

DEVELOPMENT CHARGES BACKGROUND STUDY

Town of Midland



Consolidated Report

HEMSON Consulting Ltd.

January 16, 2020

HEMSON

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January 16, 2020

Lockie Davis
Financial Leadership Advisor
Town of Midland
575 Dominion Avenue
Midland, Ontario L4R 1R2

Dear Mr. Davis:

**Re: Town of Midland Development Charges Background Study –
Consolidated Report**

Hemson Consulting is pleased to submit this Development Charges Background Study for the Town of Midland. The study is the culmination of several months of work by the consulting team, and Town staff and Council.

The Consolidated Report reflects minor edits and corrections made since the initial release of the Background Study on September 6, 2019, and reflects the development charges rates approved by Council on November 20, 2019. An adjustment to the cash flows for Library, Indoor Recreation and Public Works now ensures interest on debenture payments are not inflated. The net effect was a reduction in the rates from \$16,879 to \$16,751 for low density units.

We would like to thank you and other Town staff for the valuable assistance throughout the course of the study, and we look forward to continuing to provide consulting services to the Town in the future.

Yours truly,

HEMSON Consulting Ltd.



Stefan Krzeczunowicz
Associate Partner

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EXECUTIVE SUMMARY

A. PURPOSE OF 2019 DEVELOPMENT CHARGES (DC) BACKGROUND STUDY

1. Legislative Context

The Town of Midland 2019 Development Charges (DC) Background Study is presented as part of the process to lead to the approval of a new DC by-law in compliance with the *Development Charges Act, 1997 (DCA)*. The study is prepared in accordance with the *DCA* and associated Regulations, including the amendments that came into force on January 1, 2016.

2. Key Steps in Determining Future Development-Related Projects

In accordance with the *DCA* and associated regulation, 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 of a cash flow analysis.

3. 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, including operating and maintenance costs; ineligible services, including, tourism facilities, parkland acquisition, etc.; statutory 10 per cent discount for “soft” or general services; deductions for costs that exceed historical service level caps; and statutory exemptions for specific uses (i.e. industrial expansions).

4. 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 2019 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 Town’s normal annual budget process.

B. DEVELOPMENT FORECAST

1. Residential and Non-Residential

The table below provides a summary of the anticipated residential and non-residential growth over the 2019-2028 planning period. The development forecast is further discussed in Appendix A.

Development Forecast	2018 Estimate	General Services Planning Period 2019 - 2028		Engineered Services Planning Period 2019 - 2041	
		Growth	Total at 2028	Growth	Total at 2041
Residential					
Total Dwellings	7,781	1,709	9,489	3,919	11,699
Total Population	17,410	3,009	20,419	8,175	25,585
Census Population In New Dwellings		3,600		8,059	
Non-Residential					
Employment	11,013	2,087	13,100	5,474	16,487
Non-Residential Building Space (sq.m.)		131,260		344,290	

C. CALCULATED DEVELOPMENT CHARGES

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

	Residential Charge per Unit			Non-Residential Charge per Square Metre
	Low Density	Medium Density	High Density	
Discounted Services	\$ 3,831	\$ 3,574	\$ 2,533	\$ 0.45
Non-Discounted Services	\$ 12,920	\$ 12,053	\$ 8,540	\$ 90.53
Total Charge	\$ 16,751	\$ 15,627	\$ 11,073	\$ 90.98

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 as one of the provisions of the *DCA*. Additional details on the long-term capital and operating impact analysis is found in Appendix H. By 2028 the Town's net operating costs are estimated to increase by about \$362,200.

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 2019-2028 and 2019-2041 planning periods have been calculated. The years 2029 and 2042 have been included to calculate the annual contribution for the 2019-2028 and 2019-2041 periods as the expenditures in 2028 and 2041 will not trigger asset management contributions until 2029 and 2042.

By 2029, the Town will need to fund an additional \$223,200 per annum in order to properly fund the full life cycle costs of the general services assets supported under the 2019 Development Charges By-law.

By 2042, the Town will need to fund an additional \$2.8 million per annum to properly fund the full life cycle costs of the engineered services assets supported under the by-law.

F. MODIFICATIONS TO THE TOWN'S DEVELOPMENT CHARGES BY-LAW ARE PROPOSED

The Town is proposing to modify the current development charges by-law. The proposed draft by-law will be made available, under separate cover, a minimum of two weeks in advance of the statutory public meeting.

I 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 Town of Midland 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 Town of Midland will increase the demand on all services. The Town wishes to implement development charges to fund capital projects related to growth in Midland 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 Town;
- The average capital service levels provided in the Town 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 Town or its local boards to provide for the expected development, including the determination of the growth 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 Town. 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 Town 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 Town over a 10-year planning period from 2019 to 2028, and the longer-term planning horizon of 2019 to 2041.

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

In Section V, the development-related capital program that has been developed by various Town 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 an examination of the long term capital and operating costs for each service included in the development charge calculation.

Section VIII presents an Asset Management Plan for the Town, demonstrating the financial sustainability of assets over the life cycle of the 2019 Development Charges By-law and satisfying the requirements of the recent amendments to the *DCA*.

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

II THE METHODOLOGY USES A TOWN-WIDE APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS

Several key steps are required when calculating any development charge, however, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, we have tailored our approach to accommodate the Town of Midland. The approach to the calculated development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. This study uses a Town-wide approach for most services provided by the Town of Midland. The Background Study provides an update to the historical service levels and the cost of providing future development-related capital infrastructure.

A. TOWN-WIDE DEVELOPMENT CHARGES ARE PROPOSED

The *DCA* provides municipalities with flexibility to define services that will be included in the development charges by-laws, provided that its other provisions, as well as those of *O. Reg. 82/98*, are met. The *DCA* also requires that the by-laws designate the areas within which DCs shall be imposed. The development charges may apply to all lands in a municipality or to other designated development areas as specified in the by-laws.

For both discounted and non-discounted services, a range of capital infrastructure is available throughout the Town, and all Midland residents and employees have access to this infrastructure. As new development occurs, new infrastructure will be needed in order to maintain overall service levels in the Town. A widely accepted method of sharing the development-related capital costs for such Town services is to apportion them over all anticipated growth.

The following services are included in the Town-wide development charges calculations:

- General Government
- Library
- Fire
- Police
- Indoor Recreation

- Parks
- Public Works
- Parking
- Transit
- Roads and Related
- Sanitary Sewer, and
- Water Services

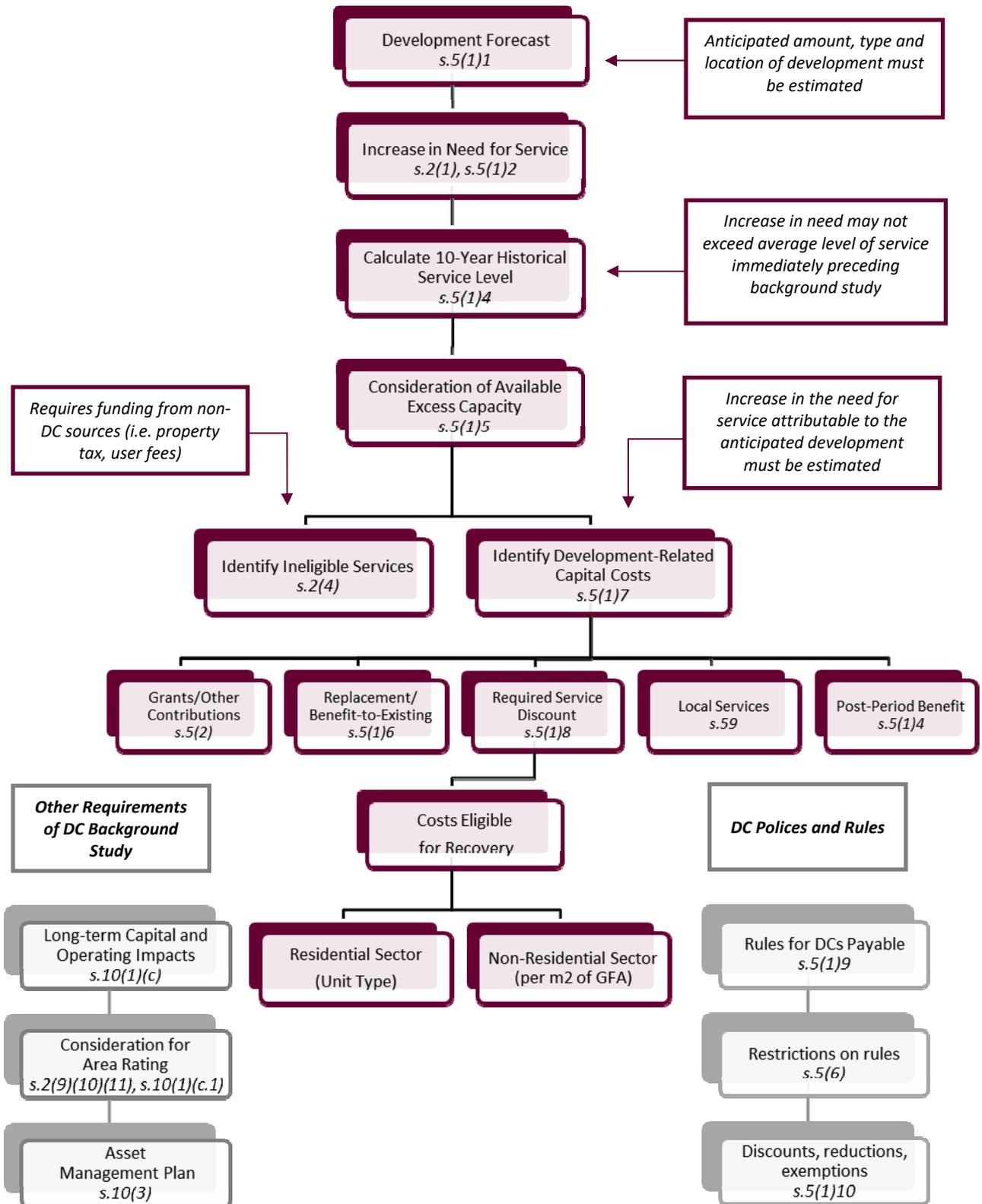
These services form a reasonable basis in which to plan and administer the Town-wide development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that constitute it. The resulting development charges for these services would be imposed against all development anywhere in the Town.

1. Area-Specific Charges Have Been Calculated

On August 12, 2019, Council considered the calculation of two area-specific charges within the Town. The charges have been calculated to recover for roads capital projects in the Tiffin by the Bay and Balm Beach Road Employment areas. Only a residential charge is calculated in Tiffin by the Bay as no non-residential growth will occur in this area. Residential and non-residential charges have been calculated for the Balm Beach Road Employment Area. Full details of the area-specific charges can be found in Appendix D and Appendix E, including maps of the areas.

B. KEY STEPS WHEN DETERMINING DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS

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



1. Development Forecast

The first step in the methodology requires that a development forecast be prepared for the 10-year study period from 2019 to 2028, and to build-out or ultimate development in 2041. The forecast of the future residential and non-residential development used in this study is based on the population and employment targets contained in Schedule 7 of the Provincial Growth Plan for the Greater Golden Horseshoe, and discussions with Town staff.

For the residential portion of the forecast, the total change in Census population determines the need for additional facilities and provides the foundation for the development-related capital forecast.

The non-residential portion of the forecast estimates the amount of building space to be developed in the Town over the planning periods. The forecast is based on the projected increase in employment levels and the anticipated amount of new building space required to accommodate them.

2. Service Categories and Historical Service Levels

The *DCA* states 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 Town 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 the development charges calculation. A review of the Town's capital service levels for buildings, land, vehicles, equipment and others 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 charges can be determined. The historical service levels used in this study have been calculated based on the period from 2009 to 2018.

For the engineered services of water and sanitary sewer services, historical service levels are less applicable and reference is made to the Town's engineering standards as well as Provincial health or environmental requirements.

3. Development-related Capital Forecast and Analysis of Net Capital Costs to Be Included in the Development Charges

A development-related capital forecast has been prepared by Town staff as part of the study. The forecast identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the *DCA* s.5.(2). The capital forecast 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 Town has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)

S. 5. (1) 4. and s. 5. (2). require that the development charges be calculated on the lesser of the historical 10-year average service levels or the service levels embodied in the future plans of the Town. 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 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 Town from non-development charges sources. The amount of financing for such non-growth 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 charges 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.

Finally, when calculating development charges, the development-related net capital costs must be reduced by 10 per cent for all services except engineered services, such as roads and related (DCA, s. 5. (1) 8). The 10 per cent discount is applied to the other services, e.g. Library and Recreation, and the resulting financing responsibility from non-development charges sources is identified.

4. 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. In the Town of Midland, the allocation is based on the projected changes in population and employment over the planning periods.

The residential component of the development charges is applied to different housing types based on average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

5. Final Adjustment

The final determination of the development charges results from adjustments made to development-related net capital costs for each service and sector resulting from a cash flow analysis that takes account of the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA.

III DEVELOPMENT FORECAST

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

The forecast is primarily based upon the Town achieving the population and employment targets contained in Schedule 7 of the Provincial Growth Plan for the Greater Golden Horseshoe.

A 10-year development forecast, from mid-year 2019 to mid-year 2028, has been used for all the development charges eligible general services in the Town. The planning period from mid-year 2019 to mid-year 2041 has been utilized for the engineered services of Roads and Related, Water Services and Sanitary Sewer.

In the general service planning horizon of 2019-2028, it is anticipated that the Town will add an average of 170 new residential units per year, which can accommodate a population of 3,600 in these new dwelling units. In the same planning horizon, it is anticipated that the Town will see a total GFA growth of 131,260 square metres of new non-residential building space with an accompanying employment growth of 2,087.

In the longer planning horizon, utilized for engineered services, the Town is anticipated to add roughly 3,919 new residential units, which can accommodate a population in new dwellings of 8,059 persons. In terms of non-residential growth, the Town is forecast to add 5,474 new employees that will generate an additional 344,290 square metres of new non-residential building space.

Table 1 provides a summary of the residential and non-residential growth forecast used in this analysis.

TABLE 1
TOWN OF MIDLAND
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
DEVELOPMENT FORECAST

Development Forecast	2018 Estimate	General Services Planning Period 2019 - 2028		Engineered Services Planning Period 2019 - 2041	
		Growth	Total at 2028	Growth	Total at 2041
Residential					
Total Dwellings	7,781	1,709	9,489	3,919	11,699
Total Population					
Census	17,410	3,009	20,419	8,175	25,585
<i>Population In New Dwellings</i>		3,600		8,059	
Non-Residential					
Employment	11,013	2,087	13,100	5,474	16,487
Non-Residential Building Space (sq.m.)		131,260		344,290	

IV HISTORICAL CAPITAL SERVICE LEVELS

The *DCA* and *O. Reg. 82/98* require that the development charges be set at a level no higher than the average service level provided in the Town over the 10-year period immediately preceding the preparation of the background study, on a service-by-service basis.

For non-engineered services (Library Services, Parks and Recreation, etc.) the legislative requirement is met by documenting service levels for the preceding 10 years: in this case, for the period from 2009 to 2018. Typically, service levels are measured as a ratio of inputs per capita or inputs per population and employment. With engineered services such as water and sanitary sewer, engineering standards are used in lieu of inputs per capita.

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 per unit. The qualitative aspect is introduced by considering the monetary value of a 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 growth reflect not only the quantity (number and size) but also the quality (value or cost) of services provided by the Town in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Town staff. This information is generally based on historical records and the Town's and surrounding municipalities' experience with costs to acquire or construct similar facilities, equipment and infrastructure.

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

TOWN OF MIDLAND
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2009 - 2018

Service	2009 - 2018 Service Level Indicator
1.0 LIBRARY Buildings Land Materials Furniture & Equipment	\$785.88 per capita \$585.51 per capita \$4.59 per capita \$116.51 per capita \$79.28 per capita
2.0 FIRE Buildings Land Vehicles Fire Fighter Equipment Furniture & Equipment	\$376.47 per household \$175.87 per household \$5.69 per household \$162.06 per household \$24.78 per household \$8.06 per household
3.0 POLICE Buildings Land Vehicles Personal Police Equipment Furniture & Equipment	\$109.23 per population & employment \$61.52 per population & employment \$12.70 per population & employment \$6.28 per population & employment \$6.02 per population & employment \$22.70 per population & employment
4.0 INDOOR RECREATION Buildings Land Equipment	\$2,051.62 per capita \$1,878.08 per capita \$126.34 per capita \$47.20 per capita
5.0 PARKS Developed Parkland Park Facilities Harbour Parks Fleet	\$1,171.33 per capita \$510.26 per capita \$480.96 per capita \$141.29 per capita \$38.82 per capita
6.0 PUBLIC WORKS Buildings Land Fleet	\$460.57 per population & employment \$195.64 per population & employment \$22.05 per population & employment \$242.88 per population & employment
7.0 PARKING Parking Spaces Meters And Machines	\$37.13 per population & employment \$32.25 per population & employment \$4.88 per population & employment
8.0 TRANSIT SERVICES Buses Stops And Shelters Buildings	\$53.18 per population & employment \$25.65 per population & employment \$4.53 per population & employment \$23.00 per population & employment

V DEVELOPMENT-RELATED CAPITAL FORECAST

The *DCA* requires that the Council of a Town express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above 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 Town 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. DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the growth forecasts summarized in Section III and detailed in Appendix A, Town staff, in collaboration with the consultant has developed a development-related capital forecast, which sets out those projects that are required to service anticipated growth. For all general services, the capital plan covers the 10-year period from 2019 to 2028. As permitted by the *DCA* s. 5(1) 4., the development charge for the engineering services is based on a longer planning horizon.

One of the recommendations contained in this background study is for Council to adopt the development-related capital forecast developed for the purposes of the development charges calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the capital projects presented here as they will be needed to service the anticipated growth in the Town. It is, however, acknowledged that changes to the forecast presented here may occur through the Town'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 shows that the gross cost of the Town's capital forecast is estimated to be \$14.2 million. Subsidies in the amount of \$1.1 million have been identified to offset the cost of Parks and General Government, which has the effect of netting down the total capital program cost. The remaining \$13.1 million is identified as the total municipal cost brought forth for the development charges calculation.

TABLE 3

**TOWN OF MIDLAND
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR GENERAL SERVICES 2019 - 2028
(in \$000)**

Service	Gross Cost	Grants/ Subsidies	Municipal Cost	Total Net Capital Program									
				2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1.0 GENERAL GOVERNMENT	\$900.0	\$420.0	\$480.0	\$0.0	\$0.0	\$100.0	\$30.0	\$35.0	\$0.0	\$0.0	\$0.0	\$80.0	\$235.0
1.1 Growth Related Studies	\$900.0	\$420.0	\$480.0	\$0.0	\$0.0	\$100.0	\$30.0	\$35.0	\$0.0	\$0.0	\$0.0	\$80.0	\$235.0
2.0 LIBRARY	\$1,396.2	\$0.0	\$1,396.2	\$119.0	\$116.7	\$114.2	\$111.7	\$109.0	\$106.2	\$103.3	\$100.2	\$97.1	\$418.9
2.1 Recovery of Library Branch Expansion Debt	\$1,045.7	\$0.0	\$1,045.7	\$83.9	\$81.6	\$79.2	\$76.6	\$73.9	\$71.2	\$68.2	\$65.2	\$62.0	\$383.8
2.2 Library Materials	\$350.6	\$0.0	\$350.6	\$35.1	\$35.1	\$35.1	\$35.1	\$35.1	\$35.1	\$35.1	\$35.1	\$35.1	\$35.1
3.0 FIRE	\$57.7	\$0.0	\$57.7	\$25.0	\$0.0	\$0.0	\$0.0	\$32.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.1 Personal Equipment	\$32.7	\$0.0	\$32.7	\$0.0	\$0.0	\$0.0	\$0.0	\$32.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.2 Studies	\$25.0	\$0.0	\$25.0	\$25.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.0 POLICE	\$198.2	\$0.0	\$198.2	\$0.0	\$0.0	\$0.0	\$4.1	\$0.0	\$190.0	\$0.0	\$4.1	\$0.0	\$0.0
4.1 Buildings	\$190.0	\$0.0	\$190.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$190.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Personal Equipment	\$8.2	\$0.0	\$8.2	\$0.0	\$0.0	\$0.0	\$4.1	\$0.0	\$0.0	\$0.0	\$4.1	\$0.0	\$0.0
5.0 INDOOR RECREATION	\$2,196.0	\$0.0	\$2,196.0	\$312.9	\$332.4	\$353.2	\$375.2	\$398.7	\$423.6	\$0.0	\$0.0	\$0.0	\$0.0
5.1 Recovery of NSSRC Expansion Debt	\$2,196.0	\$0.0	\$2,196.0	\$312.9	\$332.4	\$353.2	\$375.2	\$398.7	\$423.6	\$0.0	\$0.0	\$0.0	\$0.0
6.0 PARKS	\$4,590.7	\$722.3	\$3,868.4	\$0.0	\$350.0	\$384.0	\$562.0	\$350.0	\$350.7	\$0.0	\$194.3	\$152.3	\$1,525.2
6.1 Park Facilities/Development	\$1,400.0	\$0.0	\$1,400.0	\$0.0	\$350.0	\$200.0	\$500.0	\$350.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.2 Vehicles	\$60.0	\$0.0	\$60.0	\$0.0	\$0.0	\$60.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.3 New Multi-Use Trails and Bike Paths in Parks	\$3,130.7	\$722.3	\$2,408.4	\$0.0	\$0.0	\$124.0	\$62.0	\$0.0	\$350.7	\$0.0	\$194.3	\$152.3	\$1,525.2
7.0 PUBLIC WORKS	\$3,793.6	\$0.0	\$3,793.6	\$210.7	\$206.7	\$202.6	\$198.3	\$193.8	\$189.2	\$184.4	\$179.4	\$174.2	\$2,054.4
7.1 Opeartions Complex Debt	\$3,793.6	\$0.0	\$3,793.6	\$210.7	\$206.7	\$202.6	\$198.3	\$193.8	\$189.2	\$184.4	\$179.4	\$174.2	\$2,054.4
8.0 PARKING	\$550.0	\$0.0	\$600.0	\$0.0	\$500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$100.0	\$0.0
8.1 Studies	\$50.0	\$0.0	\$50.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$50.0	\$0.0
8.2 Pay & Display Meters	\$500.0	\$0.0	\$550.0	\$0.0	\$500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$50.0	\$0.0
9.0 TRANSIT SERVICES	\$470.0	\$0.0	\$470.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$420.0	\$0.0	\$0.0	\$50.0	\$0.0
9.1 Fleet	\$420.0	\$0.0	\$420.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$420.0	\$0.0	\$0.0	\$0.0	\$0.0
9.2 Studies	\$50.0	\$0.0	\$50.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$50.0	\$0.0
TOTAL - 10 YEAR GENERAL SERVICES	\$14,152.5	\$1,142.3	\$13,060.2	\$667.6	\$1,505.8	\$1,154.0	\$1,281.3	\$1,119.2	\$1,679.7	\$287.7	\$478.0	\$653.5	\$4,233.5

Of this \$13.1 million net capital cost, 30 per cent, or \$3.9 million, is related to the Parks capital program. This includes new facilities such as wayfinding signage, as well as the development of new parks, and multi-use trails and bike paths.

The next largest capital program belongs to Public Works. This capital program totals \$3.8 million and recovers debt associated with the new operations complex.

Indoor recreation represents 17 per cent, or \$2.2 million of the capital program. This \$2.2 million is related to the debt recovery of the North Simcoe Sports and Recreation Centre.

The capital program for Library is recovering for the debt related to the library branch expansion and additional collection material acquisitions to preserve the historical level of service in Midland from the previous 10 years going forward. The program amounts to \$1.4 million.

The capital program associated with General Government relates to the provision of development-related studies and amounts to \$480,000 over the next 10 years. These studies include additional development charges studies, OP reviews and Growth Management Strategies, Parks and Recreation Master Plans, Harbour Study, Zoning by-law update and secondary plans.

The remainder of the Town's development-related capital program consists of nominal amounts for Fire (\$57,700), Police (\$198,200), Parking (\$600,000) and Transit Services (\$470,000).

The capital forecast incorporates those projects identified to be related to development anticipated in the next 10 years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see the following Section VI). Portions of the capital forecast may be related to the replacement of existing facilities, shares of projects that benefit the existing population, or growth anticipated to occur beyond the 2019-2028 planning period. In addition to these reductions, the amounts shown in Table 3 have not been reduced by 10 per cent for various general services as required by *s. 5 (1)* of the *DCA*.

After these reductions, the remaining development-related capital costs are brought forward to the development charges calculation. Further details on the capital plans for each individual service category are available in Appendix B.

C. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR ENGINEERING SERVICES

Table 4 provides the development-related capital recoveries for engineering services. The development-related costs associated with roads and related works, water services, and sanitary sewer are for the most part recovered on a Town-wide basis.

In Midland, the total engineering capital program from 2019-2041 is \$155.4 million. Roads and related projects account for 53 per cent, or \$82.4 million, of the total engineering capital program. Scheduled roads projects in the Town are based on the Transportation Master Plan currently being finalized and include road works, roadway studies and other works (such as new bike lanes, multi-use trails and sidewalks).

The sanitary sewer projects total over \$29.6 million. This program provides for the continued recovery of the cost to upgrade and expand the wastewater treatment plant, as well as for new UV systems, secondary clarifiers and a nutrient management facility at the Wastewater Treatment Centre.

Finally, the water projects add another \$43.4 million to the capital program, which is comprised water storage, supply, distribution, and other water related projects.

Details of the engineering services capital program are included in Appendix C.

D. TIFFIN BY THE BAY AREA-SPECIFIC CHARGE

An area-specific charge for the Tiffin by the Bay development has been calculated to recover for intersection improvements—at William Street and Pillsbury and Highway 12 and William Street—required to meet the needs of this development. The charge will only apply to residential development and has been in place since 2009.

Development-related capital costs have been determined for each project in the area and total \$465,046. Full details of the calculation of the charge can be found in Appendix D.

E. BALM BEACH ROAD EMPLOYMENT AREA-SPECIFIC CHARGE

A new area-specific development charge has also been calculated for the Balm Beach Road Employment Area in order to implement a servicing strategy recently approved

by Town Council. The area is located west of County Road 93 and along both sides of Balm Beach Road and along Sundowner Road located north of and forming a crescent street connection to Balm Beach Road.

The development charge eligible costs included in the charge amount to \$2.8 million and are to be recovered through separate charges for residential and non-residential development. Full details of the calculation of the charges can be found in Appendix E.

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TABLE 4

**TOWN OF MIDLAND
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR ENGINEERED SERVICES 2019 - 2041
(in \$000)**

Service	Gross Cost	Grants / Subsidies	Net Municipal Cost
1.0 ROADS & RELATED	\$82,421.5	\$10,359.7	\$72,061.7
1.1 Roadway Improvements and Studies	\$46,304.1	\$0.0	\$46,304.1
1.2 Intersection Improvements	\$13,499.7	\$0.0	\$13,499.7
1.3 New Multi-Use Paths in Roadways	\$2,926.2	\$0.0	\$2,926.2
1.4 New Cycling Lanes in Roadways	\$8,699.8	\$0.0	\$8,699.8
1.5 New Sidewalks in Roadways	\$632.0	\$0.0	\$632.0
1.6 Projects to be Funded as a Local Service (Non-DC Eligible)	\$10,359.7	\$10,359.7	\$0.0
2.0 SANITARY SEWERAGE	\$29,563.9	\$3,205.0	\$26,358.9
2.1 Prior Wastewater Treatment Plant Expansion	\$12,948.9	\$3,205.0	\$9,743.9
2.2 Projects Identified in Wastewater Master Plan	\$16,015.0	\$0.0	\$16,015.0
2.3 Studies	\$600.0	\$0.0	\$600.0
3.0 WATER SERVICES	\$43,366.8	\$0.0	\$43,366.8
3.1 Water Storage and Supply (Prior Oversized Projects)	\$5,117.8	\$0.0	\$5,117.8
3.2 Projects Identified in Water Master Plan (Timing Unknown)	\$38,249.0	\$0.0	\$38,249.0
TOTAL - ENGINEERED SERVICES CAPITAL PROGRAM	\$155,352.2	\$13,564.7	\$141,787.5

VI DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE *DEVELOPMENT CHARGES ACT*

This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. For all 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 accounts for interest earnings and borrowing costs are also discussed.

For residential development, an adjusted total per capita amount is applied to different housing types on the basis of average occupancy factors. For non-residential development, the calculated development charges rates are based on gross floor area (GFA) of building space.

It is noted that the calculation of the development charges does not include any provision for exemptions required under the *DCA*, for example, the exemption for enlargements of up to 50 per cent on existing industrial buildings. Such legislated exemptions, or other exemptions which Council may choose to provide, will result in a loss of development charges revenue for the affected types of development. Any such revenue loss may not be offset by increasing other portions of the calculated charge.

A. DEVELOPMENT CHARGES CALCULATION

A summary of the “unadjusted” residential and non-residential development charges for the Town-wide services is presented in Table 5. Further details of the calculation for each individual general service category are available in Appendix B.

1. General Services

The capital forecast for general services incorporates those projects identified to be related to development anticipated in the next 10 years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 5 shows that \$3.9 million of the capital forecast relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. These portions of capital costs would have to be funded from property taxes and other non-development charges revenue sources.

An additional share of \$2.6 million has been identified as available DC reserves and represents the revenues collected from previous DC by-laws. This portion has been netted out of the chargeable capital costs.

The *DCA, s. 5 (1) 8*, requires that development-related net capital costs for “soft” services be reduced by 10 per cent in calculating the applicable development charges for these services. The 10 per cent share of development-related net capital costs not included in the development charges calculations must be funded from non-development charges sources. In total, about \$434,500 is identified as the required 10 per cent reduction.

The remaining \$6.1 million is carried forward to the development charges calculation as a development-related cost. Of the development-related cost, \$5.7 million has been allocated to new residential development, and \$328,100 has been allocated to new non-residential development. This results in an unadjusted charge of \$1,594.45 per capita and \$2.50 per square metre for the provision of soft services.

2. Engineered Services

Table 6 displays the development-related capital forecast for Roads, Water, and Sanitary Sewer Services from 2019 to 2041. The net cost of the capital program amounts to \$141.8 million; however, \$1.6 million has been identified as funds available in the DC reserves and is removed from the development charges calculation. In addition, \$62.9 million of the works is deemed to benefit the existing population and, as such, is also removed from the development charges calculation. Another portion of the program that is not included in the DC calculation is the share of the works that is considered to provide benefit to development beyond the DC Study’s planning horizon. \$2.0 million is identified as the post-period benefit share.

The net capital cost after the discounts is \$75.3 million, of which \$45.2 million is allocated to benefit the future residential population and \$30.1 million is allocated to non-residential development. The resulting development charge is \$5,602.64 per capita and \$87.42 per square metre.

3. Adjusted Residential and Non-Residential Development Charge Rates

Final adjustments to the “unadjusted” development charges rates are made through a cash flow analysis for general services. The analysis, details of which are included in Appendix B for general services, and Appendix C for engineered services, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charges receipts for each service category. Table 7 summarizes the results of the cash flow adjustments for the residential development charges rates. As shown, the adjusted per capita rate increases by \$315.58, from \$7,197.09 per capita to \$7,512.67 per capita after the cash flow analysis. Table 7 also provides the calculated rates by residential unit with the total charge per unit ranging from a high

of \$16,751 for a fully serviced low density unit to a low of \$11,073 for a high density unit. The medium density charge is calculated at \$15,627.

The non-residential charge also experiences an increase after cash flow considerations from \$89.92 to \$90.98 per square metre. This is displayed on Table 8.

**B. COMPARISON OF 2019 NEWLY CALCULATED DEVELOPMENT CHARGES
WITH CHARGES CURRENTLY IN FORCE IN MIDLAND**

Tables 9 and 10 present a comparison of the newly calculated residential and non-residential development charges with currently imposed development charge rates. It demonstrates that the residential development charge rate for a low density unit increases by \$637 per unit, or 4 per cent.

The current development charges rate for non-residential development will increase by \$57.52 per square metre, from \$33.46 to \$90.98 per square metre, or 172 per cent.

