

# **HEMSON**

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Consulting Ltd.

30 St. Patrick Street, Suite 1000, Toronto, Ontario, Canada M5T 3A3  
Facsimile (416) 595-7144 Telephone (416) 593-5090  
e-mail: hemson@hemson.com

## MEMORANDUM

**Date:** November 12, 2009

**Re:** 2009 Development Charges Background Study Update

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### **BACKGROUND**

On May 4, 2009, Council of the City of Brantford enacted a new development charges by-law (Chapter 261 of City of Brantford Municipal Code) that provides for the implementation of new development charges rates to recover a share of the growth-related costs associated with emplacing the infrastructure necessary to meet the servicing needs of new development.

The City's process leading to the enactment of the new by-law included significant consultation with the stakeholders, most importantly the representatives of the landowners; developers; and construction industry active in the City of Brantford. The consultative process included the valuable exchange of information and data between the City's representatives (staff and Hemson Consulting) and those from the development industry; however, not all issues were fully resolved before the passage of the new by-law. The City was in a position where a new by-law needed to be passed as the former by-law was set to expire and it was legislatively not possible to extend the life of the former by-law.

As a result of the need to enact the new by-law prior to the resolution of all issues, Council directed that the new by-law continue with the current (old) development charges rates until December 31, 2009 and that the new rates not come into force

until January 1, 2010. Council further directed that City staff and Hemson continue to work with the development industry to further resolve the outstanding issues and concerns. The City's May 4, 2009 DC by-law has been appealed by a number of parties, all of whom participated in the public process and consultation.

Since May 2009, City staff and Hemson have been reviewing the DC Background Study in light of the development submissions. In addition, since completion of the Background Study, other pertinent information has become available and the development charges calculations have been updated to reflect the most current data and costs. More specifically, data and information from the following sources has been incorporated:

- Revised infrastructure data generated from the City's Tangible Capital Assets reporting;
- Project costs and timing adjusted to reflect infrastructure grant funding;
- Capital projects adjusted to reflect City's current capital budget information.

Other adjustments have been made as a result of the review of the Background Study details and consideration of submissions from the development industry.

This memo provides an overview of the key updates and adjustments to the development charges calculations for each applicable service. The memo also provides the revised fully calculated rates. It is recommended that Council endorse the proposed modified rates as outlined in this memo, and become the basis for staff use as part of on-going settlement discussion between the four DC Bylaw appellants.

Historically, the City of Brantford has operated with a one-year approved capital budget. Most municipalities of the size and service delivery responsibility similar to Brantford develop, consider and have Council approve multi-year capital budget and forecasts extending for 5-10 years. These types of medium- to long-term capital budget and plans facilitate the completion of development charges studies. The City's current lack of an approved multi-year capital budget has complicated Brantford's 2009 Development Charges Study. It is understood that the City is moving towards developing a five-year capital budget for Council's consideration and approval. This will significantly benefit the City's next DC study process.

Appended to this report is a more detailed response to the items subject to the Bylaw Appeal. It is important to note that the items subject to the Appeal also largely represent the submissions and comments received as part of the Background Study public process. We would note that there is considerable overlap in the issues

identified in the various submissions, and, rather than addressing each stakeholder's concerns individually, we have attempted to cover the issues under various categories. There are issues raised in the correspondence that are primarily of a policy nature and that are addressed specifically to the Mayor and Members of Council, e.g. request for Council to have regard to the current economic climate and to reduce or defer implementation of the calculated charges. We have not included responses to these issues.

In addition, there is a further Appendix that contains revised Background Study tables reflecting the updates and changes made since May, 2009.

## **OVERVIEW OF CHANGES TO THE DC STUDY**

Based on a full review of all development charges material and comments provided by stakeholders, changes are proposed to the DC Study. The changes are described below:

### **1. Municipal Airport Service**

Hemson recommends that the City reconsider including Municipal Airport as a development charge recovery under the current by-law. It is the consultants' understanding the City is currently completing a Business Plan evaluation of the operating and expansion of the airport. It is also understood that a key directive of the business plan feasibility is that the airport be fully self-supporting and not rely on revenue support from the City. Therefore, it is recommended that this component be removed from the City's DC and that the Airport Business Plan include the consideration and applicability of development charges as a form of financing. Pending the outcome of the Airport Business Plan the City may, in the future, levy development charges for the provision of airport services.

### **2. Library Capital Program**

Since May 2009, the Library Board has approved the recommendations as put forward in the Library Feasibility Study for Expansion. The Study provides for revisions to the timing and scope of future expansions to library services in Brantford. The DC library growth-related capital plan has been adjusted to reflect the Library Feasibility Study for Expansion. The DC-recoverable amount remains the same for library after the revisions; however, the adjustments to timing result in a minor lowering of the calculated library development charge.

### **3. Parks and Recreation Inventory**

Parks and Recreation staff reviewed the parks and recreation inventory to ensure consistency with the inventories compiled as part of the City's tangible capital assets exercise. As a result, a number of changes to the inventories have been made to reflect the most currently available data. The adjustments are relatively minor and have only a marginal impact on the calculated development charges.

### **4. Parks and Recreation Capital Program**

Parks and Recreation staff reviewed and updated the parks and recreation capital program and made a number of changes to reflect the receipt of upper-level government grants and other anticipated contributions. In addition, the scope and timing of the capital program were reviewed in light of the City's capital financing limitations and it is recognized that further changes may occur in response to future fiscal capacity of the City. The following is an overview of the key changes to the capital program:

- Southwest Community Centre currently planned for 2012;
- Wayne Gretzky Aquatics Expansion adjusted to reflect benefit to existing residents;
- Wayne Gretzky Quad Pad arena project updated to reflect current cost estimates and anticipated grants;
- Twinning of Steve Brown/Lion's Arena currently planned for 2014;
- Steve Brown Fieldhouse and Lorne Park and new spray pad removed from current growth-related capital program to further examine need and growth-related component;
- Updated cost allocations to reflect current perspective on benefit to existing shares for the following projects: New Accessible playground identified in 2014; Recreation Facility Design identified in 2015; John Wright Soccer Expansion identified in 2016; and New Skateboard facility identified in 2017.

### **5. Roads and Related Capital Program**

No projects were removed from this category. The consultant and City staff recommend that Council give consideration to making an adjustment to the allocation of the cost of the Roads and Related capital program. Based on a review of

the Roads and Related capital program it is recommended that a 25% Post Period Benefit share be assigned for all projects to be constructed. This allocation is based on the Transportation Master Plan (TMP) service population and employment being 16,720, or 25%, greater than the DC Study forecast.

The basis of this recommendation is that the City is planning a full update of a TMP. It is anticipated that the new TMP will identify an updated list of growth-related road projects and costs. When the updated TMP is completed, it is recommended that the City review the Roads and Related component of the development charges to reflect the updated growth-related roads capital needs.

## **6. Water and Wastewater Services Capital Program**

City staff has undertaken a detailed review of the water and wastewater growth-related capital programs in the context of the City's current projected 2031 population. The review determined that the capital program contained in the DC Background Study provided for meeting the servicing needs of a larger population than the City is currently restricted to under the Provincial growth allocation for the City of Brantford. Furthermore, it was determined that some of the works and a share of some works, as identified in the Growth Management Study, were actually designed to service lands not with the City's current boundary or not currently designated for development. The result of these findings has led to a reduction in the scope and costs of the water and wastewater growth-related capital program.

The growth-related project list includes the provision for studies to examine the water and wastewater infrastructure needs of the City to servicing the lands and growth to 2031, as identified in the City's recently updated Official Plan. When the water and wastewater servicing studies are completed, it is recommended that the City review the water and wastewater components of development charges to reflect the updated growth-related water and wastewater capital needs.

## **CONCLUSION**

The impact of these proposed changes are lower calculated development charges; the updated charges are shown on Exhibit 1. Exhibit 2 provides a comparison of the amended calculated rates with those adopted in May 2009 (currently in effect). The following is a summary of the revised calculated rates:

**City of Brantford**  
**2009 Development Charges Study**  
**Revised Fully Calculated Rates and Comparison with Existing Charges**

<b>CHARGE</b>	<b>May 2009</b>	<b>Nov. 2009 Revised</b>	<b>Difference in</b>	
	<b>Background</b>	<b>Calculated</b>	<b>Charge</b>	
	<b>Study (1)</b>	<b>Charge</b>		
Singles/Semis	\$21,861	\$15,583	(\$6,278)	-29%
Rows and Other Multiples	\$14,954	\$10,659	(\$4,295)	-29%
Large Apartments	\$11,393	\$8,122	(\$3,271)	-29%
Small Apartments	\$9,970	\$7,106	(\$2,864)	-29%
Infill - Singles/Semis	\$15,959	\$11,714	(\$4,245)	-27%
Infill - Rows and Other Multiples	\$10,916	\$8,012	(\$2,904)	-27%
Infill - Large Apartments	\$8,316	\$6,105	(\$2,211)	-27%
Infill - Small Apartments	\$7,278	\$5,342	(\$1,936)	-27%
Non-Residential (sq. m)	\$82.26	\$55.23	(\$27.03)	-33%
Industrial (sq. m)	\$82.26	\$55.23	(\$27.03)	-33%

<b>CHARGE</b>	<b>Current</b>	<b>Nov. 2009 Revised</b>	<b>Difference in</b>	
	<b>In-Force</b>	<b>Calculated</b>	<b>Charge</b>	
	<b>Charge(2)</b>	<b>Charge</b>		
Singles/Semis	\$9,305	\$15,583	\$6,278	67%
Rows and Other Multiples	\$6,505	\$10,659	\$4,154	64%
Large Apartments	\$6,625	\$8,122	\$1,497	23%
Small Apartments	\$3,915	\$7,106	\$3,191	82%
Infill - Singles/Semis	\$4,763	\$11,714	\$6,951	146%
Infill - Rows and Other Multiples	\$3,329	\$8,012	\$4,683	141%
Infill - Large Apartments	\$3,175	\$6,105	\$2,930	92%
Infill - Small Apartments	\$2,021	\$5,342	\$3,321	164%
Non-Residential (sq. m)	\$68.00	\$55.23	(\$12.77)	-19%
Industrial (sq. m)	\$59.61	\$55.23	(\$4.38)	-7%

## Notes:

(1) Fully calculated rates in the May 2009 Background Study and set to come into force on January 1, 2010.

(2) Rate from the previous DC by-law that continue to be applicable until December 31, 2009.

EXIHIBIT 1

CITY OF BRANTFORD  
 2009 DEVELOPMENT CHARGES STUDY  
 REVISED FULLY CALCULATED RATES  
 (as of November 3, 2009)

SERVICE	Residential Charge By Unit Type				Non-Residential Charge Per Square Metre of GFA
	Single & Semi- Detached	Rows & Other Multiples	Large Apartment over 70 sq. m	Small Apartment 70 sq. m or less	
Fire Department	\$227	\$155	\$118	\$104	\$1.22
Police Service	\$68	\$46	\$35	\$31	\$0.37
Public Library	\$893	\$611	\$466	\$407	\$0.00
Parks & Recreation	\$3,859	\$2,640	\$2,011	\$1,760	\$0.00
Public Transit	\$163	\$111	\$85	\$74	\$0.88
Municipal Parking	\$577	\$395	\$301	\$263	\$3.10
Municipal Airport	\$0	\$0	\$0	\$0	\$0.00
Land Ambulance	\$28	\$19	\$14	\$13	\$0.14
Public Works: Buildings & Fleet	\$187	\$128	\$98	\$85	\$1.01
General Government	\$61	\$42	\$32	\$28	\$0.32
<b>General Services Charge</b>	<b>\$6,063</b>	<b>\$4,147</b>	<b>\$3,160</b>	<b>\$2,765</b>	<b>\$7.04</b>
Roads And Related	\$7,033	\$4,811	\$3,666	\$3,207	\$35.82
Water Services	\$1,541	\$1,054	\$803	\$703	\$7.64
Waste Water Services	\$946	\$647	\$493	\$431	\$4.73
Engineered Services Charge	\$9,520	\$6,512	\$4,962	\$4,341	\$48.19
<b>TOTAL DEVELOPMENT CHARGE</b>	<b>\$15,583</b>	<b>\$10,659</b>	<b>\$8,122</b>	<b>\$7,106</b>	<b>\$55.23</b>

**EXHIBIT 2**

**CITY OF BRANTFORD  
2009 DEVELOPMENT CHARGES STUDY  
COMPARISON OF REVISED RATES AND BY-LAW RATES  
(as of November 3, 2009)**

<b>Residential Charge (Single Detached Unit)</b>	<b>May 2009 Background Study Charge SDU</b>	<b>Revised Residential Charge SDU</b>	<b>Difference in Charge</b>	
Fire Department	\$227	\$227	\$0	0%
Police Service	\$68	\$68	\$0	0%
Public Library	\$998	\$893	(\$105)	-11%
Parks & Recreation	\$4,694	\$3,859	(\$835)	-18%
Public Transit	\$163	\$163	\$0	0%
Municipal Parking	\$577	\$577	\$0	0%
Municipal Airport	\$365	\$0	(\$365)	0%
Land Ambulance	\$28	\$28	\$0	0%
Public Works: Buildings & Fleet	\$187	\$187	\$0	0%
General Government	\$61	\$61	\$0	0%
<b>General Services Charge Per Unit</b>	<b>\$7,368</b>	<b>\$6,063</b>	<b>(\$1,305)</b>	<b>-18%</b>
Roads And Related	\$9,311	\$7,033	(\$2,278)	-24%
Water Services	\$3,018	\$1,541	(\$1,477)	-49%
Waste Water Services	\$2,164	\$946	(\$1,218)	-56%
<b>Engineered Services Charge Per Unit</b>	<b>\$14,493</b>	<b>\$9,520</b>	<b>(\$4,973)</b>	<b>-34%</b>
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$21,861</b>	<b>\$15,583</b>	<b>(\$6,278)</b>	<b>-29%</b>

<b>Non-Residential Charge</b>	<b>May 2009 Background Study Charge Sq. m</b>	<b>Revised Non-Residential Charge Sq. m</b>	<b>Difference in Charge</b>	
Fire Department	\$1.22	\$1.22	\$0.00	0%
Police Service	\$0.37	\$0.37	\$0.00	0%
Public Library	\$0.00	\$0.00	\$0.00	0%
Parks & Recreation	\$0.00	\$0.00	\$0.00	0%
Public Transit	\$0.88	\$0.88	\$0.00	0%
Municipal Parking	\$3.10	\$3.10	\$0.00	0%
Municipal Airport	\$1.96	\$0.00	(\$1.96)	-100%
Land Ambulance	\$0.14	\$0.14	\$0.00	0%
Public Works: Buildings & Fleet	\$1.01	\$1.01	\$0.00	0%
General Government	\$0.32	\$0.32	\$0.00	0%
<b>General Services Charge Per sq. m</b>	<b>\$9.00</b>	<b>\$7.04</b>	<b>(\$1.96)</b>	<b>-22%</b>
Roads And Related	\$47.42	\$35.82	(\$11.60)	-24%
Water Services	\$15.07	\$7.64	(\$7.43)	-49%
Waste Water Services	\$10.77	\$4.73	(\$6.04)	-56%
<b>Engineered Services Charge Per sq. m</b>	<b>\$73.26</b>	<b>\$48.19</b>	<b>(\$25.07)</b>	<b>-34%</b>
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$82.26</b>	<b>\$55.23</b>	<b>(\$27.03)</b>	<b>-33%</b>

**APPENDIX A – RESPONSE TO STAKEHOLDER COMMENTS**

The following section responds to written and verbal stakeholder comments received during the DC Study process.

