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$4.6
CLOSING CASH BALANCE	\$23.1	\$19.9	\$16.5	\$12.9	\$9.1	\$7.6	\$7.8	\$8.1	\$8.4	\$8.7	\$9.0	

2021 Adjusted Charge Per Capita	\$0.00
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D

SANITARY SERVICES & WATER TECHNICAL

APPENDIX

APPENDIX D.1
SANITARY SEWER (PLANT-BASED)
TECHNICAL APPENDIX

SANITARY SEWER (PLANT-BASED) TECHNICAL APPENDIX

The sanitary sewer charge only applies to urban areas—Corunna, Mooretown, and Courtwright—with sewage services that flow into the Regional Wastewater Treatment Plant. The plant was constructed in 2011. It is assumed that future growth in St. Clair will largely occur on lands with sewer plant servicing consistent with provincial and local planning policies. For future growth, it is assumed that 80 per cent of residential development and 95 per cent of non-residential development in the Township will be located in Plant-based service areas.

TABLE 1 2021-2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

St. Clair’s plant-based sanitary sewer capital program consists of one capital infrastructure project. The project is the continued recovery of the debenture principal payments related to the Regional Wastewater Treatment Plant which total \$5.1 million. The debenture interest costs associated with this project are included in the cash flow analysis.

The entire capital program totals \$5.1 million before deductions (see Table 1). The entire \$5.1 million development-related capital program is not to be fully recovered from future development charges; a deduction of \$4.3 million (85 per cent) is made to the gross value to account for the fact that the plan replaced two smaller plants in Corunna and Courtwright. The growth-related share of costs thus only relates to additional capacity created by the new plant. The reserve funds are accounted for in the cash flow as the opening balance of the analysis.

After netting off benefit to existing shares, the result is a development-related and development charge recoverable share of the capital program of \$758,279. Of the \$758,279, \$530,796, or 70 per cent, is allocated to residential development which results in a charge of \$340.31 per capita and \$227,484 (30 per cent) is allocated to non-residential development resulting in a charge of \$3.52 per square metre.

TABLE 2 CASH FLOW ANALYSIS

After taking into account reserve fund balances and interest costs, the residential charge increases \$795.00 per capita and the non-residential charge increases to \$8.25 per square metre.

SEWER SERVICES - PLANT SUMMARY					
2021-2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$5,055,196	\$758,279	\$340.31	\$3.52	\$795.00	\$8.25

APPENDIX D.1

TABLE 1

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
10.0 SEWER SERVICES - PLANT									
10.1 Development-Related Works									
10.1.1	Regional Wastewater Treatment Plant	2021 - 2021	\$ 422,812	\$ -	\$ 422,812	\$ 359,391	\$ 63,422	\$ 63,422	\$ -
10.1.2	Regional Wastewater Treatment Plant	2022 - 2022	\$ 439,344	\$ -	\$ 439,344	\$ 373,443	\$ 65,902	\$ 65,902	\$ -
10.1.3	Regional Wastewater Treatment Plant	2023 - 2023	\$ 456,523	\$ -	\$ 456,523	\$ 388,044	\$ 68,478	\$ 68,478	\$ -
10.1.4	Regional Wastewater Treatment Plant	2024 - 2024	\$ 474,373	\$ -	\$ 474,373	\$ 403,217	\$ 71,156	\$ 71,156	\$ -
10.1.5	Regional Wastewater Treatment Plant	2025 - 2025	\$ 492,921	\$ -	\$ 492,921	\$ 418,983	\$ 73,938	\$ 73,938	\$ -
10.1.6	Regional Wastewater Treatment Plant	2026 - 2026	\$ 512,194	\$ -	\$ 512,194	\$ 435,365	\$ 76,829	\$ 76,829	\$ -
10.1.7	Regional Wastewater Treatment Plant	2027 - 2027	\$ 532,221	\$ -	\$ 532,221	\$ 452,388	\$ 79,833	\$ 79,833	\$ -
10.1.8	Regional Wastewater Treatment Plant	2028 - 2028	\$ 553,031	\$ -	\$ 553,031	\$ 470,076	\$ 82,955	\$ 82,955	\$ -
10.1.9	Regional Wastewater Treatment Plant	2029 - 2029	\$ 574,654	\$ -	\$ 574,654	\$ 488,456	\$ 86,198	\$ 86,198	\$ -
10.1.10	Regional Wastewater Treatment Plant	2030 - 2030	\$ 597,123	\$ -	\$ 597,123	\$ 507,555	\$ 89,568	\$ 89,568	\$ -
Subtotal Development-Related Works			\$ 5,055,196	\$ -	\$ 5,055,196	\$ 4,296,916	\$ 758,279	\$ 758,279	\$ -
TOTAL SEWER SERVICES - PLANT			\$ 5,055,196	\$ -	\$ 5,055,196	\$ 4,296,916	\$ 758,279	\$ 758,279	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	70%	\$530,796
2021-2031 Growth in Population in New Units		1,560
Unadjusted Development Charge Per Capita		\$340.31
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	30%	\$227,484
2021-2031 Growth in Square Metres		64,681
Unadjusted Development Charge Per Square Metre		\$3.52

Reserve Fund Balance	
Estimated Balance as at December 2020	\$73,093



APPENDIX D.1
TABLE 2

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SEWER SERVICES - PLANT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

