Report for Public Consultation

Prepared by Hemson for the City of Brantford



Development Charges Background Study

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Executive Summary

A. Purpose of the 2021 Development Charges Background Study

The *Development Charges Act, 1997* (DCA), and its associated *Ontario Regulation 82/98* (O. Reg. 82/98), allow municipalities in Ontario to recover development-related capital costs from new development. This City of Brantford Development Charges Background Study is presented as part of a process to establish development charge by-laws that comply with this legislation.

i. Legislative Context

The City of Brantford's 2021 Development Charges (DC) Background Study is presented as part of the process to lead to the approval of a new DC bylaw in compliance with the *Development Charges Act, 1997* (DCA). The study is prepared in accordance with the DCA and associated Regulation, including the amendments that came into force on January 1, 2016, June 6, 2019, January 1, 2020 and September 17, 2020.

ii. Key Steps in Determining Future Development-Related Projects

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

iii. DC Eligible and Ineligible Costs

Development charges are intended to pay for the initial round of capital costs needed to service new development over an identified planning period.

This is based on the overarching principle that "growth pays for growth". However, the DCA and associated regulation includes several statutory adjustments and deductions that prevent these costs from fully being recovered by growth. Such adjustments include, but are not limited to: ineligible costs, including operating and maintenance costs; ineligible services; deductions for costs that exceed historical service level caps; and statutory exemptions for specific uses (i.e. industrial expansions).

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

It is recommended that Council adopt the development-related capital program developed for the purposes of the 2021 DC Background Study. However, it is recognized that the DC Background Study is a point-in-time analysis and there may be changes to project timing, scope and costs through the City's normal annual budget process.

B. Development Forecast

The DCA requires that the City estimate "the anticipated amount, type and location of development" for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital program.

For the purposes of this DC Background Study, four development forecasts were prepared based on geographic area: City-wide (2021-2030 for general services and 2021-2051 for engineered services), City-wide Excluding Area-Specific Development Charge (ASDC) Areas (2021-2051), Northern Boundary Expansion Lands (2021-2051), and Tutela Heights (2021-2051). The anticipated residential and non-residential growth are summarized below. The development forecasts are further discussed in Appendix A.

i. City-wide Forecast

A 10-year City-wide forecast was prepared for the calculation of all City-wide general services development charges as well as Public Works: Buildings and Fleet. From 2021 to 2030, 20,850 people in new dwellings are anticipated, along with 7,610 additional jobs and 493,930 square metres of non-residential building space.

The 2021-2051 forecast was prepared for the calculation of DCs for the City-wide engineered services of Roads and Related, Water, Wastewater, and Stormwater. By 2051, 73,530 people in new dwellings are anticipated, along with 34,040 additional jobs and 2.43 million square metres of non-residential building space.

		2021	- 2030	2021 - 2051	
City-wide Development Forecast	2020	Growth	Total at 2030	Growth	Total at 2051
Residential					
Total Occupied Dwellings	41,030	7,572	48,602	26,436	67,466
Total Population Census Population In New Dwellings	102,533	15,638 <i>20,851</i>	118,171	57,679 <i>73,534</i>	160,212
Non-Residential					
Employment Employment Growth in New Space	45,819	7,611 <i>6,424</i>	53,430	34,039 <i>28,419</i>	79,858
Non-Residential Building Space (sq.m.)		493,926		2,430,622	

ii. City-wide Excluding ASDC Areas Forecast (2021-2051)

For the purposes of the calculation of Roads and Related, Water, Wastewater, and Stormwater servicing DCs which apply to development across the City with the exception of the Northern Boundary Expansion Lands and Tutela Heights, the 2021-2051 City-wide forecast was adjusted to exclude development anticipated to occur in the two ASDC areas over the same planning period. Approximately 46,740 people in new dwellings, 13,590

additional jobs, and 1.14 million square metres of additional non-residential building space is anticipated in this area by 2051.

City-wide Excluding ASDC Areas Development Forecast	Growth 2021-2051
Residential	
Dwelling Units	17,518
Population in New Dwellings	46,742
Non-Residential	
Employment in New Space	13,590
Non-Residential Building Space (sq.m.)	1,140,982

iii. Northern Boundary Expansion Lands Forecast (2021-2051)

An area-specific forecast for the Northern Boundary Expansion Lands, from 2021 to 2051, was prepared for the calculation of area-specific Roads and Related, Water, Wastewater, and Stormwater servicing development charges. Approximately 23,060 people in new dwellings, 14,740 additional jobs, and 1.28 million square metres of additional non-residential building space is anticipated.

Northern Boundary Expansion Lands Development Forecast	Growth 2021-2051
Residential	
Dwelling Units	7,688
Population in New Dwellings	23,055
Non-Residential	
Employment in New Space	14,739
Non-Residential Building Space (sq.m.)	1,284,690

iv. Tutela Heights (2021-2051)

Similarly, an area-specific forecast for the Tutela Heights area, from 2021 to 2051, was prepared for the calculation of ASDC for the same four engineered services. Approximately 3,730 people in new dwellings, 90 additional jobs, and 4,950 square metres of additional non-residential building space is anticipated.

Tutela Heights Development Forecast	Growth 2021-2051
Residential	
Dwelling Units	1,230
Population in New Dwellings	3,733
Non-Residential	
Employment in New Space	90
Non-Residential Building Space (sq.m.)	4,950

C. Calculated Development Charges

The tables below provide the development charges calculated City-wide as well as the Northern Boundary Expansion Lands and Tutela Heights service areas for residential and non-residential development based on the aforementioned forecasts.

The rates calculated as part of this Background Study are the maximum permissible rates under the current legislation. Council may implement rates lower than those calculated and the revenue shortfall will need to be made up from other sources, namely property taxes, user fees and water and wastewater utility rates.

It should be noted that the services included for development charges recovery in this study relate solely to eligible services per the DCA

amendments that came into force in September 2020. Parking services, along with other community amenities as appropriate, may be examined as part of a future Community Benefits Charge (CBC) by-law under the *Planning Act.* Until those future by-laws are in force, the current rates as per the City's DC by-law 32-2019 will remain in force for Parking services.

i. City-wide Development Charges

Calculated City-wide development charges are summarized below. For illustrative purposes, Parking services DCs to be carried forward from Bylaw 32-2019 are included as part of the overall total charges, although these charges have not been calculated as part of this study.

Total DCs are calculated at \$38,392 per single- or semi-detached unit, and \$88.54 per square metre of non-residential building space.

		Non-Residential			
Service	Singles & Semis	Rows & Other Multiples	Large Apartment (> 70 sq.m)	Small Apartment (= or <70 sq.m)	Charge (Per Sq.M.)
Parking (By-law 32-2019)	<i>\$578</i>	\$412	\$307	\$242	\$2.66
Fire Department	\$700	\$494	\$367	\$306	\$3.53
Police Service	\$1,259	\$888	\$661	\$550	\$6.34
Public Library	\$875	\$617	\$459	\$382	\$0.00
Parks & Recreation	\$7,196	\$5,077	\$3,776	\$3,145	\$0.00
Public Transit	\$374	\$264	\$196	\$163	\$1.88
Housing	\$6,665	\$4,702	\$3,497	\$2,913	\$0.00
Land Ambulance	\$178	\$126	\$94	\$78	\$0.89
Child Care	\$957	\$675	\$502	\$418	\$0.00
Development-Related Studies	\$137	\$97	\$72	\$60	\$0.69
Subtotal General Services	\$18,919	\$13,352	\$9,931	\$8,257	\$15.99
Services Related to a Highway					
Roads & Related	\$10,194	\$7,192	\$5,349	\$4,456	\$37.30
Public Works: Buildings & Fleet	\$333	\$235	\$175	\$145	\$1.68
Water Services	\$2,082	\$1,469	\$1,093	\$910	\$7.79
Wastewater Services	\$3,379	\$2,384	\$1,773	\$1,477	\$12.65
Stormwater	\$3,485	\$2,459	\$1,829	\$1,523	\$13.13
Subtotal Engineered Service	\$19,473	\$13,739	\$10,219	\$8,511	\$72.55
TOTAL CHARGE PER UNIT	\$38,392	\$27,091	\$20,150	\$16,768	\$88.54

ii. Northern Boundary Expansion Lands Area-Specific Development Charges

Calculated ASDCs for the Northern Boundary Expansion Lands are provided in the table below. It is intended that development in the Northern Boundary Expansion Lands be subject to the ASDC rates for Roads and Related, Water, Wastewater, and Stormwater services.

In addition to the area-specific rates, the City-wide charges for Fire, Police, Public Library, Parks and Recreation, Public Transit, Housing, Land Ambulance, Child Care, Development-Related Studies, and Public Works: Buildings and Fleet would apply in the Northern Boundary Expansion Lands.

The City-wide Parking charge as per By-law 32-2019 will also apply until September 2022, or until a CBC by-law is brought into force.

Total DCs are calculated at \$56,157 per single- or semi-detached unit, and \$151.10 per square metre of non-residential building space.

		Non-Residential			
Service	Singles & Semis	Rows & Other Multiples	Large Apartment (> 70 sq.m)	Small Apartment (= or <70 sq.m)	Charge (Per Sq.M.)
Roads & Related	\$12,856	\$9,070	\$6,746	\$5,619	\$46.47
Water Services	\$11,594	\$8,180	\$6,084	\$5,067	\$41.92
Wastewater Services	\$9,467	\$6,679	\$4,968	\$4,138	\$34.23
Stormwater	\$2,988	\$2,108	\$1,568	\$1,306	\$10.81
Total Area-Specific DCs	\$36,905	\$26,037	\$19,366	\$16,130	\$133.43
Applicable City-wide DCs	\$19,252	\$13,587	\$10,106	\$8,402	\$17.67
TOTAL CHARGE PER UNIT	\$56,157	\$39,624	\$29,472	\$24,532	\$151.10

iii. Tutela Heights Area-Specific Development Charges

Calculated ASDCs for Tutela Heights are provided in the table below. It is intended that development in Tutela Heights be subject to the ASDC rates for Roads and Related, Water, Wastewater, and Stormwater services, in addition to the applicable City-wide DCs for all general services and Public Works: Buildings and Fleet, and the City-wide Parking charge as per By-law 32-2019.

Total DCs are calculated at \$48,340 per single- or semi-detached unit, and \$141.36 per square metre of non-residential building space.

		Non-Residential			
Service	Singles & Semis	Rows & Other Multiples	Large Apartment (> 70 sq.m)	Small Apartment (= or <70 sq.m)	Charge (Per Sq.M.)
Roads & Related	\$10,194	\$7,192	\$5,349	\$4,456	\$37.30
Water Services	\$7,094	\$5,005	\$3,722	\$3,100	\$32.38
Wastewater Services	\$9,917	\$6,996	\$5,204	\$4,334	\$45.31
Stormwater	\$1,883	\$1,329	\$988	\$823	\$8.70
Total Area-Specific DCs	\$29,088	\$20,522	\$15,263	\$12,713	\$123.69
Applicable City-wide DCs	\$19,252	\$13,587	\$10,106	\$8,402	\$17.67
TOTAL CHARGE PER UNIT	\$48,340	\$34,109	\$25,369	\$21,115	\$141.36

D. Long-Term Capital and Operating Costs

An overview of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the DC by-law is provided in the study. This examination is required as one of the provisions of the DCA. Additional details on the long-term capital and operating impact analysis is found in Appendix H. By 2030 the City's net operating costs are estimated to increase by about \$22.57 million per annum.

E. Asset Management Plan

A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

By 2031, the City will need to fund an additional \$2.54 million per annum in order to properly fund the full life cycle costs of the new City-wide general services assets supported under the 2020 Development Charges By-law. By 2052, the City will need to fund an additional \$3.11 million per annum in order to fund the life cycle costs associated with the new engineered services assets across all benefitting areas. Additional details are provided in Appendix F.

F. Draft Development Charges By-law Available under Separate Cover

The City is proposing some modifications to the policies and provisions in the current development charges by-laws. The proposed draft by-laws will be made available under separate cover a minimum of two weeks in advance of the statutory public meeting.

1. Introduction

The City of Brantford is growing as an attractive location for a variety of residential and non-residential development. The anticipated development in the City will increase the demand on municipal services. The City wishes to implement development charges to fund capital projects related to development in the City so that development continues to be serviced in a fiscally responsible manner.

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

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

- A forecast of the amount, type and location of development anticipated in the City;
- The average capital service levels provided in the City over the ten-year period immediately preceding the preparation of the background study;
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the City or its local boards to provide for the anticipated development, including the determination of the development-related and non-development-related components of capital projects; and

 An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

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

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

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

2. Methodology

Several key steps are required in calculating any development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. Therefore, this study has been tailored for the City of Brantford's unique circumstances. The approach to the proposed development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them.

A. Both City-wide and Area-Specific Development Charges are Calculated

The City provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The DCA provides legislation with respect to the services that may be included in the development charge by-laws. The DCA also requires that the by-law designates the areas within which the by-law shall be imposed. The development charges may apply to all lands in the municipality or to other designated development areas as specified in the by-law.

i. Services Based on a City-wide Approach

For the some of services that the City provides, a range of capital facilities, land, equipment and infrastructure is available throughout the city (e.g. fire stations, police services, fleet) and so on. As new development occurs, new facilities will need to be added so that service levels in newly developing areas are provided at levels enjoyed in existing communities. A widely accepted method for sharing the development-related capital costs for such municipal services is to apportion them over all new development anticipated in the City.

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

- Fire Department
- Police Service
- Public Library
- Parks and Recreation
- Public Transit
- Housing
- Land Ambulance
- Child Care
- Development-Related Studies
- Services Related to a Highway:
 - Roads and Related
 - Public Works: Buildings and Fleet
- Water Services
- Wastewater Services
- Stormwater

These services form a reasonable basis on which to plan and administer the development charges. The analysis of each of these services examines the individual capital facilities and equipment that make them up. For example, Fire Service includes various buildings and associated land, fire fighting vehicles and equipment.

The resulting development charge for these services would be imposed against all development in the City.

It should be noted that the services included for development charges recovery in this study relate solely to eligible services per the DCA amendments brought into force on September 18, 2020. Parking services, along with other community amenities as appropriate, may be examined as part of a future Community Benefits Charge (CBC) by-law under the *Planning Act*. Although a development charge is not being recalculated for this service at this time, the development charges at the existing rates are included in a summary of the total charges in this study. Until the corresponding future by-laws come into force, the current rates as per the City's DC by-law 32-2019 will remain in force for Parking services.

ii. Area-Specific Charges are Calculated

For some services the City provides, the need for development-related capital infrastructure to support anticipated development is more localized. For such services, where costs and benefits are more localized, an alternative technique – the area-specific approach – is proposed.

The area-specific charges relate to the provision of certain engineered services within two benefitting areas: the Northern Boundary Expansion Lands and Tutela Heights. The servicing needs in these area require differing, additional, identifiable and independent projects in order to provide for the anticipated growth. The area-specific approach is applied to

more closely align the capital costs for these services with the particular areas that are serviced by the required infrastructure.

Area-specific DCs calculated for the Northern Boundary Expansion Lands and Tutela Heights include:

- Roads and Related
- Water Services
- Wastewater Services
- Stormwater

It is noted that corresponding development charges for these services have been calculated for City-wide development outside of the Northern Boundary Expansion Lands and Tutela Heights.

B. Key Steps in Determining Development Charges for Future Development-Related Projects

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

i. Development Forecast

The first step in the methodology requires development forecasts to be prepared for the ten-year City-wide study period, 2021–2030, for general services (including Public Works: Buildings and Fleet) and over the long-term to 2051 for the engineered services of Roads and Related, Water, Wastewater, and Stormwater. The forecast of future residential and non-residential development used in this study was prepared in conjunction with the City's planning staff.

For the residential portion of the City-wide forecast, the net (or Census) population growth and population growth in new units is estimated. Net population growth equals the population in new housing units reduced by

the decline in the population in the existing base anticipated over the planning period (due to reducing household sizes as the community ages). Net population is used in the calculation of the development charges funding envelopes. In calculating the per capita development charge, however, population growth in new units is used for both the City-wide and area-specific services.

The non residential portion of the forecast estimates the amount of building space to be developed in the City over the planning periods. Factors for floor space per worker by employment category are used to convert the floor space forecast into employment for the purposes of allocating development related capital costs.

ii. Service Categories and Historical Service Levels

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

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

Historical ten-year average service levels thus form the basis for the development charge calculation. A review of the City's capital service levels for buildings, land, vehicles, equipment and so on has therefore been prepared for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2011 to 2021.

Historical service levels have not been calculated for the engineered services as new infrastructure for these services is required to meet engineering standards set by health and environmental legislation.

iii. Development-Related Capital Forecast and Analysis of Net Capital Costs to be Included in the Development Charges

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

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

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

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

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

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

iv. Attribution to Types of Development

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

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

Finally, the residential component of the City-wide and area-specific development charges is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

v. Final Adjustment

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

3. Development Forecast

The following section provides a summary of the development forecasts that have been used as inputs to the City-wide and area-specific development charges calculations. The development forecasts were prepared in conjunction with the City's planning staff. A more detailed summary of the forecasts, including tables illustrating historical trends and forecast results, is provided in Appendix A.

The DCA requires that the City estimate "the anticipated amount, type and location of development" for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital program.

A. Residential Development Forecasts

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

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

Table 1A provides a summary of the City-wide residential forecast for the 10-year planning period from 2021 to 2030 and from 2021 to 2051. The 2021 to 2030 City-wide forecast is used for the calculation of City-wide Fire,

Police, Public Library, Parks and Recreation, Public Transit, Housing, Land Ambulance, Child Care, Development-Related Studies, and Public Works: Buildings and Fleet development charges. The total 10-year population in new units is forecast at 20,850.

The 2021 to 2051 City-wide forecast is used for the calculation of City-wide Roads and Related, Water, Wastewater, and Stormwater development charges. The total 2021-2051 population in new units is forecast at 73,530.

Table 1B provides a summary of the City-wide Excluding ASDC Areas forecast for the 2021-2051 planning period. This forecast is used for the calculation of Roads and Related, Water, Wastewater, and Stormwater development charges applying to development across the City with the exception of the Northern Boundary Expansion Lands and Tutela Heights. The total 2021-2051 population in new units is forecast at 46,740.

Table 1C provides a summary of the Northern Boundary Expansion Lands area-specific forecast for the planning period from 2021 to 2051. This forecast is used for the calculation of area-specific Roads and Related, Water, Wastewater, and Stormwater development charges. The total 2021-2051 population in new units is forecast at 23,060.

Finally, Table 1D summarized the Tutela Heights area-specific 2021-2051 forecast used for the calculation of area-specific engineered services development charges. The total 2021-2051 population in new units in Tutela Heights is forecast at 3,730.

B. Non-Residential Development Forecasts

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

City-wide, the 10-year employment growth is estimated at 7,610 and GFA growth is forecast at 493,920 square metres, while 34,040 additional jobs and 2.43 million additional square metres are anticipated from 2021 to 2051 (Table 1A). Excluding the two ASDC benefitting areas, 13,590 jobs and 1.14 million square metres are anticipated between 2021 and 2051 (Table 1B). Within the Northern Boundary Expansion Lands, 14,740 jobs and 1.28 million square metres of non-residential building space are forecast (Table 1C), while 90 jobs and 4,950 square metres are anticipated in Tutela Heights over the 2021 to 2051 period.

