

# DEVELOPMENT CHARGES BACKGROUND STUDY

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Township of Brock

**HEMSON** Consulting Ltd

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## **EXECUTIVE SUMMARY**

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The following summarizes the findings of the 2009 Development Charges Background Study.

### **A. STUDY CONSISTENT WITH DEVELOPMENT CHARGES LEGISLATION**

- This study calculates development charges for the Township of Brock in compliance with the provisions of the *Development Charges Act, 1997 (DCA)* and its associated regulation: *O. Reg. 82/98*.
- The Township of Brock's existing development charges by-law 1889-2004-PL expires on August 16, 2009, and Council must pass a new development charges by-law before this expiry date in order to continue to levy development charges.
- The Township needs to continue implementing development charges to fund capital projects related to growth throughout Brock so that development pays for its capital requirements to the extent allowed by the *DCA* and so that new services required by growth are provided in a fiscally responsible manner.
- The *DCA* and *O. Reg. 82/98* require that a development charges background study be prepared in which development charges are determined with reference to:
  - A forecast of the amount, type and location of housing units, population and non-residential development anticipated in the Township;
  - A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the Township to provide for the expected development, including the determination of the growth and non-growth-related components of the capital projects; 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.
- This report identifies the growth-related net capital costs which are attributable to development that is forecast to occur in the Township. These costs are apportioned to types of development (residential, non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development.

**B. ALL SERVICES WITH GROWTH-RELATED COSTS INCLUDED IN THE ANALYSIS**

The following Township services have been included in the development charge analysis:

- Library, Parks and Recreation
- Fire Services
- Public Works: Buildings and Fleet
- General Government
- Roads and Related

Development charges for all services are calculated on a Township-wide basis.

**C. TOWNSHIP OF BROCK IS ANTICIPATED TO GROW BY 390 HOUSEHOLDS AND 420 EMPLOYEES OVER 10 YEARS**

- A development forecast for the 10-year study period estimates that the number of households in the Township will grow by approximately 390 to 2018 and by about 1,700 to 2031.
- The Township's employment is forecast to grow by approximately 420 employees over the next 10 years and 1,210 to 2031.
- Approximately 27,450 square metres of new non-residential building space are expected over the 10-year period, 2009–2018, and 78,730 square metres are projected to 2031.

**D. DEVELOPMENT CHARGES STUDY INCLUDES A \$15.6 MILLION GROWTH-RELATED CAPITAL PROGRAM FOR GENERAL SERVICES OVER THE NEXT 10 YEARS AND A \$19.1 MILLION PROGRAM FOR ROADS TO 2031**

- The 2009–2018 growth-related capital program for general services including library, parks & recreation fire, public works: buildings & fleet and general government totals \$15.6 million.
- The roads and related gross capital program totals an additional \$19.1 million to 2031.
- The *DCA* requires that the gross capital costs be reduced by grants, subsidies, and recoveries from other governments; capital replacements or other benefits provided to the existing community; existing reserve fund balances; and a statutory 10 per cent reduction for eligible general (or “soft”) services when calculating development charges.
- After the above considerations, the shares of the capital programs related to servicing growth are:
  - \$4.10 million for general services for growth over the period 2009–2018.
  - \$14.99 million for roads and related services to service growth to 2031.

**E. CALCULATED CHARGES ARE SIGNIFICANTLY HIGHER THAN EXISTING CHARGES**

- The calculated charges are the maximum charges the Township may adopt. Lower charges can be approved; however, this will require a reduction in the capital plan and reduced service levels or financing from other sources, most likely through increased property taxes or user fees.
- The following tables summarize the calculated Township-wide residential and non-residential development charges.

### Calculated Township-Wide Residential Development Charges

SERVICE	Charge By Unit Type		
	Single & Semi-Detached	Rows & Other Multiples	Apartment/Garden Suite
Library, Parks & Recreation	\$7,475	\$5,928	\$4,382
Fire Services	\$1,488	\$1,180	\$872
Public Works: Buildings & Fleet	\$1,279	\$1,014	\$750
General Government	\$533	\$422	\$312
General Services Charge Per Unit	\$10,775	\$8,544	\$6,316
Roads & Related	\$7,263	\$5,760	\$4,257
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$18,038</b>	<b>\$14,304</b>	<b>\$10,573</b>

### Calculated Township-Wide Non-Residential Development Charges

SERVICE	Calculated Charge (\$/sq.m)
Library, Parks & Recreation	\$0.00
Fire Services	\$4.93
Public Works: Buildings & Fleet	\$4.29
General Government	\$1.77
General Services Charge Per sq. m	\$10.99
Roads & Related	\$38.08
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$49.07</b>

- The total calculated residential charges are higher than the Township's existing development charges. This is mainly due to a larger parks and recreation capital program than was used in the 2004 Study.
- Construction cost increases for recreation and roads and related infrastructure have also had an affect on the rates. These cost pressures have been experienced by municipalities throughout Ontario.

### Change in Township-Wide Residential Development Charges

SERVICE	Current Charge SDU	Calculated Charge SDU	Change	
Library, Parks & Recreation	\$1,218	\$7,475	\$6,257	514%
Fire Services	\$1,483	\$1,488	\$5	0%
Public Works: Buildings & Fleet	\$1,182	\$1,279	\$97	8%
General Government	\$638	\$533	(\$105)	-16%
General Services Charge Per Unit	\$4,521	\$10,775	\$6,254	138%
Roads & Related	\$6,236	\$7,263	\$1,027	16%
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$10,757</b>	<b>\$18,038</b>	<b>\$7,281</b>	<b>68%</b>

- Calculated non-residential development charges are also higher than exiting charges. The Township does not currently levy development charges on industrial uses.

### Change in Township-Wide Non-Residential Development Charges

SERVICE	Current Charge Sq. m	Calculated Charge Sq. m	Change	
Library, Parks & Recreation	\$0.00	\$0.00	\$0.00	n/a
Fire Services	\$7.45	\$4.93	(\$2.52)	-34%
Public Works: Buildings & Fleet	\$6.53	\$4.29	(\$2.24)	-34%
General Government	\$3.19	\$1.77	(\$1.42)	-45%
General Services Charge Per sq. m	\$17.17	\$10.99	(\$6.18)	-36%
Roads & Related	\$29.18	\$38.08	\$8.90	31%
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$46.35</b>	<b>\$49.07</b>	<b>\$2.72</b>	<b>6%</b>

#### F. A PORTION OF GROWTH-RELATED COSTS REQUIRES FUNDING FROM NON-DEVELOPMENT CHARGE SOURCES

- The DCA requires that the growth-related net capital costs for certain general services be reduced by 10 per cent in calculating the applicable development charges for these services. The 10 per cent share of growth-related net capital costs not included in the development charge calculation must be funded from non-development charge sources.
- In total, \$389,200 is identified to provide for the required 10 per cent reduction over the 10-year planning period.

- Non-development charge funding for replacement portions of the capital forecast and other benefits to the existing community total an additional \$2.59 million for general services and \$3.48 million for roads and related services.
- It is estimated also that net operating costs will increase by about \$1.12 million by the year 2018 as the facilities and infrastructure embodied in the general capital forecast are operated and maintained.

**G. DEVELOPMENT CHARGES BY-LAW PRACTICES AND COLLECTION POLICIES HAVE BEEN REVIEWED**

- It is recommended that present practices regarding collection of development charges and by-law administration continue to the extent possible.
- As required under the *DCA*, the Township should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption.
- It is recommended that the Township develop reporting 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 or front ending agreements. The municipality is not obligated to enter into services-in-lieu agreements.
- It is recommended that Council adopt the growth-related capital forecast included in this background study, subject to annual review through the Township's normal capital budget process.
- It is recommended the Township combine Library and Parks and Recreation services for the purposes of development charges, as done in this study, since a development charge for Library Services would otherwise not be permitted due to excess capacity.
- Council may also wish to consider the continued exemption of industrial uses.

## I INTRODUCTION

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This Township of Brock Development Charges Background Study is presented as part of a process to lead to the approval of new development charge by-laws in compliance with the *Development Charges Act, 1997 (DCA)*.

The *DCA* and *O. Reg. 82/98* require that a development charge background study be prepared in which development charges are determined with reference to:

- A forecast of the amount, type and location of housing units, population and non-residential development anticipated in the Township;
- The average capital service levels provided in the Township over the 10 year period immediately preceding the preparation of the background study; and
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the Township to provide for the expected development, including the determination of the growth and non-growth-related components of the capital projects.

This study presents the results of the review which determines the growth-related net capital costs which are attributable to development that is forecast to occur in the community. These growth-related net capital costs are then apportioned among various types of development (residential; non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development. The study arrives, therefore, at calculated development charges for various types of development.

The *DCA* provides for a period of public review and comment regarding the calculated development charges. Following completion of this process in accordance with the *DCA* and Council's review of this study and the comments it receives regarding this study or other information brought to its attention about the calculated charges, it is intended that Council will pass a new development charges by-law for the Township.

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

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

Section III presents a summary of the forecast residential and non-residential development which is expected to occur within the Township over the 2009–2018 period and to 2031.

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

In Section V, the growth-related capital forecast that has been developed by various Township departments and agencies is reviewed.

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

Section VII provides a comparison of existing development charge rates in the Township with the rates calculated in this study.

Section VIII provides an examination of the long-term capital and operating costs for each service included in the development charge calculation.

Section IX provides a review of development charges administrative matters such as collection method and timing of payments, exemptions, credits for services-in-lieu, front-end financing, etc.

## **II A TOWNSHIP-WIDE METHODOLOGY ALIGNS GROWTH-RELATED COSTS AND BENEFITS**

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Several key steps are required in calculating any development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, therefore, we have tailored our approach to the Township of Brock's unique circumstances. The approach to the calculated development charges is focussed on providing a reasonable alignment of growth-related costs with the development that necessitates them. This study calculates charges on a Township-wide basis which is consistent with the Township's 2004 Development Charges Study. Despite the fact that development charges are calculated on a Township-wide basis, legislation allows a municipality to exempt or reduce rates for specific geographic areas. However, legislation prevents lost revenue, due to exemptions or reductions, from being made up through increasing charges on other areas.

### **A. TOWNSHIP-WIDE DEVELOPMENT CHARGES ARE CALCULATED**

Brock provides a range of services to the community it serves and has a sizeable inventory of facilities, land, infrastructure, vehicles and equipment. The *DCA* provides the Township with flexibility when defining services that will be included in the development charge by-laws, provided that the other provisions of the Act and Regulations are met. The *DCA* also permits the Township to designate, in its by-laws, the areas within which the development charges shall be imposed. The charges may apply to all lands in the Township or to other designated development areas as specified in the by-laws.

For all of the development charge eligible services that the Township provides, the full range of capital facilities, land, equipment and infrastructure is available throughout the municipality. All residents therefore have access to all facilities. A widely accepted method for sharing the growth-related capital costs for such services is to apportion them over all new growth anticipated in the Township.

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

- Library, Parks and Recreation
- Fire Services
- Public Works: Buildings and Fleet
- General Government
- Roads and Related

These services form a reasonable basis in which to plan and administer the Township-wide development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that make them up. For example, the Fire Services category includes fire stations and associated land, vehicles, furniture and equipment.

The resulting development charge for all of the above services would be imposed uniformly against all new development everywhere in the Township.

## **B. KEY STEPS IN DETERMINING DEVELOPMENT CHARGES FOR FUTURE GROWTH-RELATED PROJECTS**

Several key steps are required in calculating development charges for future growth-related projects. These are summarized below.

### **1. Growth Forecast**

The first step in the methodology requires a development forecast to be prepared for the 10 year study period, 2009–2018, for most Township-wide services and for growth to 2031 for roads and related services. The forecast is largely based on the Growing Durham Study which was prepared as part of the Region's *Growth Plan* Conformity work.

Household growth is used as the basis of calculating historic service levels and calculating the residential development charge. Households were used as the Growing Durham Study household forecast is more uniform than the population forecast for Brock.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the 10 year period, 2009–2018, and to 2031. The forecast of GFA is based on the employment forecast for the Township. A factor of 65 square metres per employee was used to convert the employment forecast into gross floor area for the purposes of the development charges study.

## **2. Service Categories and Historic Service Levels**

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

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

Historic 10 year average service levels thus form the basis for development charges. A review of the Township's capital service levels for buildings, land, vehicles, and so on has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historic service levels used in this study have been calculated based on the period 1999–2008.

For “hard” services, such as roads (and road-related works), historic service levels are less applicable and reference is made to the Township's engineering standards as well as Provincial requirements.

## **3. Growth-Related Capital Forecast and Analysis of Net Capital Costs to be Included in the Development Charges**

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

In conjunction with *DCA*, s. 5. (1) 4. referenced above, these sections have the effect of requiring that the development charge be calculated on the lesser of the historic 10 year average service levels or the service levels embodied in future plans of the Township. The growth-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, *O. Reg. 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 growth-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 Township from non-development charges sources. The amount of Township funding for such non-growth shares of projects is also identified as part of the preparation of the growth-related capital forecast.

There is also a requirement in the *DCA* to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Such capacity is available to partially meet the future servicing requirements. Adjustments are made in the analysis to meet this requirement of the *DCA*.

Finally, in calculating development charges, the growth-related net capital costs must be reduced by 10 per cent for all Township services except roads and related services and fire (*DCA*, s. 5. (1) 8.). The 10 per cent discount is applied to the other services, e.g. parks and recreation, libraries etc., and the resulting Township funding responsibility from non-development charge sources is identified.

#### **4. Attribution to Types of Development**

The next step in the determination of development charges is the allocation of the growth-related net capital costs between the residential and the non-residential sectors. In the Township of Brock, the allocation is based on the consideration of projected changes in population in new units and employment over the planning periods.

The residential component of the development charge 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 charge results from adjustments made to growth-related net capital costs for each service and sector resulting from the application of any unallocated growth-related reserve fund balances that are available to finance the growth-related capital costs in the capital forecast. A cash flow analysis is also undertaken to account for the timing of projects and receipt of development

charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the *DCA*.

### III GROWTH FORECAST

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This section provides the basis for the growth forecasts used in calculating the development charges and provides a summary of the forecast results.

Brock's estimated 2008 Census population and quantity of households is estimated at 12,015 and 4,470 respectively. Estimated employment in 2008 is 3,790. The number of households in the Township is forecast to grow by 390 in the 10-year planning period from 2009 to 2018. Employment is expected to grow by 420 over the 10-year forecast period.

Household and employment projections were also prepared to 2031. The development charges forecast projects the Township's 2031 household count to be 6,175. This represents growth of 1,700 households from 2008.

Employment is expected to reach 5,000 in 2031, an increase of 1,210 when compared to 2008 employment. Table 1 provides a summary of the residential and non-residential growth forecasts used in this analysis.

**TABLE 1**  
**TOWNSHIP OF BROCK**  
**SUMMARY OF RESIDENTIAL & NON-RESIDENTIAL**  
**DEVELOPMENT FORECAST**

	Existing	2009-2018		2009-2031	
	As At Mid-Year 2008	Forecast Change	As at 2018	Forecast Change	As at 2031
<b>Housing Units</b>	4,471	392	4,863	1,704	6,175

	Existing	2009-2018		2009-2031	
	As At Mid-Year 2008	Forecast Change	As at 2018	Forecast Change	As at 2031
<b>Employment</b>	3,789	422	4,211	1,211	5,000
<b>Non-Residential Building Space (sq.m)</b>		27,449		78,728	

## **IV SUMMARY OF HISTORIC CAPITAL SERVICE LEVELS**

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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 municipality over the 10 year period immediately preceding the preparation of the background study, on a service by service basis.

For non-engineered services, or general services, (fire, library, parks and recreation etc.) the legislative requirement is met by documenting historic service levels for the preceding 10 years, in this case, for the period 1999 to 2008. Typically, service levels for non-engineering services are measured as a ratio of inputs per household (or per capita or per population and employment). With engineered services, or “hard” services, such as roads and water, engineering and legislated environmental and health standards are used in lieu of inputs per household.

*O. Reg. 82/98* requires that when determining historical service levels both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per household. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of \$’s/square foot to replace or construct a facility of the same quality. This approach helps to ensure that the growth-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 replacement cost) of service provided historically by the Township. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by Township staff based on historical records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure.

Table 2 summarizes service levels for all general Township-wide services included in the development charge calculation (excluding general government and roads and related services). Appendix B provides detailed historical inventory data upon which the calculation of service levels is based.

**TABLE 2**  
**TOWNSHIP OF BROCK**  
**HISTORIC AVERAGE SERVICE LEVELS**

<b>Service</b>	<b>Historic Average Service Level 1999 - 2008</b>
<b>LIBRARY, PARKS &amp; RECREATION</b>	<b>\$7,673 per household</b>
- Library	\$700 per household
- Indoor Recreation	\$5,341 per household
- Park Development	\$888 per household
- Park Facilities	\$577 per household
- Special Facilities	\$166 per household
<b>FIRE SERVICES</b>	<b>\$1,535 per household</b>
- Buildings	\$595 per household
- Land	\$21 per household
- Vehicles	\$763 per household
- Furniture & Equipment	\$157 per household
<b>PUBLIC WORKS: BUILDINGS &amp; FLEET</b>	<b>\$2,104 per household</b>
- Buildings	\$860 per household
- Land	\$211 per household
- Furniture & Equipment	\$68 per household
- Municipal Fleet & Works Rolling Stock	\$964 per household

## **V THE GROWTH-RELATED CAPITAL FORECAST**

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### **A. A GROWTH-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL**

The *DCA* requires the Council of a municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section II, *O. Reg. 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.

Based on the growth forecasts summarized in Section III and detailed in Appendix A, staff of the Township departments and agencies, in collaboration with the consultants, developed a growth-related capital forecast setting out those projects that are required to service anticipated growth. For all services, except for roads and related services, the capital plan covers the 10 year period from 2009 to 2018. As permitted by the *DCA* s. 5 (1) 4., the development charge for roads and related services is based on development expected in the Township to 2031 which is the Growing Durham Plan horizon year.

One of the recommendations contained in this background study is for Council to adopt the growth-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 growth-related projects contained herein that are consistent with the growth occurring in the Township. It is acknowledged that changes to the forecast presented here may occur through the Township's normal capital budget process.

### **B. THE GROWTH-RELATED CAPITAL FORECAST FOR GENERAL SERVICES**

A summary of the Growth-Related Capital Forecast for all services is presented in Table 3.