SEWER SERVICES - PLANT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$51.16	(\$29.3)	(\$98.6)	(\$156.5)	(\$202.0)	(\$233.6)	(\$250.2)	(\$250.3)	(\$232.5)	(\$195.0)	(\$136.2)	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sewer Services - Plant: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Sewer Services - Plant: Debenture Principal Payments	\$44.40	\$46.13	\$47.93	\$49.81	\$51.76	\$53.78	\$55.88	\$58.07	\$60.34	\$62.70	\$0.0	\$530.8
- Sewer Services - Plant: Inflated	\$44.4	\$46.1	\$47.9	\$49.8	\$51.8	\$53.8	\$55.9	\$58.1	\$60.3	\$62.7	\$0.0	\$530.8
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	125	129	132	135	139	142	145	148	152	155	158	1,560
REVENUE												
- DC Receipts: Inflated	\$99.5	\$104.3	\$109.1	\$114.1	\$119.3	\$124.6	\$130.0	\$135.5	\$141.3	\$147.1	\$153.2	\$1,378.0
INTEREST												
- Interest on Opening Balance	\$1.8	(\$1.6)	(\$5.4)	(\$8.6)	(\$11.1)	(\$12.8)	(\$13.8)	(\$13.8)	(\$12.8)	(\$10.7)	(\$7.5)	(\$96.3)
- Interest on In-year Transactions	\$1.0	\$1.0	\$1.1	\$1.1	\$1.2	\$1.2	\$1.3	\$1.4	\$1.4	\$1.5	\$2.7	\$14.8
- Interest on Debt	(\$138.4)	(\$126.8)	(\$114.8)	(\$102.3)	(\$89.3)	(\$75.8)	(\$61.8)	(\$47.2)	(\$32.1)	(\$16.3)	\$0.0	(\$804.7)
TOTAL REVENUE	(\$36.1)	(\$23.1)	(\$10.0)	\$4.3	\$20.1	\$37.2	\$55.8	\$75.9	\$97.9	\$121.5	\$148.4	\$491.8
CLOSING CASH BALANCE	(\$29.3)	(\$98.6)	(\$156.5)	(\$202.0)	(\$233.6)	(\$250.2)	(\$250.3)	(\$232.5)	(\$195.0)	(\$136.2)	\$12.2	

2021 Adjusted Charge Per Capita	\$795.00
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D.1
TABLE 2

TOWNSHIP OF ST. CLAIR
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
SEWER SERVICES - PLANT
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

SEWER SERVICES - PLANT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$21.93	(\$11.0)	(\$39.3)	(\$63.1)	(\$81.6)	(\$94.5)	(\$101.2)	(\$101.1)	(\$93.5)	(\$77.7)	(\$53.1)	
2021 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Sewer Services - Plant: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Sewer Services - Plant: Debenture Principal Payments	\$19.03	\$19.77	\$20.54	\$21.35	\$22.18	\$23.05	\$23.95	\$24.89	\$25.86	\$26.9	\$0.0	\$227.5
- Sewer Services - Plant: Inflated	\$19.0	\$19.8	\$20.5	\$21.3	\$22.2	\$23.0	\$23.9	\$24.9	\$25.9	\$26.87	\$0.0	\$227.5
NON-RESIDENTIAL GROWTH												
- Non-Residential Growth in Square Metres	5,360	5,460	5,561	5,664	5,768	5,873	5,980	6,088	6,198	6,309	6,421	64,681
REVENUE												
- DC Receipts: Inflated	\$44.2	\$45.9	\$47.7	\$49.6	\$51.5	\$53.5	\$55.6	\$57.7	\$59.9	\$62.2	\$64.6	\$592.4
INTEREST												
- Interest on Opening Balance	\$0.8	(\$0.6)	(\$2.2)	(\$3.5)	(\$4.5)	(\$5.2)	(\$5.6)	(\$5.6)	(\$5.1)	(\$4.3)	(\$2.9)	(\$38.6)
- Interest on In-year Transactions	\$0.4	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6	\$0.6	\$0.6	\$1.1	\$6.4
- Interest on Debt	(\$59.3)	(\$54.3)	(\$49.2)	(\$43.8)	(\$38.3)	(\$32.5)	(\$26.5)	(\$20.2)	(\$13.7)	(\$7.0)	\$0.0	(\$344.9)
TOTAL REVENUE	(\$13.9)	(\$8.6)	(\$3.2)	\$2.8	\$9.3	\$16.4	\$24.1	\$32.5	\$41.6	\$51.5	\$62.8	\$215.3
CLOSING CASH BALANCE	(\$11.0)	(\$39.3)	(\$63.1)	(\$81.6)	(\$94.5)	(\$101.2)	(\$101.1)	(\$93.5)	(\$77.7)	(\$53.1)	\$9.8	

2021 Adjusted Charge Per Capita	\$8.25
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Allocation of Capital Program	
Residential Sector	70.0%
Non-Residential Sector	30.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX D.2
SANITARY SEWER (LAGOON-BASED)
TECHNICAL APPENDIX

SANITARY SEWER (LAGOON-BASED) TECHNICAL APPENDIX

The sanitary sewer charge only applies to the areas with sewage services that flow into one of the Township’s three sewage lagoons (at Brigden, Wilkesport/Sombra, and Port Lambton). For future growth, it is assumed that 20 per cent of residential development and 5 per cent of non-residential development in the Township will be located in lagoon serviced areas.

TABLE 1 2021-2031 DEVELOPMENT RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

St. Clair’s lagoon-based sanitary sewer capital program consists of two capital infrastructure projects. The first project is a \$120,000 environmental assessment to examine the capacity of the lagoons and the required improvements (see Table 1). The second project involves the undertaking of biosolids improvements with a present cost estimate of \$4.5 million.