TOWN OF MIDLAND
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES

10 Year Growth in Population in New Units	3,600
10 Year Growth in Square Metres	131,260

Service	Development-Related Capital Program (2019 - 2028)						Residential Share		Non-Residential Share	
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Required Service Discount (\$000)	Available DC Reserves (\$000)	Post Period Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	(\$000)	%	(\$000)
	1.0 GENERAL GOVERNMENT	\$480.0	\$205.0	\$27.5	\$153.0	\$0.0	\$94.5	63%	\$59.5	37%
Unadjusted Development Charge Per Capita								\$16.54		
Unadjusted Development Charge Per Sq.M										\$0.27
2.0 LIBRARY	\$1,396.2	\$0.0	\$35.1	\$365.0	\$0.0	\$996.1	100%	\$996.1	0%	\$0.00
Unadjusted Development Charge Per Capita								\$276.71		
Unadjusted Development Charge Per Sq.M										\$0.00
3.0 FIRE	\$57.7	\$0.0	\$0.0	\$11.0	\$0.0	\$46.7	63%	\$29.4	37%	\$17.27
Unadjusted Development Charge Per Capita								\$8.17		
Unadjusted Development Charge Per Sq.M										\$0.13
4.0 POLICE	\$198.2	\$0.0	\$0.0	\$73.3	\$0.0	\$124.9	63%	\$78.7	37%	\$46.20
Unadjusted Development Charge Per Capita								\$21.85		
Unadjusted Development Charge Per Sq.M										\$0.35
5.0 INDOOR RECREATION	\$2,196.0	\$0.0	\$0.0	\$825.8	\$0.0	\$1,370.2	100%	\$1,370.2	0%	\$0.00
Unadjusted Development Charge Per Capita								\$380.61		
Unadjusted Development Charge Per Sq.M										\$0.00
6.0 PARKS	\$3,868.4	\$449.0	\$341.9	\$262.5	\$0.0	\$2,815.0	100%	\$2,815.0	0%	\$0.00
Unadjusted Development Charge Per Capita								\$781.95		
Unadjusted Development Charge Per Sq.M										\$0.00
7.0 PUBLIC WORKS	\$3,793.6	\$2,954.0	\$0.0	\$694.6	\$0.0	\$145.0	63%	\$91.4	37%	\$53.66
Unadjusted Development Charge Per Capita								\$25.38		
Unadjusted Development Charge Per Sq.M										\$0.41
8.0 PARKING	\$550.0	\$250.0	\$30.0	\$212.8	\$0.0	\$57.2	63%	\$36.0	37%	\$21.17
Unadjusted Development Charge Per Capita								\$10.01		
Unadjusted Development Charge Per Sq.M										\$0.16
9.0 TRANSIT SERVICES	\$470.0	\$0.0	\$0.0	\$51.5	\$0.0	\$418.5	63%	\$263.6	37%	\$154.84
Unadjusted Development Charge Per Capita								\$73.23		
Unadjusted Development Charge Per Sq.M										\$1.18
TOTAL 10-YEAR GENERAL SERVICES	\$13,010.2	\$3,858.0	\$434.5	\$2,649.6	\$0.0	\$6,068.1		\$5,740.0		\$328.1
Unadjusted Development Charge Per Capita								\$1,594.45		
Unadjusted Development Charge Per Sq.M										\$2.50

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TABLE 6

TOWN OF MIDLAND
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR ENGINEERED SERVICES

Ultimate Year Growth in Population in New Units	8,059
Employment Growth	5,474
Ultimate Growth in Square Meters	344,290

Service	Development-Related Capital Program (2019 - 2041)					Residential Share		Non-Residential Share	
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Available DC Reserves (\$000)	Post-Period Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	(\$000)	%	(\$000)
1.0 ROADS & RELATED	\$72,061.7	\$34,419.8	\$757.3	\$0.0	\$36,884.7	60%	\$22,130.8	40%	\$14,753.87
Development Charge Per Capita							\$2,746.10		
Development Charge Per Square Metre									\$42.85
2.0 SANITARY SEWERAGE	\$26,358.9	\$12,633.9	\$395.5	\$2,049.9	\$11,279.6	60%	\$6,767.7	40%	\$4,511.83
Development Charge Per Capita							\$839.77		
Development Charge Per Square Metre									\$13.10
3.0 WATER SERVICES	\$43,366.8	\$15,850.1	\$428.1	\$0.0	\$27,088.6	60%	\$16,253.2	40%	\$10,835.45
Development Charge Per Capita							\$2,016.77		
Development Charge Per Square Metre									\$31.47
TOTAL ENGINEERED SERVICES	\$141,787.5	\$62,903.8	\$1,580.9	\$2,049.9	\$75,252.9		\$45,151.7		\$30,101.1
Development Charge Per Capita							\$5,602.64		
Development Charge Per Square Metre									\$87.42

TABLE 7

**TOWN OF MIDLAND
TOWN-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE**

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)			Percentage of Charge
			Low Density	Medium Density	High Density	
General Government	\$16.54	\$16.76	\$37	\$35	\$25	0.2%
Library	\$276.71	\$425.41	\$949	\$885	\$627	5.7%
Fire	\$8.17	\$8.98	\$20	\$19	\$13	0.1%
Police	\$21.85	\$22.22	\$50	\$46	\$33	0.3%
Indoor Recreation	\$380.61	\$498.05	\$1,111	\$1,036	\$734	6.6%
Parks	\$781.95	\$766.45	\$1,709	\$1,594	\$1,130	10.2%
Public Works	\$25.38	\$87.15	\$194	\$181	\$128	1.2%
Parking	\$10.01	\$11.34	\$25	\$24	\$17	0.2%
Transit Services	\$73.23	\$73.67	\$164	\$153	\$109	1.0%
Subtotal General Services	\$1,594.45	\$1,910.03	\$4,259	\$3,973	\$2,816	25.4%
Roads & Related	\$2,746.10	\$2,746.10	\$6,123	\$5,712	\$4,047	36.6%
Sanitary Sewerage	\$839.77	\$839.77	\$1,872	\$1,747	\$1,238	11.2%
Water Services	\$2,016.77	\$2,016.77	\$4,497	\$4,195	\$2,972	26.8%
Subtotal Engineered Services	\$5,602.65	\$5,602.65	\$12,492	\$11,654	\$8,257	74.6%
TOTAL CHARGE PER UNIT	\$7,197.09	\$7,512.67	\$16,751	\$15,627	\$11,073	100.0%
(1) Based on Persons Per Unit Of:			2.23	2.08	1.47	

TABLE 8

**TOWN OF MIDLAND
TOWN-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE**

Service	Non-Residential		Percentage of Charge
	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	
General Government	\$0.27	\$0.27	0.3%
Library	\$0.00	\$0.00	0.0%
Fire	\$0.13	\$0.15	0.2%
Police	\$0.35	\$0.36	0.4%
Indoor Recreation	\$0.00	\$0.00	0.0%
Parks	\$0.00	\$0.00	0.0%
Public Works	\$0.41	\$1.41	1.5%
Parking	\$0.16	\$0.18	0.2%
Transit Services	\$1.18	\$1.19	1.3%
Subtotal General Services	\$2.50	\$3.56	3.9%
Roads & Related	\$42.85	\$42.85	47.1%
Sanitary Sewerage	\$13.10	\$13.10	14.4%
Water Services	\$31.47	\$31.47	34.6%
Subtotal Engineered Services	\$87.42	\$87.42	96.1%
TOTAL CHARGE PER SQUARE METRE	\$89.92	\$90.98	100.0%

TABLE 9

**TOWN OF MIDLAND
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES**

REVISED RATES AS OF JUNE 2019

Service	Current Low Density Charge	Calculated Low Density Charge	Difference in Charge	
General Government	\$395	\$37	(\$358)	-91%
Library	\$1,926	\$949	(\$977)	-51%
Fire	\$158	\$20	(\$138)	-87%
Police	\$106	\$50	(\$56)	-53%
Indoor Recreation	\$4,674	\$1,111	(\$3,563)	-76%
Parks	\$1,628	\$1,709	\$81	5%
Public Works	\$958	\$194	(\$764)	-80%
Parking	\$0	\$25	\$25	N/A
Transit Services	\$86	\$164	\$78	91%
Subtotal General Services	\$9,931	\$4,259	(\$5,672)	-57%
Roads & Related	\$2,391	\$6,123	\$3,732	156%
Sanitary Sewerage	\$1,746	\$1,872	\$126	7%
Water Services	\$2,046	\$4,497	\$2,451	120%
Subtotal Engineered Services	\$6,183	\$12,492	\$6,309	102%
TOTAL CHARGE PER UNIT	\$16,114	\$16,751	\$637	4%

TABLE 10

**TOWN OF MIDLAND
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES**

REVISED RATES AS OF JUNE 2019

Service	Current Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge	
General Government	\$1.65	\$0.27	(\$1.38)	-84%
Library	\$0.00	\$0.00	\$0.00	0%
Fire	\$0.66	\$0.15	(\$0.51)	-77%
Police	\$0.45	\$0.36	(\$0.09)	-20%
Indoor Recreation	\$0.00	\$0.00	\$0.00	0%
Parks	\$0.00	\$0.00	\$0.00	0%
Public Works	\$3.99	\$1.41	(\$2.58)	-65%
Parking	\$0.00	\$0.18	\$0.18	N/A
Transit Services	\$0.36	\$1.19	\$0.83	231%
Subtotal General Services	\$7.11	\$3.56	(\$3.55)	-50%
Roads & Related	\$10.19	\$42.85	\$32.66	321%
Sanitary Sewerage	\$7.44	\$13.10	\$5.66	76%
Water Services	\$8.72	\$31.47	\$22.75	261%
Subtotal Engineered Services	\$26.35	\$87.42	\$61.07	232%
TOTAL CHARGE PER SQUARE METRE	\$33.46	\$90.98	\$57.52	172%

VII LONG-TERM CAPITAL AND OPERATING COSTS

This section provides a brief examination of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the development charges by-law. This examination is required as one of the features of the *Development Charges Act, 1997*.

A. NET OPERATING COSTS FOR THE TOWN'S SERVICES TO INCREASE OVER THE FORECAST PERIOD

Table 11 summarizes the estimated increase in net operating costs that the Town will experience for additions associated with the planned capital program. The estimated changes in net operating costs are based on the financial information from the Town (additional details are included in Appendix F).

As shown in Table 11, by 2028 the Town's net operating costs are estimated to increase by about \$362,200. The most significant portion of this increase relates to the hiring of additional police officers. The construction of the new parks facilities and additional buses are also projected to impact on the annual operating budget.

B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGES SOURCES TOTALS \$4.3 MILLION

As discussed in Section VI, Table 11 also summarizes the components of the development-related capital forecast that will require funding from non-development charges sources. Of the \$13.0 million net capital forecast, about \$4.3 million will need to be financed from non-development charges sources over the next 10 years. This includes about \$434,500 in respect of the 10 per cent discount required by the *DCA* for "soft" services and about \$3.9 million for shares of projects related to capital replacement and for non-growth shares of projects that provide benefit to the existing community.

TABLE 11

**TOWN OF MIDLAND
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS FOR GENERAL SERVICES
(in thousands of constant dollars)**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Net Operating Impacts (1)											
General Government	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Library	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fire	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Police	\$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	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Parks	\$0.0	\$17.5	\$36.7	\$64.8	\$82.3	\$99.8	\$99.8	\$109.5	\$117.2	\$193.4	\$193.4
Public Works	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Parking	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Transit Services	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0
Roads & Related	\$11.1	\$22.2	\$33.2	\$44.3	\$55.4	\$66.5	\$77.5	\$88.6	\$99.7	\$110.8	\$110.8
NET OPERATING IMPACTS	\$69.1	\$97.7	\$127.9	\$167.1	\$195.7	\$224.3	\$235.4	\$256.2	\$274.9	\$362.2	n/a
Long-term Capital Impact (1)											
Total Net Cost	\$667.6	\$1,505.8	\$1,154.0	\$1,281.3	\$1,119.2	\$1,679.7	\$287.7	\$478.0	\$603.5	\$4,233.5	\$13,010.2
Net Cost From Development Charges	\$56.6	\$141.3	\$545.4	\$888.4	\$797.1	\$1,248.2	\$99.8	\$144.5	\$182.3	\$1,964.6	\$6,068.1
Prior Growth Share from DC Reserve Balances (2)	\$443.4	\$890.1	\$304.5	\$120.5	\$129.2	\$166.7	\$40.8	\$39.7	\$115.1	\$399.7	\$2,649.6
Portion for Post-2028 Development (3)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Funding From Non-DC Sources											
Discount Portion	\$3.5	\$63.5	\$41.4	\$56.6	\$42.0	\$29.8	\$3.5	\$8.4	\$16.3	\$169.5	\$434.5
Replacement	\$164.1	\$411.0	\$262.7	\$215.9	\$150.9	\$235.0	\$143.6	\$285.4	\$289.8	\$1,699.7	\$3,858.0
FUNDING FROM NON-DC SOURCES	\$167.6	\$474.5	\$304.1	\$272.5	\$192.9	\$264.8	\$147.1	\$293.7	\$306.1	\$1,869.2	\$4,292.5

*Notes:**(1) See Appendix H**(2) Existing development charge reserve fund balances collected from growth prior to 2019 are applied to fund initial projects in development-related capital forecast**(3) Post 2028 development-related net capital costs may be eligible for development charge funding in future DC by-laws*

VIII ASSET MANAGEMENT PLAN

The *DCA* now requires that municipalities complete an Asset Management Plan before passing a development charges by-law. 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. Further details relating to the Asset Management Plan are discussed in Appendix G

A. ANNUAL CAPITAL PROVISIONS WILL REACH \$223,200 BY 2029 AND \$2.8 MILLION BY 2042

Tables 12 and 13 summarize the annual capital provisions required to replace the development eligible and ineligible costs associated with the capital infrastructure identified in the DC Background Study. This estimate is based on information obtained through discussions with municipal staff regarding useful life assumptions and the capital cost of acquiring and/or replacing each asset.

Table 12 illustrates that by 2029 the Town will need to fund an additional \$223,200 per annum in order to properly fund the full life cycle costs of the new general services assets supported under the proposed Development Charges By-law. Table 13 illustrates that by 2042, the Town will be required to fund approximately \$2.8 million per annum in order to fund the full life cycle costs of the engineered services assets. The years 2029 and 2042 have been included to calculate the annual contribution for the 2019-2028 and 2019-2041 periods as the expenditures in 2028 and 2041 will not trigger asset management contributions until 2029 and 2042.

The calculated annual funding provision should be considered in the context of the Town's projected growth. Over the next 10 years, the Town is projected to increase by 3,009 people. By 2041, the Town's population will increase by approximately 8,175 people. In addition, the Town will add 2,087 new employees by 2028 and 5,474 employees by 2041. This results in approximately 131,260 square metres and 344,290 square metres of additional non-residential building space by 2028 and 2041 respectively.

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 to be funded under the proposed Development Charges By-law.

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

B. TRANSIT ASSET MANAGEMENT IN THE TOWN

The Town of Midland currently operates two routes throughout the week serviced by 4 passenger buses. In addition, the transit system included 4 vans, 14 shelters and bus bays at the operations centre (see Appendix B.9). The Town aims to maintain the transit fleet in state of good repair through regular maintenance and inspections to achieve public transit safety and reliability standards. The Town also completes regular reviews of its transit service and has recently completed a Transit Operational Review in 2018.

The Town is currently planning to add an additional bus in 2024 to increase service delivery. This is reflected in the Transit Services capital program. The full cost of the growth related capital program for Transit Services is \$418,485 (see Appendix B.9).

The additional bus is expected to have a yearly net operating impact of \$58,000 per year by 2028 (see Appendix H). In addition, by 2029 the Town will be required to contribute an additional \$23,500 in DC related funds for future capital replacement of growth-related capital in this study (see Appendix G). The Town maintains that the transit system will be financially sustainable through yearly capital and operating budget reviews.

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

TABLE 12

**TOWN OF MIDLAND
SUMMARY OF ASSET MANAGEMENT PROVISIONS FOR GENERAL SERVICES**

	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2029	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Services				
General Government	\$275,000	\$625,000	\$0	\$0
Library	\$1,396,200	\$0	\$23,600	\$0
Fire	\$57,700	\$0	\$2,400	\$0
Police	\$198,200	\$0	\$4,800	\$0
Indoor Recreation	\$2,196,000	\$0	\$0	\$0
Parks	\$3,419,400	\$1,171,300	\$158,500	\$55,100
Public Works	\$839,700	\$2,954,000	\$0	\$0
Parking	\$300,000	\$250,000	\$10,400	\$10,400
Transit Services	\$470,000	\$0	\$23,500	\$0
Total	\$9,152,200	\$5,000,300	\$223,200	\$65,500

TABLE 13

**TOWN OF MIDLAND
SUMMARY OF ASSET MANAGEMENT PROVISIONS FOR ENGINEERED SERVICES**

	2019 - 2041 Capital Program		Calculated AMP Annual Provision by 2042	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Services				
Roads & Related	\$37,641,900	\$44,779,600	\$2,047,200	\$2,478,600
Sanitary Sewerage	\$11,675,100	\$17,888,800	\$266,100	\$410,400
Water Services	\$27,516,800	\$15,850,100	\$514,900	\$232,500
Total	\$76,833,800	\$78,518,500	\$2,828,200	\$3,121,500

IX DEVELOPMENT CHARGES ADMINISTRATION AND CONSIDERATIONS

A. DEVELOPMENT CHARGES ADMINISTRATION

Many of the administrative requirements of the *DCA* will be similar to those presently followed by the Town in terms of collection practices. However, changes will likely be required in the use of and reporting on the new development charges. In this regard:

- It is recommended that the current practices regarding collection of development charges and by-law administration continue to the extent possible;
- As required under the *DCA*, the Town should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption;
- It is recommended that the Town continue to report policies consistent with the requirements of the *DCA*;
- It is recommended that the by-laws permit the payment of a development charge in cash or through services-in-lieu agreements. The municipality is not obligated to enter services-in-lieu agreements; and
- It is recommended that Council adopt the development-related capital forecast included in this background study, subject to annual review through the Town's normal capital budget process.

B. CONSIDERATION OF AREA RATING

In accordance with the *DCA*, Council must give consideration to the use of area rating, also known as area-specific development charges, as part of the DC Background Study. As part of the Town's 2019 DC update, the appropriateness of implementing area-specific development charges for various Town services was examined and discussed with Council at a meeting on August 12th, 2019.

The *DCA* permits the Town to designate, in its DC by-law, the areas where development charges shall be imposed. The charges may apply to all lands in the Town or to other designated development areas as specified in the DC by-law.

The following was considered with respect to area-specific development charges:

- Is the use of area-specific charges appropriate for some or all services?
- Are there any data limitations with calculating an area-specific development charge?

Area-specific development charges are typically considered when there is a clear benefit to a particular area (including the population or population and employment), and have been implemented in mostly stand alone greenfield developments.

Two area-specific charges have been calculated to recover for roads capital projects in the Tiffin by the Bay and Balm Beach areas. Only a residential charge will be levied against future growth in Tiffin by the Bay as no non-residential growth will occur in this area. Full details of the area-specific charges can be found in Appendix D and Appendix E, including maps of the area.

C. LOCAL SERVICE DEFINITIONS

The 2019 DC Background Study also includes definitions to determine the eligible capital costs for inclusion in the development charges calculation for the Town. The local service definitions have been reviewed by Town staff and are set out in Appendix I.

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A

DEVELOPMENT FORECAST

This appendix summarizes the development forecasts used to prepare the 2019 Development Charges Background Study for the Town of Midland.

The *Development Charges Act (DCA)* requires the Town 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 Town to prepare a reasonable development-related capital program.

The development forecasts are consistent with the long-term population and employment targets established for the Town by Schedule 7 to the *Growth Plan for the Greater Golden Horseshoe: a 2031* population of 22,500; and 2031 employment of 13,800 jobs.

The forecast results are presented below in the following tables:

Table 1	Historical Population, Households & Employment
Table 2	Historical Housing Completions by Unit Type
Table 3	Historical Building Permits for New Units by Unit Type
Table 4	Historical Households by Period of Construction Showing Household Size
Table 5	Population, Household & Employment Forecast Summary (1)
Table 6	Population, Household & Employment Growth Summary (2)
Table 7	Growth in Occupied Dwellings by Unit Type
Table 8	Forecast Population in New Households by Unit Type
Table 9	Non-Residential Space Forecast

A. KEY ASSUMPTIONS, DEFINITIONS AND HISTORICAL TRENDS

Historical population and employment set out in this appendix are used to determine the average service levels attained in the Town over the last 10 years (2009-2018).

Population figures shown in the development forecast represent mid-year estimates. Population figures account for population recorded in the Census (“Census population”). This definition does not include the Census net under-coverage (4.82 per cent of the Census population in Simcoe County) which represents those who were

missed or double-counted by the Census and included in the Town’s 2031 population target in the *Growth Plan*.

Historical data indicates that the Town’s population has increased by about 980 persons over the last 10 years—from 16,426 in 2008 to 17,410 in 2018. Residential development has grown at a faster rate than population over the same period—from 7,002 occupied dwellings in 2008 to 7,781 occupied dwellings in 2018. A significant portion of this residential growth has taken place over the last 3 years (see Tables 1 and 2).

“Place of Work Employment” figures in the forecasts record where people work rather than their place of residence. It includes all employment with a regular or no fixed 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 2 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 but is also influenced by tourism. Jobs under this category typically locate in land zoned for commercial and institutional uses, but may also be located in mixed-use areas.
- Employment Land Employment refers to traditional industrial-type employment primarily accommodated in low-rise industrial buildings in business parks and 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.

Historical employment figures are shown in Table 1. There are currently about 11,013 jobs in the Town. Overall employment fell between 2006 and 2016, in part the result of the 2008 financial crisis and subsequent recession. As a result, the Town’s activity rate (the ratio of employment to population) has fallen from 69.7 per cent in 2006 to 63.1 per cent in 2016.

Details on new housing growth in the Town are provided in Table 2. The overall market share of single and semi-detached units over the last decade has been 78 per cent, though the number of units completed in any given year varies. The market share of row houses and apartments over the same period has been 9 per cent and 13 per cent respectively. As with the single and semi-detached unit types, the number of

completions in any given year is variable, though there has been a marked increase in the number of row units constructed in recent years. Table 3 shows that building permits for new housing have followed a similar trend to housing completions.

Table 4 provides details on historical occupancy patterns for permanently occupied households in Midland. The overall average occupancy level in the Town for single and semi-detached units is 2.43 persons per housing unit (PPU). Occupancy levels for recently constructed units are generally higher than the overall average though sample sizes, especially for rowhouses and apartments, are small.

B. FORECAST METHOD AND RESULTS

A 10-year development forecast, from 2019 to 2028, has been used for all development charge eligible general services in the Town. For engineered services of Roads & Related, Sanitary Sewage, and Water Services, a long-term forecast from 2019 to 2041 has been prepared.

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* as well as the *population in new housing units* is required.

- The *population growth*¹ 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 m² 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 floorspace* in the Town.

1. Residential Forecast

The residential development forecast incorporates anticipated growth in population and occupied households by type. As shown in Table 5, the Town's population is

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

forecast to grow from 17,410 in 2018 to 20,419 in 2028. Occupied dwellings are forecast to increase by 1,700 units over the next 10 years.

Although the majority of new housing (55 per cent) is anticipated to be single and semi-detached dwelling units (see Table 7) a shift towards medium and higher density built form is anticipated over the forecast period. This shift is in keeping with known development applications and Provincial and local land use planning policies that seek to promote intensification and redevelopment.

Population growth in the new units is estimated by applying the following PPU's to the housing unit forecast: 2.23 for single and semi-detached units; 2.08 for rows; and 1.47 for apartments. The assumptions are informed by the historical occupancy patterns for permanently occupied units set out in Table 4.

The total forecast population in new housing units over the 2019 to 2028 period is 3,600, of which 2,100 (58 per cent) will be single and semi-detached housing types. The forecast population in new units between 2019 and 2041 is 8,059 (see Table 8).

2. Non-Residential Forecast

Employment in the Town, after a long period of decline, is forecast to increase steadily between 2019 and 2028, at about 209 jobs per year and slightly above the rate of population growth (see Tables 5 and 6). About 57 per cent of new jobs will be population-related, mostly retail, education, healthcare, local government and other jobs that primarily serve the local population (see Table 9).

An assumed floor space per worker (FSW) is applied to the employment forecast in order to project growth in new non-residential space in the Town. The FSWs used are:

- 50 m² per employee for Population-Related Employment
- 80 m² per employee for Employment Land Employment

The overall growth in new non-residential building space across the Town between 2019 and 2028 is 131,260 m², of which 59,500 m² will be for population-related activities and 71,760 m² will be on employment lands (Table 9).

The total growth in new non-residential building space between 2019 and 2041 across the Town is 344,290 m², of which 156,050 m² will be for population-related activities and 188,240 m² will be on employment lands.

Forecasts of development in areas subject to area specific development charges are set out in Appendices D and E.

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 1
Historical Population, Households & Employment

Mid-Year	Census Population	Population Growth	Occupied Households	Household Growth	Household Size (PPU)	Place of Work Employment	Employment Growth	Activity Rate
1996	16,347		5,895		2.77	9,860		60.3%
1997	16,320	-27	6,021	126	2.71	9,955	95	61.0%
1998	16,293	-27	6,149	128	2.65	10,051	96	61.7%
1999	16,266	-27	6,280	131	2.59	10,148	97	62.4%
2000	16,239	-27	6,414	134	2.53	10,246	98	63.1%
2001	16,214	-25	6,550	136	2.48	10,344	98	63.8%
2002	16,237	23	6,618	68	2.45	10,544	200	64.9%
2003	16,260	23	6,687	69	2.43	10,748	204	66.1%
2004	16,283	23	6,756	69	2.41	10,956	208	67.3%
2005	16,306	23	6,826	70	2.39	11,168	212	68.5%
2006	16,330	24	6,897	71	2.37	11,383	215	69.7%
2007	16,378	48	6,949	52	2.36	11,351	-32	69.3%
2008	16,426	48	7,002	53	2.35	11,319	-32	68.9%
2009	16,474	48	7,055	53	2.34	11,287	-32	68.5%
2010	16,523	49	7,108	53	2.32	11,255	-32	68.1%
2011	16,572	49	7,162	54	2.31	11,223	-32	67.7%
2012	16,630	58	7,204	42	2.31	11,103	-120	66.8%
2013	16,688	58	7,246	42	2.30	10,985	-118	65.8%
2014	16,746	58	7,288	42	2.30	10,868	-117	64.9%
2015	16,805	59	7,331	43	2.29	10,752	-116	64.0%
2016	16,864	59	7,374	43	2.29	10,638	-114	63.1%
2017	17,135	271	7,581	207	2.26	10,824	186	63.2%
2018	17,410	275	7,781	200	2.24	11,013	189	63.3%

Source: Statistics Canada, Census of Canada

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 2
Historical Housing Completions By Unit Type

Year	New Units			Total
	Singles/Semis	Rows	Apartments	
2004	133	4	0	137
2005	151	5	62	218
2006	220	29	2	251
2007	139	6	0	145
2008	146	51	0	197
2009	101	14	0	115
2010	101	6	92	199
2011	35	0	0	35
2012	36	0	0	36
2013	22	0	0	22
2014	52	5	1	58
2015	90	11	0	101
2016	136	9	55	200
2017	163	49	1	213
2018	171	16	0	187
Total	1,696	205	213	2,114
<i>10-Year Average</i>	<i>91</i>	<i>11</i>	<i>15</i>	<i>117</i>
<i>5-Year Average</i>	<i>122</i>	<i>18</i>	<i>11</i>	<i>152</i>

Year	Shares By Unit Type			Total
	Singles/Semis	Rows	Apartments	
2004	97%	3%	0%	100%
2005	69%	2%	28%	100%
2006	88%	12%	1%	100%
2007	96%	4%	0%	100%
2008	74%	26%	0%	100%
2009	88%	12%	0%	100%
2010	51%	3%	46%	100%
2011	100%	0%	0%	100%
2012	100%	0%	0%	100%
2013	100%	0%	0%	100%
2014	90%	9%	2%	100%
2015	89%	11%	0%	100%
2016	68%	5%	28%	100%
2017	77%	23%	0%	100%
2018	91%	9%	0%	100%
Total	80%	10%	10%	100%
<i>10-Year Average</i>	<i>78%</i>	<i>9%</i>	<i>13%</i>	<i>100%</i>
<i>5-Year Average</i>	<i>81%</i>	<i>12%</i>	<i>8%</i>	<i>100%</i>

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

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 3
Historical Building Permits For New Units By Unit Type

Year	New Units			Total
	Singles/Semis	Rows	Apartments	
2004	32	18	4	54
2005	45	27	0	72
2006	56	61	0	117
2007	55	0	142	197
2008	54	7	20	81
2009	24	0	0	24
2010	52	0	0	52
2011	28	0	0	28
2012	21	0	0	21
2013	13	5	10	28
2014	32	0	0	32
2015	44	7	0	51
2016	84	4	1	89
2017	34	0	3	37
Total	574	129	180	883
<i>10-Year Average</i>	<i>37</i>	<i>2</i>	<i>2</i>	<i>40</i>
<i>5-Year Average</i>	<i>49</i>	<i>3</i>	<i>1</i>	<i>52</i>

Year	Shares By Unit Type			Total
	Singles/Semis	Rows	Apartments	
2004	59%	33%	7%	100%
2005	63%	38%	0%	100%
2006	48%	52%	0%	100%
2007	28%	0%	72%	100%
2008	67%	9%	25%	100%
2009	100%	0%	0%	100%
2010	100%	0%	0%	100%
2011	100%	0%	0%	100%
2012	100%	0%	0%	100%
2013	46%	18%	36%	100%
2014	100%	0%	0%	100%
2015	86%	14%	0%	100%
2016	94%	4%	1%	100%
2017	92%	0%	8%	100%
Total	65%	15%	20%	100%

Source: Statistics Canada, Building Permit Data (data for 2018 unavailable)

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 4
Historical Households by Period of Construction Showing Household Size

	Period of Construction								Pre 2006	2006-2016	Total
	Pre 1970	1971-1980	1981-1990	1991-1995	1996-2001	2001-2006	2006-2011	2011-2016			
Singles & Semis											
Household Pop.	5,800	2,110	1,940	795	415	380	585	240	11,440	825	12,265
Households	2,420	825	790	315	150	185	255	115	4,685	370	5,055
Household Size	2.40	2.56	2.46	2.52	2.77	2.05	2.29	2.09	2.44	2.23	2.43
Rows											
Household Pop.	70	55	125	135	45	95	175	85	525	260	785
Households	40	25	60	70	25	40	75	50	260	125	385
Household Size	1.75	2.20	2.08	1.93	1.80	2.38	2.33	1.70	2.02	2.08	2.04
Apartments											
Household Pop.	1,800	620	275	150	95	85	140	0	3,025	140	3,165
Households	1,045	415	185	90	75	65	95	0	1,875	95	1,970
Household Size	1.72	1.49	1.49	1.67	1.27	1.31	1.47	0.00	1.61	1.47	1.61
All Units											
Household Pop.	7,670	2,785	2,340	1,080	555	560	900	325	14,990	1,225	16,215
Households	3,505	1,265	1,035	475	250	290	425	165	6,820	590	7,410
Household Size	2.19	2.20	2.26	2.27	2.22	1.93	2.12	1.97	2.20	2.08	2.19

Source: Statistics Canada, 2016 Census Special Run

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 5
Population, Household & Employment Forecast Summary

Mid-Year	Census Population	Occupied Households	Place of Work Employment	Household Size	Activity Rate
2016	16,864	7,374	10,638	2.29	63.1%
2017	17,135	7,581	10,824	2.26	63.2%
2018	17,410	7,781	11,013	2.24	63.3%
2019	17,690	7,959	11,206	2.22	63.3%
2020	17,974	8,129	11,402	2.21	63.4%
2021	18,263	8,299	11,602	2.20	63.5%
2022	18,556	8,469	11,805	2.19	63.6%
2023	18,854	8,639	12,012	2.18	63.7%
2024	19,157	8,809	12,222	2.17	63.8%
2025	19,465	8,979	12,436	2.17	63.9%
2026	19,778	9,149	12,654	2.16	64.0%
2027	20,096	9,319	12,875	2.16	64.1%
2028	20,419	9,489	13,100	2.15	64.2%
2029	20,747	9,659	13,329	2.15	64.2%
2030	21,080	9,829	13,562	2.14	64.3%
2031	21,415	9,999	13,800	2.14	64.4%
2032	21,812	10,169	14,056	2.14	64.4%
2033	22,216	10,339	14,316	2.15	64.4%
2034	22,628	10,509	14,581	2.15	64.4%
2035	23,047	10,679	14,851	2.16	64.4%
2036	23,474	10,849	15,127	2.16	64.4%
2037	23,882	11,019	15,390	2.17	64.4%
2038	24,297	11,189	15,657	2.17	64.4%
2039	24,719	11,359	15,929	2.18	64.4%
2040	25,148	11,529	16,206	2.18	64.4%
2041	25,585	11,699	16,487	2.19	64.4%

Source: Growth Plan for the Greater Golden Horseshoe, 2019, and Hemson Consulting Ltd.