**TABLE 3**  
**TOWNSHIP OF BROCK**  
**SUMMARY OF GROWTH-RELATED CAPITAL FORECAST**  
**2009-2018**

Service	Gross Cost (\$000)	Grants/ Subsidies (\$000)	Capital Cost (\$000)	Total Net Capital Forecast (\$000)									
				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>1.0 LIBRARY, PARKS &amp; RECREATION</b>	<b>\$9,934.5</b>	<b>\$0.0</b>	<b>\$9,934.5</b>	<b>\$134.1</b>	<b>\$214.1</b>	<b>\$134.1</b>	<b>\$289.1</b>	<b>\$230.2</b>	<b>\$117.5</b>	<b>\$2,302.8</b>	<b>\$6,277.5</b>	<b>\$117.5</b>	<b>\$117.5</b>
1.1 Library	\$2,000.0	\$0.0	\$2,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,000.0	\$0.0	\$0.0	\$0.0
1.2 Indoor Recreation	\$6,226.5	\$0.0	\$6,226.5	\$16.6	\$16.6	\$16.6	\$16.6	\$0.0	\$0.0	\$0.0	\$6,160.0	\$0.0	\$0.0
1.3 Parks	\$1,708.0	\$0.0	\$1,708.0	\$117.5	\$197.5	\$117.5	\$272.5	\$230.2	\$117.5	\$302.8	\$117.5	\$117.5	\$117.5
<b>2.0 FIRE SERVICES</b>	<b>\$2,039.8</b>	<b>\$0.0</b>	<b>\$2,039.8</b>	<b>\$1,547.5</b>	<b>\$83.5</b>	<b>\$50.5</b>	<b>\$96.5</b>	<b>\$53.5</b>	<b>\$55.5</b>	<b>\$57.5</b>	<b>\$58.5</b>	<b>\$18.5</b>	<b>\$18.5</b>
2.1 Buildings, Land, Furn. & Equipment	\$1,684.8	\$0.0	\$1,684.8	\$1,518.5	\$18.5	\$18.5	\$18.5	\$18.5	\$18.5	\$18.5	\$18.5	\$18.5	\$18.5
2.2 Fully Equipped Vehicles	\$355.0	\$0.0	\$355.0	\$29.0	\$65.0	\$32.0	\$78.0	\$35.0	\$37.0	\$39.0	\$40.0	\$0.0	\$0.0
<b>3.0 PUBLIC WORKS: BUILDINGS &amp; FLEET</b>	<b>\$3,370.0</b>	<b>\$0.0</b>	<b>\$3,370.0</b>	<b>\$57.5</b>	<b>\$124.5</b>	<b>\$109.5</b>	<b>\$1,557.5</b>	<b>\$614.5</b>	<b>\$109.5</b>	<b>\$599.5</b>	<b>\$57.5</b>	<b>\$57.5</b>	<b>\$82.5</b>
3.1 Buildings, Land & Furnishings	\$2,075.0	\$0.0	\$2,075.0	\$57.5	\$57.5	\$57.5	\$1,557.5	\$57.5	\$57.5	\$57.5	\$57.5	\$57.5	\$57.5
3.2 Fleet	\$1,295.0	\$0.0	\$1,295.0	\$0.0	\$67.0	\$52.0	\$0.0	\$557.0	\$52.0	\$542.0	\$0.0	\$0.0	\$25.0
<b>4.0 GENERAL GOVERNMENT</b>	<b>\$289.7</b>	<b>\$0.0</b>	<b>\$289.7</b>	<b>\$124.7</b>	<b>\$20.0</b>	<b>\$0.0</b>	<b>\$10.0</b>	<b>\$105.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$30.0</b>
4.1 Growth-Related Studies	\$289.7	\$0.0	\$289.7	\$124.7	\$20.0	\$0.0	\$10.0	\$105.0	\$0.0	\$0.0	\$0.0	\$0.0	\$30.0
<b>TOTAL - 10 YEAR GENERAL SERVICES</b>	<b>\$15,634.0</b>	<b>\$0.0</b>	<b>\$15,634.0</b>	<b>\$1,863.9</b>	<b>\$442.1</b>	<b>\$294.1</b>	<b>\$1,953.1</b>	<b>\$1,003.2</b>	<b>\$282.5</b>	<b>\$2,959.7</b>	<b>\$6,393.5</b>	<b>\$193.5</b>	<b>\$248.5</b>

The table provides a separate total for services analysed over the 10 year period, 2009–2018. Further details on the capital plans for each individual service category are available in Appendix B.

The growth-related capital forecast for general services estimates a total gross cost of \$15.63 million. No grants or subsidies have been identified.

This capital forecast incorporates those projects identified to be related to growth 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 Section VI for the method and determination of net capital costs attributable to growth). Portions of this capital forecast may relate to providing servicing for growth which has occurred prior to 2009 (for which development charge reserve fund balances exist), for replacement of existing capital facilities or for growth anticipated to occur beyond the 2009–2018 planning period. In addition, the amounts shown in Table 3 have not been reduced by 10 per cent for various general services as mandated by s.5(1)8. of the DCA.

Of the \$15.63 million in 10-year net growth-related capital costs for general services, \$9.93 million (64 per cent) is related to the provision of Library, Parks and Recreation services. Public Works: Buildings and Fleet is the next largest component at \$3.37 million or 22 per cent of the total general services program. The net growth-related capital forecast for the Fire capital program totals \$2.04 million (13 per cent of total). The last service, General Government, totals \$290,000 (2 per cent).

### **C. GROWTH-RELATED CAPITAL EXPENDITURES FOR ROADS AND RELATED SERVICES**

In addition to the growth-related capital forecast for general services, the gross and net Roads and Related program totals \$19.13 million. Further details of the Roads and Related capital program are included in Appendix C.

## **VI DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE *DCA***

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This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. Furthermore, the calculation of the “unadjusted” per household (residential) and per square metre (non-residential) is presented. Adjustments are made to these amounts resulting from a cash flow analysis that considers interest earnings and borrowing costs.

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

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

### **A. UNADJUSTED DEVELOPMENT CHARGE CALCULATION FOR GENERAL SERVICES**

A summary of the “unadjusted” residential and non-residential development charges for general services is presented in Table 4. Further details of the calculation for each individual Township service category are available in Appendix B.

**TABLE 4**  
**TOWNSHIP OF BROCK**  
**SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**  
**10-YEAR GENERAL SERVICES**

10 Year Growth in Households 392  
 10 Year Growth in Square Metres 27,449

	Growth-Related Capital Forecast						Service Discount Required %	Service Discount \$000	Total Growth-Related Net Capital Costs After Discount (\$000)	Residential Share		Non-Residential Share	
	Total (Net of Grants/ Subsidies) (\$000)	Benefit to Existing/ Replacement Share (\$000)	Prior Growth (\$000)	Net Cost After Prior Growth & Replacement (\$000)	Pre-Built for Post 2018 Growth (\$000)	Growth-Related Net Capital Costs 2009-2018 (\$000)				%	\$000	%	\$000
<b>1.0 LIBRARY, PARKS &amp; RECREATION</b>	\$9,934.5	\$807.4	\$378.1	\$8,749.0	\$5,746.5	\$3,002.5	10%	\$300.3	\$2,702.26	100%	\$2,702.3	0%	\$0.00
Unadjusted Development Charge Per HH													\$6,893.49
Unadjusted Development Charge Per Sq. m													\$0.00
<b>2.0 FIRE SERVICES</b>	\$2,039.8	\$1,221.8	\$96.3	\$721.7	\$119.8	\$601.8	0%	\$0.0	\$601.84	80%	\$481.5	20%	\$120.37
Unadjusted Development Charge Per HH													\$1,228.23
Unadjusted Development Charge Per Sq. m													\$4.39
<b>3.0 PUBLIC WORKS: BUILDINGS &amp; FLEET</b>	\$3,370.0	\$524.6	\$116.8	\$2,728.6	\$2,091.0	\$637.6	10%	\$63.8	\$573.8	80%	\$459.1	20%	\$114.76
Unadjusted Development Charge Per HH													\$1,171.04
Unadjusted Development Charge Per Sq. m													\$4.18
<b>4.0 GENERAL GOVERNMENT</b>	\$289.7	\$37.5	\$0.0	\$252.2	\$0.0	\$252.2	10%	\$25.2	\$227.02	80%	\$181.6	20%	\$45.40
Unadjusted Development Charge Per HH													\$463.31
Unadjusted Development Charge Per Sq. m													\$1.65
<b>TOTAL 10 YEAR GENERAL SERVICES</b>	<b>\$15,634.0</b>	<b>\$2,591.3</b>	<b>\$591.2</b>	<b>\$12,451.5</b>	<b>\$7,957.4</b>	<b>\$4,494.2</b>		<b>\$389.2</b>	<b>\$4,104.9</b>		<b>\$3,824.4</b>		<b>\$280.5</b>
<b>Unadjusted Development Charge Per HH</b>													<b>\$9,756.07</b>
<b>Unadjusted Development Charge Per Sq. m</b>													<b>\$10.22</b>

The capital forecast for general services incorporates those projects identified to be related to growth anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 4 shows that \$2.59 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 will have to be funded from property taxes, user fees or other non-development charge revenue sources.

An additional share of \$591,200 has been identified as prior growth and represents the revenues collected from previous development charges. This portion has been netted out of the chargeable capital costs. Another share of the forecast, \$7.96 million, is attributable to growth beyond the 2018 period (and can therefore only be recovered under future development charges studies).

The DCA, s.5(1)8 requires that growth-related net capital costs for general services be reduced by 10 per cent in calculating the applicable development charge. The discount does not apply to Fire. The 10 per cent share of growth-related net capital costs not included in the development charge calculations must be funded from non-development charge sources. In total, about \$389,200 is identified as the required 10 per cent reduction.

The discounted net growth-related capital cost for general services is \$4.10 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted development charges. Library, parks & recreation are all deemed to benefit residential development only, while the other services are allocated between both sectors based on shares of population in new units and employment growth. Approximately \$3.82 million of the general services development charges net discounted capital program is deemed to benefit residential development. When this amount is divided by the 10-year growth in new households (392), an unadjusted charge of \$9,756.07 per household is derived. The non-residential share of the general services capital program totals \$280,500 and when this amount is divided by the 10-year forecast of non-residential space growth (27,449 sq. m), an unadjusted charge of \$10.22 per square metre is derived.

**B. UNADJUSTED DEVELOPMENT CHARGE CALCULATION FOR ROADS AND RELATED SERVICES**

Table 5 describes the calculation of unadjusted rates for roads and related services. The gross and net roads and related capital program is \$19.13 million. Approximately \$3.48 million has been identified as replacement shares and \$663,900 in development charges reserve funds are available to offset the capital program. The net growth-related capital program of \$14.99 million is allocated to the residential and non-residential sectors based on each sector's share of forecast future population in new units and employment growth to 2031. On this basis, the allocation to the residential and non-residential sectors is calculated at 80 per cent and 20 per cent respectively. The residential sector's "unadjusted" development charge is calculated at \$7,037.36 per household. This was calculated by taking the residential share of the net growth-related capital program (\$11.99 million) and dividing it by the growth in households to 2031(1,704).

The non-residential charge is calculated by taking the non-residential share of the net growth-related capital program (\$3.0 million) and dividing it by the growth in non-residential gross floor area to 2031 (78,728). This results in a charge of \$38.08 per square metre.

**TABLE 5**  
**TOWNSHIP OF BROCK**  
**SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**  
**ROADS AND RELATED**

Horizon Year Growth in Households           1,704  
Horizon Year Employment Growth           1,211  
Horizon Year Growth in Square Meters       78,728

	Growth-Related Capital Forecast													
	Gross Cost (\$000)	Grants and Subsidies (\$000)	Replacement/ Benefit to Existing Share (\$000)	Pre-Built Service (Calculated Oversizing) (\$000)	Prior Growth (\$000)	Total Growth- Related Net Capital Costs (\$000)	Service Discount Required		Total Growth- Related Net Capital Costs After Discount		Residential Share		Non-Residential Share	
							%	\$000	(\$000)	%	\$000	%	\$000	
<b>ROADS AND RELATED</b>														
Unadjusted Residential Charge (per hh)	\$19,131.3	\$0.0	\$3,476.0	\$0.0	\$663.9	\$14,991.4	0%	\$0.0	\$14,991.4	80%	\$11,993.1	20%	\$2,998.3	
Unadjusted Non-Residential Charge per (sq. m)											\$7,037.36		\$38.08	

**C. ADJUSTED RATES FOR GENERAL SERVICES RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**

Final adjustments to the “unadjusted” development charge rates summarized above are made through a cash flow analysis. The analysis, details of which are included in the Appendices, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipts for each service.

Tables 6 and 7 summarize the results of the adjustment for the residential and non-residential components of the general services rates respectively. As shown on Table 6, the adjusted per household rate for general services increases from \$16,793 to \$17,477 after the cash flow analysis. Table 7 shows that the adjusted non-residential rate increases from \$48.30 to \$49.79 per square metre. The roads and related capital program was not cash flowed.

**TABLE 6**  
**TOWNSHIP OF BROCK**  
**CALCULATED UNADJUSTED AND ADJUSTED DEVELOPMENT CHARGES**  
**RESIDENTIAL DEVELOPMENT CHARGES**

<b>SERVICE</b>	<b>Unadjusted Charge Per Household</b>	<b>Adjusted Charge After Cashflow Per Household</b>
Library, Parks & Recreation	\$6,893	\$7,243
Fire Services	\$1,228	\$1,442
Public Works: Buildings & Fleet	\$1,171	\$1,239
General Government	\$463	\$516
General Services Charge Per Unit	\$9,756	\$10,440
Roads & Related	\$7,037	\$7,037
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$16,793</b>	<b>\$17,477</b>

TABLE 7

**TOWNSHIP OF BROCK  
CALCULATED UNADJUSTED AND ADJUSTED DEVELOPMENT CHARGES  
NON-RESIDENTIAL DEVELOPMENT CHARGES**

<b>SERVICE</b>	<b>Unadjusted Charge (\$/sq.m)</b>	<b>Calculated Charge After Cashflow (\$/sq.m)</b>
Library, Parks & Recreation	\$0.00	\$0.00
Fire Services	\$4.39	\$4.93
Public Works: Buildings & Fleet	\$4.18	\$4.29
General Government	\$1.65	\$1.77
General Services Charge Per sq. m	\$10.22	\$10.99
Roads & Related	\$38.08	\$38.08
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$48.30</b>	<b>\$49.07</b>

**D. CALCULATED TOWNSHIP-WIDE RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**

Residential Township-wide development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for services. The calculated residential development charges for all services are shown in Table 8.

TABLE 8

**TOWNSHIP OF BROCK  
CALCULATED DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES**

<b>SERVICE</b>	<b>Adjusted Charge After Cashflow Per Household</b>	<b>Charge By Unit Type (1)</b>		
		<b>Single &amp; Semi-Detached</b>	<b>Rows &amp; Other Multiples</b>	<b>Apartment/ Garden Suite</b>
Library, Parks & Recreation	\$7,243	\$7,475	\$5,928	\$4,382
Fire Services	\$1,442	\$1,488	\$1,180	\$872
Public Works: Buildings & Fleet	\$1,239	\$1,279	\$1,014	\$750
General Government	\$516	\$533	\$422	\$312
General Services Charge Per Unit	\$10,440	\$10,775	\$8,544	\$6,316
Roads & Related	\$7,037	\$7,263	\$5,760	\$4,257
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$17,477</b>	<b>\$18,038</b>	<b>\$14,304</b>	<b>\$10,573</b>

(1) Based on Persons Per Unit Of:

2.90

2.30

1.70

As shown in the table, the calculated residential charge ranges from \$10,573 for apartments and garden suites to \$18,038 for single-family and semi-detached units. The calculated charge for rows (and other multiple units) is \$14,304.

Table 9 shows the calculated non-residential development charge is \$26.57 per square metre.

TABLE 9

**TOWNSHIP OF BROCK  
CALCULATED DEVELOPMENT CHARGES  
NON-RESIDENTIAL DEVELOPMENT CHARGES**

<b>SERVICE</b>	<b>Calculated Charge (\$/sq.m)</b>
Library, Parks & Recreation	\$0.00
Fire Services	\$4.93
Public Works: Buildings & Fleet	\$4.29
General Government	\$1.77
General Services Charge Per sq. m	\$10.99
Roads & Related	\$38.08
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$49.07</b>

## **VII COMPARISON OF CURRENT AND CALCULATED DEVELOPMENT CHARGES**

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Tables 10-11 present a comparison of total calculated Township-wide development charges for a single/semi-detached housing unit and a non-residential building respectively with the Township's existing charges (as at May, 2009).

Table 10 shows that the calculated charge per single/semi detached unit of \$18,038 will produce an increase of \$7,281 over the present development charge. This represents a 68 per cent increase. The total calculated residential charges are higher than the Township's existing development charges mainly due to a larger parks and recreation capital program than was used in the 2004 Study. Construction cost increases for recreation and roads and related infrastructure have also had an affect on the rates. These cost pressures have been experienced by municipalities throughout Ontario.

Table 11 shows the change calculated for the non-residential charge. The calculated charge of \$49.07 per square metre represents an increase of about 6 per cent (\$2.72) over the existing rate of \$46.35. Library, Parks and Recreation are not included in the non-residential charge which is one of the primary reasons the non-residential rate is not increasing by the same magnitude as the residential rate. It is important to note that the Township does not presently levy a charge on industrial uses.

TABLE 10

**TOWNSHIP OF BROCK  
COMPARISON OF CURRENT AND CALCULATED  
RESIDENTIAL DEVELOPMENT CHARGES**

SERVICE	Current Residential Charge SDU	Calculated Residential Charge SDU	Difference in Charge	
Library, Parks & Recreation	\$1,218	\$7,475	\$6,257	514%
Fire Services	\$1,483	\$1,488	\$5	0%
Public Works: Buildings & Fleet	\$1,182	\$1,279	\$97	8%
General Government	\$638	\$533	(\$105)	-16%
General Services Charge Per Unit	\$4,521	\$10,775	\$6,254	138%
Roads & Related	\$6,236	\$7,263	\$1,027	16%
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$10,757</b>	<b>\$18,038</b>	<b>\$7,281</b>	<b>68%</b>

TABLE 11

**TOWNSHIP OF BROCK  
COMPARISON OF CURRENT AND CALCULATED  
NON-RESIDENTIAL DEVELOPMENT CHARGES**

SERVICE	Current Non-Residential Charge Sq. m	Calculated Non-Residential Charge Sq. m	Difference in Charge	
Library, Parks & Recreation	\$0.00	\$0.00	\$0.00	n/a
Fire Services	\$7.45	\$4.93	(\$2.52)	-34%
Public Works: Buildings & Fleet	\$6.53	\$4.29	(\$2.24)	-34%
General Government	\$3.19	\$1.77	(\$1.42)	-45%
General Services Charge Per sq. m	\$17.17	\$10.99	(\$6.18)	-36%
Roads & Related	\$29.18	\$38.08	\$8.90	31%
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$46.35</b>	<b>\$49.07</b>	<b>\$2.72</b>	<b>6%</b>

## **VIII LONG-TERM CAPITAL AND OPERATING COSTS**

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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 *DCA*.

### **A. NET OPERATING COSTS FOR THE TOWNSHIP'S SERVICES ESTIMATED TO INCREASE OVER THE FORECAST PERIOD**

Table 12 summarizes the estimated increase in net operating costs that the Township will experience for additions associated with the planned capital program. These estimates are based on standard measurements used in similar sized municipalities. (additional details are included in Appendix E).

As shown in Table 12, by 2018, the Township's net operating costs for general services are estimated to increase by \$987,500. Increases in net operating costs will be experienced as new facilities are emplaced. Operating and maintenance costs will also increase as additions to the Township's road network are undertaken. Roads and related operating costs are expected to increase by \$137,200 by 2018.

### **B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGE SOURCES TOTALS \$2.98 MILLION FOR GENERAL SERVICES**

Table 12 also summarizes the components of the Growth-Related Capital Forecast that will require funding from non-development charge sources as discussed above in Section VI. In total \$2.98 million will need to be financed from non-development charge sources over the next 10 years. In addition, \$7.96 million in interim financing may be required for projects related to growth in the post-2018 period. Because the by-laws must be revisited at least every five years, it is difficult to determine the quantum of interim financing that may be required. Additionally, \$3.48 million is required from non-development charges sources (to 2031) for the replacement shares associated with the Roads and Related capital program. Appendix E provides a breakdown of the non-development charge financing requirements by service.