The entire capital program totals \$1.6 million, including \$1.5 million in investments in biosolids improvements that have yet to be incurred. The net development-related capital program of \$1.6 million is not to be fully recovered from future development charges; a deduction of \$1.4 million (85 per cent) is made to the net amount to account for benefits to existing residents that are unrelated to system capacity improvements. It is assumed that a portion of the capacity improvements to the lagoons will benefit development beyond 2031. As such, 50 per cent of the development-related capital program has been allocated for post-2031 recovery through future development charge by-laws.

After netting off benefit to existing and post-period shares, the result is a development-related and development charge recoverable share of the capital program of \$121,500. Of the \$121,500, \$111,780, or 92 per cent, is allocated to residential development which results in a charge of \$286.66 per capita and \$9,720 (8 per cent) is allocated to non-residential development, yielding in a charge of \$2.86 per square metre.

TABLE 2 CASH FLOW ANALYSIS

After taking into account the timing of projects and development, the residential charge decreases to \$245.00 per capita and the non-residential charge decreases to \$3.50 per square metre.

SEWER SERVICES - LAGOON SUMMARY					
2021-2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$4,620,000	\$121,500	\$286.66	\$2.86	\$245.00	\$3.50

APPENDIX D.2

TABLE 1

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
11.0 SEWER SERVICES - LAGOON									
11.1 Development-Related Works									
11.1.1	Lagoon Study EA	2022 - 2022	\$ 120,000	\$ -	\$ 120,000	\$ 102,000	\$ 18,000	\$ 9,000	\$ 9,000
11.1.2	Biosolids - Cell Improvements	2021 - 2031	\$ 4,500,000	\$ 3,000,000	\$ 1,500,000	\$ 1,275,000	\$ 225,000	\$ 112,500	\$ 112,500
Subtotal Development-Related Works			\$ 4,620,000	\$ 3,000,000	\$ 1,620,000	\$ 1,377,000	\$ 243,000	\$ 121,500	\$ 121,500
TOTAL SEWER SERVICES - LAGOON			\$ 4,620,000	\$ 3,000,000	\$ 1,620,000	\$ 1,377,000	\$ 243,000	\$ 121,500	\$ 121,500

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	92%	\$111,780
2021-2031 Growth in Population in New Units		390
Unadjusted Development Charge Per Capita		\$286.66
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	8%	\$9,720
2021-2031 Growth in Square Metres		3,404
Unadjusted Development Charge Per Square Metre		\$2.86

Reserve Fund Balance	
Estimated Balance as at December 2020	\$23,423



APPENDIX D.2

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 SEWER SERVICES - LAGOON
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

SEWER SERVICES - LAGOON	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$21.55	\$20.5	\$10.9	\$9.9	\$9.0	\$8.3	\$7.8	\$7.5	\$7.3	\$7.5	\$7.8	
2016 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sewer Services - Lagoon: Non Inflated	\$9.4	\$17.7	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$9.4	\$111.8
- Sewer Services - Lagoon: Inflated	\$9.4	\$18.0	\$9.8	\$10.0	\$10.2	\$10.4	\$10.6	\$10.8	\$11.0	\$11.2	\$11.5	\$122.9
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	31	32	33	34	35	35	36	37	38	39	40	390
REVENUE												
- DC Receipts: Inflated	\$7.7	\$8.0	\$8.4	\$8.8	\$9.2	\$9.6	\$10.0	\$10.4	\$10.9	\$11.3	\$11.8	\$106.1
INTEREST												
- Interest on Opening Balance	\$0.8	\$0.7	\$0.4	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$4.1
- Interest on In-year Transactions	(\$0.0)	(\$0.3)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.0	(\$0.5)
TOTAL REVENUE	\$8.4	\$8.4	\$8.7	\$9.1	\$9.5	\$9.9	\$10.3	\$10.7	\$11.2	\$11.6	\$12.1	\$109.8
CLOSING CASH BALANCE	\$20.5	\$10.9	\$9.9	\$9.0	\$8.3	\$7.8	\$7.5	\$7.3	\$7.5	\$7.8	\$8.4	

2016 Adjusted Charge Per Capita	\$245.00
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D.2

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 SEWER SERVICES - LAGOON
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

SEWER SERVICES - LAGOON	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$1.87	\$2.1	\$1.6	\$1.9	\$2.2	\$2.6	\$3.0	\$3.4	\$3.9	\$4.4	\$5.0	
2016 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Sewer Services - Lagoon: Non Inflated	\$0.82	\$1.54	\$0.82	\$0.82	\$0.82	\$0.82	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$9.7
- Sewer Services - Lagoon: Inflated	\$0.8	\$1.6	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$10.7
NON-RESIDENTIAL GROWTH												
- Non-Residential Growth in Square Metres	282	287	293	298	304	309	315	320	326	332	338	3,404
REVENUE												
- DC Receipts: Inflated	\$1.0	\$1.0	\$1.1	\$1.1	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3	\$1.4	\$1.4	\$13.2
INTEREST												
- Interest on Opening Balance	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	\$0.2	\$1.1
- Interest on In-year Transactions	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL REVENUE	\$1.1	\$1.1	\$1.2	\$1.2	\$1.3	\$1.3	\$1.3	\$1.4	\$1.4	\$1.6	\$1.6	\$14.4
CLOSING CASH BALANCE	\$2.1	\$1.6	\$1.9	\$2.2	\$2.6	\$3.0	\$3.4	\$3.9	\$4.4	\$5.0	\$5.5	

2016 Adjusted Charge Per Capita	\$3.50
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D.3
COMBINED SANITARY SEWER
TECHNICAL APPENDIX

COMBINED SANITARY SEWER TECHNICAL

APPENDIX

Under the *Development Charges Act* a municipal council has the policy choice of implementing area-specific or municipal-wide charges. Moreover, section 10 (2) (c.1) of the Act requires that Council consider the use of more than one development charge by-law to reflect different needs for services in different areas.