## **1. Gross Versus Net Population Methodology**

Hemson is of the opinion that the theoretical “freed up” capacity, attained through less people residing in the existing community, remains as a benefit to the existing community and should not be used to reduce the ability to recover future development charges from new development. The gross population methodology ensures that future development can attain the historic average level of service enjoyed by the existing community.

It is noted also that there is no requirement under the *DCA* to calculate service levels based on population figures (whether ‘net’ population or population in new units). Nor is there a requirement that service level calculations account for any infrastructure capacity that might be created by the decline in population in the existing base in the future. In any case, it is not, in our view, reasonable or equitable to attribute the benefit of this theoretical “freed up” capacity to growth and it is within Council's jurisdiction to decide how to estimate the increase in need for services attributable to anticipated development.

The *DCA* does, however, limit maximum permissible funding envelopes through Council's approved growth-related capital funding program, ten-year average historic service levels, and allowances for uncommitted excess capacity.

## **2. Impact of Reducing Growth Forecast**

### **Engineered Services**

The growth forecast is based on the build-out of the City's existing boundary (assumed to be 2031); forecast population at build-out is consistent with the Provincial *Growth Plan* target for the City. There would be a marginal impact on rates if the growth projections were reduced by extending the build-out past 2031. This would result in some projects, or shares of projects, being moved from the “net growth related” column to the “post period benefit” column reducing the amount of the capital program eligible for recovery in the DC planning period (numerator). However, the denominator in the rate calculation (forecast growth) would also be reduced, which would result in a similar charge. For Roads and Related infrastructure, a 25% allocation to post period benefit has been made to account for the difference between the TMP growth forecast and the DC growth forecast.

## **General Services**

Lowering the amount of growth forecast in the ten-year planning period would lower the maximum allowable funding envelopes for general services. This in turn would reduce the size of the capital programs eligible for recovery in the ten-year planning period. However, similar to the case described above, when rates are calculated the denominator (forecast growth) will also have been reduced, resulting in similar charges. Timing of growth and capital expenditures can slightly affect rates but this is generally minor. For services that have growth-related capital programs under the maximum allowable funding envelopes, rates are increased by lowering the amount of growth forecast in the ten-year planning period.

### **3. Impact of Six Nations Issues on Growth Forecast**

Some development sites in the City of Brantford have been affected by actions taken by Six Nations groups. Although long-term actions would have an impact on future residential and non-residential growth, the DC forecasts assume that issues will be resolved. This assumption is consistent with other forecasts.

### **4. Replacement/Benefit to Existing Shares Understated**

As described in Part 1, replacement/benefit to existing shares were amended for several parks and recreation projects. Other benefit to existing shares were reviewed and no other changes are proposed.

### **5. Replacement Costs in Inventories**

We reviewed the inventory replacement costs. Changes have been made to Parks and Recreation inventory described in Part 1 of this response. Other inventories were reviewed and no changes were identified.

### **6. Size and Timing of Capital Plans**

Significant changes have been made to the capital programs for Library, Parks and Recreation, Water Services and Wastewater Services. In many cases projects have been pushed back and the general size of the programs has been reduced. The revised capital plans are very reasonable. Capital plans for other services were examined and no changes were made.

### **7. Post Period Benefit for Engineered Services**

As mentioned in Part 1, the Roads and Related service has been revised to include a post period benefit of 25%. The water and wastewater capital programs have also been revised. No additional changes are proposed.

## **8. Roads Capital Program**

The projects in the roads capital program were reviewed along with the costs. The roads capital program was deemed reasonable. It is important to note that the costs in the capital program reflect 2008 prices.

## **9. Eligibility of Municipal Parking Service**

Development charges can be recovered for municipal parking infrastructure under the DCA. As the City experiences residential and non-residential growth there will be an increased need for parking lots. Many municipalities across Ontario levy parking development charges.

User fees recovered through paid parking are used to fund the operating costs associated with operation, maintenance and replacement of existing facilities. User fees are not a funding source used to build new growth-related facilities.

Council has determined that new parking lots will be required due to new growth and this cannot be adequately accommodated in the City's existing facilities. As the proposed new parking garage is an addition to the City's inventory, no replacement/benefit to existing share has been identified.

The development charge in respect of parking is, however, limited by the average historic service level in the City.

## **10. Grants Secured Following the Passing of DC by-law**

The DCA does not require a municipality to update its development charges by-law if new grants are received for growth-related projects. If grants are received and applied to growth-related projects identified in the background study, the development charges reserve fund balance will increase which would result in a larger opening balance in the next DC update. This may result in lower development charges, all other factors being equal.

## **11. Former Lot Coverage Cap for Industrial Development**

The City made the policy choice to remove the minimum and maximum 20% coverage rate as it was confusing and difficult to administer. The new by-law based the industrial charge on the actual building size with the charge capped when 25% lot coverage is reached.

**12. Consideration Should Be Given to the Trend That Number of Employees per Hectare Is Declining as the City Shifts from Manufacturing to Warehouse and Distribution**

A ratio of 92 square metres per employee for employment land employment was used in the DC Study. This is on the mid- to high-side when compared to other municipalities in Southern Ontario.

**13. Residential/Non-Residential Split for Water and Sewer Should Be Based on Flow Rates**

As a result of comments received, Hemson conducted an analysis of the sector flow rates for water and wastewater services. It was determined that the residential/non-residential split using flow rates would be very similar to the split using population in new units and employment. No change is proposed.

**14. Consideration Should Be Given to Basing the Residential/Non-Residential Split on Net Population Rather Than Population in New Units**

The objective is to split growth-related costs to shares of new growth expected in each sector since it is new growth that will pay the development charge. Therefore, gross population was used because it the most appropriate way of measuring new residential growth.

**15. Water/Wastewater Projects Outside the City's Current Boundary**

City Staff have confirmed the capital programs for water and wastewater now (with the proposed changes) only include projects related to growth within the City's current boundary.

**16. Land Costs**

Land costs in the DC Study are based on a City-wide average of recent land sales that was acquired through RealTrack – an online real estate database. They are based on 2007-2008 transactions with land sizes which are comparable to existing municipal facilities.

**17. Calculation of Infill Charge**

A municipality has the ability to reduce charges in defined areas as long as the revenue shortfalls are not made up through increasing charges in other areas. The City's infill charge is valid.

## **18. Person Per Unit Assumptions**

The person per unit assumptions in the DC Study were reviewed and are deemed reasonable.

**APPENDIX B – REVISED DC TABLES**

APPENDIX B.3  
TABLE 2

CITY OF BRANTFORD  
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 LIBRARY</b>												
<b>3.1 New Branch Library</b>												
	Land (0.5 ha)	2016	\$ 290,000	\$ -	\$ 290,000	\$ -	\$ -	\$ 290,000	\$ -	\$ 290,000	90%	\$ 261,000
	Building (13,000 sq. ft.)	2016	\$ 3,900,000	\$ -	\$ 3,900,000	\$ -	\$ -	\$ 3,807,326	\$ 92,674	\$ 3,900,000	90%	\$ 3,426,593
	Materials	2016	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ 150,000	\$ 150,000	90%	\$ -
	Furniture and Equipment	2016	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000	90%	\$ -
	Circulation Equipment	2016	\$ 52,000	\$ -	\$ 52,000	\$ -	\$ -	\$ -	\$ 52,000	\$ 52,000	90%	\$ -
	Subtotal New Branch Library		\$ 4,492,000	\$ -	\$ 4,492,000	\$ -	\$ -	\$ 4,097,326	\$ 394,674	\$ 4,492,000		\$ 3,687,593
<b>3.2 Expansion St. Paul Avenue Branch</b>												
	Provision for Land	2011	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 394,200	\$ 105,800	\$ -	\$ 500,000	90%	\$ 95,220
	Building (3,000 sq. ft.)	2011	\$ 800,000	\$ -	\$ 800,000	\$ -	\$ -	\$ 800,000	\$ -	\$ 800,000	90%	\$ 720,000
	Furniture and Equipment	2011	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ 30,000	90%	\$ 27,000
	Circulation Equipment	2011	\$ 7,800	\$ -	\$ 7,800	\$ -	\$ -	\$ 7,800	\$ -	\$ 7,800	90%	\$ 7,020
	Subtotal Expansion St. Paul Avenue Branch		\$ 1,337,800	\$ -	\$ 1,337,800	\$ -	\$ 394,200	\$ 943,600	\$ -	\$ 1,337,800		\$ 849,240
<b>TOTAL PUBLIC LIBRARY</b>			<b>\$ 5,829,800</b>	<b>\$ -</b>	<b>\$ 5,829,800</b>	<b>\$ -</b>	<b>\$ 394,200</b>	<b>\$ 5,040,926</b>	<b>\$ 394,674</b>	<b>\$ 5,829,800</b>		<b>\$ 4,536,833</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ 504,093

<b>Residential Development Charge Calculation</b>		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	100%	\$4,536,833
10 Year Growth in Population in New Units		15,479
Unadjusted Development Charge Per Capita (\$)		<b>\$293.09</b>
<b>Non-Residential Development Charge Calculation</b>		
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	0%	\$ -
10 Year Growth in Square Metres		399,855
Unadjusted Development Charge Per sq. m (\$)		<b>\$0.00</b>

APPENDIX B.3  
TABLE 3

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
PUBLIC LIBRARY  
RESIDENTIAL DEVELOPMENT CHARGE

3.00 PUBLIC LIBRARY

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE FROM APPLICABLE RESERVES												
OPENING CASH BALANCE (\$000)		\$0.00	\$481.38	\$997.72	\$648.10	\$1,115.22	\$1,613.96	\$2,146.03	\$2,713.10	(\$1,030.46)	(\$529.64)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS	Shares Res Non-Res											
3.00 PUBLIC LIBRARY - constant (\$000)	100% 0%	\$0.0	\$0.0	\$849.2	\$0.0	\$0.0	\$0.0	\$0.0	\$3,687.6	\$0.0	\$0.0	\$4,536.8
3.00 PUBLIC LIBRARY - current (\$000)		\$0.0	\$0.0	\$883.5	\$0.0	\$0.0	\$0.0	\$0.0	\$4,235.9	\$0.0	\$0.0	\$5,119.4
NEW UNIT GROWTH												
- Population in New Units		1,626	1,654	1,682	1,414	1,434	1,455	1,475	1,496	1,607	1,636	15,479
REVENUE - current (\$000)												
- Dev. Charge Receipts	Rate for 2009 \$291.00 Balance: Inflation: 2.0%	\$473.1	\$490.9	\$509.3	\$436.8	\$451.8	\$467.4	\$483.5	\$500.1	\$547.9	\$568.8	\$4,929.6
- Interest on Opening Balance	Rate: 3.5% 5.5%	\$0.0	\$16.8	\$34.9	\$22.7	\$39.0	\$56.5	\$75.1	\$95.0	(\$56.7)	(\$29.1)	\$254.2
- Interest on In-year Transactions (excl.int.)	Rate: 3.5% 5.5%	\$8.3	\$8.6	(\$10.3)	\$7.6	\$7.9	\$8.2	\$8.5	(\$102.7)	\$9.6	\$10.0	(\$44.4)
TOTAL REVENUE		\$481.4	\$516.3	\$533.9	\$467.1	\$498.7	\$532.1	\$567.1	\$492.3	\$500.8	\$549.6	\$5,139.4
CLOSING CASH BALANCE		\$481.4	\$997.7	\$648.1	\$1,115.2	\$1,614.0	\$2,146.0	\$2,713.1	(\$1,030.5)	(\$529.6)	\$20.0	
<b>PUBLIC LIBRARY CHARGE PER CAPITA</b>	<b>\$291.00</b>											

**APPENDIX B.4  
TABLE 1 - PAGE 1**

**CITY OF BRANTFORD  
INVENTORY OF CAPITAL ASSETS  
PARKS & RECREATION DEPARTMENT  
INDOOR RECREATION**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
<b>BUILDINGS (sq.ft.)</b>											
Beckett Adult Leisure Centre	23,819	23,819	23,819	23,819	23,819	23,819	23,819	23,819	23,819	23,819	\$173
Bellview Community Hall	3,542	3,542	3,542	3,542	3,542	3,542	3,542	3,542	3,542	3,542	\$173
Branlyn Community Centre	22,100	22,100	22,100	22,100	22,100	22,100	22,100	22,100	22,100	22,100	\$173
Civic Centre	77,083	77,083	77,083	77,083	77,083	77,083	77,083	77,083	77,083	77,083	\$173
Dufferin Tennis Club	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	\$324
Eagle Place Community Centre	11,760	11,760	11,760	11,760	11,760	11,760	11,760	11,760	13,204	13,204	\$172
Earl Haig Family Fun Park	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	7,400	\$155
Grandview Hall	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	\$173
Jaycees Sports Park Building	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606	\$285
Lions Park Complex	36,663	36,663	36,663	36,663	36,663	36,663	36,663	36,663	36,663	36,663	\$152
Resurrection Community Centre	10,250	10,250	10,250	10,250	10,250	10,250	10,250	10,250	10,250	10,250	\$173
TB Constain/SC Johnson CC			16,430	16,430	16,430	16,430	16,430	16,430	16,430	16,430	\$173
Tranquility Hall	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	\$173
Wayne Gretzky Sports Centre	125,749	125,749	125,749	125,749	125,749	125,749	125,749	125,749	125,749	125,749	\$266
Woodman Community Centre	11,873	11,873	11,873	11,873	11,873	11,873	11,873	11,873	11,873	11,873	\$173
<b>Total (sq.ft.)</b>	<b>340,140</b>	<b>340,140</b>	<b>356,570</b>	<b>356,570</b>	<b>356,570</b>	<b>356,570</b>	<b>356,570</b>	<b>356,570</b>	<b>358,014</b>	<b>358,014</b>	
<b>Total (\$000)</b>	<b>\$70,018.3</b>	<b>\$70,018.3</b>	<b>\$72,852.5</b>	<b>\$72,852.5</b>	<b>\$72,852.5</b>	<b>\$72,852.5</b>	<b>\$72,852.5</b>	<b>\$72,852.5</b>	<b>\$73,101.3</b>	<b>\$73,101.3</b>	