**TABLE 12**  
**TOWNSHIP OF BROCK**  
**SUMMARY OF LONG TERM CAPITAL AND**  
**OPERATING COST IMPACTS FOR GENERAL SERVICES**  
(in thousands of constant dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
<b>NET OPERATING IMPACTS (1)</b>											
Library, Parks & Recreation	\$11.8	\$281.5	\$293.3	\$320.5	\$343.5	\$355.3	\$385.5	\$647.3	\$659.0	\$670.8	
Fire Services	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	
Public Works: Buildings & Fleet	\$0.0	\$10.1	\$17.9	\$87.9	\$171.4	\$179.2	\$260.5	\$260.5	\$260.5	\$264.3	
<b>NET OPERATING IMPACTS</b>	<b>\$64.3</b>	<b>\$344.1</b>	<b>\$363.6</b>	<b>\$460.9</b>	<b>\$567.4</b>	<b>\$587.0</b>	<b>\$698.5</b>	<b>\$960.3</b>	<b>\$972.0</b>	<b>\$987.5</b>	<b>n/a</b>
<b>LONG-TERM CAPITAL IMPACTS (1)</b>											
Total Net Cost	\$1,863.9	\$442.1	\$294.1	\$1,953.1	\$1,003.2	\$282.5	\$2,959.7	\$6,393.5	\$193.5	\$248.5	\$15,634.0
Net Cost From Development Charges	\$594.1	\$102.2	\$51.3	\$103.5	\$618.8	\$96.6	\$1,996.2	\$422.2	\$46.6	\$73.6	\$4,104.9
Prior Growth Share from DC Reserve Balances (2)	\$112.9	\$163.6	\$66.5	\$134.1	\$64.8	\$0.0	\$49.2	\$0.0	\$0.0	\$0.0	\$591.2
Portion for Post 2018 Growth (3)	\$17.0	\$17.0	\$17.0	\$1,517.0	\$17.0	\$17.0	\$532.6	\$5,763.6	\$17.0	\$42.0	\$7,957.4
<b>Funding From Non-DC Sources</b>											
- Discount Portion	\$16.9	\$6.5	\$4.7	\$5.5	\$67.7	\$9.7	\$220.7	\$45.8	\$4.5	\$7.5	\$389.2
- Replacement	\$1,122.8	\$152.8	\$154.6	\$193.1	\$234.9	\$159.2	\$161.0	\$161.9	\$125.4	\$125.4	\$2,591.3
<b>FUNDING FROM NON-DC SOURCES</b>	<b>\$1,139.8</b>	<b>\$159.3</b>	<b>\$159.3</b>	<b>\$198.5</b>	<b>\$302.6</b>	<b>\$168.9</b>	<b>\$381.7</b>	<b>\$207.7</b>	<b>\$129.9</b>	<b>\$132.9</b>	<b>\$2,980.5</b>
<b>TOTAL NET OPERATING &amp; CAPITAL IMPACTS</b>	<b>\$1,204.0</b>	<b>\$503.3</b>	<b>\$522.9</b>	<b>\$659.4</b>	<b>\$870.0</b>	<b>\$755.8</b>	<b>\$1,080.3</b>	<b>\$1,168.0</b>	<b>\$1,101.9</b>	<b>\$1,120.4</b>	<b>n/a</b>

## Notes:

(1) See Appendix E

(2) Existing development charge reserve fund balances collected from growth prior to 2009 are applied to fund initial projects in growth-related capital forecast

(3) Post 2018 growth-related net capital costs may be eligible for development charge funding in future DC by-laws

## **IX DEVELOPMENT CHARGES ADMINISTRATION**

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### **A. DEVELOPMENT CHARGE ADMINISTRATION**

Many of the administrative requirements of the *DCA* will be similar to those presently followed by the Township in terms of collection practices. In this regard:

- It is recommended that the present practices regarding collection of development charges and by-law administration continue to the extent possible;
- As required under the *DCA*, the Township should codify any rules regarding the application of the by-laws and any exemptions within the development charges by-laws proposed for adoption;
- It is recommended that the Township develop reporting 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 or front ending agreements. The municipality is not obligated to enter into services-in-lieu agreements;
- It is recommended that limited exemptions, other than those required in the *DCA* be formally adopted in the by-laws;
- It is recommended that Council adopt the growth-related capital forecast included in this background study, subject to annual review through the Township's normal capital budget process;
- It is recommended the Township combine Library and Parks and Recreation services for the purposes of development charges, as done in this study, since a development charge for Library Services would otherwise not be permitted due to excess capacity; and
- Council may also wish to consider the continued exemption of industrial uses.

## **B. LOCAL SERVICE DEFINITIONS**

The following provides the definition of “local service”, under the *DCA*, for a number of services provided by the Township of Brock. The purpose in establishing these definitions is to determine the eligible capital costs for inclusion in the development charge calculation for the Township of Brock. The functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is considered to be a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the land owner or developer. The issue of “local services” is being specifically considered for the services of:

- Roads
- Stormwater Management Facilities
- Parkland Development
- Street Tree Planting

### **1. Roads**

Local Roads:

- All roads and share of roads within a development plan (i.e. plan of subdivision, lot created by consent, site plan etc.) and considered to solely provide service to the subject lands are to be treated as a local service under the *DCA* and the associated costs are not included in the development charges calculation.

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 charge calculation.
- Note, oversizing of roads usually relates to collector roads, however it is possible that a share of an arterial road may be local and would be funded as a direct developer responsibility. It is noted that growth-related arterial roads requirements are generally fully funded from development charges.

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

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

- Stormwater management facilities servicing local drainage areas;
- Storm sewer oversizing associated with local drainage areas; and
- Storm sewer works on existing roads or roads within the development plan.

## **3. Parkland Development**

For the purpose of parkland development, local service includes the requirement for the owner to undertake preparation of the park plan to prepare design and grading plans for the park, prior to development. In addition, the owner is required to provide stripping and stockpiling, levelling, topsoiling, seeding and stormwater servicing (consistent with the development plan), and provide services to the lot line. These requirements are part of the conditions of s.51 and 53 of the *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.

With respect to other parkland development costs, the municipal policy is to include all other components of parkland development in the development charges calculation, including parking, park furniture, signage, landscaping and walkways/trails, in addition to the necessary fields, diamonds, playground equipment, lighting, irrigation and field houses.

## **4. Street Tree Planting**

Street tree planting and other landscaping work are considered a local area service and a direct responsibility of the developer.

**APPENDIX A**

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***GROWTH FORECAST***

**APPENDIX A**  
**RESIDENTIAL AND NON-RESIDENTIAL**  
**GROWTH FORECAST**

This appendix provides the details of the growth forecast used in the preparation of the 2009 Development Charges Background Study for the Township of Brock. The forecast described herein is consistent with governing legislation and represents a best estimate of the amount and type of development that is likely to occur in the Township from 2009 to 2031.

Durham Region, like all municipalities in the Greater Toronto Area (GTA), has undertaken significant planning work over the last few years in order to conform to the *Growth Plan for the Greater Golden Horseshoe*. The population and employment forecasts contained herein are largely based on the targets prepared in the Growing Durham Study undertaken as part of the Region's *Growth Plan* conformity work.

This growth forecast appendix begins with a brief discussion of recent development activity. This is followed by more detailed discussion of the residential growth forecast. The final section describes the employment and non-residential space forecast.

**A. RECENT DEVELOPMENT ACTIVITY**

Growth in Brock has largely been driven by the Township's attractiveness as a mixed urban-rural municipality. The Township contains several villages that offer urban amenities, namely Cannington, Beaverton, and Sunderland. However, the Township also offers prime agricultural opportunities, and recreation opportunities along the east shore of Lake Simcoe. Water and sewer servicing considerations have affected the historic level of growth in the Township and this is likely to continue in the future.

**1. Historic Growth Methodology**

Historic growth numbers presented in this report are based on Statistics Canada Census data. The forthcoming population numbers do not include Census under coverage which typically understates actual population by 4 per cent.

The ten year historic period used in the Development Charges Study is from 1999–2008. Since 2006 was the date of the last Census, values for 2007 and 2008 are estimated.

Total employment numbers used in the historic tables are based on Statistics Canada Place of Work data. Place of Work employment numbers are premised on where someone works rather than their place of residence.

## **2. Growth in Population, Housing Units and Employment (Tables 1-2)**

Brock's population and housing growth has occurred at a modest pace over the last ten years.

Between 1999 and 2008 the Township added 216 housing units and the Township's population increased by about 150 people. The population growth rate has been slightly less as the result of the decline in the average number of persons residing in dwelling units. The Township's Census population was 11,980 in 2006.

The Township of Brock has experienced relatively strong employment growth over the past decade. Between 1999 and 2008, employment in Brock increased by 240 employees or 7 per cent. Brock's total employment in 2006 was approximately 3,685. Since employment growth has exceeded population growth, Brock's activity rate (jobs to population ratio) has increased to about 32 per cent.

## **3. Average Brock Household has 2.61 Persons Per Unit (Table 3)**

Occupancy levels for single and semi detached, row and other multiple and apartment units in Brock are provided in Table 2. The overall average occupancy level in Brock is 2.61 persons per unit (PPU) which is slightly less than the Ontario average of 2.67.

As of 2006, single and semi detached units represented about 80 per cent of the Township's total housing stock, rows and other multiples 5 per cent and apartments 15 per cent.

For housing units built between 1996 and 2006 the occupancy level for singles/semis is higher at 3.00. The persons per unit values used in the development charges study have been slightly adjusted from the most recent ten year average due to small sample sizes. The PPU in new units value used in the development charges calculation for single and semi detached units is 2.90. The value for rows and other multiples has been estimated at 2.30 and the PPU value used for apartments is 1.70.

## **B. FORECAST REFLECTS RECENT OFFICIAL PLAN TARGETS**

The residential and non-residential growth forecasts used in this development charges study is largely based on the Growing Durham Study which was prepared as part of the Region's *Growth Plan* conformity work.

## **1. Forecast of Households and Population (Table 4)**

Table 3 provides details of the Township-wide household and forecast from 2009 to 2031. Households form the basis of the development charges calculation since the Growing Durham Study household forecast is more uniform than the population forecast for Brock.

In the initial 10-year development charges forecast period from 2009–2018, which applies to general services, the Township’s households are forecast to rise from approximately 4,470 in 2008 to 4,860 in 2018. The development charges forecast for roads and related services is based on growth to the horizon year of 2031. Approximately 6,180 households are forecast at 2031. This represents respective increases of 9 per cent and 38 per cent when measured against 2008 households.

## **2. Non-Residential Space Forecast Based on the Forecast of Employment (Table 5)**

Non-residential development charges are calculated on a per square metre basis. Therefore, as required by the *DCA*, a forecast for non-residential building space is provided. Consistent with the residential forecast, the non-residential building space forecast covers a period from 2009 to 2031. The 10-year forecast period (2009–2018) is used for general services and the forecast to 2031 is used for roads and related services. The non-residential building space used in this study is based on the employment forecast.

In the initial 10-year development charges forecast period from 2009–2018 the Township’s employment is forecast to rise from approximately 3,790 in 2008 to 4,210 in 2018. The Township’s employment at 2031 is estimated to be 5,000. This represents respective increases of 11 per cent and 32 per cent when measured against 2008 employment.

Over the 10 year planning period 2009–2018, about 27,450 square metres of building space is forecast to be added. Over the period to 2031, 78,730 square metres will be added. A ratio of 65 square metres per employee was used to derive the floor space forecast.

**TABLE A.1**  
**Historic Population, Households & Employment**

Mid-Year	Population	Growth	Households	Growth	HH Size	Employment	Growth	Activity Rate
<b>1996</b>	<b>11,705</b>		<b>4,160</b>		<b>2.81</b>	<b>3,505</b>		<b>29.9%</b>
1997	11,785	80	4,207	47	2.80	3,526	21	29.9%
1998	11,865	80	4,254	47	2.79	3,547	21	29.9%
1999	11,946	81	4,302	48	2.78	3,569	21	29.9%
2000	12,028	82	4,351	49	2.76	3,590	22	29.9%
<b>2001</b>	<b>12,110</b>	<b>82</b>	<b>4,400</b>	<b>49</b>	<b>2.75</b>	<b>3,612</b>	<b>22</b>	<b>29.8%</b>
2002	12,084	-26	4,404	4	2.74	3,627	14	30.0%
2003	12,057	-26	4,409	4	2.73	3,641	15	30.2%
2004	12,031	-26	4,413	4	2.73	3,656	15	30.4%
2005	12,005	-26	4,418	4	2.72	3,670	15	30.6%
<b>2006</b>	<b>11,979</b>	<b>-26</b>	<b>4,422</b>	<b>4</b>	<b>2.71</b>	<b>3,685</b>	<b>15</b>	<b>30.8%</b>
2007	11,997	18	4,446	24	2.70	3,737	52	31.1%
2008	12,015	18	4,471	24	2.69	3,789	52	31.5%
Growth 99-08		150	216		241			

Source: Statistics Canada, Census of Canada, Growing Durham Plan

**TABLE A.2**  
**Historic Housing Activity - Units**

Mid-Year	Housing Completions - Units			
	Singles/Semis	Rows	Apts.	Total
1994	44	0	0	44
1995	38	0	0	38
1996	5	11	48	64
1997	14	12	0	26
1998	15	0	0	15
1999	28	0	0	28
2000	17	0	0	17
2001	25	0	0	25
2002	20	2	0	22
2003	16	0	0	16
2004	18	0	0	18
2005	18	0	0	18
2006	15	0	0	15
2007	18	0	0	18
2008	9	0	0	9
<b>Total</b>	<b>300</b>	<b>25</b>	<b>48</b>	<b>373</b>
<i>Average '99-'08</i>	<i>18</i>	<i>0</i>	<i>0</i>	<i>19</i>

Source: CMHC Housing Market Data

**Historic Housing Activity - Shares By Unit Type**

Mid-Year	Housing Completions - Units			
	Singles/Semis	Rows	Apts.	Total
1994	100%	0%	0%	100%
1995	100%	0%	0%	100%
1996	8%	17%	75%	100%
1997	54%	46%	0%	100%
1998	100%	0%	0%	100%
1999	100%	0%	0%	100%
2000	100%	0%	0%	100%
2001	100%	0%	0%	100%
2002	91%	9%	0%	100%
2003	100%	0%	0%	100%
2004	100%	0%	0%	100%
2005	100%	0%	0%	100%
2006	100%	0%	0%	100%
2007	100%	0%	0%	100%
2008	100%	0%	0%	100%
<b>Total</b>	<b>80%</b>	<b>7%</b>	<b>13%</b>	<b>100%</b>

**TABLE A.3**  
**Historic Households by Period of Construction Showing Household Size**

	Period of Construction									Pre 1996	1996-2006	Total
	Pre 1946	1946-1960	1961-1970	1971-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2006			
<b>Singles/Semis</b>												
Household Population	3,625	1,115	1,110	1,700	695	1,145	435	425	475	9,825	900	10,725
Households	1,305	440	405	645	220	365	160	170	130	3,540	300	3,840
Household Size	2.78	2.53	2.74	2.64	3.16	3.14	2.72	2.50	3.65	2.78	3.00	2.79
<b>Rows</b>												
Household Population	70	0	0	0	40	80	0	0	0	190	0	190
Households	45	0	0	15	20	50	0	20	0	130	20	150
Household Size	1.56	0.00	0.00	0.00	2.00	1.60	0.00	0.00	0.00	1.46	0.00	1.27
<b>Apartments</b>												
Household Population	170	95	55	145	55	0	0	55	0	520	55	575
Households	110	45	30	95	40	0	40	50	10	360	60	420
Household Size	1.55	2.11	1.83	1.53	1.38	0.00	0.00	1.10	0.00	1.44	0.92	1.37
<b>All Units</b>												
Household Population	3,865	1,210	1,165	1,845	790	1,225	435	480	475	10,535	955	11,490
Households	1,460	485	435	755	280	415	200	240	140	4,030	380	4,410
Household Size	2.65	2.49	2.68	2.44	2.82	2.95	2.18	2.00	3.39	2.61	2.51	2.61

Source: Statistics Canada, 2006 Census Special Run

**TABLE A.4**  
**Population and Household Forecast Summary**

Mid-Year	Households	Population	PPH
2006	4,422	11,979	2.71
2007	4,446	11,997	2.70
2008	4,471	12,015	2.69
2009	4,495	12,034	2.68
2010	4,520	12,052	2.67
<b>2011</b>	<b>4,545</b>	<b>12,070</b>	<b>2.66</b>
2012	4,584	12,074	2.63
2013	4,624	12,078	2.61
2014	4,664	12,082	2.59
2015	4,704	12,086	2.57
<b>2016</b>	<b>4,745</b>	<b>12,090</b>	<b>2.55</b>
2017	4,804	12,098	2.52
2018	4,863	12,106	2.49
2019	4,923	12,114	2.46
2020	4,984	12,122	2.43
<b>2021</b>	<b>5,045</b>	<b>12,130</b>	<b>2.40</b>
2022	5,133	12,271	2.39
2023	5,222	12,413	2.38
2024	5,313	12,557	2.36
2025	5,406	12,703	2.35
<b>2026</b>	<b>5,500</b>	<b>12,850</b>	<b>2.34</b>
2027	5,629	13,075	2.32
2028	5,761	13,304	2.31
2029	5,896	13,537	2.30
2030	6,034	13,774	2.28
<b>2031</b>	<b>6,175</b>	<b>14,015</b>	<b>2.27</b>

Source: Growign Durham Plan

**Forecast Population & Household Growth Summary**

Mid-Year	HH Growth	Total HHS	Pop'n Growth	Total Pop'n	Pop'n in lew HH Growth
2007	24	4,446	18	11,997	
2008	24	4,471	18	12,015	
2009	25	4,495	18	12,034	69
2010	25	4,520	18	12,052	70
<b>2011</b>	<b>25</b>	<b>4,545</b>	<b>18</b>	<b>12,070</b>	<b>70</b>
2012	39	4,584	4	12,074	110
2013	40	4,624	4	12,078	111
2014	40	4,664	4	12,082	112
2015	40	4,704	4	12,086	113
<b>2016</b>	<b>41</b>	<b>4,745</b>	<b>4</b>	<b>12,090</b>	<b>114</b>
2017	59	4,804	8	12,098	164
2018	59	4,863	8	12,106	167
2019	60	4,923	8	12,114	169
2020	61	4,984	8	12,122	171
<b>2021</b>	<b>61</b>	<b>5,045</b>	<b>8</b>	<b>12,130</b>	<b>173</b>
2022	88	5,133	141	12,271	247
2023	89	5,222	142	12,413	251
2024	91	5,313	144	12,557	256
2025	93	5,406	146	12,703	260
<b>2026</b>	<b>94</b>	<b>5,500</b>	<b>147</b>	<b>12,850</b>	<b>265</b>
2027	129	5,629	225	13,075	362
2028	132	5,761	229	13,304	370
2029	135	5,896	233	13,537	379
2030	138	6,034	237	13,774	388
<b>2031</b>	<b>141</b>	<b>6,175</b>	<b>241</b>	<b>14,015</b>	<b>397</b>
2009-2018	392		91		1,102
2018-2031	1,312		1,909		3,687
2009-2031	1,704		2,000		4,789

**TABLE A.5**  
**Forecast Employment and Non-Residential GFA Growth**

Mid-Year	Total Employment	Activity Rate	Employment Growth	Non-Res GFA Growth (sq. m)
<b>2006</b>	<b>3,685</b>	<b>30.8%</b>		
2007	<b>3,737</b>	31.1%	<b>52</b>	3,350
2008	<b>3,789</b>	31.5%	<b>52</b>	3,397
2009	3,842	31.9%	53	3,444
2010	3,896	32.3%	54	3,493
<b>2011</b>	<b>3,950</b>	<b>32.7%</b>	<b>54</b>	<b>3,541</b>
2012	3,987	33.0%	37	2,424
2013	4,025	33.3%	38	2,447
2014	4,063	33.6%	38	2,470
2015	4,101	33.9%	38	2,493
<b>2016</b>	<b>4,140</b>	<b>34.2%</b>	<b>39</b>	<b>2,517</b>
2017	4,175	34.5%	35	2,300
2018	4,211	34.8%	36	2,320
2019	4,247	35.1%	36	2,340
2020	4,283	35.3%	36	2,360
<b>2021</b>	<b>4,320</b>	<b>35.6%</b>	<b>37</b>	<b>2,380</b>
2022	4,384	35.7%	64	4,165
2023	4,449	35.8%	65	4,226
2024	4,515	36.0%	66	4,289
2025	4,582	36.1%	67	4,353
<b>2026</b>	<b>4,650</b>	<b>36.2%</b>	<b>68</b>	<b>4,417</b>
2027	4,718	36.1%	68	4,419
2028	4,787	36.0%	69	4,483
2029	4,857	35.9%	70	4,549
2030	4,928	35.8%	71	4,616
<b>2031</b>	<b>5,000</b>	<b>35.7%</b>	<b>72</b>	<b>4,683</b>
2009-2018			422	27,449
2018-2031			789	51,280
2009-2031			1,211	78,728

Source: Growing Durham Plan, Hemson Consulting

## **APPENDIX B**

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### ***INTRODUCTION AND OVERVIEW***

## **GENERAL SERVICES TECHNICAL APPENDIX INTRODUCTION AND OVERVIEW**

The following appendix provides the detailed analysis undertaken to establish the development charge rates for each of the general services in the Township of Brock. Four general services have been analysed as part of the development charges study:

Appendix B.1	Library, Parks & Recreation
Appendix B.2	Fire Services
Appendix B.3	Public Works: Buildings & Fleet
Appendix B.4	General Government

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.

### **TABLE 1      HISTORIC SERVICE LEVELS**

Table 1 presents the data used to determine the 10-year historic 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 municipality 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 historic inventory period has been defined as 1999 to 2008.

*O. Reg. 82/98* requires that when defining and determining historic service levels both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the growth-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 municipality in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Township staff. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The final page of Table 1 shows the calculation of the maximum allowable development charge revenue that can be raised for each service. The “maximum allowable” development charge revenue is calculated by taking the 10-year historic service level (\$/household) multiplied by the forecast increase in population in new households over the planning period. The resulting figure is the value of capital infrastructure that would have to be acquired in order to maintain the average 10-year historic service level.

There is also a requirement in the *DCA* to consider “excess capacity” within the Township’s existing infrastructure that may be available to partially meet 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 maximum allowable funding envelope are required.