To comply with this requirement, the calculated development charge rates shown in the body of this report are based on two separate sewer service areas—Plant and Lagoon—as well as a combined rate that would apply uniformly across the Township. The current Township practice is to impose a combined, uniform rate to all areas where sewer services are available.

The summary table below presents that calculated development charges per capita (residential) and per square metre of new gross floor area (non-residential) using the combined Township-wide approach. After taking into account the timing of projects and development, the residential charge is \$695.00 per capita and the non-residential charge is \$7.35 per square metre.

SEWER SERVICES SUMMARY					
2021-2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$6,675,196	\$879,779	\$329.41	\$3.49	\$695.00	\$7.35

APPENDIX D.3

TABLE 1

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
12.0 SEWER SERVICES - COMBINED									
12.1 Development-Related Works									
	12.1.1 Regional Wastewater Treatment Plant Debt	2021 - 2021	\$ 422,812	\$ -	\$ 422,812	\$ 359,391	\$ 63,422	\$ 63,422	\$ -
	12.1.2 Regional Wastewater Treatment Plant Debt	2022 - 2022	\$ 439,344	\$ -	\$ 439,344	\$ 373,443	\$ 65,902	\$ 65,902	\$ -
	12.1.3 Regional Wastewater Treatment Plant Debt	2023 - 2023	\$ 456,523	\$ -	\$ 456,523	\$ 388,044	\$ 68,478	\$ 68,478	\$ -
	12.1.4 Regional Wastewater Treatment Plant Debt	2024 - 2024	\$ 474,373	\$ -	\$ 474,373	\$ 403,217	\$ 71,156	\$ 71,156	\$ -
	12.1.5 Regional Wastewater Treatment Plant Debt	2025 - 2025	\$ 492,921	\$ -	\$ 492,921	\$ 418,983	\$ 73,938	\$ 73,938	\$ -
	12.1.6 Regional Wastewater Treatment Plant Debt	2026 - 2026	\$ 512,194	\$ -	\$ 512,194	\$ 435,365	\$ 76,829	\$ 76,829	\$ -
	12.1.7 Regional Wastewater Treatment Plant Debt	2027 - 2027	\$ 532,221	\$ -	\$ 532,221	\$ 452,388	\$ 79,833	\$ 79,833	\$ -
	12.1.8 Regional Wastewater Treatment Plant Debt	2028 - 2028	\$ 553,031	\$ -	\$ 553,031	\$ 470,076	\$ 82,955	\$ 82,955	\$ -
	12.1.9 Regional Wastewater Treatment Plant Debt	2029 - 2029	\$ 574,654	\$ -	\$ 574,654	\$ 488,456	\$ 86,198	\$ 86,198	\$ -
	12.1.10 Regional Wastewater Treatment Plant Debt	2030 - 2030	\$ 597,123	\$ -	\$ 597,123	\$ 507,555	\$ 89,568	\$ 89,568	\$ -
	12.1.11 Lagoon Study EA	2022 - 2022	\$ 120,000	\$ -	\$ 120,000	\$ 102,000	\$ 18,000	\$ 9,000	\$ 9,000
	12.1.12 Biosolids - Cell Improvements	2021 - 2031	\$ 4,500,000	\$ 3,000,000	\$ 1,500,000	\$ 1,275,000	\$ 225,000	\$ 112,500	\$ 112,500
	Subtotal Development-Related Works		\$ 9,675,196	\$ 3,000,000	\$ 6,675,196	\$ 5,673,916	\$ 1,001,279	\$ 879,779	\$ 121,500
	TOTAL SEWER SERVICES - COMBINED		\$ 9,675,196	\$ 3,000,000	\$ 6,675,196	\$ 5,673,916	\$ 1,001,279	\$ 879,779	\$ 121,500

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$642,239
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$329.41
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$237,540
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$3.49

Reserve Fund Balance	
Balance as at December 2020	\$96,516



APPENDIX D.3

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 SEWER SERVICES - COMBINED
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

SEWER SERVICES - COMBINED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$70.5	(\$15.4)	(\$96.1)	(\$158.4)	(\$207.8)	(\$242.9)	(\$262.3)	(\$264.5)	(\$247.9)	(\$210.8)	(\$151.5)	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sewer Services - Combined: Non Inflated	\$7.5	\$14.0	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$88.7
- Sewer Services - Combined: Debenture Principal Paymen	\$46.3	\$48.1	\$50.0	\$51.9	\$54.0	\$56.1	\$58.3	\$60.6	\$62.9	\$65.4	\$0.0	\$553.5
- Sewer Services - Combined: Inflated	\$53.8	\$62.4	\$57.8	\$59.9	\$62.1	\$64.3	\$66.7	\$69.1	\$71.7	\$74.3	\$9.1	\$651.1
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$108.8	\$113.9	\$119.3	\$124.7	\$130.3	\$136.1	\$142.0	\$148.1	\$154.4	\$160.8	\$167.4	\$1,505.8
INTEREST												
- Interest on Opening Balance	\$2.5	(\$0.8)	(\$5.3)	(\$8.7)	(\$11.4)	(\$13.4)	(\$14.4)	(\$14.5)	(\$13.6)	(\$11.6)	(\$8.3)	(\$99.7)
- Interest on In-year Transactions	\$1.0	\$0.9	\$1.1	\$1.1	\$1.2	\$1.3	\$1.3	\$1.4	\$1.4	\$1.5	\$2.8	\$15.0
- Interest on Debt	(\$144.3)	(\$132.2)	(\$119.7)	(\$106.7)	(\$93.1)	(\$79.0)	(\$64.4)	(\$49.2)	(\$33.4)	(\$17.0)	\$0.0	(\$839.1)
TOTAL REVENUE	(\$32.1)	(\$18.3)	(\$4.6)	\$10.5	\$27.0	\$45.0	\$64.5	\$85.7	\$108.8	\$133.7	\$161.8	\$581.9
CLOSING CASH BALANCE	(\$15.4)	(\$96.1)	(\$158.4)	(\$207.8)	(\$242.9)	(\$262.3)	(\$264.5)	(\$247.9)	(\$210.8)	(\$151.5)	\$1.3	