											UNIT COST (\$/ha)
<b>LAND (ha)</b>											
Beckett Adult Leisure Centre	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$580,000
Bellview Community Hall	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$580,000
Branlyn Community Centre	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	\$580,000
Civic Centre	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	\$580,000
Dufferin Tennis Club	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	\$580,000
Eagle Place Community Centre	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	\$580,000
Earl Haig Family Fun Park	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	\$580,000
Grandview Hall	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$580,000
Lions Park Complex	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	\$580,000
Resurrection Community Centre	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$580,000
TB Constain/SC Johnson CC	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$580,000
Tranquility Hall	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$580,000
Wayne Gretzky Sports Centre	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	\$580,000
Woodman Community Centre	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$580,000
<b>Total (ha)</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	<b>18.36</b>	
<b>Total (\$000)</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	<b>\$10,650.9</b>	

<b>FURNITURE AND EQUIPMENT (\$)</b>											
Beckett Adult Leisure Centre	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600	\$47,600
Bellview Community Hall	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084	\$7,084
Branlyn Community Centre	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000	\$37,000
Civic Centre	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Dufferin Tennis Club	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Eagle Place Community Centre	\$23,520	\$23,520	\$23,520	\$23,520	\$23,520	\$23,520	\$23,520	\$23,520	\$23,520	\$26,408	\$26,408
Earl Haig Family Fun Park	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Grandview Hall	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240	\$9,240
Jaycees Sports Park Building	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Lions Park Complex	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
Resurrection Community Centre	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500	\$20,500
TB Constain/SC Johnson CC			\$11,600	\$11,600	\$11,600	\$11,600	\$11,600	\$11,600	\$11,600	\$11,600	\$11,601
Tranquility Hall	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050	\$4,050
Wayne Gretzky Sports Centre	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000	\$220,000
Woodman Community Centre	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746	\$23,746
<b>Total (\$000)</b>	<b>\$558.7</b>	<b>\$558.7</b>	<b>\$570.3</b>	<b>\$570.3</b>	<b>\$570.3</b>	<b>\$570.3</b>	<b>\$570.3</b>	<b>\$570.3</b>	<b>\$570.3</b>	<b>\$573.2</b>	<b>\$573.2</b>

APPENDIX B.4  
TABLE 1 - PAGE 2

CITY OF BRANTFORD  
INVENTORY OF CAPITAL ASSETS  
PARKS & RECREATION DEPARTMENT  
PARK DEVELOPMENT

Neighbourhood Parks (ha)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Development Cost (\$/ha)
Andrew W. Pate Park	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	\$99,486
Anne Good Park	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	\$99,486
Arctic Park	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$99,486
Bellview Park	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	\$99,486
Brenda Court Park	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$99,486
Bridle Path park	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	\$99,486
Brier Park	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.28	\$99,486
Brookefield Phase 1								0.87	0.87	0.87	\$99,486
Brookefield West Phase 2										0.67	\$99,486
Brooklyn Park	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	\$99,486
Burnley Park	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	\$99,486
Cameron Heights Park	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	\$99,486
Carolina Park	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$99,486
Cedarland Park	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	\$99,486
Centennial Park	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	\$99,486
Central Park	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	\$99,486
Charles Ward Park	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	\$99,486
City View Park	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	\$99,486
Conklin Park	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	\$99,486
Connaught Park	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	\$99,486
Deer Park				1.68	1.68	1.68	1.68	1.68	1.68	1.68	\$99,486
Devereux Park	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	\$99,486
Devon Down Park	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	\$99,486
Donegal Park					2.87	2.87	2.87	2.87	2.87	2.87	\$99,486
Echo Park	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	\$99,486
Edith Monture Park		3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	\$99,486
Edward E. Goold Park							0.50	0.50	0.50	0.50	\$99,486
Elgin Park	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	\$99,486
Empire - Wyndfield Shantz									1.90	1.90	\$99,486
Florence Buchanan Park	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$99,486
Grandwoodlands Park	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.27	\$99,486
Greenbrier Park	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	\$99,486
Greenwood Park	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	\$99,486
Hillcrest Park	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	\$99,486
Holmedale Park	1.65	1.65	1.65	1.65	1.65	1.65	1.34	1.65	1.65	1.65	\$99,486
Iroquois Park	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	\$99,486
Kerr Shaver Terrace	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$99,486
Landsdowne Park	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$99,486
Lynden Hills Park	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	\$99,486
Mayfair Park	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	\$99,486
Mayors Common Park	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	\$99,486

**APPENDIX B.4  
TABLE 1 - PAGE 3**

**CITY OF BRANTFORD  
INVENTORY OF CAPITAL ASSETS  
PARKS & RECREATION DEPARTMENT  
PARK DEVELOPMENT**

Neighbourhood Parks (ha)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Development Cost (\$/ha)
Mission Estates							1.05	1.05	1.05	1.05	\$99,486
Mohawk Canal	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	\$99,486
Moose Park	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$99,486
Orchard Park	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	\$99,486
Parsons Park	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	\$99,486
Pleasant Ridge Park	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	\$99,486
Prince Charles Park	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	\$99,486
Princess Anne Park	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	\$99,486
Recreation Park	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$99,486
Robert Moore Park	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$99,486
Roswell Park	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	\$99,486
Shallow Creek Park	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	\$99,486
Sheri-Mar Park	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$99,486
Silverbridge Park	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	\$99,486
Spring Garden Park	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	\$99,486
Spring St. Buck Park	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	\$99,486
Tranquility Park			1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$99,486
Turtle Pond Park									2.00	2.00	\$99,486
Tutela Park	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	\$99,486
Westdale Park	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$99,486
Wilkes Park	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	\$99,486
Wood Street Park	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	\$99,486
Woodman Park	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	\$99,486
Wynfield West Phase 1											0.31
<b>Total Neighbourhood Parks (ha)</b>	<b>93.30</b>	<b>96.40</b>	<b>97.61</b>	<b>99.29</b>	<b>102.17</b>	<b>101.86</b>	<b>104.59</b>	<b>104.59</b>	<b>108.49</b>	<b>109.47</b>	
<b>Total Development Value (\$000)</b>	<b>\$9,281.6</b>	<b>\$9,590.0</b>	<b>\$9,710.8</b>	<b>\$9,878.3</b>	<b>\$10,164.2</b>	<b>\$10,133.2</b>	<b>\$10,405.1</b>	<b>\$10,405.1</b>	<b>\$10,793.0</b>	<b>\$10,890.5</b>	
<b>Sports Related Parks (ha)</b>											<b>Development Cost (\$/ha)</b>
Bill Little Park	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	\$181,607
Cockshutt Park	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	\$181,607
D'Aubigny Creek Park	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	\$181,607
Dufferin Park	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	\$181,607
George Campbell Park	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	\$181,607
Jaycee Park	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	\$181,607
John Wright Park	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	\$181,607
Mohawk Park	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	\$181,607
Steve Brown Sports Complex	12.67	12.67	12.67	12.67	12.67	12.67	12.67	12.67	12.67	12.67	\$181,607
Waterworks Park- fields	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$181,607
Wayne Gretzky Sports Centre	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	\$181,607
<b>Total Sports Related Parks (ha)</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	<b>62.86</b>	
<b>Total Development Value (\$000)</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	<b>\$11,415.9</b>	

APPENDIX B.4  
TABLE 1 - PAGE 4

CITY OF BRANTFORD  
INVENTORY OF CAPITAL ASSETS  
PARKS & RECREATION DEPARTMENT  
PARK DEVELOPMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Development Cost (\$/ha)
<b>Horticulture Parks (ha)</b>											
Alexandra Park	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$208,086
Armouries Gore					0.12	0.12	0.12	0.12	0.12	0.12	\$208,086
Bell Memorial Park	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$208,086
C.J's Park									0.39	0.39	\$208,086
C.N.R. Gore Park	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$208,086
Dunsdon Park	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$208,086
Fordview Park	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$208,086
Glenhyrst Gardens	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	\$208,086
Glenhyrst Gardens	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$208,086
Golfdale Park	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.96	0.96	0.96	\$208,086
Jubilee Terrace	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	\$208,086
Lincoln Circle	0.13	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	\$208,086
Lincoln Square	0.10	0.10	0.10	0.10	0.10	0.10	0.23	0.23	0.23	0.23	\$208,086
Lorne Park	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	\$208,086
Preston Park	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$208,086
Regent Park	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	\$208,086
Seneca Park	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	\$208,086
St. Andrew's Park		0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$208,086
Tom Thumb Park	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$208,086
Victoria Park	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	\$208,086
War Memorial Park	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$208,086
West Street Gore	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$208,086
<b>Total Horticulture Parks (ha)</b>	<b>15.47</b>	<b>15.59</b>	<b>15.49</b>	<b>15.49</b>	<b>15.61</b>	<b>15.61</b>	<b>15.62</b>	<b>16.28</b>	<b>16.66</b>	<b>16.66</b>	
<b>Total Development Value (\$000)</b>	<b>\$3,219.3</b>	<b>\$3,244.5</b>	<b>\$3,223.7</b>	<b>\$3,223.7</b>	<b>\$3,249.0</b>	<b>\$3,249.0</b>	<b>\$3,249.7</b>	<b>\$3,387.1</b>	<b>\$3,467.5</b>	<b>\$3,467.5</b>	
<b>Development Cost (\$/ha)</b>											
<b>Waterfront Parks (ha)</b>											
Brant's Crossing	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$8,400,000
Cockshutt Boat Launch						0.40	0.40	0.40	0.40	0.40	\$25,600
Fordview Park	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	\$25,600
Gilkison Flats	11.72	11.72	11.72	11.72	11.72	11.72	11.72	11.72	11.72	11.72	\$25,600
<b>Total Waterfront Parks (ha)</b>	<b>15.14</b>	<b>15.14</b>	<b>15.14</b>	<b>15.14</b>	<b>15.14</b>	<b>15.54</b>	<b>15.54</b>	<b>15.54</b>	<b>15.54</b>	<b>15.54</b>	
<b>Total Development Value (\$000)</b>	<b>\$2,082.0</b>	<b>\$2,082.0</b>	<b>\$2,082.0</b>	<b>\$2,082.0</b>	<b>\$2,082.0</b>	<b>\$2,092.3</b>	<b>\$2,092.3</b>	<b>\$2,092.3</b>	<b>\$2,092.3</b>	<b>\$2,092.3</b>	
<b>Development Cost (\$/ha)</b>											
<b>Specialized Parks (ha)</b>											
Bell Homestead	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	\$208,086
Dogford Park								1.40	1.40	1.40	\$99,486
Harmony Square									0.32	0.32	\$6,255,832
Mohawk Park (Community Park)	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	12.70	\$208,086
<b>Total Specialized Parks (ha)</b>	<b>13.28</b>	<b>13.28</b>	<b>13.28</b>	<b>13.28</b>	<b>13.28</b>	<b>13.28</b>	<b>13.28</b>	<b>14.68</b>	<b>15.00</b>	<b>15.00</b>	
<b>Total Development Value (\$000)</b>	<b>\$2,763.4</b>	<b>\$2,763.4</b>	<b>\$2,763.4</b>	<b>\$2,763.4</b>	<b>\$2,763.4</b>	<b>\$2,763.4</b>	<b>\$2,763.4</b>	<b>\$2,902.3</b>	<b>\$4,902.3</b>	<b>\$4,902.3</b>	

APPENDIX B.4  
TABLE 1 - PAGE 5

CITY OF BRANTFORD  
INVENTORY OF CAPITAL ASSETS  
PARKS & RECREATION DEPARTMENT  
PARK DEVELOPMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<b>Maintained Woodlots and Natural Parks</b>												
Brookefield phase 2 blocks 147,149,											\$15,500	
Brookefield phase 2 blocks 150,1152,											\$15,500	
D'Aubigny Creek Park	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	
Edith Monture Forest							\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	
Forestwood Park	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	
Friendship Park	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	
Franklin Grobb Forest								\$31,000	\$31,000	\$31,000	\$31,000	
Jaycee open space	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	
Kerr Shaver Terrace	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	
Mohawk Trail Park	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
Northwest Perched Fen									\$15,500	\$15,500	\$15,500	
Rotary Park								\$15,500	\$15,500	\$15,500	\$15,500	
Royal Oak Park	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	
Shellard Forest						\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	
Waterworks Park	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	
<b>Total Development Value (\$000)</b>	<b>\$205.0</b>	<b>\$205.0</b>	<b>\$205.0</b>	<b>\$205.0</b>	<b>\$205.0</b>	<b>\$220.5</b>	<b>\$236.0</b>	<b>\$282.5</b>	<b>\$298.0</b>	<b>\$329.0</b>		
											<b>Development Cost (\$/ha)</b>	
<b>Cemeteries (ha)</b>												
Greenwood Cemetery						6.47	6.47	6.47	6.47	6.47	6.47	\$99,486
Mount Hope Cemetery						22.88	22.88	22.88	22.88	22.88	22.88	\$208,086
Oakhill Cemetery	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	24.59	\$208,086
Tranquility Cemetery						0.43	0.43	0.43	0.43	0.43	0.43	\$99,486
<b>Total Cemeteries (ha)</b>	<b>24.59</b>	<b>24.59</b>	<b>24.59</b>	<b>24.59</b>	<b>24.59</b>	<b>54.37</b>	<b>54.37</b>	<b>54.37</b>	<b>54.37</b>	<b>54.37</b>	<b>54.37</b>	
<b>Total Development Value (\$000)</b>	<b>\$5,116.6</b>	<b>\$5,116.6</b>	<b>\$5,116.6</b>	<b>\$5,116.6</b>	<b>\$5,116.6</b>	<b>\$10,564.6</b>	<b>\$10,564.6</b>	<b>\$10,564.6</b>	<b>\$10,564.6</b>	<b>\$10,564.6</b>	<b>\$10,564.6</b>	<b>Development Cost (\$/km)</b>
<b>Trails (km)</b>												
Developed Trails	32.1	33.7	36.4	40.6	50.2	50.2	55.2	61.9	67.2	68.0	\$66,000	
<b>Total Trails (km)</b>	<b>32.10</b>	<b>33.70</b>	<b>36.40</b>	<b>40.60</b>	<b>50.20</b>	<b>50.20</b>	<b>55.18</b>	<b>61.85</b>	<b>67.22</b>	<b>68.03</b>		
<b>Total Development Value (\$000)</b>	<b>\$2,118.6</b>	<b>\$2,224.2</b>	<b>\$2,402.4</b>	<b>\$2,679.6</b>	<b>\$3,313.2</b>	<b>\$3,313.2</b>	<b>\$3,641.9</b>	<b>\$4,082.1</b>	<b>\$4,436.5</b>	<b>\$4,490.0</b>		
<b>TOTAL PARKLAND (\$000)</b>	<b>\$ 36,202.4</b>	<b>\$ 36,641.6</b>	<b>\$ 36,919.8</b>	<b>\$ 37,364.5</b>	<b>\$ 38,309.2</b>	<b>\$ 43,752.0</b>	<b>\$ 44,368.8</b>	<b>\$ 45,131.9</b>	<b>\$ 47,970.0</b>	<b>\$ 48,152.0</b>		