**TABLE 2      2009 – 2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET  
AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT  
CHARGES**

In order to impose a development charge it is not sufficient to merely base the charge on historic service levels. The *DCA* requires that Council express its intent to provide future capital facilities to support future growth. Based on the growth forecasts presented in Appendix A, Hemson Consulting in collaboration with Township staff has developed a growth-related capital forecast which sets out the projects required to service anticipated growth for the 10-year period from 2009 to 2018.

To determine the growth-related share of the program, the project costs are reduced by any “prior growth” and “replacement” shares. A prior growth share relates to a

portion of a facility being constructed to alleviate an existing deficiency and to service growth that has already occurred. The prior growth column for each service typically equals the existing uncommitted reserve fund balance for that particular service.

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

The capital program less any prior growth and replacement shares yields the net growth-related program. Although deemed growth-related, not all of the net growth-related capital program may be recoverable from development charges in the period from 2009 to 2018. For some of the services, a portion of the capital program may service growth occurring after 2018. This portion of the capital program is deemed “pre-built” service capacity and is to be considered as committed excess capacity to be recovered under future development charges. The capital costs associated with pre-built service capacity are also removed from the development charge calculation.

The remaining portion of the net capital program represents the growth-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 on the final page of Table 1. Finally, when calculating development charges, the growth-related net capital cost must be reduced by 10 per cent for all services except protection services and engineered services (*DCA s.5.(1)8.*). The 10 per cent discount is therefore applied to all general services considered in this appendix with the exception of Fire. As with replacement shares, the 10 per cent mandatory reduction must be funded from non-development charge sources.

The result is the discounted growth-related net capital cost that is eligible for recovery against growth over the period from 2009 to 2018.

### **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 growth-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Library, Parks & Recreation the growth-related costs have been apportioned as 80 per cent residential and 20 per cent non-residential. This apportionment is based on the anticipated shares of population in new units and employment growth to the horizon year of 2031.

The growth-related costs associated with the Library, Parks & Recreation and have been allocated 100 per cent to the residential sector because the need for these services is generally driven by residential development.

The residential discounted growth-related net capital costs are then divided by the forecast population growth in new units. This gives the unadjusted residential development charge per household. The non-residential growth-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, therefore, are accounted for in the calculation as allowed under the *DCA*. Based on the growth forecast, the analysis calculates the development charge rate that is required to finance the net growth-related capital spending plan including provisions for any borrowing costs or interest earnings on the reserve funds. The opening balance for all services is set at zero as the existing reserve fund balances are applied to the earliest occurring projects in the capital program for each service as a prior growth share. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

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

cent is used for borrowing on the funds and an interest rate of 3.5 per cent is applied to positive balances.

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

**APPENDIX B.1**

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***LIBRARY, PARKS AND RECREATION***

## APPENDIX B.1

### LIBRARY, PARKS AND RECREATION

Brock Township Public Libraries is responsible for the delivery of library services in the Township and the Parks & Recreation Division of the Public Works Department is responsible for parks and recreation services. Significant facility expansions are planned over the next ten years.

#### TABLE 1 HISTORIC SERVICE LEVELS

The floor area of the three libraries in Brock totals 9,000 square feet with a replacement value of \$1.65 million (Page 1). The land associated with this space totals 0.58 hectares with a value of \$95,700. Materials are valued at \$1.45 million and furniture and equipment total \$215,100. Computer-related equipment is excluded in this total as required by the *DCA*.

The Township operates eleven indoor recreation buildings that have a total area of approximately 121,100 square feet and a replacement value of \$22.4 million (Page 2). This space includes recreation centres, arenas, program rooms and other space. The land associated with the Township's indoor recreation facilities totals 3.54 hectares with a value of \$502,100. The total replacement value of all indoor recreation equipment in 2008 is estimated at \$684,700.

The Township of Brock's inventory of parkland is separated into two categories: community parks and neighbourhood parks. The cost of developing Brock's total inventory of 40.11 ha of parkland is \$3.91 million (Page 3). The cost of parkland acquisition cannot be included in the development charges inventory as per the *DCA*.

The Township also has an inventory of sports fields, playground equipment and similar facilities. The total value of these facilities is \$2.55 million (Page 4-5). The inventory of small outdoor buildings and equipment is valued at \$842,000 (Page 6).

The combined value of capital assets for Library, Parks & Recreation is \$34.3 million (Page 7). The 10-year historic average service level is \$7,672.85 per household, and this, multiplied by the 10-year forecast growth in households (392), results in a 10-year maximum allowable funding envelope of \$3.008 million. Some excess capacity

exists (\$5,300) which reduces the maximum allowable funding envelope to \$3.003 million.

**TABLE 2      2009 – 2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES**

The 2009–2018 growth-related capital program for the Library component of Library, Parks & Recreation contains one major expansion. The Cannington Library expansion is planned for 2015 at a cost of \$2.0 million.

The indoor recreation component of the capital plan contains debenture payments for the existing Cannington Centre and a new central twin pad arena with Zambonis. The gross cost of the indoor recreation component of the capital program is \$6.23 million.

The parks component of the capital plan includes items such as parks, trails, playground equipment, and parking lot expansions totalling \$1.71 million in gross costs.

The Library, Parks & Recreation gross capital program totals \$9.93 million. The harbour infrastructure expenditures and parking lot expansions have benefit to existing shares totalling \$807,000. There are also \$378,000 in existing reserve funds available to fund the capital program (prior growth share). Following these deductions, approximately \$8.75 million in growth-related costs remain. This amount is well in excess of the maximum allowable funding envelope of \$3.0 million. The post-2018 share of \$5.75 million is deemed to be growth-related and recoverable in subsequent development charges studies.

After applying a 10 per cent reduction of \$300,250, as prescribed by legislation, the discounted growth-related net capital cost totals \$2.70 million, 100 per cent of which is allocated to residential development. This yields an unadjusted development charge rate of \$6,893.49 per household.

**TABLE 3      CASH FLOW ANALYSIS**

After cash flow consideration, the residential charge increases to \$7,243 per household. This increase reflects the timing of household growth and expenditures.

10-year Hist. Service Level per household	<b>LIBRARY, PARKS &amp; RECREATION</b>				<b>Adjusted</b>	
	2009-2018		Unadjusted		<b>Development Charge</b>	
	Growth-Related Total	Capital Program Net DC Recoverable	Development Charge \$/hh	Development Charge \$/sq.m	<b>\$/hh</b>	<b>\$/sq.m</b>
\$7,672.85	\$9,934,471	\$2,702,263	\$6,893.49	\$0.00	<b>\$7,243.00</b>	<b>\$0.00</b>

APPENDIX B.1  
TABLE 1 - PAGE 1

TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
LIBRARY, PARKS & RECREATION  
LIBRARY BOARD

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
<b>BUILDINGS (sq.ft.)</b>											
Beaverton Library	1,474	1,474	3,796	3,796	3,796	3,796	3,796	3,796	3,796	3,796	\$185
Cannington Library	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	\$185
Sunderland Library	1,040	1,040	3,540	3,540	3,540	3,540	3,540	3,540	3,540	3,540	\$185
<b>Total (sq.ft.)</b>	<b>4,114</b>	<b>4,114</b>	<b>8,936</b>	<b>8,936</b>	<b>8,936</b>	<b>8,936</b>	<b>8,936</b>	<b>8,936</b>	<b>8,936</b>	<b>8,936</b>	
<b>Total (\$000)</b>	<b>\$761.1</b>	<b>\$761.1</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	<b>\$1,653.2</b>	
<b>LAND (hectares)</b>											
Beaverton Library	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	UNIT COST (\$/ha)
Cannington Library	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$165,000
Sunderland Library	0.01	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$165,000
<b>Total (ha)</b>	<b>0.56</b>	<b>0.56</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	
<b>Total (\$000)</b>	<b>\$92.4</b>	<b>\$92.4</b>	<b>\$95.7</b>	<b>\$95.7</b>	<b>\$95.7</b>	<b>\$95.7</b>	<b>\$95.7</b>	<b>\$95.7</b>	<b>\$95.7</b>	<b>\$95.7</b>	
<b>MATERIALS (#)</b>											
- Books	44,073	51,816	48,398	49,271	51,004	49,293	54,630	57,004	63,469	57,265	UNIT COST (\$/material)
- Periodicals	24	24	24	37	37	37	39	69	70	74	\$7.00
- CD, Video Tape	55	60	63	63	63	63	63	63	63	63	\$33.56
<b>Total (#)</b>	<b>44,152</b>	<b>51,900</b>	<b>48,485</b>	<b>49,371</b>	<b>51,104</b>	<b>49,393</b>	<b>54,733</b>	<b>57,137</b>	<b>63,603</b>	<b>57,403</b>	
<b>Total (\$000)</b>	<b>\$1,119.3</b>	<b>\$1,315.7</b>	<b>\$1,229.2</b>	<b>\$1,251.4</b>	<b>\$1,295.3</b>	<b>\$1,252.0</b>	<b>\$1,387.3</b>	<b>\$1,447.6</b>	<b>\$1,611.5</b>	<b>\$1,454.3</b>	
<b>FURNITURE AND EQUIPMENT (excluding computers) (\$)</b>											
Beaverton Library	\$32,428	\$32,428	\$83,512	\$83,512	\$83,512	\$85,032	\$86,579	\$88,155	\$89,759	\$91,393	
Cannington Library	\$35,200	\$35,200	\$35,200	\$35,200	\$35,200	\$35,840	\$36,492	\$37,157	\$37,833	\$38,521	
Sunderland Library	\$22,880	\$22,880	\$77,880	\$77,880	\$77,880	\$79,297	\$80,740	\$82,210	\$83,706	\$85,229	
<b>Total (\$000)</b>	<b>\$90.5</b>	<b>\$90.5</b>	<b>\$196.6</b>	<b>\$196.6</b>	<b>\$196.6</b>	<b>\$200.2</b>	<b>\$203.8</b>	<b>\$207.5</b>	<b>\$211.3</b>	<b>\$215.1</b>	
<b>INVENTORY SUMMARY(\$000)</b>											
- Buildings	\$761.1	\$761.1	\$1,653.2	\$1,653.2	\$1,653.2	\$1,653.2	\$1,653.2	\$1,653.2	\$1,653.2	\$1,653.2	
- Land	\$92.4	\$92.4	\$95.7	\$95.7	\$95.7	\$95.7	\$95.7	\$95.7	\$95.7	\$95.7	
- Materials	\$1,119.3	\$1,315.7	\$1,229.2	\$1,251.4	\$1,295.3	\$1,252.0	\$1,387.3	\$1,447.6	\$1,611.5	\$1,454.3	
- Furniture and Equipment	\$90.5	\$90.5	\$196.6	\$196.6	\$196.6	\$200.2	\$203.8	\$207.5	\$211.3	\$215.1	
<b>Total (\$000)</b>	<b>\$2,063.3</b>	<b>\$2,259.7</b>	<b>\$3,174.6</b>	<b>\$3,196.8</b>	<b>\$3,240.8</b>	<b>\$3,201.0</b>	<b>\$3,339.9</b>	<b>\$3,404.0</b>	<b>\$3,571.7</b>	<b>\$3,418.3</b>	

APPENDIX B.1  
TABLE 1 - PAGE 2TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
LIBRARY, PARKS & RECREATION  
INDOOR RECREATION - MAJOR FACILITIES

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
<b>BUILDINGS (sq.ft.)</b>											
Beaverton Arena/Community Centre	25,300	25,300	25,300	25,300	25,300	25,300	25,300	25,300	25,300	25,300	\$185
Beaverton Curling Rink	3,763	3,763	3,763	3,763	3,763	3,763	3,763	3,763	3,763	3,763	\$185
Cannington Arena/Community Centre	23,640	23,640	23,640	23,640	23,640	23,640	23,640	23,640	23,640	23,640	\$185
Cannington Curling Rink	17,220	17,220	17,220	17,220	17,220	17,220	17,220	17,220	17,220	17,220	\$185
Sunderland Arena/Community Centre	25,800	25,800	25,800	25,800	25,800	25,800	25,800	25,800	25,800	25,800	\$185
Manilla Hall	4,260	4,260	4,260	4,260	4,260	4,260	4,260	4,260	4,260	4,260	\$185
Wilfrid Hall	3,950	3,950	3,950	3,950	3,950	3,950	3,950	3,950	3,950	3,950	\$185
Lawn Bowling Facility - Cannington	1,546	1,546	1,546	1,546	1,546	1,546	1,546	1,546	1,546	1,546	\$185
Old Town Hall - Sunderland*	7,510	7,510	7,510	7,510	7,510	7,510	7,510	7,510	7,510	7,510	\$185
Beaverton Town Hall*	1,540	1,540	1,540	1,540	1,540	1,540	1,540	1,540	1,540	1,540	\$185
Cannington Town Hall*	6,530	6,530	6,530	6,530	6,530	6,530	6,530	6,530	6,530	6,530	\$185
<b>Total (sq.ft.)</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	<b>121,059</b>	
<b>Total (\$000)</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	<b>\$22,395.9</b>	

\* Space for non-DC eligible uses has been removed

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/ha)
<b>LAND (hectares)</b>											
Beaverton Arena/Community Centre	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	\$165,000
Beaverton Curling Rink	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$165,000
Cannington Arena/Community Centre	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$165,000
Cannington Curling Rink	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$165,000
Sunderland Arena/Community Centre	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$165,000
Manilla Hall	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	\$125,000
Wilfrid Hall	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$125,000
Lawn Bowling Facility - Cannington	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$165,000
Old Town Hall - Sunderland*	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$165,000
Cannington Town Hall*	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$165,000
Beaverton Town Hall*	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$165,000
<b>Total (ha)</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	<b>3.54</b>	
<b>Total (\$000)</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	<b>\$502.1</b>	

\* Space for non-DC eligible uses has been removed

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>EQUIPMENT (\$)</b>										
Beaverton Arena/Community Centre	\$193,700	\$193,700	\$199,600	\$199,600	\$199,600	\$203,233	\$206,931	\$210,698	\$214,532	\$218,436
Cannington Arena/Community Centre	\$146,800	\$146,800	\$195,900	\$199,200	\$199,600	\$203,233	\$206,931	\$210,698	\$214,532	\$218,436
Sunderland Arena/Community Centre	\$144,600	\$144,600	\$193,700	\$193,700	\$193,700	\$197,225	\$200,814	\$204,469	\$208,191	\$211,980
Manilla Hall	\$16,400	\$16,400	\$16,400	\$16,400	\$16,400	\$16,698	\$17,002	\$17,311	\$17,626	\$17,948
Wilfrid Hall	\$16,400	\$16,400	\$16,400	\$16,400	\$16,400	\$16,698	\$17,002	\$17,311	\$17,626	\$17,948
<b>Total (\$000)</b>	<b>\$517.9</b>	<b>\$517.9</b>	<b>\$622.0</b>	<b>\$625.3</b>	<b>\$625.7</b>	<b>\$637.1</b>	<b>\$648.7</b>	<b>\$660.5</b>	<b>\$672.5</b>	<b>\$684.7</b>

APPENDIX B.1  
TABLE 1 - PAGE 3TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
LIBRARY, PARKS & RECREATION  
PARK DEVELOPMENT & FACILITIES - PARK DEVELOPMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Development Cost (\$/ha)
<b>PARK DEVELOPMENT (hectares)</b>											
<b>Community Parks</b>											
Beaverton Fairgrounds	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	\$97,500
McLeod Park/Clare Hardy Park - Cannington	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	15.60	\$97,500
Sunderland Fairgrounds	6.90	6.90	6.90	6.90	6.90	6.90	6.90	6.90	6.90	6.90	\$97,500
Manilla Park	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	\$97,500
Port Bolster Park	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	\$97,500
Beaverton Harbour Parkland	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	\$97,500
King Street Park - Beaverton	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$97,500
Centennial Park - Thorah	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$97,500
Old Mill Gateway - Centennial/Beaverton	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$97,500
Old Mill Gateway - Luft Property	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$97,500
<b>Total Community Parks (ha)</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	<b>37.08</b>	
<b>Total Development Value (\$000)</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	<b>\$3,615.3</b>	
<b>Neighbourhood Parks</b>											
Maple Lane Parkette	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$97,500
Public Square - Ethel Park	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$97,500
Barkey Subn Parkland - Cannington	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$97,500
Gamebridge Parkette	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$97,500
<b>Total Neighbourhood Parks (ha)</b>	<b>2.75</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	
<b>Total Development Value (\$000)</b>	<b>\$268.1</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	<b>\$295.4</b>	
<b>TOTAL DEVELOPED PARKLAND</b>											
Total Parkland (ha)	39.83	40.11	40.11	40.11	40.11	40.11	40.11	40.11	40.11	40.11	
Total Development Value (\$000)	\$3,883.4	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	

APPENDIX B.1  
TABLE 1 - PAGE 4TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
LIBRARY, PARKS & RECREATION  
PARK DEVELOPMENT & FACILITIES - FACILITIES

Senior Soccer - Unlit	# of Fields										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Brock Park - Port Bolster	2	2	2	2	2	2	2	2	2	2	\$64,615
<b>Subtotal (#)</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	
<b>Subtotal (\$)</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	<b>\$129,230</b>	

Ball Diamond - Unlit	# of Fields										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
King Street - Beaverton	1	1	1	1	1	1	1	1	1	1	\$82,913
Cannington - Clare Hardy	1	1	1	1	1	1	1	1	1	1	\$82,913
Sunderland Fairground #3	1	1	1	1	1	1	1	1	1	1	\$82,913
<b>Subtotal (#)</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	
<b>Subtotal (\$)</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	<b>\$248,739</b>	

Ball Diamond - Lit	# of Fields										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Beaverton Fairground #1	1	1	1	1	1	1	1	1	1	1	\$219,689
Beaverton Fairground #2	1	1	1	1	1	1	1	1	1	1	\$219,689
Cannington - Clare Hardy	1	1	1	1	1	1	1	1	1	1	\$219,689
Manilla Park	1	1	1	1	1	1	1	1	1	1	\$219,689
Sunderland Fairground #1	1	1	1	1	1	1	1	1	1	1	\$219,689
Sunderland Fairground #2	1	1	1	1	1	1	1	1	1	1	\$219,689
<b>Subtotal (#)</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	
<b>Subtotal (\$)</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	<b>\$1,318,134</b>	

Basketball Courts	# of Courts										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Beaverton - Old Mill Gateway	1	1	1	1	1	1	1	1	1	1	\$16,365
Sunderland Fairgrounds			1	1	1	1	1	1	1	1	\$16,365
<b>Subtotal (#)</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	
<b>Subtotal (\$)</b>	<b>\$16,365</b>	<b>\$16,365</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	

APPENDIX B.1  
TABLE 1 - PAGE 5

TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
LIBRARY, PARKS & RECREATION  
PARK DEVELOPMENT & FACILITIES - FACILITIES

Tennis Courts		# of Courts										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)	
King Street Parkette	2	2	2	2	2	2	2	2	2	2	\$80,317	
Sunderland Fairgrounds	2	2	2	2	2	2	2	2	2	2	\$80,317	
Cannington	2	2	2	2	2	2	2	2	2	2	\$80,317	
<b>Subtotal (#)</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>		
<b>Subtotal (\$)</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>	<b>\$481,902</b>		

Lawn Bowling		# of Facilities										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)	
Cannington Lawn Bowl	4	4	4	4	4	4	4	4	4	4	\$5,455	
<b>Subtotal (#)</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>		
<b>Subtotal (\$)</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>	<b>\$21,820</b>		

Playgrounds		# of Playgrounds										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)	
Beaverton Fairgrounds	1	1	1	1	1	1	1	1	1	1	\$27,275	
McLeod/Clare Hardy - Cannington	2	2	2	2	2	2	2	2	2	2	\$27,275	
Sunderland Fairgrounds	1	1	1	1	1	1	1	1	1	1	\$27,275	
Port Bolster Park	1	1	1	1	1	1	1	1	1	1	\$27,275	
Manilla Park	1	1	1	1	1	1	1	1	1	1	\$27,275	
Harbour Park - Beaverton	1	1	1	1	1	1	1	1	1	1	\$27,275	
King Street Park	1	1	1	1	1	1	1	1	1	1	\$27,275	
Old Mill Gateway Park	1	1	1	1	1	1	1	1	1	1	\$27,275	
Centennial Park - Thorah	1	1	1	1	1	1	1	1	1	1	\$27,275	
<b>Subtotal (#)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>		
<b>Subtotal (\$)</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>	<b>\$272,750</b>		