2021 Adjusted Charge Per Capita	\$695.00
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D.3

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 SEWER SERVICES - COMBINED
 NON-RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

SEWER SERVICES - COMBINED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$26.1	(\$4.4)	(\$33.2)	(\$55.4)	(\$73.1)	(\$85.8)	(\$92.9)	(\$93.9)	(\$88.3)	(\$75.3)	(\$54.4)	
2021 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Sewer Services - Combined: Non Inflated	\$2.76	\$5.19	\$2.76	\$2.76	\$2.76	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$32.8
- Sewer Services - Combined: Debenture Principal Paymen	\$17.1	\$17.8	\$18.5	\$19.2	\$20.0	\$20.7	\$21.6	\$22.4	\$23.3	\$24.2	\$0.0	\$204.7
- Sewer Services - Combined: Inflated	\$19.89	\$23.09	\$21.36	\$22.1	\$23.0	\$23.8	\$24.7	\$25.6	\$26.5	\$27.5	\$3.4	\$240.8
NON-RESIDENTIAL GROWTH												
- Non-Residential Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$41.5	\$43.1	\$44.8	\$46.5	\$48.3	\$50.2	\$52.1	\$54.1	\$56.2	\$58.3	\$60.6	\$555.7
INTEREST												
- Interest on Opening Balance	\$0.9	(\$0.2)	(\$1.8)	(\$3.0)	(\$4.0)	(\$4.7)	(\$5.1)	(\$5.2)	(\$4.9)	(\$4.1)	(\$3.0)	(\$35.2)
- Interest on In-year Transactions	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$1.0	\$5.5
- Interest on Debt	(\$53.4)	(\$48.9)	(\$44.3)	(\$39.4)	(\$34.4)	(\$29.2)	(\$23.8)	(\$18.2)	(\$12.4)	(\$6.3)	\$0.0	(\$310.4)
TOTAL REVENUE	(\$10.6)	(\$5.7)	(\$0.9)	\$4.4	\$10.3	\$16.7	\$23.6	\$31.2	\$39.5	\$48.4	\$58.6	\$215.6
CLOSING CASH BALANCE	(\$4.4)	(\$33.2)	(\$55.4)	(\$73.1)	(\$85.8)	(\$92.9)	(\$93.9)	(\$88.3)	(\$75.3)	(\$54.4)	\$0.9	

2021 Adjusted Charge Per Capita	\$7.35
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D.4
WATER
TECHNICAL APPENDIX

WATER TECHNICAL APPENDIX

As part of this development charges update for the Township, projects related to Water infrastructure are now being considered for recovery. Water services in the Township are provided by the Lambton Area Water Supply System (LAWSS). In order to properly service the LAWSS's growing population, development-related works are being studied and planned for. The Township is funding a share of the cost of these studies.

TABLE 1 2021-2031 DEVELOPMENT RELATED CAPITAL PROGRAM & CALCULATION OF THE "UNADJUSTED" DEVELOPMENT CHARGES

The LAWSS is planning to undertake a twinning of the West Lambton Subsystem, which will include a Grid Reinforcement for the Township of St. Clair. The work arising in part from an Environmental Assessment completed in 2010. It is assumed that the benefit of these improvements will be spread evenly across the Township between existing residents and new development. The development-related charge is eligible for funding through development charges.

The total cost of the project is \$32.0 million. A share of \$22.7 million has been netted off as this will be funded by other municipalities, leaving a total Township share of \$9.3 million (or 29.2% of the cost, based on 2019 St. Clair usage of the LAWSS). A share of \$8.8 million has been netted off from the St. Clair share to reflect the benefit of the works accruing to existing development in the Township. The remaining \$572,605 is brought forward to the development charge calculation.

Of the \$572,605, \$418,002, or 73 per cent, is allocated to residential development. This results in a charge of \$214.39 per capita. The remaining \$154,603 (27 per cent) is allocated to non-residential development, yielding in a charge of \$2.27 per square metre.

TABLE 2 CASH FLOW ANALYSIS

After taking into account the timing of projects and development, the residential charge increases to \$217.00 per capita and the non-residential charge increases to \$2.35 per square metre.