TABLE 6
Population, Household & Employment Growth Summary

Mid-Year	Census Pop'n Growth	Occupied Households	Employment Growth
2016			
2017	271	213	186
2018	275	187	189
2019	280	170	193
2020	284	170	196
2021	289	170	200
2022	293	170	203
2023	298	170	207
2024	303	170	210
2025	308	170	214
2026	313	170	218
2027	318	170	221
2028	323	170	225
2029	328	170	229
2030	333	170	233
2031	335	170	238
2032	397	170	256
2033	404	170	260
2034	412	170	265
2035	419	170	270
2036	427	170	276
2037	408	170	263
2038	415	170	267
2039	422	170	272
2040	429	170	277
2041	437	170	281
2019-2028	3,009	1,700	2,087
2019-2041	8,175	3,910	5,474

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 7
Growth in Occupied Households by Unit Type

Mid-Year	Singles & Semi-Detached	Other Multiples	Apartments	Total New Households
2019	94	60	17	170
2020	94	60	17	170
2021	94	60	17	170
2022	94	60	17	170
2023	94	60	17	170
2024	94	60	17	170
2025	94	60	17	170
2026	94	60	17	170
2027	94	60	17	170
2028	94	60	17	170
2029	68	68	34	170
2030	68	68	34	170
2031	68	68	34	170
2032	68	68	34	170
2033	68	68	34	170
2034	68	68	34	170
2035	68	68	34	170
2036	68	68	34	170
2037	68	68	34	170
2038	68	68	34	170
2039	68	68	34	170
2040	68	68	34	170
2041	68	68	34	170
2019-2028	940	600	170	1,700
2019-2041	1,824	1,484	612	3,910

Source: Growth Plan for the Greater Golden Horseshoe and Town of Midland development pipeline

TABLE 8
Forecast Population in New Households by Unit Type*

Mid-Year	Singles & Semi-Detached	Other Multiples	Apartments	Total Population in New HH
2019	210	125	25	360
2020	210	125	25	360
2021	210	125	25	360
2022	210	125	25	360
2023	210	125	25	360
2024	210	125	25	360
2025	210	125	25	360
2026	210	125	25	360
2027	210	125	25	360
2028	210	125	25	360
2029	152	141	50	343
2030	152	141	50	343
2031	152	141	50	343
2032	152	141	50	343
2033	152	141	50	343
2034	152	141	50	343
2035	152	141	50	343
2036	152	141	50	343
2037	152	141	50	343
2038	152	141	50	343
2039	152	141	50	343
2040	152	141	50	343
2041	152	141	50	343
2019-2028	2,100	1,250	250	3,600
2019-2041	4,076	3,083	900	8,059

*Based on PPU's 2.23 2.08 1.47

TOWN OF MIDLAND 2019 DEVELOPMENT CHARGES STUDY

TABLE 9
Non-Residential Space Forecast

Employment Density Assumptions

Population-Related Employment 50 m² per employee

Employment Land Employment 80 m² per employee

Mid-Year	Population-Related Employment			Employment Land Employment			Total		
	Total Emp	Emp Growth	Space (m ²)	Total Emp	Emp Growth	Space (m ²)	Total Emp	Emp Growth	Space (m ²)
2016	6,064			4,574			10,638		
2017	6,170	106	5,300	4,654	80	6,400	10,824	186	11,700
2018	6,277	107	5,350	4,736	82	6,560	11,013	189	11,910
2019	6,387	110	5,500	4,819	83	6,640	11,206	193	12,140
2020	6,499	112	5,600	4,903	84	6,720	11,402	196	12,320
2021	6,613	114	5,700	4,989	86	6,880	11,602	200	12,580
2022	6,729	116	5,800	5,076	87	6,960	11,805	203	12,760
2023	6,847	118	5,900	5,165	89	7,120	12,012	207	13,020
2024	6,967	120	6,000	5,255	90	7,200	12,222	210	13,200
2025	7,089	122	6,100	5,347	92	7,360	12,436	214	13,460
2026	7,213	124	6,200	5,441	94	7,520	12,654	218	13,720
2027	7,339	126	6,300	5,536	95	7,600	12,875	221	13,900
2028	7,467	128	6,400	5,633	97	7,760	13,100	225	14,160
2029	7,598	131	6,550	5,731	98	7,840	13,329	229	14,390
2030	7,730	132	6,600	5,832	101	8,080	13,562	233	14,680
2031	7,866	136	6,800	5,934	102	8,160	13,800	238	14,960
2032	8,012	146	7,300	6,044	110	8,800	14,056	256	16,100
2033	8,160	148	7,400	6,156	112	8,960	14,316	260	16,360
2034	8,311	151	7,550	6,270	114	9,120	14,581	265	16,670
2035	8,465	154	7,700	6,386	116	9,280	14,851	270	16,980
2036	8,622	157	7,850	6,505	119	9,520	15,127	276	17,370
2037	8,772	150	7,500	6,618	113	9,040	15,390	263	16,540
2038	8,924	152	7,600	6,733	115	9,200	15,657	267	16,800
2039	9,080	156	7,800	6,849	116	9,280	15,929	272	17,080
2040	9,237	157	7,850	6,969	120	9,600	16,206	277	17,450
2041	9,398	161	8,050	7,089	120	9,600	16,487	281	17,650
2019-2028		1,190	59,500		897	71,760		2,087	131,260
2019-2041		3,121	156,050		2,353	188,240		5,474	344,290

Source: Hemson Consulting Ltd.

APPENDIX B

**TOWN-WIDE GENERAL SERVICES
TECHNICAL APPENDIX**

APPENDIX B

TOWN-WIDE GENERAL SERVICES TECHNICAL APPENDIX

INTRODUCTION AND OVERVIEW

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the general services in the Town of Midland. Nine general services have been analysed:

Appendix B.1	General Government
Appendix B.2	Library Services
Appendix B.3	Fire Services
Appendix B.4	Police Services
Appendix B.5	Indoor Recreation
Appendix B.6	Parks
Appendix B.7	Public Works
Appendix B.8	Parking
Appendix B.9	Transit Services

Every service, with the exception of General Government, 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. The benefits of all of the general services listed above are deemed to be Town-wide for the purposes of calculating a development charge.

Table 1 Historical Service Levels

Table 1 presents the data used to determine the 10-year historical service level. The *DCA* and O. Reg. 82/98 require that development charges be set at a level no higher than the average service level provided in the Town over the 10-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 has been defined as 2009 to 2018.

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 per unit. 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 Town 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. 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, net of uncommitted excess capacity and the legislated 10 per cent reduction (for all applicable services). The maximum allowable is defined as the 10-year historical service level (expressed as \$/capita or \$/population & employment) multiplied by the forecast increase in net population, or net population and employment, over the planning period. The resulting figure is the value of capital infrastructure that must be constructed for that particular service so that the 10-year historical service level is maintained.

There is also a requirement in the *DCA* to consider “excess capacity” within the Town’s existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed its intent before or at the time the capacity was created, to recoup 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. Should uncommitted excess capacity exist, it is determined whether or not this capacity will be available to service new development and, if so, deductions to the maximum allowable funding envelope are required.

Table 2 2019 – 2028 Development-Related Capital Program & the Calculation of the Unadjusted Development Charge

The *DCA* requires that Council express its intent to provide future capital facilities to support future development. Based on the development forecasts presented in Appendix A, a development-related capital program which sets out the projects required to service anticipated development for the 10-year period from 2019 to 2028 has been developed.

To determine the share of the program that is eligible for recovery through development charges, the project costs are reduced by any anticipated grants or subsidies, “benefit to existing” shares and the legislated “10 per cent reduction” for any eligible services.

A benefit to existing share represents that portion of a capital project that will benefit the existing community. It could, for example, represent a portion of a new facility that, at least in part, replaces a facility that is demolished, redeployed or will otherwise not be available to serve its former function (a “replacement” share). The benefit to existing 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 shares will require funding from non-development charge sources, typically property taxes or user fees.

When calculating development charges, the development-related net capital cost must be reduced by 10 per cent for all services except protection services, transit services, engineered services, and services related to a highway (*DCA* s.5.(1)8.). The 10 per cent discount is therefore applied to General Government, Library Services, Parks, and Parking. As with benefit to existing shares, the 10 per cent mandatory reduction must be funded from non-development charge sources.

The capital program less any replacement or benefit to existing shares, and 10 per cent discount, yields the development-related costs. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2019 to 2028. For some of the services, a portion of the capital program will service development that will not occur until after 2028. This portion of the capital program is either deemed “pre-built” service capacity to be considered as committed excess capacity and recovered under future development or represent a service level increase that is ineligible for development charge recovery.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. 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 cost that is eligible for recovery against development over the period from 2019 to 2028.

Calculation of the Unadjusted Development Charge 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 when determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For General Government, Police and Fire Services, Public Works, Parking and Transit Services the development-related costs have been apportioned as 63 per cent residential and 37 per cent non-residential. This apportionment is based on the anticipated changes in population in new households and employment in new non-residential floorspace over the 10-year forecast period. The development-related costs associated with Library, Parks and Indoor Recreation have been allocated 100 per cent to the residential sector because the need for these services is generally driven entirely by residential development.

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

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 development charges rate that is 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 charges 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 3.5 per cent is used for

positive opening balances, and a rate of 5.5 per cent is used for negative opening 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

GENERAL GOVERNMENT

APPENDIX B.1

GENERAL GOVERNMENT

The *DCA* allows the cost of development-related studies to be included in the calculation of the development charges. Consistent with s.5(1)7 of the *DCA*, the eligible development-related capital costs for the provision of studies and permitted General Government expenditures and are reduced by 10 per cent when calculating the development charges. The benefits of General Government are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2019 – 2028 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The 10-year development-related capital plan for General Government includes two Development Charges Studies, an Official Plan Review and Growth Management Study, a Parks & Recreation Master Plan, a Harbour Study, and other development-related studies. The gross project costs total \$900,000. Developer funding has been identified for the CR93 North and CR93 South Secondary Plans, leaving \$480,000 as the net municipal cost of the overall program.

A total benefit to existing share of \$205,000 related to the Official Plan Review and GMS, Harbour Study, Parks & Recreation Master Plan, and Zoning By-law Update has been deducted, as well as the 10 per cent discount of \$27,500. Available DC reserve funds of \$153,007 are applied to help offset the cost of the program. No post-period shares have been identified for this service.

The remaining amount of \$94,493 is eligible for development charges funding in the 2019-2028 planning period. This amount is allocated 63 per cent to the residential sector and 37 per cent to non-residential development. This yields an unadjusted development charge of \$16.54 per capita and \$0.27 per square metre.

Table 2 Cash Flow Analysis

After cash flow, the residential calculated charge increases to \$16.76 per capita and the non-residential charge remains at \$0.27 per square metre. This is a reflection of the balanced timing of the capital program and development charges revenues.

The following table summarizes the calculation of the General Government development charge.

GENERAL GOVERNMENT SUMMARY					
2019 - 2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$900,000	\$94,493	\$16.54	\$0.27	\$16.76	\$0.27

**TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
GENERAL GOVERNMENT**

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	10% Reduction		Available DC Reserves	2019-2028	Post 2028
1.0 GENERAL GOVERNMENT										
1.1 Growth-Related Studies										
1.1.1 Zoning By-Law Update	2021	\$ 100,000	\$ -	\$ 100,000	\$ 50,000	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
1.1.2 CR93 North Secondary Plan	2021	\$ 210,000	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.1.3 CR93 South Secondary Plan	2021	\$ 210,000	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.1.4 Harbour Study	2022	\$ 30,000	\$ -	\$ 30,000	\$ 15,000	\$ 1,500	\$ 13,500	\$ -	\$ 13,500	\$ -
1.1.5 Development Charges Study	2023	\$ 35,000	\$ -	\$ 35,000	\$ -	\$ 3,500	\$ 31,500	\$ 31,500	\$ -	\$ -
1.1.6 Parks and Recreation Master Plan	2027	\$ 80,000	\$ -	\$ 80,000	\$ 40,000	\$ 4,000	\$ 36,000	\$ 31,507	\$ 4,493	\$ -
1.1.7 Official Plan Review & Growth Management Strategy	2028	\$ 200,000	\$ -	\$ 200,000	\$ 100,000	\$ 10,000	\$ 90,000	\$ 90,000	\$ -	\$ -
1.1.8 Development Charges Study	2028	\$ 35,000	\$ -	\$ 35,000	\$ -	\$ 3,500	\$ 31,500	\$ -	\$ 31,500	\$ -
Subtotal Growth-Related Studies		\$ 900,000	\$ 420,000	\$ 480,000	\$ 205,000	\$ 27,500	\$ 247,500	\$ 153,007	\$ 94,493	\$ -
TOTAL GENERAL GOVERNMENT		\$ 900,000	\$ 420,000	\$ 480,000	\$ 205,000	\$ 27,500	\$ 247,500	\$ 153,007	\$ 94,493	\$ -

Residential Development Charge Calculation

Residential Share of 2019 - 2028 DC Eligible Costs	63%	\$59,531
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$16.54

Non-Residential Development Charge Calculation

Non-Residential Share of 2019 - 2028 DC Eligible Costs	37%	\$34,962
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.27

Reserve Fund Balance at December 31, 2018	\$153,007
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APPENDIX B.1
TABLE 2

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$6.1	\$12.6	(\$10.8)	(\$14.1)	(\$8.2)	(\$1.9)	\$4.9	\$12.1	\$16.4	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$0.0	\$0.0	\$28.4	\$8.5	\$0.0	\$0.0	\$0.0	\$0.0	\$2.8	\$19.8	\$59.5
- General Government: Inflated	\$0.0	\$0.0	\$29.5	\$9.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.3	\$23.7	\$65.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$6.0	\$6.2	\$6.3	\$6.4	\$6.5	\$6.7	\$6.8	\$6.9	\$7.1	\$7.2	\$66.1
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.2	\$0.4	(\$0.6)	(\$0.8)	(\$0.5)	(\$0.1)	\$0.2	\$0.4	\$0.6	(\$0.1)
- Interest on In-year Transactions	\$0.1	\$0.1	(\$0.6)	(\$0.1)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.5)	(\$0.4)
TOTAL REVENUE	\$6.1	\$6.5	\$6.1	\$5.7	\$5.9	\$6.3	\$6.8	\$7.2	\$7.6	\$7.3	\$65.6
CLOSING CASH BALANCE	\$6.1	\$12.6	(\$10.8)	(\$14.1)	(\$8.2)	(\$1.9)	\$4.9	\$12.1	\$16.4	(\$0.0)	

2019 Adjusted Charge Per Capita	\$16.76
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.1
TABLE 2

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$3.35	\$6.93	(\$6.98)	(\$9.05)	(\$5.66)	(\$1.95)	\$2.12	\$6.54	\$9.28	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$0.0	\$0.0	\$16.7	\$5.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.7	\$11.7	\$35.0
- General Government: Inflated	\$0.0	\$0.0	\$17.3	\$5.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.9	\$13.9	\$38.5
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	12,140	12,320	12,580	12,760	13,020	13,200	13,460	13,720	13,900	14,160	131,260
REVENUE											
- DC Receipts: Inflated	\$3.3	\$3.4	\$3.5	\$3.7	\$3.8	\$3.9	\$4.1	\$4.3	\$4.4	\$4.6	\$39.1
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	\$0.2	(\$0.4)	(\$0.5)	(\$0.3)	(\$0.1)	\$0.1	\$0.2	\$0.3	(\$0.3)
- Interest on In-year Transactions	\$0.1	\$0.1	(\$0.4)	(\$0.0)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.0	(\$0.3)	(\$0.2)
TOTAL REVENUE	\$3.3	\$3.6	\$3.4	\$3.2	\$3.4	\$3.7	\$4.1	\$4.4	\$4.7	\$4.7	\$38.5
CLOSING CASH BALANCE	\$3.3	\$6.9	(\$7.0)	(\$9.0)	(\$5.7)	(\$2.0)	\$2.1	\$6.5	\$9.3	(\$0.0)	

2019 Adjusted Charge Per Square Metre	\$0.27
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.2

LIBRARY

APPENDIX B.2

LIBRARY SERVICES

The Town provides Library Services from one branch located on King Street. The library provides a wide range of resources in a variety of formats as well as a number of programs for the residents of Midland. The benefits of Library Services are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

Table 1 displays the Library's 10-year historical inventory for buildings, land, materials, and furniture and equipment (excluding personal computer equipment). The building space amounts to 26,802 square feet and is valued at \$10.2 million. The library building occupies approximately 0.10 hectares of land worth \$75,500. The collection materials are valued at \$1.8 million and the furniture and equipment associated with the library branch is valued at \$1.7 million.

The 2018 full replacement value of the inventory of capital assets amounts to \$13.7 million and the 10-year historical average service level is \$785.88 per capita.

The historical service level multiplied by the 10-year forecast of population growth results in a 10-year maximum allowable funding envelope of \$2.4 million (\$785.88 per capita x 3,009 net population growth). Library services must be reduced by 10 per cent as required under the *DCA*. The 10 per cent reduction amounts to approximately \$236,471 and is netted off of the maximum allowable funding envelope.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Library Services as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

The discounted maximum allowable funding envelope brought forward to the DC calculation is therefore \$2.1 million.

Table 2 2019 – 2028 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The Library’s total 10-year capital program amounts to \$1.4 million. The capital program provides for the recovery of the library branch expansion, as well as for additional collection materials throughout the period. No grants, subsidies, or other recoveries are anticipated to fund any shares of the above mentioned projects and as such, the net cost to the municipality remains at \$1.4 million.

There are no replacement or benefit to existing shares identified. The 10 per cent reduction removes \$35,058 from the calculation, so the remaining \$1.4 million is deemed to be DC eligible. Available DC reserve funds of \$365,038 are applied to the DC eligible costs.

The remaining \$996,147 is related to growth between 2019 and 2028 and is allocated entirely against future residential development in the Town of Midland. This results in an unadjusted development charge of \$276.71 per capita.

Table 3 Cash Flow and Reserve Fund Analysis

After cash flow, the residential calculated charge increases to \$425.41 per capita. The following table summarizes the calculation of the Library development charge.

LIBRARY SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$785.88	\$1,396,243	\$996,147	\$276.71	\$0.00	\$425.41	\$0.00

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APPENDIX B.2
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
LIBRARY

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Main Branch - 320 King St.	12,552	26,802	26,802	26,802	26,802	26,802	26,802	26,802	26,802	26,802	26,802	\$380
Total (sq.ft.)	12,552	26,802										
Total (\$000)	\$4,769.8	\$10,184.8										

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Main Branch - 320 King St.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$755,300
Total (ha)	0.10											
Total (\$000)	\$75.5											

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APPENDIX B.2
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
LIBRARY

MATERIALS Type of Collection	# of Collection Materials										UNIT COST (\$/item)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Books	45,081	47,163	49,246	51,328	53,410	44,202	34,994	25,786	30,815	36,777	\$40
Periodicals (Serial Titles)	126	125	125	124	123	85	48	10	19	54	\$90
CDs, Video Tapes	3,663	3,727	3,790	3,854	3,918	3,424	2,929	2,435	2,998	3,544	\$30
Audiocassettes/Talking Books	921	973	1,024	1,076	1,127	1,051	974	898	1,264	1,479	\$90
Microfilms	224	226	228	230	232	237	242	247	247	247	\$130
Video Games	-	-	-	-	-	-	-	95	120	152	\$60
Total (#)	50,015	52,214	54,413	56,612	58,810	48,999	39,187	29,471	35,463	42,253	
Total (\$000)	\$2,036.5	\$2,126.5	\$2,216.6	\$2,306.6	\$2,396.6	\$2,003.8	\$1,611.1	\$1,224.0	\$1,477.3	\$1,756.6	

FURNITURE & EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Shelving	\$129,480	\$223,360	\$223,360	\$238,470	\$238,470	\$239,976	\$241,482	\$242,988	\$244,494	\$246,000
Audio/Visual Equipment	\$2,370	\$16,670	\$16,670	\$16,670	\$18,640	\$74,912	\$131,184	\$187,456	\$243,728	\$300,000
Furniture & Other Equipment	\$161,860	\$523,980	\$523,980	\$523,980	\$523,980	\$546,304	\$568,627	\$590,951	\$613,274	\$635,598
HVAC System	\$209,330	\$485,570	\$485,570	\$485,570	\$485,570	\$485,570	\$485,570	\$485,570	\$485,570	\$485,570
Total (\$000)	\$503.0	\$1,249.6	\$1,249.6	\$1,264.7	\$1,266.7	\$1,346.8	\$1,426.9	\$1,507.0	\$1,587.1	\$1,667.2

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APPENDIX B.2
TABLE 1

TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
LIBRARY

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688

INVENTORY SUMMARY (\$000)

Buildings	\$4,769.8	\$10,184.8	\$10,184.8	\$10,184.8	\$10,184.8	\$10,184.8	\$10,184.8	\$10,184.8	\$10,184.8	\$10,184.8
Land	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5	\$75.5
Materials	\$2,036.5	\$2,126.5	\$2,216.6	\$2,306.6	\$2,396.6	\$2,003.8	\$1,611.1	\$1,224.0	\$1,477.3	\$1,756.6
Furniture & Equipment	\$503.0	\$1,249.6	\$1,249.6	\$1,264.7	\$1,266.7	\$1,346.8	\$1,426.9	\$1,507.0	\$1,587.1	\$1,667.2
Total (\$000)	\$7,384.8	\$13,636.4	\$13,726.5	\$13,831.6	\$13,923.6	\$13,610.9	\$13,298.2	\$12,991.3	\$13,324.7	\$13,684.1

SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$292.93	\$624.60	\$623.68	\$621.86	\$620.04	\$618.23	\$616.40	\$614.58	\$612.43	\$610.30	\$585.51
Land	\$4.64	\$4.63	\$4.63	\$4.61	\$4.60	\$4.58	\$4.57	\$4.56	\$4.54	\$4.53	\$4.59
Materials	\$125.07	\$130.41	\$135.74	\$140.84	\$145.90	\$121.64	\$97.51	\$73.86	\$88.83	\$105.26	\$116.51
Furniture & Equipment	\$30.89	\$76.63	\$76.52	\$77.22	\$77.11	\$81.75	\$86.36	\$90.93	\$95.43	\$99.90	\$79.28
Total (\$/capita)	\$453.53	\$836.28	\$840.57	\$844.52	\$847.65	\$826.20	\$804.83	\$783.93	\$801.24	\$819.99	\$785.88

TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$785.88
Net Population Growth 2019 - 2028	3,009
Maximum Allowable Funding Envelope	\$2,364,713
Less: 10% Legislated Reduction	\$236,471
Discounted Maximum Allowable Funding Envelope	\$2,128,242

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY

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	10% Reduction		Available DC Reserves	2019-2028	Post 2028
2.0 LIBRARY										
2.1 Recovery of Library Branch Expansion Debt¹										
2.1.1 Principle Payment	2019	\$ 83,933	\$ -	\$ 83,933	\$ -	\$ -	\$ 83,933	\$ 83,933	\$ -	\$ -
2.1.2 Principle Payment	2020	\$ 81,601	\$ -	\$ 81,601	\$ -	\$ -	\$ 81,601	\$ 81,601	\$ -	\$ -
2.1.3 Principle Payment	2021	\$ 79,163	\$ -	\$ 79,163	\$ -	\$ -	\$ 79,163	\$ 79,163	\$ -	\$ -
2.1.4 Principle Payment	2022	\$ 76,612	\$ -	\$ 76,612	\$ -	\$ -	\$ 76,612	\$ 76,612	\$ -	\$ -
2.1.5 Principle Payment	2023	\$ 73,945	\$ -	\$ 73,945	\$ -	\$ -	\$ 73,945	\$ 43,728	\$ 30,217	\$ -
2.1.6 Principle Payment	2024	\$ 71,156	\$ -	\$ 71,156	\$ -	\$ -	\$ 71,156	\$ -	\$ 71,156	\$ -
2.1.7 Principle Payment	2025	\$ 68,239	\$ -	\$ 68,239	\$ -	\$ -	\$ 68,239	\$ -	\$ 68,239	\$ -
2.1.8 Principle Payment	2026	\$ 65,188	\$ -	\$ 65,188	\$ -	\$ -	\$ 65,188	\$ -	\$ 65,188	\$ -
2.1.9 Principle Payment	2027	\$ 61,998	\$ -	\$ 61,998	\$ -	\$ -	\$ 61,998	\$ -	\$ 61,998	\$ -
2.1.10 Principle Payment	2028	\$ 58,661	\$ -	\$ 58,661	\$ -	\$ -	\$ 58,661	\$ -	\$ 58,661	\$ -
2.1.11 Principle Payment	2028	\$ 325,167	\$ -	\$ 325,167	\$ -	\$ -	\$ 325,167	\$ -	\$ 325,167	\$ -
Subtotal Recovery of Library Branch Expansion Debt		\$ 1,045,664	\$ -	\$ 1,045,664	\$ -	\$ -	\$ 1,045,664	\$ 365,038	\$ 680,626	\$ -
2.2 Library Materials										
2.2.1 Provision for additional collection materials	Various	\$ 350,579	\$ -	\$ 350,579	\$ -	\$ 35,058	\$ 315,521	\$ -	\$ 315,521	\$ -
Subtotal Library Materials		\$ 350,579	\$ -	\$ 350,579	\$ -	\$ 35,058	\$ 315,521	\$ -	\$ 315,521	\$ -
TOTAL LIBRARY		\$ 1,396,243	\$ -	\$ 1,396,243	\$ -	\$ 35,058	\$ 1,361,185	\$ 365,038	\$ 996,147	\$ -

Note 1: The principal payments have already considered the 10% reduction in previous by-laws.

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	100%	\$996,147
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$276.71
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.00

2019 - 2028 Net Funding Envelope	\$2,128,242
Reserve Fund Balance at December 31, 2018	\$365,038

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APPENDIX B.2
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

LIBRARY	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$39.8	\$85.8	\$138.3	\$197.9	\$234.0	\$235.3	\$245.1	\$264.3	\$293.5	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Library: Debenture Principal Payments	\$0.0	\$0.0	\$0.0	\$0.0	\$30.2	\$71.2	\$68.2	\$65.2	\$62.0	\$383.8	\$680.6
- Library: Non Inflated (Excluding Principal Payments)	\$31.6	\$31.6	\$31.6	\$31.6	\$31.6	\$31.6	\$31.6	\$31.6	\$31.6	\$31.6	\$315.5
- Library: Inflated (Excludes Principal Payments)	\$31.6	\$32.2	\$32.8	\$33.5	\$34.2	\$34.8	\$35.5	\$36.2	\$37.0	\$37.7	\$345.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$153.1	\$156.2	\$159.3	\$162.5	\$165.8	\$169.1	\$172.5	\$175.9	\$179.4	\$183.0	\$1,676.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$1.4	\$3.0	\$4.8	\$6.9	\$8.2	\$8.2	\$8.6	\$9.3	\$10.3	\$60.7
- Interest on In-year Transactions	\$2.1	\$2.2	\$2.2	\$2.3	\$1.8	\$1.1	\$1.2	\$1.3	\$1.4	(\$6.6)	\$9.0
- Interest Payments for Library Expansion ²	(\$83.9)	(\$81.6)	(\$79.2)	(\$76.6)	(\$73.9)	(\$71.2)	(\$68.2)	(\$65.2)	(\$62.0)	(\$58.7)	(\$720.5)
TOTAL REVENUE	\$71.3	\$78.2	\$85.4	\$93.0	\$100.5	\$107.2	\$113.7	\$120.6	\$128.1	\$128.1	\$1,026.1
CLOSING CASH BALANCE	\$39.8	\$85.8	\$138.3	\$197.9	\$234.0	\$235.3	\$245.1	\$264.3	\$293.5	\$0.0	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2019 Adjusted Charge Per Capita	\$425.41
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.3

FIRE SERVICES

APPENDIX B.3

FIRE SERVICES

The Town of Midland Fire Department has one station located on Bayshore Drive, and its workforce consists of both career and volunteer firefighters. The benefits of Fire Services are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

The Town of Midland Fire Department operates from one fire hall that is 13,900 square feet and is valued at \$4.9 million. The land area associated with the building is approximately 0.90 hectares and is valued at \$157,500. There are 8 fire vehicles in service that have a replacement value of \$4.2 million. The Fire Safety House and Public Education vehicles are shared between Midland, Penetanguishene, Tay and Tiny. Therefore, a 25 per cent share is allocated to Midland. The cost to provide personal fire fighter equipment, communications equipment and breathing apparatus to all firefighters totals \$697,100. The total cost of all furniture and equipment at the station is approximately \$255,000.

The current replacement value of all Fire Services capital infrastructure is \$10.2 million, which provides the Town with a 10-year historical average service level of \$376.47 per population and employment.

The calculated maximum allowable recoverable through development charges over the 2019 to 2028 planning period is \$1.9 million (\$376.47 per population and employment x 5,096 population and employment growth). Fire Services is not subject to the 10 per cent discount and as such, the full funding envelope is carried forward to the development charges calculation.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Fire Services as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

Table 2 2019 – 2028 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The Fire Services capital program totals \$57,700. This includes bunker gear for additional firefighters and a Fire Master Plan. No grants, benefit to existing share or 10 per cent discount are identified for this service’s capital program.

The existing reserve fund balance of \$11,033 has been deducted, so the remaining \$46,667 is related to development between 2019 and 2028 and is allocated entirely against future development in the Town of Midland.

The 10-year development-related net capital cost is allocated 63 per cent against residential development, and 37 per cent against non-residential development. The allocation between residential and non-residential development is based on shares of 10-year growth in population in new units and employment growth in new space. The resulting unadjusted development charge is \$8.17 per capita and \$0.13 per square metre.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$8.98 per capita and the non-residential rate increases to \$0.15 per square metre.

The following table summarizes the calculation of the Fire Services development charge.

FIRE SUMMARY						
10-year Hist. Service Level	2019 - 2028		Unadjusted		Adjusted	
	Development-Related Capital Program		Development Charge		Development Charge	
pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$376.47	\$57,700	\$46,667	\$8.17	\$0.13	\$8.98	\$0.15

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APPENDIX B.3
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
FIRE

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Headquarters - 550 Bayshore Dr.	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	\$350
Total (sq.ft.)	13,900											
Total (\$000)	\$4,865.0											

LAND Station Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Headquarters - 550 Bayshore Dr.	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$175,000
Total (ha)	0.90											
Total (\$000)	\$157.5											

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Staff Vehicles, sedans, wagons, vans, pick-ups	2	3	3	3	3	3	3	3	3	3	3	\$60,000
Tankers	1	1	1	1	1	1	1	1	1	1	1	\$545,000
Pumpers (heavy duty custom)	2	2	2	2	2	2	2	2	2	2	2	\$750,000
Pumpers Telesquirt/Aerial Ladder	1	1	1	1	1	1	1	1	1	1	1	\$1,500,000
Rescue & Equipment	1	1	1	1	1	1	1	1	1	1	1	\$500,000
Fire Safety house (1)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$70,000
Public Education Vehicle (1)	0.25	0.25	0.25	0.25	0.25	25.00	0.25	0.25	0.25	0.25	-	\$91,700
Total (#)	7.50	8.50	8.50	8.50	8.50	33.25	8.50	8.50	8.50	8.50	8.25	
Total (\$000)	\$4,205.4	\$4,265.4	\$4,265.4	\$4,265.4	\$4,265.4	\$6,535.0	\$4,265.4	\$4,265.4	\$4,265.4	\$4,265.4	\$4,242.5	

Notes:

- (1) Fire Safety House and Public Education Vehicle are shared by Midland, Penetanguishene, Tay and Tiny. A 25% share is allocated to Midland.
(2) All vehicle unit costs include equipment

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APPENDIX B.3
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
FIRE

FIRE FIGHTER EQUIPMENT Description	# of Items										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Personal Fire Fighter Equipment											
- Protective Equipment Ensemble	36	36	36	36	36	36	36	36	36	36	\$2,500
- Station Wear & Uniform	36	36	36	36	36	36	36	36	36	36	\$1,250
- Training Manuals and Training	36	36	36	36	36	36	36	36	36	36	\$1,700
Communications Equipment											
- Pagers	40	42	42	42	42	42	42	42	42	42	\$675
- Mobile Radios	9	9	9	9	9	9	9	9	9	9	\$1,500
- Portable Radios	20	21	21	41	41	41	41	41	41	41	\$1,500
- Base Station	2	2	2	2	2	2	2	2	2	2	\$25,000
Breathing Apparatus											
- Harness and Regulator Assembly w/Cylinder	20	20	20	20	20	20	20	20	20	20	\$10,000
- Cylinders	28	28	35	35	35	35	35	35	35	35	\$1,500
- Rapid Intervention Team Kit	2	2	2	2	2	2	2	2	2	2	\$7,500
- Compressed Air Refill Centre	1	1	1	1	1	1	1	1	1	1	\$80,000
Total (#)	230	233	240	260							
Total (\$000)	\$653.7	\$656.6	\$667.1	\$697.1							

FURNITURE & EQUIPMENT Equipment	Total Value of Furniture & Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Station Furniture and Equipment	\$216,200	\$216,200	\$216,200	\$216,200	\$216,200	\$220,000	\$220,000	\$220,000	\$235,000	\$255,000
Total (\$000)	\$216.2	\$216.2	\$216.2	\$216.2	\$216.2	\$220.0	\$220.0	\$220.0	\$235.0	\$255.0

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APPENDIX B.3
TABLE 1

TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
FIRE

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688
Historical Employment	<u>10,956</u>	<u>11,168</u>	<u>11,383</u>	<u>11,351</u>	<u>11,319</u>	<u>11,287</u>	<u>11,255</u>	<u>11,223</u>	<u>11,103</u>	<u>10,985</u>
Total Historical Population & Employment	27,239	27,474	27,713	27,729	27,745	27,761	27,778	27,795	27,733	27,673

INVENTORY SUMMARY (\$000)

Buildings	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0	\$4,865.0
Land	\$157.5	\$157.5	\$157.5	\$157.5	\$157.5	\$157.5	\$157.5	\$157.5	\$157.5	\$157.5
Vehicles	\$4,205.4	\$4,265.4	\$4,265.4	\$4,265.4	\$4,265.4	\$6,535.0	\$4,265.4	\$4,265.4	\$4,265.4	\$4,242.5
Fire Fighter Equipment	\$653.7	\$656.6	\$667.1	\$697.1	\$697.1	\$697.1	\$697.1	\$697.1	\$697.1	\$697.1
Furniture & Equipment	\$216.2	\$216.2	\$216.2	\$216.2	\$216.2	\$220.0	\$220.0	\$220.0	\$235.0	\$255.0
Total (\$000)	\$10,097.8	\$10,160.7	\$10,171.2	\$10,201.2	\$10,201.2	\$12,474.6	\$10,205.0	\$10,205.0	\$10,220.0	\$10,217.1

SERVICE LEVEL (\$/population & employment)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Service Level
Buildings	\$178.60	\$177.08	\$175.55	\$175.45	\$175.35	\$175.25	\$175.14	\$175.03	\$175.42	\$175.80	\$175.87
Land	\$5.78	\$5.73	\$5.68	\$5.68	\$5.68	\$5.67	\$5.67	\$5.67	\$5.68	\$5.69	\$5.69
Vehicles	\$154.39	\$155.25	\$153.91	\$153.83	\$153.74	\$235.40	\$153.55	\$153.46	\$153.80	\$153.31	\$162.06
Fire Fighter Equipment	\$24.00	\$23.90	\$24.07	\$25.14	\$25.12	\$25.11	\$25.09	\$25.08	\$25.13	\$25.19	\$24.78
Furniture & Equipment	\$7.94	\$7.87	\$7.80	\$7.80	\$7.79	\$7.92	\$7.92	\$7.92	\$8.47	\$9.21	\$8.06
Total (\$/pop & emp)	\$370.71	\$369.83	\$367.02	\$367.89	\$367.68	\$449.36	\$367.38	\$367.15	\$368.51	\$369.21	\$376.47

TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
FIRE

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$376.47
Net Population & Employment Growth 2019 - 2028	5,096
Maximum Allowable Funding Envelope	\$1,918,491
Discounted Maximum Allowable Funding Envelope	\$1,918,491

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE

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	0% Reduction		Available DC Reserves	2019-2028	Post 2028
3.0 FIRE										
3.1 Personal Equipment										
3.1.1 Bunker Gear for Additional Firefighters	2023	\$ 32,700	\$ -	\$ 32,700	\$ -	\$ -	\$ 32,700	\$ 11,033	\$ 21,667	\$ -
Subtotal Personal Equipment		\$ 32,700	\$ -	\$ 32,700	\$ -	\$ -	\$ 32,700	\$ 11,033	\$ 21,667	\$ -
3.2 Studies										
3.2.1 Fire Master Plan	2019	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -
Subtotal Studies		\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -
TOTAL FIRE		\$ 57,700	\$ -	\$ 57,700	\$ -	\$ -	\$ 57,700	\$ 11,033	\$ 46,667	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	63%	\$29,400
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$8.17
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	37%	\$17,267
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.13

2019 - 2028 Net Funding Envelope	\$1,918,491
Reserve Fund Balance at December 31, 2018	\$11,033

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APPENDIX B.3
TABLE 3

TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	(\$12.9)	(\$10.2)	(\$7.4)	(\$4.3)	(\$16.1)	(\$13.4)	(\$10.4)	(\$7.2)	(\$3.7)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Fire: Non Inflated	\$15.8	\$0.0	\$0.0	\$0.0	\$13.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$29.4
- Fire: Inflated	\$15.8	\$0.0	\$0.0	\$0.0	\$14.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$30.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$3.2	\$3.3	\$3.4	\$3.4	\$3.5	\$3.6	\$3.6	\$3.7	\$3.8	\$3.9	\$35.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$0.7)	(\$0.6)	(\$0.4)	(\$0.2)	(\$0.9)	(\$0.7)	(\$0.6)	(\$0.4)	(\$0.2)	(\$4.7)
- Interest on In-year Transactions	(\$0.3)	\$0.1	\$0.1	\$0.1	(\$0.3)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.2)
TOTAL REVENUE	\$2.9	\$2.6	\$2.9	\$3.1	\$3.0	\$2.7	\$3.0	\$3.2	\$3.5	\$3.7	\$30.5
CLOSING CASH BALANCE	(\$12.9)	(\$10.2)	(\$7.4)	(\$4.3)	(\$16.1)	(\$13.4)	(\$10.4)	(\$7.2)	(\$3.7)	\$0.0	

2019 Adjusted Charge Per Capita	\$8.98
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.3
TABLE 3

TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	(\$7.69)	(\$6.26)	(\$4.67)	(\$2.92)	(\$9.90)	(\$8.29)	(\$6.50)	(\$4.53)	(\$2.37)	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Fire: Non Inflated	\$9.3	\$0.0	\$0.0	\$0.0	\$8.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$17.3
- Fire: Inflated	\$9.3	\$0.0	\$0.0	\$0.0	\$8.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$17.9
TOTAL FIRE FUNDING REQUIREMENT	\$9.3	\$0.0	\$0.0	\$0.0	\$8.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$17.9
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	12,140	12,320	12,580	12,760	13,020	13,200	13,460	13,720	13,900	14,160	131,260
REVENUE											
- DC Receipts: Inflated	\$1.8	\$1.8	\$1.9	\$2.0	\$2.0	\$2.1	\$2.2	\$2.3	\$2.4	\$2.5	\$20.9
INTEREST											
- Interest on Opening Balance	\$0.0	(\$0.4)	(\$0.3)	(\$0.3)	(\$0.2)	(\$0.5)	(\$0.5)	(\$0.4)	(\$0.2)	(\$0.1)	(\$2.9)
- Interest on In-year Transactions	(\$0.2)	\$0.0	\$0.0	\$0.0	(\$0.2)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.1)
TOTAL REVENUE	\$1.6	\$1.4	\$1.6	\$1.7	\$1.7	\$1.6	\$1.8	\$2.0	\$2.2	\$2.4	\$17.9
CLOSING CASH BALANCE	(\$7.7)	(\$6.3)	(\$4.7)	(\$2.9)	(\$9.9)	(\$8.3)	(\$6.5)	(\$4.5)	(\$2.4)	\$0.0	

2019 Adjusted Charge Per Square Metre	\$0.15
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.4

POLICE SERVICES

APPENDIX B.4

POLICE SERVICES

Policing for the Town of Midland is provided by the Ontario Provincial Police. The Midland detachment headquarters office is found on Second Street, along with a garage. The benefits of Police Services are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

The 10-year historical inventory of capital assets for the Police Department includes the 8,250 square foot police station and 960 square foot garage, which together are valued at \$1.7 million. The 0.92 hectares of land associated with the buildings are valued at \$351,400. The Police have three vehicles valued at \$173,700. The cost to outfit the 42 police officers is \$172,200 and the total cost of furniture and equipment in the station is \$633,500.