**APPENDIX B.4  
TABLE 1 - PAGE 7**

**CITY OF BRANTFORD  
CALCULATION OF SERVICE LEVELS  
PARKS & RECREATION**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Historic Population</b>	85,752	86,084	86,417	87,159	87,908	88,663	89,424	90,192	91,249	92,317

**INVENTORY SUMMARY (\$000)**

Indoor Recreation	\$81,228.0	\$81,228.0	\$84,073.7	\$84,073.7	\$84,073.7	\$84,073.7	\$84,073.7	\$84,073.7	\$84,325.4	\$84,325.4
Parkland	\$36,202.4	\$36,641.6	\$36,919.8	\$37,364.5	\$38,309.2	\$43,752.0	\$44,368.8	\$45,131.9	\$47,970.0	\$48,152.0
Outdoor Buildings	\$6,067.9	\$6,067.9	\$6,067.9	\$6,067.9	\$6,067.9	\$6,111.5	\$6,111.5	\$6,111.5	\$6,111.5	\$6,111.5
<b>Total (\$000)</b>	<b>\$123,498.3</b>	<b>\$123,937.5</b>	<b>\$127,061.5</b>	<b>\$127,506.2</b>	<b>\$128,450.9</b>	<b>\$133,937.3</b>	<b>\$134,554.1</b>	<b>\$135,317.1</b>	<b>\$138,407.0</b>	<b>\$138,588.9</b>

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Service Level
Indoor Recreation	\$947.24	\$943.59	\$972.88	\$964.60	\$956.39	\$948.24	\$940.17	\$932.16	\$924.13	\$913.43	\$944.28
Parkland	\$422.18	\$425.65	\$427.23	\$428.69	\$435.79	\$493.47	\$496.16	\$500.40	\$525.71	\$521.59	\$467.69
Outdoor Buildings	\$70.76	\$70.49	\$70.22	\$69.62	\$69.03	\$68.93	\$68.34	\$67.76	\$66.98	\$66.20	\$68.83
<b>Total (\$/capita)</b>	<b>\$1,440.18</b>	<b>\$1,439.73</b>	<b>\$1,470.33</b>	<b>\$1,462.91</b>	<b>\$1,461.20</b>	<b>\$1,510.64</b>	<b>\$1,504.67</b>	<b>\$1,500.32</b>	<b>\$1,516.81</b>	<b>\$1,501.22</b>	<b>\$1,480.80</b>

**CITY OF BRANTFORD  
CALCULATION OF MAXIMUM ALLOWABLE  
PARKS & RECREATION**

10 Year Average Service Level (1999-2008)      \$1,480.80 per capita

2008 Population      92,317

Population In New Units 2009-2018      15,479

Population In New Units 2009-2031      36,993

	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 Parks &amp; Recreation</b>	\$1,480.80 per capita	\$22,922.1	\$54,779.0	\$138,588.9	\$136,704.0	\$1,885.0	\$21,037.1	\$52,894.0

APPENDIX B.4  
TABLE 2 - PAGE 1

CITY OF BRANTFORD  
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 PARKS &amp; RECREATION</b>												
<b>4.1 Recreation Buildings</b>												
	Southwest Community Centre	2012	\$ 8,000,000	\$ -	\$ 8,000,000	\$ -	\$ -	\$ 8,000,000	\$ -	\$ 8,000,000	90%	\$ 7,200,000
	Wayne Gretzky Aquatics Expansion	2009	\$ 9,000,000	\$ 6,000,000	\$ 3,000,000	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ 1,500,000	90%	\$ -
	Gretzky Quad Pad Arena	2009	\$ 38,882,345	\$ 25,921,563	\$ 12,960,782	\$ 10,787,560	\$ 1,358,626	\$ 814,596	\$ -	\$ 2,173,222	90%	\$ 733,137
	Twinning Steve Brown /Lions Park Arena	2014	\$ 15,000,000	\$ -	\$ 15,000,000	\$ 7,500,000	\$ -	\$ 7,500,000	\$ -	\$ 7,500,000	90%	\$ 6,750,000
	Subtotal Recreation Buildings		\$ 70,882,345	\$ 31,921,563	\$ 38,960,782	\$ 19,787,560	\$ 2,858,626	\$ 16,314,596	\$ -	\$ 19,173,222		\$ 14,683,137
<b>4.2 Parkland Development and Facilities</b>												
	Park Development in New Residential Areas	2009	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	Park Development in New Residential Areas	2010	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	New Youth Park	2010	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	90%	\$ 90,000
	Park Development in New Residential Areas	2011	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	New Spray Pad	2011	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000	90%	\$ 225,000
	Park Development in New Residential Areas	2012	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	Park Development in New Residential Areas	2013	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	Park Development in New Residential Areas	2014	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000	\$ -	\$ 300,000	90%	\$ 270,000
	New Accessible Playground	2014	\$ 250,000	\$ -	\$ 250,000	\$ 100,000	\$ -	\$ 150,000	\$ -	\$ 150,000	90%	\$ 135,000
	Sports field Expansions	2014	\$ 750,000	\$ -	\$ 750,000	\$ -	\$ -	\$ 750,000	\$ -	\$ 750,000	90%	\$ 675,000
	Recreation Facility Design	2015	\$ 275,000	\$ -	\$ 275,000	\$ 68,000	\$ -	\$ 207,000	\$ -	\$ 207,000	90%	\$ 186,300
	Park Development in New Residential Areas	2015	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000	\$ -	\$ 300,000	90%	\$ 270,000
	Park Development in New Residential Areas	2016	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000	\$ -	\$ 300,000	90%	\$ 270,000
	John Wright Soccer Complex expansion	2016	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 250,000	\$ -	\$ 750,000	\$ -	\$ 750,000	90%	\$ 675,000
	New Skateboard Facility	2017	\$ 400,000	\$ -	\$ 400,000	\$ 200,000	\$ -	\$ 200,000	\$ -	\$ 200,000	90%	\$ 180,000
	Park Development in New Residential Areas	2017	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000	\$ -	\$ 300,000	90%	\$ 270,000
	Park Development in New Residential Areas	2018	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 15,515	\$ 284,485	\$ 300,000	90%	\$ 13,963
	Subtotal Parkland Development and Facilities		\$ 5,525,000	\$ -	\$ 5,525,000	\$ 618,000	\$ -	\$ 4,622,515	\$ 284,485	\$ 4,907,000		\$ 4,160,263

APPENDIX B.4  
TABLE 2 - PAGE 2

CITY OF BRANTFORD  
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 PARKS &amp; RECREATION</b>												
<b>4.3 Trail Development</b>												
	New Trail Development	2009	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	90%	\$ -
	Trail / Bikeway Development	2010	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	90%	\$ -
	Trail /Bikeway Improvements	2011	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	90%	\$ -
	New Trail Development	2012	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	90%	\$ -
	Trails/Bikeway Improvements	2013	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	90%	\$ -
	New Trail Development	2015	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	90%	\$ 90,000
	New Trail Development	2017	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000	90%	\$ -
	Subtotal Trail Development		\$ 550,000	\$ 350,000	\$ 200,000	\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 200,000		\$ 90,000
<b>TOTAL PARKS &amp; RECREATION</b>			<b>\$ 76,957,345</b>	<b>\$ 32,271,563</b>	<b>\$ 44,685,782</b>	<b>\$ 20,405,560</b>	<b>\$ 2,858,626</b>	<b>\$ 21,037,111</b>	<b>\$ 384,485</b>	<b>\$ 24,280,222</b>		<b>\$ 18,933,400</b>

Non-Chargeable Growth-Related Net Capital Cost: \$ 2,103,711

<b>Residential Development Charge Calculation</b>		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	100%	\$18,933,400
10 Year Growth in Population in New Units		15,479
Unadjusted Development Charge Per Capita (\$)		<b>\$1,223.13</b>
<b>Non-Residential Development Charge Calculation</b>		
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	0%	\$ -
10 Year Growth in Square Metres		399,855
Unadjusted Development Charge Per sq. m (\$)		<b>\$0.00</b>

APPENDIX B.4  
TABLE 3

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
PARKS & RECREATION  
RESIDENTIAL DEVELOPMENT CHARGE

4.00 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	\$1,150.45	\$3,068.11	\$4,985.35	(\$948.56)	\$786.88	(\$5,993.95)	(\$4,824.76)	(\$3,996.63)	(\$2,344.80)				
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS				Shares													
				Res	Non-Res												
4.00 PARKS & RECREATION - constant (\$000)				100%	0%	\$913.1	\$270.0	\$405.0	\$7,380.0	\$180.0	\$7,830.0	\$546.3	\$945.0	\$450.0	\$14.0	\$18,933.4	
4.00 PARKS & RECREATION - current (\$000)						\$913.1	\$275.4	\$421.4	\$7,831.7	\$194.8	\$8,645.0	\$615.2	\$1,085.5	\$527.2	\$16.7	\$20,526.1	
NEW UNIT GROWTH																	
- Population in New Units				1,626	1,654	1,682	1,414	1,434	1,455	1,475	1,496	1,607	1,636		15,479		
REVENUE - current (\$000)				Rate for 2009													
- Dev. Charge Receipts				\$1,257.00	Inflation:	2.0%	\$2,043.8	\$2,120.5	\$2,200.1	\$1,886.8	\$1,951.7	\$2,018.8	\$2,088.3	\$2,160.2	\$2,366.7	\$2,457.1	\$21,294.0
				Balance:	Positive	Negative											
- Interest on Opening Balance				Rate:	3.5%	5.5%	\$0.0	\$40.3	\$107.4	\$174.5	(\$52.2)	\$27.5	(\$329.7)	(\$265.4)	(\$219.8)	(\$129.0)	(\$646.3)
- Interest on In-year Transactions (excl.int.)				Rate:	3.5%	5.5%	\$19.8	\$32.3	\$31.1	(\$163.5)	\$30.7	(\$182.2)	\$25.8	\$18.8	\$32.2	\$42.7	(\$112.3)
TOTAL REVENUE				\$2,063.6	\$2,193.1	\$2,338.6	\$1,897.8	\$1,930.3	\$1,864.1	\$1,784.4	\$1,913.6	\$2,179.1	\$2,370.8		\$20,535.4		
CLOSING CASH BALANCE				\$1,150.5	\$3,068.1	\$4,985.4	(\$948.6)	\$786.9	(\$5,994.0)	(\$4,824.8)	(\$3,996.6)	(\$2,344.8)	\$9.4				
<b>PARKS &amp; RECREATION CHARGE PER CAPITA</b>				<b>\$1,257.00</b>													