TABLE 1A

CITY OF BRANTFORD

SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL

DEVELOPMENT FORECAST

		2021 -	- 2030	2021 - 2051	
City-wide Development Forecast	2020	Growth	Total at 2030	Growth	Total at 2051
Residential					
Total Occupied Dwellings	41,030	7,572	48,602	26,436	67,466
Total Population Census <i>Population In New Dwellings</i>	102,533	15,638 <i>20,851</i>	118,171	57,679 <i>73,534</i>	160,212
Non-Residential					
Employment Employment Growth in New Space	45,819	7,611 <i>6,424</i>	53,430	34,039 <i>28,419</i>	79,858
Non-Residential Building Space (sq.m.)		493,926		2,430,622	

TABLE 1B

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST

City-wide Excluding ASDC Areas Development Forecast	Growth 2021-2051
Residential	
Dwelling Units	17,518
Population in New Dwellings	46,742
Non-Residential	
Employment in New Space	13,590
Non-Residential Building Space (sq.m.)	1,140,982

TABLE 1C

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST

Northern Boundary Expansion Lands Development Forecast	Growth 2021-2051
Residential	
Dwelling Units	7,688
Population in New Dwellings	23,055
Non-Residential	
Employment in New Space	14,739
Non-Residential Building Space (sq.m.)	1,284,690

TABLE 1D

CITY OF BRANTFORD TUTELA HEIGHTS SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT FORECAST

Tutela Heights Development Forecast	Growth 2021-2051
Residential	
Dwelling Units	1,230
Population in New Dwellings	3,734
Non-Residential	
Employment in New Space	90
Non-Residential Building Space (sq.m.)	4,950

4. Historical Capital Service Levels

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

For non-engineered services (library, fire, police, etc.) the legislative requirement is met by documenting service levels for the preceding ten years: in this case, for the period 2011 to 2020. Typically, service levels for non-engineered services are measured as a ratio of inputs per population or inputs per population and employment. For engineered services, engineering and environmental/regulatory standards are used in lieu of inputs per capita.

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

The DCA (s.5.2 (3)) requires that in estimating the increase in need for Transit Services, the increased need "shall not exceed the planned level of service over the ten-year period immediately following the preparation of the background study". Therefore, a service level and maximum funding envelope is not required for Transit as it based on a planned level of services as opposed to a historical level of service.

Table 2 summarizes service levels for all general services included in the development charge calculation, with the exception of Transit. Average historical service levels range from approximately \$60 per population and employment for Land Ambulance, to \$7,549 per population and employment for Roads and Related services. Appendix B provides detailed historical inventory data upon which the calculation of service levels is based for the general services.

TABLE 2

CITY OF BRANTFORD SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2011 - 2020

			2011 - 2020
Service		Service Level	
			Indicator
1.0	FIRE DEPARTMENT	\$238.68	per population & employment
	Buildings	\$119.70	per population & employment
	Land	\$30.81	per population & employment
	Furniture & Equipment	\$29.30	per population & employment
	Vehicles	\$58.87	per population & employment
2.0	POLICE SERVICE	\$370.71	per population & employment
	Buildings	\$255.97	per population & employment
	Land	\$25.02	per population & employment
	Vehicles	\$17.57	per population & employment
	Furniture & Equipment	\$72.15	per population & employment
3.0	PUBLIC LIBRARY	\$465.00	per capita
	Buildings	\$345.05	per capita
	Land	\$5.64	per capita
	Materials	\$88.41	per capita
	Furniture & Equipment	\$25.90	per capita
4.0	PARKS & RECREATION	\$4,221.45	per capita
	Indoor Recreation	\$2,441.71	per capita
	Parkland	\$346.84	per capita
	Park Buildings	\$149.18	per capita
	Park Facilities	\$1,283.72	per capita
6.0	HOUSING	\$2,976.50	per capita
	Buildings	\$2,599.89	per capita
	Land	\$376.61	per capita
7.0	LAND AMBULANCE	\$59.89	per population & employment
	Buildings	\$29.38	per population & employment
	Land		per population & employment
	Vehicles		per population & employment
	Furniture And Equipment	\$1.47	per population & employment
8.0	CHILD CARE	\$363.60	per population & employment
	Child Care Spaces	\$363.60	per capita
C1.1	ROADS & RELATED	\$7,549.39	per population & employment
	Roads Infrastructure	\$7,549.39	per population & employment
C1.2	PUBLIC WORKS: BUILDINGS & FLEET		per population & employment
	Buildings		per population & employment
	Land		per population & employment
	Furniture & Equipment		per population & employment
	Fleet & Equipment	\$163.86	per population & employment

5. Development-Related Capital Forecast

The DCA requires the Council of a municipality to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section II, O. Reg. 82/98, s. 3 states that:

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

A. Development-Related Capital Forecasts are provided for Council's Approval

Based on the development forecasts summarized in Section 3 and detailed in Appendix A, City staff, in collaboration with the consultants developed development-related capital forecasts setting out those projects that are required to service anticipated development. For City-wide general services, the capital plan covers the 10-year period from 2021 to 2030. For engineered services (both City-wide and area specific), the capital plan covers the period from 2021–2051.

It is recommended that Council adopt the development related capital forecasts developed for the purposes of the development charges calculations. It is assumed that future capital budgets and forecasts will continue to bring forward the capital projects presented here as they will be needed to service the anticipated development in the City. It is however

acknowledged that changes to the forecast presented here may occur through the City's normal capital budget process.

B. The Development-Related Capital Program for City-Wide General Services (2021-2030)

A summary of the development-related capital program for City-wide general services is shown in Table 3. Further details on the capital plans for each individual service category are available in Appendix B. It is noted that while a 10-year planning period is also used for Public Works: Buildings and Fleet, this services falls within the Services Related to a Highway category within Appendix C.

The 2021-2030 development-related capital program for City-wide general services is estimated at a total gross cost of \$272.60 million. Approximately \$44.04 million in grants or other subsidies has been identified, leaving a net municipal cost of \$228.56 million.

This capital forecast incorporates those projects identified to be related to development anticipated in the next 10 years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see the following Section 6 for the method and determination of net capital costs attributable to growth). Portions of this capital forecast may relate to providing servicing for development which has occurred prior to 2021 (for which development charge reserve fund balances exist), for replacement of existing capital facilities, or for growth anticipated to occur beyond the 2021-2030 planning period.

C. The Development-Related Capital Program City-wide and Area-Specific Engineered Services (2021-2051)

A summary of the development-related capital program for City-wide engineered services is shown in Table 4A. Further details on the capital plans for each individual service category are available in Appendix C. The development-related capital program for City-wide engineered services is estimated at a total gross cost of \$474.60 million. After removing grants, developer contributions, and other recoveries; benefit to existing shares, prior growth shares, and shares benefitting development beyond the 2051 horizon, the remaining \$356.04 million is carried forward to the development charge calculations.

Table 4B summarizes the City-wide Excluding ASDC Areas development-related capital program. Further details on the capital plans for each individual service category are available in Appendix D. The development-related capital program is estimated at a total gross cost of \$164.41 million. Excluding grants, developer contributions, and other recoveries; benefit to existing shares, prior growth shares, and shares benefitting development beyond the 2051 horizon, \$72.13 million remains to be carried forward to the DC calculation.

Table 4C summarizes of the development-related capital program for the Northern Boundary Expansion Lands. Further details on the capital plans for each individual service category are available in Appendix E. The development-related capital program for the area-specific engineered services required to support development in this area totals \$334.73 million. After removing grants, developer contributions, and other recoveries; benefit to existing shares, prior growth shares, and shares benefitting development beyond the 2051 horizon, the remaining \$229.17 million is carried forward to the development charge calculations.

Finally, the Tutela Heights area-specific engineered services capital program is summarized in Table 4D, with further details available in Appendix F. The development-related capital program totals \$21.95 million. Approximately \$17.28 million is carried forward to the development charge calculations after removing grants, developer contributions, and other recoveries; benefit to existing shares, prior growth shares, and shares benefitting development beyond the 2051 horizon.

CITY OF BRANTFORD

SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM FOR CITY-WIDE GENERAL SERVICES 2021 - 2030

(in \$000)

1	Gross	Grants/	Municipal					Total Net Car	oital Program				
Service	Cost	Subsidies	Cost	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1.0 FIRE DEPARTMENT	\$15,834.2	\$0.0	\$15,834.2	\$6,158.5	\$245.9	\$3,249.1	\$252.4	\$255.9	\$259.4	\$263.0	\$866.6	\$870.4	\$3,413.1
1.1 Buildings, Land & Furnishings	\$1,500.0	\$0.0	\$1,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,500.0
1.2 Fire Station 2 Relocation	\$8,340.6	\$0.0	\$8,340.6	\$5,413.5	\$129.3	\$132.6	\$135.9	\$139.4	\$142.9	\$146.5	\$150.1	\$153.9	\$1,796.6
1.3 Fully Equipped Vehicles	\$525.0	\$0.0	\$525.0	\$525.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
1.4 Equipment	\$5,368.6	\$0.0	\$5,368.6	\$220.1	\$116.5	\$3,116.5	\$116.5	\$116.5	\$116.5	\$116.5	\$716.5	\$616.5	\$116.5
1.5 Studies	\$100.0	\$0.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$100.0	\$0.0
2.0 POLICE SERVICE	\$39,560.8	\$0.0	\$39,560.8	\$2,178.6	\$279.8	\$3,279.8	\$1,520.5	\$1,570.7	\$1,622.8	\$1,677.1	\$2,583.5	\$1,792.3	\$23,055.9
2.1 Police Service Headquarters Redevelopment	\$32,913.1	\$0.0	\$32,913.1	\$1,898.8	\$0.0	\$0.0	\$1,240.8	\$1,290.9	\$1,343.0	\$1,397.3	\$1,453.7	\$1,512.5	\$22,776.1
2.2 Equipment	\$6,647.7	\$0.0	\$6,647.7	\$279.8	\$279.8	\$3,279.8	\$279.8	\$279.8	\$279.8	\$279.8	\$1,129.8	\$279.8	\$279.8
3.0 PUBLIC LIBRARY	\$7,893.5	\$0.0	\$7,893.5	\$138.3	\$138.3	\$845.3	\$5,942.2	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3
3.1 Buildings, Land and Furnishings	\$6,510.9	\$0.0	\$6,510.9	\$0.0	\$0.0	\$707.0	\$5,803.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.2 Materials Acquisitions	\$1,382.6	\$0.0	\$1,382.6	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3	\$138.3
4.0 PARKS & RECREATION	\$67,389.7	\$0.0	\$67,389.7	\$35,761.9	\$1,012.1	\$1,212.1	\$25,531.3	\$612.1	\$612.1	\$612.1	\$812.1	\$612.1	\$612.1
4.1 Wayne Gretzky Sports Centre	\$13,118.3	\$0.0	\$13,118.3	\$13,118.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Southwest Community Centre and Park	\$42,744.3	\$0.0	\$42,744.3	\$17,825.0	\$0.0	\$0.0	\$24,919.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.3 Park Development	\$8,322.1	\$0.0	\$8,322.1	\$4,463.1	\$606.6	\$756.6	\$356.6	\$356.6	\$356.6	\$356.6	\$356.6	\$356.6	\$356.6
4.4 Trails and Active Transportation	\$2,655.0	\$0.0	\$2,655.0	\$355.5	\$255.5	\$255.5	\$255.5	\$255.5	\$255.5	\$255.5	\$255.5	\$255.5	\$255.5
4.5 Studies	\$550.0	\$0.0	\$550.0	\$0.0	\$150.0	\$200.0	\$0.0	\$0.0	\$0.0	\$0.0	\$200.0	\$0.0	\$0.0
5.0 PUBLIC TRANSIT	\$5,895.0	\$0.0	\$5,895.0	\$197.0	\$322.0	\$522.0	\$2,022.0	\$22.0	\$422.0	\$22.0	\$2,322.0	\$22.0	\$22.0
5.1 Facilities	\$720.0	\$0.0	\$720.0	\$22.0	\$22.0	\$522.0	\$22.0	\$22.0	\$22.0	\$22.0	\$22.0	\$22.0	\$22.0
5.2 Fleet	\$4,400.0	\$0.0	\$4,400.0	\$0.0	\$0.0	\$0.0	\$2,000.0	\$0.0	\$400.0	\$0.0	\$2,000.0	\$0.0	\$0.0
5.3 Transportation Studies	\$775.0	\$0.0	\$775.0	\$175.0	\$300.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$300.0	\$0.0	\$0.0
6.0 HOUSING	\$97,947.6	\$40,640.6	\$57,307.0	\$12,533.5	\$2,978.7	\$1,989.5	\$5,924.5	\$5,932.4	\$5,940.6	\$5,949.0	\$5,957.7	\$3,354.5	\$6,746.7
6.1 Buildings, Land, and Furnishings	\$69,548.3	\$27,683.1	\$41,865.2	\$10,406.3	\$0.0	\$0.0	\$5,678.5	\$5,678.5	\$5,678.5	\$5,678.5	\$5,678.5	\$3,066.4	\$0.0
6.2 50 Unit Affordable Housing Building (2023)	\$9,098.2	\$4,571.5	\$4,526.7	\$0.0	\$0.0	\$1,878.2	\$69.3	\$72.1	\$75.0	\$78.0	\$81.2	\$84.4	\$2,188.7
6.3 Shellard Lane New Build - 70 Unit	\$14,315.5	\$7,136.0	\$7,179.5	\$0.0	\$2,954.2	\$61.4	\$125.6	\$129.4	\$133.3	\$137.4	\$141.5	\$145.8	\$3,350.8
6.4 Recovery of 177 Colborne Housing Debt	\$4,985.6	\$1,250.0	\$3,735.6	\$2,127.2	\$24.5	\$49.9	\$51.1	\$52.4	\$53.8	\$55.1	\$56.5	\$57.9	\$1,207.2
7.0 LAND AMBULANCE	\$12,290.5	\$3,387.0	\$8,903.5	\$258.2	\$0.0	\$258.2	\$0.0	\$7,870.7	\$0.0	\$258.2	\$0.0	\$258.2	\$0.0
7.1 Facilities	\$10,500.0	\$2,887.5	\$7,612.5	\$0.0	\$0.0	\$0.0	\$0.0	\$7,612.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
7.2 Fleet	\$1,750.0	\$488.3	\$1,261.8	\$252.4	\$0.0	\$252.4	\$0.0	\$252.4	\$0.0	\$252.4	\$0.0	\$252.4	\$0.0
7.3 Equipment and Personnel	\$40.5	\$11.3	\$29.2	\$5.8	\$0.0	\$5.8	\$0.0	\$5.8	\$0.0	\$5.8	\$0.0	\$5.8	\$0.0
8.0 CHILD CARE	\$6,988.8	\$0.0	\$6,988.8	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9
8.1 Child Care Spaces	\$6,988.8	\$0.0	\$6,988.8	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9	\$698.9
9.0 DEVELOPMENT-RELATED STUDIES	\$2,694.2	\$0.0	\$2,694.2	\$1,969.2	\$0.0	\$125.0	\$0.0	\$100.0	\$0.0	\$500.0	\$0.0	\$0.0	\$0.0
9.1 Growth-Related Studies	\$2,694.2	\$0.0	\$2,694.2	\$1,969.2	\$0.0	\$125.0	\$0.0	\$100.0	\$0.0	\$500.0	\$0.0	\$0.0	\$0.0
C1.2 PUBLIC WORKS: BUILDINGS & FLEET	\$16,105.0	\$8.0	\$16,097.0	\$3,470.0	\$1,467.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0
1.2.1 Fleet and Equipment	\$2,080.0	\$8.0	\$2,072.0	\$2,000.0	\$72.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
1.2.2 Technical Studies	\$14,025.0	\$0.0	\$14,025.0	\$1,470.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0	\$1,395.0
TOTAL - 10 YEAR GENERAL SERVICES	\$272,599.4	\$44,035.7	\$228,563.8	\$63,364.0	\$7,142.5	\$13,574.8	\$43,286.9	\$18,595.8	\$11,088.9	\$11,513.4	\$14,774.0	\$9,141.6	\$36,081.8



TABLE 4A

CITY OF BRANTFORD SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM FOR CITY-WIDE ENGINEERED SERVICES 2021 - 2051 (in \$000)

		Develop	ment-Related Cap	oital Program (202	1 - 2051)	
Service	Gross Cost	Grants / Subsidies / Contributions	Replacement & Benefit to Existing	Prior Growth / Available DC Reserves	Other Development- Related	2021-2051 DC Share
C1.1 ROADS AND RELATED	\$335,621.2	\$3,547.5	\$45,230.5	\$25,196.0	\$0.0	\$261,647.1
2.0 WATER SERVICES	\$15,422.0	\$0.0	\$185.8	\$4,186.2	\$0.0	\$11,050.0
3.0 WASTEWATER SERVICES	\$123,352.5	\$0.0	\$24,391.8	\$0.0	\$15,737.2	\$83,223.5
4.0 STORMWATER	\$200.0	\$0.0	\$0.0	\$81.9	\$0.0	\$118.1
TOTAL ENGINEERED SERVICES	\$474,595.7	\$3,547.5	\$69,808.1	\$29,464.1	\$15,737.2	\$356,038.8

TABLE 4B

CITY OF BRANTFORD SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM CITY-WIDE EXCLUDING ASDC AREAS 2021 - 2051 (in \$000)

		Development-Rel	lated Capital Prog	ram (2021 - 2051)	
Service	Gross Cost	Grants / Subsidies / Contributions	Replacement & Benefit to Existing	Other Development- Related	2021-2051 DC Share
1.0 ROADS AND RELATED	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.0 WATER SERVICES	\$40,832.1	\$7,620.0	\$13,069.2	\$990.1	\$19,152.8
3.0 WASTEWATER SERVICES	\$10,735.0	\$0.0	\$460.4	\$1,186.7	\$9,087.9
4.0 STORMWATER	\$112,844.0	\$0.0	\$68,818.8	\$140.4	\$43,884.8
TOTAL ENGINEERED SERVICES	\$164,411.1	\$7,620.0	\$82,348.3	\$2,317.2	\$72,125.5



TABLE 4C

CITY OF BRANTFORD SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM NORTHERN BOUNDARY EXPANSION LANDS 2021 - 2051 (in \$000)

	1	Development-Rela	ated Capital Prog	gram (2021 - 2051)
Service	Gross Cost	Grants / Subsidies / Contributions	Replacement & Benefit to Existing	Other Development- Related	2021-2051 DC Share
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
1.0 ROADS AND RELATED	\$31,594.1	\$0.0	\$0.0	\$0.0	\$31,594.1
2.0 WATER SERVICES	\$124,560.0	\$524.0	\$27,294.4	\$5,221.5	\$91,520.0
3.0 WASTEWATER SERVICES	\$123,352.5	\$0.0	\$24,391.8	\$15,737.2	\$83,223.5
4.0 STORMWATER	\$55,219.0	\$0.0	\$32,381.9	\$0.0	\$22,837.1
TOTAL	\$334,725.5	\$524.0	\$84,068.2	\$20,958.7	\$229,174.6

TABLE 4D

CITY OF BRANTFORD SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM TUTELA HEIGHTS 2021 - 2051 (in \$000)

]	Development-Related Capital Program (2021 - 2051)									
Service	Gross Cost	Grants / Subsidies / Contributions	Replacement & Benefit to Existing	Other Development- Related	2021-2051 DC Share						
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)						
1.0 ROADS AND RELATED	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0						
2.0 WATER SERVICES	\$9,420.0	\$0.0	\$2,485.3	\$535.9	\$6,398.8						
3.0 WASTEWATER SERVICES	\$10,735.0	\$0.0	\$460.4	\$1,186.7	\$9,087.9						
4.0 STORMWATER	\$1,796.0	\$0.0	\$0.0	\$0.0	\$1,796.0						
TOTAL	\$21,951.0	\$0.0	\$2,945.7	\$1,722.6	\$17,282.7						



6. DCs are Calculated in Accordance with the DCA

This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. The calculation of the "unadjusted" per capita (residential) and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that takes interest earnings and borrowing costs into account are also discussed.