The current replacement value of the Police capital infrastructure is approximately \$3.0 million. This provides a 10-year average historical service level of \$109.23 per population and employment. This average historical service level multiplied by the 10-year net population and employment growth results in a maximum allowable funding envelope of \$556,636 (\$109.23 per population and employment x 5,096 population and employment growth). Police services is not subject to the 10 per cent reduction.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Police Services as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

Table 2 2019 – 2028 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The Police capital program includes a provision for additional police station space totalling \$190,000; this space is required to service the increased needs arising from development over the planning period. The program also includes \$8,200 to outfit two new uniformed officers. The 2019-2028 capital program totals \$198,200.

No grants, benefit to existing shares or 10 per cent discount are identified. A portion of the new space (\$73,323) will be funded through the Town's Police reserve fund and is therefore deducted from the total development charge calculation. The remaining \$124,877 is eligible for DC recovery between 2019 and 2028. No post-period shares have been identified for this service

The total development-related cost is allocated 63 per cent against new residential development and 37 per cent against non-residential development. This yields an unadjusted development charge of \$21.85 per capita and \$0.35 per square metre.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$22.22 per capita and the non-residential charge increases to \$0.36 per square metre.

The following table summarizes the calculation of the Police development charge.

POLICE SUMMARY						
10-year Hist.	2019 - 2028		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
\$109.23	\$198,200	\$124,877	\$21.85	\$0.35	\$22.22	\$0.36

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APPENDIX B.4
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
POLICE

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Police Headquarters - 250 Second St.	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	\$190
Police Garage - 262 Second Street	960	960	960	960	960	960	960	960	960	960	\$140
Total (sq.ft.)	9,210										
Total (\$000)	\$1,701.9										

LAND Station Name	# of Hectares										UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Police Headquarters - 250 Second St.	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$382,000
Police Garage - 262 Second Street	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$382,000
Total (ha)	0.92										
Total (\$000)	\$351.4										

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APPENDIX B.4
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
POLICE

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Special Purpose/Utility/Prison Transport	3	3	3	3	3	3	3	3	3	3	\$57,900
Total (#)	3										
Total (\$000)	\$173.7										

PERSONAL POLICE EQUIPMENT Description	# of Staff										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Number of Equipped Staff	35	35	42	42	42	42	42	42	42	42	\$4,100
Total (#)	35	35	42								
Total (\$000)	\$143.5	\$143.5	\$172.2								

FURNITURE & EQUIPMENT Equipment	Total Value of Furniture & Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Communications Equipment	\$222,200	\$222,200	\$222,200	\$222,200	\$222,200	\$222,200	\$222,200	\$222,200	\$222,200	\$222,200
Other Station Equipment	\$384,400	\$384,400	\$411,300	\$411,300	\$411,300	\$411,300	\$411,300	\$411,300	\$411,300	\$411,300
Total (\$000)	\$606.6	\$606.6	\$633.5							

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APPENDIX B.4
TABLE 1

TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
POLICE

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688
Historical Employment	<u>10,956</u>	<u>11,168</u>	<u>11,383</u>	<u>11,351</u>	<u>11,319</u>	<u>11,287</u>	<u>11,255</u>	<u>11,223</u>	<u>11,103</u>	<u>10,985</u>
Total Historical Population & Employment	27,239	27,474	27,713	27,729	27,745	27,761	27,778	27,795	27,733	27,673

INVENTORY SUMMARY (\$000)

Buildings	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9	\$1,701.9
Land	\$351.4	\$351.4	\$351.4	\$351.4	\$351.4	\$351.4	\$351.4	\$351.4	\$351.4	\$351.4
Vehicles	\$173.7	\$173.7	\$173.7	\$173.7	\$173.7	\$173.7	\$173.7	\$173.7	\$173.7	\$173.7
Personal Police Equipment	\$143.5	\$143.5	\$172.2	\$172.2	\$172.2	\$172.2	\$172.2	\$172.2	\$172.2	\$172.2
Furniture & Equipment	\$606.6	\$606.6	\$633.5	\$633.5	\$633.5	\$633.5	\$633.5	\$633.5	\$633.5	\$633.5
Total (\$000)	\$2,977.1	\$2,977.1	\$3,032.7							

SERVICE LEVEL (\$/population & employment)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Service Level
Buildings	\$62.48	\$61.95	\$61.41	\$61.38	\$61.34	\$61.31	\$61.27	\$61.23	\$61.37	\$61.50	\$61.52
Land	\$12.90	\$12.79	\$12.68	\$12.67	\$12.67	\$12.66	\$12.65	\$12.64	\$12.67	\$12.70	\$12.70
Vehicles	\$6.38	\$6.32	\$6.27	\$6.26	\$6.26	\$6.26	\$6.25	\$6.25	\$6.26	\$6.28	\$6.28
Personal Police Equipment	\$5.27	\$5.22	\$6.21	\$6.21	\$6.21	\$6.20	\$6.20	\$6.20	\$6.21	\$6.22	\$6.02
Furniture & Equipment	\$22.27	\$22.08	\$22.86	\$22.85	\$22.83	\$22.82	\$22.81	\$22.79	\$22.84	\$22.89	\$22.70
Total (\$/pop & emp)	\$109.30	\$108.36	\$109.43	\$109.37	\$109.31	\$109.24	\$109.18	\$109.11	\$109.35	\$109.59	\$109.23

TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
POLICE

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$109.23
Net Population & Employment Growth 2019 - 2028	5,096
Maximum Allowable Funding Envelope	\$556,636
Discounted Maximum Allowable Funding Envelope	\$546,618

**TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
POLICE**

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	0% Reduction		Available DC Reserves	2019-2028	Post 2028
4.0 POLICE										
4.1 Buildings										
4.1.1 Provision for Additional Police Station Space	2024	\$ 190,000	\$ -	\$ 190,000	\$ -	\$ -	\$ 190,000	\$ 73,323	\$ 116,677	\$ -
Subtotal Buildings		\$ 190,000	\$ -	\$ 190,000	\$ -	\$ -	\$ 190,000	\$ 73,323	\$ 116,677	\$ -
4.2 Personal Equipment										
4.2.1 Outfitting Equipment for Uniformed Officer	2022	\$ 4,100	\$ -	\$ 4,100	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100	\$ -
4.2.2 Outfitting Equipment for Uniformed Officer	2026	\$ 4,100	\$ -	\$ 4,100	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100	\$ -
Subtotal Personal Equipment		\$ 8,200	\$ -	\$ 8,200	\$ -	\$ -	\$ 8,200	\$ -	\$ 8,200	\$ -
TOTAL POLICE		\$ 198,200	\$ -	\$ 198,200	\$ -	\$ -	\$ 198,200	\$ 73,323	\$ 124,877	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	63%	\$78,672
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$21.85
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	37%	\$46,204
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.35

2019 - 2028 Net Funding Envelope	\$546,618
Reserve Fund Balance at December 31, 2018	\$73,323

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APPENDIX B.4
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
POLICE
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

POLICE	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.0	\$8.1	\$16.7	\$25.8	\$32.5	\$42.5	(\$30.3)	(\$22.9)	(\$17.8)	(\$9.2)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Police: Non Inflated	\$0.0	\$0.0	\$0.0	\$2.6	\$0.0	\$73.5	\$0.0	\$2.6	\$0.0	\$0.0	\$78.7
- Police: Inflated	\$0.0	\$0.0	\$0.0	\$2.7	\$0.0	\$81.2	\$0.0	\$3.0	\$0.0	\$0.0	\$86.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$8.0	\$8.2	\$8.3	\$8.5	\$8.7	\$8.8	\$9.0	\$9.2	\$9.4	\$9.6	\$87.6
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.3	\$0.6	\$0.9	\$1.1	\$1.5	(\$1.7)	(\$1.3)	(\$1.0)	(\$0.5)	(\$0.0)
- Interest on In-year Transactions	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	(\$2.0)	\$0.2	\$0.1	\$0.2	\$0.2	(\$0.7)
TOTAL REVENUE	\$8.1	\$8.6	\$9.1	\$9.5	\$9.9	\$8.3	\$7.5	\$8.0	\$8.6	\$9.2	\$86.9
CLOSING CASH BALANCE	\$8.1	\$16.7	\$25.8	\$32.5	\$42.5	(\$30.3)	(\$22.9)	(\$17.8)	(\$9.2)	\$0.0	

2019 Adjusted Charge Per Capita	\$22.22
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.4
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
POLICE
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

POLICE	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$4.44	\$9.18	\$14.28	\$18.09	\$23.88	(\$18.89)	(\$14.39)	(\$11.19)	(\$5.86)	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Police: Non Inflated	\$0.0	\$0.0	\$0.0	\$1.5	\$0.0	\$43.2	\$0.0	\$1.5	\$0.0	\$0.0	\$46.2
- Police: Inflated	\$0.0	\$0.0	\$0.0	\$1.6	\$0.0	\$47.7	\$0.0	\$1.7	\$0.0	\$0.0	\$51.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	12,140	12,320	12,580	12,760	13,020	13,200	13,460	13,720	13,900	14,160	131,260
REVENUE											
- DC Receipts: Inflated	\$4.4	\$4.5	\$4.7	\$4.9	\$5.1	\$5.2	\$5.4	\$5.7	\$5.8	\$6.1	\$51.8
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.2	\$0.3	\$0.5	\$0.6	\$0.8	(\$1.0)	(\$0.8)	(\$0.6)	(\$0.3)	(\$0.3)
- Interest on In-year Transactions	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$1.2)	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.4)
TOTAL REVENUE	\$4.4	\$4.7	\$5.1	\$5.4	\$5.8	\$4.9	\$4.5	\$4.9	\$5.3	\$5.9	\$51.0
CLOSING CASH BALANCE	\$4.4	\$9.2	\$14.3	\$18.1	\$23.9	(\$18.9)	(\$14.4)	(\$11.2)	(\$5.9)	(\$0.0)	

2019 Adjusted Charge Per Square Metre	\$0.36
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.5

INDOOR RECREATION

APPENDIX B.5**INDOOR RECREATION**

The Town of Midland provides indoor recreation services through facilities such as lawn bowling, rowing club, gymnasiums, and recreation centres. The benefits of Indoor Recreation services are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

The 10-year historical inventory of capital assets for Indoor Recreation includes 142,743 square feet of facilities worth \$28.7 million, which are housed on 5.84 hectares of land valued at \$2.1 million. The furniture and equipment in these facilities have a replacement cost of \$776,900.

The 2018 total replacement value of the inventory of capital assets for Indoor Recreation amounts to \$31.5 million and the 10-year historical average service level is \$2,051.62 per capita.

The historical service level multiplied by the 10-year forecast of net population growth results in a 10-year maximum allowable funding envelope of \$6.2 million (\$2,051.62 per capita x 3,009 net population growth). Indoor Recreation is a service for which development-related capital costs must be reduced by 10 percent as required under the *DCA*, resulting in a \$617,332 deduction. The resulting discounted maximum allowable funding envelope brought forward to the development charges calculation is \$5.6 million.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Indoor Recreation as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

Table 2 2019 – 2028 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The 2019–2028 gross development-related capital program for Indoor Recreation totals \$2.2 million, and consists of principal payments on debt associated with the NSSRC expansion. There are no grants, subsidies, or replacement shares identified for this service. The available DC reserve fund balance of \$825,788 has been applied. The remaining DC costs eligible for recovery in 2019-2028 totals \$1.4 million.

The \$1.4 million is allocated entirely to the residential sector, resulting in an unadjusted development charge of \$380.61 per capita.

Table 3 Cash Flow and Reserve Fund Analysis

After cash flow consideration, which factors in interest payments on the NSSRC debt, the residential charge increases to \$498.05 per capita. The following table summarizes the calculation of the Indoor Recreation development charge.

INDOOR RECREATION SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$2,051.62	\$2,195,995	\$1,370,207	\$380.61	\$0.00	\$498.05	\$0.00

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APPENDIX B.5
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
North Simcoe Sports and Recreation Centre	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	\$210
Lawn Bowling & Shuffleboard	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	2,343	\$160
Rowing Club	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	\$80
Hurons Gymnastic Centre	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	\$150
Shared School Gymnasiums	21,450	21,450	21,450	21,450	21,450	21,450	21,450	-	-	-	-	\$150
William Street Building	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$90
Total (sq.ft.)	164,193	142,743	142,743	142,743	142,743							
Total (\$000)	\$31,868.4	\$28,650.9	\$28,650.9	\$28,650.9	\$28,650.9							

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
North Simcoe Sports and Recreation Centre	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	\$356,100
Lawn Bowling & Shuffleboard	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	\$356,100
Rowing Club	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$356,100
Hurons Gymnastic Centre	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$356,100
William Street Building	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$356,100
Total (ha)	5.84											
Total (\$000)	\$2,079.6											

EQUIPMENT Description	Total Value of Furniture & Equipment (\$)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
North Simcoe Sports and Recreation Centre	\$539,520	\$539,520	\$539,520	\$539,520	\$539,520	\$539,520	\$539,520	\$539,520	\$539,520	\$539,520
Lawn Bowling & Shuffleboard	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300
Rowing Club	\$43,270	\$43,270	\$43,270	\$43,270	\$43,270	\$43,270	\$43,270	\$43,270	\$43,270	\$43,270
Hurons Gymnastic Centre	\$64,630	\$64,630	\$64,630	\$64,630	\$64,630	\$64,630	\$64,630	\$64,630	\$64,630	\$64,630
William Street Building	\$16,190	\$16,190	\$16,190	\$16,190	\$16,190	\$16,190	\$16,190	\$16,190	\$16,190	\$16,190
Total (\$000)	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9

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APPENDIX B.5
TABLE 1

**TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
INDOOR RECREATION**

Historical Population	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688

INVENTORY SUMMARY (\$000)

Buildings	\$31,868.4	\$31,868.4	\$31,868.4	\$31,868.4	\$31,868.4	\$31,868.4	\$31,868.4	\$28,650.9	\$28,650.9	\$28,650.9
Land	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6	\$2,079.6
Equipment	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9	\$776.9
Total (\$000)	\$34,724.9	\$31,507.4	\$31,507.4	\$31,507.4						

SERVICE LEVEL (\$/capita)

**Average
Service
Level**

Buildings	\$1,957.16	\$1,954.40	\$1,951.52	\$1,945.80	\$1,940.12	\$1,934.47	\$1,928.73	\$1,728.87	\$1,722.84	\$1,716.86	\$1,878.08
Land	\$127.72	\$127.54	\$127.35	\$126.98	\$126.61	\$126.24	\$125.86	\$125.49	\$125.05	\$124.62	\$126.34
Equipment	\$47.71	\$47.65	\$47.58	\$47.44	\$47.30	\$47.16	\$47.02	\$46.88	\$46.72	\$46.56	\$47.20
Total (\$/capita)	\$2,132.59	\$2,129.58	\$2,126.45	\$2,120.22	\$2,114.02	\$2,107.86	\$2,101.61	\$1,901.24	\$1,894.61	\$1,888.03	\$2,051.62

**TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
INDOOR RECREATION**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$2,051.62
Net Population Growth 2019 - 2028	3,009
Maximum Allowable Funding Envelope	\$6,173,325
Less: 10% Legislated Reduction	\$617,332
Discounted Maximum Allowable Funding Envelope	\$5,555,992

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APPENDIX B.5
TABLE 2

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
INDOOR RECREATION

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	10% Reduction		Available DC Reserves	2019-2028	Post 2028
5.0 INDOOR RECREATION										
5.1 Recovery of NSSRC Expansion Debt¹										
5.1.1 Principal Payment	2019	\$ 312,866	\$ -	\$ 312,866	\$ -	\$ -	\$ 312,866	\$ 312,866	\$ -	\$ -
5.1.2 Principal Payment	2020	\$ 332,413	\$ -	\$ 332,413	\$ -	\$ -	\$ 332,413	\$ 332,413	\$ -	\$ -
5.1.3 Principal Payment	2021	\$ 353,181	\$ -	\$ 353,181	\$ -	\$ -	\$ 353,181	\$ 180,509	\$ 172,671	\$ -
5.1.4 Principal Payment	2022	\$ 375,246	\$ -	\$ 375,246	\$ -	\$ -	\$ 375,246	\$ -	\$ 375,246	\$ -
5.1.5 Principal Payment	2023	\$ 398,690	\$ -	\$ 398,690	\$ -	\$ -	\$ 398,690	\$ -	\$ 398,690	\$ -
5.1.6 Principal Payment	2024	\$ 423,599	\$ -	\$ 423,599	\$ -	\$ -	\$ 423,599	\$ -	\$ 423,599	\$ -
Subtotal Recovery of NSSRC Expansion Debt		\$ 2,195,995	\$ -	\$ 2,195,995	\$ -	\$ -	\$ 2,195,995	\$ 825,788	\$ 1,370,207	\$ -
TOTAL INDOOR RECREATION		\$ 2,195,995	\$ -	\$ 2,195,995	\$ -	\$ -	\$ 2,195,995	\$ 825,788	\$ 1,370,207	\$ -

Note 1: The principal payments have already considered the 10% reduction in previous by-laws.

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	100%	\$1,370,207
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$380.61
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.00

2019 - 2028 Net Funding Envelope	\$5,555,992
Reserve Fund Balance at December 31, 2018	\$825,788

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APPENDIX B.5
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
INDOOR RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

INDOOR RECREATION	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$52.06	\$129.13	\$57.70	(\$198.34)	(\$464.04)	(\$741.06)	(\$576.36)	(\$398.50)	(\$206.66)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Indoor Recreation: Non Inflated	\$0.0	\$0.0	\$172.7	\$375.2	\$398.7	\$423.6	\$0.0	\$0.0	\$0.0	\$0.0	\$1,370.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$179.3	\$182.9	\$186.5	\$190.3	\$194.1	\$198.0	\$201.9	\$206.0	\$210.1	\$214.3	\$1,963.3
INTEREST											
- Interest on Opening Balance	\$0.0	\$1.8	\$4.5	\$2.0	(\$10.9)	(\$25.5)	(\$40.8)	(\$31.7)	(\$21.9)	(\$11.4)	(\$133.8)
- Interest on In-year Transactions	\$3.1	\$3.2	\$0.2	(\$5.1)	(\$5.6)	(\$6.2)	\$3.5	\$3.6	\$3.7	\$3.7	\$4.2
- Interest Payments for NSSRC Debt ²	(\$130.4)	(\$110.8)	(\$90.1)	(\$68.0)	(\$44.6)	(\$19.6)	\$0.0	\$0.0	\$0.0	\$0.0	(\$463.5)
TOTAL REVENUE	\$52.1	\$77.1	\$101.2	\$119.2	\$133.0	\$146.6	\$164.7	\$177.9	\$191.8	\$206.7	\$1,370.2
CLOSING CASH BALANCE	\$52.1	\$129.1	\$57.7	(\$198.3)	(\$464.0)	(\$741.1)	(\$576.4)	(\$398.5)	(\$206.7)	\$0.0	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2019 Adjusted Charge Per Capita

\$498.05

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2019

Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.6

PARKS

APPENDIX B.6

PARKS

The Town of Midland has many Parks amenities that range from parks, sports fields and the harbour. The service also operates a fleet of vehicles to maintain outdoor amenities. The benefits of Parks services are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

The 10-year historical inventory of capital assets for Parks includes 90.15 hectares of developed parkland valued at \$8.5 million. Amenities such as baseball diamonds, tennis courts, washroom and picnic facilities, and playground equipment have a combined value of \$12.8 million. The Parks fleet, which consists of ice resurfacers, pick-up trucks, tractors and other vehicles, has a replacement value of \$680,200.

The Town harbor has buildings and canopies that occupy 5,888 square feet, worth \$455,700. The entire harbor sits on 1.42 hectares valued at \$1.4 million, and contains equipment worth \$491,100.

The total value of the Parks capital infrastructure is estimated to be \$24.3 million. The 10-year historical average service level is \$1,171.33 per capita and this, multiplied by the 10-year net population growth, results in a 10-year maximum allowable funding envelope of \$3.5 million. As per the *DCA*, a 10 per cent discount has been applied, so the discounted maximum allowable funding envelope brought forward to the development charge calculation is \$3.2 million.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Parks as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

Table 2 2019 – 2028 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The Parks capital program includes provisions for new park development, new vehicles, and trail expansions. Park facilities and development projects total \$1.4 million and include wayfinding signage projects and new washrooms as well as the development of parkland at Sunnyside Park and the Bayport Development. A \$60,000 provision for additional vehicles is included in the capital program. New multi-use trails and bike baths throughout Town parks will add another \$3.1 million.

Altogether, the Parks capital program totals \$4.6 million. \$722,300 in developer funding has been identified for the Little Lake Park Multi-Use Trail, and is removed from the DC calculation as a local service. Several projects have benefit to existing shares related to the partial replacement of existing vehicles and trail expansions, totaling \$448,993. These mainly relate to the multi-use trails and vehicle acquisitions. Another \$341,945 has been netted off due to the legislated 10 per cent discount. The remaining DC eligible costs total \$3.1 million.

Available DC reserve funds total \$262,498 and are used to fund a portion of the capital program. The DC costs eligible for recovery over the 2019 to 2028 planning period amount to \$2.8 million and are allocated 100 per cent against new residential development, yielding an unadjusted residential development charge of \$781.95 per capita.

Table 3 Cash Flow Analysis

After cash flow and reserve fund analysis, the residential calculated charge decreases to \$766.45 per capita.

The following table summarizes the calculation of the Parks development charge.

PARKS SUMMARY						
10-year Hist.	2019 - 2028		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$1,171.33	\$4,590,740	\$2,815,005	\$781.95	\$0.00	\$766.45	\$0.00

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APPENDIX B.6
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PARKS
PARK DEVELOPMENT

DEVELOPED PARKLAND Park Name	# of Hectares of Developed Parkland										UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
District Parks											
Harbourside Park	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	\$74,100
Huronian Park	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	4.18	\$74,100
Mac McAllen Park	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$74,100
McCullough Park	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	\$74,100
Pete Petterson	9.43	9.43	9.43	9.43	9.43	9.43	9.43	9.43	9.43	9.43	\$74,100
Galloway Park	-	-	-	3.50	3.50	3.50	3.50	3.50	3.50	3.50	\$74,100
Community Parks											
Little Lake Park	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	51.64	\$102,200
Tiffin Park	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32	\$102,200
Total (ha)	86.65	86.65	86.65	90.15							
Total (\$000)	\$8,218.0	\$8,218.0	\$8,218.0	\$8,477.4							

Note: Cost related to the development of neighbourhood parks has been excluded from the service level as the funding of neighbourhood parks is directly the responsibility of the developer.

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APPENDIX B.6
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PARKS
PARK FACILITIES

BASEBALL DIAMONDS Park Name	# of Baseball Diamonds										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Bayview Park	1	1	1	-	-	-	-	-	-	-	\$6,900
Little Lake Park	1	1	-	-	-	-	-	-	-	-	\$23,000
Little Lake Park - Upgraded	-	-	1	1	1	1	1	1	1	1	\$129,500
Mac McAllen Park	1	1	1	-	-	-	-	-	-	-	\$24,000
Mac McAllen Park - Upgraded	-	-	-	1	1	1	1	1	1	1	\$97,100
Pete Pettersen Park	-	-	-	-	-	-	-	-	-	-	\$173,300
Pete Pettersen Park - Upgraded	1	1	1	1	1	1	1	1	1	1	\$269,800
Tiffin Park	-	-	-	-	-	-	-	-	-	-	\$349,000
Tiffin Park - Upgraded	1	1	1	1	1	1	1	1	1	1	\$377,700
Total (#)	5	5	5	4							
Total (\$000)	\$701.4	\$701.4	\$807.9	\$874.1							

TENNIS COURTS Park Name	# of Tennis Courts										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Little Lake Park	4	4	4	4	4	4	4	4	4	4	\$91,700
Tiffin Park	2	2	2	2	2	2	2	2	1	1	\$91,700
Total (#)	6	6	6	6	6	6	6	6	5	5	
Total (\$000)	\$550.2	\$550.2	\$550.2	\$550.2	\$550.2	\$550.2	\$550.2	\$550.2	\$458.5	\$458.5	

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APPENDIX B.6
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PARKS
PARK FACILITIES

BOAT LAUNCH Park Name	# of Boat Launches										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Pettersen Park	2	2	2	2	2	2	2	2	2	2	\$145,700
Total (#)	2	2	2	2	2	2	2	2	2	2	
Total (\$000)	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4	\$291.4

PARKS BUILDINGS Building Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Parks Depot	11,648	11,648	11,648	11,648	11,648	11,648	11,648	11,648	-	-	\$200
Operations Centre	-	-	-	-	-	-	-	-	44,395	44,395	\$180
Total (#)	11,648	44,395	44,395								
Total (\$000)	\$2,329.6	\$7,991.1	\$7,991.1								

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APPENDIX B.6
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PARKS
FLEET

PARKS FLEET Vehicle Name	# of Vehicles										UNIT COST (\$/vehicle)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2006 Kubota (Disposed of in 2010)	1	1	-	-	-	-	-	-	-	-	\$32,400
2010 Kubota	-	-	1	1	1	1	1	1	1	1	\$25,900
2007 Kubota (Disposed of in 2011)	1	1	-	-	-	-	-	-	-	-	\$29,900
2011 Kubota	-	-	1	1	1	1	1	1	1	1	\$25,900
2008 Kubota (Disposed of in 2012)	1	1	1	1	-	-	-	-	-	-	\$19,100
2012 Kubota	-	-	-	-	1	1	1	1	1	1	\$25,900
2013 Kubota	-	-	-	-	1	1	1	1	1	1	\$25,900
2003 Olympia Ice Resurfacer (Disposed of in 2010)	1	-	-	-	-	-	-	-	-	-	\$70,100
2010 Olympia Ice Resurfacer	-	1	1	1	1	1	1	1	1	1	\$84,200
2007 Olympia Ice Resurfacer (Disposed of in 2013)	1	1	1	1	-	-	-	-	-	-	\$70,100
2013 Olympia Ice Resurfacer	-	-	-	-	1	1	1	1	1	1	\$84,200
1997 Ford ½ Ton Pick Up (Disposed of in 2008)	-	-	-	-	-	-	-	-	-	-	\$16,400
2008 GMC 1/2 Ton (4x4)	1	1	1	1	1	1	1	1	1	1	\$34,500
2000 Chev Crew Cab 1 Ton (Disposed of in 2012)	1	1	1	-	-	-	-	-	-	-	\$46,400
2012 International Terra Star 1 Ton	-	-	-	1	1	1	1	1	1	1	\$69,400
1997 Ford ½ Ton Pick Up (Disposed of in 2011)	1	1	-	-	-	-	-	-	-	-	\$18,300
2011 Chev Silverado 1500	-	-	1	1	1	1	1	1	1	1	\$31,300
1996 Ford 1/2 Ton (Disposed of in 2011)	1	1	-	-	-	-	-	-	-	-	\$14,000
2011 Dodge Ram 2500	-	-	1	1	1	1	1	1	1	1	\$31,300
1993 GMC ½ Ton Pickup (Disposed of in 2010)	1	-	-	-	-	-	-	-	-	-	\$35,600
2010 GMC Sierra Ext. Cab	-	1	1	1	1	1	1	1	1	1	\$34,500
1980 Tractor (Disposed of in 2009)	-	-	-	-	-	-	-	-	-	-	\$18,500
2007 Tractor	1	1	1	1	1	1	1	1	1	1	\$34,500
2003 Riding Mower J. Deere (Disposed of in 2009)	-	-	-	-	-	-	-	-	-	-	\$18,500
2009 Top Dresser	1	1	1	1	1	1	1	1	1	1	\$17,800
2009 Overseeder	1	1	1	1	1	1	1	1	1	1	\$20,500
2003 Ford Haul-All	1	1	1	1	1	-	-	-	-	-	\$140,300
2014 Dodge w/ Haul-All attachment	-	-	-	-	-	1	1	1	1	1	\$31,300
Landscape Trailer	1	1	1	1	1	1	1	1	1	1	\$10,300
1995 Front End Loader Ford	1	1	1	1	1	1	1	1	1	1	\$74,500
1989 Tru-Play (Disposed of 2014)	1	1	1	1	1	-	-	-	-	-	\$8,600
2014 Bannerman DM-6	-	-	-	-	-	1	1	1	1	1	\$8,600
2004 Ford 1/2 Ton (Disposed of 2018)	1	1	1	1	1	-	-	-	-	-	\$31,300
2008 Ford 3/4 Ton	1	1	1	1	1	1	1	1	1	1	\$48,600
2009 GMC 4X4 Ext Cab	1	1	1	1	1	1	1	1	1	1	\$34,500
2012 Volvo L20B	-	-	-	1	1	1	1	1	1	1	\$98,200
2005 GMC Van	-	-	-	1	1	1	1	1	1	1	\$35,600
2018 Kubota Zero Turn Lawn Mower	-	-	-	-	-	-	-	-	-	1	\$32,400
2018 Kubota	-	-	-	-	-	-	-	-	-	1	\$32,400
Total (#)	15	15	15	17	17	16	16	16	16	18	
Total (\$000)	\$569.7	\$568.6	\$598.9	\$755.7	\$755.7	\$615.4	\$615.4	\$615.4	\$615.4	\$680.2	

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APPENDIX B.6
TABLE 1

TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
PARKS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688

INVENTORY SUMMARY (\$000)