APPENDIX C  
TABLE 1

CITY OF BRANTFORD  
2009 DEVELOPMENT CHARGES STUDY  
ROADS AND RELATED GROWTH-RELATED CAPITAL PROGRAM

ROADS AND RELATED GROWTH-RELATED CAPITAL PROGRAM 2009-2031					Anticipated Timing	Estimated Project Costs (2008\$)								
						Gross Cost (2008\$)1	Grants and Subsidies	Benefit to Existing and Local Shares2		Prior Growth3	Net Growth-Related	Post Period Benefit4	Net DC Recoverable 2009-2031	Notes
Proj #	Road	From	To	Description	Length (m)									
<b>New Projects</b>														
1	Colborne St / Dalhousie St	Downtown	One Way Street Conversion - Phase 2											
	Clarence St	Colborne St	Dalhousie	Widen to 5 lanes / Property Acq / New Traffic/Pedestrian Signals	100	2010 - 2012	\$ 2,300,000	\$ -	3%	\$ 75,000		\$ 2,225,000	\$ 556,000	\$ 1,669,000
2	Clarence St Corridor	Clarence and Grey Intersection				2012 - 2016	\$ 2,600,000	\$ -	0%	\$ -		\$ 2,600,000	\$ 650,000	\$ 1,950,000
3	Shellard Lane	Veterans Memorial	West City Limit	Widen to 4 lanes	3,700	2012 - 2016	\$ 9,900,000	\$ -	28%	\$ 2,775,000		\$ 7,125,000	\$ 1,781,000	\$ 5,344,000
4	Oak Park Rd	Hardy Road	Hwy 403	Widen to 4 lanes; 4L Bridge	1,300	2022 - 2031	\$ 7,000,000	\$ -	14%	\$ 975,000		\$ 6,025,000	\$ 1,506,000	\$ 4,519,000
5	Henry/WGP/Stanley	WGP	Stanley St	Intersection Improvements		2009	\$ 2,800,000	\$ -	0%	\$ -	\$ 250,000	\$ 2,550,000	\$ 638,000	\$ 1,912,000
6	Hardy Road CN Separation	Tollgate Rd	St. Andrew's Dr	4 lane Bridge	750	2027 - 2031	\$ 15,000,000	\$ -	4%	\$ 562,500		\$ 14,437,500	\$ 3,609,000	\$ 10,828,500
7	Hardy Road	Ava Rd	Oak Park Rd	Widen to 4 lanes	3,300	2027 - 2031	\$ 5,800,000	\$ -	43%	\$ 2,475,000		\$ 3,325,000	\$ 831,000	\$ 2,494,000
8	BSAR inclu. Grand River Bridge	Mt Pleasant	Erie Ave	Widen to 4 lanes; 4L Bridge	1,500	2012 - 2016	\$ 8,300,000	\$ -	14%	\$ 1,125,000		\$ 7,175,000	\$ 1,794,000	\$ 5,381,000
9	BSAR Extension	Market St	Colborne St	4 lane arterial road ext; Bridge	3,000	2012 - 2016	\$ 15,000,000	\$ -	15%	\$ 2,250,000		\$ 12,750,000	\$ 3,188,000	\$ 9,562,000
10	Oak Park Rd Arterial Rd	Hardy Road	Colborne St	New 4 lane arterial road; 2 Bridges										
				Road Works	5,000	2027 - 2031	\$ 20,000,000	\$ -	19%	\$ 3,750,000		\$ 16,250,000	\$ 4,063,000	\$ 12,187,000
				River Bridge		2027 - 2031	\$ 15,000,000	\$ -	0%	\$ -		\$ 15,000,000	\$ 3,750,000	\$ 11,250,000
				Second Bridge		2027 - 2031	\$ 2,000,000	\$ -	0%	\$ -		\$ 2,000,000	\$ 500,000	\$ 1,500,000
11	King George Rd	Dunsdon Rd	Norman St	Widen to 5 lanes	425	2009	\$ 400,000	\$ -	80%	\$ 318,750		\$ 81,250	\$ 20,000	\$ 61,250
12	Charing Cross Extension	West St	Henry St	Charing cross extension; CN Bridge	700	2014 - 2018	\$ 26,000,000	\$ -	2%	\$ 525,000		\$ 25,475,000	\$ 6,369,000	\$ 19,106,000
13	Colborne/Dalhousie/Brant/comm Intersection			Intersection Improvements / EA		2012 - 2016	\$ 1,600,000	\$ -	0%	\$ -		\$ 1,600,000	\$ 400,000	\$ 1,200,000
14	Clarence St	Clarence and West Street Intersection				2012 - 2016	\$ 1,800,000	\$ -	0%	\$ -		\$ 1,800,000	\$ 450,000	\$ 1,350,000
15	Wayne Gretzky	Colborne St	Lynden Road	Widen to 6 lanes; 6L Bridges	3,600	2027 - 2031	\$ 15,000,000	\$ -	18%	\$ 2,700,000		\$ 12,300,000	\$ 3,075,000	\$ 9,225,000
16	Grey St	Wayne Gretzky Pkw	Garden Ave	Upgrades		2017 - 2021	\$ 900,000	\$ -	25%	\$ 225,000		\$ 675,000	\$ 169,000	\$ 506,000
17	Rowanwood Ave Extension	Grey St	Elgin St	2 lane road connection	650	2022 - 2026	\$ 1,900,000	\$ -	26%	\$ 487,500		\$ 1,412,500	\$ 353,000	\$ 1,059,500
18	Tollgate Road	St George Rd	King George Rd	Widen to 4 lanes including Bridge	650	2027 - 2031	\$ 2,700,000	\$ -	18%	\$ 487,500		\$ 2,212,500	\$ 553,000	\$ 1,659,500
19	Henry St	Wayne Gretzky Pkw	Garden Ave	Widen to 4 lanes	2,300	2008	\$ 4,800,000	\$ 3,500,000	0%	\$ -	\$ 520,000	\$ 780,000	\$ 195,000	\$ 585,000
20	Oak Park Rd / HWY 403	Hwy 403	Powerline	Interchange & Widen 4 lanes	900	2009	\$ 12,700,000	\$ 2,900,000	0%	\$ -	\$ 1,350,000	\$ 8,450,000	\$ 2,113,000	\$ 6,337,000
<b>Recovery of Projects All Ready Constructed Not Yet Fully Funded</b>														
	BSAR Empire Developments					2003	\$ 9,709,206		54%	\$ 5,242,971	\$ 864,319	\$ 3,601,916	\$ -	\$ 3,601,916
	North West Business Park Phase 2					2003	\$ 4,609,839		10%	\$ 460,984	\$ 250,000	\$ 3,898,855	\$ -	\$ 3,898,855
	Lynden Road-Brantwood Park to WG Parkway					2005	\$ 4,073,577		70%	\$ 2,851,504	\$ 1,000,000	\$ 222,073	\$ -	\$ 222,073
	Road Operation Safety Improvements - Henry St					2006	\$ 250,000		0%	\$ -	\$ 250,000	\$ -	\$ -	\$ -
	North Park/Fairview Intersection Improvements					2007	\$ 893,941		90%	\$ 804,547	\$ 50,000	\$ 39,394	\$ -	\$ 39,394
	Oak Park/Hwy 403 Interchange (included above as part of project 20, the 2007 DC Reserve Fund committed \$1.35 million)					2007								
<b>Growth-Related Studies</b>														
	Transportation (incl. Transit) Master Plan Review and Update Study (every 5 years @ \$300,000 per study)					2009 - 2031	\$ 1,200,000	\$ -	0%	\$ -	\$ -	\$ 1,200,000	\$ -	\$ 1,200,000
<b>TOTAL ROADS AND RELATED GROWTH-RELATED CAPITAL PROGRAM 2009-2031</b>							<b>\$ 194,236,563</b>	<b>\$ 6,400,000</b>		<b>\$ 28,091,256</b>	<b>\$ 4,534,319</b>	<b>\$ 155,210,988</b>	<b>\$ 36,563,000</b>	<b>\$ 118,647,988</b>

Notes:

- Projects and Costs are based on the Transportation Master Plan Update (2007), the 2004 DC Study, and the City's Capital Budget. The costs are in 2008\$ and reflect the City's current cost of works.
- Benefit to Existing Based on the following  
Resurfacing of an existing Urban Road = \$300,000 per KM every 10 Years \$ 750 /m per 25 year planning period (2.5 times per 25 years)
- Prior growth is the share of projects already funded from the roads development charge reserve fund or committed against the reserve fund.
- A 25% Post Period Benefit share has been allocated for all projects to be constructed. The allocation is based on the TMP service population and employment being 17,000 (population plus employment) greater than the DC forecast.  
The City's next TMP will identify the specific areas of change to the capital program.
- The EA for the Shellard Lane widening should be completed for the entire section, although implementation could be phased to match development in the area
- A coordinated Provincial / Federal EA will be required to be completed for the portion of the BSAR extension that was previously recommended to use portions of the Glebe Farm lands. For the portion of the corridor between Market St and the Glebe lands, the City has obtained EA approval, but this may need to be updated prior to implementation.
- Grey St extension may also be implemented in conjunction with future development of the adjacent lands through the Draft Plan Approval process. This could affect implementation timing, and the costs to be borne by the City.
- Grant funds the benefit to existing share.
- Project has a \$2 million Provincial grant and a \$900,000 developer local share contribution. The Provincial grant funds the benefit to existing share of the works. The 2007 DC Reserve Fund continuity committed \$1.35 million to these works.
- The BTE share of projects already constructed based on 2004 DC Study

APPENDIX C  
TABLE 2

CITY OF BRANTFORD  
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES  
ROADS AND RELATED 2009 TO 2031

Ultimate Year Growth in Population in New Units 36,993  
Ultimate Employment Growth 13,093  
Ultimate Growth in Square Metres 763,668

	Growth-Related Capital Forecast									Residential Share		Non-Residential Share		
	Gross Cost (\$000)	Grants and Subsidies (\$000)	Prior Growth (\$000)	Benefit to Existing Share (\$000)	Pre-Built Service (Calculated Oversizing) (\$000)	Total Growth-Related Net Capital Costs (\$000)	Service Discount Required %	\$000	Total Growth-Related Net Capital Costs After Discount (\$000)	\$000	%	\$000	%	\$000
<b>ROADS AND RELATED</b>														
Roads and Related Projects	\$194,236.6	\$6,400.0	\$10,683.8	\$28,091.3	\$36,563.0	\$112,498.5	0%	\$0.0	\$112,498.5	75%	\$84,373.9	25%	\$28,124.6	
<b>TOTAL ROADS AND RELATED</b>	<b>\$194,236.6</b>	<b>\$6,400.0</b>	<b>\$10,683.8</b>	<b>\$28,091.3</b>	<b>\$36,563.0</b>	<b>\$112,498.5</b>	<b>0%</b>	<b>\$0.0</b>	<b>\$112,498.5</b>		<b>\$84,373.9</b>		<b>\$28,124.6</b>	
Unadjusted Development Charge Per Capita (\$)											\$ 2,280.82			
Unadjusted Development Charge Per Sq. M. (\$)													\$ 36.83	

APPENDIX C  
TABLE 3

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
ROADS AND RELATED  
RESIDENTIAL DEVELOPMENT CHARGE

11.0 ROADS AND RELATED

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
OPENING CASH BALANCE FROM APPLICABLE RESERVES	\$4,612,136															
OPENING CASH BALANCE (\$000)			\$4,612.1	(\$4,275.9)	(\$1,052.4)	\$2,486.5	\$1,555.3	\$1,086.0	(\$2,608.8)	(\$6,505.2)	(\$10,634.6)	(\$10,384.2)	(\$10,023.6)	(\$5,986.4)		
2009 to 2031 RESIDENTIAL FUNDING REQUIREMENTS																
ROADS AND RELATED - constant (\$000)			\$12,532.2	\$456.4	\$456.4	\$4,174.4	\$3,757.2	\$6,623.1	\$6,623.1	\$6,623.1	\$2,980.9	\$2,980.9	\$115.0	\$115.0		
ROADS AND RELATED - current (\$000)	2.0%		\$12,532.2	\$465.5	\$474.8	\$4,429.9	\$4,066.9	\$7,312.4	\$7,458.7	\$7,607.8	\$3,492.6	\$3,562.5	\$140.2	\$143.0		
POPULATION GROWTH																
- Population in New Units			1,626	1,654	1,682	1,414	1,434	1,455	1,475	1,496	1,607	1,636	1,665	1,695		
REVENUE - current (\$000)		Rate for 2009														
- Dev. Charge Receipts		\$2,291	Inflation:	2.0%	\$3,725.0	\$3,864.7	\$4,009.8	\$3,438.9	\$3,557.2	\$3,679.5	\$3,806.2	\$3,937.2	\$4,313.5	\$4,478.2	\$4,649.8	\$4,828.6
		Balance:	Postive	Negative												
- Interest on Opening Balance		Rate:	3.5%	5.5%	\$161.4	(\$235.2)	(\$57.9)	\$87.0	\$54.4	\$38.0	(\$143.5)	(\$357.8)	(\$584.9)	(\$571.1)	(\$551.3)	(\$329.3)
- Interest on In-year Transactions (excl.int.)		Rate:	3.5%	5.5%	(\$242.2)	\$59.5	\$61.9	(\$27.3)	(\$14.0)	(\$99.9)	(\$100.4)	(\$100.9)	\$14.4	\$16.0	\$78.9	\$82.0
TOTAL REVENUE			\$3,644.2	\$3,689.0	\$4,013.8	\$3,498.7	\$3,597.6	\$3,617.6	\$3,562.3	\$3,478.5	\$3,743.0	\$3,923.1	\$4,177.4	\$4,581.3		
CLOSING CASH BALANCE			(\$4,275.9)	(\$1,052.4)	\$2,486.5	\$1,555.3	\$1,086.0	(\$2,608.8)	(\$6,505.2)	(\$10,634.6)	(\$10,384.2)	(\$10,023.6)	(\$5,986.4)	(\$1,548.1)		

			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL		
OPENING CASH BALANCE (\$000)			(\$1,548.1)	\$3,320.8	\$7,222.0	\$11,405.1	\$15,885.4	\$20,679.5	\$25,804.3	\$21,010.9	\$16,038.5	\$10,885.5	\$5,550.1			
2009 to 2031 RESIDENTIAL FUNDING REQUIREMENTS																
ROADS AND RELATED - constant (\$000) - constant (\$000)			\$115.0	\$537.0	\$537.0	\$537.0	\$537.0	\$537.0	\$7,749.7	\$7,749.7	\$7,749.7	\$7,749.7	\$7,749.7	\$88,986.0		
ROADS AND RELATED - current (\$000) - current (\$000)			\$145.9	\$694.6	\$708.5	\$722.7	\$737.2	\$751.9	\$11,068.4	\$11,289.8	\$11,515.6	\$11,745.9	\$11,980.8	\$113,048.0		
POPULATION GROWTH																
- Population in New Units			1,726	1,490	1,512	1,535	1,559	1,583	1,688	1,718	1,749	1,780	1,813	36,993		
REVENUE - current (\$000)		Rate for 2009														
- Dev. Charge Receipts		\$2,291	Inflation:	2.0%	\$5,014.7	\$4,414.6	\$4,571.2	\$4,733.7	\$4,902.3	\$5,077.3	\$5,524.3	\$5,734.8	\$5,954.1	\$6,182.5	\$6,420.5	\$106,818.6
		Balance:	Postive	Negative												
- Interest on Opening Balance		Rate:	3.5%	5.5%	(\$85.1)	\$116.2	\$252.8	\$399.2	\$556.0	\$723.8	\$903.2	\$735.4	\$561.3	\$381.0	\$194.3	
- Interest on In-year Transactions (excl.int.)		Rate:	3.5%	5.5%	\$85.2	\$65.1	\$67.6	\$70.2	\$72.9	\$75.7	(\$152.5)	(\$152.8)	(\$152.9)	(\$153.0)	(\$152.9)	
TOTAL REVENUE			\$5,014.8	\$4,595.9	\$4,891.6	\$5,203.1	\$5,531.2	\$5,876.8	\$6,275.0	\$6,317.4	\$6,362.5	\$6,410.5	\$6,461.8			
CLOSING CASH BALANCE			\$3,320.8	\$7,222.0	\$11,405.1	\$15,885.4	\$20,679.5	\$25,804.3	\$21,010.9	\$16,038.5	\$10,885.5	\$5,550.1	\$31.1			
ROADS AND RELATED CHARGE PER CAPITA	\$2,291.00															