Skateboard Ramp		# of Facilities										UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)	
Beaverton - Old Mill Gateway	1	1	1	1	1	1	1	1	1	1	\$16,365	
Cannington - McLeod Park		1	1	1	1	1	1	1	1	1	\$16,365	
Sunderland Fairgrounds					1	1	1	1	1	1	\$16,365	
<b>Subtotal (#)</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>		
<b>Subtotal (\$)</b>	<b>\$16,365</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$32,730</b>	<b>\$49,095</b>	<b>\$49,095</b>	<b>\$49,095</b>	<b>\$49,095</b>	<b>\$49,095</b>	<b>\$49,095</b>		

<b>Total Park Facilities (\$000)</b>	<b>\$2,505.3</b>	<b>\$2,521.7</b>	<b>\$2,538.0</b>	<b>\$2,538.0</b>	<b>\$2,554.4</b>	<b>\$2,554.4</b>	<b>\$2,554.4</b>	<b>\$2,554.4</b>	<b>\$2,554.4</b>	<b>\$2,554.4</b>	
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APPENDIX B.1  
TABLE 1 - PAGE 6

TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
LIBRARY, PARKS & RECREATION  
PARK DEVELOPMENT & FACILITIES - EQUIPMENT & OTHER OUTDOOR FACILITIES

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Equipment &amp; Other Outdoor Facilities (\$)</b>										
Washroom/Changeroom - Harbour Park Cres.	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100
Picnic Shelter - Cannington	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000
Washroom/Storage - Cannington	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100
Picnic Shelter - Sunderland	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000
Grandstand - Sunderland	\$210,300	\$210,300	\$210,300	\$210,300	\$210,300	\$210,300	\$210,300	\$210,300	\$210,300	\$210,300
Concession Booth - Sunderland	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000
Horse Stable - Sunderland	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100	\$98,100
Washroom/Storage/Booth - Beaverton	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Storage/Electrical Equipment	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600
Bleachers - All Locations	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100	\$42,100
Outdoor Equipment (Mowers, Weedwackers, etc.)	\$119,300	\$119,300	\$119,300	\$163,500	\$163,500	\$163,500	\$163,500	\$163,500	\$163,500	\$163,500
Harbour Infrastructure								\$40,000	\$80,000	\$120,000
<b>Total (\$000)</b>	<b>\$678.6</b>	<b>\$678.6</b>	<b>\$678.6</b>	<b>\$722.8</b>	<b>\$722.8</b>	<b>\$722.8</b>	<b>\$722.8</b>	<b>\$762.8</b>	<b>\$802.8</b>	<b>\$842.8</b>

**APPENDIX B.1  
TABLE 1 - PAGE 7**

**TOWNSHIP OF BROCK  
CALCULATION OF SERVICE LEVELS  
LIBRARY AND PARKS AND RECREATION**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Historic Households	4,302	4,351	4,400	4,404	4,409	4,413	4,418	4,422	4,446	4,471

**INVENTORY SUMMARY (\$000)**

- Library	\$2,063.3	\$2,259.7	\$3,174.6	\$3,196.8	\$3,240.8	\$3,201.0	\$3,339.9	\$3,404.0	\$3,571.7	\$3,418.3
- Indoor Recreation	\$23,415.9	\$23,415.9	\$23,520.0	\$23,523.3	\$23,523.7	\$23,535.1	\$23,546.7	\$23,558.5	\$23,570.5	\$23,582.8
- Park Development	\$3,883.4	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7	\$3,910.7
- Park Facilities	\$2,505.3	\$2,521.7	\$2,538.0	\$2,538.0	\$2,554.4	\$2,554.4	\$2,554.4	\$2,554.4	\$2,554.4	\$2,554.4
- Special Facilities	\$678.6	\$678.6	\$678.6	\$722.8	\$722.8	\$722.8	\$722.8	\$762.8	\$802.8	\$842.8
<b>Total (\$000)</b>	<b>\$32,546.5</b>	<b>\$32,786.6</b>	<b>\$33,822.0</b>	<b>\$33,891.7</b>	<b>\$33,952.4</b>	<b>\$33,924.0</b>	<b>\$34,074.5</b>	<b>\$34,190.5</b>	<b>\$34,410.1</b>	<b>\$34,309.0</b>

Average  
Service  
Level

**SERVICE LEVEL (\$/household)**

- Library	\$479.56	\$519.37	\$721.51	\$725.83	\$735.07	\$725.32	\$756.05	\$769.79	\$803.29	\$764.58	\$700.04
- Indoor Recreation	\$5,442.55	\$5,381.83	\$5,345.46	\$5,340.88	\$5,335.64	\$5,332.90	\$5,330.21	\$5,327.57	\$5,301.12	\$5,274.85	\$5,341.30
- Park Development	\$902.62	\$898.83	\$888.80	\$887.91	\$887.03	\$886.15	\$885.26	\$884.38	\$879.54	\$874.73	\$887.52
- Park Facilities	\$582.31	\$579.57	\$576.83	\$576.25	\$579.39	\$578.81	\$578.23	\$577.66	\$574.50	\$571.35	\$577.49
- Special Facilities	\$157.73	\$155.97	\$154.23	\$164.11	\$163.95	\$163.78	\$163.62	\$172.50	\$180.55	\$188.51	\$166.49
<b>Total (\$/hh)</b>	<b>\$7,564.77</b>	<b>\$7,535.57</b>	<b>\$7,686.82</b>	<b>\$7,694.98</b>	<b>\$7,701.08</b>	<b>\$7,686.96</b>	<b>\$7,713.38</b>	<b>\$7,731.90</b>	<b>\$7,739.00</b>	<b>\$7,674.02</b>	<b>\$7,672.85</b>

**TOWNSHIP OF BROCK  
CALCULATION OF MAXIMUM ALLOWABLE  
PARKS & RECREATION DEPARTMENT**

10 Year Average Service Level (1999-2008)      \$7,672.85 per household

2008 Households      4,471

Growth in Households 2009 - 2018      392

Growth in Population in Households 2009 - 2031      1,704

	Average Service Level	Maximum Allowable		Excess Calculation (\$000)				
		10 Years	2031	2008 Inventory	Using Average Service Level	Excess Capacity	New Maximum Allowable	
							10 Years	2031
<b>Total Library, Parks &amp; Recreation</b>	\$7,672.85 per household	\$3,007.8	\$13,076.1	\$34,309.0	\$34,303.7	\$5.3	\$3,002.5	\$13,070.8

APPENDIX B.1  
TABLE 2TOWNSHIP OF BROCK  
GROWTH-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Total Project Cost	Less Grants /Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Growth-Related Costs				2009-2018 Discounted Growth-Related Net Capital Costs	
							Prior Growth	2009-2018	Post 2018	Total		
<b>1.0 LIBRARY, PARKS &amp; RECREATION</b>												
<b>1.1 Library</b>												
	Cannington Library Expansion	2015	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 49,239	\$ 1,950,761	\$ -	\$ 2,000,000	90%	\$ 1,755,685
	Subtotal		\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 49,239	\$ 1,950,761	\$ -	\$ 2,000,000		\$ 1,755,685
<b>1.2 Indoor Recreation</b>												
	Cannington CC Debenture Principal Payment	2009	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ -	\$ 16,628	90%	\$ -
	Cannington CC Debenture Principal Payment	2010	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ -	\$ 16,628	90%	\$ -
	Cannington CC Debenture Principal Payment	2011	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ -	\$ 16,628	90%	\$ -
	Cannington CC Debenture Principal Payment	2012	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ -	\$ 16,628	90%	\$ -
	Central - Twin Pad	2016	\$ 6,000,000	\$ -	\$ 6,000,000	\$ -	\$ -	\$ 413,474	\$ 5,586,526	\$ 6,000,000	90%	\$ 372,126
	Zambonis - 2	2016	\$ 160,000	\$ -	\$ 160,000	\$ -	\$ -	\$ -	\$ 160,000	\$ 160,000	90%	\$ -
	Subtotal Indoor Recreation		\$ 6,226,510	\$ -	\$ 6,226,510	\$ -	\$ 66,510	\$ 413,474	\$ 5,746,526	\$ 6,226,510		\$ 372,126
<b>1.3 Parks</b>												
	Harbour Infrastructure Expenditures	various	\$ 800,000	\$ -	\$ 800,000	\$ 729,855	\$ -	\$ 70,145	\$ -	\$ 70,145	90%	\$ 63,130
	New Playground Equipment	2010	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ -	\$ 80,000	90%	\$ -
	New Playground Equipment	2012	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ -	\$ 80,000	90%	\$ -
	Baseball/Harbour Parking Lot Expansion	2012	\$ 75,000	\$ -	\$ 75,000	\$ 37,500	\$ 37,500	\$ -	\$ -	\$ 37,500	90%	\$ -
	Cannington Baseball Parking Lot Expansion	2013	\$ 80,000	\$ -	\$ 80,000	\$ 40,000	\$ 40,000	\$ -	\$ -	\$ 40,000	90%	\$ -
	Ken May Park Sunderland (0.3355 ha)	2013	\$ 32,711	\$ -	\$ 32,711	\$ -	\$ 24,827	\$ 7,885	\$ -	\$ 32,711	90%	\$ 7,096
	Kaitlin Group Park Sunderland (1.9 ha)	2015	\$ 185,250	\$ -	\$ 185,250	\$ -	\$ -	\$ 185,250	\$ -	\$ 185,250	90%	\$ 166,725
	Trail Development (1.5km per year)	various	\$ 375,000	\$ -	\$ 375,000	\$ -	\$ -	\$ 375,000	\$ -	\$ 375,000	90%	\$ 337,500
	Subtotal Parks		\$ 1,707,961	\$ -	\$ 1,707,961	\$ 807,355	\$ 262,327	\$ 638,279	\$ -	\$ 900,606		\$ 574,451
<b>TOTAL LIBRARY, PARKS &amp; RECREATION</b>			<b>\$ 9,934,471</b>	<b>\$ -</b>	<b>\$ 9,934,471</b>	<b>\$ 807,355</b>	<b>\$ 378,076</b>	<b>\$ 3,002,514</b>	<b>\$ 5,746,526</b>	<b>\$ 9,127,116</b>		<b>\$ 2,702,263</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ 300,251

Residential Development Charge Calculation		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	100%	\$2,702,263
10 Year Growth in Population in Households		392
Unadjusted Development Charge Per Household (\$)		<b>\$6,893.49</b>
Non-Residential Development Charge Calculation		
Non-Res. Share of 2009-2018 Discounted Growth-Related Capital Program	0%	\$ -
10 Year Growth in Square Metres		27,449
Unadjusted Development Charge Per sq. m (\$)		<b>\$0.00</b>

APPENDIX B.1  
TABLE 3

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
LIBRARY, PARKS & RECREATION  
RESIDENTIAL DEVELOPMENT CHARGE

1.00 LIBRARY, PARKS & RECREATION

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL		
OPENING CASH BALANCE FROM APPLICABLE RESERVES															
OPENING CASH BALANCE (\$000)			\$0.00	\$105.79	\$223.38	\$349.03	\$610.26	\$896.02	\$1,207.87	(\$682.54)	(\$858.67)	(\$448.16)			
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS			Shares												
	Res	Non-Res													
1.00	LIBRARY, PARKS & RECREATION - constant (\$000)	100%	0%	\$40.1	\$40.1	\$40.1	\$40.1	\$47.2	\$40.1	\$1,962.5	\$412.2	\$40.1	\$40.1	\$2,702.3	
1.00	LIBRARY, PARKS & RECREATION - current (\$000)			\$40.1	\$40.9	\$41.7	\$42.5	\$51.0	\$44.2	\$2,210.1	\$473.5	\$46.9	\$47.9	\$3,038.8	
NEW UNIT GROWTH			25	25	25	39	40	40	40	41	59	59	392		
REVENUE - current (\$000)			Rate for 2009												
-	Dev. Charge Receipts	\$7,243.00	Inflation:	2.0%	\$178.2	\$182.7	\$187.4	\$302.2	\$310.9	\$319.9	\$329.1	\$338.6	\$496.8	\$513.0	\$3,158.8
		Balance:	Postive	Negative											
-	Interest on Opening Balance	Rate:	3.5%	5.5%	\$0.0	\$3.7	\$7.8	\$12.2	\$21.4	\$31.4	\$42.3	(\$37.5)	(\$47.2)	(\$24.6)	\$9.3
-	Interest on In-year Transactions (excl.int.)	Rate:	3.5%	5.5%	\$2.4	\$2.5	\$2.6	\$4.5	\$4.5	\$4.8	(\$51.7)	(\$3.7)	\$7.9	\$8.1	(\$18.1)
-	Interest on Cannington Arena Debenture				(\$34.8)	(\$30.4)	(\$30.4)	(\$15.2)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$110.8)
TOTAL REVENUE			\$145.9	\$158.5	\$167.3	\$303.7	\$336.8	\$356.1	\$319.6	\$297.4	\$457.4	\$496.5	\$3,039.2		
CLOSING CASH BALANCE			\$105.8	\$223.4	\$349.0	\$610.3	\$896.0	\$1,207.9	(\$682.5)	(\$858.7)	(\$448.2)	\$0.4			
LIBRARY, PARKS & RECREATION CHARGE PER HH			\$7,243.00												

**APPENDIX B.2**

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***FIRE SERVICES***

## APPENDIX B.2

### FIRE SERVICES

The Brock Fire Department is responsible for the provision of fire protection and emergency services across the Township. The *Fire Protection and Prevention Act* defines fire protection services as “...fire suppression, fire prevention, fire safety education, communication, training of persons involved in the provision of fire protection services, rescue and emergency services and the delivery of all those services.” The Department currently employs about 60 firefighters excluding captains and chiefs.

#### TABLE 1 HISTORIC SERVICE LEVELS

Table 1 displays the 10-year historic inventory for buildings, land, rolling stock and furniture and equipment. The Fire Department currently operates out of three stations in Sunderland, Cannington and Beaverton. The total building area of all fire stations in 2008 is 14,150 square feet. These buildings have a total replacement value of \$2.62 million.

The land associated with the two fire stations totals 0.65 hectares valued at \$107,300. The 2008 fleet includes 11 vehicles with a replacement value of \$2.74 million. Furniture and equipment and personal firefighter equipment at all stations are valued at approximately \$923,100.

The 2008 full replacement value of the inventory of capital assets for Fire Services totals \$6.39 million and the 10-year historic average service level is \$1,535.29 per household (Page 2). The historic service level, multiplied by the 10-year forecast growth in households, results in a 10-year maximum allowable funding envelope of \$601,800. No excess capacity is identified.

#### TABLE 2 2009 – 2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The replacement of the Sunderland Fire Hall is currently underway at a cost of \$1.5 million. A replacement share of 65% or \$971,000 has been calculated based on the size of the new hall when compared to the old hall. New firefighter equipment (tanks, radios, clothing etc.) will also be needed as the Department hires new firefighters. This has been included at a cost of \$184,800 over 10 years.

Two additional vehicles have been included in the capital program at a total cost of \$80,000. The Township also has an outstanding debenture for two larger replacement pumpers.

Altogether, the 10-year capital forecast for the Fire Services amounts to \$2.04 million. A deduction of \$1.22 million is made to this amount to account for the replacement shares related to the Sunderland Hall and vehicle debenture payments. A deduction of \$96,300 is also made to account for the existing reserve fund balance and is considered a prior growth share.

The growth-related component of the capital program (\$721,700) is over the 10-year maximum allowable funding envelope of \$601,800. Therefore, \$120,000 is identified as a Post-2018 share which can be recovered in subsequent development charges studies. The DCA does not require a 10 per cent statutory discount for fire services; therefore, the \$601,800 is carried forward to the development charges calculation.

The growth-related net capital cost of \$601,800 for Fire Services is allocated 80 per cent to residential development (\$481,500) and 20 per cent to non-residential development (\$120,400). This ratio is based on each sector's share of population in new unit growth and employment growth to 2031. The residential share of the net growth-related capital cost is divided by the 10-year forecast growth in households (392) to derive an unadjusted charge of \$1,228.23 per household. The non-residential share of the net growth-related capital cost is divided by the 10-year forecast growth in floor space (27,449) to derive an unadjusted charge of \$4.39 per square metre.

### TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$1,442 per household and the non-residential charge increases to \$4.93 per square metre. This is largely a reflection of projects being undertaken early in the 10-year planning period.

10-year Hist. Service Level per household	FIRE SERVICES		Unadjusted		Adjusted	
	2009-2018 Growth-Related Total	Capital Program Net DC Recoverable	Development Charge \$/hh	Development Charge \$/sq.m	Development Charge \$/hh	Development Charge \$/sq.m
\$1,535.29	\$2,039,800	\$601,838	\$1,228.23	\$4.39	<b>\$1,442.00</b>	<b>\$4.93</b>

APPENDIX B.2  
TABLE 1 - PAGE 1

TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
FIRE SERVICES

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
<b>BUILDINGS (sq.ft.)</b>											
Station #1 - Sunderland	4,531	4,531	4,531	4,531	4,531	4,531	4,531	4,531	4,531	4,531	\$185
Station #2 - Cannington	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	\$185
Station #3 - Beaverton	5,120	5,120	5,120	5,120	5,120	5,120	5,120	5,120	5,120	5,120	\$185
<b>Total (sq.ft.)</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	<b>14,151</b>	
<b>Total (\$000)</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	<b>\$2,617.9</b>	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/ha)
<b>LAND (hectares)</b>											
Station #1 - Sunderland	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$165,000
Station #2 - Cannington	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20	\$165,000
Station #3 - Beaverton	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$165,000
<b>Total (ha)</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>	<b>0.65</b>	
<b>Total (\$000)</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$90.8</b>	<b>\$107.3</b>

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/vehicle)
<b>VEHICLES (# at all stations &amp; divisions)</b>											
- Tankers	4	4	4	4	4	4	4	4	4	3	\$200,000
- Pumpers (heavy duty custom)	7	7	7	6	6	4	4	4	4	4	\$350,000
- Rescue	3	4	4	4	4	4	4	4	4	4	\$185,000
<b>Total (#)</b>	<b>14</b>	<b>15</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>11</b>	
<b>Total (\$000)</b>	<b>\$3,805.0</b>	<b>\$3,990.0</b>	<b>\$3,990.0</b>	<b>\$3,640.0</b>	<b>\$3,640.0</b>	<b>\$2,940.0</b>	<b>\$2,940.0</b>	<b>\$2,940.0</b>	<b>\$2,940.0</b>	<b>\$2,740.0</b>	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<b>FURNITURE &amp; EQUIPMENT (\$)</b>											
- Personal Fire Fighter Equipment	\$362,100	\$365,400	\$367,600	\$370,300	\$373,100	\$379,890	\$386,804	\$393,844	\$466,512	\$516,502	
- Communications Equipment	\$104,200	\$105,000	\$105,800	\$106,600	\$327,400	\$333,358	\$339,426	\$345,603	\$351,893	\$358,297	
- Other Station Equipment	\$43,200	\$43,400	\$43,700	\$43,700	\$44,100	\$44,902	\$45,719	\$46,551	\$47,399	\$48,261	
<b>Total (\$000)</b>	<b>\$509.5</b>	<b>\$513.8</b>	<b>\$517.1</b>	<b>\$520.6</b>	<b>\$744.6</b>	<b>\$758.2</b>	<b>\$771.9</b>	<b>\$786.0</b>	<b>\$865.8</b>	<b>\$923.1</b>	

APPENDIX B.2  
TABLE 1 - PAGE 2

TOWNSHIP OF BROCK  
CALCULATION OF SERVICE LEVELS  
FIRE SERVICES

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Historic Households	4,302	4,351	4,400	4,404	4,409	4,413	4,418	4,422	4,446	4,471

INVENTORY SUMMARY (\$000)

- Buildings	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9	\$2,617.9
- Land	\$90.8	\$90.8	\$90.8	\$90.8	\$90.8	\$90.8	\$90.8	\$90.8	\$90.8	\$107.3
- Vehicles	\$3,805.0	\$3,990.0	\$3,990.0	\$3,640.0	\$3,640.0	\$2,940.0	\$2,940.0	\$2,940.0	\$2,940.0	\$2,740.0
- Furniture & Equipment	\$509.5	\$513.8	\$517.1	\$520.6	\$744.6	\$758.2	\$771.9	\$786.0	\$865.8	\$923.1
<b>Total (\$000)</b>	<b>\$7,023.2</b>	<b>\$7,212.5</b>	<b>\$7,215.8</b>	<b>\$6,869.3</b>	<b>\$7,093.3</b>	<b>\$6,406.8</b>	<b>\$6,420.6</b>	<b>\$6,434.7</b>	<b>\$6,514.5</b>	<b>\$6,388.2</b>