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

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

A. Development Charges Calculation

i. Unadjusted Residential and Non-Residential Development Charge Rates

The capital forecast for the City-wide general services incorporates those projects identified to be related to development anticipated in the next 10 years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 5 shows that \$68.31

million of the capital forecast relates to replacement of existing capital facilities or for shares of projects that provide benefit existing development. In addition, \$22.25 million has been committed to projects in the capital forecast from existing development charge reserve funds. Another share of the forecast, \$29.73 million, is deemed "other development related" and is attributable to development beyond 2030 (and can therefore only be recovered under future development charge studies) or represents a service level increase in the City. The remaining amount of \$108.27 million is deemed to be eligible for recovery through DCs in the 2021 to 2031 period. This amount is then allocated to new residential development (\$101.85 million) and non-residential development (\$6.43 million).

The total net development related capital costs eligible for recovery for the City-wide general services results in unadjusted development charges for each service expressed as a per capita charge for residential development and a charge per square metre of new gross floor area (GFA) for non-residential development. These unadjusted development charges are displayed at the right of Table 5.

Table 6A presents the "unadjusted" residential and non-residential development charges for the City-wide engineered services. It shows that of the total net cost of the 2021-2051 capital program, \$51.62 million is considered to replace existing infrastructure or to benefit the existing community. A total amount of \$34.12 million has been, or will be, funded through the existing DC reserve funds and has also been removed from the development charges calculation. Finally, \$824,200 is deemed "other development-related" and is generally attributed to development anticipated to occur beyond 2051. After these deductions, the remaining \$286.08 million is carried forward to the development charge calculation. This amount is then allocated to new residential development (\$205.98 million) and non-residential development (\$80.10 million). The allocation of City-wide engineering service costs yields unadjusted charges for each service

expressed as a per capita charge for residential development and a charge per square foot for new non-residential development.

Table 6B presents the calculation of the City-wide Excluding ASDC Areas unadjusted development charges. Of the net municipal costs, \$117.52 million is considered to replace existing infrastructure or to benefit the existing community. Approximately \$1.48 million is deemed "other development-related". After these deductions, the remaining \$99.03 million is carried forward to the development charge calculation. This amount is then allocated to residential development (\$76.26 million) and non-residential development (\$22.78 million).

Table 6C presents the calculation of the area-specific unadjusted development charges for the Northern Boundary Expansion Lands. Of the net municipal costs, \$84.07 million is considered to replace existing infrastructure or to benefit the existing community. Approximately \$20.96 million is deemed "other development-related". After these deductions, \$229.17 million is carried forward to the development charge calculations and allocated to residential development (\$139.80 million) and non-residential development (\$89.38 million).

Finally, Table 6D presents the calculation of unadjusted development charges for Tutela Heights. Approximately \$2.95 million is considered to benefit the existing community, and another \$1.72 million is deemed "other development-related". The remaining \$17.28 million is allocated to residential development (\$16.94 million) and non-residential development (\$345,700 million).

The allocation of area-specific engineered services costs yields unadjusted charges for each service expressed as a per capita charge for residential development and a charge per square foot for new non-residential development.

TABLE 5

CITY OF BRANTFORD SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES 10-YEAR CAPITAL PROGRAM FOR CITY-WIDE GENERAL SERVICES

10 Year Growth in Population in New Units20,85110 Year Growth in Square Feet493,926

			Development-Rel	ated Capital Prog	gram (2021 - 2030)			_		_
	Service	Net Municipal Cost	Replacement & Benefit to Existing	Available DC Reserves	Other Development- Related	Total DC Eligible Costs for Recovery		sidential Share		Residential Share
		(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)
1.0	FIRE DEPARTMENT	\$15,834.2	\$8,904.9	\$1,471.8	\$0.0	\$5,457.5	71%	\$3,874.9	29%	\$1,582.69
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$185.84		\$3.20
2.0	POLICE SERVICE	\$39,560.8	\$19,213.9	\$2,569.5	\$9,158.8	\$8,618.6	71%	\$6,119.2	29%	\$2,499.40
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$293.47		\$5.06
3.0	PUBLIC LIBRARY	\$7,893.5	\$0.0	\$2,972.6	\$0.0	\$4,920.9	100%	\$4,920.9	0%	\$0.00
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$236.00		\$0.00
4.0	PARKS & RECREATION	\$67,389.7	\$1,573.4	\$13,118.3	\$14,248.1	\$38,450.0	100%	\$38,450.0	0%	\$0.00
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$1,844.04		\$0.00
5.0	PUBLIC TRANSIT	\$5,895.0	\$1,292.5	\$1,424.4	\$0.0	\$3,178.1	71%	\$2,256.5	29%	\$921.66
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$108.22		\$1.87
6.0	HOUSING	\$57,307.0	\$20,057.4	\$196.5	\$0.0	\$37,053.0	100%	\$37,053.0	0%	\$0.00
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$1,777.04		\$0.00
7.0	LAND AMBULANCE	\$8,903.5	\$3,045.0	\$33.7	\$4,432.4	\$1,392.4	71%	\$988.6	29%	\$403.79
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$47.41		\$0.82
8.0	CHILD CARE	\$6,988.8	\$0.0	\$0.0	\$1,302.8	\$5,686.0	100%	\$5,686.0	0%	\$0.00
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$272.70		\$0.00
9.0	DEVELOPMENT-RELATED STUDIES	\$2,694.2	\$904.8	\$163.7	\$588.5	\$1,037.3	71%	\$736.5	29%	\$300.81
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$35.32		\$0.61
C1.2	PUBLIC WORKS: BUILDINGS & FLEET	\$16,097.0	\$13,317.3	\$299.0	\$0.0	\$2,480.7	71%	\$1,761.3	29%	\$719.40
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$84.47		\$1.46
TOTA	AL 10 YEAR GENERAL SERVICES	\$228,563.8	\$68,309.2	\$22,249.5	\$29,730.6	\$108,274.5		\$101,846.7		\$6,427.8
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$4,884.51		\$13.02



TABLE 6A

CITY OF BRANTFORD SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES CITY-WIDE ENGINEERED SERVICES 2021 - 2051 (in \$000)

Growth in Population in New Units 2021-2051	73,534
Growth in New Building Space (Sq.m.) 2021-2051	2,430,622

			Develop	ment-Related Cap	oital Program (202	1 - 2030)			
	Service	Gross Cost	Grants / Subsidies / Contributions	Replacement & Benefit to Existing	Prior Growth / Available DC Reserves	Other Development- Related	2021-2051 DC Share	Residential Share	Non-Residential Share
		(\$000)	(\$000)	(\$000)	(\$000)	\$ -	(\$000)	% (\$000)	% (\$000)
1.1	ROADS AND RELATED	\$335,621.2	\$3,547.5	\$45,230.5	\$25,196.0	\$0.0	\$261,647.1	72% #######	28% \$73,261.2
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$2,561.89	\$30.14
2.0	WATER SERVICE	\$15,422.0	\$0.0	\$185.8	\$4,186.2	\$0.0	\$11,050.0	72% \$ 7,956.0	28% \$ 3,094.0
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$108.19	\$1.27
3.0	WASTEWATER SERVICES	\$24,946.0	\$0.0	\$6,204.2	\$4,654.5	\$824.2	\$13,263.1	72% \$ 9,549.4	28% \$ 3,713.7
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$129.86	\$1.53
4.0	STORMWATER	\$200.0	\$ -	\$0.0	\$81.9	\$0.0	\$118.1	72% \$ 85.0	28% \$ 33.1
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$1.16	\$0.01
тот	AL ENGINEERED SERVICES	\$376,189.2	\$3,547.5	\$51,620.5	\$34,118.6	\$824.2	\$286,078.4	\$205,976.4	\$80,101.9
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$2,801.10	\$32.95



TABLE 6B

CITY OF BRANTFORD

SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL AREA-SPECIFIC DEVELOPMENT CHARGES CITY-WIDE EXCLUDING SANDWICH SOUTH 2021 - 2051

(in \$000)

Growth in Population in New Units 2021-2051 46,742
Growth in New Building Space (Sq.m.) 2021-2051 1,140,982

	-		Developr	ment-Related Cap	ital Program (202	1 - 2051)			
	Service	Grants / Gross Subsidies / Cost Contribution		Replacement & Benefit to Existing	Prior Growth / Available DC Reserves	Other Development- Related	2021-2051 DC Share	Residential Share	Non-Residential Share
		(\$000)	(\$000)	(\$000)	(\$000)	\$ -	(\$000)	% (\$000)	% (\$000)
1.0	ROADS AND RELATED	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	77% \$ -	23% \$ -
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$0.00	\$0.00
2.0	WATER SERVICE	\$40,832.1	\$7,620.0	\$13,069.2	\$0.0	\$990.1	\$19,152.8	77% \$ 14,747.6	23% \$ 4,405.1
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$315.51	\$3.86
3.0	WASTEWATER SERVICES	\$71,982.5	\$0.0	\$35,632.7	\$0.0	\$354.1	\$35,995.7	77% \$ 27,716.7	23% \$ 8,279.0
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$592.97	\$7.26
4.0	STORMWATER	\$112,844.0	\$0.0	\$68,818.8	\$0.0	\$140.4	\$43,884.8	77% \$ 33,791.3	23% \$10,093.5
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$722.93	\$8.85
тот	AL	\$225,658.6	\$7,620.0	\$117,520.6	\$0.0	\$1,484.6	\$99,033.3	\$76,255.6	\$22,777.7
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$1,631.41	\$19.97



TABLE 6C

CITY OF BRANTFORD SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL AREA-SPECIFIC DEVELOPMENT CHARGES NORTHERN BOUNDARY EXPANSION LANDS 2021 - 2051 (in \$000)

Growth in Population in New Units 2021-2051 23,055 Growth in New Building Space (Sq.m.) 2021-2051 1,284,690

		D	evelopment-Rela	ated Capital Pro	gram (2021 - 2051)				
	Service	Gross Cost	Grants / Subsidies / Contributions	Replacement & Benefit to Existing	Other Development- Related	2021-2051 DC Share		sidential Share		Residential Share
		(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)
1.0	ROADS AND RELATED	\$31,594.1	\$0.0	\$0.0	\$0.0	\$31,594.1	61%	\$ 19,272.4	39%	\$ 12,321.7
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$835.93		\$9.59
2.0	WATER SERVICE	\$124,560.0	\$524.0	\$27,294.4	\$5,221.5	\$91,520.0	61%	\$ 55,827.2	39%	\$ 35,692.8
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$2,421.48		\$27.78
3.0	WASTEWATER SERVICES	\$123,352.5	\$0.0	\$24,391.8	\$15,737.2	\$83,223.5	61%	\$ 50,766.3	39%	\$ 32,457.2
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$2,201.97		\$25.26
4.0	STORMWATER	\$55,219.0	\$0.0	\$32,381.9	\$0.0	\$22,837.1	61%	\$ 13,930.6	39%	\$ 8,906.5
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$604.24		\$6.93
TC	DTAL	\$334,725.5	\$524.0	\$84,068.2	\$20,958.7	\$229,174.6		\$139,796.5		\$89,378.1
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$6,063.62		\$69.56



TABLE 6D

CITY OF BRANTFORD SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL AREA-SPECIFIC DEVELOPMENT CHARGES TUTELA HEIGHTS 2021 - 2051

(in \$000)

Growth in Population in New Units 2021-2051	3,734
Growth in New Building Space (Sq.m.) 2021-2051	4,950

		Г	evelopment-Rela	ated Capital Pro	gram (2021 - 2051)				
	Service	Gross Cost (\$000)	Grants / Subsidies / Contributions (\$000)	Replacement & Benefit to Existing (\$000)	Other Development- Related (\$000)	2021-2051 DC Share (\$000)		sidential Share (\$000)		Residential Share (\$000)
		(,)	(,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,		(\$000)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1.0	ROADS AND RELATED	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	98%	\$0.00	2%	\$0.00
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$0.00		\$0.00
2.0	WATER SERVICE	\$9,420.0	\$0.0	\$2,485.3	\$535.9	\$6,398.8	98%	\$ 6,270.8	2%	\$ 128.0
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$1,679.39		\$25.85
3.0	WASTEWATER SERVICES	\$10,735.0	\$0.0	\$460.4	\$1,186.7	\$9,087.9	98%	\$ 8,906.2	2%	\$ 181.8
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$2,385.15		\$36.72
4.0	STORMWATER	\$1,796.0	\$0.0	\$0.0	\$0.0	\$1,796.0	98%	\$ 1,760.1	2%	\$ 35.9
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$471.37		\$7.26
TC	DTAL	\$21,951.0	\$0.0	\$2,945.7	\$1,722.6	\$17,282.7		\$16,937.1		\$345.7
	Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq.M							\$4,535.91		\$69.83



ii. Adjusted Residential and Non-Residential Development Charge Rates

Final adjustments to the "unadjusted" development charge rates are made through a cash flow analysis. The analysis, details of which are included in Appendices B, C, D, E, and F, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipts for each service category.

Table 7 summarizes the results of the adjustment for the residential component of the City-wide development charge rates. As shown, the adjusted per capita rate is increased from \$9,317 per capita to \$11,024 per capita after the cash flow analysis. The calculated rates by residential unit with the total charge per unit range from a high of \$38,392 per single- or semi-detached unit to a low of \$16,768 for small apartments. The rate per row or multiple unit is \$27,091, and the rate per large apartment (over 70 square metres) is \$20,150.

The calculated unadjusted and adjusted City-wide non-residential development charge rates are presented in Table 8. The total adjusted rate is \$88.54 per square metre.

Table 9 summarizes the results of the adjustment for the residential component of the Northern Boundary Expansion Lands area-specific development charge rates. The adjusted per capita rate is \$10,759 after the cash flow analysis. It is noted that the area-specific engineered services shown include the applicable City-wide components of the Roads and Related, Water, Wastewater, and Stormwater charges. The calculated rates by residential unit with the total charge per unit, including the applicable calculated City-wide general services DCs, are \$56,157 per single- or semi-detached unit, \$39,624 per row or multiple unit, \$29,472 per large apartment and \$24,532 per small apartment unit.

The calculated unadjusted and adjusted Northern Boundary Expansion Lands area-specific non-residential development charge rates are presented in Table 10. The total adjusted rates, including the applicable calculated City-wide DCs, are \$151.10 per square metre.

Tables 11 and 12 summarizes the results of the adjustment for the residential and non-residential components of the Tutela Heights areaspecific development charge rates. The total adjusted rates by residential unit, including all applicable City-wide charges, are \$48,340 per single- or semi-detached unit, \$34,109 per row or multiple unit, \$25,369 per large apartment and \$21,115 per small apartment unit. The total adjusted non-residential rates, including the applicable calculated City-wide DCs, are \$141.36 per square metre.

TABLE 7

CITY OF BRANTFORD CITY-WIDE DEVELOPMENT CHARGES RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

	Unadjusted	Adjusted	F	Residential Charg	e By Unit Type (1	L)
Service	Charge Per Capita	Charge Per Capita	Singles & Semis	Rows & Other Multiples	Large Apartment (> 70 sq.m)	Small Apartment (= or <70 sq.m)
Parking (By-law 32-2019)			\$578	\$412	\$307	\$242
Fire Department	\$185.84	\$204	\$700	\$494	\$367	\$306
Police Service	\$293.47	\$367	\$1,259	\$888	\$661	\$550
Public Library	\$236.00	\$255	\$875	\$617	\$459	\$382
Parks & Recreation	\$1,844.04	\$2,098	\$7,196	\$5,077	\$3,776	\$3,145
Public Transit	\$108.22	\$109	\$374	\$264	\$196	\$163
Housing	\$1,777.04	\$1,943	\$6,665	\$4,702	\$3,497	\$2,913
Land Ambulance	\$47.41	\$52	\$178	\$126	\$94	\$78
Child Care	\$272.70	\$279	\$957	\$675	\$502	\$418
Development-Related Studies	\$35.32	\$40	\$137	\$97	\$72	\$60
Subtotal General Services	\$4,800	\$5,347	\$18,919	\$13,352	\$9,931	\$8,257
Services Related to a Highway						
Roads & Related	\$2,562	\$2,972	\$10,194	\$7,192	\$5,349	\$4,456
Public Works: Buildings & Fleet	\$84.47	\$97	\$333	\$235	\$175	\$145
Water Services	\$424	\$607	\$2,082	\$1,469	\$1,093	\$910
Wastewater Services	\$723	\$985	\$3,379	\$2,384	\$1,773	\$1,477
Stormwater	\$724	\$1,016	\$3,485	\$2,459	\$1,829	\$1,523
Subtotal Engineered Services	\$4,517	\$5,677	\$19,473	\$13,739	\$10,219	\$8,511
TOTAL CHARGE PER UNIT	\$9,317	\$11,024	\$38,392	\$27,091	\$20,150	\$16,768
(1) Based on Persons Per Unit Of:			3.43	2.42	1.80	1.50

TABLE 8

CITY OF BRANTFORD CITY-WIDE DEVELOPMENT CHARGES NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE

	Non-Resi	dential Charge
Service	Unadjusted	Adjusted
	Charge per	Charge per
	Square Metre	Square Metre
Parking (By-law 32-2019)		\$2.66
Fire Department	\$3.20	\$3.53
Police Service	\$5.06	\$6.34
Public Library	\$0.00	\$0.00
Parks & Recreation	\$0.00	\$0.00
Public Transit	\$1.87	\$1.88
Housing	\$0.00	\$0.00
Land Ambulance	\$0.82	\$0.89
Child Care	\$0.00	\$0.00
Development-Related Studies	\$0.61	\$0.69
Subtotal General Services	\$11.56	\$15.99
Services Related to a Highway		
Roads & Related	\$30.14	\$37.30
Public Works: Buildings & Fleet	\$1.46	\$1.68
Water Services	\$5.13	\$7.79
Wastewater Services	\$8.78	\$12.65
Stormwater	\$8.86	\$13.13
Subtotal Engineered Services	\$54.38	\$72.55
TOTAL CHARGE PER SQUARE METRE	\$65.93	\$88.54