APPENDIX C  
TABLE 4

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
ROADS AND RELATED  
NON-RESIDENTIAL DEVELOPMENT CHARGE

11.0 ROADS AND RELATED

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE FROM APPLICABLE RESERVES	\$1,537,379													
OPENING CASH BALANCE (\$000)			\$1,537.4	(\$1,175.0)	\$167.3	\$1,632.5	\$1,746.1	\$2,040.4	\$1,291.9	\$525.2	(\$259.5)	(\$51.5)	\$188.0	\$1,642.4
2009 to 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS														
ROADS AND RELATED - constant (\$000)			\$4,177.4	\$152.1	\$152.1	\$1,391.5	\$1,252.4	\$2,207.7	\$2,207.7	\$2,207.7	\$993.6	\$993.6	\$38.3	\$38.3
ROADS AND RELATED - current (\$000)	2.0%		\$4,177.4	\$155.2	\$158.3	\$1,476.6	\$1,355.6	\$2,437.5	\$2,486.2	\$2,535.9	\$1,164.2	\$1,187.5	\$46.7	\$47.7
NON-RESIDENTIAL GROWTH														
- Growth in Sq. m			41,462	42,093	42,734	40,304	40,875	41,455	42,043	42,640	32,947	33,302	33,660	34,023
REVENUE - current (\$000)		Rate for 2009												
- Dev. Charge Receipts		\$35.82	\$1,485.2	\$1,537.9	\$1,592.6	\$1,532.1	\$1,584.8	\$1,639.5	\$1,696.0	\$1,754.4	\$1,382.7	\$1,425.6	\$1,469.7	\$1,515.3
		Balance:												
		Inflation:												
		Positive												
		Negative												
- Interest on Opening Balance		Rate:	\$53.8	(\$64.6)	\$5.9	\$57.1	\$61.1	\$71.4	\$45.2	\$18.4	(\$14.3)	(\$2.8)	\$6.6	\$57.5
- Interest on In-year Transactions (excl.int.)		Rate:	(\$74.0)	\$24.2	\$25.1	\$1.0	\$4.0	(\$21.9)	(\$21.7)	(\$21.5)	\$3.8	\$4.2	\$24.9	\$25.7
TOTAL REVENUE			\$1,465.0	\$1,497.5	\$1,623.6	\$1,590.2	\$1,649.9	\$1,689.0	\$1,719.5	\$1,751.3	\$1,372.3	\$1,426.9	\$1,501.2	\$1,598.5
CLOSING CASH BALANCE			(\$1,175.0)	\$167.3	\$1,632.5	\$1,746.1	\$2,040.4	\$1,291.9	\$525.2	(\$259.5)	(\$51.5)	\$188.0	\$1,642.4	\$3,193.2
ROADS AND RELATED CHARGE PER SQ. M		\$35.82												

			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)			\$3,193.2	\$4,845.0	\$6,074.6	\$7,379.8	\$8,764.2	\$10,231.6	\$11,785.9	\$9,671.4	\$7,441.6	\$5,091.9	\$2,617.5	
2009 to 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS														
ROADS AND RELATED - constant (\$000) - constant (\$000)			\$38.3	\$179.0	\$179.0	\$179.0	\$179.0	\$179.0	\$2,583.2	\$2,583.2	\$2,583.2	\$2,583.2	\$2,583.2	\$29,662.0
ROADS AND RELATED - current (\$000) - current (\$000)			\$48.6	\$231.5	\$236.2	\$240.9	\$245.7	\$250.6	\$3,689.5	\$3,763.3	\$3,838.5	\$3,915.3	\$3,993.6	\$37,682.7
NON-RESIDENTIAL GROWTH														
- Growth in Sq. m			34,389	27,480	27,716	27,954	28,195	28,437	24,044	24,217	24,391	24,566	24,743	763,668
REVENUE - current (\$000)		Rate for 2009												
- Dev. Charge Receipts		\$35.82	\$1,562.2	\$1,273.3	\$1,310.0	\$1,347.6	\$1,386.4	\$1,426.3	\$1,230.1	\$1,263.7	\$1,298.2	\$1,333.7	\$1,370.2	\$33,417.5
		Balance:												
		Inflation:												
		Positive												
		Negative												
- Interest on Opening Balance		Rate:	\$111.8	\$169.6	\$212.6	\$258.3	\$306.7	\$358.1	\$412.5	\$338.5	\$260.5	\$178.2	\$91.6	
- Interest on In-year Transactions (excl.int.)		Rate:	\$26.5	\$18.2	\$18.8	\$19.4	\$20.0	\$20.6	(\$67.6)	(\$68.7)	(\$69.9)	(\$71.0)	(\$72.1)	
TOTAL REVENUE			\$1,700.4	\$1,461.1	\$1,541.4	\$1,625.3	\$1,713.1	\$1,805.0	\$1,575.0	\$1,533.5	\$1,488.8	\$1,440.9	\$1,389.7	
CLOSING CASH BALANCE			\$4,845.0	\$6,074.6	\$7,379.8	\$8,764.2	\$10,231.6	\$11,785.9	\$9,671.4	\$7,441.6	\$5,091.9	\$2,617.5	\$13.6	-
ROADS AND RELATED CHARGE PER SQ. M		\$35.82												

APPENDIX D  
TABLE 1

CITY OF BRANTFORD  
2009 DEVELOPMENT CHARGES STUDY  
WATER SERVICING GROWTH-RELATED CAPITAL PROGRAM

WATER SERVICE GROWTH-RELATED CAPITAL PROGRAM 2009-2031	Anticipated Timing	Gross Cost	Grants and Subsidies	Benefit to Existing and Local Shares (8)		Prior Growth (2)	Net Growth-Related	Post Period Benefit (3)	Net DC Recoverable 2009-2031	Notes
<b>Water Supply and Treatment</b>										
Water Treatment Plant Upgrade and Expansion, highlift PS and related	2009 - 2013	\$46,500,000	\$ -	65%	\$ 30,225,000	\$ 2,600,000	\$ 13,675,000	\$ -	\$ 13,675,000	4
<b>Storage</b>										
Elevated Storage Tank in PD1 including land and trunk watermain. Capacity of 2,000	2013	\$ 7,000,000	\$ -	80%	\$ 5,600,000	\$ -	\$ 1,400,000	\$ -	\$ 1,400,000	5
<b>Pumping</b>										
No needs identified at this time			\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -	6
<b>Water Mains</b>										
1 Shellard Lane	2005	\$ 2,000,000	\$ -	50%	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	7
2 Ferrero Blvd: Sitts Cres to north of Highway 403	2011	\$ 2,500,000	\$ -	0%	\$ -	\$ -	\$ 2,500,000	\$ 1,650,000	\$ 850,000	
3 Fen Ridge Crt: North to Highway 403	2011	\$ 2,500,000	\$ -	0%	\$ -	\$ -	\$ 2,500,000	\$ 1,650,000	\$ 850,000	
<b>Growth-Related Studies</b>										
1 Water/Wastewater Growth Needs Study (Water Share)	2010	\$ 100,000	\$ -	0%	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	8
2 Water Tower Study for Pressure District #1 (south-west area)	2009 - 2014	\$ 300,000	\$ -	80%	\$ 240,000	\$ -	\$ 60,000	\$ -	\$ 60,000	
<b>TOTAL WATER SERVICE GROWTH-RELATED CAPITAL PROGRAM 2009-2031</b>		<b>\$60,900,000</b>	<b>\$0</b>		<b>\$37,065,000</b>	<b>\$2,600,000</b>	<b>\$21,235,000</b>	<b>\$3,300,000</b>	<b>\$17,935,000</b>	
Sub-Total Water Supply, Storage and Growth-Related Studies		\$53,800,000	\$0		\$36,065,000	\$2,600,000	\$15,135,000	\$0	\$15,135,000	84%
Sub-Total Water Distribution and Pumping		\$7,000,000	\$0		\$1,000,000	\$0	\$6,000,000	\$3,300,000	\$2,700,000	15%

Notes:

- Projects and Costs are based on the Growth Management Strategy (2006), the 2004 DC Study, and the City's Capital Budget. The costs are in 2008\$ and reflect the City's current cost of works.
- Prior growth is the share of projects already funded from the development charge reserve fund or committed against the reserve fund.
- No Post Period Benefit share is identified as projects are designed to service full build-out of the lands within the City's current boundary.
- The Water Treatment Plant requires and upgrade, new filter, highlift PS and related works. The capacity at the end of the works will be 100 ML of max day supply and current utilization is 65 ML yielding the 65% benefit to existing share.
- Storage costs include land, pipe from the WTP to site, site distribution works and storage tank. The BTE share is to allocate as share of the costs to address existing deficiencies.
- No growth-related water pumping needs have been identified at this time. Specific development may have local water pumping needs which would be deemed a local service and not recovered under development charges, see local service definitions.
- Projects and Costs are based on the Growth Management Strategy (2006). Costs have been indexed to late 2008\$ based on the Statistics Canada non-residential construction cost index.
- The City has determined that it requires a water and wastewater growth management strategy study to determine future growth-related infrastructure needs, the total cost is \$200,000 and has been allocated equally to water and wastewater services.

APPENDIX D  
TABLE 2

CITY OF BRANTFORD  
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES  
WATER SERVICES - 2009 TO 2031

Ultimate Year Growth in Population in New Units	36,993
Ultimate Employment Growth	13,093
Ultimate Growth in Square Meters	763,668

	Growth-Related Capital Forecast												
	Gross Cost	Grants and Subsidies	Prior Growth	Benefit to Existing Share	Pre-Built Service (Calculated Oversizing)	Total Growth-Related Net Capital Costs	Service Discount Required	Total Growth-Related Net Capital Costs After Discount	Residential Share	Non-Residential Share			
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	\$000	(\$000)	%	\$000	%	\$000
<b>WATER SERVICES</b>													
Water Supply, Storage, Distribution and Related	\$60,900.0	\$0.0	\$2,600.0	\$37,065.0	\$3,300.0	\$17,935.0	0%	\$0.0	\$17,935.0	75%	\$13,451.3	25%	\$4,483.8
<b>TOTAL WATER SERVICES</b>	<b>\$60,900.0</b>	<b>\$0.0</b>	<b>\$2,600.0</b>	<b>\$37,065.0</b>	<b>\$3,300.0</b>	<b>\$17,935.0</b>	<b>0%</b>	<b>\$0.0</b>	<b>\$17,935.0</b>		<b>\$13,451.3</b>		<b>\$4,483.8</b>
Unadjusted Development Charge Per Capita (\$)											\$ 363.62		
Unadjusted Development Charge Per Sq. M. (\$)												\$	5.87

Residential Charge	Total		Residential Infill Area1	
	%	\$/capita	% of Total	\$/capita
Water Supply, Storage and Growth-Related Studies	84%	\$ 306.9	100%	\$ 306.9
Water Distribution and Pumping	15%	\$ 54.7	50%	\$ 27.4
<b>Total</b>		<b>\$ 363.6</b>		<b>\$ 334.2</b>

Notes:  
The City is proposing a reduced residential charge in the defined Residential Infill Area. The reduction is based on the full water supply, storage and study component and 50% of the water distribution charge.

APPENDIX D  
TABLE 3

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER SERVICES  
RESIDENTIAL DEVELOPMENT CHARGE

12.0 WATER SERVICES

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE FROM APPLICABLE RESERVES	\$87,920												
OPENING CASH BALANCE (\$000)		\$87.9	(\$1,965.5)	(\$3,472.7)	(\$6,398.7)	(\$8,314.1)	(\$11,576.9)	(\$11,493.3)	(\$11,362.2)	(\$11,187.9)	(\$10,910.1)	(\$10,570.8)	(\$10,163.9)
2009 to 2031 RESIDENTIAL FUNDING REQUIREMENTS													
WATER SERVICES - constant (\$000)		\$2,808.8	\$2,133.8	\$3,333.8	\$2,058.8	\$3,108.8	\$7.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
WATER SERVICES - current (\$000)	2.5%	\$2,808.8	\$2,187.1	\$3,502.5	\$2,217.0	\$3,431.5	\$8.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
POPULATION GROWTH													
- Population in New Units		1,626	1,654	1,682	1,414	1,434	1,455	1,475	1,496	1,607	1,636	1,665	1,695
REVENUE - current (\$000)	Rate for 2009												
- Dev. Charge Receipts	\$502 Inflation: 2.5%	\$816.2	\$851.0	\$887.3	\$764.7	\$794.8	\$826.2	\$858.8	\$892.8	\$982.9	\$1,025.4	\$1,069.9	\$1,116.5
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	\$4.0	(\$127.8)	(\$225.7)	(\$415.9)	(\$540.4)	(\$752.5)	(\$747.1)	(\$738.5)	(\$727.2)	(\$709.2)	(\$687.1)	(\$660.7)
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	(\$64.8)	(\$43.4)	(\$85.0)	(\$47.2)	(\$85.7)	\$18.4	\$19.3	\$20.1	\$22.1	\$23.1	\$24.1	\$25.1
TOTAL REVENUE		\$755.4	\$679.8	\$576.6	\$301.6	\$168.7	\$92.1	\$131.1	\$174.3	\$277.8	\$339.3	\$406.9	\$481.0
CLOSING CASH BALANCE		(\$1,965.5)	(\$3,472.7)	(\$6,398.7)	(\$8,314.1)	(\$11,576.9)	(\$11,493.3)	(\$11,362.2)	(\$11,187.9)	(\$10,910.1)	(\$10,570.8)	(\$10,163.9)	(\$9,683.0)

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)		(\$9,683.0)	(\$9,120.9)	(\$8,659.8)	(\$8,125.9)	(\$7,512.8)	(\$6,813.4)	(\$6,020.1)	(\$5,059.7)	(\$3,978.7)	(\$2,766.3)	(\$1,411.1)	-
2009 to 2031 RESIDENTIAL FUNDING REQUIREMENTS													
WATER SERVICES - constant (\$000)		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13,451.3
WATER SERVICES - current (\$000)		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14,155.4
POPULATION GROWTH													
- Population in New Units		1,726	1,490	1,512	1,535	1,559	1,583	1,688	1,718	1,749	1,780	1,813	36,993
REVENUE - current (\$000)	Rate for 2009												
- Dev. Charge Receipts	\$502.00 Inflation: 2.5%	\$1,165.2	\$1,030.8	\$1,072.6	\$1,116.2	\$1,161.6	\$1,209.0	\$1,321.9	\$1,378.9	\$1,438.7	\$1,501.2	\$1,566.6	\$24,849.2
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	(\$629.4)	(\$592.9)	(\$562.9)	(\$528.2)	(\$488.3)	(\$442.9)	(\$391.3)	(\$328.9)	(\$258.6)	(\$179.8)	(\$91.7)	
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	\$26.2	\$23.2	\$24.1	\$25.1	\$26.1	\$27.2	\$29.7	\$31.0	\$32.4	\$33.8	\$35.2	
TOTAL REVENUE		\$562.0	\$461.1	\$533.8	\$613.1	\$699.4	\$793.3	\$960.3	\$1,081.0	\$1,212.5	\$1,355.2	\$1,510.1	
CLOSING CASH BALANCE		(\$9,120.9)	(\$8,659.8)	(\$8,125.9)	(\$7,512.8)	(\$6,813.4)	(\$6,020.1)	(\$5,059.7)	(\$3,978.7)	(\$2,766.3)	(\$1,411.1)	\$99.0	-
WATER SERVICES CHARGE PER CAPITA	Per Capita \$502												