Average  
Service  
Level

SERVICE LEVEL (\$/household)

- Buildings	\$608.49	\$601.70	\$594.99	\$594.39	\$593.80	\$593.21	\$592.62	\$592.03	\$588.79	\$585.56	\$594.56
- Land	\$21.09	\$20.86	\$20.63	\$20.60	\$20.58	\$20.56	\$20.54	\$20.52	\$20.41	\$23.99	\$20.98
- Vehicles	\$884.39	\$917.05	\$906.82	\$826.45	\$825.62	\$666.19	\$665.52	\$664.86	\$661.22	\$612.87	\$763.10
- Furniture & Equipment	\$118.42	\$118.09	\$117.52	\$118.20	\$168.89	\$171.79	\$174.74	\$177.75	\$194.72	\$206.46	\$156.66
<b>Total (\$/hh)</b>	<b>\$1,632.39</b>	<b>\$1,657.69</b>	<b>\$1,639.95</b>	<b>\$1,559.64</b>	<b>\$1,608.90</b>	<b>\$1,451.75</b>	<b>\$1,453.42</b>	<b>\$1,455.15</b>	<b>\$1,465.14</b>	<b>\$1,428.88</b>	<b>\$1,535.29</b>

TOWNSHIP OF BROCK  
CALCULATION OF MAXIMUM ALLOWABLE  
FIRE SERVICES

10 Year Average Service Level (1999-2008)	\$1,535.29 per household
2008 Households	4,471
Growth in Households 2009 - 2018	392
Growth in Population in Households 2009 - 2031	1,704

	Average Service Level	Maximum Allowable		Excess Calculation (\$000)				
		10 Years	2031	2008 Inventory	Using Average Service Level	Excess Capacity	New Maximum Allowable	
			(\$000)				10 Years	2031
<b>Total Fire Services</b>	\$1,535.29 per household	\$601.8	\$2,616.5	\$6,388.2	\$6,864.0	\$0.0	\$601.8	\$2,616.5

APPENDIX B.2  
TABLE 2

TOWNSHIP OF BROCK  
GROWTH-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Total Project Cost	Less Grants /Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Growth-Related Costs				2009-2018 Discounted Growth-Related Net Capital Costs	
							Prior Growth	2009-2018	Post 2018	Total		
<b>2.0 FIRE SERVICES</b>												
<b>2.1 Buildings, Land, Furn. &amp; Equipment</b>												
	New Sunderland Fire Hall	2009	\$ 1,500,000	\$ -	\$ 1,500,000	\$ 970,929	\$ 93,766	\$ 435,305	\$ -	\$ 529,071	100%	\$ 435,305
	New Personal Firefighter Equipment	various	\$ 184,800	\$ -	\$ 184,800	\$ -	\$ -	\$ 64,964	\$ 119,836	\$ 184,800	100%	\$ 64,964
	Subtotal Buildings, Land, Furn. & Equipment		\$ 1,684,800	\$ -	\$ 1,684,800	\$ 970,929	\$ 93,766	\$ 500,269	\$ 119,836	\$ 713,871		\$ 500,269
<b>2.2 Fully Equipped Vehicles</b>												
	New Fire Prev. Vehicle	2010	\$ 35,000	\$ -	\$ 35,000	\$ -	\$ -	\$ 35,000	\$ -	\$ 35,000	100%	\$ 35,000
	New Fire Chief Vehicle	2012	\$ 45,000	\$ -	\$ 45,000	\$ -	\$ -	\$ 45,000	\$ -	\$ 45,000	100%	\$ 45,000
	Fire Vehicle Debenture Principal Payment	2009	\$ 29,000	\$ -	\$ 29,000	\$ 26,457	\$ 2,543	\$ -	\$ -	\$ 2,543	100%	\$ -
	Fire Vehicle Debenture Principal Payment	2010	\$ 30,000	\$ -	\$ 30,000	\$ 27,370	\$ -	\$ 2,630	\$ -	\$ 2,630	100%	\$ 2,630
	Fire Vehicle Debenture Principal Payment	2011	\$ 32,000	\$ -	\$ 32,000	\$ 29,194	\$ -	\$ 2,806	\$ -	\$ 2,806	100%	\$ 2,806
	Fire Vehicle Debenture Principal Payment	2012	\$ 33,000	\$ -	\$ 33,000	\$ 30,107	\$ -	\$ 2,893	\$ -	\$ 2,893	100%	\$ 2,893
	Fire Vehicle Debenture Principal Payment	2013	\$ 35,000	\$ -	\$ 35,000	\$ 31,931	\$ -	\$ 3,069	\$ -	\$ 3,069	100%	\$ 3,069
	Fire Vehicle Debenture Principal Payment	2014	\$ 37,000	\$ -	\$ 37,000	\$ 33,756	\$ -	\$ 3,244	\$ -	\$ 3,244	100%	\$ 3,244
	Fire Vehicle Debenture Principal Payment	2015	\$ 39,000	\$ -	\$ 39,000	\$ 35,580	\$ -	\$ 3,420	\$ -	\$ 3,420	100%	\$ 3,420
	Fire Vehicle Debenture Principal Payment	2016	\$ 40,000	\$ -	\$ 40,000	\$ 36,493	\$ -	\$ 3,507	\$ -	\$ 3,507	100%	\$ 3,507
	Subtotal Fully Equipped Vehicles		\$ 355,000	\$ -	\$ 355,000	\$ 250,888	\$ 2,543	\$ 101,569	\$ -	\$ 104,112		\$ 101,569
<b>TOTAL FIRE SERVICES</b>			<b>\$ 2,039,800</b>	<b>\$ -</b>	<b>\$ 2,039,800</b>	<b>\$ 1,221,816</b>	<b>\$ 96,309</b>	<b>\$ 601,838</b>	<b>\$ 119,836</b>	<b>\$ 817,984</b>		<b>\$ 601,838</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ -

<b>Residential Development Charge Calculation</b>		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	80%	\$481,471
10 Year Growth in Population in Households		392
Unadjusted Development Charge Per Household (\$)		<b>\$1,228.23</b>
<b>Non-Residential Development Charge Calculation</b>		
Non-Res. Share of 2009-2018 Discounted Growth-Related Capital Program	20%	\$ 120,368
10 Year Growth in Square Metres		27,449
Unadjusted Development Charge Per sq. m (\$)		<b>\$4.39</b>

APPENDIX B.2  
TABLE 3 - PAGE 1

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
FIRE SERVICES  
RESIDENTIAL DEVELOPMENT CHARGE

## 2.00 FIRE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE FROM APPLICABLE RESERVES											
OPENING CASH BALANCE (\$000)	\$0.00	(\$327.63)	(\$346.09)	(\$335.83)	(\$340.67)	(\$305.38)	(\$266.52)	(\$223.90)	(\$177.13)	(\$92.44)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS											
2.00 FIRE SERVICES - constant (\$000)	\$353.4	\$35.3	\$7.4	\$43.5	\$7.7	\$7.8	\$7.9	\$8.0	\$5.2	\$5.2	\$481.5
2.00 FIRE SERVICES - current (\$000)	\$353.4	\$36.0	\$7.7	\$46.2	\$8.3	\$8.6	\$8.9	\$9.2	\$6.1	\$6.2	\$490.7
NEW UNIT GROWTH	25	25	25	39	40	40	40	41	59	59	392
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$35.5	\$36.4	\$37.3	\$60.2	\$61.9	\$63.7	\$65.5	\$67.4	\$98.9	\$102.1	\$628.9
- Interest on Opening Balance	\$0.0	(\$18.0)	(\$19.0)	(\$18.5)	(\$18.7)	(\$16.8)	(\$14.7)	(\$12.3)	(\$9.7)	(\$5.1)	(\$132.9)
- Interest on In-year Transactions (excl.int.)	(\$8.7)	\$0.0	\$0.5	\$0.2	\$0.9	\$1.0	\$1.0	\$1.0	\$1.6	\$1.7	(\$0.8)
- Interest on Fire Vehicle Debenture	(\$0.9)	(\$0.8)	(\$0.8)	(\$0.6)	(\$0.5)	(\$0.4)	(\$0.3)	(\$0.1)	\$0.0	\$0.0	(\$4.6)
TOTAL REVENUE	\$25.8	\$17.5	\$18.0	\$41.3	\$43.6	\$47.5	\$51.6	\$56.0	\$90.8	\$98.7	\$490.7
CLOSING CASH BALANCE	(\$327.6)	(\$346.1)	(\$335.8)	(\$340.7)	(\$305.4)	(\$266.5)	(\$223.9)	(\$177.1)	(\$92.4)	\$0.0	
FIRE SERVICES CHARGE PER HH											\$1,442.00

APPENDIX B.2  
TABLE 3 - PAGE 2

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
FIRE SERVICES  
NON-RESIDENTIAL DEVELOPMENT CHARGE

2.00 FIRE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE FROM APPLICABLE RESERVES											
OPENING CASH BALANCE (\$000)	\$0.00	(\$73.56)	(\$69.07)	(\$56.51)	(\$58.60)	(\$50.74)	(\$42.18)	(\$32.80)	(\$22.43)	(\$11.68)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS											
2.00 FIRE SERVICES - constant (\$000)	\$88.4	\$8.8	\$1.9	\$10.9	\$1.9	\$1.9	\$2.0	\$2.0	\$1.3	\$1.3	\$120.4
2.00 FIRE SERVICES - current (\$000)	\$88.4	\$9.0	\$1.9	\$11.5	\$2.1	\$2.2	\$2.2	\$2.3	\$1.5	\$1.6	\$122.7
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Sq. m	3,444	3,493	3,541	2,424	2,447	2,470	2,493	2,517	2,300	2,320	27,449
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$17.0	\$17.6	\$18.2	\$12.7	\$13.1	\$13.4	\$13.8	\$14.3	\$13.3	\$13.7	\$147.1
- Interest on Opening Balance	\$0.0	(\$4.0)	(\$3.8)	(\$3.1)	(\$3.2)	(\$2.8)	(\$2.3)	(\$1.8)	(\$1.2)	(\$0.6)	(\$23.0)
- Interest on In-year Transactions (excl.int.)	(\$2.0)	\$0.2	\$0.3	\$0.0	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	(\$0.3)
- Interest on Fire Vehicle Debenture	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.0)	\$0.0	\$0.0	(\$1.1)
TOTAL REVENUE	\$14.8	\$13.5	\$14.5	\$9.5	\$9.9	\$10.7	\$11.6	\$12.7	\$12.3	\$13.3	\$122.7
CLOSING CASH BALANCE	(\$73.6)	(\$69.1)	(\$56.5)	(\$58.6)	(\$50.7)	(\$42.2)	(\$32.8)	(\$22.4)	(\$11.7)	\$0.0	
<b>FIRE SERVICES CHARGE PER SQ. M</b>											<b>\$4.93</b>

**APPENDIX B.3**

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***PUBLIC WORKS: BUILDINGS & FLEET***

### APPENDIX B.3

#### PUBLIC WORKS: BUILDINGS & FLEET

This section covers the yards, buildings, and fleet components of the Township's Public Works operations. The road and related infrastructure component of public works is described in Appendix C.

##### **TABLE 1 HISTORIC SERVICE LEVELS**

The Public Works Department operates out of four depots and yards and one small dog pound. The total replacement cost of all buildings is \$3.79 million.

Approximately 5.64 hectares of land is associated with the Public Works operations with a value of \$930,600. Minor furniture and equipment assets add an additional \$321,800 to the inventory. The total value of the Township's rolling stock and related equipment inventory is \$4.54 million. This amount excludes fire vehicles.

As shown on Page 2, the total value of the Public Works: Buildings & Fleet capital inventory is \$9.59 million. The 10-year historic average service level is \$2,103.68 per household, and this, multiplied by the 10-year forecast growth in households, results in a 10-year maximum allowable funding envelope of \$824,600. Approximately \$187,100 in excess capacity is deducted resulting in a revised funding envelope of \$637,600.

##### **TABLE 2 2009 – 2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET & CALCULATION OF THE "UNADJUSTED" DEVELOPMENT CHARGES**

The 10-year growth-related capital plan for Public Works includes a works yard expansion in 2012 at a cost of \$1.5 million. The salt management plan is included at a cost of \$575,000, however, only \$50,400 is deemed to be growth-related after benefit to existing shares are taken into account.

Several additional vehicles are also expected to be added to the Township's fleet over the 10-year planning period. The additional vehicles and equipment total \$1.3 million over the 10-year planning period.

The total 10-year capital forecast for Public Works: Buildings and Fleet totals \$3.37 million. Of this amount, \$524,600 is considered a replacement/benefit to existing

share and approximately \$116,800 is to be funded from the current Public Works development charges reserve fund and is therefore considered to be a prior growth share.

As the growth-related capital program exceeds the maximum allowable funding envelope therefore, \$637,600 is eligible for funding through development charges in this period and \$2.09 million is identified as the Post-2018 share which can be recovered in subsequent development charges studies.

The maximum allowable funding envelope amount of \$637,600 is reduced by the legislated 10 per cent discount, yielding a discounted growth-related net capital cost of \$573,800. The growth-related cost is allocated 80 per cent, or \$459,000 against new residential development, and 20 per cent, or \$114,800 against non-residential development. This is based on anticipated shares of population in new units and employment growth over the forecast period to 2031, yielding an unadjusted development charge of \$1,171.04 per household and \$4.18 per square metre.

### TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$1,239 per household and the non-residential calculated charge increases to \$4.29 per square metre.

The following table summarizes the calculation of the Public Works: Buildings & Fleet development charges.

PUBLIC WORKS: BUILDINGS & FLEET						
10-year Hist. Service Level per household	2009-2018 Growth-Related Capital Program		Unadjusted Development Charge		Adjusted Development Charge	
	Total	Net DC Recoverable	\$/hh	\$/sq.m	\$/hh	\$/sq.m
\$2,103.68	\$3,370,000	\$573,815	\$1,171.04	\$4.18	<b>\$1,239.00</b>	<b>\$4.29</b>

APPENDIX B.3  
TABLE 1 - PAGE 1

TOWNSHIP OF BROCK  
INVENTORY OF CAPITAL ASSETS  
PUBLIC WORKS: BUILDINGS & FLEET

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
<b>BUILDINGS (sq.ft.)</b>											
Franklin Depot	2,633	2,633	2,633	2,633	2,633	2,633	2,633	2,633	2,633	2,633	\$185
Beaverton Patrol Yard	9,268	9,268	9,268	9,268	9,268	9,268	9,268	9,268	9,268	9,268	\$185
Cannington Equipment Yard	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	3,400	\$185
Sunderland Equipment Yard	4,768	4,768	4,768	4,768	4,768	4,768	4,768	4,768	4,768	4,768	\$185
Dog Pound	400	400	400	400	400	400	400	400	400	400	\$185
<b>Total (sq.ft.)</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	<b>20,469</b>	
<b>Total (\$000)</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	<b>\$3,786.8</b>	

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/ha)
<b>LAND (hectares)</b>											
Dog Pound	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$165,000
Franklin Depot	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$165,000
Beaverton Patrol Yard	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	\$165,000
Cannington Equipment Yard	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$165,000
Sunderland Equipment Yard	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$165,000
<b>Total (ha)</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	<b>5.64</b>	
<b>Total (\$000)</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	<b>\$930.6</b>	

**FURNITURE AND EQUIPMENT (\$)**

All Yards - Miscellaneous Equipment	\$248,600	\$248,600	\$248,600	\$249,600	\$320,600	\$326,333	\$326,333	\$326,333	\$326,333	\$326,333	\$326,333
Dog Pound	\$0	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500	\$5,500
<b>Total (\$000)</b>	<b>\$248.6</b>	<b>\$254.1</b>	<b>\$254.1</b>	<b>\$255.1</b>	<b>\$326.1</b>	<b>\$331.8</b>	<b>\$331.8</b>	<b>\$331.8</b>	<b>\$331.8</b>	<b>\$331.8</b>	<b>\$331.8</b>

**ROLLING STOCK & RELATED EQUIPMENT (\$)**

Rolling Stock & Related Equipment	\$1,791,000	\$1,791,000	\$1,791,000	\$1,791,000	\$1,889,000	\$1,889,000	\$1,889,000	\$1,889,000	\$1,889,000	\$1,889,000	\$1,889,000
Municipal Fleet	\$2,331,000	\$2,376,000	\$2,376,000	\$2,350,000	\$2,350,000	\$2,349,000	\$2,098,000	\$2,395,000	\$2,695,000	\$2,654,000	\$2,654,000
<b>Total (\$000)</b>	<b>\$4,122.0</b>	<b>\$4,167.0</b>	<b>\$4,167.0</b>	<b>\$4,141.0</b>	<b>\$4,239.0</b>	<b>\$4,238.0</b>	<b>\$3,987.0</b>	<b>\$4,284.0</b>	<b>\$4,584.0</b>	<b>\$4,543.0</b>	<b>\$4,543.0</b>

APPENDIX B.3  
TABLE 1 - PAGE 2

TOWNSHIP OF BROCK  
CALCULATION OF SERVICE LEVELS  
PUBLIC WORKS: BUILDINGS & FLEET

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Historic Households	4,302	4,351	4,400	4,404	4,409	4,413	4,418	4,422	4,446	4,471

INVENTORY SUMMARY (\$000)

- Buildings	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8	\$3,786.8
- Land	\$930.6	\$930.6	\$930.6	\$930.6	\$930.6	\$930.6	\$930.6	\$930.6	\$930.6	\$930.6
- Furniture & Equipment	\$248.6	\$254.1	\$254.1	\$255.1	\$326.1	\$331.8	\$331.8	\$331.8	\$331.8	\$331.8
- Municipal Fleet & Works Rolling Stock	\$4,122.0	\$4,167.0	\$4,167.0	\$4,141.0	\$4,239.0	\$4,238.0	\$3,987.0	\$4,284.0	\$4,584.0	\$4,543.0
<b>Total (\$000)</b>	<b>\$9,088.0</b>	<b>\$9,138.5</b>	<b>\$9,138.5</b>	<b>\$9,113.5</b>	<b>\$9,282.5</b>	<b>\$9,287.2</b>	<b>\$9,036.2</b>	<b>\$9,333.2</b>	<b>\$9,633.2</b>	<b>\$9,592.2</b>

Average  
Service  
Level

SERVICE LEVEL (\$/household)

- Buildings	\$880.16	\$870.34	\$860.63	\$859.77	\$858.91	\$858.06	\$857.20	\$856.35	\$851.66	\$847.00	\$860.01
- Land	\$216.30	\$213.89	\$211.50	\$211.29	\$211.08	\$210.87	\$210.66	\$210.45	\$209.30	\$208.15	\$211.35
- Furniture & Equipment	\$57.78	\$58.40	\$57.75	\$57.92	\$73.97	\$75.19	\$75.12	\$75.04	\$74.63	\$74.22	\$68.00
- Municipal Fleet & Works Rolling Stock	\$958.07	\$957.73	\$947.05	\$940.20	\$961.49	\$960.30	\$902.53	\$968.79	\$1,030.96	\$1,016.15	\$964.33
<b>Total (\$/hh)</b>	<b>\$2,112.31</b>	<b>\$2,100.35</b>	<b>\$2,076.92</b>	<b>\$2,069.18</b>	<b>\$2,105.45</b>	<b>\$2,104.42</b>	<b>\$2,045.50</b>	<b>\$2,110.63</b>	<b>\$2,166.55</b>	<b>\$2,145.52</b>	<b>\$2,103.68</b>

TOWNSHIP OF BROCK  
CALCULATION OF MAXIMUM ALLOWABLE  
PUBLIC WORKS: BUILDINGS & FLEET

10 Year Average Service Level (1999-2008)	\$2,103.68 per household
2008 Households	4,471
Growth in Households 2009 - 2018	392
Growth in Population in Households 2009 - 2031	1,704

	Average Service Level	Maximum Allowable		Excess Calculation (\$000)				
		10 Years	2031	2008 Inventory	Using Average Service Level	Excess Capacity	New Maximum Allowable	
							10 Years	2031
<b>Total Public Works</b>	\$2,103.68 per household	\$824.6	\$3,585.1	\$9,592.2	\$9,405.1	\$187.1	\$637.6	\$3,398.0