WATER SUMMARY

2021-2031		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$32,000,000	\$572,605	\$214.39	\$2.27	\$217.00	\$2.35

APPENDIX D.4
TABLE 1

TOWNSHIP OF ST. CLAIR
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs	Total DC Eligible Costs	DC Eligible Costs	
						Replacement & BTE Shares		2021 - 2031	Post 2031
13.0 WATER									
13.1 Lambton Area Water Supply System (LAWSS): Twinning of West Lambton Subsystem									
13.1.1	St. Clair Grid Reinforcement (Phase 1 - 2010 EA)	2021 - 2031	\$ 32,000,000	\$ 22,662,400	\$ 9,337,600	\$ 8,764,995	\$ 572,605	\$ 572,605	\$ -
	Subtotal LAWSS: Twinning of West Lambton Subsystem		\$ 32,000,000	\$ 22,662,400	\$ 9,337,600	\$ 8,764,995	\$ 572,605	\$ 572,605	\$ -
	TOTAL WATER		\$ 32,000,000	\$ 22,662,400	\$ 9,337,600	\$ 8,764,995	\$ 572,605	\$ 572,605	\$ -

Residential Development Charge Calculation		
Residential Share of 2021-2031 DC Eligible Costs	73%	\$ 418,002
2021-2031 Growth in Population in New Units		1,950
Unadjusted Development Charge Per Capita		\$214.39
Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2031 DC Eligible Costs	27%	\$ 154,603
2021-2031 Growth in Square Metres		68,086
Unadjusted Development Charge Per Square Metre		\$2.27

Reserve Fund Balance	
Balance as at December 31, 2020	\$0

APPENDIX D.4

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 WATER
 RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

WATER	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	(\$4.1)	(\$7.6)	(\$10.4)	(\$12.4)	(\$13.6)	(\$13.8)	(\$13.0)	(\$11.1)	(\$8.0)	(\$3.5)	
2021 - 2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$38.0	\$418.0
- Water: Inflated	\$38.0	\$38.8	\$39.5	\$40.3	\$41.1	\$42.0	\$42.8	\$43.7	\$44.5	\$45.4	\$46.3	\$462.4
NEW RESIDENTIAL DEVELOPMENT												
- Population Growth in New Units	157	161	165	169	173	177	181	186	190	194	198	1,950
REVENUE												
- DC Receipts: Inflated	\$34.0	\$35.6	\$37.2	\$38.9	\$40.7	\$42.5	\$44.3	\$46.2	\$48.2	\$50.2	\$52.3	\$470.1
INTEREST												
- Interest on Opening Balance	\$0.0	(\$0.2)	(\$0.4)	(\$0.6)	(\$0.7)	(\$0.7)	(\$0.8)	(\$0.7)	(\$0.6)	(\$0.4)	(\$0.2)	(\$5.4)
- Interest on In-year Transactions	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.0
TOTAL REVENUE	\$33.9	\$35.3	\$36.7	\$38.3	\$40.0	\$41.8	\$43.6	\$45.5	\$47.7	\$49.8	\$52.2	\$464.8
CLOSING CASH BALANCE	(\$4.1)	(\$7.6)	(\$10.4)	(\$12.4)	(\$13.6)	(\$13.8)	(\$13.0)	(\$11.1)	(\$8.0)	(\$3.5)	\$2.3	

2021 Adjusted Charge Per Capita	\$217.00
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D.4

TABLE 2

TOWNSHIP OF ST. CLAIR
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 WATER
 NON-RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)

WATER	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.0	(\$0.8)	(\$1.4)	(\$1.8)	(\$1.9)	(\$1.8)	(\$1.4)	(\$0.6)	\$0.5	\$2.1	\$4.1	
2021 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$14.05	\$14.05	\$14.05	\$14.05	\$14.05	\$14.05	\$14.1	\$14.1	\$14.1	\$14.1	\$14.1	\$154.6
- Water: Inflated	\$14.1	\$14.3	\$14.6	\$14.9	\$15.2	\$15.5	\$15.8	\$16.1	\$16.5	\$16.8	\$17.1	\$171.0
NEW RESIDENTIAL DEVELOPMENT												
- Non-Residential Growth in Square Metres	5,642	5,747	5,854	5,962	6,071	6,182	6,295	6,408	6,524	6,641	6,759	68,086
REVENUE												
- DC Receipts: Inflated	\$13.3	\$13.8	\$14.3	\$14.9	\$15.4	\$16.0	\$16.7	\$17.3	\$18.0	\$18.7	\$19.4	\$177.8
INTEREST												
- Interest on Opening Balance	\$0.0	(\$0.0)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.0)	\$0.0	\$0.1	\$0.1	(\$0.3)
- Interest on In-year Transactions	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
TOTAL REVENUE	\$13.3	\$13.7	\$14.2	\$14.8	\$15.3	\$15.9	\$16.6	\$17.3	\$18.0	\$18.8	\$19.6	\$177.6
CLOSING CASH BALANCE	(\$0.8)	(\$1.4)	(\$1.8)	(\$1.9)	(\$1.8)	(\$1.4)	(\$0.6)	\$0.5	\$2.1	\$4.1	\$6.6	

2021 Adjusted Charge Per Capita	\$2.35
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Allocation of Capital Program	
Residential Sector	73.0%
Non-Residential Sector	27.0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX E

RESERVE FUNDS

RESERVE FUNDS

The *Development Charges Act* requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances, as at October 9, 2020, that are available to help fund the development-related net capital costs identified in this study. We have made an adjustment based on anticipated collections to year-end to arrive at an uncommitted reserve fund balance as of December 31, 2020. All of the available reserve funds are accounted for in this study.

As shown in Table 1, the December 2020 total reserve fund balance was in a positive position of \$663,085. These funds are assigned to projects in the cash flow analysis for each service area. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation through the cash flow analysis.