Developed Parkland	\$8,218.0	\$8,218.0	\$8,218.0	\$8,477.4	\$8,477.4	\$8,477.4	\$8,477.4	\$8,477.4	\$8,477.4	\$8,477.4
Park Facilities	\$5,671.2	\$5,671.2	\$5,842.9	\$7,306.7	\$7,306.7	\$7,306.7	\$7,274.3	\$7,274.3	\$12,844.1	\$12,844.1
Harbour	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6	\$2,325.6
Parks Fleet	\$569.7	\$568.6	\$598.9	\$755.7	\$755.7	\$615.4	\$615.4	\$615.4	\$615.4	\$680.2
Total (\$000)	\$16,784.6	\$16,783.5	\$16,985.5	\$18,865.4	\$18,865.4	\$18,725.1	\$18,692.7	\$18,692.7	\$24,262.5	\$24,327.3

SERVICE LEVEL (\$/capita)

Average
Service
Level

Developed Parkland	\$504.70	\$503.99	\$503.25	\$517.61	\$516.10	\$514.59	\$513.07	\$511.55	\$509.76	\$507.99	\$510.26
Park Facilities	\$348.29	\$347.80	\$357.80	\$446.13	\$444.83	\$443.53	\$440.25	\$438.95	\$772.35	\$769.66	\$480.96
Harbour	\$142.82	\$142.62	\$142.41	\$142.00	\$141.58	\$141.17	\$140.75	\$140.33	\$139.84	\$139.36	\$141.29
Parks Fleet	\$34.99	\$34.87	\$36.67	\$46.14	\$46.01	\$37.36	\$37.25	\$37.13	\$37.01	\$40.76	\$38.82
Total (\$/capita)	\$1,030.80	\$1,029.28	\$1,040.14	\$1,151.87	\$1,148.51	\$1,136.65	\$1,131.31	\$1,127.97	\$1,458.96	\$1,457.77	\$1,171.33

TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
PARKS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$1,171.33
Net Population Growth 2019 - 2028	3,009
Maximum Allowable Funding Envelope	\$3,524,532
Less: 10% Legislated Reduction	\$352,453
Discounted Maximum Allowable Funding Envelope	\$3,172,079

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TABLE 2

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS

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	10% Reduction		Available DC Reserves	2019-2028	Post 2028
6.0 PARKS										
6.1 Park Facilities/Development										
6.1.1 Wayfinding Signage (Phase 2)	2020	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 15,000	\$ 135,000	\$ 135,000	\$ -	\$ -
6.1.2 BayPort Development	2020	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ 20,000	\$ 180,000	\$ 127,498	\$ 52,502	\$ -
6.1.3 Washrooms at Seasons Park (Hanson Development)	2021	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ 20,000	\$ 180,000	\$ -	\$ 180,000	\$ -
6.1.4 Sunnyside Park	2022	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 50,000	\$ 450,000	\$ -	\$ 450,000	\$ -
6.1.5 BayPort Development	2023	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ 20,000	\$ 180,000	\$ -	\$ 180,000	\$ -
6.1.6 Wayfinding Signage (Phase 3)	2023	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 15,000	\$ 135,000	\$ -	\$ 135,000	\$ -
Subtotal Park Facilities/Development		\$ 1,400,000	\$ -	\$ 1,400,000	\$ -	\$ 140,000	\$ 1,260,000	\$ 262,498	\$ 997,502	\$ -
6.2 Vehicles										
6.2.1 Provision for Vehicles	2021	\$ 60,000	\$ -	\$ 60,000	\$ 23,912	\$ 3,609	\$ 32,479	\$ -	\$ 32,479	\$ -
Subtotal Vehicles		\$ 60,000	\$ -	\$ 60,000	\$ 23,912	\$ 3,609	\$ 32,479	\$ -	\$ 32,479	\$ -
6.3 New Multi-Use Trails and Bike Paths in Parks										
6.3.1 Penetanguishene Road Multi-Use Path	2021	\$ 124,000	\$ -	\$ 124,000	\$ 31,000	\$ 9,300	\$ 83,700	\$ -	\$ 83,700	\$ -
6.3.2 New Multi-Use path - Hugel Avenue and Cook Drive	2022	\$ 62,040	\$ -	\$ 62,040	\$ 46,530	\$ 1,551	\$ 13,959	\$ -	\$ 13,959	\$ -
6.3.3 New Multi-Use trail - Yonge Street and Highway 12	2024	\$ 350,700	\$ -	\$ 350,700	\$ 87,675	\$ 26,303	\$ 236,723	\$ -	\$ 236,723	\$ -
6.3.4 Little Lake Park Multi Use Trail - to be funded as Local Service	2025	\$ 722,300	\$ 722,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6.3.5 Mid-Pen Multi-Use Path Connection	2026	\$ 194,250	\$ -	\$ 194,250	\$ 145,688	\$ 4,856	\$ 43,706	\$ -	\$ 43,706	\$ -
6.3.6 New Multi-Use Path Connection	2027	\$ 152,250	\$ -	\$ 152,250	\$ 114,188	\$ 3,806	\$ 34,256	\$ -	\$ 34,256	\$ -
6.3.7 Mud Lake Multi Use Trail	2028	\$ 1,525,200	\$ -	\$ 1,525,200	\$ -	\$ 152,520	\$ 1,372,680	\$ -	\$ 1,372,680	\$ -
Subtotal New Multi-Use Trails and Bike Paths in Parks		\$ 3,130,740	\$ 722,300	\$ 2,408,440	\$ 425,080	\$ 198,336	\$ 1,785,024	\$ -	\$ 1,785,024	\$ -
TOTAL PARKS		\$ 4,590,740	\$ 722,300	\$ 3,868,440	\$ 448,993	\$ 341,945	\$ 3,077,503	\$ 262,498	\$ 2,815,005	\$ -

Note 1: The principal payments have already considered the 10% reduction in previous by-laws.

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	100%	\$2,815,005
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$781.95
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.00

2019 - 2028 Net Funding Envelope	\$3,172,079
Reserve Fund Balance at December 31, 2018	\$262,498

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APPENDIX B.6
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARKS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$280.75	\$522.45	\$519.09	\$332.22	\$300.38	\$354.94	\$683.53	\$978.86	\$1,301.23	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Parks: Non Inflated	\$0.0	\$52.5	\$296.2	\$464.0	\$315.0	\$236.7	\$0.0	\$43.7	\$34.3	\$1,372.7	\$2,815.0
- Parks: Inflated	\$0.0	\$53.6	\$308.1	\$492.4	\$341.0	\$261.4	\$0.0	\$50.2	\$40.1	\$1,640.5	\$3,187.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$275.9	\$281.4	\$287.1	\$292.8	\$298.7	\$304.6	\$310.7	\$316.9	\$323.3	\$329.8	\$3,021.3
INTEREST											
- Interest on Opening Balance	\$0.0	\$9.8	\$18.3	\$18.2	\$11.6	\$10.5	\$12.4	\$23.9	\$34.3	\$45.5	\$184.6
- Interest on In-year Transactions	\$4.8	\$4.0	(\$0.6)	(\$5.5)	(\$1.2)	\$0.8	\$5.4	\$4.7	\$5.0	(\$36.0)	(\$18.6)
TOTAL REVENUE	\$280.8	\$295.3	\$304.8	\$305.5	\$309.1	\$315.9	\$328.6	\$345.5	\$362.5	\$339.3	\$3,187.2
CLOSING CASH BALANCE	\$280.8	\$522.5	\$519.1	\$332.2	\$300.4	\$354.9	\$683.5	\$978.9	\$1,301.2	(\$0.0)	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2019 Adjusted Charge Per Capita	\$766.45
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.7

PUBLIC WORKS

APPENDIX B.7

PUBLIC WORKS

The Town of Midland operates an Operations Centre and is responsible for the repair and maintenance of Town infrastructure that falls within a road right of way. The benefits of the Public Works service are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

The 10-year historical inventory of capital assets for Public Works includes the 44,395 square foot Operations Centre, valued at \$8.0 million and located on 9.06 hectares of land worth \$859,100. The Public Works vehicle fleet and small equipment totals 64 pieces of equipment and vehicles that have a replacement value of \$6.6 million.

The total combined value of the inventory of Public Works capital assets is \$15.5 million. The resulting 10-year historical average service level is \$460.57 per population and employment. When multiplied by the 10-year forecast net population and employment growth, this results in a 10-year maximum allowable funding envelope of \$2.4 million, which is brought forward to the development charges calculation. Public Works is not subject to the ten percent reduction.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Public Works as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

Table 2 2019 – 2028 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The 10-year development-related capital plan for Public Works is entirely related to debt recovery for the recently completed Operations Centre. The principal payments on this totals \$3.8 million. Replacement shares of \$3.0 million have been identified with an additional \$694,643 funded from available DC reserves. The remaining

\$145,014 is related to development occurring between 2019 and 2028 and is included in the development charges calculation.

The development-related cost is allocated 63 per cent to residential development and 37 per cent to non-residential development, resulting in a per capita unadjusted charge of \$25.38 and a non-residential unadjusted charge of \$0.41 per square metre.

Table 3 Cash Flow Analysis

After cash flow analysis, including factoring interest payments on the Operations Centre debt, the residential calculated charge increases to \$87.15 per capita and the non-residential charge increases to \$1.41 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

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

PUBLIC WORKS SUMMARY						
10-year Hist.	2019 - 2028		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
\$460.57	\$3,793,632	\$145,014	\$25.38	\$0.41	\$87.15	\$1.41

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TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Main Public Works Building	9,342	9,342	9,342	9,342	9,342	9,342	9,342	9,342	9,342	-	-	\$200
Salt Dome	10,691	10,691	10,691	10,691	10,691	10,691	10,691	10,691	10,691	-	-	\$50
Equipment Storage Building	5,024	5,024	5,024	5,024	5,024	5,024	5,024	5,024	5,024	-	-	\$90
Storage Building	1,519	1,519	1,519	1,519	1,519	1,519	1,519	1,519	1,519	-	-	\$90
Salt Storage Building	475	475	475	475	475	475	475	475	475	-	-	\$100
Main WWTC Building	7,518	7,518	7,518	7,518	7,518	7,518	7,518	7,518	7,518	-	-	\$230
Operations Centre (Main Building)	-	-	-	-	-	-	-	-	-	44,395	44,395	\$180
Total (#)	34,569	44,395	44,395									
Total (\$000)	\$4,768.5	\$7,991.1	\$7,991.1									

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Main Public Works Building	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	-	-	\$269,800
Salt Dome	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-	-	\$269,800
Equipment Storage Building	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	-	-	\$269,800
Storage Building	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-	-	\$269,800
Salt Storage Building	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-	-	\$269,800
Main WWTC Building	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	-	-	\$269,800
Operations Centre (Main Building)	-	-	-	-	-	-	-	-	-	9.06	9.06	\$94,829
Total (ha)	2.03	9.06	9.06									
Total (\$000)	\$547.7	\$859.1	\$859.1									

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APPENDIX B.7
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET Description	# of Fleet and Small Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Public Works											
2006 GMC Sierra Classic #12 (replaced #4)	1	1	1	1	1	-	-	-	-	-	\$51,800
1988 Chev Pickup Auto -1/2 ton #8 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$30,200
2006 Ford F150 4 x 2 #3 (replaced #8)	1	1	1	1	1	-	-	-	-	-	\$30,200
1997 Trackless Sidewalk Plow with Accessories #44 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$135,100
2007 Trackless MT5T Sidewalk Tractor #93 (replaced #44)	1	1	1	1	1	1	1	1	1	1	\$135,100
2004 Holder Sidewalk Tractor #91 (replaced #95)	1	1	1	1	1	-	-	-	-	-	\$135,100
1997 JCB 215 Backhoe/Loader Diesel Auto #25 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$134,900
2007 Volvo Backhoe #27 (replaced #25)	1	1	1	1	1	1	1	1	1	1	\$134,900
1994 Johnson Street Sweeper Diesel #21 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$154,900
2007 Allianz Road Sweeper #22 (replaced #21)	1	1	1	1	1	1	1	1	1	1	\$154,900
1997 Freightliner Sewer Cleaner Diesel Manual #41 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$409,000
2008 Sewer machine, Sterling/Vactor #43 (replaced #41)	1	1	1	1	1	1	1	1	1	1	\$428,400
1993 2x6 Dump/Plow/Sander Diesel Manual #83 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$234,200
2006 Sterling Tandem Truck Pw #81 (replaced #83)	1	1	1	1	1	-	-	-	-	-	\$234,200
1999 Chev 2x4 Diesel Manual #6 (replaced # - N/A)	-	-	-	-	-	-	-	-	-	-	\$49,600
2008 Ford F350 single axle drive dump truck #04 (replaced #6)	1	1	1	1	1	1	1	1	1	1	\$49,600
2003 GMC 2x4 Diesel Auto #11 (replaced old #9)	1	1	1	1	1	-	-	-	-	-	\$51,800
2009 GMC 4x4 Pickup Auto #9 (replaced #1)	-	1	1	1	1	1	1	1	1	1	\$30,200
2009 GMC Pickup Auto #2 (replaced old #2)	1	1	1	1	1	1	1	1	1	1	\$30,200
2001 Van - Econoline #7 (replaced #20)	1	-	-	-	-	-	-	-	-	-	\$34,500
1999 Trackless Sidewalk Plow with Accessories #90 (replaced #76)	-	-	-	-	-	-	-	-	-	-	\$135,100
1979 Bombardier Tracked Plow & Sander #78 (replaced # - N/A)	1	1	1	1	-	-	-	-	-	-	\$117,600
1999 Johnson Street Sweeper Diesel #24 (replaced #35)	1	1	1	-	-	-	-	-	-	-	\$154,900
1990 GMC 2x6 Dump Snow Plow Diesel Auto #89 (replaced # - N/A)	1	-	-	-	-	-	-	-	-	-	\$153,200
2002 Volvo 2x6 Dump/Spreader Diesel Manual #82 (replaced #43)	1	1	1	-	-	-	-	-	-	-	\$187,500
1998 Volvo 2x6 Dump Truck Diesel Manual #86 (replaced #42)	1	-	-	-	-	-	-	-	-	-	\$234,200
2001 Freightliner 2x6 Dump/Plow/Sander Diesel Manual #87 (replaced old #88)	1	1	1	-	-	-	-	-	-	-	\$234,200
2018 Freightliner 4x4 Snow Plow Diesel Manual #98	-	-	-	-	-	-	-	-	-	1	\$234,200
1994 AutoCar 4x4 Snow Plow Diesel Manual #84 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	-	\$234,200
2016 John Deere 4x4 Loader/Plow #34	-	-	-	-	-	-	-	1	1	1	\$304,100
1995 Volvo L120D 4x4 Loader/Plow Diesel Auto #29 (replaced # - N/A)	1	1	1	1	1	-	-	-	-	-	\$304,100
1991 Volvo L120 4x4 Loader/Plow Diesel Auto #14 (replaced # - N/A)	1	1	1	1	1	-	-	-	-	-	\$292,400
2000 Volvo L120C Loader Diesel 2000 #28 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	1	\$304,100
2003 Volvo Grader 2x6 Snowfighter #42 (replaced #33)	1	1	1	1	1	1	1	1	1	1	\$315,700
1979 SMI Snow Blower #77	1	1	-	-	-	-	-	-	-	-	\$554,600
1991 SMI Snow Blower #71 (replace #36)	1	1	1	1	1	-	-	-	-	-	\$554,600
1992 Case 4x4 Skid Steer Loader/Snow Plow Diesel #10 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	1	\$47,700
1998 Tarco Leaf Loader Diesel #66 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	1	\$41,100
2000 Tarco Leaf Loader Diesel #69 (replaced #65)	1	1	1	1	1	-	-	-	-	-	\$41,100

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APPENDIX B.7
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET Description	# of Fleet and Small Equipment										UNIT COST (\$/unit)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
1994 Tarco Leaf Loader Diesel #80 (replaced # - N/A)	1	1	-	-	-	-	-	-	-	-	-	\$41,100
1996 Giant Vac. Leaf Loader Gas Trailer #26 (replaced # - N/A)	1	1	-	-	-	-	-	-	-	-	-	\$41,100
1987 Marathon Asphalt Mics Kettle 250 gals. #23 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	1	1	\$16,200
1972 Sullivan 125 cgm Portable Compressor Diesel #31 & #34 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	1	1	\$24,800
2002 Asphalt Roller Double Drum #54 (replaced # - old #53)	1	1	1	1	1	1	1	1	1	1	1	\$29,500
1998 Vermeer Wood Chipper Gas Trailer (replaced #13)	1	1	1	1	1	1	1	1	1	1	1	\$41,100
2009 Marathon Melter Propane #39	1	1	1	1	1	1	1	1	1	1	1	\$32,600
1993 Crafc0 Asphalt Sealer & Melter Propane #40 (new addition)	1	1	1	1	1	-	-	-	-	-	-	\$32,600
Mowers and Weedies-2 mowers and some weedies	1	1	1	1	1	1	1	1	1	1	1	\$21,600
Tandem Trailer #63 (1984) AND #64 (1997) - (replaced #s - N/A)	1	1	1	1	1	1	1	1	1	1	1	\$12,000
2001 CCTV Equipment #81 (replaced #79)	1	1	1	1	1	-	-	-	-	-	-	\$25,600
2016 CCTV Equipment #82 (replaced #81)	-	-	-	-	-	-	-	-	-	1	1	
2009 CCTV Equipment #81 (replaced #79)	1	1	1	1	1	1	1	1	1	-	-	\$12,300
1993 Marathon Pavement Router #38 (new addition)	1	1	1	1	1	1	1	1	1	1	1	\$7,600
2005 Sterling Tandem Dump #88 (replaced # - N/A)	1	1	1	1	1	-	-	-	-	-	-	\$234,200
2007 Sterling LT9513 Dump #79 (replaced # - N/A)	1	1	1	1	1	1	1	1	1	1	1	\$167,300
2008 Ford F350 single axle drive dump truck #05 (replaced old #8)	1	1	1	1	1	1	1	1	1	1	1	\$51,600
1995 Western Star 2x6 tandem Dump/Spreader Diesel truck including plow/wing #85	-	-	-	-	-	-	-	-	-	-	-	\$167,300
1993 Hot Air Lance #68 (new addition)	1	1	1	1	1	1	1	1	1	1	1	\$3,500
2010 Trackless sidewalk tractor with attachments #94 (replaced #90)	-	1	1	1	1	1	1	1	1	1	1	\$140,300
2010 Freightliner tandem dump/plow/spreader truck #85 (replaced #86)	-	1	1	1	1	1	1	1	1	1	1	\$262,900
2009 Marathon asphalt Hot Box on trailer #55 (new addition)	1	1	1	1	1	1	1	1	1	1	1	\$35,300
2010 Volvo loader #30 (new addition)	-	1	1	1	1	1	1	1	1	1	1	\$250,800
2010 GMC pickup truck #8 (replaced Van #7)	-	1	1	1	1	1	1	1	1	1	1	\$30,000
2011 Freightliner tri-axle dump truck #75 (replaced #89)	-	-	1	1	1	1	1	1	1	1	1	\$163,800
2010 ODB leaf loader #36 (replaced #26)	-	1	1	1	1	1	1	1	1	1	1	\$34,600
2010 ODB leaf loader #65 (replaced #80)	-	1	1	1	1	1	1	1	1	1	1	\$34,600
2011 LaRue detachable snow blower #72 (replaced #77)	-	-	1	1	1	1	1	1	1	1	1	\$112,200
2018 LaRue detachable snowblower D40 (replaced #71)	-	-	-	-	-	-	-	-	-	-	1	\$112,200
2012 Freightliner dump truck/plow/spreader #80 (replaced #87)	-	-	1	1	1	1	1	1	1	1	1	\$271,600
2012 Trackless boom flail mower #53 (new addition)	-	-	-	1	1	1	1	1	1	1	1	\$34,400
2012 Freightliner dump truck/plow/spreader #76 (replaced #82)	-	-	-	1	1	1	1	1	1	1	1	\$236,500
2012 Elgin street sweeper #25 (replaced #24)	-	-	-	1	1	1	1	1	1	1	1	\$156,900
2013 MacLean sidewalk tractor with attachments #92 (replaced #78)	-	-	-	-	1	1	1	1	1	1	1	\$118,300
2015 Freightliner tandem dump/plow truck #73	-	-	-	-	-	-	1	1	1	1	1	\$236,500
2015 Freightliner tandem dump/plow truck #74	-	-	-	-	-	-	1	1	1	1	1	\$236,500
2017 Freightliner Single axle dump/plow truck	-	-	-	-	-	-	-	-	1	1	1	\$236,500

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TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET Description	# of Fleet and Small Equipment										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
2015 Maclean Sidewalk Tractor with attachments #96	-	-	-	-	-	-	1	1	1	1	\$118,300
2017 Trackless Sidewalk Tractor with attachments #97	-	-	-	-	-	-	-	-	1	1	\$118,300
Water and Wastewater Department											
W8 F250 Ford 4x4 PU with Plow 2002	1	1	1	1	1	1	1	1	1	1	\$37,800
W9 F150 2003 Ford PU	1	1	1	1	1	1	1	1	1	1	\$32,400
W16 Ford Econoline 2500 Van	1	1	1	1	1	-	-	-	-	-	\$36,700
W#16 - 2015 Chev van	-	-	-	-	-	1	1	1	1	1	\$31,724
W12 2005 GMC Cargo	1	1	1	1	1	1	1	1	1	1	\$32,400
W#14 - 09 Ford MT	1	1	1	1	1	1	1	1	1	1	\$64,700
W15 GMC Dump Truck 1988	1	1	1	1	-	-	-	-	-	-	\$97,100
W#17 - 08 Ford	1	1	1	1	1	1	1	1	1	1	\$36,800
W#20 - 90 John Deer	1	1	1	1	1	1	1	1	1	1	\$134,900
Trench Box with Trailer	1	1	1	1	1	1	1	1	1	1	\$27,000
Mobile Sign Trailer	1	1	1	1	1	1	1	1	1	1	\$7,000
W#6 - 2014 FORD	1	1	1	1	1	1	1	1	1	1	\$36,800
2008 Sterling LT9513 Plow #83 (replaced #85)	1	1	1	1	1	1	1	1	1	1	\$226,600
W10 1983 Ford F350 chasis Utility Body Cube Van	1	1	1	1	-	-	-	-	-	-	\$5,400
W#5 -08 Ford	1	1	1	1	1	1	1	1	1	1	\$32,400
WW#4 -08 P Wave	1	1	1	1	1	1	1	1	1	1	\$19,000
Chemtrac Particle Counters	1	1	1	1	1	1	1	1	1	1	\$20,000
350 KW Generator (Well #7)	1	1	1	1	1	1	1	1	1	1	\$75,500
Threading machine model 300 Comp	1	1	1	1	1	1	1	1	1	1	\$7,000
W#21 - 07Volvo backhoe	1	1	1	1	1	1	1	1	1	1	\$134,900
2008 Cub Cadet Mower	1	1	1	1	1	1	1	1	1	1	\$8,300
Valve operating trailer & vacuum w trailer	1	1	1	1	1	1	1	1	1	1	\$72,200
Total (#)	67	71	71	71	69	57	60	61	63	64	
Total (\$000)	\$7,216.8	\$7,578.3	\$7,489.1	\$7,340.3	\$7,238.5	\$5,245.8	\$5,837.1	\$6,141.2	\$6,483.7	\$6,595.9	

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APPENDIX B.7
TABLE 1

TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688
Historical Employment	10,956	11,168	11,383	11,351	11,319	11,287	11,255	11,223	11,103	10,985
Total Historical Population & Employment	27,239	27,474	27,713	27,729	27,745	27,761	27,778	27,795	27,733	27,673

INVENTORY SUMMARY (\$000)

Buildings	\$4,768.5	\$4,768.5	\$4,768.5	\$4,768.5	\$4,768.5	\$4,768.5	\$4,768.5	\$4,768.5	\$7,991.1	\$7,991.1
Land	\$547.7	\$547.7	\$547.7	\$547.7	\$547.7	\$547.7	\$547.7	\$547.7	\$859.1	\$859.1
Fleet	\$7,216.8	\$7,578.3	\$7,489.1	\$7,340.3	\$7,238.5	\$5,245.8	\$5,837.1	\$6,141.2	\$6,483.7	\$6,595.9
Total (\$000)	\$12,532.9	\$12,894.4	\$12,805.2	\$12,656.4	\$12,554.6	\$10,562.0	\$11,153.3	\$11,457.4	\$15,334.0	\$15,446.2

SERVICE LEVEL (\$/population & employment)

											Average Service Level
Buildings	\$175.06	\$173.56	\$172.07	\$171.97	\$171.87	\$171.77	\$171.66	\$171.56	\$288.14	\$288.77	\$195.64
Land	\$20.11	\$19.93	\$19.76	\$19.75	\$19.74	\$19.73	\$19.72	\$19.70	\$30.98	\$31.05	\$22.05
Fleet	\$264.94	\$275.84	\$270.24	\$264.72	\$260.89	\$188.96	\$210.13	\$220.95	\$233.79	\$238.35	\$242.88
Total (\$/pop & emp)	\$460.11	\$469.33	\$462.07	\$456.43	\$452.50	\$380.46	\$401.51	\$412.21	\$552.91	\$558.17	\$460.57

TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$460.57
Net Population & Employment Growth 2019 - 2028	5,096
Maximum Allowable Funding Envelope	\$2,347,065
Discounted Maximum Allowable Funding Envelope	\$2,347,065

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TABLE 2

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC WORKS

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	0% Reduction		Available DC Reserves	2019-2028	Post 2028
7.0 PUBLIC WORKS										
7.1 Opeartions Complex Debt										
7.1.1 Principal Payment	2019	\$ 210,747	\$ -	\$ 210,747	\$ 164,102	\$ -	\$ 46,645	\$ 46,645	\$ -	\$ -
7.1.2 Principal Payment	2020	\$ 206,738	\$ -	\$ 206,738	\$ 160,980	\$ -	\$ 45,758	\$ 45,758	\$ -	\$ -
7.1.3 Principal Payment	2021	\$ 202,581	\$ -	\$ 202,581	\$ 157,743	\$ -	\$ 44,838	\$ 44,838	\$ -	\$ -
7.1.4 Principal Payment	2022	\$ 198,270	\$ -	\$ 198,270	\$ 154,387	\$ -	\$ 43,884	\$ 43,884	\$ -	\$ -
7.1.5 Principal Payment	2023	\$ 193,801	\$ -	\$ 193,801	\$ 150,906	\$ -	\$ 42,895	\$ 42,895	\$ -	\$ -
7.1.6 Principal Payment	2024	\$ 189,166	\$ -	\$ 189,166	\$ 147,297	\$ -	\$ 41,869	\$ 41,869	\$ -	\$ -
7.1.7 Principal Payment	2025	\$ 184,360	\$ -	\$ 184,360	\$ 143,555	\$ -	\$ 40,805	\$ 40,805	\$ -	\$ -
7.1.8 Principal Payment	2026	\$ 179,376	\$ -	\$ 179,376	\$ 139,674	\$ -	\$ 39,702	\$ 39,702	\$ -	\$ -
7.1.9 Principal Payment	2027	\$ 174,209	\$ -	\$ 174,209	\$ 135,650	\$ -	\$ 38,558	\$ 38,558	\$ -	\$ -
7.1.10 Principal Payment	2028	\$ 168,850	\$ -	\$ 168,850	\$ 131,478	\$ -	\$ 37,372	\$ 37,372	\$ -	\$ -
7.1.11 Principal Payment	2028	\$ 1,885,535	\$ -	\$ 1,885,535	\$ 1,468,204	\$ -	\$ 417,332	\$ 272,318	\$ 145,014	\$ -
Subtotal Opeartions Complex Debt		\$ 3,793,632	\$ -	\$ 3,793,632	\$ 2,953,975	\$ -	\$ 839,657	\$ 694,643	\$ 145,014	\$ -
TOTAL PUBLIC WORKS		\$ 3,793,632	\$ -	\$ 3,793,632	\$ 2,953,975	\$ -	\$ 839,657	\$ 694,643	\$ 145,014	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	63%	\$91,359
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$25.38
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	37%	\$53,655
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.41

2019 - 2028 Net Funding Envelope	\$2,347,065
Reserve Fund Balance at December 31, 2018	\$694,643

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APPENDIX B.7
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$2.54	\$6.36	\$11.55	\$18.18	\$26.35	\$36.14	\$47.65	\$60.98	\$76.22	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$91.4	\$91.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$31.4	\$32.0	\$32.6	\$33.3	\$34.0	\$34.6	\$35.3	\$36.0	\$36.8	\$37.5	\$343.5
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	\$0.2	\$0.4	\$0.6	\$0.9	\$1.3	\$1.7	\$2.1	\$2.7	\$10.0
- Interest on In-year Transactions	\$0.5	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	(\$1.5)	\$3.9
- Interest on Operations Centre	(\$29.4)	(\$28.8)	(\$28.2)	(\$27.6)	(\$27.0)	(\$26.4)	(\$25.7)	(\$25.0)	(\$24.3)	(\$23.5)	(\$266.1)
TOTAL REVENUE	\$2.5	\$3.8	\$5.2	\$6.6	\$8.2	\$9.8	\$11.5	\$13.3	\$15.2	\$15.1	\$91.4
CLOSING CASH BALANCE	\$2.5	\$6.4	\$11.5	\$18.2	\$26.4	\$36.1	\$47.7	\$61.0	\$76.2	\$0.0	

2019 Adjusted Charge Per Capita	\$87.15
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.7
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$0.12	\$1.18	\$3.36	\$6.62	\$11.15	\$16.91	\$24.10	\$32.81	\$43.00	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$53.7	\$53.7
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	12,140	12,320	12,580	12,760	13,020	13,200	13,460	13,720	13,900	14,160	131,260
REVENUE											
- DC Receipts: Inflated	\$17.1	\$17.7	\$18.4	\$19.0	\$19.8	\$20.5	\$21.3	\$22.2	\$22.9	\$23.8	\$202.7
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.0	\$0.0	\$0.1	\$0.2	\$0.4	\$0.6	\$0.8	\$1.1	\$1.5	\$4.9
- Interest on In-year Transactions	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.4	\$0.4	\$0.4	\$0.4	(\$0.8)	\$2.3
- Interest on Operations Centre	(\$17.3)	(\$16.9)	(\$16.6)	(\$16.2)	(\$15.9)	(\$15.5)	(\$15.1)	(\$14.7)	(\$14.3)	(\$13.8)	(\$156.3)
TOTAL REVENUE	\$0.1	\$1.1	\$2.2	\$3.3	\$4.5	\$5.8	\$7.2	\$8.7	\$10.2	\$10.7	\$53.7
CLOSING CASH BALANCE	\$0.1	\$1.2	\$3.4	\$6.6	\$11.2	\$16.9	\$24.1	\$32.8	\$43.0	\$0.0	

2019 Adjusted Charge Per Square Metre	\$1.41
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.8

PARKING

APPENDIX B.8

PARKING

The Town of Midland operates several parking lots, meters, and ticket machines. The benefits of Parking services are deemed to be Town-wide for the purposes of calculating the development charge.

Table 1 2009-2018 Historical Service Levels

The 10-year historical inventory of capital assets for Parking include 554 parking spaces across 10 lots, which are valued at \$889,300. In addition, the Town has 351 parking meters and 3 handheld ticket machines that have a replacement value of \$138,200.

The total combined value of the inventory of Parking capital assets is \$1.0 million. The resulting 10-year historical average service level is \$37.13 per population and employment. When multiplied by the 10-year forecast net population and employment growth, this results in a 10-year maximum allowable funding envelope of \$189,214. After the mandatory 10 per cent deduction of \$18,913, the resulting envelope of \$170,220 is brought forward to the development charges calculation.

Paragraph 5 of s.5(1) of the *DCA* requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity" that is "uncommitted". "Excess capacity" is undefined in the *DCA*, but is considered to relate to the capacity available to meet some or all of the increase in need for service in order to potentially represent a deduction. It is recognized that no "surplus" of capacity exists within Parking as the deduction of uncommitted excess capacity would occur as part of conceptual planning and feasibility work associated with planning new facilities.

Table 2 2019 – 2028 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The 10-year development-related capital plan for Parking consists of \$50,000 for a Parking Needs Study and \$500,000 for Pay & Display Meters. There are no grants or replacement shares identified. A benefit to existing share of \$250,000 has been applied to the Pay & Display Meters. After deducting the mandatory 10 per cent discount, the

total DC eligible costs total \$270,000. Reserve funds of \$212,783 have been applied, and the remaining \$57,217 is attributable to development between 2019 and 2028.

The development-related cost is allocated 63 per cent to residential development and 37 per cent to non-residential development, resulting in a per capita unadjusted charge of \$10.01 and a non-residential unadjusted charge of \$0.16 per square metre.

Table 3 Cash Flow Analysis

After cash flow and reserve fund analysis, the residential calculated charge increases to \$11.34 per capita and the non-residential charge increases to \$0.18 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Parking development charge.