TABLE 9

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS DEVELOPMENT CHARGES RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

	Unadjusted	Adjusted	Residential Charge By Unit Type (1)			
Service	Charge Per Capita	Charge Per Capita	Singles & Semis	Rows & Other Multiples	Large Apartment (> 70 sq.m)	Small Apartment (= or <70 sq.m)
Roads & Related	\$3,398	\$3,748	\$12,856	\$9,070	\$6,746	\$5,619
Water Services	\$2,530	\$3,380	\$11,594	\$8,180	\$6,084	\$5,067
Wastewater Services	\$2,332	\$2,760	\$9,467	\$6,679	\$4,968	\$4,138
Stormwater	\$605	\$871	\$2,988	\$2,108	\$1,568	\$1,306
Total Area-Specific DCs	\$8,865	\$10,759	\$36,905	\$26,037	\$19,366	\$16,130
Applicable City-wide DCs	\$4,885	\$5,444	\$19,252	\$13,587	\$10,106	\$8,402
TOTAL CHARGE PER UNIT	\$13,749	\$16,203	\$56,157	\$39,624	\$29,472	\$24,532
(1) Based on Persons Per Unit Of:			3.43	2.42	1.80	1.50

TABLE 10

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS DEVELOPMENT CHARGES NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE

	Non-Resi	dential Charge	
Service	Unadjusted	Adjusted	
	Charge per	Charge per	
	Square Metre	Square Metre	
Roads & Related	\$39.73	\$46.47	
Water Services	\$29.06	\$41.92	
Wastewater Services	\$26.79	\$34.23	
Stormwater	\$6.95	\$10.81	
Total Area-Specific DCs	\$102.53	\$133.43	
Applicable City-wide DCs	\$13.01	\$17.67	
TOTAL CHARGE PER SQUARE METRE	\$115.54	\$151.10	

TABLE 11

CITY OF BRANTFORD TUTELA HEIGHTS DEVELOPMENT CHARGES RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

	Unadjusted	Adjusted	Residential Charge By Unit Type (1)			
Service	Charge Per Capita	Charge Per Capita	Singles & Semis	•	Large Apartment (> 70 sq.m)	Small Apartment (= or <70 sq.m)
Roads & Related	\$2,562	\$2,972	\$10,194	\$7,192	\$5,349	\$4,456
Water Services	\$1,788	\$2,068	\$7,094	\$5,005	\$3,722	\$3,100
Wastewater Services	\$2,515	\$2,891	\$9,917	\$6,996	\$5,204	\$4,334
Stormwater	\$473	\$549	\$1,883	\$1,329	\$988	\$823
Total Area-Specific DCs	\$7,337	\$8,480	\$29,088	\$20,522	\$15,263	\$12,713
Applicable City-wide DCs	\$4,885	\$5,444	\$19,252	\$13,587	\$10,106	\$8,402
TOTAL CHARGE PER UNIT	\$12,222	\$13,924	\$48,340	\$34,109	\$25,369	\$21,115
(1) Based on Persons Per Unit Of:			3.43	2.42	1.80	1.50

TABLE 12

CITY OF BRANTFORD TUTELA HEIGHTS DEVELOPMENT CHARGES NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE

	Non-Resi	dential Charge	
Service	Unadjusted	Adjusted	
	Charge per	Charge per	
	Square Metre	Square Metre	
Roads & Related	\$30.14	\$37.30	
Water Services	\$27.13	\$32.38	
Wastewater Services	\$38.25	\$45.31	
Stormwater	\$7.27	\$8.70	
Total Area-Specific DCs	\$102.78	\$123.69	
Applicable City-wide DCs	\$13.01	\$17.67	
TOTAL CHARGE PER SQUARE METRE	\$115.80	\$141.36	

B. Comparison Calculated and Current Development Charges

Tables 13 and 14 present a comparison of the newly calculated City-wide residential and non-residential development charges with the City's current charges. Overall, the calculated City-wide residential charge per single- or semi-detached unit represents an increase of \$14,313 over the current charge. The calculated non-residential, non-industrial charge represents an increase of \$8.71 per square metre.

Tables 15 and 16 present a comparison of the newly calculated areaspecific residential and non-residential development charges for the Northern Boundary Expansion Lands with the City's current charges. For illustrative purposes and to provide an accurate comparison, the areaspecific charges are combined with the applicable calculated City-wide DC rates. Overall, the calculated residential charge per single- or semi-detached unit in the Northern Boundary Expansion Lands is \$6,191 higher than the current total charge. This is primarily due to increases in the calculated City-wide general services DCs. The calculated non-residential charge is \$21.94 per square metre lower than the current charge, by comparison.

Tables 17 and 18 show the current vs. calculated comparisons for Tutela Heights. The total calculated residential charge represents an increase of \$9,293 per single or semi, while the non-residential charge represents a decrease of \$7.78 per square metre from the currently applicable DCs in Tutela Heights.

TABLE 13

CITY OF BRANTFORD COMPARISON OF CURRENT AND CALCULATED RESIDENTIAL DEVELOPMENT CHARGES

	Resident	tial (\$/Single Detach	ned Unit)
	Current	Calculated	Difference in
Service	Residential	Residential	Charge
	Charge	Charge	_
Parking (By-law 32-2019)	\$578	<i>\$578</i>	\$0
Fire Department	\$471	\$700	\$229
Police Service	\$819	\$1,259	\$440
Public Library	\$905	\$875	(\$30)
Parks & Recreation	\$5,482	\$7,196	\$1,714
Public Transit	\$478	\$374	(\$104)
Housing	\$330	\$6,665	\$6,335
Land Ambulance	\$29	\$178	\$149
Child Care	N/A	\$957	N/A
Development-Related Studies	\$90	\$137	\$47
Subtotal General Services	\$9,182	\$18,919	\$9,737
Services Related to a Highway			
Roads & Related	\$11,978	\$10,194	(\$1,784)
Public Works: Buildings & Fleet	\$151	\$333	\$182
Water Services	\$1,589	\$2,082	\$493
Wastewater Services	\$1,153	\$3,379	\$2,226
Stormwater	\$26	\$3,485	\$3,459
Subtotal Engineered Services	\$14,897	\$19,473	\$4,576
TOTAL CHARGE PER UNIT	\$24,079	\$38,392	\$14,313

CITY OF BRANTFORD

TABLE 14

COMPARISON OF CURRENT AND CALCULATED NON-RESIDENTIAL DEVELOPMENT CHARGES

	Non-Residential (\$/Square Metre)			
Service	Current Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge	
Parking (By-law 32-2019)	\$2.66	<i>\$2.66</i>	\$0.00	
Fire Department	\$2.17	\$3.53	\$1.36	
Police Service	\$3.76	\$6.34	\$2.58	
Public Library	\$0.00	\$0.00	\$0.00	
Parks & Recreation	\$0.00	\$0.00	\$0.00	
Public Transit	\$2.19	\$1.88	(\$0.31)	
Housing	\$0.00	\$0.00	\$0.00	
Land Ambulance	\$0.12	\$0.89	\$0.77	
Child Care	N/A	\$0.00	N/A	
Development-Related Studies	\$0.41	\$0.69	\$0.28	
Subtotal General Services	\$11.31	\$15.99	\$4.68	
Services Related to a Highway				
Roads & Related	\$55.10	\$37.30	(\$17.80)	
Public Works: Buildings & Fleet	\$0.70	\$1.68	\$0.98	
Water Services	\$7.30	\$7.79	\$0.49	
Wastewater Services	\$5.31	\$12.65	\$7.34	
Stormwater	\$0.11	\$13.13	\$13.02	
Subtotal Engineered Services	\$68.52	\$72.55	\$4.03	
TOTAL CHARGE PER SQUARE METRE	\$79.83	\$88.54	\$8.71	

TABLE 15

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS DEVELOPMENT CHARGES COMPARISON OF CURRENT AND CALCULATED RESIDENTIAL DEVELOPMENT CHARGES

	Residential (\$/Single Detached Unit)			
	Current	Calculated	Difference in	
Service	Residential	Residential	Charge	
	Charge	Charge	Onarge	
Roads & Related	\$14,942	\$12,856	(\$2,086)	
Water Services	\$12,658	\$11,594	(\$1,064)	
Wastewater Services	\$10,136	\$9,467	(\$669)	
Stormwater	\$2,897	\$2,988	\$91	
Total Area-Specific DCs	\$40,633	\$36,905	(\$3,728)	
Applicable City-wide DCs	\$9,333	\$19,252	\$9,919	
TOTAL CHARGE PER UNIT	\$49,966	\$56,157	\$6,191	

TABLE 16

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS DEVELOPMENT CHARGES COMPARISON OF CURRENT AND CALCULATED NON-RESIDENTIAL DEVELOPMENT CHARGES

	Non-Residential (\$/Square Metre)			
	Current	Calculated	Difference in	
Service	Non-Residential	Non-Residential	Charge	
	Charge	Charge	Onarge	
Roads & Related	\$65.44	\$46.47	(\$18.97)	
Water Services	\$47.31	\$41.92	(\$5.39)	
Wastewater Services	\$37.78	\$34.23	(\$3.55)	
Stormwater	\$10.50	\$10.81	\$0.31	
Total Area-Specific DCs	\$161.03	\$133.43	(\$27.60)	
Applicable City-wide DCs	\$12.01	\$17.67	\$5.66	
TOTAL CHARGE PER SQUARE METRE	\$173.04	\$151.10	(\$21.94)	

TABLE 17

CITY OF BRANTFORD TUTELA HEIGHTS DEVELOPMENT CHARGES COMPARISON OF CURRENT AND CALCULATED RESIDENTIAL DEVELOPMENT CHARGES

	Residential (\$/Single Detached Unit)			
Service	Current Residential Charge	Calculated Residential Charge	Difference in Charge	
Roads & Related	\$11,978	\$10,194	(\$1,784)	
Water Services	\$8,219	\$7,094	(\$1,125)	
Wastewater Services	\$7,615	\$9,917	\$2,302	
Stormwater	\$1,902	\$1,883	(\$19)	
Total Area-Specific DCs	\$29,714	\$29,088	(\$626)	
Applicable City-wide DCs	\$9,333	\$19,252	\$9,919	
TOTAL CHARGE PER UNIT	\$39,047	\$48,340	\$9,293	

TABLE 18

CITY OF BRANTFORD TUTELA HEIGHTS DEVELOPMENT CHARGES COMPARISON OF CURRENT AND CALCULATED NON-RESIDENTIAL DEVELOPMENT CHARGES

	Non-Residential (\$/Square Metre)			
Service	Current Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge	
Roads & Related	\$55.10	\$37.30	(\$17.80)	
Water Services	\$37.99	\$32.38	(\$5.61)	
Wastewater Services	\$35.26	\$45.31	\$10.05	
Stormwater	\$8.78	\$8.70	(\$0.08)	
Total Area-Specific DCs	\$137.13	\$123.69	(\$13.44)	
Applicable City-wide DCs	\$12.01	\$17.67	\$5.66	
TOTAL CHARGE PER SQUARE METRE	\$149.14	\$141.36	(\$7.78)	

7. Cost of Growth Analysis

This section provides a brief examination of the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the DC by-law. This examination is required as one of the provisions of the DCA. Additional details on the cost of growth analysis, including asset management analysis is included in Appendix H.

A. Asset Management Plan

Tables 19 and 20 provide the calculated annual asset management contribution for both the gross capital expenditures and the share related to the general services and engineered services DC recoverable portions over the 2021-2030 and 2021-2051 planning periods. The year 2031 and 2052 have been included to calculate the annual contribution for these periods as the expenditures in 2030 and 2052 will not trigger asset management contributions until 2031 and 2052, respectively.

As shown in Table 19, by 2031 the City should fund an additional \$2.44 million per annum in order to fund the full life cycle costs of the new assets related to the City-wide general services supported under the development charges by-law.

By 2052, the City should fund an additional \$3.11 million per annum associated with the full life cycle costs of the new assets related to the Citywide and area-specific engineered services support under the DC by-law (Table 20).

TABLE 19

CITY OF BRANTFORD CALCULATED ANNUAL PROVISION BY 2031 GENERAL SERVICES

	2021 - 2030			Calculated AMP Annual				
	Capital Program			Provision by 2031				
Service	DC Recoverable		Non-DC Funded		DC Related		Non-DC Related	
Fire Department	\$	5,458,000	\$	10,377,000	\$	121,000	\$	491,000
Police Service	\$	8,619,000	\$	30,942,000	\$	86,000	\$	505,000
Public Library	\$	4,921,000	\$	2,973,000	\$	151,000	\$	95,000
Parks & Recreation	\$	38,450,000	\$	28,940,000	\$	776,000	\$	524,000
Public Transit	\$	3,178,000	\$	2,717,000	\$	500,000	\$	211,000
Housing	\$	37,053,000	\$	60,895,000	\$	567,000	\$	1,016,000
Land Ambulance	\$	1,392,000	\$	10,898,000	\$	57,000	\$	289,000
Child Care	\$	5,686,000	\$	1,303,000	\$	_	\$	_
Development-Related Studies	\$	1,037,000	\$	1,657,000	\$	-	\$	-
Public Works: Buildings & Fleet	\$	2,481,000	\$	13,624,000	\$	178,000	\$	31,000
Total 2031 Provision		108,275,000	\$	164,326,000	\$	2,436,000	\$	3,162,000

TABLE 20

CITY OF BRANTFORD CALCULATED ANNUAL PRIVISION BY 2052 ENGINEERED SERVICES

	2021 - 2051			Calculated AMP Annual				
	Capital Program			Provision by 2052				
Service	DC	Recoverable	No	n-DC Funded		OC Related	No	n-DC Related
Roads & Related	\$	293,241,197	\$	73,974,008	\$	2,380,745	\$	873,557
Water Services	\$	128,121,618	\$	62,112,382	\$	448,307	\$	193,663
Wastewater Services	\$	58,346,717	\$	49,316,783	\$	29,501	\$	43,515
Stormwater	\$	68,636,042	\$	101,422,958	\$	254,365	\$	381,428
Total 2052 Provision	\$	548,345,574	\$	286,826,131	\$	3,112,918	\$	1,492,162

B. Long-Term Capital and Operating Costs

Appendix H also summarizes the estimated increase in net operating costs that the City will experience for additions associated with the planned capital forecast. These estimates are based on City budget information provided by City staff. By 2030, the City's net operating costs are estimated to increase by \$22.57 million.

Appendix H also summarizes the components of the development related capital program that will require funding from non-development charge sources:

- Of the \$228.56 million in City-wide general services net capital programs, about \$68.31 million will need to be financed from non-development charge sources over the planning period of 2021-2030. This share is related to capital replacement and non-growth shares of projects that provide benefit to the existing community.
- Of the \$983.99 million in total City-wide and area-specific engineered services net capital programs, about \$239.17 million is related to capital replacement and benefits to the existing community, and will need to be financed from non-development charge sources over the planning period of 2021-2051.

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

C. The Program is Deemed to be Financially Sustainable

In summary, the asset management plan and long-term capital and operating analysis contained in Appendix H demonstrates that the City can afford to invest and operate the identified general and engineered services infrastructure over the 10-year and long-term planning period.

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

8. Development Charges Policy and Administration

This section addresses the requirement under the DCA for Council to consider area rating for development charges as well as development charge by-law policies and administration.

A. By-law Administration

Many of the administrative requirements of the DCA will be similar to those presently followed by the City. However, changes will likely be required in the collection practices for the new development charges. In this regard:

- It is recommended that current practices regarding collection of development charges and by-law administration continue to the extent possible. It is noted that the City has recently reviewed its collection and administration practices to align with changes enacted through Bill 108, the *More Homes, More Choices Act* on January 1, 2020.
- As required under the DCA, the City should continue codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption.
- It is recommended that the City continue to report policies consistent with the requirements of the DCA.
- It is recommended that Council adopt the development-related capital forecasts included in this background study for City-wide and areaspecific services, subject to annual review through the City's normal capital budget process.

A copy of the by-law will be made two weeks prior to the Public Meeting as required by the legislation.

B. Consideration for Area Rating

In accordance with the DCA, Council must give consideration to the use of area rating, also known as area-specific development charges, as part of the DC Background Study. As part of the City's 2021 DC update, the area-specific development charges are calculated for the Northern Boundary Expansion Lands and Tutela Heights to properly reflect the infrastructure requirements to service development in those service areas.

Appendix A Development Forecast

Development Forecast

This appendix provides details of the development forecast used to prepare the 2021 Development Charges Background Study for the City of Brantford. The forecast method and assumptions are discussed and the results are presented in a series of tables.

The forecasts of population, households, employment, and non-residential building space were prepared by Hemson. The forecasts are consistent with the City's 2021 Official Plan and the provincial Growth Plan, and also take into account Statistics Canada Census information, recent building permit and CMHC housing completion data, and other information provided through consultation with City staff. City-wide forecasts were prepared, along with area-specific forecasts for the Northern Boundary Expansion Lands area-specific development charge (ASDC) area, the Tutela Heights ASDC area, and City-wide excluding the ASDC areas, for the purposes of the engineered services development charge calculations.

The forecast results are set out as follows:

Historical Development - City-wide

Table 1	Historical Population, Dwellings, & Employment
Table 2	Historical Housing Activity
Table 3	Historical Residential Building Permits
Table 4	Historical Households by Period of Construction Showing
	Household Size

Forecast Development - City-wide

Table 5	Population, Household & Employment Growth Summary
Table 6	Forecast of Occupied Households by Unit Type
Table 7	Growth in Households by Unit Type
Table 8	Forecast Population in New Households by Unit Type
Table 9	Non-Residential Space Forecast

Forecast Development – City-wide Excluding ASDC Areas

Table 10	Forecast of Housing by Type
Table 11	Forecast Population Growth in New Households by Unit
	Type
Table 12	Employment Growth in New Non-Residential Space by
	Category

Forecast Development – Northern Boundary Expansion Lands

Table 13	Forecast of Housing by Type
Table 14	Forecast Population Growth in New Households by Unit
	Туре
Table 15	Employment Growth in New Non-Residential Space by
	Category

Forecast Development - Tutela Heights

Table 16	Forecast of Housing by Type
Table 17	Forecast Population Growth in New Households by Unit
	Type
Table 18	Employment Growth in New Non-Residential Space by
	Category

A. Forecast Approach and Key Assumptions

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

Four development forecasts were prepared for the purposes of the 2021 Development Charges Background Study:

- The City-wide forecast covers the 2021-2030 planning period for the calculation of all general services development charges, as well as the 2021-2051 planning period for the calculation of the City-wide engineered services DCs of Roads and Related, Water, Wastewater, and Stormwater services.
- A 2021-2051 forecast was prepared for the "City-wide Excluding ASDC Areas" benefitting area. This forecast was prepared for the calculation of Roads and Related, Water, Wastewater, and Stormwater development charges applying to development across the City with the exception of the ASDC areas.
- An area-specific forecast for the Northern Boundary Expansion Lands, from 2020 to 2051, was prepared for the calculation of engineered services ASDCs applying to that area.
- Another 2021-2051 area-specific forecast was prepared for the Tutela Heights benefitting area for the calculation of engineered services ASDCs.