APPENDIX E

TABLE 1

TOWNSHIP OF ST. CLAIR
 DEVELOPMENT CHARGE RESERVE FUND BALANCES BY ACCOUNT
 DECEMBER 31, 2020

Service	Uncommitted Reserve Fund Balance as at October 9, 2020	Adjustment to Year-End 2020	Uncommitted Reserve Funds as at December 31, 2020
Library Service	\$17,570	\$1,520	\$19,090
Fire Department	\$24,077	\$20,093	\$44,171
Police Service	\$32,790	\$5,140	\$37,930
Indoor Recreation	\$127,489	\$7,602	\$135,091
Park Development & Facilities	\$45,602	\$7,602	\$53,204
Public Works	\$72,426	\$6,979	\$79,405
General Government	\$31,728	\$7,238	\$38,966
Roads & Related	\$33,919	\$56,083	\$90,002
Sewer Services	\$34,776	\$61,740	\$96,516
Storm Drainage	\$62,277	\$6,434	\$68,711
Total Development Charge Reserve Funds	\$482,655	\$180,430	\$663,085

Source: Township of St. Clair Development Charges Reserve Fund Statements

APPENDIX F

COST OF GROWTH

ASSET MANAGEMENT PLAN

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

i. Asset Types

A summary of the future Township-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table 1. Although all capital assets considered in this study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. The exception and the justification is as follows:

- Some projects do not relate to the emplacement of a tangible capital asset – some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.
- For assets that have been constructed (i.e. recovery of past commitments) it is assumed that the related contribution is already included within the Township’s annual provision. As such, these projects are identified as “not applicable” in the table.

It should be noted that the capital cost estimates prepared for each of the projects identified in this section include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (e.g. new buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components.

Table 1 – Summary of Township Assets Useful Lives	
Service	Estimated Useful Life
Fire Department	
Debenture Principal	Not infrastructure
Buildings	40 years
Police Service	
Debenture Principal	Not infrastructure
Indoor Recreation	
Buildings	40 years

Table 1 – Summary of Township Assets Useful Lives	
Master Plan	Not infrastructure
Park Development & Facilities	
Buildings	40 years
Land Development	20 years
Public Works	
Buildings	40 years
Vehicles & Equipment	15 years
General Government	
Studies	Not Infrastructure
Roads & Related	
Roads Infrastructure	50 years
Bridges	50 years
Storm Drainage	
Master Plan	Not infrastructure
Storm Upgrade	50 years
Water	
Water Infrastructure	50 years

ii. 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 Township staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services. 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 form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

Consistent with the requirements of the *DCA*, assets that are proposed to be funded under the development charges by-law have been included in the analysis. As a result, the total calculated annual provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing (BTE)

development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to benefit-to-existing (BTE) and post-period benefit have also been calculated.

Table 2 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2021-2031 DC recoverable portion for General Services and Engineering Services. The year 2032 has been included to calculate the annual contribution for the 2021-2031 period as the expenditures in 2031 will not trigger asset management contributions until 2032. As shown in Table 2, by 2032, the Township will need to fund an additional \$100,698 per annum in order to properly fund the full life cycle costs of the new assets related to General and Engineering Services supported under the development charges by-law.

**APPENDIX F
TABLE 2**

**TOWNSHIP OF ST. CLAIR
CALCULATED ANNUAL PROVISION BY 2032**

Service	2021 - 2031 Capital Program		Calculated AMP Annual Provision by 2032	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Library Service	\$ -	\$ -	\$ -	\$ -
Fire Department	\$ 304,754	\$ 1,949,213	\$ 348	\$ 5,335
Police Service	\$ 152,481	\$ 74,770	\$ -	\$ -
Indoor Recreation	\$ 145,000	\$ 25,000	\$ 3,343	\$ -
Park Development & Facilities	\$ 705,423	\$ 2,214,577	\$ 35,112	\$ 84,216
Public Works	\$ 363,066	\$ 46,934	\$ 9,563	\$ 1,184
General Government	\$ 104,000	\$ -	\$ -	\$ -
Roads & Related	\$ 1,584,566	\$ 2,440,434	\$ 34,237	\$ 52,845
Sewer Services (Combined)	\$ 879,779	\$ 5,795,416	\$ 2,722	\$ 33,577
Storm Drainage	\$ 76,653	\$ 1,173,347	\$ 1,515	\$ 23,196
Water	\$ 572,605	\$ 31,427,395	\$ 13,857	\$ 760,526
Total	\$ 4,888,327	\$ 45,147,086	\$ 100,698	\$ 960,879

iii. Financial Sustainability of the Program

a) Future Revenue Growth

The calculated annual funding provision should be considered within the context of the Township’s projected growth. Over the next 11 years (to 2031) the Township is projected to increase by 696 households, which represents a 12 per cent increase over the existing base. In addition, the Township will also add 704 new employees that will result in approximately 68,086 square metres of additional non-residential building space.

This growth will have the effect of increasing the overall assessment base and additional user fee and charges revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law. The collection of these funds is intended to be allocated to the Township's reserves for the future replacement of these assets.

LONG-TERM CAPITAL AND OPERATING IMPACT ANALYSIS

As shown in Table 3, by 2031, the Township's net operating costs are estimated to increase by \$418,800 for property tax supported services. Increases in net operating costs would be experienced if new facilities such as park facilities are opened. Operating and maintenance costs will also increase as additions to in the Township's road network are made. Water and Sewer capital expenditures are expected to be off-set by user fees and water/sewer rates rather than property taxes and therefore no impact is reflected in the analysis. Capital costs related to studies are not expected to have an impact on property tax supported costs.