APPENDIX B.3  
TABLE 2

TOWNSHIP OF BROCK  
GROWTH-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Total Project Cost	Less Grants /Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Growth-Related Costs				2009-2018 Discounted Growth-Related Net Capital Costs	
							Prior Growth	2009-2018	Post 2018	Total		
<b>3.0 PUBLIC WORKS: BUILDINGS &amp; FLEET</b>												
<b>3.1 Buildings, Land &amp; Furnishings</b>												
	Works Yard Expansion	2012	\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 1,500,000	\$ 1,500,000	90%	\$ -
	Salt Management Plan	various	\$ 575,000	\$ -	\$ 575,000	\$ 524,584	\$ -	\$ -	\$ 50,416	\$ 50,416	90%	\$ -
	Subtotal Buildings, Land & Furnishings		\$ 2,075,000	\$ -	\$ 2,075,000	\$ 524,584	\$ -	\$ -	\$ 1,550,416	\$ 1,550,416		\$ -
<b>3.2 Fleet</b>												
	Rear Extend-a-Mower	2010	\$ 17,000	\$ -	\$ 17,000	\$ -	\$ 17,000	\$ -	\$ -	\$ 17,000	90%	\$ -
	Parks One Ton Dump	2010	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	90%	\$ -
	Parks One Ton Dump	2011	\$ 52,000	\$ -	\$ 52,000	\$ -	\$ 49,835	\$ 2,165	\$ -	\$ 52,000	90%	\$ 1,948
	Backhoe	2013	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	Float (Trailer for backhoe)	2013	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	90%	\$ 45,000
	Tandem Dump Truck	2013	\$ 275,000	\$ -	\$ 275,000	\$ -	\$ -	\$ 275,000	\$ -	\$ 275,000	90%	\$ 247,500
	New Inspector Pick-up	2013	\$ 32,000	\$ -	\$ 32,000	\$ -	\$ -	\$ 32,000	\$ -	\$ 32,000	90%	\$ 28,800
	New Kubota Tractor	2014	\$ 42,000	\$ -	\$ 42,000	\$ -	\$ -	\$ 42,000	\$ -	\$ 42,000	90%	\$ 37,800
	Parks Trailer (for Kubota)	2014	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ -	\$ 10,000	\$ -	\$ 10,000	90%	\$ 9,000
	Gradall	2015	\$ 450,000	\$ -	\$ 450,000	\$ -	\$ -	\$ 26,407	\$ 423,593	\$ 450,000	90%	\$ 23,767
	1-Ton Dump	2015	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	90%	\$ -
	New Kubota Tractor	2015	\$ 42,000	\$ -	\$ 42,000	\$ -	\$ -	\$ -	\$ 42,000	\$ 42,000	90%	\$ -
	Tractor/Finishing Mower	2018	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ 25,000	90%	\$ -
	Subtotal Fleet		\$ 1,295,000	\$ -	\$ 1,295,000	\$ -	\$ 116,835	\$ 637,572	\$ 540,593	\$ 1,295,000		\$ 573,815
<b>TOTAL PUBLIC WORKS: BUILDINGS &amp; FLEET</b>			<b>\$ 3,370,000</b>	<b>\$ -</b>	<b>\$ 3,370,000</b>	<b>\$ 524,584</b>	<b>\$ 116,835</b>	<b>\$ 637,572</b>	<b>\$ 2,091,009</b>	<b>\$ 2,845,416</b>		<b>\$ 573,815</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ 63,757

Residential Development Charge Calculation		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	80%	\$459,052
10 Year Growth in Population in Households		392
Unadjusted Development Charge Per Household (\$)		<b>\$1,171.04</b>
Non-Residential Development Charge Calculation		
Non-Res. Share of 2009-2018 Discounted Growth-Related Capital Program	20%	\$ 114,763
10 Year Growth in Square Metres		27,449
Unadjusted Development Charge Per sq. m (\$)		<b>\$4.18</b>

APPENDIX B.3  
TABLE 3 - PAGE 1

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
PUBLIC WORKS: BUILDINGS & FLEET  
RESIDENTIAL DEVELOPMENT CHARGE

3.00 PUBLIC WORKS: BUILDINGS & FLEET

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE FROM APPLICABLE RESERVES												
OPENING CASH BALANCE (\$000)		\$0.00	\$31.03	\$63.97	\$97.22	\$153.23	(\$232.78)	(\$231.99)	(\$209.25)	(\$161.85)	(\$84.26)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS	Shares											
3.00 PUBLIC WORKS: BUILDINGS & FLEET - constant (\$00	Res 80% Non-Res 20%	\$0.0	\$0.0	\$1.6	\$0.0	\$401.0	\$37.4	\$19.0	\$0.0	\$0.0	\$0.0	\$459.1
3.00 PUBLIC WORKS: BUILDINGS & FLEET - current (\$000)		\$0.0	\$0.0	\$1.6	\$0.0	\$434.1	\$41.3	\$21.4	\$0.0	\$0.0	\$0.0	\$498.5
NEW UNIT GROWTH		25	25	25	39	40	40	40	41	59	59	392
REVENUE - current (\$000)	Rate for 2009											
- Dev. Charge Receipts	\$1,239.00 Inflation: 2.0%	\$30.5	\$31.3	\$32.1	\$51.7	\$53.2	\$54.7	\$56.3	\$57.9	\$85.0	\$87.7	\$540.4
- Interest on Opening Balance	Balance: Postive Negative	\$0.0	\$1.1	\$2.2	\$3.4	\$5.4	(\$12.8)	(\$12.8)	(\$11.5)	(\$8.9)	(\$4.6)	(\$38.5)
- Interest on In-year Transactions (excl.int.)	Rate: 3.5% 5.5%	\$0.5	\$0.5	\$0.5	\$0.9	(\$10.5)	\$0.2	\$0.6	\$1.0	\$1.5	\$1.5	(\$3.1)
TOTAL REVENUE		\$31.0	\$32.9	\$34.9	\$56.0	\$48.1	\$42.1	\$44.2	\$47.4	\$77.6	\$84.6	\$498.8
CLOSING CASH BALANCE		\$31.0	\$64.0	\$97.2	\$153.2	(\$232.8)	(\$232.0)	(\$209.3)	(\$161.8)	(\$84.3)	\$0.3	
<b>PUBLIC WORKS: BUILDINGS &amp; FLEET CHARGE PER HH</b>	<b>\$1,239.00</b>											

APPENDIX B.3  
TABLE 3 - PAGE 2

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
PUBLIC WORKS: BUILDINGS & FLEET  
NON-RESIDENTIAL DEVELOPMENT CHARGE

3.00 PUBLIC WORKS: BUILDINGS & FLEET

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE FROM APPLICABLE RESERVES											
OPENING CASH BALANCE (\$000)	\$0.00	\$15.06	\$31.15	\$47.91	\$60.78	(\$36.89)	(\$37.53)	(\$32.83)	(\$22.02)	(\$11.43)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS											
3.00 PUBLIC WORKS: BUILDINGS & FLEET - constar	\$0.0	\$0.0	\$0.4	\$0.0	\$100.3	\$9.4	\$4.8	\$0.0	\$0.0	\$0.0	\$114.8
3.00 PUBLIC WORKS: BUILDINGS & FLEET - current (\$000)	\$0.0	\$0.0	\$0.4	\$0.0	\$108.5	\$10.3	\$5.4	\$0.0	\$0.0	\$0.0	\$124.6
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Sq. m	3,444	3,493	3,541	2,424	2,447	2,470	2,493	2,517	2,300	2,320	27,449
REVENUE - current (\$000)											
- Dev. Charge Receipts	\$14.8	\$15.3	\$15.8	\$11.0	\$11.4	\$11.7	\$12.0	\$12.4	\$11.6	\$11.9	\$127.9
- Interest on Opening Balance	\$0.0	\$0.5	\$1.1	\$1.7	\$2.1	(\$2.0)	(\$2.1)	(\$1.8)	(\$1.2)	(\$0.6)	(\$2.3)
- Interest on In-year Transactions (excl.int.)	\$0.3	\$0.3	\$0.3	\$0.2	(\$2.7)	\$0.0	\$0.1	\$0.2	\$0.2	\$0.2	(\$0.9)
TOTAL REVENUE	\$15.1	\$16.1	\$17.2	\$12.9	\$10.9	\$9.7	\$10.1	\$10.8	\$10.6	\$11.5	\$124.7
CLOSING CASH BALANCE	\$15.1	\$31.2	\$47.9	\$60.8	(\$36.9)	(\$37.5)	(\$32.8)	(\$22.0)	(\$11.4)	\$0.1	
<b>PUBLIC WORKS: BUILDINGS &amp; FLEET CHARGE PER SQ. M</b>											<b>\$4.29</b>

**APPENDIX B.4**

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***GENERAL GOVERNMENT***

## APPENDIX B.4

### GENERAL GOVERNMENT

The *DCA* allows the cost of growth-related studies and other general government functions to be included in the calculation of the development charges as long as they are permitted under the legislation. Consistent with s.5(1)7 of the *DCA*, the eligible growth-related net capital cost for the provision of studies and permitted general government expenditures is reduced by 10 per cent in calculating the development charges.

**TABLE 1      2009 – 2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET  
AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT  
CHARGES**

The first item in the capital program is the recovery of previous growth-related general government expenditures (\$94,300 net discounted cost). The General Government reserve fund balance is in a negative position due to debenture payments for the Township Office. Although Township offices are currently an illegible service under the *DCA*, the Act allows for the recovery of debenture payments for administrative facilities that were undertaken prior to the Act’s revision in 1997.

Growth-related studies comprise the remainder of the General Government capital program. These include development charges studies, hamlet growth studies, and an Official Plan review study.

As shown on Table 1, the 2009–2018 growth-related net capital cost for General Government is \$289,700. An amount of \$37,500 has been identified as a benefit to existing share related to the Official Plan review. The remaining amount of \$252,200 is eligible for development charges funding in the 10-year planning period. This cost is reduced by the required 10 per cent discount, yielding a discounted growth-related net capital cost of \$227,000. This amount is included in the development charge calculation. The residual 10 per cent discount share of costs totalling \$25,200 will require funding from non-development charge sources.

The total discounted growth-related net capital cost for the planning period of \$227,000 is allocated 80 per cent (\$181,600) to the residential sector and 20 per cent (\$45,400) to the non-residential sector based on shares of 2031 growth in population

in new units and employment. The resulting unadjusted per household residential charge is \$463.31 before cash flow adjustments. The non-residential unadjusted charge is \$1.65 per square metre.

**TABLE 2 CASH FLOW ANALYSIS**

After cash flow consideration, the residential charge increases to \$516.00 per household and the non-residential charge increases slightly to \$1.77 per square metre.

GENERAL GOVERNMENT						
10-year Hist. Service Level per pop+empl	2009-2018 Growth-Related Capital Program		Unadjusted Development Charge		Adjusted Development Charge	
	Total	Net DC Recoverable	\$/hh	\$/sq.m	\$/hh	\$/sq.m
N/A	\$289,748	\$227,023	\$463.31	\$1.65	<b>\$516.00</b>	<b>\$1.77</b>

APPENDIX B.4  
TABLE 1

TOWNSHIP OF BROCK  
GROWTH-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Total Project Cost	Less Grants /Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Growth-Related Costs				2009-2018 Discounted Growth-Related Net Capital Costs	
							Prior Growth	2009-2018	Post 2018	Total		
<b>4.0 GENERAL GOVERNMENT</b>												
<b>4.1 Growth-Related Studies</b>												
	Recovery of Previous Gen. Govt. Expenditures	2009	\$ 104,748	\$ -	\$ 104,748	\$ -	\$ -	\$ 104,748	\$ -	\$ 104,748	90%	\$ 94,273
	Hamlet Studies	2009	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ -	\$ 20,000	\$ -	\$ 20,000	90%	\$ 18,000
	Hamlet Studies	2010	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ -	\$ 20,000	\$ -	\$ 20,000	90%	\$ 18,000
	Development Charges Study	2013	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ 30,000	90%	\$ 27,000
	Building Permit Fee Study	2012	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ -	\$ 10,000	\$ -	\$ 10,000	90%	\$ 9,000
	Official Plan Review	2013	\$ 75,000	\$ -	\$ 75,000	\$ 37,500	\$ -	\$ 37,500	\$ -	\$ 37,500	90%	\$ 33,750
	Development Charges Study	2018	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ 30,000	90%	\$ 27,000
	Subtotal Growth-Related Studies		\$ 289,748	\$ -	\$ 289,748	\$ 37,500	\$ -	\$ 252,248	\$ -	\$ 252,248		\$ 227,023
<b>TOTAL GENERAL GOVERNMENT</b>			<b>\$ 289,748</b>	<b>\$ -</b>	<b>\$ 289,748</b>	<b>\$ 37,500</b>	<b>\$ -</b>	<b>\$ 252,248</b>	<b>\$ -</b>	<b>\$ 252,248</b>		<b>\$ 227,023</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ 25,225

<b>Residential Development Charge Calculation</b>			
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	80%	\$	\$181,618
10 Year Growth in Population in Households			392
Unadjusted Development Charge Per Household (\$)			<b>\$463.31</b>
<b>Non-Residential Development Charge Calculation</b>			
Non-Res. Share of 2009-2018 Discounted Growth-Related Capital Program	20%	\$	45,405
10 Year Growth in Square Metres			27,449
Unadjusted Development Charge Per sq. m (\$)			<b>\$1.65</b>

APPENDIX B.4  
TABLE 2 - PAGE 1

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
GENERAL GOVERNMENT  
RESIDENTIAL DEVELOPMENT CHARGE

4.00 GENERAL GOVERNMENT

OPENING CASH BALANCE FROM APPLICABLE RESERVES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)			\$0.00	(\$79.24)	(\$85.33)	(\$76.39)	(\$66.49)	(\$101.49)	(\$83.88)	(\$64.68)	(\$43.71)	(\$10.10)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS													
	Shares												
	Res	Non-Res											
4.00	80%	20%	\$89.8	\$14.4	\$0.0	\$7.2	\$48.6	\$0.0	\$0.0	\$0.0	\$0.0	\$21.6	\$181.6
4.00			\$89.8	\$14.7	\$0.0	\$7.6	\$52.6	\$0.0	\$0.0	\$0.0	\$0.0	\$25.8	\$190.6
NEW UNIT GROWTH			25	25	25	39	40	40	40	41	59	59	392
REVENUE - current (\$000)													
	Rate for 2009												
- Dev. Charge Receipts	\$516.00	Inflation: 2.0%	\$12.7	\$13.0	\$13.4	\$21.5	\$22.1	\$22.8	\$23.4	\$24.1	\$35.4	\$36.5	\$224.9
	Balance:	Positive											
	Rate:	3.5%	\$0.0	(\$4.4)	(\$4.7)	(\$4.2)	(\$3.7)	(\$5.6)	(\$4.6)	(\$3.6)	(\$2.4)	(\$0.6)	(\$33.6)
- Interest on Opening Balance	Rate:	3.5%	(\$2.1)	(\$0.0)	\$0.2	\$0.2	(\$0.8)	\$0.4	\$0.4	\$0.4	\$0.6	\$0.2	(\$0.5)
- Interest on In-year Transactions (excl.int.)	Rate:	3.5%											
TOTAL REVENUE			\$10.6	\$8.6	\$8.9	\$17.5	\$17.6	\$17.6	\$19.2	\$21.0	\$33.6	\$36.1	\$190.8
CLOSING CASH BALANCE			(\$79.2)	(\$85.3)	(\$76.4)	(\$66.5)	(\$101.5)	(\$83.9)	(\$64.7)	(\$43.7)	(\$10.1)	\$0.2	
GENERAL GOVERNMENT CHARGE PER HH													\$516.00

APPENDIX B.4  
TABLE 2 - PAGE 2

TOWNSHIP OF BROCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
GENERAL GOVERNMENT  
NON-RESIDENTIAL DEVELOPMENT CHARGE

4.00 GENERAL GOVERNMENT

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE FROM APPLICABLE RESERVES												
OPENING CASH BALANCE (\$000)		\$0.00	(\$16.80)	(\$15.05)	(\$9.27)	(\$7.04)	(\$16.11)	(\$12.12)	(\$7.69)	(\$2.93)	\$1.79	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS	Shares											
4.00 GENERAL GOVERNMENT - constant (\$000)	Res 80% Non-Res 20%	\$22.5	\$3.6	\$0.0	\$1.8	\$12.2	\$0.0	\$0.0	\$0.0	\$0.0	\$5.4	\$45.4
4.00 GENERAL GOVERNMENT - current (\$000)		\$22.5	\$3.7	\$0.0	\$1.9	\$13.2	\$0.0	\$0.0	\$0.0	\$0.0	\$6.5	\$47.6
NON-RESIDENTIAL SPACE GROWTH												
- Growth in Sq. m		3,444	3,493	3,541	2,424	2,447	2,470	2,493	2,517	2,300	2,320	27,449
REVENUE - current (\$000)	Rate for 2009											
- Dev. Charge Receipts	\$1.77	\$6.1	\$6.3	\$6.5	\$4.6	\$4.7	\$4.8	\$5.0	\$5.1	\$4.8	\$4.9	\$52.8
	Balance: Postive Negative											
- Interest on Opening Balance	Rate: 3.5% 5.5%	\$0.0	(\$0.9)	(\$0.8)	(\$0.5)	(\$0.4)	(\$0.9)	(\$0.7)	(\$0.4)	(\$0.2)	\$0.1	(\$4.7)
- Interest on In-year Transactions (excl.int.)	Rate: 3.5% 5.5%	(\$0.4)	\$0.0	\$0.1	\$0.0	(\$0.2)	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.0)	(\$0.2)
TOTAL REVENUE		\$5.7	\$5.4	\$5.8	\$4.1	\$4.1	\$4.0	\$4.4	\$4.8	\$4.7	\$4.9	\$47.9
CLOSING CASH BALANCE		(\$16.8)	(\$15.1)	(\$9.3)	(\$7.0)	(\$16.1)	(\$12.1)	(\$7.7)	(\$2.9)	\$1.8	\$0.3	
GENERAL GOVERNMENT CHARGE PER SQ. M	\$1.77											

**APPENDIX C**

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***ROADS AND RELATED TECHNICAL APPENDIX***

## APPENDIX C

### ROADS AND RELATED TECHNICAL APPENDIX

This appendix provides the detailed analysis undertaken to establish the development charge rates for the Roads and Related service category in the Township of Brock. The service category includes the road network as well as bridges and culverts, streetlights, intersection improvements, traffic signalization, sidewalks, stormwater management, and other related expenditures.

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

The growth-related road and related infrastructure projects are required to service the demands of new development up to 2031. This forecast is discussed in more detail in Appendix A.

The following tables set out the 2009 to 2031 growth-related capital forecast and the calculation of the development charges for roads. The growth-related capital program for roads and related services was prepared by Township staff in conjunction with an engineering consultant. The projects identified in the capital program are required to service the demands of new development between 2009 and 2031, subject to annual capital budget reviews. Consistent with s.5.(1)7. of the *DCA*, there is no legislated percentage reduction in the eligible growth-related capital cost for the provision of transportation infrastructure.

Tables 1 – 2 provide details of the projects included in the Township-wide roads and related services development charges calculation. The content of the tables is as follows:

Table 1        Roads and Related Capital Program: 2009–2031

Table 2        Calculation of Roads & Related Development Charge

The total cost of the roads capital program is \$19.13 million and provides for the undertaking of projects throughout the Township.

The entire \$19.13 million growth-related capital program is not to be fully recovered from future development charges; approximately \$3.48 million of the program has been identified as a non-growth or benefit to existing share (Table 1). Table 2 also identifies a prior growth share of \$663,900 which will be funded from the existing available roads development charges reserve fund.

The result is a growth-related and development charge recoverable share of the capital program of \$14.99 million (Table 2). The growth-related cost has been allocated 80 per cent (\$11.99 million) to new residential development and 20 per cent (\$3.0 million) to new non-residential development. The allocation of costs is based on shares of population (in new households) and employment growth over the planning period. When the \$11.99 million residential share is divided by the forecast increase in households to 2031 (1,704) a household charge of \$7,037.36 is derived.

The non-residential share of the roads charge (\$3.0 million) is divided by the growth in non-residential floor space to 2031 (78,728). This results in a charge of \$38.08 per square metre.

The roads and related capital program does not contain detailed timing estimates therefore a cash flow analysis was not undertaken.