The City-wide forecast was prepares in consultation with City staff. It is consistent with the City's most recent forecasts and targets that form the basis of its Municipal Comprehensive Review (MCR) and 2021 Official Plan, and considers recent Statistics Canada Census data, building permits, and CMHC housing completion data.

The area-specific development forecasts for the Northern Boundary Expansion Lands and Tutela Heights are also consistent with the recent City documents, and were developed in close consultation with City planning staff.

The City-wide Excluding ASDC Areas forecast represents the 2021-2051 City-wide forecast, net of anticipated growth in the Northern Boundary Expansion Lands and Tutela Heights ASDC areas over the same planning period.

B. Historical Development in the City

Historical growth and development figures presented here are based on Statistics Canada Census data, Canada Mortgage Housing Corporation (CMHC) housing market information, and building permit data. Figures shown in the development forecast represent mid-year estimates. Population figures are equivalent to the population recorded in the Census ("Census population"). This definition does not include the Census net undercoverage, which is typically included in the definition of "total" population commonly used in municipal planning documents.

For development charges purposes, a 10-year historical period of 2011 to 2020 is used for calculating historical service levels. Since 2016 was the last year of available Census information, figures from 2017 to 2020 are estimated. Furthermore, the existing population, dwellings, and employment that were added with the City's most recent municipal boundary adjustment have been added to the 2016 Census information.

Table 1 shows that overall, the population of Brantford has increased by approximately 9,580 people over the last 10 years, to an estimated 102,530 in 2020. Total occupied households increased by 3,920, reaching an estimated 41,030 by 2020.

"Place of work" employment figures in the forecasts record where people work rather than their place of residence. It includes employment with a regular or no fixed place of work. As shown in Table 1, place of work employment has grown by 1,630 jobs over the historical 10-year period, to a total of 45,820 in 2020.

Details on new housing growth in the City are provided in Tables 2 (completions) and 3 (building permits). The overall market share of single-and semi- detached units completed over the last decade has been 50%, though the number of units completed in any one year varies. The market share of rows and other multiples over the same period has been 34%, while

apartments make up the remaining 16%. Over the same period, residential building permits have been comprised of 41% singles and semis, 26% rows, and 33% apartments, with particularly high rates of apartment permits in recent years (Table 3).

Table 4 provides details on historical occupancy patterns for occupied households in Brantford. The overall average occupancy level in the City for single- and semi-detached units is 2.73 persons per housing unit (PPU). Occupancy levels for units constructed between 2006 and 2016 are higher than the overall average and are used in the development charges calculation since they better reflect the number of people that are likely to reside in new development. The average PPU of singles and semis built in the City in the period 2006 to 2016 is 3.43. Due to their smaller sample sizes, the overall average PPUs for recently constructed row and apartment housing, at 2.42 and 1.65, respectively, is used in the DC calculation.

C. Forecast Method and Results

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

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

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

i. Residential Forecasts

As shown in Table 5, the City's population is forecast to grow by 15,640, to 118,170 by 2030, and by 57,680 over the existing based by 2051, reaching a total of 160,210 (net of Census undercoverage). Occupied households are forecast to increase by 7,570 units over the next 10 years, and by 26,440 units to 2051 (Table 7).

In keeping with recent trends, about half of new housing is anticipated to be single- and semi-detached dwelling units, while rows and multiples will comprise approximately 30%, and apartments will make up the remaining 20% (Table 7).

Population growth in the new units is estimated by applying the following PPUs to the housing unit forecast: 3.43 for singles and semis; 2.42 for rows and multiples; and 1.65 for apartments. The assumptions are informed by the historical occupancy patterns for permanently occupied units set out in Table 4. The forecast growth in population in new housing units over the 2021 to 2030 period is 20,850, and 73,530 over the 2021 to 2051 period (Table 8).

Net of growth anticipated in the Northern Boundary Expansion Lands and Tutela Heights, the remaining 2021-2051 housing growth in the City of Brantford is forecast at 17,520 units (Table 10). The forecast population in these new units is 46,740 (Table 11).

The Northern Boundary Expansion Lands forecast assumes slow growth in the initial years following Official Plan adoption, before development activity peaks in 2025-2027, and stabilizes thereafter. Approximately 7,690 residential units are anticipated over the 2021-2051 period, comprised of 4,720 singles and semis, 2,530 rows and multiples, and 440 apartments, as

shown in Table 13. Applying the same PPUs as the City-wide forecast, the population in these new units is calculated at 23,060 (Table 14).

In Tutela Heights, 1,230 residential units are anticipated over the 2021-2051 period, including 800 singles and semis, 370 rows and multiples, and 60 apartments, (Table 16). Applying the same PPUs, the population in these new units is calculated at 3,730 (Table 17).

ii. Non-Residential Development Forecasts

Non-residential development charges are calculated on a unit of gross floor area (GFA) bases. Therefore, forecasts of new non-residential building space have been developed.

As shown in Table 9, overall employment in the City is forecast to increase by 7,610 jobs over the 2021 to 2030 planning period and by 34,040 jobs over the 2021 to 2051 period. However, for the purposes of the development charges population, work at home employment is excluded from the analysis as it is not considered to require building floor space for its activities. This leaves 6,420 jobs requiring non-residential floor space over the next 10 years, and 28,420 by the 2051 horizon.

The floorspace forecast for population-related, employment land-related and major office is based on historical floorspace trends and averages. An assumed floor space per worker (FSW) for each employment category is applied to the forecast numbers in order to estimate growth in non-residential space across the City. The FSWs used are:

Population-Related 55 m² per employee
Employment Land-Related 110 m² per employee
Major Office 27 m² per employee

The overall growth in new non-residential building space across the City between 2021 and 2030 is 493,930 square metres. Approximately 2.43 million square metres are anticipated between 2021 and 2051.

More than half of future employment growth is anticipated to occur in the Northern Boundary Expansion Lands and Tutela Heights. Outside of these areas, over the 2021 to 2051 period, 13,590 jobs requiring new space are anticipated. This growth translates to 1.14 million square metres of new non-residential space (Table 12).

Approximately 14,740 jobs are anticipated in the Northern Boundary Expansion Lands over the 2021 to 2051 period (Table 15). Applying the same FSW factors as the City-wide forecast, the non-residential space forecast is 1.28 million square metres.

The Tutela Heights areas is anticipated to remain primarily residential, with only 90 new jobs within 4,950 square metres of new space anticipated over the 2021 to 2051 period (Table 18).

APPENDIX A

TABLE 1

Historical Population, Dwellings & Employment

Mid-Year	Census Population	Growth	Total Occupied Dwellings	Growth	HH Size	Employment by Place of Work	Growth	Activity Rate
2011	93,650	702	37,500	386	2.50	44,224	32	47.2%
2012	94,628	978	37,922	422	2.50	44,249	25	46.8%
2013	95,617	989	38,349	427	2.49	44,274	25	46.3%
2014	96,616	999	38,781	432	2.49	44,299	25	45.9%
2015	97,625	1,009	39,218	437	2.49	44,324	25	45.4%
2016	98,645	1,020	39,660	442	2.49	44,349	25	45.0%
2017	99,603	958	39,994	334	2.49	44,712	363	44.9%
2018	100,570	967	40,333	339	2.49	45,078	366	44.8%
2019	101,547	977	40,679	346	2.50	45,447	369	44.8%
2020	102,533	986	41,030	351	2.50	45,819	372	44.7%
Growth 2011-2020		9,585		3,916			1,627	

Source: Statistics Canada; Hemson Consulting Ltd.

Note: Census Population does not include Census net undercoverage of roughly 3.0%. Note: Activity Rate represents the ratio between total employment and Census population.

Note: 2016 figures reflect municipal boundary adjustment.



APPENDIX A

TABLE 2

Historical Housing Activity - Units

	C	MHC Annual Housi	ng Completions			Shares by Unit Type					
Year	Singles/Semis	Rows	Apts.	Total	Singles/Semis	Rows	Apts.	Total			
2011	175	71	0	246	71%	29%	0%	100%			
2012	126	94	61	281	45%	33%	22%	100%			
2013	180	142	0	322	56%	44%	0%	100%			
2014	175	64	0	239	73%	27%	0%	100%			
2015	208	55	211	474	44%	12%	45%	100%			
2016	145	101	7	253	57%	40%	3%	100%			
2017	53	96	159	308	17%	31%	52%	100%			
2018	123	140	57	320	38%	44%	18%	100%			
2019	72	62	0	134	54%	46%	0%	100%			
2020	243	208	0	451	54%	46%	0%	100%			
Growth 2011 - 2020	1,500	1,033	495	3,028	50%	34%	16%	100%			

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



APPENDIX A

TABLE 3

Historical Residential Building Permits

		Building P	ermits	Shares by Unit Type					
Year	Singles/Semis	Rows	Apts.	Total	Singles/Semis	Rows	Apts.	Total	
2011	135	118	89	342	39%	35%	26%	100%	
2012	189	64	77	330	57%	19%	23%	100%	
2013	175	119	19	313	56%	38%	6%	100%	
2014	188	47	71	306	61%	15%	23%	100%	
2015	164	114	331	609	27%	19%	54%	100%	
2016	105	97	30	232	45%	42%	13%	100%	
2017	138	153	135	426	32%	36%	32%	100%	
2018	116	243	81	440	26%	55%	18%	100%	
2019	247	46	223	516	48%	9%	43%	100%	
2020	292	111	379	782	37%	14%	48%	100%	
Growth 2011 - 2020	1,749	1,112	1,435	4,296	41%	26%	33%	100%	

Source: Statistics Canada; City of Brantford



APPENDIX A

TABLE 4

Historical Households by Period of Construction Showing Household Size

	Period of Construction											Period of Construction Summary		
Dwelling Unit Type	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total	
Singles & Semis														
Household Population	12,820	11,580	7,910	10,315	8,125	3,590	3,355	5,040	4,795	3,430	62,735	8,225	70,960	
Households	5,515	4,780	3,005	3,710	2,730	1,215	1,090	1,580	1,425	975	23,625	2,400	26,025	
Household Size	2.32	2.42	2.63	2.78	2.98	2.95	3.08	3.19	3.36	3.52	2.66	3.43	2.73	
Rows														
Household Population	210	350	1,065	2,320	1,615	795	565	490	785	755	7,410	1,540	8,950	
Households	65	125	350	930	585	355	290	275	410	315	2,975	725	3,700	
Household Size	3.23	2.80	3.04	2.49	2.76	2.24	1.95	1.78	1.91	2.40	2.49	2.12	2.42	
Apartments														
Household Population	3,525	2,320	2,875	3,300	1,600	720	280	300	310	465	14,920	775	15,695	
Households	2,060	1,410	1,830	2,005	960	370	170	210	215	270	9,015	485	9,500	
Household Size	1.71	1.65	1.57	1.65	1.67	1.95	1.65	1.43	1.44	1.72	1.66	1.60	1.65	
All Units														
Household Population	16,555	14,250	11,850	15,935	11,340	5,105	4,200	5,830	5,890	4,650	85,065	10,540	95,605	
Households	7,640	6,315	5,185	6,645	4,275	1,940	1,550	2,065	2,050	1,560	35,615	3,610	39,225	
Household Size	2.17	2.26	2.29	2.40	2.65	2.63	2.71	2.82	2.87	2.98	2.39	2.92	2.44	

Source: Statistics Canada, 2016 Census Special Run



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TABLE 5

Population, Household & Employment Growth Summary

	Census	Annual	Total Occupied	Annual	Av. Household	Place of Work	Annual	Activity Rate
Mid-Year	Population	Growth	Dwellings	Growth	Size (PPU)	Employment	Growth	Activity Nate
2021	103,529	996	41,386	356	2.50	46,192	373	46.5%
2022	104,884	1,355	42,058	672	2.49	46,797	605	46.8%
2023	106,256	1,372	42,746	688	2.49	47,410	613	47.1%
2024	107,646	1,390	43,451	705	2.48	48,031	621	47.4%
2025	109,055	1,409	44,172	721	2.47	48,661	630	47.7%
2026	110,482	1,427	44,911	739	2.46	49,300	639	48.0%
2027	112,356	1,874	45,800	889	2.45	50,301	1,002	48.3%
2028	114,262	1,906	46,711	911	2.45	51,323	1,022	48.6%
2029	116,200	1,938	47,645	934	2.44	52,366	1,043	48.9%
2030	118,171	1,971	48,602	957	2.43	53,430	1,064	49.2%
2031	120,176	2,005	49,585	983	2.42	54,517	1,087	49.5%
2032	122,097	1,921	50,497	912	2.42	55,642	1,125	49.8%
2033	124,049	1,952	51,429	932	2.41	56,790	1,148	50.1%
2034	126,032	1,983	52,381	952	2.41	57,962	1,172	50.4%
2035	128,046	2,014	53,354	973	2.40	59,158	1,196	50.7%
2036	130,092	2,046	54,348	994	2.39	60,380	1,222	51.0%
2037	132,014	1,922	55,258	910	2.39	61,547	1,167	51.3%
2038	133,964	1,950	56,186	928	2.38	62,737	1,190	51.6%
2039	135,943	1,979	57,132	946	2.38	63,950	1,213	51.9%
2040	137,951	2,008	58,096	964	2.37	65,186	1,236	52.2%
2041	139,988	2,037	59,078	982	2.37	66,445	1,259	52.5%
2042	141,944	1,956	59,889	811	2.37	67,692	1,247	52.8%
2043	143,927	1,983	60,713	824	2.37	68,963	1,271	53.1%
2044	145,938	2,011	61,549	836	2.37	70,258	1,295	53.4%
2045	147,977	2,039	62,398	849	2.37	71,577	1,319	53.7%
2046	150,045	2,068	63,258	860	2.37	72,921	1,344	54.0%
2047	152,025	1,980	64,076	818	2.37	74,258	1,337	54.3%
2048	154,032	2,007	64,906	830	2.37	75,620	1,362	54.6%
2049	156,065	2,033	65,748	842	2.37	77,007	1,387	54.9%
2050	158,125	2,060	66,601	853	2.37	78,419	1,412	55.2%
2051	160,212	2,087	67,466	865	2.37	79,858	1,439	55.5%
Growth 2021-2030	,	15,638	ŕ	7,572		,	7,611	-
Growth 2021-2051		57,679		26,436			34,039	

Source: Statistics Canada; Hemson Consulting Ltd.

Note: Census Population does not include Census net undercoverage of roughly 3.0%.



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TABLE 6

Forecast of Occupied Households by Unit Type

		Occupied Ho	ouseholds			Shares By Unit Type					
Year	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total			
2021	27,215	4,379	9,793	41,386	66%	11%	24%	100%			
2022	27,531	4,590	9,937	42,058	65%	11%	24%	100%			
2023	27,851	4,812	10,083	42,746	65%	11%	24%	100%			
2024	28,175	5,045	10,231	43,451	65%	12%	24%	100%			
2025	28,502	5,289	10,381	44,172	65%	12%	24%	100%			
2026	28,833	5,545	10,534	44,911	64%	12%	23%	100%			
2027	29,292	5,802	10,706	45,800	64%	13%	23%	100%			
2028	29,759	6,072	10,880	46,711	64%	13%	23%	100%			
2029	30,234	6,354	11,057	47,645	63%	13%	23%	100%			
2030	30,716	6,649	11,237	48,602	63%	14%	23%	100%			
2031	31,206	6,959	11,420	49,585	63%	14%	23%	100%			
2032	31,695	7,214	11,588	50,497	63%	14%	23%	100%			
2033	32,191	7,479	11,759	51,429	63%	15%	23%	100%			
2034	32,695	7,754	11,932	52,381	62%	15%	23%	100%			
2035	33,207	8,039	12,108	53,354	62%	15%	23%	100%			
2036	33,727	8,335	12,286	54,348	62%	15%	23%	100%			
2037	34,199	8,592	12,467	55,258	62%	16%	23%	100%			
2038	34,678	8,857	12,651	56,186	62%	16%	23%	100%			
2039	35,164	9,130	12,838	57,132	62%	16%	22%	100%			
2040	35,656	9,412	13,028	58,096	61%	16%	22%	100%			
2041	36,155	9,702	13,221	59,078	61%	16%	22%	100%			
2042	36,575	9,932	13,382	59,889	61%	17%	22%	100%			
2043	36,999	10,168	13,546	60,713	61%	17%	22%	100%			
2044	37,428	10,409	13,712	61,549	61%	17%	22%	100%			
2045	37,862	10,656	13,880	62,398	61%	17%	22%	100%			
2046	38,301	10,908	14,049	63,258	61%	17%	22%	100%			
2047	38,723	11,140	14,213	64,076	60%	17%	22%	100%			
2048	39,150	11,377	14,379	64,906	60%	18%	22%	100%			
2049	39,582	11,619	14,547	65,748	60%	18%	22%	100%			
2050	40,018	11,866	14,717	66,601	60%	18%	22%	100%			
2051	40,460	12,118	14,889	67,466	60%	18%	22%	100%			

Source: Statistics Canada; Hemson Consulting Ltd.



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TABLE 7

Growth in Households by Unit Type

		Occupied H	ouseholds			Shares By Unit Type					
Year	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total			
2021	151	142	64	356	42%	40%	18%	100%			
2022	316	211	144	672	47%	31%	21%	100%			
2023	320	222	146	688	47%	32%	21%	100%			
2024	324	233	148	705	46%	33%	21%	100%			
2025	327	244	150	721	45%	34%	21%	100%			
2026	331	256	153	739	45%	35%	21%	100%			
2027	459	257	172	889	52%	29%	19%	100%			
2028	467	270	174	911	51%	30%	19%	100%			
2029	475	282	177	934	51%	30%	19%	100%			
2030	482	295	180	957	50%	31%	19%	100%			
2031	490	310	183	983	50%	32%	19%	100%			
2032	489	255	168	912	54%	28%	18%	100%			
2033	496	265	171	932	53%	28%	18%	100%			
2034	504	275	173	952	53%	29%	18%	100%			
2035	512	285	176	973	53%	29%	18%	100%			
2036	520	296	178	994	52%	30%	18%	100%			
2037	472	257	181	910	52%	28%	20%	100%			
2038	479	265	184	928	52%	29%	20%	100%			
2039	486	273	187	946	51%	29%	20%	100%			
2040	492	282	190	964	51%	29%	20%	100%			
2041	499	290	193	982	51%	30%	20%	100%			
2042	420	230	161	811	52%	28%	20%	100%			
2043	424	236	164	824	51%	29%	20%	100%			
2044	429	241	166	836	51%	29%	20%	100%			
2045	434	247	168	849	51%	29%	20%	100%			
2046	439	252	169	860	51%	29%	20%	100%			
2047	422	232	164	818	52%	28%	20%	100%			
2048	427	237	166	830	51%	29%	20%	100%			
2049	432	242	168	842	51%	29%	20%	100%			
2050	436	247	170	853	51%	29%	20%	100%			
2051	442	252	172	865	51%	29%	20%	100%			
Growth 2021-2030	3,652	2,412	1,508	7,572	48%	32%	20%	100%			
Growth 2021-2051	13,396	7,881	5,160	26,436	51%	30%	20%	100%			

Source: Hemson Consulting Ltd.