Table 4 summarizes the components of the development-related capital forecast that will require funding from non-DC sources. In total, \$22.3 million will need to be financed from non-DC sources over the 2021-2031 planning period. In addition, \$196,300 in interim DC financing related to post-period shares of projects may be required. However, because DC by-laws must be revisited at least every five years, it is difficult to determine the quantum of interim financing that may be necessary.

Council is made aware of these factors so that they understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in the Study.

THE PROGRAM IS DEEMED FINANCIALLY SUSTAINABLE

In summary, the asset management plan and long-term capital and operating analysis included in this appendix demonstrates that the Township can afford to invest and operate the identified general and engineered services infrastructure over the ten-year planning period. Importantly, the Township's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.

APPENDIX F

TABLE 3

TOWNSHIP OF ST. CLAIR
 ESTIMATED NET OPERATING COST OF THE PROPOSED
 DEVELOPMENT-RELATED CAPITAL PROGRAM
 (in constant 2020 dollars)

	Net Cost (in 2020\$)		Estimated Operating Costs (\$000)											
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
Fire Department			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0
Fire Share of Emergency Services Building - already constructed			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
New Vehicles and Equipment - already purchased			\$0.0	\$0.00	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Storage Space	\$0.10	per \$1.00 of total infrastructure value	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0
Police Service			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Police Share of Emergency Services Building - already constructed			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Indoor Recreation			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.0	\$12.0	\$12.0	\$12.0	\$12.0	\$12.0
Storage/First Aid Room	\$0.10	per \$1.00 of total infrastructure value	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.0	\$12.0	\$12.0	\$12.0	\$12.0	\$12.0
Park Development & Facilities			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.0	\$40.0	\$140.0	\$140.0	\$140.0	\$140.0	\$140.0
Total Park Development & Facilities Program	\$0.05	per \$1.00 of total infrastructure value	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.0	\$40.0	\$140.0	\$140.0	\$140.0	\$140.0	\$140.0
Public Works			\$25.8	\$34.5	\$37.5	\$40.5	\$43.5	\$46.5	\$49.5	\$52.5	\$52.5	\$55.5	\$58.5	
Total Buildings & Fleet New Infrastructure	\$0.15	per \$1.00 of total infrastructure value	\$25.8	\$34.50	\$37.5	\$40.50	\$43.5	\$46.50	\$49.5	\$52.50	\$52.50	\$55.5	\$58.5	
General Government			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Development-Related Studies - no additional operating costs			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Roads & Related			\$16.5	\$33.5	\$51.0	\$69.0	\$87.4	\$106.4	\$125.9	\$145.9	\$146.4	\$166.8	\$188.3	
Roads and Related Projects	\$300	per household	\$16.5	\$33.49	\$51.0	\$68.97	\$87.4	\$106.42	\$125.9	\$145.86	\$146.35	\$166.8	\$188.3	
Storm Drainage			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Included in Roads			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Sanitary Sewer			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Rate Supported Costs			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Water			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Rate Supported Costs			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
TOTAL ESTIMATED OPERATING COSTS			\$42.3	\$68.0	\$88.5	\$109.5	\$136.9	\$204.9	\$347.4	\$370.4	\$370.9	\$394.3	\$418.8	



APPENDIX F

TABLE 4

TOWNSHIP OF ST. CLAIR
 SUMMARY OF TAX AND RATE SUPPORTED FUNDING REQUIREMENTS
 CAPITAL PROGRAM FOR ALL SERVICES

Service	Development-Related Capital Program (2021-2031)				Total DC Eligible Costs for Recovery (\$000)
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserve Funds (\$000)	Post-Period Benefit (\$000)	
1.0 LIBRARY SERVICE	\$ -	\$ -	\$ 19.1	\$ -	\$ -
2.0 FIRE DEPARTMENT	\$ 2,254.0	\$ 1,949.2	\$ 44.2	\$ -	\$ 260.6
3.0 POLICE SERVICE	\$ 227.3	\$ -	\$ 37.9	\$ 74.8	\$ 114.6
4.0 INDOOR RECREATION	\$ 170.0	\$ 25.0	\$ 135.1	\$ -	\$ 9.9
5.0 PARK DEVELOPMENT & FACILITIES	\$ 2,920.0	\$ 2,214.6	\$ 53.2	\$ -	\$ 652.2
6.0 PUBLIC WORKS	\$ 410.0	\$ 46.9	\$ 79.4	\$ -	\$ 283.7
7.0 GENERAL GOVERNMENT	\$ 104.0	\$ -	\$ 39.0	\$ -	\$ 65.0
8.0 ROADS & RELATED	\$ 4,025.0	\$ 2,440.4	\$ 90.0	\$ -	\$ 1,494.6
9.0 SEWER SERVICES - PLANT	\$ 5,055.2	\$ 4,296.9	\$ 73.1	\$ -	\$ 685.2
10.0 SEWER SERVICES - LAGOON	\$ 1,620.0	\$ 1,377.0	\$ 23.4	\$ 121.5	\$ 98.1
11.0 STORM DRAINAGE	\$ 1,250.0	\$ 1,173.3	\$ 68.7	\$ -	\$ 7.9
12.0 WATER	\$ 9,337.6	\$ 8,765.0	\$ -	\$ -	\$ 572.6
Total	\$ 27,373.0	\$ 22,288.4	\$ 663.1	\$ 196.3	\$ 4,244.3

Note: Total DC eligible costs for recovery will not exactly match what is presented in the capital programs as we included the reserve fund balances as part of the cash flow analysis and not in the individual capital programs

APPENDIX G

DRAFT 2021 DEVELOPMENT CHARGES BY-LAW
(AVAILABLE UNDER SEPARATE COVER)