APPENDIX D  
TABLE 4

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER SERVICES  
NON-RESIDENTIAL DEVELOPMENT CHARGE

12.0 WATER SERVICES

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE FROM APPLICABLE RESERVES	\$29,307												
OPENING CASH BALANCE (\$000)		\$29.3	(\$609.0)	(\$1,061.0)	(\$1,981.2)	(\$2,530.7)	(\$3,520.3)	(\$3,385.6)	(\$3,224.8)	(\$3,038.5)	(\$2,922.4)	(\$2,787.5)	(\$2,632.1)
2009 to 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
WATER SERVICES - constant (\$000)		\$936.3	\$711.3	\$1,111.3	\$686.3	\$1,036.3	\$2.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
WATER SERVICES - current (\$000)	2.5%	\$936.3	\$729.0	\$1,167.5	\$739.0	\$1,143.8	\$2.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NON-RESIDENTIAL GROWTH													
- Growth in Sq. m		41,462	42,093	42,734	40,304	40,875	41,455	42,043	42,640	32,947	33,302	33,660	34,023
REVENUE - current (\$000)	Rate for 2009												
- Dev. Charge Receipts	\$7.64 Inflation: 2.5%	\$316.8	\$329.6	\$343.0	\$331.6	\$344.7	\$358.3	\$372.5	\$387.2	\$306.7	\$317.7	\$329.2	\$341.1
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	\$1.3	(\$39.6)	(\$69.0)	(\$128.8)	(\$164.5)	(\$228.8)	(\$220.1)	(\$209.6)	(\$197.5)	(\$190.0)	(\$181.2)	(\$171.1)
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	(\$20.1)	(\$13.0)	(\$26.8)	(\$13.2)	(\$26.0)	\$8.0	\$8.4	\$8.7	\$6.9	\$7.1	\$7.4	\$7.7
TOTAL REVENUE		\$298.0	\$277.0	\$247.2	\$189.6	\$154.2	\$137.5	\$160.8	\$186.3	\$116.1	\$134.9	\$155.4	\$177.7
CLOSING CASH BALANCE		(\$609.0)	(\$1,061.0)	(\$1,981.2)	(\$2,530.7)	(\$3,520.3)	(\$3,385.6)	(\$3,224.8)	(\$3,038.5)	(\$2,922.4)	(\$2,787.5)	(\$2,632.1)	(\$2,454.4)

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)		(\$2,454.4)	(\$2,252.7)	(\$2,103.2)	(\$1,933.9)	(\$1,743.4)	(\$1,529.7)	(\$1,291.1)	(\$1,082.1)	(\$850.0)	(\$593.0)	(\$309.3)	
2009 to 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
WATER SERVICES - constant (\$000)		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,483.8
WATER SERVICES - current (\$000)		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,718.5
NON-RESIDENTIAL GROWTH													
- Growth in Sq. m		34,389	27,480	27,716	27,954	28,195	28,437	24,044	24,217	24,391	24,566	24,743	763,668
REVENUE - current (\$000)	Rate for 2009												
- Dev. Charge Receipts	\$7.64 Inflation: 2.5%	\$353.3	\$289.4	\$299.2	\$309.3	\$319.8	\$330.6	\$286.5	\$295.8	\$305.3	\$315.2	\$325.4	\$7,508.2
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	(\$159.5)	(\$146.4)	(\$136.7)	(\$125.7)	(\$113.3)	(\$99.4)	(\$83.9)	(\$70.3)	(\$55.2)	(\$38.5)	(\$20.1)	
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	\$7.9	\$6.5	\$6.7	\$7.0	\$7.2	\$7.4	\$6.4	\$6.7	\$6.9	\$7.1	\$7.3	
TOTAL REVENUE		\$201.7	\$149.5	\$169.2	\$190.6	\$213.7	\$238.6	\$209.0	\$232.1	\$256.9	\$283.7	\$312.6	
CLOSING CASH BALANCE		(\$2,252.7)	(\$2,103.2)	(\$1,933.9)	(\$1,743.4)	(\$1,529.7)	(\$1,291.1)	(\$1,082.1)	(\$850.0)	(\$593.0)	(\$309.3)	\$3.3	
WATER SERVICES CHARGE PER SQ. M	\$7.64												

APPENDIX D  
TABLE 5

CITY OF BRANTFORD  
2009 DEVELOPMENT CHARGES STUDY  
WASTE WATER SERVICING GROWTH-RELATED CAPITAL PROGRAM

WASTEWATER GROWTH-RELATED CAPITAL PROGRAM 2009-2031	Anticipated Timing	Estimated Project Costs (2009\$)								Notes
		Gross Cost	Grants and Subsidies	Benefit to Existing and Local Shares (8)		Prior Growth (2)	Net Growth-Related	Post Period Benefit (3)	Net DC Recoverable 2009-2031	
<b>Waste Water Treatment Plant</b>										
Additional Plant Capacity to Build-Out or I/I Replacement (2 ML at \$4/l)	2010 - 2031	\$8,000,000	\$ -	0%	\$ -		\$ 8,000,000	\$ -	\$ 8,000,000	4
<b>Pumping</b>										
No needs identified at this time										5
<b>Trunk Sewers</b>										
1 West Brantford Trunk: Erie Ave to Greenwich St. PS and Mokawk St Trunk: PS to Cayuga St (GMS Proj ID 1)	2016	\$3,705,000	\$ -	0%	\$ -		\$ 3,705,000	\$ -	\$ 3,705,000	6
2 Oakhill Drive Bottleneck Twinning (GMS Proj ID 2)	2016	\$1,482,000	\$ -	0%	\$ -		\$ 1,482,000	\$ -	\$ 1,482,000	6
3 North/West crossing of Hwy 403	2011	\$2,500,000		0%	\$ -	\$ 1,350,000	\$ 1,150,000	\$ -	\$ 1,150,000	
<b>Recovery of Projects All Ready Constructed Not Yet Fully Funded</b>										
PCP Influent Pumping Stations Upgrades	2006 - 2008	\$10,000,000		80%	\$ 8,000,000	\$ 500,000	\$ 1,500,000	\$ 990,000	\$ 510,000	
<b>Growth-Related Studies</b>										
1 Water/Wastewater Growth Needs Study (Wastewater Share)	2010	\$ 100,000	\$ -	0%	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000	8
2 Infiltration and Inflow Studies (1 every 5 years @ \$100,000/study)	2009 - 2031	\$ 400,000	\$ -	80%	\$ 320,000	\$ -	\$ 80,000	\$ -	\$ 80,000	9
3 WPCP Upgrades Study (biosolids, nitrogen removal, filtration and effluent p	2010	\$ 200,000	\$ -	80%	\$ 160,000	\$ -	\$ 40,000	\$ -	\$ 40,000	9
<b>TOTAL WASTEWATER GROWTH-RELATED CAPITAL PROGRAM 2009-2031</b>		<b>\$26,387,000</b>	<b>\$0</b>		<b>\$8,480,000</b>	<b>\$1,850,000</b>	<b>\$16,057,000</b>	<b>\$990,000</b>	<b>\$15,067,000</b>	
Sub-Total Waste Water Treatment		\$8,000,000	\$0		\$0	\$0	\$8,000,000	\$0	\$8,000,000	53%
Sub-Total Waste Water Collection and Pumping		\$17,687,000	\$0		\$8,000,000	\$1,850,000	\$7,837,000	\$990,000	\$6,847,000	45%

Notes:

- 1) Projects and Costs are based on the Growth Management Strategy (2006), the 2004 DC Study, and the City's Capital Budget. The costs are in 2008\$ and reflect the City's current cost of works.
- 2) Prior growth is the share of projects already funded from the development charge reserve fund or committed against the reserve fund.
- 3) No Post Period Benefit share is identified as projects are designed to service full build-out of the lands within the City's current boundary.
- 4) WWTP expansion based on a cost of \$4.00 per litre and an expansion of 2 ML per average day flow. Note, the capacity required and the cost is currently being reviewed.
- 5) No growth-related pumping needs have been identified at this time. It is anticipated that specific development will have local sewage pumping needs which would be deemed a local service and not recovered under development charges, see local service definitions.
- 6) Projects and Costs are based on the Growth Management Strategy (GMS) (2006). Costs have been indexed to late 2008\$ based on the Statistics Canada non-residential construction cost index.
- 7) Project identified in 2004 DC Study. The timing is consistent with the road works as identified on growth-related roads works. Cost based on 2004 DC Study and indexed to 2008\$.
- 8) The City has determined that it requires a water and wastewater growth management strategy study to determine future growth-related infrastructure needs, the total cost is \$200,000 and has been allocated equally to water and wastewater services.
- 9) The benefit to existing share is based on share of available WWTP capacity.

APPENDIX D  
TABLE 6

CITY OF BRANTFORD  
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES  
WASTE WATER SERVICES - 2009 TO 2031

Ultimate Year Growth in Population in New Units           36,993  
Ultimate Employment Growth                                   13,093  
Ultimate Growth in Square Metres                           763,668

	Growth-Related Capital Forecast									Total Growth-Related Net Capital Costs After Discount			
	Gross Cost	Grants and Subsidies	Prior Growth	Benefit to Existing Share	Pre-Built Service (Calculated Oversizing)	Total Growth-Related Net Capital Costs	Service Discount Required			Residential Share	Non-Residential Share		
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	\$000	(\$000)	%	\$000	%	\$000
<b>WASTE WATER SERVICES</b>													
Waste Water Treatment, Collection and Related	\$26,387.0	\$0.0	\$1,850.0	\$8,480.0	\$990.0	\$15,067.0	0%	\$0.0	\$15,067.0	75%	\$11,300.3	25%	\$3,766.8
<b>TOTAL WASTE WATER SERVICES</b>	<b>\$26,387.0</b>	<b>\$0.0</b>	<b>\$1,850.0</b>	<b>\$8,480.0</b>	<b>\$990.0</b>	<b>\$15,067.0</b>	<b>0%</b>	<b>\$0.0</b>	<b>\$15,067.0</b>		<b>\$11,300.3</b>		<b>\$3,766.8</b>
Unadjusted Development Charge Per Capita (\$)											\$ 305.47		
Unadjusted Development Charge Per Sq. M. (\$)												\$	4.93

Residential Charge	%	Total		Residential Infill Area1	
		\$	\$/capita	% of Total	\$/capita
Waste Water Treatment	53%	\$	162.2	100%	\$ 162.2
Waste Water Collection and Pumping	45%	\$	138.8	50%	\$ 69.4
<b>Total</b>		<b>\$</b>	<b>305.5</b>		<b>\$ 231.6</b>

Notes:

The City is proposing a reduced residential charge in the defined Residential Infill Area. The reduction is based on the full wastewater component and 50% of the wastewater collection and pumping charge.

APPENDIX D  
TABLE 7

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WASTE WATER SERVICES  
RESIDENTIAL DEVELOPMENT CHARGE

13.0 WASTE WATER SERVICES

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE FROM APPLICABLE RESERVES	\$887,009												
OPENING CASH BALANCE (\$000)		\$887.0	\$1,032.5	\$1,188.4	\$542.9	\$716.8	\$909.1	\$1,103.9	\$1,336.6	(\$3,180.5)	(\$3,144.4)	(\$3,088.7)	(\$3,030.6)
2009 to 2031 RESIDENTIAL FUNDING REQUIREMENTS													
WASTE WATER SERVICES - constant (\$000)		\$397.5	\$405.0	\$1,162.5	\$300.0	\$300.0	\$315.0	\$300.0	\$4,190.3	\$300.0	\$300.0	\$315.0	\$300.0
WASTE WATER SERVICES - current (\$000)	2.5%	\$397.5	\$415.1	\$1,221.4	\$323.1	\$331.1	\$356.4	\$347.9	\$4,980.9	\$365.5	\$374.7	\$403.2	\$393.6
POPULATION GROWTH													
- Population in New Units		1,626	1,654	1,682	1,414	1,434	1,455	1,475	1,496	1,607	1,636	1,665	1,695
REVENUE - current (\$000)	Rate for 2009												
- Dev. Charge Receipts	\$308 Inflation: 2.5%	\$500.8	\$522.1	\$544.4	\$469.2	\$487.7	\$506.9	\$526.9	\$547.7	\$603.0	\$629.1	\$656.4	\$685.0
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	\$39.9	\$46.5	\$53.5	\$24.4	\$32.3	\$40.9	\$49.7	\$60.1	(\$206.7)	(\$204.4)	(\$200.8)	(\$197.0)
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	\$2.3	\$2.4	(\$22.0)	\$3.3	\$3.5	\$3.4	\$4.0	(\$144.1)	\$5.3	\$5.7	\$5.7	\$6.6
TOTAL REVENUE		\$543.0	\$571.0	\$575.9	\$496.9	\$523.5	\$551.2	\$580.6	\$463.8	\$401.6	\$430.4	\$461.3	\$494.6
CLOSING CASH BALANCE		\$1,032.5	\$1,188.4	\$542.9	\$716.8	\$909.1	\$1,103.9	\$1,336.6	(\$3,180.5)	(\$3,144.4)	(\$3,088.7)	(\$3,030.6)	(\$2,929.6)