APPENDIX A

TABLE 8

Forecast Population in New Households by Unit Type

		Average Househ	nold Size (PPU)		Population in New HH					
Year	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total		
2021	3.43	2.42	1.65	2.73	517	342	105	964		
2022	3.43	2.42	1.65	2.73	1,085	512	238	1,835		
2023	3.43	2.42	1.65	2.72	1,098	537	241	1,876		
2024	3.43	2.42	1.65	2.72	1,111	564	244	1,919		
2025	3.43	2.42	1.65	2.71	1,122	590	248	1,960		
2026	3.43	2.42	1.65	2.79	1,134	619	253	2,006		
2027	3.43	2.42	1.65	2.79	1,576	623	283	2,482		
2028	3.43	2.42	1.65	2.79	1,602	653	287	2,542		
2029	3.43	2.42	1.65	2.78	1,629	682	292	2,603		
2030	3.43	2.42	1.65	2.78	1,653	714	297	2,664		
2031	3.43	2.42	1.65	2.82	1,681	750	302	2,733		
2032	3.43	2.42	1.65	2.82	1,677	618	277	2,572		
2033	3.43	2.42	1.65	2.81	1,701	641	282	2,624		
2034	3.43	2.42	1.65	2.81	1,729	666	285	2,680		
2035	3.43	2.42	1.65	2.81	1,756	690	290	2,736		
2036	3.43	2.42	1.65	2.79	1,784	716	293	2,793		
2037	3.43	2.42	1.65	2.79	1,619	622	299	2,540		
2038	3.43	2.42	1.65	2.79	1,643	641	304	2,588		
2039	3.43	2.42	1.65	2.78	1,667	661	309	2,637		
2040	3.43	2.42	1.65	2.78	1,688	682	314	2,684		
2041	3.43	2.42	1.65	2.79	1,713	701	318	2,732		
2042	3.43	2.42	1.65	2.79	1,439	557	266	2,262		
2043	3.43	2.42	1.65	2.79	1,454	571	271	2,296		
2044	3.43	2.42	1.65	2.78	1,471	583	274	2,328		
2045	3.43	2.42	1.65	2.78	1,489	598	277	2,364		
2046	3.43	2.42	1.65	2.79	1,505	610	279	2,394		
2047	3.43	2.42	1.65	2.79	1,449	561	270	2,280		
2048	3.43	2.42	1.65	2.78	1,465	574	274	2,313		
2049	3.43	2.42	1.65	2.78	1,482	586	277	2,345		
2050	3.43	2.42	1.65	2.78	1,495	598	281	2,374		
2051	3.43	2.42	1.65	2.75	1,515	610	283	2,408		
2021-2030	3.43	2.42	1.65	2.75	12,527	5,836	2,488	20,851		
2021-2051	3.43	2.42	1.65	2.78	45,949	19,072	8,513	73,534		

Source: Hemson Consulting Ltd.



APPENDIX A

TABLE 9

Non-Residential Space Forecast

Employment Density

Population-Related Employment 55.0 m² per employee Employment Land Employment 110.0 m² per employee 27.0 m² per employee Major Office

	Po	pulation-Related		E	Employment Land			Major Office			Total for DC Study		Work at Ho	me / No Fixed Plac	e of Work		Total	
Mid-Year	Total Emp	Emp Growth	Space (m ²)	Total Emp	Empl Growth	Space (m ²)	Total Emp	Empl Growth	Space (m ²)	Total Emp	Empl Growth	Space (m ²)	Total Emp	Empl Growth	Space (m ²)	Total Emp	Empl Growth	Space (m ²)
2021	20,249	221	12,155	17,252	175	19,250	942	3	81	38,444	400	31,486	7,748	63	0	46,192	373	31,486
2022	20,578	329	18,095	17,422	170	18,700	947	5	135	38,947	503	36,930	7,850	102	0	46,797	605	36,930
2023	20,912	334	18,370	17,593	171	18,810	952	5	135	39,458	511	37,315	7,952	102	0	47,410	613	37,315
2024	21,251	339	18,645	17,766	173	19,030	957	5	135	39,974	516	37,810	8,057	105	0	48,031	621	37,810
2025	21,596	345	18,975	17,941	175	19,250	962	5	135	40,499	525	38,360	8,162	105	0	48,661	630	38,360
2026	21,946	350	19,250	18,118	177	19,470	966	4	108	41,031	532	38,828	8,269	107	0	49,300	639	38,828
2027	22,378	432	23,760	18,499	381	41,910	987	21	567	41,864	834	66,237	8,437	168	0	50,301	1,002	66,237
2028	22,818	440	24,200	18,888	389	42,790	1,008	21	567	42,714	850	67,557	8,609	172	0	51,323	1,022	67,557
2029	23,267	449	24,695	19,285	397	43,670	1,030	22	594	43,582	868	68,959	8,784	175	0	52,366	1,043	68,959
2030	23,725	458	25,190	19,691	406	44,660	1,052	22	594	44,468	886	70,444	8,962	178	0	53,430	1,064	70,444
2031	24,192	467	25,685	20,106	415	45,650	1,074	22	594	45,372	904	71,929	9,145	183	0	54,517	1,087	71,929
2032	24,578	386	21,230	20,631	525	57,750	1,097	23	621	46,309	937	79,601	9,333	188	0	55,642	1,125	79,601
2033	24,970	392	21,560	21,170	539	59,290	1,120	23	621	47,264	955	81,471	9,526	193	0	56,790	1,148	81,471
2034	25,369	399	21,945	21,723	553	60,830	1,144	24	648	48,240	976	83,423	9,722	196	0	57,962	1,172	83,423
2035	25,774	405	22,275	22,290	567	62,370	1,168	24	648	49,235	995	85,293	9,923	201	0	59,158	1,196	85,293
2036	26,186	412	22,660	22,873	583	64,130	1,193	25	675	50,252	1,017	87,465	10,128	205	0	60,380	1,222	87,465
2037	26,461	275	15,125	23,534	661	72,710	1,221	28	756	51,223	971	88,591	10,324	196	0	61,547	1,167	88,591
2038	26,738	277	15,235	24,214	680	74,800	1,249	28	756	52,214	991	90,791	10,523	199	0	62,737	1,190	90,791
2039	27,018	280	15,400	24,914	700	77,000	1,278	29	783	53,223	1,009	93,183	10,727	204	0	63,950	1,213	93,183
2040	27,301	283	15,565	25,634	720	79,200	1,308	30	810	54,252	1,029	95,575	10,934	207	0	65,186	1,236	95,575
2041	27,588	287	15,785	26,374	740	81,400	1,338	30	810	55,300	1,048	97,995	11,145	211	0	66,445	1,259	97,995
2042	27,927	339	18,645	27,028	654	71,940	1,378	40	1,080	56,337	1,037	91,665	11,355	210	0	67,692	1,247	91,665
2043	28,270	343	18,865	27,699	671	73,810	1,420	42	1,134	57,395	1,058	93,809	11,568	213	0	68,963	1,271	93,809
2044	28,617	347	19,085	28,386	687	75,570	1,463	43	1,161	58,473	1,078	95,816	11,785	217	0	70,258	1,295	95,816
2045	28,968	351	19,305	29,090	704	77,440	1,507	44	1,188	59,571	1,098	97,933	12,006	221	0	71,577	1,319	97,933
2046	29,323	355	19,525	29,813	723	79,530	1,553	46	1,242	60,689	1,118	100,297	12,232	226	0	72,921	1,344	100,297
2047	29,752	429	23,595	30,468	655	72,050	1,580	27	729	61,802	1,113	96,374	12,456	224	0	74,258	1,337	96,374
2048	30,187	435	23,925	31,138	670	73,700	1,608	28	756	. ,	1,134	98,381	12,684	228	0	75,620	1,362	98,381
2049	30,629	442	24,310	31,822	684	75,240	1,636	28	756	64,090	1,154	100,306	12,917	233	0	77,007	1,387	100,306
2050	31,077	448	24,640	32,521	699	76,890	1,665	29	783	65,265	1,175	102,313	13,154	237	0	78,419	1,412	102,313
2051	31,532	455	25,025	33,236	715	78,650	1,695	30	810	66,463		104,485	13,395	241	0	79,858	1,439	104,485
2021-2030		3,697	203,335		2,614	287,540		113	3,051		6,424	493,926		1,276	0		7,611	493,926
2021-2051		11,504	632,720		16,159	1,777,490		756	20,412		28,419	2,430,622		5,709	0		34,039	2,430,622

Source: Statistics Canada; Hemson Consulting Ltd. Note: 2017 figures reflect municipal boundary adjustment.



CITY OF BRANTFORD CITY-WIDE EXCLUDING ASDC AREAS FORECAST OF TOTAL HOUSING BY TYPE

Mid-Year	Singles & Semis	Rows	Apartments	Total New HH
2021	151	142	64	356
2022	270	191	141	603
2023	176	149	136	461
2024	108	128	132	368
2025	70	118	130	318
2026	32	108	121	260
2027	201	130	149	481
2028	250	159	154	563
2029	297	187	161	645
2030	304	200	164	668
2031	312	215	167	694
2032	311	160	152	623
2033	318	170	155	643
2034	326	180	157	663
2035	334	190	160	684
2036	342	201	162	705
2037	294	162	165	621
2038	301	170	168	639
2039	308	178	171	657
2040	314	187	174	675
2041	321	195	177	693
2042	242	135	145	522
2043	246	141	148	535
2044	251	146	150	547
2045	256	152	152	560
2046	261	157	153	571
2047	244	137	148	529
2048	249	142	150	541
2049	254	147	152	553
2050	258	152	154	564
2051	264	157	156	576
Growth 2021 - 2051	7,865	4,986	4,668	17,518



CITY OF BRANTFORD CITY-WIDE EXCLUDING ASDC AREAS FORECAST POPULATION GROWTH IN NEW HOUSEHOLDS BY UNIT TYPE*

Mid-Year	Singles & Semis	Rows	Apartments	Total Population in New HH
2021	517	342	105	964
2022	927	463	233	1,623
2023	604	361	224	1,189
2024	370	310	218	898
2025	240	286	214	740
2026	108	261	200	569
2027	691	315	245	1,251
2028	858	385	254	1,497
2029	1,019	452	266	1,737
2030	1,043	484	271	1,798
2031	1,071	520	276	1,867
2032	1,066	388	251	1,705
2033	1,091	411	256	1,758
2034	1,118	436	259	1,813
2035	1,146	460	264	1,870
2036	1,173	486	267	1,926
2037	1,008	392	273	1,673
2038	1,032	411	277	1,720
2039	1,056	431	282	1,769
2040	1,077	452	287	1,816
2041	1,103	471	291	1,865
2042	829	327	240	1,396
2043	844	341	244	1,429
2044	861	353	247	1,461
2045	878	368	251	1,497
2046	894	380	253	1,527
2047	838	331	244	1,413
2048	854	344	247	1,445
2049	871	356	251	1,478
2050	885	368	254	1,507
2051	904	380	257	1,541
Growth 2021 - 2051	26,976	12,065	7,701	46,742

Source: Hemson Consulting, 2021

*Based on PPUs 3.43 2.42 1.65



CITY OF BRANTFORD

CITY-WIDE EXCLUDING ASDC AREAS

EMPLOYMENT GROWTH IN NEW NON-RESIDENTIAL SPACE BY CATEGORY

Employment Density

Population-Related Employment 55.0 m^2 per employee Employment Land Employment 110.0 m^2 per employee Major Office 27.0 m^2 per employee

	Populati	ion-Related	Employr	ment Land	Majo	r Office	Total Emp ir	New Space
Mid-Year	Emp Growth	Growth in New Space (m²)	Emp Growth	Growth in New Space (m²)	Emp Growth	Space (m²)	Emp Growth	Space (m ²)
2021	221	12,155	175	19,250	3	81	399	31,486
2022	329	18,095	131	14,410	5	135	465	32,640
2023	284	15,620	132	14,520	5	135	421	30,275
2024	239	13,145	134	14,740	5	135	378	28,020
2025	165	9,075	136	14,960	5	135	306	24,170
2026	117	6,435	139	15,290	4	108	260	21,833
2027	167	9,185	44	4,840	21	567	232	14,592
2028	187	10,285	52	5,720	21	567	260	16,572
2029	226	12,430	60	6,600	22	594	308	19,624
2030	235	12,925	69	7,590	22	594	326	21,109
2031	244	13,420	78	8,580	22	594	344	22,594
2032	163	8,965	188	20,680	23	621	374	30,266
2033	169	9,295	202	22,220	23	621	394	32,136
2034	176	9,680	216	23,760	24	648	416	34,088
2035	182	10,010	230	25,300	24	648	436	35,958
2036	189	10,395	246	27,060	25	675	460	38,130
2037	52	2,860	324	35,640	28	756	404	39,256
2038	54	2,970	343	37,730	28	756	425	41,456
2039	57	3,135	363	39,930	29	783	449	43,848
2040	60	3,300	383	42,130	30	810	473	46,240
2041	64	3,520	403	44,330	30	810	497	48,660
2042	116	6,380	317	34,870	40	1,080	473	42,330
2043	120	6,600	334	36,740	42	1,134	496	44,474
2044	124	6,820	350	38,500	43	1,161	517	46,481
2045	128	7,040	367	40,370	44	1,188	539	48,598
2046	132	7,260	386	42,460	46	1,242	564	50,962
2047	206	11,330	318	34,980	27	729	551	47,039
2048	212	11,660	333	36,630	28	756	573	49,046
2049	219	12,045	347	38,170	28	756	594	50,971
2050	225	12,375	362	39,820	29	783	616	52,978
2051	232	12,760	378	41,580	30	810	640	55,150
Growth 2021 - 2051	5,294	291,170	7,540	829,400	756	20,412	13,590	1,140,982



CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS FORECAST OF GROWTH IN HOUSEHOLDS BY TYPE

Mid-Year	Singles & Semis	Rows	Apartments	Total New HH
2021	0	0	0	0
2022	30	15	3	48
2023	124	63	10	197
2024	186	95	16	297
2025	217	111	20	348
2026	249	128	22	399
2027	218	112	19	349
2028	187	96	17	300
2029	153	83	14	250
2030	153	83	14	250
2031	153	83	14	250
2032	153	83	14	250
2033	153	83	14	250
2034	153	83	14	250
2035	153	83	14	250
2036	153	83	14	250
2037	153	83	14	250
2038	153	83	14	250
2039	153	83	14	250
2040	153	83	14	250
2041	153	83	14	250
2042	153	83	14	250
2043	153	83	14	250
2044	153	83	14	250
2045	153	83	14	250
2046	153	83	14	250
2047	153	83	14	250
2048	153	83	14	250
2049	153	83	14	250
2050	153	83	14	250
2051	153	83	14	250
Growth 2021 - 2051	4,723	2,530	435	7,688



CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS FORECAST POPULATION GROWTH IN NEW HOUSEHOLDS BY UNIT TYPE*

Mid-Year	Singles & Semis	Rows	Apartments	Total Population in New HH
2021	0	0	0	0
2022	103	36	5	144
2023	425	152	16	593
2024	638	230	26	894
2025	744	269	33	1,046
2026	854	310	36	1,200
2027	748	271	31	1,050
2028	641	232	28	901
2029	525	201	23	749
2030	525	201	23	749
2031	525	201	23	749
2032	525	201	23	749
2033	525	201	23	749
2034	525	201	23	749
2035	525	201	23	749
2036	525	201	23	749
2037	525	201	23	749
2038	525	201	23	749
2039	525	201	23	749
2040	525	201	23	749
2041	525	201	23	749
2042	525	201	23	749
2043	525	201	23	749
2044	525	201	23	749
2045	525	201	23	749
2046	525	201	23	749
2047	525	201	23	749
2048	525	201	23	749
2049	525	201	23	749
2050	525	201	23	749
2051	525	201	23	749
Growth 2021 - 2051	16,228	6,123	704	23,055

Source: Hemson Consulting, 2021

*Based on PPUs 3.43 2.42 1.65



CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS EMPLOYMENT GROWTH IN NEW NON-RESIDENTIAL SPACE BY CATEGORY

Employment Density

Population-Related Employment55.0 m^2 per employeeEmployment Land Employment110.0 m^2 per employeeMajor Office27.0 m^2 per employee

	Population	on-Related	Employr	nent Land	Major	Office	Total Emp in	New Space
Mid-Year	Emp Growth	Growth in New Space (m ²)	Emp Growth	Growth in New Space (m ²)	Emp Growth	Space (m²)	Emp Growth	Space (m²)
2021	0	0	0	0	0	0	0	0
2022	0	0	39	4,290	0	0	39	4,290
2023	50	2,750	39	4,290	0	0	89	7,040
2024	100	5,500	39	4,290	0	0	139	9,790
2025	175	9,625	39	4,290	0	0	214	13,915
2026	225	12,375	38	4,180	0	0	263	16,555
2027	260	14,300	337	37,070	0	0	597	51,370
2028	250	13,750	337	37,070	0	0	587	50,820
2029	220	12,100	337	37,070	0	0	557	49,170
2030	220	12,100	337	37,070	0	0	557	49,170
2031	220	12,100	337	37,070	0	0	557	49,170
2032	220	12,100	337	37,070	0	0	557	49,170
2033	220	12,100	337	37,070	0	0	557	49,170
2034	220	12,100	337	37,070	0	0	557	49,170
2035	220	12,100	337	37,070	0	0	557	49,170
2036	220	12,100	337	37,070	0	0	557	49,170
2037	220	12,100	337	37,070	0	0	557	49,170
2038	220	12,100	337	37,070	0	0	557	49,170
2039	220	12,100	337	37,070	0	0	557	49,170
2040	220	12,100	337	37,070	0	0	557	49,170
2041	220	12,100	337	37,070	0	0	557	49,170
2042	220	12,100	337	37,070	0	0	557	49,170
2043	220	12,100	337	37,070	0	0	557	49,170
2044	220	12,100	337	37,070	0	0	557	49,170
2045	220	12,100	337	37,070	0	0	557	49,170
2046	220	12,100	337	37,070	0	0	557	49,170
2047	220	12,100	337	37,070	0	0	557	49,170
2048	220	12,100	337	37,070	0	0	557	49,170
2049	220	12,100	337	37,070	0	0	557	49,170
2050	220	12,100	337	37,070	0	0	557	49,170
2051	220	12,100	337	37,070	0	0	557	49,170
rowth 2021 - 2051	6,127	336,600	8,609	948,090	0	0	14,739	1,284,690