PARKING SUMMARY						
10-year Hist. Service Level per pop & emp	2019 - 2028		Unadjusted		Adjusted	
	Development-Related Total	Capital Program Net DC Recoverable	Development \$/capita	Charge \$/sq.m	Development \$/capita	Charge \$/sq.m
\$37.13	\$550,000	\$57,217	\$10.01	\$0.16	\$11.34	\$0.18

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TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
PARKING

PARKING SPACES Lot Name	# of Parking Spaces										UNIT COST (\$/space)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Lot 1, First Street	120	120	120	120	120	119	118	118	117	116	\$350
Lot 2, Bay Street	30	30	30	30	30	30	30	30	30	30	\$230
Lot 3, Dominion Avenue	16	16	16	16	16	16	16	15	15	15	\$290
Lot 4, Dominion Avenue	17	17	17	17	17	17	17	17	17	17	\$1,520
Lot 5, Midland Avenue	70	70	69	70	70	70	69	69	68	68	\$230
Lot 6, Midland Avenue	167	167	167	167	167	167	167	167	167	167	\$3,230
Lot 7, Bay Street	46	46	46	46	46	45	45	44	44	43	\$620
Lot 8, Bay Street	13	13	13	13	13	13	13	13	13	13	\$12,450
Lot 9, Midland Avenue	44	44	44	44	44	44	44	44	44	44	\$420
Lot 10, Midland Avenue	41	41	41	41	41	41	41	41	41	41	\$1,210
Total (#)	564	564	563	564	564	562	560	558	556	554	
Total (\$000)	\$893.4	\$893.4	\$893.1	\$893.4	\$893.4	\$892.5	\$891.7	\$890.9	\$890.1	\$889.3	

METERS AND MACHINES Location	# of Meters and Machines										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Parking Meters	339	343	345	351	351	339	343	345	351	351	\$380
Hand-held Ticket Machines	2	2	2	2	3	2	2	2	2	3	\$1,620
Total (#)	341	345	347	353	354	341	345	347	353	354	
Total (\$000)	\$132.1	\$133.6	\$134.3	\$136.6	\$138.2	\$132.1	\$133.6	\$134.3	\$136.6	\$138.2	

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APPENDIX B.8
TABLE 1

**TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
PARKING**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688
Historical Employment	<u>10,956</u>	<u>11,168</u>	<u>11,383</u>	<u>11,351</u>	<u>11,319</u>	<u>11,287</u>	<u>11,255</u>	<u>11,223</u>	<u>11,103</u>	<u>10,985</u>
Total Historical Population & Employment	27,239	27,474	27,713	27,729	27,745	27,761	27,778	27,795	27,733	27,673

INVENTORY SUMMARY (\$000)

Parking Spaces	\$893.4	\$893.4	\$893.1	\$893.4	\$893.4	\$892.5	\$891.7	\$890.9	\$890.1	\$889.3
Meters And Machines	\$132.1	\$133.6	\$134.3	\$136.6	\$138.2	\$132.1	\$133.6	\$134.3	\$136.6	\$138.2
Total (\$000)	\$1,025.4	\$1,026.9	\$1,027.5	\$1,030.0	\$1,031.6	\$1,024.6	\$1,025.3	\$1,025.3	\$1,026.8	\$1,027.6

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Parking Spaces	\$32.80	\$32.52	\$32.23	\$32.22	\$32.20	\$32.15	\$32.10	\$32.05	\$32.10	\$32.14	\$32.25
Meters And Machines	\$4.85	\$4.86	\$4.85	\$4.93	\$4.98	\$4.76	\$4.81	\$4.83	\$4.93	\$5.00	\$4.88
Total (\$/pop & emp)	\$37.64	\$37.38	\$37.08	\$37.14	\$37.18	\$36.91	\$36.91	\$36.89	\$37.02	\$37.13	\$37.13

**TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
PARKING**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$37.13
Net Population & Employment Growth 2019 - 2028	5,096
Maximum Allowable Funding Envelope	\$189,214
Less: 10% Legislated Reduction	\$18,913
Discounted Maximum Allowable Funding Envelope	\$170,220

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKING

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	10% Reduction		Available DC Reserves	2019-2028	Post 2028
8.0 PARKING										
8.1 Studies										
8.1.1 Parking Needs Study	2027	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ 45,000	\$ -	\$ -
Subtotal Studies		\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ 45,000	\$ -	\$ -
8.2 Pay & Display Meters										
8.2.1 Pay & Display Meters in Surface Lots	2020	\$ 500,000	\$ -	\$ 500,000	\$ 250,000	\$ 25,000	\$ 225,000	\$ 167,783	\$ 57,217	\$ -
Subtotal Pay & Display Meters		\$ 500,000	\$ -	\$ 550,000	\$ 250,000	\$ 30,000	\$ 270,000	\$ 212,783	\$ 57,217	\$ -
TOTAL PARKING		\$ 550,000	\$ -	\$ 550,000	\$ 250,000	\$ 30,000	\$ 270,000	\$ 212,783	\$ 57,217	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	63%	\$36,047
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$10.01
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	37%	\$21,170
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$0.16

2019 - 2028 Net Funding Envelope	\$170,220
Reserve Fund Balance at December 31, 2018	\$212,783

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APPENDIX B.8
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKING
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARKING	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$4.15	(\$29.20)	(\$26.49)	(\$23.54)	(\$20.34)	(\$16.87)	(\$13.12)	(\$9.07)	(\$4.70)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Parking: Non Inflated	\$0.0	\$36.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$36.0
- Parking: Inflated	\$0.0	\$36.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$36.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$4.1	\$4.2	\$4.2	\$4.3	\$4.4	\$4.5	\$4.6	\$4.7	\$4.8	\$4.9	\$44.7
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	(\$1.6)	(\$1.5)	(\$1.3)	(\$1.1)	(\$0.9)	(\$0.7)	(\$0.5)	(\$0.3)	(\$7.7)
- Interest on In-year Transactions	\$0.1	(\$0.9)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.2)
TOTAL REVENUE	\$4.2	\$3.4	\$2.7	\$3.0	\$3.2	\$3.5	\$3.7	\$4.0	\$4.4	\$4.7	\$36.8
CLOSING CASH BALANCE	\$4.2	(\$29.2)	(\$26.5)	(\$23.5)	(\$20.3)	(\$16.9)	(\$13.1)	(\$9.1)	(\$4.7)	(\$0.0)	

2019 Adjusted Charge Per Capita	\$11.34
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKING
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARKING	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$2.27	(\$17.47)	(\$15.99)	(\$14.34)	(\$12.50)	(\$10.47)	(\$8.21)	(\$5.72)	(\$2.99)	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Parking: Non Inflated	\$0.0	\$21.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$21.2
- Parking: Inflated	\$0.0	\$21.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$21.6
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	12,140	12,320	12,580	12,760	13,020	13,200	13,460	13,720	13,900	14,160	131,260
REVENUE											
- DC Receipts: Inflated	\$2.2	\$2.3	\$2.4	\$2.5	\$2.6	\$2.7	\$2.8	\$2.9	\$3.0	\$3.1	\$26.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.1	(\$1.0)	(\$0.9)	(\$0.8)	(\$0.7)	(\$0.6)	(\$0.5)	(\$0.3)	(\$0.2)	(\$4.7)
- Interest on In-year Transactions	\$0.0	(\$0.5)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	(\$0.1)
TOTAL REVENUE	\$2.3	\$1.9	\$1.5	\$1.6	\$1.8	\$2.0	\$2.3	\$2.5	\$2.7	\$3.0	\$21.6
CLOSING CASH BALANCE	\$2.3	(\$17.5)	(\$16.0)	(\$14.3)	(\$12.5)	(\$10.5)	(\$8.2)	(\$5.7)	(\$3.0)	(\$0.0)	

2019 Adjusted Charge Per Square Metre	\$0.18
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.9

TRANSIT SERVICES

APPENDIX B.9

TRANSIT SERVICES

This appendix provides details of the Transit Services ridership forecast and capital program used in the 2019 DC Background Study for the Town of Midland. The forecast method and key assumptions are discussed and the results of the forecasts are presented in the following sections.

The Midland Transit Service runs two bus routes: a North Route and a South Route, which both operate on an hourly basis. The anticipated ridership of the system and the related capital program requirements are discussed further in the following sections. The benefits of Transit Services are deemed to be Town-wide for the purposes of calculating the development charge.

Transit Ridership and Planned Level of Service

In accordance with the *DCA*, Transit services must be based on a “planned level of service” rather than the “10-year historical average level of service”. For the purposes of determining the “planned level of service” for transit, the Town’s Transit development-related capital program has been informed based on existing and proposed capital budget documents and discussions with staff.

In addition, any background study that incorporates Transit services into the calculation must now include the following:

- An assessment of ridership forecast for all modes of transit and whether ridership is generated from existing or planned development (O.Reg. 82/98 s.8(2)4).
- An assessment of ridership capacity for all modes of transit over the 10-year forecast period (O. Reg. 82/98 s.8(2)4).

Midland Transit ridership has been growing steadily over the past few years. The table below shows the ridership for 2017, 2018 and 2019 (as of the end of August 2019). Ridership increased to 64,328 riders in 2018 which represents a year over year increase of 1,119 riders.

Historical Transit Ridership	
Year	Ridership
2017	63,209
2018	64,328
2019 (Jan-Aug)	42,207

Moving forward, the Town expects transit ridership to continue to grow. Generally, transit ridership increases are attributed to population and employment growth. As a result, ridership is expected to grow in proportion to population and employment growth in the Town. The Transit capital program presented in Table 2 is therefore considered to reflect the planned level of service.

Table 1 2009-2018 Historical Service Levels

The 10-year historical inventory of capital assets for Transit Services includes 8 vehicles, including 4 passenger buses and 4 vans. Throughout the Town there are 14 stops and shelters and an additional 3,523 square feet used for bus bays and the Operations Centre.

Table 2 2019 – 2028 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The capital program for Transit Services includes an additional bus at \$420,000 and a \$50,000 transit study. The gross development-related capital program totals \$470,000. There are no grants or replacement shares identified, and Transit is not subject to the 10 per cent deduction. The transit reserve fund balance of \$51,515 has been deducted from the capital costs.

The remaining \$418,485 is eligible for DC recovery in the 2019-2028 time period. It is allocated 63 per cent to residential development and 37 per cent to non-residential development, resulting in an unadjusted development charge of \$73.23 per capita and an unadjusted non-residential charge of \$1.18 per square metre.

Table 3 Cash Flow Analysis

After cash flow analysis, the residential charge increases to \$73.67 per capita and the non-residential charge increases to \$1.19 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Transit Services development charge.

TRANSIT SERVICES SUMMARY					
2019 - 2028		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverabl	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$470,000	\$418,485	\$73.23	\$1.18	\$73.67	\$1.19

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APPENDIX B.9
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
TRANSIT SERVICES

BUSES Type of Bus	# of Buses										UNIT COST (\$/bus)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
2002 30 ft Eldorado Passenger Bus #67	1	1	1	1	1	1	1	1	1	1	1	\$174,000
2002 30 ft Eldorado Passenger Bus #69	1	1	1	1	1	1	1	1	1	1	1	\$191,700
2018 30 ft Vicinity Passenger Bus #71	-	-	-	-	-	-	-	-	-	-	1	\$450,870
2009 GMC Savana 2500 Van #63	1	1	1	1	1	1	1	1	1	1	1	\$64,000
2012 Dodge Grand Caravan #65	-	-	-	1	1	1	1	1	1	1	1	\$53,000
2011 International IC_ICLC	-	-	1	1	1	1	1	1	1	1	1	\$215,000
2015 Dodge Grand Caravan #64	-	-	-	-	-	-	1	1	1	1	1	\$52,100
2018 Dodge Grand Caravan #N/A	-	-	-	-	-	-	-	-	-	-	1	\$55,000
Total (#)	3	3	4	5	5	5	6	6	6	6	8	
Total (\$000)	\$429.7	\$429.7	\$644.7	\$697.7	\$697.7	\$697.7	\$749.8	\$749.8	\$749.8	\$749.8	\$1,255.7	

STOPS AND SHELTERS Description	# of Stops and Shelters										UNIT COST (\$/unit)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Bus Shelters	12	12	12	12	12	2	13	13	14	14	14	\$10,800
Total (#)	12	12	12	12	12	2	13	13	14	14	14	
Total (\$000)	\$129.6	\$129.6	\$129.6	\$129.6	\$129.6	\$21.6	\$140.4	\$140.4	\$151.2	\$151.2	\$151.2	

BUILDINGS Description	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Bus Bay	3,746	3,746	3,746	3,746	3,746	3,746	3,746	3,746	-	-	-	\$170
Bus Bays - Operations Centre	-	-	-	-	-	-	-	-	3,523	3,523	3,523	\$180
Total (sq.ft.)	3,746	3,746	3,746	3,746	3,746	3,746	3,746	3,746	3,523	3,523	3,523	
Total (\$000)	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$634.1	\$634.1	\$634.1	

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APPENDIX B.9
TABLE 1

TOWN OF MIDLAND
CALCULATION OF SERVICE LEVELS
TRANSIT SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688
Historical Employment	<u>10,956</u>	<u>11,168</u>	<u>11,383</u>	<u>11,351</u>	<u>11,319</u>	<u>11,287</u>	<u>11,255</u>	<u>11,223</u>	<u>11,103</u>	<u>10,985</u>
Total Historical Population & Employment	27,239	27,474	27,713	27,729	27,745	27,761	27,778	27,795	27,733	27,673

INVENTORY SUMMARY (\$000)

Buses	\$429.7	\$429.7	\$644.7	\$697.7	\$697.7	\$697.7	\$749.8	\$749.8	\$749.8	\$1,255.7
Stops And Shelters	\$129.6	\$129.6	\$129.6	\$129.6	\$129.6	\$21.6	\$140.4	\$140.4	\$151.2	\$151.2
Buildings	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$636.8	\$634.1	\$634.1
Total (\$000)	\$1,196.1	\$1,196.1	\$1,411.1	\$1,464.1	\$1,464.1	\$1,356.1	\$1,527.0	\$1,527.0	\$1,535.1	\$2,041.0

SERVICE LEVEL (\$/pop & emp)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Service Level
Buses	\$15.78	\$15.64	\$23.26	\$25.16	\$25.15	\$25.13	\$26.99	\$26.98	\$27.04	\$45.38	\$25.65
Stops And Shelters	\$4.76	\$4.72	\$4.68	\$4.67	\$4.67	\$0.78	\$5.05	\$5.05	\$5.45	\$5.46	\$4.53
Buildings	\$23.38	\$23.18	\$22.98	\$22.97	\$22.95	\$22.94	\$22.93	\$22.91	\$22.87	\$22.92	\$23.00
Total (\$/pop & emp)	\$43.91	\$43.54	\$50.92	\$52.80	\$52.77	\$48.85	\$54.97	\$54.94	\$55.35	\$73.75	\$53.18

TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
TRANSIT SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$53.18
Net Population & Employment Growth 2019 - 2028	5,096
Maximum Allowable Funding Envelope	\$271,005
Less: 10% Legislated Reduction	\$27,101
Discounted Maximum Allowable Funding Envelope	\$243,905

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
TRANSIT SERVICES

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	0% Reduction		Available DC Reserves	2019-2028	Post 2028
9.0 TRANSIT SERVICES										
9.1 Fleet										
9.1.1 Additional Bus	2024	\$ 420,000	\$ -	\$ 420,000	\$ -	\$ -	\$ 420,000	\$ 51,515	\$ 368,485	\$ -
Subtotal Fleet		\$ 420,000	\$ -	\$ 420,000	\$ -	\$ -	\$ 420,000	\$ 51,515	\$ 368,485	\$ -
9.2 Studies										
9.2.1 Transit Study	2027	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
Subtotal Studies		\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
TOTAL TRANSIT SERVICES		\$ 470,000	\$ -	\$ 470,000	\$ -	\$ -	\$ 470,000	\$ 51,515	\$ 418,485	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2028 DC Eligible Costs	63%	\$263,646
10-Year Growth in Population in New Units		3,600
Unadjusted Development Charge Per Capita		\$73.23
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2028 DC Eligible Costs	37%	\$154,840
10-Year Growth in Square Metres		131,260
Unadjusted Development Charge Per Square Metre		\$1.18

2019 - 2028 Net Funding Envelope	\$243,905
Reserve Fund Balance at December 31, 2018	\$51,515

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TABLE 3

TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

TRANSIT SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$26.99	\$55.46	\$85.48	\$117.11	\$150.41	(\$77.59)	(\$51.46)	(\$23.30)	(\$30.57)	
2019 - 2028 RESIDENTIAL FUNDING REQUIREMENTS											
- Transit Services: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$232.1	\$0.0	\$0.0	\$31.5	\$0.0	\$263.6
- Transit Services: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$256.3	\$0.0	\$0.0	\$36.9	\$0.0	\$293.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	360	360	360	360	360	360	360	360	360	360	3,600
REVENUE											
- DC Receipts: Inflated	\$26.5	\$27.1	\$27.6	\$28.1	\$28.7	\$29.3	\$29.9	\$30.5	\$31.1	\$31.7	\$290.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.9	\$1.9	\$3.0	\$4.1	\$5.3	(\$4.3)	(\$2.8)	(\$1.3)	(\$1.7)	\$5.2
- Interest on In-year Transactions	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	(\$6.2)	\$0.5	\$0.5	(\$0.2)	\$0.6	(\$2.4)
TOTAL REVENUE	\$27.0	\$28.5	\$30.0	\$31.6	\$33.3	\$28.3	\$26.1	\$28.2	\$29.6	\$30.6	\$293.2
CLOSING CASH BALANCE	\$27.0	\$55.5	\$85.5	\$117.1	\$150.4	(\$77.6)	(\$51.5)	(\$23.3)	(\$30.6)	\$0.0	

2019 Adjusted Charge Per Capita	\$73.67
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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APPENDIX B.9
TABLE 3

**TOWN OF MIDLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
TRANSIT SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

TRANSIT SERVICES	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
OPENING CASH BALANCE	\$0.00	\$14.70	\$30.44	\$47.36	\$65.42	\$84.78	(\$49.10)	(\$33.44)	(\$16.19)	(\$19.43)	
2019 - 2028 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Transit Services: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$136.3	\$0.0	\$0.0	\$18.5	\$0.0	\$154.8
- Transit Services: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$150.5	\$0.0	\$0.0	\$21.7	\$0.0	\$172.2
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	12,140	12,320	12,580	12,760	13,020	13,200	13,460	13,720	13,900	14,160	131,260
REVENUE											
- DC Receipts: Inflated	\$14.5	\$15.0	\$15.6	\$16.1	\$16.8	\$17.3	\$18.0	\$18.8	\$19.4	\$20.1	\$171.6
INTEREST											
- Interest on Opening Balance	\$0.0	\$0.5	\$1.1	\$1.7	\$2.3	\$3.0	(\$2.7)	(\$1.8)	(\$0.9)	(\$1.1)	\$2.0
- Interest on In-year Transactions	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	(\$3.7)	\$0.3	\$0.3	(\$0.1)	\$0.4	(\$1.4)
TOTAL REVENUE	\$14.7	\$15.7	\$16.9	\$18.1	\$19.4	\$16.7	\$15.7	\$17.3	\$18.4	\$19.4	\$172.2
CLOSING CASH BALANCE	\$14.7	\$30.4	\$47.4	\$65.4	\$84.8	(\$49.1)	(\$33.4)	(\$16.2)	(\$19.4)	\$0.0	

2019 Adjusted Charge Per Square Metre	\$1.19
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Allocation of Capital Program	
Residential Sector	63.0%
Non-Residential Sector	37.0%
Rates for 2019	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C

***ENGINEERING INFRASTRUCTURE
TECHNICAL APPENDIX***

APPENDIX C

ENGINEERED SERVICES TECHNICAL APPENDIX

The Engineering Department is responsible for capital works projects including the design and tendering for new road and reconstruction works, which often include the improvement of intersections and the construction of new bike lanes, multi-use trails, and sidewalks. All works are designed to achieve service levels that will preserve the health and quality of life of the general public and conform to good engineering practices. The department also provides review and inspection services to facilitate new development and to maintain service standards to sustain the existing infrastructure.

This appendix sets out details of the development-related capital works and the development charge calculations for the engineered services: Roads & Related; Sanitary Sewerage; and Water Services. The cost, quantum and description of the works included in the charge are based upon the following master servicing plans that are currently underway:

- Transportation Master Plan, undertaken by Stantec Consulting;
- Waterworks Master Plan, undertaken by AECOM Canada Ltd.;
- Wastewater Master Plan, undertaken by J. L. Richards & Associates Limited.

Cost estimates have been reviewed by Town Engineering staff and were presented to Council for review on August 12, 2019.

Consistent with s. 5. (1)7. of the *Development Charges Act (DCA)*, there is no legislated percentage reduction in the eligible development-related capital costs for the provision of the engineering infrastructure.

A long-term development forecast from 2019 to 2041 has been used to calculate development charges for engineered services. The development forecasts are consistent with the forecasts used to establish servicing demands and associated infrastructure needs in the above master plans.

The benefits of this infrastructure are deemed to relate to the entire Town, except in areas where water and sewer services are not provided. Development charges associated with works that specifically benefit the Balm Beach Road Employment Area and Tiffin By The Bay development are set out Appendices D and E.

The Town's engineering capital programs do not contain detailed timing estimates; therefore a cash flow analysis of the development charges was not undertaken.

APPENDIX C.1

ROADS & RELATED

APPENDIX C.1

ROADS & RELATED

This section provides the analysis undertaken to establish the development charge rates for the Roads & Related service. The service includes all roads & related infrastructure related to a highway as defined in subsection 1 (1) of the *Municipal Act, 2001*, including the road network, bridges and culverts, streetlights, intersection improvements, traffic signalization, sidewalks, cycling lanes, transit priority measures, and other related structures.

The basis of the development-related capital program for Roads & Related infrastructure is the Town's Transportation Master Plan, which is currently being finalized, as well as discussions with Town staff. The projects identified in the capital program are required to service the demands of new development between 2019 and 2041, subject to annual capital budget reviews.

TABLE 1 – HISTORICAL SERVICE LEVELS

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 the Town over the 10-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 has been defined as 2009 to 2018. *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 keeping with the Regulation, the method for establishing the historical service level for the Roads & Related service expresses the service level as a \$ per capita and employment based on a valuation of the inventory of capital assets used to provide the service. The quantum and value of the inventory is based on the Town's experience with costs to acquire or construct similar infrastructure.

Table 1 demonstrates that the Town's current road infrastructure comprises 39.7 lane km of roads with a current replacement value estimated at \$81.7 million (this figure is net of land acquisition costs). Other works related to the road network, including traffic signals, sidewalks, and multi-use trails, add another \$11.1 million to the value of the inventory. The 2018 full replacement value of the inventory of capital assets for the Roads & Related service is almost \$92.8 million.

The Town has a 10-year historical average service level of \$3,333.75 per population and employment for Roads & Related infrastructure. Table 1 also shows the calculation of the “maximum allowable” funding envelope for the Roads & Related infrastructure. The maximum allowable is defined as the 10 year historical service level (\$3,333.75 per population and employment) multiplied by the forecast increase in net population and employment over the planning period (13,649 persons and jobs). The resulting maximum allowable funding envelope of \$45.5 million is the value of capital infrastructure that would have to be constructed over the 2019-2041 period so that the 10- year historical service level for Roads & Related is maintained.

TABLE 2 – 2019-2041 DEVELOPMENT-RELATED CAPITAL PROGRAM

Table 2 summarizes the development-related capital program for the Roads & Related infrastructure service.

The program includes \$82.4 million of capital works, including \$46.3 million of roadway improvements, reconstruction works, and studies, \$13.5 million of intersection improvements, \$2.9 million of multi-use pathways in roadways, \$8.7 million of new cycling lanes in roadways, \$632,000 of new sidewalks in roadways, and \$10.4 million of new roads and cycling lanes that are of direct benefit to specific developments and are to be funded through direct developer contributions as a local service under the *DCA*. The latter contributions are shown as subsidies in Table 2 and have the effect of removing these costs from the development charge calculation. The net cost of the program, less the subsidies, is \$72.1 million.

Of the \$72.1 million net cost, \$34.4 million has been identified as a benefit to the existing community and has been removed from the development charge calculation. These costs include a substantial portion of the costs to address existing deficiencies in road rights of way, for example where joint storm and sanitary sewers require separation, or costs relate to qualitative improvements to streetscapes that are unrelated to expanding the capacity of the road network to accommodate increased traffic. The remaining \$37.6 million is related to development in the Town.

Existing development charge reserve funds of \$757,259 have been allocated to initial works. This leaves \$36.9 million that can be carried forward to the development charge calculation.

Calculation of the Development Charges

The development charge eligible costs of \$36.9 million is allocated 60 per cent, or \$22.1 million, to residential development, and 40 per cent, or \$14.8 million, to non-residential development based on the ratio of forecast growth in population in new households and employment in new floor space.

This yields development charge rates of \$2,746.10 per capita and \$42.85 per square metre respectively. The following table summarizes the calculation of the Roads & Related development charge:

ROADS & RELATED SUMMARY				
10-year Hist.	2019 - 2041		Unadjusted	
Service Level	Development-Related	Capital Program	Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m
\$3,333.75	\$82,421,492	\$36,884,671	\$2,746.10	\$42.85

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APPENDIX C.1
TABLE 1

TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED

ROADS Type of Road	# of Kilometres										UNIT COST (\$/km)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Urban Arterials											
2 Lane	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	\$2,500,000
3 Lane	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.0	\$3,000,000
4 Lane	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	3.5	\$3,300,000
Urban Collector											
2 Lane	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	\$1,500,000
4 Lane	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$2,000,000
Total (km)	39.7										
Total (\$000)	\$82,250.0	\$81,650.0	\$81,650.0								

TRAFFIC SIGNALS Description	# of Traffic Signals										UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Signalized Intersections	13	13	13	14	14	14	14	14	14	14	\$120,000
Pedestrian Crossing Signals	3	3	3	3	3	3	3	3	3	3	\$45,000
Total (#)	16	16	16	17							
Total (\$000)	\$1,695.0	\$1,695.0	\$1,695.0	\$1,815.0							

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 APPENDIX C.1
 TABLE 1

TOWN OF MIDLAND
 INVENTORY OF CAPITAL ASSETS
 ROADS & RELATED

SIDEWALKS Description	# of Metres										UNIT COST (\$/m)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Sidewalks	74,376	76,338	78,680	79,887	79,887	83,680	87,472	91,265	95,057	95,057	\$80
Total (#)	74,376	76,338	78,680	79,887	79,887	83,680	87,472	91,265	95,057	95,057	
Total (\$000)	\$5,950.1	\$6,107.0	\$6,294.4	\$6,391.0	\$6,391.0	\$6,694.4	\$6,997.8	\$7,301.2	\$7,604.6	\$7,604.6	

TRAILS Description	# of Kilometres										UNIT COST (\$/km)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Paved Trails	13	15	17	17	18	18	20	20	20	20	\$80,000
Unpaved Trail	6	6	6	6	6	6	6	6	6	6	\$27,000
Total (#)	19	21	23	23	24	24	26	26	26	26	
Total (\$000)	\$1,202.0	\$1,362.0	\$1,522.0	\$1,522.0	\$1,602.0	\$1,602.0	\$1,762.0	\$1,762.0	\$1,762.0	\$1,722.0	

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APPENDIX C.1
TABLE 1

**TOWN OF MIDLAND
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Historical Population	16,283	16,306	16,330	16,378	16,426	16,474	16,523	16,572	16,630	16,688
Historical Employment	<u>10,956</u>	<u>11,168</u>	<u>11,383</u>	<u>11,351</u>	<u>11,319</u>	<u>11,287</u>	<u>11,255</u>	<u>11,223</u>	<u>11,103</u>	<u>10,985</u>
Total Historical Population & Employment	27,239	27,474	27,713	27,729	27,745	27,761	27,778	27,795	27,733	27,673

INVENTORY SUMMARY (\$000)

Roads	\$82,250.0	\$82,250.0	\$82,250.0	\$82,250.0	\$82,250.0	\$82,250.0	\$82,250.0	\$82,250.0	\$81,650.0	\$81,650.0
Traffic Signals	\$1,695.0	\$1,695.0	\$1,695.0	\$1,815.0	\$1,815.0	\$1,815.0	\$1,815.0	\$1,815.0	\$1,815.0	\$1,815.0
Sidewalks	\$5,950.1	\$6,107.0	\$6,294.4	\$6,391.0	\$6,391.0	\$6,694.4	\$6,997.8	\$7,301.2	\$7,604.6	\$7,604.6
Trails	\$1,202.0	\$1,362.0	\$1,522.0	\$1,522.0	\$1,602.0	\$1,602.0	\$1,762.0	\$1,762.0	\$1,762.0	\$1,722.0
Total (\$000)	\$91,097.1	\$91,414.0	\$91,761.4	\$91,978.0	\$92,058.0	\$92,361.4	\$92,824.8	\$93,128.2	\$92,831.6	\$92,791.6

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Roads	\$3,019.57	\$2,993.74	\$2,967.92	\$2,966.21	\$2,964.50	\$2,962.79	\$2,960.98	\$2,959.17	\$2,944.15	\$2,950.53	\$2,968.95
Traffic Signals	\$62.23	\$61.69	\$61.16	\$65.45	\$65.42	\$65.38	\$65.34	\$65.30	\$65.45	\$65.59	\$64.30
Sidewalks	\$218.44	\$222.28	\$227.13	\$230.48	\$230.35	\$241.14	\$251.92	\$262.68	\$274.21	\$274.80	\$243.34
Trails	\$44.13	\$49.57	\$54.92	\$54.89	\$57.74	\$57.71	\$63.43	\$63.39	\$63.53	\$62.23	\$57.15
Total (\$/pop & emp)	\$3,344.36	\$3,327.29	\$3,311.13	\$3,317.03	\$3,318.00	\$3,327.02	\$3,341.66	\$3,350.54	\$3,347.33	\$3,353.14	\$3,333.75

**TOWN OF MIDLAND
CALCULATION OF MAXIMUM ALLOWABLE
ROADS & RELATED**

20-Year Funding Envelope Calculation	
10 Year Average Service Level 2009 - 2018	\$3,333.75
Net Population & Employment Growth 2019 - 2041	13,649
Maximum Allowable Funding Envelope	\$45,503,040
Discounted Maximum Allowable Funding Envelope	\$45,503,040

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED

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	0% Reduction		Available DC Reserves	2019-2041	Post-2041
1.0 ROADS & RELATED										
1.1 Roadway Improvements and Studies										
1.1.1 William Street Cross-Section	Mid-Term	\$ 5,102,029	\$ -	\$ 5,102,029	\$ 2,551,015	\$ -	\$ 2,551,015	\$ 757,259	\$ 1,793,755	\$ -
1.1.2 Hugel Avenue: Midland Avenue to George Street	2019	\$ 3,200,000	\$ -	\$ 3,200,000	\$ 1,676,389	\$ -	\$ 1,523,611	\$ -	\$ 1,523,611	\$ -
1.1.3 King Street: Bayshore to Yonge	2020	\$ 13,000,000	\$ -	\$ 13,000,000	\$ 6,810,330	\$ -	\$ 6,189,670	\$ -	\$ 6,189,670	\$ -
1.1.4 Dominion Avenue: 2nd to 4th	2021	\$ 150,000	\$ -	\$ 150,000	\$ 78,581	\$ -	\$ 71,419	\$ -	\$ 71,419	\$ -
1.1.5 Dominion Avenue: Midland Avenue to Russell	2021	\$ 5,102,029	\$ -	\$ 5,102,029	\$ 2,672,808	\$ -	\$ 2,429,221	\$ -	\$ 2,429,221	\$ -
1.1.6 Growth-Related Road Works 2022-2041	Various	\$ 19,000,000	\$ -	\$ 19,000,000	\$ 9,953,559	\$ -	\$ 9,046,441	\$ -	\$ 9,046,441	\$ -
1.1.7 Highway 12 Corridor Study	Mid-Term	\$ 150,000	\$ -	\$ 150,000	\$ 78,581	\$ -	\$ 71,419	\$ -	\$ 71,419	\$ -
1.1.8 Transportation Master Plan Updates (Every 5 Years)	Various	\$ 600,000	\$ -	\$ 600,000	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
Subtotal Roadway Improvements and Studies		\$ 46,304,058	\$ -	\$ 46,304,058	\$ 24,121,261	\$ -	\$ 22,182,797	\$ 757,259	\$ 21,425,538	\$ -
1.2 Intersection Improvements										
1.2.1 William Street / Bayshore Drive (Intersection)	Short-Term	\$ 3,249,700	\$ -	\$ 3,249,700	\$ 1,624,850	\$ -	\$ 1,624,850	\$ -	\$ 1,624,850	\$ -
1.2.2 Bay Street, Aberdeen Boulevard & TRW Access	Short-Term	\$ 2,730,560	\$ -	\$ 2,730,560	\$ 682,640	\$ -	\$ 2,047,920	\$ -	\$ 2,047,920	\$ -
1.2.3 Bay Street / Fourth Street (Intersection)	Mid-Term	\$ 300,000	\$ -	\$ 300,000	\$ 75,000	\$ -	\$ 225,000	\$ -	\$ 225,000	\$ -
1.2.4 Vindin Street / Harbourview Drive (Intersection)	Mid-Term	\$ 3,249,700	\$ -	\$ 3,249,700	\$ 812,425	\$ -	\$ 2,437,275	\$ -	\$ 2,437,275	\$ -
1.2.5 Fuller Avenue / Harbourview Drive (Intersection)	Mid-Term	\$ 3,249,700	\$ -	\$ 3,249,700	\$ 812,425	\$ -	\$ 2,437,275	\$ -	\$ 2,437,275	\$ -
1.2.6 Fuller Avenue / Brunelle Sideroad / Midland Point Road (Intersection)	Long-Term	\$ 500,000	\$ -	\$ 500,000	\$ 125,000	\$ -	\$ 375,000	\$ -	\$ 375,000	\$ -
1.2.7 Penetanguishene Road / Hugel Avenue	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.8 Fourth Street / Hugel Avenue	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.9 Fourth Street / Victoria Street	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.10 First Street / Elizabeth Street	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.11 Manly Street / Hugel Avenue	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.12 Manly Street / Bayshore Drive	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.13 Manly Street / Yonge Street	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
1.2.14 William Street / Bay Street	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 5,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -
1.2.15 William Street / Hugel Avenue	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 5,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -
1.2.16 William Street / Scott Street	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 5,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -
1.2.17 William Street / Hanly Street	Short-Term	\$ 20,000	\$ -	\$ 20,000	\$ 15,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -
Subtotal Intersection Improvements		\$ 13,499,660	\$ -	\$ 13,499,660	\$ 4,267,340	\$ -	\$ 9,232,320	\$ -	\$ 9,232,320	\$ -