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)		(\$2,929.6)	(\$2,801.6)	(\$2,759.8)	(\$2,699.7)	(\$2,641.5)	(\$2,539.8)	(\$2,413.2)	(\$2,219.2)	(\$1,988.8)	(\$1,718.2)	(\$888.0)	
2009 to 2031 RESIDENTIAL FUNDING REQUIREMENTS													
- constant (\$000)		\$300.0	\$300.0	\$300.0	\$315.0	\$300.0	\$300.0	\$300.0	\$300.0	\$300.0	\$0.0	\$0.0	\$11,300.3
- current (\$000)		\$403.5	\$413.6	\$423.9	\$456.2	\$445.4	\$456.5	\$467.9	\$479.6	\$491.6	\$0.0	\$0.0	\$13,948.5
POPULATION GROWTH													
- Population in New Units		1,726	1,490	1,512	1,535	1,559	1,583	1,688	1,718	1,749	1,780	1,813	36,993
REVENUE - current (\$000)	Rate for 2009												
- Dev. Charge Receipts	\$308.00 Inflation: 2.5%	\$714.9	\$632.5	\$658.1	\$684.8	\$712.7	\$741.8	\$811.0	\$846.0	\$882.7	\$921.1	\$961.2	\$15,246.0
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	(\$190.4)	(\$182.1)	(\$179.4)	(\$175.5)	(\$171.7)	(\$165.1)	(\$156.9)	(\$144.2)	(\$129.3)	(\$111.7)	(\$57.7)	
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	\$7.0	\$4.9	\$5.3	\$5.1	\$6.0	\$6.4	\$7.7	\$8.2	\$8.8	\$20.7	\$21.6	
TOTAL REVENUE		\$531.5	\$455.3	\$484.0	\$514.5	\$547.0	\$583.1	\$661.9	\$710.0	\$762.2	\$830.1	\$925.1	
CLOSING CASH BALANCE		(\$2,801.6)	(\$2,759.8)	(\$2,699.7)	(\$2,641.5)	(\$2,539.8)	(\$2,413.2)	(\$2,219.2)	(\$1,988.8)	(\$1,718.2)	(\$888.0)	\$37.1	
WASTE WATER SERVICES CHARGE PER CAPITA	Per Capita \$ 308												

APPENDIX D  
TABLE 8

CITY OF BRANTFORD  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WASTE WATER SERVICES  
NON-RESIDENTIAL DEVELOPMENT CHARGE

13.0 WASTE WATER SERVICES

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPENING CASH BALANCE FROM APPLICABLE RESERVES	\$295,670												
OPENING CASH BALANCE (\$000)		\$295.7	\$374.0	\$458.1	\$277.6	\$389.9	\$512.8	\$641.2	\$787.3	(\$644.1)	(\$616.3)	(\$583.0)	(\$549.9)
2009 to 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
WASTE WATER SERVICES - constant (\$000)		\$132.5	\$135.0	\$387.5	\$100.0	\$100.0	\$105.0	\$100.0	\$1,396.8	\$100.0	\$100.0	\$105.0	\$100.0
WASTE WATER SERVICES - current (\$000)	2.5%	\$132.5	\$138.4	\$407.1	\$107.7	\$110.4	\$118.8	\$116.0	\$1,660.3	\$121.8	\$124.9	\$134.4	\$131.2
NON-RESIDENTIAL GROWTH													
- Growth in Sq. m		41,462	42,093	42,734	40,304	40,875	41,455	42,043	42,640	32,947	33,302	33,660	34,023
REVENUE - current (\$000)	Rate for 2008												
- Dev. Charge Receipts	\$4.73 Inflation: 2.5%	\$196.1	\$204.1	\$212.4	\$205.3	\$213.4	\$221.8	\$230.6	\$239.7	\$189.9	\$196.7	\$203.8	\$211.2
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	\$13.3	\$16.8	\$20.6	\$12.5	\$17.5	\$23.1	\$28.9	\$35.4	(\$41.9)	(\$40.1)	(\$37.9)	(\$35.7)
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	\$1.4	\$1.5	(\$6.3)	\$2.2	\$2.3	\$2.3	\$2.6	(\$46.2)	\$1.5	\$1.6	\$1.6	\$1.8
TOTAL REVENUE		\$210.8	\$222.4	\$226.7	\$220.0	\$233.3	\$247.2	\$262.0	\$229.0	\$149.6	\$158.3	\$167.5	\$177.3
CLOSING CASH BALANCE		\$374.0	\$458.1	\$277.6	\$389.9	\$512.8	\$641.2	\$787.3	(\$644.1)	(\$616.3)	(\$583.0)	(\$549.9)	(\$503.8)

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE (\$000)		(\$503.8)	(\$450.4)	(\$437.4)	(\$420.9)	(\$408.0)	(\$383.8)	(\$355.0)	(\$356.2)	(\$355.6)	(\$353.0)	(\$176.4)	
2009 to 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS													
WASTE WATER SERVICES - constant (\$000)		\$100.0	\$100.0	\$100.0	\$105.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$0.0	\$0.0	\$3,766.8
WASTE WATER SERVICES - current (\$000)		\$134.5	\$137.9	\$141.3	\$152.1	\$148.5	\$152.2	\$156.0	\$159.9	\$163.9	\$0.0	\$0.0	\$4,649.5
NON-RESIDENTIAL GROWTH													
- Growth in Sq. m		34,389	27,480	27,716	27,954	28,195	28,437	24,044	24,217	24,391	24,566	24,743	763,668
REVENUE - current (\$000)	Rate for 2008												
- Dev. Charge Receipts	\$4.73 Inflation: 2.5%	\$218.8	\$179.2	\$185.2	\$191.5	\$198.0	\$204.7	\$177.4	\$183.1	\$189.0	\$195.2	\$201.5	\$4,648.6
	Balance: Positive Negative												
- Interest on Opening Balance	Rate: 4.5% 6.5%	(\$32.7)	(\$29.3)	(\$28.4)	(\$27.4)	(\$26.5)	(\$24.9)	(\$23.1)	(\$23.2)	(\$23.1)	(\$22.9)	(\$11.5)	
- Interest on In-year Transactions (excl.int.)	Rate: 4.5% 6.5%	\$1.9	\$0.9	\$1.0	\$0.9	\$1.1	\$1.2	\$0.5	\$0.5	\$0.6	\$4.4	\$4.5	
TOTAL REVENUE		\$187.9	\$150.9	\$157.8	\$165.0	\$172.6	\$180.9	\$154.8	\$160.5	\$166.5	\$176.6	\$194.6	
CLOSING CASH BALANCE		(\$450.4)	(\$437.4)	(\$420.9)	(\$408.0)	(\$383.8)	(\$355.0)	(\$356.2)	(\$355.6)	(\$353.0)	(\$176.4)	\$18.2	
WASTE WATER SERVICES CHARGE PER SQ. M	\$ 4.73												

TABLE 7

CITY OF BRANTFORD  
CITY-WIDE DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES

SERVICE	Unadjusted Charge Per Capita	Adjusted Charge After Cashflow Per Capita	Charge By Unit Type (1)			
			Single & Semi-Detached	Rows & Other Multiples	Large Apartment over 70 sq. m	Small Apartment 70 sq. m or less
Fire Department	\$63	\$74	\$227	\$155	\$118	\$104
Police Service	\$21	\$22	\$68	\$46	\$35	\$31
Public Library	\$293	\$291	\$893	\$611	\$466	\$407
Parks & Recreation	\$1,223	\$1,257	\$3,859	\$2,640	\$2,011	\$1,760
Public Transit	\$54	\$53	\$163	\$111	\$85	\$74
Municipal Parking	\$175	\$188	\$577	\$395	\$301	\$263
Municipal Airport	\$0	\$0	\$0	\$0	\$0	\$0
Land Ambulance	\$9	\$9	\$28	\$19	\$14	\$13
Public Works: Buildings & Fleet	\$58	\$61	\$187	\$128	\$98	\$85
General Government	\$19	\$20	\$61	\$42	\$32	\$28
General Services Charge Per Unit	\$1,915	\$1,975	\$6,063	\$4,147	\$3,160	\$2,765
Roads And Related	\$2,281	\$2,291	\$7,033	\$4,811	\$3,666	\$3,207
Water Services	\$364	\$502	\$1,541	\$1,054	\$803	\$703
Waste Water Services	\$305	\$308	\$946	\$647	\$493	\$431
Engineered Services Charge Per Unit	\$2,950	\$3,101	\$9,520	\$6,512	\$4,962	\$4,341
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$4,865</b>	<b>\$5,076</b>	<b>\$15,583</b>	<b>\$10,659</b>	<b>\$8,122</b>	<b>\$7,106</b>

(1) Based on Persons Per Unit Of:

3.07

2.10

1.60

1.40

**TABLE 8**

**CITY OF BRANTFORD  
CITY-WIDE DEVELOPMENT CHARGES  
NON-RESIDENTIAL DEVELOPMENT CHARGES**

<b>SERVICE</b>	<b>Unadjusted Charge (\$/sq.m)</b>	<b>Adjusted Charge After Cashflow (\$/sq.m)</b>
Fire Department	\$1.04	\$1.22
Police Service	\$0.35	\$0.37
Public Library	\$0.00	\$0.00
Parks & Recreation	\$0.00	\$0.00
Public Transit	\$0.89	\$0.88
Municipal Parking	\$2.91	\$3.10
Municipal Airport	\$0.00	\$0.00
Land Ambulance	\$0.15	\$0.14
Public Works: Buildings & Fleet	\$0.96	\$1.01
General Government	\$0.32	\$0.32
<b>General Services Charge Per sq. m</b>	<b>\$6.62</b>	<b>\$7.04</b>
Roads And Related	\$36.83	\$35.82
Water Services	\$5.87	\$7.64
Waste Water Services	\$4.93	\$4.73
<b>Engineered Services Charge Per sq. m</b>	<b>\$47.63</b>	<b>\$48.19</b>
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$54.26</b>	<b>\$55.23</b>

**TABLE 9**

**CITY OF BRANTFORD  
INFILL AREA RESIDENTIAL DEVELOPMENT CHARGES**

<b>SERVICE</b>	<b>Adjusted Charge After Cashflow Per Capita</b>	<b>Charge By Unit Type (1)</b>			
		<b>Single &amp; Semi- Detached</b>	<b>Rows &amp; Other Multiples</b>	<b>Large Apartment over 70 sq. m</b>	<b>Small Apartment 70 sq. m or less</b>
Fire Department	\$74	\$227	\$155	\$118	\$104
Police Service	\$22	\$68	\$46	\$35	\$31
Public Library	\$291	\$893	\$611	\$466	\$407
Parks & Recreation	\$1,257	\$3,859	\$2,640	\$2,011	\$1,760
Public Transit	\$53	\$163	\$111	\$85	\$74
Municipal Parking	\$188	\$577	\$395	\$301	\$263
Municipal Airport	\$0	\$0	\$0	\$0	\$0
Land Ambulance	\$9	\$28	\$19	\$14	\$13
Public Works: Buildings & Fleet	\$61	\$187	\$128	\$98	\$85
General Government	\$20	\$61	\$42	\$32	\$28
<b>General Services Charge Per Unit</b>	<b>\$1,975</b>	<b>\$6,063</b>	<b>\$4,147</b>	<b>\$3,160</b>	<b>\$2,765</b>
Roads And Related	\$1,146	\$3,517	\$2,406	\$1,833	\$1,604
Water Services	\$461	\$1,417	\$969	\$738	\$646
Waste Water Services	\$234	\$717	\$490	\$374	\$327
<b>Engineered Services Charge Per Unit</b>	<b>\$1,840</b>	<b>\$5,651</b>	<b>\$3,865</b>	<b>\$2,945</b>	<b>\$2,577</b>
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$3,815</b>	<b>\$11,714</b>	<b>\$8,012</b>	<b>\$6,105</b>	<b>\$5,342</b>

(1) Based on Persons Per Unit Of: 3.07 2.10 1.60 1.40

TABLE 10

CITY OF BRANTFORD  
 COMPARISON OF BACKGROUND STUDY AND REVISED  
 RESIDENTIAL DEVELOPMENT CHARGES

SERVICE	Background Study	Revised Nov. 09	Difference in	
	Residential Charge SDU	Residential Charge SDU	Charge	
Fire Department	\$227	\$227	\$0	0%
Police Service	\$68	\$68	\$0	0%
Public Library	\$998	\$893	(\$105)	-11%
Parks & Recreation	\$4,694	\$3,859	(\$835)	-18%
Public Transit	\$163	\$163	\$0	0%
Municipal Parking	\$577	\$577	\$0	0%
Municipal Airport	\$365	\$0	(\$365)	-100%
Land Ambulance	\$28	\$28	\$0	0%
Public Works: Buildings & Fleet	\$187	\$187	\$0	0%
General Government	\$61	\$61	\$0	0%
General Services Charge Per Unit	\$7,368	\$6,063	(\$1,305)	-18%
Roads And Related	\$9,311	\$7,033	(\$2,278)	-24%
Water Services	\$3,018	\$1,541	(\$1,477)	-49%
Waste Water Services	\$2,164	\$946	(\$1,218)	-56%
Engineered Services Charge Per Unit	\$14,493	\$9,520	(\$4,973)	-34%
<b>TOTAL DEVELOPMENT CHARGE PER UNIT</b>	<b>\$21,861</b>	<b>\$15,583</b>	<b>(\$6,278)</b>	<b>-29%</b>

TABLE 11

CITY OF BRANTFORD  
 COMPARISON OF BACKGROUND STUDY AND REVISED  
 NON-RESIDENTIAL DEVELOPMENT CHARGES

SERVICE	Background Study	Revised Nov. 09	Difference in	
	Non-Residential Charge Sq. m	Non-Residential Charge Sq. m	Charge	
Fire Department	\$1.22	\$1.22	\$0.00	0%
Police Service	\$0.37	\$0.37	\$0.00	0%
Public Library	\$0.00	\$0.00	\$0.00	0%
Parks & Recreation	\$0.00	\$0.00	\$0.00	0%
Public Transit	\$0.88	\$0.88	\$0.00	0%
Municipal Parking	\$3.10	\$3.10	\$0.00	0%
Municipal Airport	\$1.96	\$0.00	(\$1.96)	-100%
Land Ambulance	\$0.14	\$0.14	\$0.00	0%
Public Works: Buildings & Fleet	\$1.01	\$1.01	\$0.00	0%
General Government	\$0.32	\$0.32	\$0.00	0%
General Services Charge Per sq. m	\$9.00	\$7.04	(\$1.96)	-22%
Roads And Related	\$47.42	\$35.82	(\$11.60)	-24%
Water Services	\$15.07	\$7.64	(\$7.43)	-49%
Waste Water Services	\$10.77	\$4.73	(\$6.04)	-56%
Engineered Services Charge Per sq. m	\$73.26	\$48.19	(\$25.07)	-34%
<b>TOTAL DEVELOPMENT CHARGE PER SQ M</b>	<b>\$82.26</b>	<b>\$55.23</b>	<b>(\$27.03)</b>	<b>-33%</b>