CITY OF BRANTFORD TUTELA HEIGHTS BOUNDARY EXPANSION LANDS FORECAST OF TOTAL HOUSING BY TYPE

Mid-Year	Singles & Semis	Rows	Apartments	Total New HH
2021	0	0	0	0
2022	16	5	0	21
2023	20	10	0	30
2024	30	10	0	40
2025	40	15	0	55
2026	50	20	10	80
2027	40	15	4	59
2028	30	15	3	48
2029	25	12	2	39
2030	25	12	2	39
2031	25	12	2	39
2032	25	12	2	39
2033	25	12	2	39
2034	25	12	2	39
2035	25	12	2	39
2036	25	12	2	39
2037	25	12	2	39
2038	25	12	2	39
2039	25	12	2	39
2040	25	12	2	39
2041	25	12	2	39
2042	25	12	2	39
2043	25	12	2	39
2044	25	12	2	39
2045	25	12	2	39
2046	25	12	2	39
2047	25	12	2	39
2048	25	12	2	39
2049	25	12	2	39
2050	25	12	2	39
2051	25	12	2	39
Growth 2021 - 2051	801	366	63	1,230



CITY OF BRANTFORD TUTELA HEIGHTS BOUNDARY EXPANSION LANDS FORECAST POPULATION GROWTH IN NEW HOUSEHOLDS BY UNIT TYPE*

Mid-Year	Singles & Semis	Rows	Apartments	Total Population in New HH
2021	0	0	0	0
2022	55	12	0	67
2023	69	24	0	93
2024	103	24	0	127
2025	137	36	0	173
2026	172	48	16	236
2027	137	36	7	180
2028	103	36	5	144
2029	86	29	3	118
2030	86	29	3	118
2031	86	29	3	118
2032	86	29	3	118
2033	86	29	3	118
2034	86	29	3	118
2035	86	29	3	118
2036	86	29	3	118
2037	86	29	3	118
2038	86	29	3	118
2039	86	29	3	118
2040	86	29	3	118
2041	86	29	3	118
2042	86	29	3	118
2043	86	29	3	118
2044	86	29	3	118
2045	86	29	3	118
2046	86	29	3	118
2047	86	29	3	118
2048	86	29	3	118
2049	86	29	3	118
2050	86	29	3	118
2051	86	29	3	118
Growth 2021 - 2051	2,754	883	97	3,734



CITY OF BRANTFORD TUTELA HEIGHTS BOUNDARY EXPANSION LANDS EMPLOYMENT GROWTH IN NEW NON-RESIDENTIAL SPACE BY CATEGORY

Employment Density

Population-Related Employment 55.0 m^2 per employee Employment Land Employment 110.0 m^2 per employee Major Office 27.0 m^2 per employee

	Population	on-Related	Employn	nent Land	Major	Office	Total Emp in	New Space
	F 0 11	Growth in New	F 0 11	Growth in New	F 0 11	2 (2)	F 0 11	2 (2)
Mid-Year	Emp Growth	Space (m²)	Emp Growth	Space (m ²)	Emp Growth	Space (m²)	Emp Growth	Space (m²)
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0
2025	5	275	0	0	0	0	5	275
2026	8	440	0	0	0	0	8	440
2027	5	275	0	0	0	0	5	275
2028	3	165	0	0	0	0	3	165
2029	3	165	0	0	0	0	3	165
2030	3	165	0	0	0	0	3	165
2031	3	165	0	0	0	0	3	165
2032	3	165	0	0	0	0	3	165
2033	3	165	0	0	0	0	3	165
2034	3	165	0	0	0	0	3	165
2035	3	165	0	0	0	0	3	165
2036	3	165	0	0	0	0	3	165
2037	3	165	0	0	0	0	3	165
2038	3	165	0	0	0	0	3	165
2039	3	165	0	0	0	0	3	165
2040	3	165	0	0	0	0	3	165
2041	3	165	0	0	0	0	3	165
2042	3	165	0	0	0	0	3	165
2043	3	165	0	0	0	0	3	165
2044	3	165	0	0	0	0	3	165
2045	3	165	0	0	0	0	3	165
2046	3	165	0	0	0	0	3	165
2047	3	165	0	0	0	0	3	165
2048	3	165	0	0	0	0	3	165
2049	3	165	0	0	0	0	3	165
2050	3	165	0	0	0	0	3	165
2051	3	165	0	0	0	0	3	165
Growth 2021 - 2051	90	4,950	0	0	0	0	90	4,950



Appendix B

General Services

Technical Appendix

General Services Technical Appendix Introduction & Overview

The following appendices provide the detailed analysis undertaken to establish the development charge rates for each of the general services in the City of Brantford. Nine general services have been analysed as part of the development charges study:

Appendix B.1 Fire Department

Appendix B.2 Police Service

Appendix B.3 Public Library

Appendix B.4 Parks & Recreation

Appendix B.5 Public Transit

Appendix B.6 Housing

Appendix B.7 Land Ambulance

Appendix B.8 Child Care

Appendix B.9 Development-Related Studies

Every service, with the exception of Public Transit and Development-Related Studies, contains a set of three tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

Table 1 Historical Service Levels

Table 1 presents the data used to determine the 10-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in

the municipality over the 10-year period immediately preceding the preparation of the background study, on a service-by-service basis. For the purpose of this study, the historical inventory period has been defined as 2011-2020.

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

The final page of Table 1 shows the calculation of the maximum allowable development charge revenue that can be raised for each service. The "maximum allowable" development charge revenue is calculated by taking the 10-year historical service level (expressed as \$/capita or \$/population and employment) multiplied by the forecast increase in population (or population plus employment) over the planning period. The resulting figure is the value of capital infrastructure that would have to be acquired in order to maintain the average 10-year historical service level.

There is also a requirement in the *DCA* to consider "excess capacity" within the City's existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed its intent before or

at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered "committed excess capacity" under the *DCA*, and the associated capital cost is eligible for recovery. This requirement has been addressed through the use of "net" population and employment in the determination of maximum permissible funding envelopes.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The *DCA* requires that Council express its intent to provide capital facilities to support future growth. Based on the development forecasts presented in Appendix A, Hemson, in collaboration with City staff, has developed a development-related capital program which sets out the projects required to service anticipated growth for the 10-year period from 2021-2030.

To determine the share of the program that is eligible for recovery through development charges, the project costs are reduced by any anticipated grants, and "replacement" shares.

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

The capital program less any replacement or benefit to existing shares yields the net development-related program. Although deemed development-related, not all of the net development-related capital program

may be recoverable from development charges in the period from 2021 to 2030. For some of the services, reserve fund balances may be available to fund a share of the program, or prior DCs may have already been applied to the project costs. In addition, some services have identified "other development-related" shares, which can include portions of the capital program that may service growth occurring after 2030 and therefore be recovered under future DCs, or costs that may be funded through other mechanisms. These costs are removed from the development charge calculation.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. As required, this amount is equal to or less than the maximum allowable capital amount as calculated on the final page of Table 1. The result is the development-related net capital cost that is eligible for recovery against development over the planning period from 2021 to 2030.

Calculation of the Unadjusted Development Charge Rates

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

The first step when determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Public Library, Parks and Recreation, Housing, and Child Care, the development-related costs have been apportioned as 71 per cent residential and 29 per cent non-residential. This apportionment is based on the anticipated shares of population and employment growth over the 10-year forecast period.

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

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

Table 3 Cash Flow Analysis

A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs, therefore, are accounted for in the calculation as allowed under the *DCA*. Based on the development forecast, the analysis calculates the development charge rate that is required to finance the net development-related capital spending plan including provisions for any borrowing costs or interest earnings on the reserve funds. The opening balance for all services is set at zero as the existing reserve fund balances are applied to the earliest occurring projects in the capital program for each service as a prior growth share. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

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

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

Appendix B.1
Fire Department

Fire Department

The Brantford Fire Department is responsible for the provision of fire protection and suppression, inspections, and emergency responsive services across the City. The Department currently operates from four stations across the City.

Table 1 Historical Service Levels

Table 1 displays the 10-year historical inventory for buildings, land, vehicles and furniture and equipment. The Fire Department currently operates out of four stations located across the City. Built in 2020, the 10,600 square foot Station 2 was the latest construction which replaced the old Fire Station 2. The estimated replacement value of all four stations is approximately \$17.08 million.

The land associated with the four fire stations totals 3.32 hectares valued at \$5.25 million. Furniture and equipment and personal firefighter equipment at all stations are valued at approximately \$4.42 million. The fleet associated with the Brantford Fire Department includes 13 Station Pickups, 5 Rescues/Pumpers, as well as a variety of Trailers and smaller vehicle types totalling 26 vehicles with a replacement value of \$8.33 million.

The 2020 full replacement value of the inventory of capital assets for the Fire Department totals \$35.07 million and the 10-year historical average service level is \$238.68 per population and employment. The historical service level, multiplied by the 10-year forecast growth in population and employment (23,250) results in a 10-year maximum allowable funding envelope of \$5.55 million.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The development-related capital program for the Fire Department is based on the City's 10-year capital budget and discussions with City staff. The Fire Department has recently relocated and expanded Fire Station 2 in order to provide better service to growing areas and existing communities. The cost of this project is \$8.34 million and includes the recovery of debentures associated with the relocation and expansion.

Various vehicle and equipment projects have been included in the capital program, including outfitting for 12 new Firefighters, a rescue/Hazmat vehicle, SCBA Bottles and Paks, a computer-aided dispatch system, and a portion of an upgraded radio system project and 911 emergency response program, shared with the Police Department. \$5.89 million in total fire equipment and vehicle expenditures is forecast for the 2021-2030 planning period.

Finally, an expansion of the Fire Training Centre and an update to the City's Fire Master Plan is listed in the capital program at a cost of \$1.50 million and \$100,000 respectively.

Altogether, the 10-year capital program for the Fire Department amounts to \$15.83 million. A deduction of \$8.90 million is made to this amount to account for replacement shares. A deduction of \$371,330 million is made to account for the existing reserve fund balance, and another deduction of \$1.10 million is made to account for prior DC revenues that have already been allocated to the Fire Station 2 relocation project.

The net development-related component of the capital program does not exceed the 10-year maximum allowable funding envelope of \$5.60 million,

thus, the full DC eligible capital cost of \$5.46 million is carried forward to the development charges calculation.

The development-related net capital cost of \$5.46 million for the Fire Department is allocated 71 per cent to residential development (\$3.87 million) and 29 per cent to non-residential development (\$1.58 million). This ratio is based on each sector's share of 10-year population and employment growth. The residential share of the net development-related capital cost is divided by the 10-year forecast growth in population in new units (20,850) to derive an unadjusted charge of \$185.84 per capita. The non-residential share of the net development-related capital cost is divided by the 10-year forecast growth in floor space (493,930 million) to derive an unadjusted charge of \$3.20 per square metre.

Table 3 Cash Flow Analysis

After cash flow consideration, both the residential and non-residential calculated charges increase to \$204 per capita and \$3.53 per square metre, respectively.

		FIRE DEPA	ARTMENT SUM	MARY			
10-year Hist.	20	21 - 2030	Unadj	usted	Adju	sted	
Service Level	Development-R	elated Capital Program	Developme	nt Charge	Development Charge		
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m	
\$238.68	\$15,834,247	\$15,834,247 \$5,457,549		\$3.20	\$204	\$3.53	

APPENDIX B.1 TABLE 1 - PAGE 1

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS FIRE DEPARTMENT

BUILDINGS					# of Squ	are Feet					UNIT COST
Station Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq. ft.)
Fire Station #1	16,280	16,280	16,280	16,280	16,280	16,280	16,280	16,280	16,280	16,280	\$524
Fire Station #2	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	-	\$524
New Fire Station #2	-	-	-	-	-	-	-	-	-	10,600	\$524
Excess Capacity										(6,400)	\$524
Fire Station #3	4,854	4,854	4,854	4,854	4,854	4,854	4,854	4,854	4,854	4,854	\$524
Fire Station #4	7,265	7,265	7,265	7,265	7,265	7,265	7,265	7,265	7,265	7,265	\$524
Total (sq.ft.)	32,599	32,599	32,599	32,599	32,599	32,599	32,599	32,599	32,599	32,599	
Total (\$000)	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	\$17,081.9	

LAND					# of He	ctares					UNIT COST
Station Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Fire Station #1	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	\$1,580,000
Fire Station #2	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	-	\$1,580,000
New Fire Station #2	-	-	-	-	-	-	-	-	-	0.72	\$1,580,000
Fire Station #3	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	\$1,580,000
Fire Station #4	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	\$1,580,000
Total (sq.ft.)	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.73	3.32	
Total (\$)	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,313.4	\$5,245.6	



APPENDIX B.1 TABLE 1 - PAGE 2

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS FIRE DEPARTMENT

FURNITURE & EQUIPMENT		Total Value of Furniture & Equipment (\$)									UNIT COST
Station Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/firefighter)
Personal Firefighter Equipment	150	150	150	150	150	250	250	250	250	250	\$3,800
Station Equipment	\$3,096,000	\$3,207,000	\$3,317,000	\$3,317,000	\$3,317,000	\$3,317,000	\$3,317,000	\$3,317,000	\$3,317,000	\$3,317,000	•
Station Furniture	\$141,000	\$141,000	\$141,000	\$141,000	\$141,000	\$141,000	\$141,000	\$141,000	\$148,000	\$150,000	
Total (\$000)	\$3,807.0	\$3,918.0	\$4,028.0	\$4,028.0	\$4,028.0	\$4,408.0	\$4,408.0	\$4,408.0	\$4,415.0	\$4,417.0	

VEHICLES					# of Ve	hicles					UNIT COST
Vehicle Type	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/vehicle)
55' Quinte	1	1	1	1	1	1	1	1	1	1	\$1,325,000
100' Aerial Platform	1	1	1	1	1	1	1	1	1	1	\$1,500,000
Mini Pumper	1	1	1	1	1	1	1	1	1	1	\$100,000
Rescues/Pumpers	5	5	5	5	5	5	5	5	5	5	\$900,000
Command Squad	1	1	1	1	1	1	1	1	1	1	\$120,000
Rescue Boats	2	2	2	2	2	2	2	2	2	2	\$30,000
Station Pickups/SUVs/Cars	13	13	13	13	13	13	13	13	13	13	\$50,000
Trailer - Command Unit	1	1	1	1	1	1	1	1	1	-	\$102,000
Hazardous Materials Trailer	1	1	1	1	1	1	1	1	1	1	\$36,000
Utility Vehicle and Trailer	-				-	1	1	1	1	1	\$35,000
Total (#)	26	26	26	26	26	27	27	27	27	26	
Total (\$000)	\$8,393.0	\$8,393.0	\$8,393.0	\$8,393.0	\$8,393.0	\$8,428.0	\$8,428.0	\$8,428.0	\$8,428.0	\$8,326.0	



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS FIRE DEPARTMENT

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	93,650	94,628	95,617	96,616	97,625	98,645	99,603	100,570	101,547	102,533
Historic Employment	44,224	44,249	44,274	44,299	44,324	44,349	<u>44,712</u>	45,078	45,447	45,819
Population+Employment	137,874	138,877	139,891	140,915	141,949	142,994	144,315	145,648	146,994	148,352
INVENTORY SUMMARY (\$000)										
Ruildings	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9	\$17.081.9

Land	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,304.7	\$4,313.4	\$5,245.6
Furniture & Equipment	\$3,807.0	\$3,918.0	\$4,028.0	\$4,028.0	\$4,028.0	\$4,408.0	\$4,408.0	\$4,408.0	\$4,415.0	\$4,417.0
Vehicles	\$8,393.0	\$8,393.0	\$8,393.0	\$8,393.0	\$8,393.0	\$8,428.0	\$8,428.0	\$8,428.0	\$8,428.0	\$8,326.0
Total (\$000)	\$33,586.6	\$33,697.6	\$33,807.6	\$33,807.6	\$33,807.6	\$34,222.6	\$34,222.6	\$34,222.6	\$34,238.3	\$35,070.5

SERVICE LEVEL (\$/pop & emp)

Average Service Level

Buildings	\$123.89	\$123.00	\$122.11	\$121.22	\$120.34	\$119.46	\$118.37	\$117.28	\$116.21	\$115.14	\$119.70
Land	\$31.22	\$31.00	\$30.77	\$30.55	\$30.33	\$30.10	\$29.83	\$29.56	\$29.34	\$35.36	\$30.81
Furniture & Equipment	\$27.61	\$28.21	\$28.79	\$28.58	\$28.38	\$30.83	\$30.54	\$30.26	\$30.04	\$29.77	\$29.30
Vehicles	\$60.87	\$60.43	\$60.00	\$59.56	\$59.13	\$58.94	\$58.40	\$57.87	\$57.34	\$56.12	\$58.87
Total (\$/pop & emp)	\$243.60	\$242.64	\$241.67	\$239.91	\$238.17	\$239.33	\$237.14	\$234.97	\$232.92	\$236.40	\$238.68

CITY OF BRANTFORD CALCULATION OF MAXIMUM ALLOWABLE FIRE DEPARTMENT

10-Year Funding Envelope Calculation							
10 Year Average Service Level 2011 - 2020	\$238.68						
Net Population & Employment Growth 2021 - 2030	23,249						
Maximum Allowable Funding Envelope	\$5,549,071						



APPENDIX B.1 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM FIRE DEPARTMENT