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED

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	0% Reduction		Available DC Reserves	2019-2041	Post-2041
1.3 New Multi-Use Paths in Roadways										
1.3.1 Highway 12	Mid-Term	\$ 1,787,927	\$ -	\$ 1,787,927	\$ 446,982	\$ -	\$ 1,340,945	\$ -	\$ 1,340,945	\$ -
1.3.2 McMurtry Road	Short-Term	\$ 107,613	\$ -	\$ 107,613	\$ -	\$ -	\$ 107,613	\$ -	\$ 107,613	\$ -
1.3.3 Bay Street	Short-Term	\$ 93,372	\$ -	\$ 93,372	\$ 23,343	\$ -	\$ 70,029	\$ -	\$ 70,029	\$ -
1.3.4 Taylor Drive Trail	Mid-Term	\$ 211,750	\$ -	\$ 211,750	\$ 52,938	\$ -	\$ 158,813	\$ -	\$ 158,813	\$ -
1.3.5 New Multi-Use Path - Taylor Drive & William St / Scott St	Mid-Term	\$ 43,517	\$ -	\$ 43,517	\$ 10,879	\$ -	\$ 32,638	\$ -	\$ 32,638	\$ -
1.3.6 Brunelle Side Road	Long-Term	\$ 682,000	\$ -	\$ 682,000	\$ 511,500	\$ -	\$ 170,500	\$ -	\$ 170,500	\$ -
Subtotal New Multi-Use Paths in Roadways		\$ 2,926,179	\$ -	\$ 2,926,179	\$ 1,045,641	\$ -	\$ 1,880,538	\$ -	\$ 1,880,538	\$ -
1.4 New Cycling Lanes in Roadways										
1.4.1 Fuller Avenue	Mid-Term	\$ 928,279	\$ -	\$ 928,279	\$ 232,070	\$ -	\$ 696,210	\$ -	\$ 696,210	\$ -
1.4.2 Harbourview Drive	Mid-Term	\$ 322,530	\$ -	\$ 322,530	\$ 80,633	\$ -	\$ 241,898	\$ -	\$ 241,898	\$ -
1.4.3 Vindin Street	Short-Term	\$ 621,502	\$ -	\$ 621,502	\$ 310,751	\$ -	\$ 310,751	\$ -	\$ 310,751	\$ -
1.4.4 Victoria Street	Short-Term	\$ 448,150	\$ -	\$ 448,150	\$ 336,113	\$ -	\$ 112,038	\$ -	\$ 112,038	\$ -
1.4.5 Eighth Street	Short-Term	\$ 286,429	\$ -	\$ 286,429	\$ 214,822	\$ -	\$ 71,607	\$ -	\$ 71,607	\$ -
1.4.6 Hugel Avenue	Short-Term	\$ 687,003	\$ -	\$ 687,003	\$ 515,252	\$ -	\$ 171,751	\$ -	\$ 171,751	\$ -
1.4.7 Manly Street	Short-Term	\$ 387,353	\$ -	\$ 387,353	\$ 290,515	\$ -	\$ 96,838	\$ -	\$ 96,838	\$ -
1.4.8 Galloway Boulevard	Short-Term	\$ 13,870	\$ -	\$ 13,870	\$ 10,403	\$ -	\$ 3,468	\$ -	\$ 3,468	\$ -
1.4.9 Beamish Road	Mid-Term	\$ 203,155	\$ -	\$ 203,155	\$ -	\$ -	\$ 203,155	\$ -	\$ 203,155	\$ -
1.4.10 Midland Point Road	Short-Term	\$ 12,329	\$ -	\$ 12,329	\$ 9,247	\$ -	\$ 3,082	\$ -	\$ 3,082	\$ -
1.4.11 Everton Road	Short-Term	\$ 6,178	\$ -	\$ 6,178	\$ 4,634	\$ -	\$ 1,545	\$ -	\$ 1,545	\$ -
1.4.12 Manly Street	Short-Term	\$ 3,123	\$ -	\$ 3,123	\$ 2,343	\$ -	\$ 781	\$ -	\$ 781	\$ -
1.4.13 Scott Street	Short-Term	\$ 1,814	\$ -	\$ 1,814	\$ 453	\$ -	\$ 1,360	\$ -	\$ 1,360	\$ -
1.4.14 Robert Street	Short-Term	\$ 2,104	\$ -	\$ 2,104	\$ 526	\$ -	\$ 1,578	\$ -	\$ 1,578	\$ -
1.4.15 Little Lake Park Road	Short-Term	\$ 4,444	\$ -	\$ 4,444	\$ 3,333	\$ -	\$ 1,111	\$ -	\$ 1,111	\$ -
1.4.16 Mountain View Plaza Trail	Short-Term	\$ 2,231	\$ -	\$ 2,231	\$ 1,673	\$ -	\$ 558	\$ -	\$ 558	\$ -
1.4.17 Yonge Street	Mid-Term	\$ 504,410	\$ -	\$ 504,410	\$ -	\$ -	\$ 504,410	\$ -	\$ 504,410	\$ -
1.4.18 Yonge Street	Short-Term	\$ 1,407,342	\$ -	\$ 1,407,342	\$ 1,055,507	\$ -	\$ 351,836	\$ -	\$ 351,836	\$ -
1.4.19 King Street	Short-Term	\$ 795,454	\$ -	\$ 795,454	\$ 596,591	\$ -	\$ 198,864	\$ -	\$ 198,864	\$ -
1.4.20 Fourth Street	Mid-Term	\$ 323,383	\$ -	\$ 323,383	\$ 161,691	\$ -	\$ 161,691	\$ -	\$ 161,691	\$ -
1.4.21 Bay Street	Mid-Term	\$ 343,422	\$ -	\$ 343,422	\$ 171,711	\$ -	\$ 171,711	\$ -	\$ 171,711	\$ -
1.4.22 William Street	Mid-Term	\$ 745,739	\$ -	\$ 745,739	\$ 372,869	\$ -	\$ 372,869	\$ -	\$ 372,869	\$ -
1.4.23 Penetanguishene road	Short-Term	\$ 375,328	\$ -	\$ 375,328	\$ 281,496	\$ -	\$ 93,832	\$ -	\$ 93,832	\$ -
1.4.24 Prospect Boulevard	Short-Term	\$ 250,810	\$ -	\$ 250,810	\$ 188,108	\$ -	\$ 62,703	\$ -	\$ 62,703	\$ -
1.4.25 King Street	2020	\$ 2,527	\$ -	\$ 2,527	\$ 1,895	\$ -	\$ 632	\$ -	\$ 632	\$ -
1.4.26 Woodland Drive	Short-Term	\$ 2,979	\$ -	\$ 2,979	\$ 2,234	\$ -	\$ 745	\$ -	\$ 745	\$ -
1.4.27 Montreal Street	Short-Term	\$ 5,180	\$ -	\$ 5,180	\$ 3,885	\$ -	\$ 1,295	\$ -	\$ 1,295	\$ -
1.4.28 Fourth Street	Mid-Term	\$ 2,220	\$ -	\$ 2,220	\$ 1,665	\$ -	\$ 555	\$ -	\$ 555	\$ -
1.4.29 Bay Street	Short-Term	\$ 2,412	\$ -	\$ 2,412	\$ 1,809	\$ -	\$ 603	\$ -	\$ 603	\$ -
1.4.30 Keller Drive	Mid-Term	\$ 3,534	\$ -	\$ 3,534	\$ -	\$ -	\$ 3,534	\$ -	\$ 3,534	\$ -
1.4.31 Birchwood Drive	Short-Term	\$ 4,570	\$ -	\$ 4,570	\$ 3,427	\$ -	\$ 1,142	\$ -	\$ 1,142	\$ -
Subtotal New Cycling Lanes in Roadways		\$ 8,699,807	\$ -	\$ 8,699,807	\$ 4,855,655	\$ -	\$ 3,844,152	\$ -	\$ 3,844,152	\$ -

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APPENDIX C.1
TABLE 2

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS & RELATED

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	0% Reduction		Available DC Reserves	2019-2041	Post-2041
1.5 New Sidewalks in Roadways										
1.5.1 William Street - West Side	Short-Term	\$ 269,772	\$ -	\$ 269,772	\$ 67,443	\$ -	\$ 202,329	\$ -	\$ 202,329	\$ -
1.5.2 William Street - East Side	Mid-Term	\$ 249,889	\$ -	\$ 249,889	\$ 62,472	\$ -	\$ 187,417	\$ -	\$ 187,417	\$ -
1.5.3 Pillsbury Drive	Mid-Term	\$ 112,378	\$ -	\$ 112,378	\$ -	\$ -	\$ 112,378	\$ -	\$ 112,378	\$ -
Subtotal New Sidewalks in Roadways		\$ 632,038	\$ -	\$ 632,038	\$ 129,915	\$ -	\$ 502,123	\$ -	\$ 502,123	\$ -
1.6 Projects to be Funded as a Local Service (Non-DC Eligible)										
1.6.1 New Road 1 / King Street (Intersection)	Mid-Term	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.6.2 New Road 1 - King Street to Western Development Limit	Mid-Term	\$ 6,280,288	\$ 6,280,288	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.6.3 New Road 2 - King Street to Southern End of Pratt Avenue	Mid-Term	\$ 2,457,504	\$ 2,457,504	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.6.4 New Road 2 - Cycling Lane	Mid-Term	\$ 238,315	\$ 238,315	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.6.5 New Road 1 - Cycling Lane	Mid-Term	\$ 963,690	\$ 963,690	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.6.6 Pratt Avenue - Cycling Lane	Short-Term	\$ 119,953	\$ 119,953	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Projects to be Funded as a Local Service (Non-DC Eligible)		\$ 10,359,749	\$ 10,359,749	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL ROADS & RELATED		\$ 82,421,492	\$ 10,359,749	\$ 72,061,742	\$ 34,419,813	\$ -	\$ 37,641,930	\$ 757,259	\$ 36,884,671	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2041 DC Eligible Costs	60%	\$22,130,802
Ultimate Growth in Population in New Units		8,059
Development Charge Per Capita		\$2,746.10
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2041 DC Eligible Costs	40%	\$14,753,868
Ultimate Growth in Square Metres		344,290
Development Charge Per Square Metre		\$42.85

Net Funding Envelope 2019-2041	\$ 45,503,040
Current Reserve Fund Balance	\$757,259

APPENDIX C.2

SANITARY SEWERAGE

APPENDIX C.2

SANITARY SEWERAGE

This section provides the analysis undertaken to establish the development charge rates for Sanitary Sewerage services in the Town. The primary basis of the development-related capital program for this service is the Town's Wastewater Master Plan which is currently being finalized, as well as discussions with Town staff. The projects identified in the capital program are required to service the demands of new development between 2019 and 2041, subject to annual capital budget reviews.

Through discussions with staff it was also considered appropriate, for the purpose of the development charge calculation, to include a portion of the cost of the current Wastewater Treatment Plant that was built in 1995, but which was designed to accommodate development in the forecast period (and beyond).

Consistent with s. 5. (1)7. of the *DCA*, there is no legislated percentage reduction in the eligible development-related capital cost for the provision of Sanitary Sewerage infrastructure.

2019 – 2041 DEVELOPMENT-RELATED CAPITAL PROGRAM

Table 1 summarizes the development-related capital program for the Town's Sanitary Sewerage services, including the wastewater treatment plant expansion, as well as new aeration equipment, clarifiers, UV system, nutrient management facility, and pumping station upgrade.

The program includes \$29.6 million of capital works, including includes \$16.0 million worth of projects identified in the Wastewater Master Plan that either in part or in whole are required to upgrade or expand services to meet the needs of development over the forecast period.

Wastewater Treatment Plant

The largest single project in the program is the continued recovery of a portion of the \$12.9 million cost to expand and upgrade the existing wastewater treatment plant in 1995. The historical cost of the plant expansion has not been altered as the calculation is done on a capacity basis. Grants in the amount of \$3.2 million were secured for the project. The net cost of the work to the Town was therefore \$9.7 million, including \$4.4 million of debenture interest. Of this \$9.7 million net cost,

\$4.0 million (41 per cent) has been identified as a benefit to the existing community (BTE) and has been removed from the development charge calculation.

To determine the BTE the current average day flow in 2018 was updated to reflect recent patterns in usage and to also calculate the available capacity at the plant. Because average day flows have decreased since the time of the previous DC Background Study, there is more available capacity than what was being utilized in 2013. The cost of the plant expansion deemed to be related to the available capacity is calculated at \$5.7 million and is then translated into a cost per cubic metre which yields a charge of \$827 per m³. The cost of the WWTP deemed to be related to growth between 2019-2041 is based upon the forecast net population growth in this period (8,175 persons) multiplied by a 0.628 m³/capita/day factor, which is consistent with the same factor used in the Wastewater Master Plan. This yields a capacity need of 5,134 m³. The capacity need multiplied by the cost per cubic metre yields a development charge recoverable cost of \$4.2 million (see Tables 1 and 2).

Other Sewer Infrastructure

The capital program also includes works identified in the Wastewater Master Plan. To the extent that the capacity of the sewage collection system is being expanded through these works, a portion of the cost of the works, \$6.7 million, is deemed eligible for development charge funding under this Background Study. The works include:

- **Aeration replacement & upgrade** – The current aeration equipment is inadequate to treat existing and 2041 projected flows based on ADF BOD5 and PDF TKN loadings. The cost to upsize replacement equipment to meet future demand is estimated at \$0.7 million for an additional blower and diffuser and \$0.38 million for early replacement of un-depreciated assets.
- **New secondary clarifier** – A new secondary clarifier is required to treat 2041 projected flows based on PHF. The new clarifier will have a capacity of approximately 18,500 m³/day at PHF. Surplus capacity has been allocated to growth beyond 2041.
- **New UV system** – The current sodium hypochlorite system is undersized to treat 2041 projected peak flows and presents a number of operational challenges. The existing system will be replaced with an expanded UV disinfection system.

- **New nutrient management facility at WWTC** – The existing biosolids management system has capacity to handle biosolids up to the design ADF of 15,655 m³/day. As part of lifecycle renewal a new/expanded facility could be built, the cost sharing will depend on the facilities design capacity.
- **Upgrade main Sewage Pumping Station** – The wetwell at the Main SPS will need to be expanded to handle 2041 projected peak flows. Life cycle components of the cost have been allocated as a BTE.

Provision for regular master plan updates in the amount of \$600,000 has also been included in the capital program.

In summary, \$3.2 million has been removed from the Sanitary Sewerage capital program as it represents grants received for the 1995 plant expansion. An additional \$12.6 million is deemed to benefit existing development and \$2.0 million, related to the plant, is deemed to benefit development beyond 2041. Reserve funds of \$395,542 are also identified. These costs have also been excluded from the development charge calculation.

The remaining \$11.3 million is included in the development charges calculation as providing benefit to development between 2019 and 2041.

CALCULATION OF THE DEVELOPMENT CHARGES

The development charge eligible costs of \$11.3 million are allocated 60 per cent, or \$6.8 million, to residential development, and 40 per cent, or \$4.5 million, to non-residential development based on the ratio of forecast growth in population in new dwellings and employment in new floor space.

This yields development charge rates of \$839.77 per capita and \$13.10 per square metre respectively. The following table summarizes the calculation of the Sanitary Sewerage development charge:

SANITARY SEWERAGE SUMMARY			
2019 - 2041		Unadjusted	
Development-Related Capital Program		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m
\$29,563,940	\$11,279,575	\$839.77	\$13.10

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
SANITARY SEWERAGE

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	0% Reduction		Available DC Reserves	2019-2041	Post 2041
2.0 SANITARY SEWERAGE										
2.1 Prior Wastewater Treatment Plant Expansion										
2.1.1 Wastewater Treatment Plant Expansion (1995)	Various	\$ 12,948,940	\$ 3,205,000	\$ 9,743,940	\$ 4,016,040	\$ -	\$ 5,727,900	\$ -	\$ 4,244,000	\$ 1,483,900
Subtotal Prior Wastewater Treatment Plant Expansion		\$ 12,948,940	\$ 3,205,000	\$ 9,743,940	\$ 4,016,040	\$ -	\$ 5,727,900	\$ -	\$ 4,244,000	\$ 1,483,900
2.2 Projects Identified in Wastewater Master Plan										
2.2.1 Aeration replacement & upgrade – new fine bubble aeration	Short-Term	\$ 4,000,000	\$ -	\$ 4,000,000	\$ 2,920,000	\$ -	\$ 1,080,000	\$ 395,542	\$ 684,458	\$ -
2.2.2 New secondary clarifier	Mid-Term	\$ 1,715,000	\$ -	\$ 1,715,000	\$ -	\$ -	\$ 1,715,000	\$ -	\$ 1,149,000	\$ 566,000
2.2.3 New UV System	Long-Term	\$ 2,240,000	\$ -	\$ 2,240,000	\$ 2,020,000	\$ -	\$ 220,000	\$ -	\$ 220,000	\$ -
2.2.4 New nutrient management facility at WWTC	Long-Term	\$ 5,000,000	\$ -	\$ 5,000,000	\$ 3,377,883	\$ -	\$ 1,622,117	\$ -	\$ 1,622,117	\$ -
2.2.5 Upgrade main SPS	Mid-Term	\$ 3,060,000	\$ -	\$ 3,060,000	\$ -	\$ -	\$ 3,060,000	\$ -	\$ 3,060,000	\$ -
Subtotal Projects Identified in Wastewater Master Plan		\$ 16,015,000	\$ -	\$ 16,015,000	\$ 8,317,883	\$ -	\$ 7,697,117	\$ 395,542	\$ 6,735,575	\$ 566,000
2.3 Studies										
2.3.1 Wastewater Master Plans (4)	various	\$ 600,000	\$ -	\$ 600,000	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
Subtotal Studies		\$ 600,000	\$ -	\$ 600,000	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
TOTAL SANITARY SEWERAGE		\$ 29,563,940	\$ 3,205,000	\$ 26,358,940	\$ 12,633,923	\$ -	\$ 13,725,017	\$ 395,542	\$ 11,279,575	\$ 2,049,900

Residential Development Charge Calculation		
Residential Share of 2019 - 2041 DC Eligible Costs	60%	\$6,767,745
Ultimate Growth in Population in New Units		8,059
Development Charge Per Capita		\$839.77
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2041 DC Eligible Costs	40%	\$4,511,830
Ultimate Growth in Square Metres		344,290
Development Charge Per Square Metre		\$13.10

Current Reserve Fund Balance	\$395,542
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**APPENDIX C.2
TABLE 2**

**TOWN OF MIDLAND
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
WASTEWATER TREATMENT PLANT AND RELATED**

	Total Cost
1. 1995 Plant Expansion	
WWTP Upgrade and Expansion	
1.1 Study	\$209,000
1.2 Upgrade & Expansion	<u>\$8,376,000</u>
Total Cost	\$8,585,000
1.3 Less Grant	(\$3,205,000)
Total Cost to Town	\$5,380,000
Debenture Interest Costs	\$4,363,940
Total Costs including Interest	\$9,743,940
Total Cost of Plant Expansion	\$12,948,940
Total Capacity After Expansion	15,665 m ³ / day
Plant Average Day Flow in 2018	8,736 m ³ / day
Available Capacity	6,929 m ³ ADF 44.23%
Available Capacity Share of 1995 Expansion Costs	\$5,727,900
Available Capacity	6,929 m ³ ADF
Cost Per m ³ of Available Capacity	\$827 /m ³
4. Capacity Needs 2019-2041	
4.1 Forecast Net Population Growth	8,175
4.2 Per Capita Flow Equivalent	0.628 m ³ /capita/day
4.3 Capacity Needs	5,134 m ³ ADF
5. Cost of Additional Plant Capacity	
5.1 Additional Plant Capacity Required	5,134 m ³ ADF
5.2 Cost Per Unit	\$827 /m ³
5.3 WWTP Growth-Related Costs 2019-2041	\$4,244,000

APPENDIX C.3

WATER SERVICES

APPENDIX C.3

WATER SERVICES

This section provides the analysis undertaken to establish the development charge rates for Water Services in the Town. The primary basis of the development-related capital program for this service is the Town's Waterworks Master Plan, which is currently being finalized, as well as discussions with Town staff. The projects identified in the capital program are required to service the demands of new development between 2019 and 2041, subject to annual capital budget reviews.

Consistent with s. 5. (1)7. of the *DCA*, there is no legislated percentage reduction in the eligible development-related capital cost for the provision of Water Services infrastructure.

2019-2041 DEVELOPMENT-RELATED CAPITAL PROGRAM

Table 1 summarizes the development-related capital program for the Town's Water Services, including debenture payments related to infrastructure that was built in prior years, but which were designed to accommodate development in the forecast period (and beyond), as well as new projects identified in the Waterworks Master Plan.

The program includes \$43.4 million of capital works, including \$5.1 million related to principal and interest payments on 20-year debt associated with the 2009 construction of the Everton (Sunnyside) Reservoir and Feeder Main and Mountainview Reservoir and Well and \$38.3 million related to new projects. No grants or subsidies have been identified to fund the program. As such, the net cost of the program remains \$43.4 million.

Of the \$43.4 million net cost, \$15.9 million has been identified as a benefit to the existing community and has been removed from the development charge calculation. The benefit to existing share for new projects has been estimated by AECOM based on the extent to which projects provide benefit to new customers and/or otherwise address existing system deficiencies. For the debenture payments, the benefit to existing share of 75 per cent has been maintained from the previous (2014) Background Study.

The remaining \$27.5 million is related to development in the Town. Existing development charge reserve funds of \$428,136 have been allocated to debenture

payments associated with the Everton (Sunnyside) Reservoir and Feeder Main. This leaves \$27.1 million that can be carried forward to the development charge calculation.

CALCULATION OF THE DEVELOPMENT CHARGES

The development charge eligible costs of \$27.1 million is allocated 60 per cent, or \$16.3 million, to residential development, and 40 per cent, or \$10.8 million, to non-residential development based on the ratio of forecast growth in population in new dwellings and employment in new floor space.

This yields development charge rates of \$2,016.77 per capita and \$31.47 per square metre respectively. The following table summarizes the calculation of the Water Services development charge:

WATER SERVICES SUMMARY			
2019 - 2041		Unadjusted	
Development-Related Capital Program		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m
\$43,366,803	\$27,088,615	\$2,016.77	\$31.47

TOWN OF MIDLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATER SERVICES

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	0% Reduction		Available DC Reserves	2019-2041	Post 2041	
3.0 WATER SERVICES											
3.1 Water Storage and Supply (Prior Oversized Projects)											
3.1.1	Everton (Sunnyside) Reservoir and Feeder Main - Principal	2019-2030	\$ 1,730,677	\$ -	\$ 1,730,677	\$ 1,298,008	\$ -	\$ 432,669	\$ 428,136	\$ 4,533	\$ -
3.1.2	Everton (Sunnyside) Reservoir and Feeder Main - Financing	2019-2030	\$ 470,369	\$ -	\$ 470,369	\$ 352,776	\$ -	\$ 117,592	\$ -	\$ 117,592	\$ -
3.1.3	Mountainview Reservoir and Well - Principal	2019-2031	\$ 2,215,018	\$ -	\$ 2,215,018	\$ 1,661,264	\$ -	\$ 553,755	\$ -	\$ 553,755	\$ -
3.1.4	Mountainview Reservoir and Well - Financing	2019-2031	\$ 701,740	\$ -	\$ 701,740	\$ 526,305	\$ -	\$ 175,435	\$ -	\$ 175,435	\$ -
Subtotal Water Storage and Supply (Prior Oversized Projects)			\$ 5,117,803	\$ -	\$ 5,117,803	\$ 3,838,352	\$ -	\$ 1,279,451	\$ 428,136	\$ 851,315	\$ -
3.2 Projects Identified in Water Master Plan (Timing Unknown)											
3.2.1	Install a new tank in the area of Wells 7A/7B		\$ 9,779,000	\$ -	\$ 9,779,000	\$ 977,900	\$ -	\$ 8,801,100	\$ -	\$ 8,801,100	\$ -
3.2.2	Existing Sundowner Well can be commissioned to provide supply to West Zone		\$ 5,555,000	\$ -	\$ 5,555,000	\$ 555,500	\$ -	\$ 4,999,500	\$ -	\$ 4,999,500	\$ -
3.2.3	Upgrade pump capacity of Hanly and Everton BPS		\$ 2,335,000	\$ -	\$ 2,335,000	\$ 2,101,500	\$ -	\$ 233,500	\$ -	\$ 233,500	\$ -
3.2.4	New Pressure Zone with New Booster Pump Station		\$ 6,333,000	\$ -	\$ 6,333,000	\$ 5,699,700	\$ -	\$ 633,300	\$ -	\$ 633,300	\$ -
3.2.5	New Trunk Watermain along Highway 93		\$ 5,877,000	\$ -	\$ 5,877,000	\$ -	\$ -	\$ 5,877,000	\$ -	\$ 5,877,000	\$ -
3.2.6	Watermain Twinning on Harbourview Drive		\$ 2,319,000	\$ -	\$ 2,319,000	\$ 2,087,100	\$ -	\$ 231,900	\$ -	\$ 231,900	\$ -
3.2.7	Booster Pump Station at Balm Beach		\$ 3,351,000	\$ -	\$ 3,351,000	\$ -	\$ -	\$ 3,351,000	\$ -	\$ 3,351,000	\$ -
3.2.8	Abandon Wells 12, 1A and use it as monitoring wells		\$ 100,000	\$ -	\$ 100,000	\$ 90,000	\$ -	\$ 10,000	\$ -	\$ 10,000	\$ -
3.2.9	Decommission Dominion and Montreal Standpipe		\$ 2,000,000	\$ -	\$ 2,000,000	\$ 200,000	\$ -	\$ 1,800,000	\$ -	\$ 1,800,000	\$ -
3.2.10	Water Master Plan Updates (4)		\$ 600,000	\$ -	\$ 600,000	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
Subtotal Projects Identified in Water Master Plan (Timing Unknown)			\$ 38,249,000	\$ -	\$ 38,249,000	\$ 12,011,700	\$ -	\$ 26,237,300	\$ -	\$ 26,237,300	\$ -
TOTAL WATER SERVICES			\$ 43,366,803	\$ -	\$ 43,366,803	\$ 15,850,052	\$ -	\$ 27,516,751	\$ 428,136	\$ 27,088,615	\$ -

Residential Development Charge Calculation		
Residential Share of 2019 - 2041 DC Eligible Costs	60%	\$16,253,169
Ultimate Growth in Population in New Units		8,059
Development Charge Per Capita		\$2,016.77
Non-Residential Development Charge Calculation		
Non-Residential Share of 2019 - 2041 DC Eligible Costs	40%	\$10,835,446
Ultimate Growth in Square Metres		344,290
Development Charge Per Square Metre		\$31.47

Current Reserve Fund Balance	\$428,136
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APPENDIX D

TIFFIN BY THE BAY AREA-SPECIFIC DEVELOPMENT CHARGE TECHNICAL APPENDIX

APPENDIX D

TIFFIN BY THE BAY AREA-SPECIFIC DEVELOPMENT CHARGE TECHNICAL APPENDIX FOR ROADS INFRASTRUCTURE

The Town has imposed an area specific development charge since 2009 to fund development-related road intersection improvements required to accommodate the increased traffic arising from a development at Tiffin By The Bay.

Tiffin By The Bay is a residential development in Midland that started in about 1998. The general area of the site is east of William Street to the waterfront and from Pillsbury Drive on the south to between Bay Street and Elizabeth Street on the north. The development is divided into six phases and consists largely of single detached homes and condominium apartments. In addition, there is a small townhouse development and a senior's independent living complex.

The area specific development charge scheme was established in consultation with the local developer of Tiffin By The Bay as the intersection works are largely local in nature and provide a direct benefit to development. It is acknowledged that a share of the works provides benefit to existing residents and other development.

Read, Voorhees & Associates Limited, completed a study entitled, *Tiffin By The Bay Traffic Impact Study Update*, January 2009, which identified the improvements to the road system or traffic control that will be justified by the future traffic in the area. The Study examined the current traffic situation with the traffic that will be generated by the completed portion of the development and the future traffic that will be generated by the upcoming portion of the development.

Given that the intersection improvements remain unconstructed it is proposed that the area specific charge for this area remain in force. Care has been taken to remove all costs associated with these works from the Town-wide Roads and Related development charge. In this way, development in the Town will not pay development charges that exceed the development-related capital cost of the works.

This appendix provides a brief outline of the recovery of the Tiffin By The Bay area-specific works and calculated rates. The analysis is contained in three tables:

Table 1 Tiffin By The Bay Development Potential

Table 2 Tiffin By The Bay Area-Specific Development-Related Works

Table 3 Calculation of the Area-Specific Development Charge

As displayed on Table 1, the development potential, as of year-end 2018, in the Tiffin By The Bay development is 737 units comprised of 280 single family units, 10 townhouses, 322 apartments and 125 seniors suites. For the purpose of the development charge calculations these units were converted into single family equivalents, based on difference in occupancy, with a total development potential of 591 single family equivalents.

The total cost of the development-related works is \$680,760 (see Table 2). The list of works has not been altered from the 2014 DC Background Study. However, the costs have been indexed to reflect mid-year 2018 construction costs.

The Read, Voorhees & Associates Limited study identified that 22 per cent, or \$146,670 of the works provides benefit to existing residents and other developments; the Town will recover this share of the works through other funding sources. The remaining share of the works, \$534,090 (78 per cent) is deemed to be of direct benefit to the Tiffin By The Bay development. The Town has collected development charges revenues from the units built since the passage of the 2009 DC By-law and the monies (\$69,044) are sequestered in a dedicated reserve fund. These funds have not been included in the development charge calculation. As such, the net development charge eligible costs are \$465,046 (see Table 3).

The result is a development-related and development charge recoverable share of the capital program is to be recovered against the 591 equivalent single family units yielding a charge of \$787 per single family unit. The charge is then differentiated by unit type, based on anticipated occupancies, to yield the following rates:

Single Family Units (Low Density)	\$787/unit
Townhouse (Medium Density)	\$582/unit
Apartment and Seniors Suite (High Density)	\$535/unit

The area to which in the Tiffin By The Bay area-specific development charge will apply is shown on Map 1.

APPENDIX D

TABLE 1

**TOWN OF MIDLAND
2019 DEVELOPMENT CHARGES STUDY
AREA SPECIFIC CHARGE - TIFFIN BY THE BAY (ROADS AND RELATED)
TIFFIN BY THE BAY DEVELOPMENT POTENTIAL**

Type of Unit	Total Number of Units		
	Potential at Build-Out	Existing Development	Future Development
Single Family	406	126	280
Townhouse (Condominium)	10	0	10
Apartment (Condominium)	383	61	322
Seniors Suite	<u>125</u>	0	<u>125</u>
Total	924		737

Single Family Equivalents - Future Units	
Weighting Factor	Number of Units
1	280
0.74	7
0.68	219
0.68	<u>85</u>
	591

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APPENDIX D
TABLE 2

TOWN OF MIDLAND
2019 DEVELOPMENT CHARGES STUDY
AREA SPECIFIC CHARGE - TIFFIN BY THE BAY (ROADS AND RELATED)
DEVELOPMENT-RELATED PROJECTS AND COST ESTIMATES

	Project Cost Estimate			Cost Allocation			
	Construction	Cont. & Eng. 20%	Total	Tiffin By The Bay		Town	
				%	\$	%	\$
1. William Street and Pillsbury Intersection							
Traffic Signals	\$115,800	\$23,160	\$138,960	100%	\$138,960	0%	\$0
Turn Lanes and Tapers							
South-Bound Left Turn - North Leg	\$41,700	\$8,340	\$50,040	100%	\$50,040	0%	\$0
North-Bound Left Turn - South Leg	\$41,700	\$8,340	\$50,040	100%	\$50,040	0%	\$0
West-Bound Left Turn - East Leg	\$58,300	\$11,660	\$69,960	100%	\$69,960	0%	\$0
North-Bound Right Turn - South Leg	\$28,400	\$5,680	\$34,080	100%	\$34,080	0%	\$0
Pole Relocations	\$11,600	\$2,320	\$13,920	100%	\$13,920	0%	\$0
Relocate Driveways	\$17,400	\$3,480	\$20,880	100%	\$20,880	0%	\$0
Total William Street and Pillsbury Intersection	\$314,900	\$62,980	\$377,880		\$377,880		\$0
2. Highway 12 and William Street Intersection							
Add East Bound Advance Signal Phase	\$3,500	\$700	\$4,200	60%	\$2,520	40%	\$1,680
Turn Lanes and Tapers							
South-Bound Left Turn along Island - North Leg	\$50,200	\$10,040	\$60,240	55%	\$33,132	45%	\$27,108
West-Bound Right Turn along Island - East Leg	\$47,000	\$9,400	\$56,400	35%	\$19,740	65%	\$36,660
North-Bound Lane along Island - North Leg	\$46,200	\$9,240	\$55,440	55%	\$30,492	45%	\$24,948
North-Bound Lane along taper - North Leg	\$34,800	\$6,960	\$41,760	55%	\$22,968	45%	\$18,792
North-Bound Lane north of taper - North Leg	\$51,000	\$10,200	\$61,200	55%	\$33,660	45%	\$27,540
North-Bound Lane along taper - North Leg	\$8,100	\$1,620	\$9,720	55%	\$5,346	45%	\$4,374
Pole Relocations	\$11,600	\$2,320	\$13,920	60%	\$8,352	40%	\$5,568
Total Highway 12 and William Street Intersection	\$252,400	\$50,480	\$302,880		\$156,210		\$146,670
TOTAL	\$567,300	\$113,460	\$680,760	78%	\$534,090	22%	\$146,670

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APPENDIX D
TABLE 3

TOWN OF MIDLAND
2019 DEVELOPMENT CHARGES STUDY
AREA SPECIFIC CHARGE - TIFFIN BY THE BAY (ROADS AND RELATED)
AREA SPECIFIC DEVELOPMENT CHARGE CALCULATION

	Total Project Cost	Cost Allocation	
		Town	Tiffin By The Bay
Tiffin By The Bay Area Specific Road Costs			
1. William Street and Pillsbury Intersection	\$377,880	\$0	\$377,880
2. Highway 12 and William Street Intersection	<u>\$302,880</u>	<u>\$146,670</u>	<u>\$156,210</u>
Total Tiffin By The Bay Area Specific Road Costs	\$680,760	\$146,670	\$534,090

Area Specific Development Charge Calculation	
Tiffin By The Bay Allocated Costs	\$534,090
Less: ASDC Reserve Fund Balance	\$69,044
Net DC Eligible Costs	\$465,046
Development Potential:	
Number of Single Family Equivalent Units	591
Development Charge Per Single Family Unit	\$787

ASDC By Unit Type (\$/unit)		
Single Family	100%	\$787
Townhouse	74%	\$582
Apartment	68%	\$535
Seniors Suite	68%	\$535

APPENDIX E

**BALM BEACH ROAD EMPLOYMENT AREA AREA-
SPECIFIC DEVELOPMENT CHARGE**

TECHNICAL APPENDIX

APPENDIX E

BALM BEACH ROAD EMPLOYMENT AREA AREA-SPECIFIC DEVELOPMENT CHARGE TECHNICAL APPENDIX

The Balm Beach Road employment/commercial corridor is located west of County Road 93 and along both sides of Balm Beach Road and along Sundowner Road located north of and forming a crescent street connection to Balm Beach Road. The area is designated as Employment Area in the Town’s Official Plan.