**TABLE 1  
TOWNSHIP OF BROCK  
ROADS AND RELATED CAPITAL PROGRAM 2009-2031**

Road	From	To	Design Class	Road Needs Improv. Type	Proposed Improv. Type	Reconstruction / Widening						Streetlighting		TOTAL COSTS	Benefit to Existing	Net			
						Width (m)	Length (m)	Road		Storm Sewer		Conc Sidewalks					Unit Cost	Total	
								Unit Cost	Total	Unit Cost	Total	Unit Cost	Total	Unit Cost	Total				
Albert Street South	Hwy 7 & 12	Sunderland Village Limits	R500	REC	RSS	9.5	800	\$1,525	\$1,220,000	\$475	\$380,000	\$125	\$0	\$175	\$140,000	\$1,740,000	\$519,000	\$1,221,000	
Albert Street South	River Street	South Village Limits	ULCI	R2	RSS	9.5	300	\$1,525	\$457,500	\$475	\$142,500	\$125	\$37,500	\$175	\$52,500	\$690,000	\$118,000	\$572,000	
Rynard Street	River Street	North End	SLR	BS	RSS	7.9	90	\$1,000	\$90,000	\$475	\$42,750	\$125	\$11,250	\$175	\$15,750	\$159,750	\$27,000	\$132,750	
Albert Street North	River Street	Park Street	ULCI		RSS	7.9	100	\$1,000	\$100,000	\$475	\$47,500	\$125	\$12,500	\$175	\$17,500	\$177,500		\$177,500	
Albert Street North	Ida Street	North End	SLR	RSS	RSS	7.9	290	\$1,000	\$290,000	\$475	\$137,750	\$125	\$36,250	\$175	\$50,750	\$514,750	\$404,000	\$110,750	
Albert Street North	Park Street	Ida Street	ULCI		RSS	7.9	110	\$1,000	\$110,000	\$475	\$52,250	\$125	\$13,750	\$175	\$19,250	\$195,250		\$195,250	
Ida Street	Albert Street	East End	SLR		RSS	7.9	140	\$1,000	\$140,000	\$475	\$66,500	\$125	\$17,500	\$175	\$24,500	\$248,500		\$248,500	
Waddell Street	Ida Street	North End	SLR	RSS	RSS	7.9	130	\$1,000	\$130,000	\$475	\$61,750	\$125	\$16,250	\$175	\$22,750	\$230,750	\$180,000	\$50,750	
Thompson Road	Albert Street South	Lorne Street	SLCI	R1	RSS	7.9	170	\$1,000	\$170,000	\$475	\$80,750	\$125	\$21,250	\$175	\$29,750	\$301,750	\$19,000	\$282,750	
Park Street	Albert Street	Prince Street	SLR	RSS	RSS	7.9	120	\$1,000	\$120,000	\$475	\$57,000	\$125	\$15,000	\$175	\$21,000	\$213,000	\$167,000	\$46,000	
Park Street	Prince Street	Queen Street	SLR	R1	RSS	7.9	120	\$1,000	\$120,000	\$475	\$57,000	\$125	\$15,000	\$175	\$21,000	\$213,000	\$12,000	\$201,000	
Park Street	Queen Street	King Street	ULR	R1	RSS	7.9	120	\$1,000	\$120,000	\$475	\$57,000	\$125	\$15,000	\$175	\$21,000	\$213,000	\$25,000	\$188,000	
Park Street	King Street	Ann Street South	ULR	R1	RSS	7.9	120	\$1,000	\$120,000	\$475	\$57,000	\$125	\$15,000	\$175	\$21,000	\$213,000	\$25,000	\$188,000	
Park Street	Ann Street South	Laidlaw Street South	SLR	RSS	RSS	7.9	120	\$1,000	\$120,000	\$475	\$57,000	\$125	\$15,000	\$175	\$21,000	\$213,000	\$167,000	\$46,000	
Adelaide Street	12-Cameron Street West	McKay Street	SLR	RSS	RSS	7.9	120	\$1,000	\$120,000	\$450	\$54,000	\$125	\$15,000	\$175	\$21,000	\$210,000	\$192,000	\$18,000	
McKay Street	Laidlaw Street North	York Street	ULR		RSS	7.9	130	\$1,000	\$130,000	\$450	\$58,500	\$125	\$16,250	\$175	\$22,750	\$227,500		\$227,500	
McKay Street	York Street	Adelaide Street	SLR	RSS	RSS	7.9	110	\$1,000	\$110,000	\$450	\$49,500	\$125	\$13,750	\$175	\$19,250	\$192,500	\$153,000	\$39,500	
McKay Street	Adelaide Street	East End	SLR	RSS	RSS	7.9	120	\$1,000	\$120,000	\$450	\$54,000	\$125	\$15,000	\$175	\$21,000	\$210,000	\$167,000	\$43,000	
Beaver Avenue	Hwy 12 & 48	West End Barricade	ULCI		RSS	9.5	100	\$1,345	\$134,500	\$450	\$45,000	\$125	\$12,500	\$175	\$17,500	\$209,500		\$209,500	
Main Street East	Hwy 12	1.0km West of Hwy 12	R400		RSS	7.9	1000	\$1,000	\$1,000,000	\$450	\$450,000	\$125	\$125,000	\$175	\$175,000	\$1,750,000		\$1,750,000	
Main Street East	1.0km West of Hwy 12	James Street	SCR		RSS	7.9	450	\$1,000	\$450,000	\$875	\$393,750	\$125	\$56,250	\$175	\$78,750	\$978,750		\$978,750	
Cedar Beach Road	Concession 5, Thorah	1.0 km N. of Conc. 5	SLR		RSS	7.9	1000	\$1,000	\$1,000,000	\$450	\$450,000	\$123	\$123,000	\$175	\$175,000	\$1,748,000		\$1,748,000	
Cedar Beach Road	1.0 km N. of Conc. 5	Parklawn Blvd	SLR		RSS	7.9	250	\$1,000	\$250,000	\$450	\$112,500	\$123	\$30,750	\$175	\$43,750	\$437,000		\$437,000	
Elmwood Avenue	Parklawn Blvd	120m east of Parklawn Blvd	SLR	CRK	RSS	7.9	120	\$1,000	\$120,000	\$450	\$54,000	\$125	\$15,000	\$175	\$21,000	\$210,000		\$210,000	
Nine Mile Road	Main Street	South End	SLR	CRK	RSS	7.9	500	\$1,000	\$500,000	\$450	\$225,000	\$125	\$62,500	\$175	\$87,500	\$875,000		\$875,000	
Church Street	Mill Street	West End Checkerboard	SLR	R2	RSS	7.9	270	\$1,000	\$270,000	\$450	\$121,500	\$125	\$33,750	\$175	\$47,250	\$472,500	\$52,000	\$420,500	
Church Street	Mill Street	Osborne Street	SLR	R1	RSS	7.9	270	\$1,000	\$270,000	\$450	\$121,500	\$125	\$33,750	\$175	\$47,250	\$472,500	\$27,000	\$445,500	
Mill Street	Church Street	South End Checkerboard	SLR	R2	RSS	7.9	140	\$1,000	\$140,000	\$450	\$63,000	\$125	\$17,500	\$175	\$24,500	\$245,000	\$27,000	\$218,000	
May Street	Church Street	Wood Street	SLR	R2	RSS	7.9	110	\$1,000	\$110,000	\$450	\$49,500	\$125	\$13,750	\$175	\$19,250	\$192,500	\$21,000	\$171,500	
May Street	Wood Street	Sarah Street	SLR	R1	RSS	7.9	210	\$1,000	\$210,000	\$450	\$94,500	\$125	\$26,250	\$175	\$36,750	\$367,500	\$23,000	\$344,500	
Wood Street	May Street	Osborne Street	SLR	RSS	RSS	7.9	180	\$1,000	\$180,000	\$450	\$81,000	\$125	\$22,500	\$175	\$31,500	\$315,000	\$288,000	\$27,000	
York Street	Simcoe Street East	North Street	SLR	RSS	RSS	7.9	100	\$1,000	\$100,000	\$450	\$45,000	\$125	\$12,500	\$175	\$17,500	\$175,000	\$139,000	\$36,000	
Madill Street	Simcoe Street East	Riverdale Road	SLR		RSS	7.9	220	\$1,000	\$220,000	\$450	\$99,000	\$125	\$27,500	\$175	\$38,500	\$385,000		\$385,000	
North Street	Madill Street	East End Checkerboard	SLR		RSS	7.9	170	\$1,000	\$170,000	\$450	\$76,500	\$125	\$21,250	\$175	\$29,750	\$297,500		\$297,500	
Riverdale Road	Madill Street	West End Barricade	SLR		RSS	7.9	280	\$1,000	\$280,000	\$450	\$126,000	\$125	\$35,000	\$175	\$49,000	\$490,000		\$490,000	
Lakeland Crescent	Mara Road	King Street West	SLR		RSS	7.9	610	\$1,000	\$610,000	\$450	\$274,500	\$125	\$76,250	\$175	\$106,750	\$1,067,500		\$1,067,500	
King Street West	Mara Road	West End	SLR	R1	RSS	7.9	430	\$1,000	\$430,000	\$475	\$204,250	\$125	\$53,750	\$175	\$75,250	\$763,250	\$43,000	\$720,250	
Victoria Avenue	Mara Road	0.3 km West of Mara Road	SCR	RSS	RSS	7.9	300	\$1,000	\$300,000	\$780	\$234,000	\$125	\$37,500	\$175	\$52,500	\$624,000	\$418,000	\$206,000	
Victoria Avenue	0.3 km West of Mara Road	Ethel Park Drive	SCR	RSS	RSS	7.9	190	\$1,000	\$190,000	\$450	\$85,500	\$125	\$23,750	\$175	\$33,250	\$332,500	\$263,000	\$69,500	
Victoria Avenue	0.3 km West of Mara Road	Wellington Road	SLR		RSS	7.9	320	\$1,000	\$320,000	\$450	\$144,000	\$125	\$40,000	\$175	\$56,000	\$560,000		\$560,000	
																<b>TOTALS</b>	<b>\$19,131,250</b>	<b>\$3,476,000</b>	<b>\$15,655,250</b>

Notes:  
- 5% Utility Relocations  
- 10% Contingencies  
- 10% Engineering

Legend	
REC	Reconstruction with open ditches
R2	Resurface, double lift of hot mix asphalt
BS	Base and surface
RSS	Reconstruction to urban standards w/ storm sewers
R1	Resurface, single lift of hot mix asphalt
CRK	Crack Repair
PR2	Pulverize, double lift of hot mix asphalt - paved shoulders
SCR	Semi Urban Collector Residential Road
ULCI	Urban Local Commercial / Industrial Road
SLR	Semi Urban Local Residential Road
ULR	Urban Local Residential Road

Prepared by MV  
Checked by MD

**AECOM Project No 42-62077 (109140)**  
**Updated on January 13, 2009**  
**Version 3**

APPENDIX C  
TABLE 2

TOWNSHIP OF BROCK  
CALCULATION OF DEVELOPMENT CHARGES

Service	Project Description	Timing	Total Project Cost	Less Grants /Subsidies	Total Municipal Cost	Replacement and Benefit To Existing	Growth-Related Costs				2009-2031 Discounted Growth-Related Net Capital Costs	
							Prior Growth	2009-2031	Post 2031	Total		
<b>5.0 ROADS &amp; RELATED</b>												
	<b>5.1 Roads and Related Infrastructure</b>											
	All projects		\$ 19,131,250	\$ -	\$ 19,131,250	\$ 3,476,000	\$ 663,878	\$ 14,991,372	\$ -	\$15,655,250	100%	\$14,991,372
	Subtotal Roads and Related Infrastructure		\$ 19,131,250	\$ -	\$ 19,131,250	\$ 3,476,000	\$ 663,878	\$ 14,991,372	\$ -	\$15,655,250		\$14,991,372
	<b>TOTAL ROADS &amp; RELATED</b>		<b>\$ 19,131,250</b>	<b>\$ -</b>	<b>\$ 19,131,250</b>	<b>\$ 3,476,000</b>	<b>\$ 663,878</b>	<b>\$ 14,991,372</b>	<b>\$ -</b>	<b>\$15,655,250</b>		<b>\$14,991,372</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ -

Residential Development Charge Calculation		
Residential Share of 2009-2031 Discounted Growth-Related Capital Program	80%	\$11,993,098
Horizon Year (2031) Growth in Population in Households		1,704
Unadjusted Development Charge Per Household (\$)		<b>\$7,037.36</b>
Non-Residential Development Charge Calculation		
Non-Res. Share of 2009-2031 Discounted Growth-Related Capital Program	20%	\$ 2,998,274
Horizon Year (2031) Growth in Square Metres		78,728
Unadjusted Development Charge Per sq. m (\$)		<b>\$38.08</b>

**APPENDIX D**

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***RESERVE FUNDS***

## APPENDIX D

### DEVELOPMENT CHARGES RESERVE FUNDS

The DCA 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 growth-related net capital costs identified in this study. The opening balances of the development charges reserve funds as at December 31, 2008, have been adjusted to account for current commitments to projects. All of the available reserve fund balances are therefore accounted for in this study.

As shown on Table 1, the December 31, 2008 total reserve fund balance was approximately \$1.16 million.

The application of the available uncommitted balance in each of the reserve funds is discussed in the appendix section related to each service. These funds are assigned to projects in the initial years of the capital program for each service. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis.

**TABLE 1**

**TOWNSHIP OF BROCK  
DEVELOPMENT CHARGES RESERVE FUND BALANCES**

<b>Service</b>	<b>Closing Balance December 31, 2008</b>
Library	\$49,239
Fire Services	\$96,309
Parks and Recreation	\$328,837
Public Works: Buildings & Fleet	\$116,835
General Government	(\$94,273)
Roads & Related	\$663,878
<b>Total</b>	<b>\$1,160,825</b>

**APPENDIX E**

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***LONG-TERM CAPITAL AND OPERATING IMPACTS***

## APPENDIX E

TABLE 1

**TOWNSHIP OF BROCK  
ESTIMATED NET OPERATING COST OF THE PROPOSED  
GROWTH-RELATED CAPITAL PROGRAM  
(in constant 2008 dollars)**

	Net Cost (in 2008 \$)	Estimated Operating Costs (\$000)										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Library, Parks &amp; Recreation</b>												
Cannington Library Expansion	\$25.00 per sq.ft.	\$0	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0	\$250.0
Central - Twin Pad (excludes user fees)	\$10.00 per sq.ft.	\$0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$250.0	\$250.0	\$250.0
Various Parks Expenditures	10% of additional infrastructure	\$12	\$31.5	\$43.3	\$70.5	\$93.5	\$105.3	\$135.5	\$147.3	\$159.0	\$170.8	
<b>Fire Services</b>												
New Sunderland Fire Hall	\$35.00 per sq.ft.	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5	\$52.5
<b>Public Works: Buildings &amp; Fleet</b>												
Works Yard Expansion	\$7.00 per sq.ft.	\$0.0	\$0.0	\$0.0	\$70.0	\$70.0	\$70.0	\$70.0	\$70.0	\$70.0	\$70.0	\$70.0
Additional Vehicles	15% of additional infrastructure	\$0.0	\$10.1	\$17.9	\$17.9	\$101.4	\$109.2	\$190.5	\$190.5	\$190.5	\$190.5	\$194.3
<b>Roads &amp; Related</b>												
New Roads Construction	\$350 per new household	\$8.6	\$17.3	\$26.0	\$39.7	\$53.6	\$67.6	\$81.7	\$96.0	\$116.5	\$137.2	
<b>TOTAL ESTIMATED GROWTH-RELATED OPERATING COSTS (\$000)</b>		<b>\$72.9</b>	<b>\$361.3</b>	<b>\$389.6</b>	<b>\$500.6</b>	<b>\$621.0</b>	<b>\$654.6</b>	<b>\$780.3</b>	<b>\$1,056.3</b>	<b>\$1,088.5</b>	<b>\$1,124.7</b>	

## APPENDIX E

## TABLE 2

TOWNSHIP OF BROCK  
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Growth Related Projects	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)	2017 (\$000)	2018 (\$000)	TOTAL (\$000)
<b>LIBRARY, PARKS &amp; RECREATION</b>											
Total Net Cost (1)	134.1	214.1	134.1	289.1	230.2	117.5	2,302.8	6,277.5	117.5	117.5	9,934.5
Net Cost From Development Charges (2)	40.1	40.1	40.1	40.1	47.2	40.1	1,962.5	412.2	40.1	40.1	2,702.3
Net Cost From Non-DC Sources	94.1	174.1	94.1	249.1	183.1	77.4	340.3	5,865.3	77.4	77.4	7,232.2
- Discount Portion (3)	4.5	4.5	4.5	4.5	5.2	4.5	218.1	45.8	4.5	4.5	300.3
- Prior Growth (4)	16.6	96.6	16.6	134.1	64.8	0.0	49.2	0.0	0.0	0.0	378.1
- Replacement	73.0	73.0	73.0	110.5	113.0	73.0	73.0	73.0	73.0	73.0	807.4
- For Post 2018 Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,746.5	0.0	0.0	5,746.5
<b>FIRE SERVICES</b>											
Total Net Cost (1)	1,547.5	83.5	50.5	96.5	53.5	55.5	57.5	58.5	18.5	18.5	2,039.8
Net Cost From Development Charges (2)	441.8	44.1	9.3	54.4	9.6	9.7	9.9	10.0	6.5	6.5	601.8
Net Cost From Non-DC Sources	1,105.7	39.4	41.2	42.1	43.9	45.7	47.6	48.5	12.0	12.0	1,438.0
- 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
- Prior Growth (4)	96.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.3
- Replacement	997.4	27.4	29.2	30.1	31.9	33.8	35.6	36.5	0.0	0.0	1,221.8
- For Post 2018 Growth (5)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	119.8
<b>PUBLIC WORKS: BUILDINGS &amp; FLEET</b>											
Total Net Cost (1)	57.5	124.5	109.5	1,557.5	614.5	109.5	599.5	57.5	57.5	82.5	3,370.0
Net Cost From Development Charges (2)	0.0	0.0	1.9	0.0	501.3	46.8	23.8	0.0	0.0	0.0	573.8
Net Cost From Non-DC Sources	57.5	124.5	107.6	1,557.5	113.2	62.7	575.7	57.5	57.5	82.5	2,796.2
- Discount Portion (3)	0.0	0.0	0.2	0.0	55.7	5.2	2.6	0.0	0.0	0.0	63.8
- Prior Growth (4)	0.0	67.0	49.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.8
- Replacement	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	524.6
- For Post 2018 Growth (5)	5.0	5.0	5.0	1,505.0	5.0	5.0	520.6	5.0	5.0	30.0	2,091.0
<b>GENERAL GOVERNMENT</b>											
Total Net Cost (1)	124.7	20.0	0.0	10.0	105.0	0.0	0.0	0.0	0.0	30.0	289.7
Net Cost From Development Charges (2)	112.3	18.0	0.0	9.0	60.8	0.0	0.0	0.0	0.0	27.0	227.0
Net Cost From Non-DC Sources	12.5	2.0	0.0	1.0	44.3	0.0	0.0	0.0	0.0	3.0	62.7
- Discount Portion (3)	12.5	2.0	0.0	1.0	6.8	0.0	0.0	0.0	0.0	3.0	25.2
- Prior Growth (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement	0.0	0.0	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	37.5
- For Post 2018 Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL GENERAL SERVICES</b>											
Total Net Cost (1)	1,863.9	442.1	294.1	1,953.1	1,003.2	282.5	2,959.7	6,393.5	193.5	248.5	15,634.0
Net Cost From Development Charges (2)	594.1	102.2	51.3	103.5	618.8	96.6	1,996.2	422.2	46.6	73.6	4,104.9
Net Cost From Non-DC Sources	1,269.7	339.9	242.8	1,849.7	384.4	185.9	963.6	5,971.3	146.9	174.9	11,529.1
- Discount Portion (3)	16.9	6.5	4.7	5.5	67.7	9.7	220.7	45.8	4.5	7.5	389.2
- Prior Growth (4)	112.9	163.6	66.5	134.1	64.8	0.0	49.2	0.0	0.0	0.0	591.2
- Replacement	1,122.8	152.8	154.6	193.1	234.9	159.2	161.0	161.9	125.4	125.4	2,591.3
- For Post 2018 Growth (5)	17.0	17.0	17.0	1,517.0	17.0	17.0	532.6	5,763.6	17.0	42.0	7,957.4

ROADS AND RELATED	To 2031
Total Net Cost (1)	19,131.3
Net Cost From Development Charges (2)	14,991.4
Net Cost From Non-DC Sources	4,139.9
- Discount Portion (3)	0.0
- Prior Growth (4)	663.9
- Replacement	3,476.0
- For Post 2031 Growth (5)	0.0

Notes: (1) For total growth-related capital forecast see Appendix B and C.

(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 growth-related capital forecast identified as prior growth (to be funded from present Development Charge reserve fund balances).

(5) Post 2018 growth related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required