While the proposed servicing strategy for the entire Town is being considered as part of the Waterworks Master Plan and Wastewater Master Plan studies, it is recognized that the unique characteristics of the Balm Beach Road corridor, including the level of development interests, requires an area specific servicing strategy. The strategy includes a capital infrastructure servicing plan and an area specific development charge to pay for associated development-related capital costs.¹

To implement the strategy, the Town retained Pearson Engineering Limited to prepare preliminary “order of magnitude” cost estimates for extension of water and sanitary trunk sewers along the corridor together with required servicing laterals. The cost estimates are:

Phase 1 extensions	\$1,669,206
Phase 2 extensions	\$1,169,954
Total	\$2,839,160

Given that development in the corridor is contingent on full extension of the services and the benefits of the services will accrue solely to the corridor area, it is assumed that the full cost of the works are eligible for development charge funding.

Development Charge Calculation

The calculation of the development charge for the Balm Beach Road Employment Area is set out in Table 1. The development-related capital costs included in the charge of \$2.8 million are consistent with those identified by Pearson Engineering.

¹ For more see Town Staff Report PL-2019-37, “Balm Beach Road Servicing Strategy”, dated May 15, 2019.

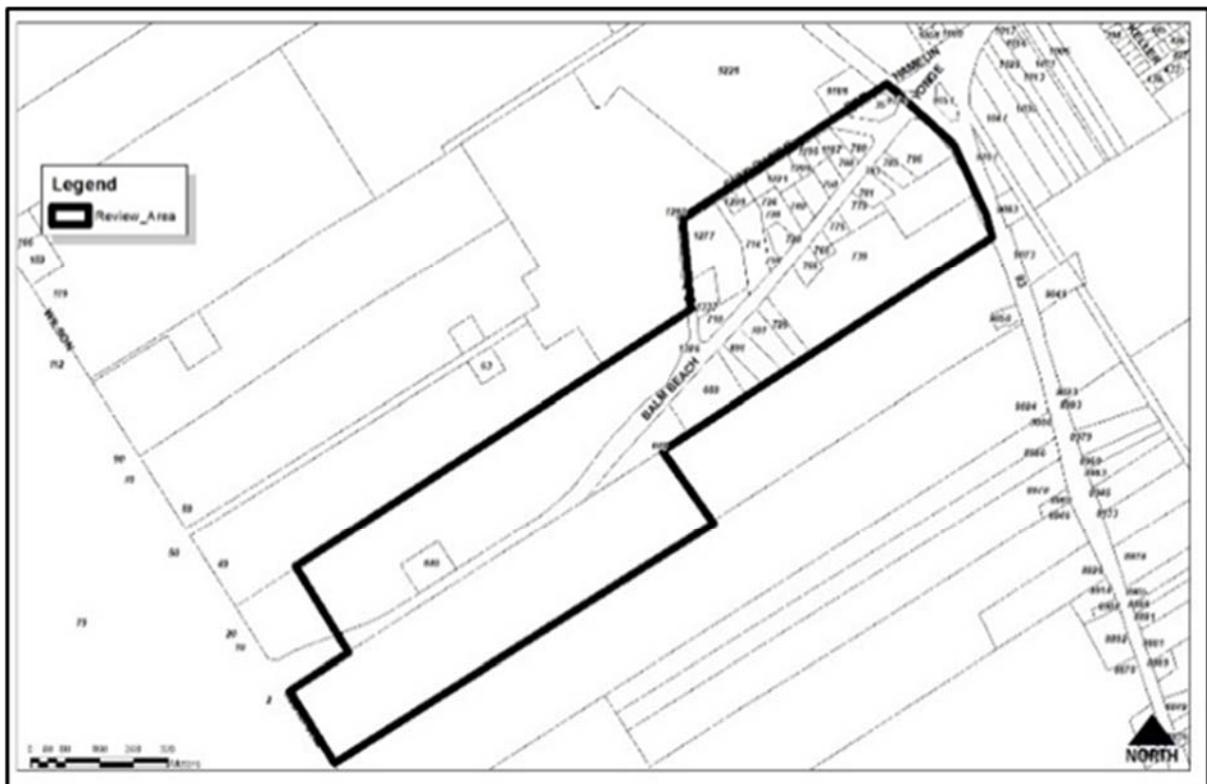
The non-residential development potential of the area, as of year-end 2018, is 103,287 m² of new gross floor area, representing about 30 per cent of all new non-residential gross floor area forecast for the Town to 2041. This includes about 24,000 m² of gross floor area in active development proposals.

The residential development potential of the area, as of year-end 2018, is approximately 200 apartment units, based on active development proposals as well as the Town Council's desire to promote the area as a location suitable for affordable housing.

The development charge eligible costs of \$2.8 million is allocated 15 per cent, or \$424,096, to residential development, and 85 per cent, or \$2.4 million, to non-residential development based on the ratio of forecast growth in population in new apartment units and employment in new floor space in the corridor.

This yields development charge rates of \$2,120.48 per unit for residential development and \$23.38 per square metre for non-residential development respectively.

The area to which in the Balm Beach Road Employment Area area-specific development charge will apply is shown on the map below.



**APPENDIX E
TABLE 1**

**TOWN OF MIDLAND
2019 DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC DEVELOPMENT CHARGE - BALM BEACH ROAD EMPLOYMENT AREA**

Balm Beach Road Area Specific Capital Costs		
1. Phase 1 Extensions (Water and Sanitary Trunk Sewers and Servicing Laterals)	\$	1,669,206
2. Phase 2 Extensions (Water and Sanitary Trunk Sewers and Servicing Laterals)	\$	1,169,954
Total Phase 1 and 2	\$	2,839,160
Benefit to Existing Development		0%
Anticipated Non-Residential Development 2019-2041		
Total New Gross Floor Area in Town 2019-2041 (m2)		344,290
% of New Gross Floor Area in Balm Beach Road Employment Area		30%
Total New Gross Floor Area in Balm Beach Road Employment Area 2019-2041 (m2)		103,287
Employment Associated With New Gross Floor Area		1,678
Anticipated Residential Development 2019-2041		
New Units 2019-2041		200
Development Charge Calculation		
Total Growth-Related Capital Cost 2019-2041	\$	2,839,160
Residential Share	15% \$	424,096
Non-Residential Share	85% \$	2,415,064
New Units 2019-2041		200
Total New Gross Floor Area 2019-2041		103,287
Residential Development Charge Per Unit	\$	2,120.48
Non-Residential Development Charge Per Square Metre	\$	23.38

Source: Staff Report PL-2019-37, Balm Beach Road Servicing Strategy, May 15, 2019

APPENDIX F

RESERVE FUND BALANCES

APPENDIX F**DEVELOPMENT CHARGES RESERVE FUNDS UNCOMMITTED BALANCES**

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 that are available to help fund the development-related net capital costs identified in this study. The opening balances of the development charges reserve funds as at December 31, 2018. All of the available reserve fund balances are therefore accounted for in this study.

As shown on Table 1, the December 31, 2018 total reserve fund balance was in a positive position of \$4.3 million.

The application of each of the balances in each of the reserve funds is discussed in the appendix section related to each service. The reserve funds are assigned to projects in the initial years of the capital program for the services in which the reserves are a position balance. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis. Where there is a negative balance, the amount is brought forward to the DC capital forecast for recovery through future development charges.

**APPENDIX F
TABLE 1**

**TOWN OF MIDLAND
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
AS AT DECEMBER 31, 2018**

Service	Reserve Fund Balance as at Dec. 31, 2018
General Government	\$153,007
Library	\$365,038
Fire	\$11,033
Police	\$73,323
Indoor Recreation	\$825,788
Parks	\$262,498
Public Works	\$694,643
Parking	\$212,783
Transit Services	\$51,515
Roads & Related	\$757,259
Sanitary Sewerage	\$395,542
Water Services	\$428,136
Tiffin by the Bay ASDC	\$69,044
Total Development Charge Reserves	\$4,299,609

APPENDIX G

ASSET MANAGEMENT PLAN

APPENDIX G

ASSET MANAGEMENT PLAN

The *Development Charges Act* requires that municipalities complete an Asset Management Plan before passing a development charges by-law. 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.

ASSET TYPES

A summary of the future municipal-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are set out in Tables 1 and 2. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some projects do not relate to the replacement of a tangible capital asset—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. They have been excluded from the asset management provision calculations.

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. The useful life estimates contained within this analysis are consistent with those assumptions used in the Town's Corporate Asset Management Plan.

Table 1 Summary of Municipal Assets Considered Town-wide General Services	
Service and Amenities	Estimated Useful Life
General Government <ul style="list-style-type: none"> • Studies 	<ul style="list-style-type: none"> • Not infrastructure
Library <ul style="list-style-type: none"> • Recovery of Library Branch Expansion Debt • Library Materials 	<ul style="list-style-type: none"> • Not infrastructure • 15 years
Fire <ul style="list-style-type: none"> • Personal Equipment • Studies 	<ul style="list-style-type: none"> • 15 years • Not infrastructure
Police <ul style="list-style-type: none"> • Buildings • Personal Equipment 	<ul style="list-style-type: none"> • 50 years • 15 years
Indoor Recreation <ul style="list-style-type: none"> • Recovery of NSSRC Expansion Debt 	<ul style="list-style-type: none"> • Not infrastructure
Parks <ul style="list-style-type: none"> • Park Facilities/Development • Vehicles • New Multi-Use Trails and Bike Paths in Parks 	<ul style="list-style-type: none"> • 25 years • 10 years • 25 years
Public Works <ul style="list-style-type: none"> • Operations Complex Debt 	<ul style="list-style-type: none"> • Not infrastructure
Parking <ul style="list-style-type: none"> • Studies • Pay & Display Meters 	<ul style="list-style-type: none"> • Not infrastructure • 25 years
Transit Services <ul style="list-style-type: none"> • Fleet • Studies 	<ul style="list-style-type: none"> • 20 years • Not infrastructure

Table 2 Summary of Municipal Assets Considered Engineered Services	
Capital Project Description	Estimated Useful Life
Roads & Related <ul style="list-style-type: none"> • Roadway Improvements • Studies • Intersection Improvements • New Multi-Use Paths in Roadways • New Cycling Lanes in Roadways • New Sidewalks in Roadways • Projects to be Funded as a Local Service 	<ul style="list-style-type: none"> • 20 years • Not infrastructure • 20 years • 20 years • 20 years • 50 years • 20 years
Sanitary Sewerage <ul style="list-style-type: none"> • Prior Wastewater Treatment Plant Expansion • Projects Identified in Wastewater Master Plan • Studies 	<ul style="list-style-type: none"> • 50 years • 50 years • Not infrastructure
Water Services <ul style="list-style-type: none"> • Water Storage and Supply • Projects Identified in Water Master Plan • Water Master Plan Updates (4) 	<ul style="list-style-type: none"> • 50 years • 50 years • Not infrastructure

No annual provisions have been identified for General Government as plan updates and studies included in the General Government development charge category are not infrastructure and therefore have no long-term financial requirements. Additionally, there are no provisions identified for Public Works and Indoor Recreation as their capital programs are exclusively funding the recovery of debt which does not qualify as infrastructure.

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 development-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from Town staff regarding useful life assumptions and the capital cost of acquiring and/or replacing 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 *Development Charges Act*, 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 development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to the 10 per cent statutory discount, benefit-to-existing and post-period benefit have also been calculated.

Tables 3 and 4 provide the calculated annual asset management contribution for both the non-DC recoverable share and the share related to the 2019-2028 and 2019-2041 DC recoverable portion. The years 2029 and 2042 have been included to calculate the annual contribution for the 2019-2028 and 2019-2041 periods as the expenditures in 2028 and 2041 will not trigger asset management contributions until 2029 and 2042, respectively.

As shown in Table 3, by 2029, the Town will need to fund an additional \$223,200 per year in order to properly fund the full life cycle costs of the new assets related to all general and protection services under the development charges by-law. Table 4 shows that by 2042 the Town will need to fund an additional \$2.8 million per year to properly fund all life-cycle costs of the new engineered assets under the DC by-law.

TRANSIT ASSET MANAGEMENT IN THE TOWN

The Town of Midland currently operates two routes throughout the week serviced by 4 passenger buses. In addition, the transit system includes 4 vans, 14 shelters and bus bays at the operations centre (see Appendix B.9). The Town aims to maintain the transit fleet in state of good repair through regular maintenance and inspections to achieve public transit safety and reliability standards. The Town also completes regular reviews of its transit service and has recently completed a Transit Operational Review in 2018.

The Town is currently planning to add an additional bus in 2024 to increase service delivery. This is reflected in the Transit Services capital program. The DC recoverable cost of the growth-related capital program for Transit Services is \$418,485 (see Appendix B.9).

The additional bus is expected to have a yearly net operating impact of \$58,000 per year by 2028 (see Appendix H). In addition, by 2029 the Town will be required to contribute an additional \$23,500 in DC related funds for future capital replacement of transit growth-related capital in this study (see Table 3). The Town maintains that the transit system will be financially sustainable through yearly capital and operating budget reviews.

FINANCIAL SUSTAINABILITY OF THE PROGRAM

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.

Future Revenue Growth

The calculated annual funding provision should be considered within the context of the Town's projected growth. Over the next 10 years, the Town is projected to increase by 3,009 people. In addition, the Town will also add 2,087 new employees that will result in approximately 131,260 square metres of additional non-residential building space. Between 2019 and 2041, the Town's population will increase by approximately

8,175 people. The Town will also add 5,474 new employees during this planning period which translates into 344,290 square metres of additional non-residential building space.

This growth will have the effect of increasing the overall assessment base. This leads to additional user fee and charge 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 Town's reserves for future replacement of these assets.

Asset Management Plan

In order to maintain, protect and manage the Town's infrastructure and assets, staff should continue to monitor current levels of service and life cycle trends. These assessments are used to schedule appropriate activities, such as road reconstruction, bridge replacement, and equipment and vehicle replacement. Ongoing maintenance and repairs to community facilities will ensure that they continue to meet the needs of a growing population into the future.

Overall, the Town will continue to invest, renew, and manage infrastructure and assets through its Asset Management Plan. This plan is crucial for forecasting capital budgetary needs both in the short and long terms. The AMP process helps to improve financial sustainability to maximize benefits, reduce risk and provide satisfactory levels of service to the community in an environmentally and financially responsible manner.

Program is Deemed Financially Sustainable

The calculated annual provisions identified in Tables 3 and 4 are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term. The Town's annual operating budget review will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

**APPENDIX G
TABLE 3**

**TOWN OF MIDLAND
SUMMARY OF ASSET MANAGEMENT PROVISIONS FOR GENERAL SERVICES**

	2019 - 2028 Capital Program		Calculated AMP Annual Provision by 2029	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Services				
General Government	\$275,000	\$625,000	\$0	\$0
Library	\$1,396,200	\$0	\$23,600	\$0
Fire	\$57,700	\$0	\$2,400	\$0
Police	\$198,200	\$0	\$4,800	\$0
Indoor Recreation	\$2,196,000	\$0	\$0	\$0
Parks	\$3,419,400	\$1,171,300	\$158,500	\$55,100
Public Works	\$839,700	\$2,954,000	\$0	\$0
Parking	\$300,000	\$250,000	\$10,400	\$10,400
Transit Services	\$470,000	\$0	\$23,500	\$0
Total	\$9,152,200	\$5,000,300	\$223,200	\$65,500

**APPENDIX G
TABLE 4**

**TOWN OF MIDLAND
SUMMARY OF ASSET MANAGEMENT PROVISIONS FOR ENGINEERED SERVICES**

	2019 - 2041 Capital Program		Calculated AMP Annual Provision by 2042	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
General Services				
Roads & Related	\$37,641,900	\$44,779,600	\$2,047,200	\$2,478,600
Sanitary Sewerage	\$11,675,100	\$17,888,800	\$266,100	\$410,400
Water Services	\$27,516,800	\$15,850,100	\$514,900	\$232,500
Total	\$76,833,800	\$78,518,500	\$2,828,200	\$3,121,500

APPENDIX H

LONG-TERM CAPITAL AND OPERATING IMPACTS

APPENDIX H

TABLE 1

TOWN OF MIDLAND
 ESTIMATED NET OPERATING COST OF THE PROPOSED
 DEVELOPMENT-RELATED CAPITAL PROGRAM
 (in constant 2019 dollars)

		Net Cost (in 2013\$)	2019	2020	2021	Estimated Operating Costs (\$000)						
						2022	2023	2024	2025	2026	2027	2028
General Government			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Library			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fire			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Police			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$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	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Parks			\$0.0	\$17.5	\$36.7	\$64.8	\$82.3	\$99.8	\$99.8	\$109.5	\$117.2	\$193.4
Park Development and Facilities	\$0.05 per \$1.00 of new infrastructure		\$0.0	\$17.5	\$36.7	\$64.8	\$82.3	\$99.8	\$99.8	\$109.5	\$117.2	\$193.4
Public Works			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Parking			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
No net additional operating impacts arising from capital program			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Transit Services			\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0
Additional Bus	\$58,000 per bus		\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0	\$58.0
Roads & Related			\$11.1	\$22.2	\$33.2	\$44.3	\$55.4	\$66.5	\$77.5	\$88.6	\$99.7	\$110.8
New Households			170	170	170	170	170	170	170	170	170	170
Cumulative New Households			170	340	510	680	850	1,020	1,190	1,360	1,530	1,700
Net Operating Cost	\$ 65 per household		\$11.1	\$22.2	\$33.2	\$44.3	\$55.4	\$66.5	\$77.5	\$88.6	\$99.7	\$110.8
Sanitary Sewerage			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
New net operating cost increases to be funded from utility rates (no tax impact)			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Water Services			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
New net operating cost increases to be funded from utility rates (no tax impact)			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL ESTIMATED OPERATING COSTS			\$69.1	\$97.7	\$127.9	\$167.1	\$195.7	\$224.3	\$235.4	\$256.2	\$274.9	\$362.2

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APPENDIX H
TABLE 2

TOWN OF MIDLAND
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	2027 (\$000)	2028 (\$000)	TOTAL (\$000)
GENERAL GOVERNMENT											
Total Net Cost (1)	0.0	0.0	100.0	30.0	35.0	0.0	0.0	0.0	80.0	235.0	480.0
Net Cost From Development Charges (2)	0.0	0.0	45.0	13.5	0.0	0.0	0.0	0.0	4.5	31.5	94.5
Net Cost From Non-DC Sources	0.0	0.0	55.0	16.5	35.0	0.0	0.0	0.0	75.5	203.5	385.5
- Discount Portion (3)	0.0	0.0	5.0	1.5	3.5	0.0	0.0	0.0	4.0	13.5	27.5
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	31.5	0.0	0.0	0.0	31.5	90.0	153.0
- Replacement & Benefit to Existing	0.0	0.0	50.0	15.0	0.0	0.0	0.0	0.0	40.0	100.0	205.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LIBRARY											
Total Net Cost (1)	119.0	116.7	114.2	111.7	109.0	106.2	103.3	100.2	97.1	418.9	1,396.2
Net Cost From Development Charges (2)	31.6	31.6	31.6	31.6	61.8	102.7	99.8	96.7	93.5	415.4	996.1
Net Cost From Non-DC Sources	87.4	85.1	82.7	80.1	47.2	3.5	3.5	3.5	3.5	3.5	400.1
- Discount Portion (3)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	35.1
- Available DC Reserves (4)	83.9	81.6	79.2	76.6	43.7	0.0	0.0	0.0	0.0	0.0	365.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FIRE											
Total Net Cost (1)	25.0	0.0	0.0	0.0	32.7	0.0	0.0	0.0	0.0	0.0	57.7
Net Cost From Development Charges (2)	25.0	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0	0.0	46.7
Net Cost From Non-DC Sources	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	11.0
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	11.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POLICE											
Total Net Cost (1)	0.0	0.0	0.0	4.1	0.0	190.0	0.0	4.1	0.0	0.0	198.2
Net Cost From Development Charges (2)	0.0	0.0	0.0	4.1	0.0	116.7	0.0	4.1	0.0	0.0	124.9
Net Cost From Non-DC Sources	0.0	0.0	0.0	0.0	0.0	73.3	0.0	0.0	0.0	0.0	73.3
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	73.3	0.0	0.0	0.0	0.0	73.3
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INDOOR RECREATION											
Total Net Cost (1)	312.9	332.4	353.2	375.2	398.7	423.6	0.0	0.0	0.0	0.0	2,196.0
Net Cost From Development Charges (2)	0.0	0.0	172.7	375.2	398.7	423.6	0.0	0.0	0.0	0.0	1,370.2
Net Cost From Non-DC Sources	312.9	332.4	180.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	825.8
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	312.9	332.4	180.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	825.8
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PARKS											
Total Net Cost (1)	0.0	350.0	384.0	562.0	350.0	350.7	0.0	194.3	152.3	1,525.2	3,868.4
Net Cost From Development Charges (2)	0.0	52.5	296.2	464.0	315.0	236.7	0.0	43.7	34.3	1,372.7	2,815.0
Net Cost From Non-DC Sources	0.0	297.5	87.8	98.1	35.0	114.0	0.0	150.5	118.0	152.5	1,053.4
- Discount Portion (3)	0.0	35.0	32.9	51.6	35.0	26.3	0.0	4.9	3.8	152.5	341.9
- Available DC Reserves (4)	0.0	262.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	262.5
- Replacement & Benefit to Existing	0.0	0.0	54.9	46.5	0.0	87.7	0.0	145.7	114.2	0.0	449.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Mandatory 10% reduction for applicable services

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2028 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

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APPENDIX H
TABLE 2

TOWN OF MIDLAND
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	2027 (\$000)	2028 (\$000)	TOTAL (\$000)
PUBLIC WORKS											
Total Net Cost (1)	210.7	206.7	202.6	198.3	193.8	189.2	184.4	179.4	174.2	2,054.4	3,793.6
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0	145.0
Net Cost From Non-DC Sources	210.7	206.7	202.6	198.3	193.8	189.2	184.4	179.4	174.2	1,909.4	3,648.6
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	46.6	45.8	44.8	43.9	42.9	41.9	40.8	39.7	38.6	309.7	694.6
- Replacement & Benefit to Existing	164.1	161.0	157.7	154.4	150.9	147.3	143.6	139.7	135.7	1,599.7	2,954.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PARKING											
Total Net Cost (1)	0.0	500.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	550.0
Net Cost From Development Charges (2)	0.0	57.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.2
Net Cost From Non-DC Sources	0.0	442.8	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	492.8
- Discount Portion (3)	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	30.0
- Available DC Reserves (4)	0.0	167.8	0.0	0.0	0.0	0.0	0.0	0.0	45.0	0.0	212.8
- Replacement & Benefit to Existing	0.0	250.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TRANSIT SERVICES											
Total Net Cost (1)	0.0	0.0	0.0	0.0	0.0	420.0	0.0	0.0	50.0	0.0	470.0
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	0.0	368.5	0.0	0.0	50.0	0.0	418.5
Net Cost From Non-DC Sources	0.0	0.0	0.0	0.0	0.0	51.5	0.0	0.0	0.0	0.0	51.5
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	51.5	0.0	0.0	0.0	0.0	51.5
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL GENERAL MUNICIPAL SERVICES											
Total Net Cost (1)	667.6	1,505.8	1,154.0	1,281.3	1,119.2	1,679.7	287.7	478.0	603.5	4,233.5	13,010.2
Net Cost From Development Charges (2)	56.6	141.3	545.4	888.4	797.1	1,248.2	99.8	144.5	182.3	1,964.6	6,068.1
Net Cost From Non-DC Sources	611.1	1,364.5	608.6	393.0	322.1	431.5	187.9	333.4	421.2	2,268.9	6,942.1
- Discount Portion (3)	3.5	63.5	41.4	56.6	42.0	29.8	3.5	8.4	16.3	169.5	434.5
- Available DC Reserves (4)	443.4	890.1	304.5	120.5	129.2	166.7	40.8	39.7	115.1	399.7	2,649.6
- Replacement & Benefit to Existing	164.1	411.0	262.7	215.9	150.9	235.0	143.6	285.4	289.8	1,699.7	3,858.0
- For Post 2028 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Mandatory 10% reduction for applicable services

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2028 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

TOWN OF MIDLAND
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	TOTAL (\$000)
ROADS & RELATED	
Total Net Cost (1)	72,061.7
Net Cost From Development Charges (2)	36,884.7
Net Cost From Non-DC Sources	35,177.1
- Available DC Reserves (4)	757.3
- Replacement & Benefit to Existing	34,419.8
- For Post 2041 Development (5)	0.0
SANITARY SEWERAGE	
Total Net Cost (1)	26,358.9
Net Cost From Development Charges (2)	11,279.6
Net Cost From Non-DC Sources	15,079.4
- Available DC Reserves (4)	395.5
- Replacement & Benefit to Existing	12,633.9
- For Post 2041 Development (5)	2,049.9
WATER SERVICES	
Total Net Cost (1)	43,366.8
Net Cost From Development Charges (2)	27,088.6
Net Cost From Non-DC Sources	16,278.2
- Available DC Reserves (4)	428.1
- Replacement & Benefit to Existing	15,850.1
- For Post 2041 Development (5)	0.0
TOTAL ENGINEERED MUNICIPAL SERVICES (6)	
Total Net Cost (1)	141,787.5
Net Cost From Development Charges (2)	75,252.9
Net Cost From Non-DC Sources	66,534.6
- Available DC Reserves (4)	1,580.9
- Replacement & Benefit to Existing	62,903.8
- For Post 2041 Development (5)	2,049.9

Notes: (1) For total development-related capital program see Appendix C.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2041 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

(6) Exact timing of engineered service projects is unknown

APPENDIX I

LOCAL SERVICE DEFINITIONS

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LOCAL SERVICE DEFINITIONS

The following guidelines set out in general terms the size and nature of engineered infrastructure that is included in the Town of Midland Development Charge Study, as a project to be eligible to be funded in part by development charges the following will apply:

1. The project will be required to be listed in the most current Town of Midland Development Charges Study.
2. If any infrastructure does not add any additional capacity over and above the capacity requirement for that development, these projects are assumed to be the sole responsibility of the developer.
3. Infrastructure that provides servicing or capacity for more than one development is not necessarily fully or partially funded from development charges. If a project is considered fully or partially local in nature, the Town will require the benefiting land owners to fund the works directly.

The following policy guidelines are general principles by which staff will be guided in considering development applications. However, each application will be considered on its own merits having regard to, among other factors, the nature, type and location of the development in any existing development and proposed development in its surrounding area these policy guidelines, the location and type of services required and their relationship to the proposed development and to existing and proposed development in the area, and subsection 59(2) of the *Development Charges Act, 1997*.

These local service policy guidelines are subject to review and amendment by the Town which may be independent of an amendment or update to the Town's development charge by-laws.

The detailed engineering requirements for all work and/or development are governed by the Town of Midland Official Plan, or if not specified in the Official Plan, by the approved Master Servicing Plans and other similar long-range capital planning documents, or in accordance with the Town's Design Criteria for sewers, watermains, and roads.

The issue of "local service" is being specifically considered for the services of:

- Roads
- Stormwater Management (SWM) Facilities

- Water and Sewer
- Parkland Development
- Street Tree Planting

1. **Roads**

a. **Local Roads:**

All roads and share of roads identified as local are to be treated as a local service under the DCA and the associated costs are not to be included in the development charges calculation. Generally, a local residential road is deemed to have a right-of-way of 20 metres and a non-residential road (collector or arterial) will have a right-of-way of 26 metres or greater.

Notwithstanding the previous, if it is shown, by way of a traffic management, or similar study, as is determined by the Town that a specific development requires, for its own local needs, a road of greater size than identified above, the road in its entirety will be considered a local service and a direct funding responsibility of the developer.

b. **Road Oversizing:**

If a local road is oversized to accommodate additional traffic needs external to the subject lands, the oversized share of the roads is to be included in the development charges calculation.

c. **Intersection Improvements and Traffic Signals:**

Intersections improvements and traffic signals within specific developments and all works necessary to connect entrances (private and specific subdivision) to the roadway are a direct developer responsibility under s.59 of DCA (as a local service). Intersection improvements on other roads due to development growth increasing traffic are to be included in the DC calculation.

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

The costs of stormwater management facilities internal to a subdivision and related to a plan of a subdivision or site plan approval 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 oversized associated with local drainage areas; and
- Storm sewer works on existing roads.

A municipality may recover these costs as a direct developer contribution (or by way of service provision) or alternatively may fund these works directly and recoup the costs through the assessment of a local charge against each unit or land area (holding) within the defined befitting area, based on proportionate shares. This may be facilitated by the Municipal Draining Act or other applicable legislation.

3. Water

- Major external trunk watermains and major pumping stations are to be included within the development charges.
- Watermains within the development that are larger than 250 mm may be included in the development charge calculation. The amount to be included in the DC Study for watermains within a development shall be calculated using tendered unit prices and shall be the difference between the cost of the actual pipe diameter and the cost of a 250 mm pipe diameter including a 10% engineering fee. Only watermain and valves will be included in the calculation. All costs related to the depth of pipe are the responsibility of the developer.
- Water mains 250 mm and under are deemed to be a local service and are a direct funding responsibility of the developer.
- Trunk watermains, generally outside the development area, identified by a Class Environmental Assessment, Servicing Study, or by Town staff, will be included in the development charge calculation. Such works would be listed in the Town's most current DC Study.
- Notwithstanding the previous, if it is shown, by way of a servicing plan, or similar study, as is determined by the Town that a specific development requires, for its own local needs, a watermain of greater size than identified above, the watermain in its entirety will be considered a local service and a direct funding responsibility of the developer.
- Connections to trunk mains and minor pumping stations to service specific areas are to be a direct developer responsibility as a local service provision (s.59 of DCA). Minor pumping stations are those that service a single subdivision, or adjacent or adjoining subdivisions or developments.

4. Sewer

- All major sanitary sewers, sanitary sewage treatment facilities are to be included in the development charge calculation.

- Major external sanitary trunk sewers may be included in the development charge calculation. These services will be identified through a Class Environmental assessment, Servicing Study or by Town staff.
- Sewer collectors 300 mm and under are deemed to be a local service and are a direct funding responsibility of the developer. Sanitary sewers larger than 300 mm that also service upstream properties will have cost sharing calculated on the tendered unit prices and shall be the difference between the cost of the actual pipe diameter and the cost of a 300 mm pipe including a 10% engineering fee. All other appurtenances with respect to oversizing and all costs related to the depth of pipe are the responsibility of the developer.
- Notwithstanding the previous, if it is shown, by way of a servicing plan, or similar study, as is determined by the Town that a specific development requires, for its own local needs, a sanitary sewer of greater size than identified above, the sanitary sewer in its entirety will be considered a local service and a direct funding responsibility of the developer.
- Major pumping stations shall be included in the DC. Major pumping stations are those required by the Town, and are identified through the Class Environmental Assessment process or a Master Servicing Study. Such works would be listed in the Town's most current DC Study.
- Local pumping stations servicing a small localized area (potentially one or more developments) are a local service and a direct developer responsibility under s.59 of the DCA. If a local pumping station serves multiple developments the costs are to be shared, as a local service, on a flow area or proportional basis.
- Connections to collectors and pumping stations to service specific areas are to be a direct developer responsibility.

5. Parkland Development

- For the purpose of parkland development, local services include the requirement for the owner to undertake preparation of the park plan, retaining necessary consultants to prepare design and grading plans for the park, prior to development. In addition, the owner is required to provide stripping and stockpiling, leveling, topsoiling, seeding and stormwater servicing including all appurtenances (consistent with the plan), fencing the property perimeter, and provide municipal water and waste water services to the lot line. These requirements are part of the conditions of s.51 and 53 Planning Act agreements. The municipality also requires the owner to dedicate parkland or provide cash-in-lieu, consistent with the Planning Act provisions. All of these costs are

deemed a direct responsibility of the developer and have not been included in the development charge calculation.

- Consistent with the past and current practice of the Town of Midland, the full cost of developing neighbourhood parks, including all above base parkland amenities, is deemed to be a local service. The development of these parks is done as part of the subdivision or development agreement. The value of these parks has not been included in the Town's historical park inventory value and the future projects are not included in the development-related capital forecast.
- With respect to other non-neighbourhood parks, the municipal policy is to include all other components of parkland development in the DC calculation, including parking, park furniture, signage, landscaping and walkways and multi-purpose trails, in addition to the necessary fields, diamonds, playground equipment, lighting, irrigation and field houses.

6. Street Tree Planting

- Street tree planting is considered a local area service and a direct responsibility of the developer.

APPENDIX J

***PROPOSED DRAFT 2019 DC BY-LAW
(AVAILABLE UNDER SEPARATE COVER)***