Project Description		Timing	1	Gross		Grants/		Net	Ineligible Costs		I	Total		Dev	elopi	nent-Related	Cost	s																
1.0 FIRE DEPARTMENT	Project Description			Project	Su	bsidies/Other		Municipal	Replacement			Development		Development		Development		Development		Development		Development		Development		Development		Development		Available 202		2021-		Other
1.1				Cost		Recoveries		Cost	& E	STE S	Shares Related Costs		Related Costs	s DC Shares /		C Shares / 2030		Development-																
1.1														Pr	rior Growth			F	Related															
1.1. Fire Training Centre 203 \$1,500,000 \$ - \$1,500,000 \$ \$750,000 \$ \$750,000 \$ \$ \$750,000 \$ \$ \$ \$ \$ \$ \$ \$ \$	1.0 FIRE DEPARTMENT																																	
1.1.1 Fire Training Centre 2008 5 5,00,000 5 5 750,000																																		
1.2 Five Station 2 Relocation 1.1 Non-Dubt Share 2021 \$ 5,413,451 \$ \$ 5,413,451 \$ \$ 5,413,451 \$ \$ 5,413,451 \$ \$ 5,413,451 \$ \$ 5,413,451 \$ \$ 1,20,200 \$ \$ 750,0			ф.	1 500 000			φ.	1 500 000	E00/		750,000	φ.	750,000	Φ.		ф	750.000	•																
1.2.1 Fire Station 2 Relocation 2021 \$ 5.413.451 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	_	2030			·	-	_		50%	_		_		·				9																
1.1.1 Non-Det Share	Subtotal buildings, Land & Furnishings		Đ	1,500,000	Ф	-	Ф	1,300,000		Ф	150,000	Ф	750,000	Ф	-	Ф	750,000	Ð	-															
1.2.1 Debt Recovery - Principle Payment 2022 \$ 120,344 \$ - \$ 129,344 \$ - \$ 56,000 \$ - \$ 75,020	1.2 Fire Station 2 Relocation																																	
1.2.2 Debt Recovery - Principle Payment 2023 \$ 132,598 \$ - \$ 132,598 \$ - \$ 5,5691 \$ 76,907 \$ - \$ 78,907 \$ - \$ 12.3 Debt Recovery - Principle Payment 2025 \$ 135,933 \$ - \$ 135,933 \$ - \$ \$ 135,933 \$ -	1.1.1 Non-Debt Share	2021	\$	5,413,451	\$	-	\$	5,413,451	42%	\$	2,273,649	\$	3,139,802	\$	1,100,451	\$	2,039,351	\$	-															
1.2.3 Debt Recovery - Principle Payment 2024 \$ 135,933 \$ - \$ 135,933 42% \$ 57,092 \$ 78,841 \$ - \$ 78,841 \$ - \$ 12,40 Debt Recovery - Principle Payment 2025 \$ 139,353 \$ - \$ 139,353 42% \$ 58,528 \$ 80,825 \$ - \$ 80,825 \$ - \$ 80,825 \$ - \$ 12,50 Debt Recovery - Principle Payment 2026 \$ 142,859 \$ - \$ 142,859 42% \$ 60,001 \$ 82,858 \$ - \$ 82,858 \$, , ,	2022			\$	-	\$	129,344	42%	\$	54,324	\$		\$	-		75,020	\$	-															
1.2.4 Debt Recovery - Principle Payment 2025 \$ 133,353 \$ - \$ 133,353 \$ 2% \$ 58,528 \$ 80,825 \$ - \$ 80,825 \$ - \$ 12,25	1.2.2 Debt Recovery - Principle Payment	2023		132,598	\$	-	\$	132,598	42%	\$	55,691	\$	76,907	\$	-	\$	76,907	\$	-															
1.2.5 Debt Recovery - Principle Payment 2026 \$ 142,859 \$ - \$ 142,859 \$ - \$ 146,452 \$ - \$ 146,452 \$ - \$ 146,452 \$ - \$ 146,452 \$ - \$ 150,137 \$ - \$ 100,137	1.2.3 Debt Recovery - Principle Payment	2024		135,933	\$	-		135,933	42%	\$	57,092	\$	78,841	\$	-		78,841	\$	-															
1.2.6 Debt Recovery - Principle Payment 2027 \$ 146.452 \$ - \$ 150.137 \$ - \$ 150.137 \$ \$ \$ 63.057 \$ 84.942 \$ - \$ 87.079 \$ - \$ 12.8 Debt Recovery - Principle Payment 2028 \$ 150.137 \$ - \$ 153.913	1.2.4 Debt Recovery - Principle Payment	2025		139,353	\$	-	\$	139,353	42%	\$	58,528	\$	80,825	\$	-	\$	80,825	\$	-															
1.2.7 Debt Recovery - Principle Payment 2028 \$ 150,137 \$ - \$ 150,137 \$ 2 - \$ 153,913 \$ 2	1.2.5 Debt Recovery - Principle Payment	2026	\$	142,859	\$	-	\$	142,859	42%	\$	60,001	\$	82,858	\$	-	\$	82,858	\$	-															
1.2.8 Debt Recovery - Principle Payment 2029 \$ 153,913 \$ - \$ \$ 153,913 \$ - \$ \$ 1,795,560 \$ 5 - \$ \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,042,005 \$ - \$ 1,0	1.2.6 Debt Recovery - Principle Payment	2027	\$	146,452	\$	-	\$	146,452	42%	\$	61,510	\$	84,942	\$	-	\$	84,942	\$	-															
1.2.9 Debt Recovery - Present Value 2030 + Principle Payments Subtotal Fire Station 2 Relocation Saddo, 600 Sadd	1.2.7 Debt Recovery - Principle Payment	2028	\$	150,137	\$	-	\$	150,137	42%	\$	63,057	\$	87,079	\$	-	\$	87,079	\$	-															
Subtotal Fire Station 2 Relocation Subtotal Fire Station 2 Relocation Subtotal Fire Station 2 Relocation Subtotal Fully Equipped Vehicles 1.2.1 Rescue/Hazmat Vehicle 2021 Subtotal Fully Equipped Vehicles Subtotal Equipment					-	=				\$					-			\$	-															
1.2 Fully Equipped Vehicles 2021 \$ 525,000 \$ - \$ 525,000 \$ - \$ 525,000 \$ \$ - \$ \$ 525,000 \$ \$ - \$ \$ 525,000 \$ \$ - \$ \$ 525,000 \$ \$ - \$ \$ 525,000 \$ \$ - \$ \$ 525,000 \$ \$ - \$ \$ 525,000 \$ 371,330 \$ 153,670 \$ - \$ \$ - \$ \$ 525,000 \$ 371,330 \$ 153,670 \$ - \$ \$ - \$ \$ 525,000 \$ 371,330 \$ 153,670 \$ - \$ \$ - \$ \$ 525,000 \$ 371,330 \$ 153,670 \$ - \$ \$ 525,000 \$ 371,300 \$ 153,670 \$ - \$ \$ 525,000 \$ 371,300 \$ 153,670 \$ - \$ \$ 525,000 \$ 371,300 \$ 153,670 \$ - \$ \$ 525,000 \$ 371,300 \$ 153,670 \$ - \$ \$ 525,000 \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577,41 \$ - \$ 577	1.2.9 Debt Recovery - Present Value 2030+ Principle Paymen	s 2030	\$	1,796,560	\$		\$	1,796,560	42%	\$	754,555	\$	1,042,005	\$	-	\$	1,042,005	\$	-															
1.2.1 Rescue/Hazmat Vehicle 2021 \$ 525,000 \$ - \$ 525,000 \$ \$ - \$ 525,000 \$ \$ - \$ 525,000 \$ \$ - \$ 525,000 \$ \$ 371,330 \$ 153,670 \$ \$ - \$ 525,000 \$ \$ \$ - \$ 525,000 \$ \$ \$ - \$ 525,000 \$ \$ \$ \$ \$ \$ \$ \$ \$	Subtotal Fire Station 2 Relocation		\$	8,340,600	\$	-	\$	8,340,600		\$	3,503,052	\$	4,837,548	\$	1,100,451	\$	3,737,097	\$	-															
1.2.1 Rescue/Hazmat Vehicle 2021 \$ 525,000 \$ - \$ 525,000 \$ \$ - \$ 525,000 \$ \$ - \$ 525,000 \$ \$ - \$ 525,000 \$ \$ 371,330 \$ 153,670 \$ \$ - \$ 525,000 \$ \$ \$ - \$ 525,000 \$ \$ \$ - \$ 525,000 \$ \$ \$ \$ \$ \$ \$ \$ \$	1.2 Fully Fauinned Vehicles																																	
1.3 Equipment 1.3.1 Expanded Emergency Operations Centre Equipment 2021 \$ 103,547 \$ - \$ 103,547 86% \$ 89,518 \$ 14,029 \$ - \$ 14,029 \$ - 1.3.2 SCBA Bottles and Paks 2029 \$ 500,000 \$ - \$ 500,000 86% \$ 432,259 \$ 67,741 \$ - \$ 67,741 \$ - 1.3.3 Fire Next Generation 911 (NG911) 2028 \$ 600,000 \$ - \$ 600,000 \$ 518,710 \$ 81,290 \$ - \$ 81,290 \$ - 1.3.4 Fire/Police Joint Radio System Upgrade 2023 \$ 3,000,000 \$ - \$ 3,000,000 86% \$ 2,593,551 \$ 406,449 \$ - \$ 406,449 \$ - 1.3.5 Equipment for 12 New Firefighters Various \$ 45,600 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 11,119,500 \$ 66% \$ 967,827 \$ 151,673 \$ - \$ 151,673 \$ - \$ 766,782 \$ - \$ 766,782 \$ - \$ 766,782 \$ - \$ 766,782 \$ - \$ 766,782 \$ - \$ 766,782 \$ -<		2021	\$	525,000	\$	-	\$	525,000	0%	\$	-	\$	525,000	\$	371,330	\$	153,670	\$	-															
1.3.1 Expanded Emergency Operations Centre Equipment 2021 \$ 103,547 \$ - \$ 103,547 \$ 66% \$ 89,518 \$ 14,029 \$ - \$ 14,029 \$ - \$ 13.32 \$ SCBA Bottles and Paks 2029 \$ 500,000 \$ - \$ 500,000 \$ - \$ 500,000 \$ - \$ 60	Subtotal Fully Equipped Vehicles		\$	525,000	\$	-	\$	525,000		\$	=	\$	525,000	\$	371,330	\$	153,670	\$	-															
1.3.1 Expanded Emergency Operations Centre Equipment 2021 \$ 103,547 \$ - \$ 103,547 \$ 66% \$ 89,518 \$ 14,029 \$ - \$ 14,029 \$ - \$ 13.32 \$ SCBA Bottles and Paks 2029 \$ 500,000 \$ - \$ 500,000 \$ - \$ 500,000 \$ - \$ 60	1.3 Equipment																																	
1.3.2 SCBA Bottles and Paks 2029 \$ 500,000 \$ -	·	2021	\$	103 547	\$	_	\$	103 547	86%	\$	89 518	\$	14 029	\$	_	\$	14 029	\$	_															
1.3.3 Fire Next Generation 911 (NG911) 2028 \$ 600,000 \$ - \$ 600,000 \$ \$ - \$ 86% \$ 518,710 \$ 81,290 \$ - \$ 81,290 \$ - \$ 406,449 \$ - \$ 406,449 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 45,600 \$ - \$ 1,319,500 \$ - \$ 1,119								,											_															
1.3.4 Fire/Police Joint Radio System Upgrade 1.3.5 Equipment for 12 New Firefighters 1.3.6 Minor Capital Subtotal Equipment 2023 \$ 3,000,000 \$ - \$ 3,000,000 \$ - \$ 45,600 0				,		_	_	,							_		,	*	_															
1.3.5 Equipment for 12 New Firefighters Various \$ 45,600 \$ - \$ 45,600 \$ 5 - \$ \$ 45,600 \$ 5 - \$ \$ 45,600 \$ 5 - \$ \$ 151,673 \$ 5 - \$ \$ 151,673 \$ 5 - \$ \$ 151,673 \$ 5 - \$ \$ 151,673 \$ 5 - \$ 5,368,647 \$ 5 -						_									_			*	_															
1.3.6 Minor Capital Subtotal Equipment						_					-		,		_		,	\$	_															
1.4 Studies 1.4.1 Fire Master Plan Subtotal Studies 2029 \$ 100,000 \$ - \$ 100,000 \$ 5						=	-			-	967,827				=			\$	-															
1.4.1 Fire Master Plan Subtotal Studies 2029 \$ 100,000 \$ - \$ 100,000 \$ 50% \$ 50,000	Subtotal Equipment		\$	5,368,647	\$	-	\$	5,368,647		\$	4,601,865	\$	766,782	\$	-	\$	766,782	\$	-															
1.4.1 Fire Master Plan Subtotal Studies 2029 \$ 100,000 \$ - \$ 100,000 \$ 50% \$ 50,000	44.00 11																																	
Subtotal Studies \$ 100,000 \$ - \$ 100,000 \$ 50,000 \$ - \$ 50,000 \$ -		2020		100.000	¢		4	100 000	E00/	4	E0 000	φ.	E0 000	¢.		ф	E0 000	¢																
		2029	_		<u> </u>		_ -		30%	1 <u>-</u>		- ·		_				<u> </u>																
TOTAL FIRE DEPARTMENT \$ 15,834,247 \$ - \$ 15,834,247 \$ 5,457,549 \$ -	Subtotal Studies		\$	100,000	\$	=	\$	100,000		\$	50,000	\$	50,000	\$	=	\$	50,000	\$	=															
101AL FIRE DEFARTIMENT \$ 15,834,247 \$ - \$ 15,834,247 \$ 8,904,917 \$ 6,929,330 \$ 1,471,781 \$ 5,457,549 \$ -	TOTAL FIRE DEPARTMENT		.	15 024 247			,	15 024 247		,	0.004.017	,	6 020 222	φ.	1 471 701	4	E 457 540	¢																
	TOTAL FIRE DEPARTMENT		\$	15,834,247	\$	-	\$	15,834,247		\$	8,904,917	\$	6,929,330	\$	1,471,781	\$	5,457,549	\$	-															

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	71%	\$3,874,860
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$185.84
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	29%	\$1,582,689
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$3.20





APPENDIX B.1 TABLE 3 - PAGE 1

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE FIRE DEPARTMENT RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

FIRE DEPARTMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.0	(\$1,422.4)	(\$1,214.6)	(\$1,284.5)	(\$1,035.6)	(\$755.6)	(\$441.2)	\$10.6	\$445.2	\$889.4	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMEN	ΓS										
- Fire Department (Non-Debt Share): Non Inflated	\$1,581.0	\$14.0	\$302.6	\$14.0	\$14.0	\$14.0	\$14.0	\$71.7	\$97.6	\$546.5	\$2,669.5
- Debenture Principle Payments (1)	\$0.0	\$53.3	\$54.6	\$56.0	\$57.4	\$58.8	\$60.3	\$61.8	\$63.4	\$739.8	\$1,205.4
- Fire Department: Inflated	\$1,581.01	\$67.6	\$369.4	\$70.8	\$72.5	\$74.3	\$76.1	\$144.2	\$177.7	\$1,392.9	\$4,026.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$196.7	\$381.8	\$398.2	\$415.4	\$432.8	\$451.8	\$570.2	\$595.7	\$622.2	\$649.5	\$4,714.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$78.2)	(\$66.8)	(\$70.6)	(\$57.0)	(\$41.6)	(\$24.3)	\$0.4	\$15.6	\$31.1	(\$291.4)
- Interest on In-year Transactions	(\$38.1)	\$5.5	\$0.5	\$6.0	\$6.3	\$6.6	\$8.6	\$7.9	\$7.8	(\$20.4)	(\$9.2)
- Interest Payments on Debentures (2)	\$0.0	(\$33.7)	(\$32.4)	(\$31.0)	(\$29.6)	(\$28.2)	(\$26.7)	(\$25.2)	(\$23.6)	(\$130.0)	(\$360.4)
TOTAL REVENUE	\$158.6	\$275.3	\$299.5	\$319.8	\$352.5	\$388.7	\$527.9	\$578.8	\$621.9	\$530.2	\$4,053.3
CLOSING CASH BALANCE	(\$1,422.4)	(\$1,214.6)	(\$1,284.5)	(\$1,035.6)	(\$755.6)	(\$441.2)	\$10.6	\$445.2	\$889.4	\$26.6	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2021 Adjusted Charge Per Capita	\$204
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Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE FIRE DEPARTMENT NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

FIRE DEPARTMENT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$549.37)	(\$486.11)	(\$540.35)	(\$468.10)	(\$386.93)	(\$296.65)	(\$87.58)	\$116.08	\$326.82	
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREI	MENTS										
- Fire Department (Non-Debt Share): Non Inflated - Debenture Principle Payments (1) - Fire Department: Inflated	\$645.8 \$0.0 \$645.77	\$5.7 \$21.8 \$27.6	\$123.6 \$22.3 \$150.9	\$5.7 \$22.9 \$28.9	\$5.7 \$23.4 \$29.6	\$5.7 \$24.0 \$30.3	\$5.7 \$24.6 \$31.1	\$29.3 \$25.3 \$58.9	\$39.9 \$25.9 \$72.6	\$223.2 \$302.2 \$569.0	\$1,090.3 \$492.3 \$1,644.7
NEW NON-RESIDENTIAL DEVELOPMENT - Growth in Square Metres	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	493,926
REVENUE - DC Receipts: Inflated	\$111.1	\$133.0	\$137.0	\$141.6	\$146.6	\$151.3	\$263.3	\$273.9	\$285.2	\$297.2	\$1,940.2
INTEREST - Interest on Opening Balance - Interest on In-year Transactions - Interest Payments on Debentures (2)	\$0.0 (\$14.7) \$0.0	(\$30.2) \$1.8 (\$13.8)	(\$26.7) (\$0.4) (\$13.2)	(\$29.7) \$2.0 (\$12.7)	(\$25.7) \$2.0 (\$12.1)	(\$21.3) \$2.1 (\$11.5)	(\$16.3) \$4.1 (\$10.9)	(\$4.8) \$3.8 (\$10.3)	\$4.1 \$3.7 (\$9.6)	\$11.4 (\$7.5) (\$53.1)	(\$139.3) (\$3.0) (\$147.2)
TOTAL REVENUE	\$96.4	\$90.8	\$96.6	\$101.2	\$110.8	\$120.6	\$240.1	\$262.6	\$283.3	\$248.1	\$1,650.6
CLOSING CASH BALANCE	(\$549.4)	(\$486.1)	(\$540.3)	(\$468.1)	(\$386.9)	(\$296.6)	(\$87.6)	\$116.1	\$326.8	\$6.0	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2021 Adjusted Charge Per Square Metre \$3.53

Allocation of Conital Browns	
Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.2
Police Services

Police Services

The Brantford Police Service is responsible for the provision of police services in the City of Brantford. The department currently operates out of one headquarter office as well as a radio sub-office.

Table 1 Historical Service Levels

The 10-year historic inventory of capital assets for Police Service includes a 60,730-square foot headquarters and a small radio sub-office of 145 square feet. The total replacement value of these two buildings is \$36.53 million. The 2.26 hectares of land associated with the headquarters is valued at \$3.57 million.

The vehicles owned and operated by the Brantford Police Service includes passenger cars, vans, pickups, SUVs, as well as various trailers and smaller vehicles. The service has a fleet of 80 vehicles, excluding cruisers, valued at \$3.04 million. The equipment required for stations and police officers adds another \$10.54 million to the value of the inventory.

The current value of the Police Service's capital infrastructure including buildings, land, vehicles, and furniture and equipment is approximately \$53.68 million. The 10-year average historic service level is \$370.71 per population and employment. This average historical service level multiplied by the 10-year forecast growth in population results in a 10-year maximum allowable funding envelope of \$8.62 million which is carried forward to the development charges calculation.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021 to 2030 Police Service development-related capital program includes the redevelopment and expansion of the Police Services Headquarters as well as various equipment acquisitions over the 10-year planning period. Required to service anticipated growth in the City of Brantford, the police service headquarters expansion and redevelopment brings the building to a total of 105,000 square feet with a gross cost of \$32.91 million. The non-debt share of this project cost is \$1.90 million and the remaining \$31.01 million is related to debenture recovery.

Other capital program items include the Police share of an upgraded radio system project, 911 emergency response program, and personal equipment for 32 additional officers that will be hired over the course of the 10-year period. Police equipment projects total \$6.65 million, bringing the total capital program for the Brantford Police Service to \$39.56 million.

Of this, \$19.21 million is deemed to benefit existing residents, as such, the 10-year development related capital program totals \$20.35 million. Approximately \$1.59 million has already been applied to the headquarters redevelopment, and the existing reserve fund contributes an additional \$977,660 which is also removed from the calculation. Another \$9.16 million is deemed "other development related" due to funding envelope restrictions, and may be recovered through future development charges studies or other tools.

The eligible \$8.62 million is related to growth between 2021 and 2030. The development-related net capital cost of \$8.62 million is then allocated 71 per cent to residential development (\$6.12 million) and 29 per cent to non-residential development (\$2.50 million). This ratio is based on each sector's share of 10-year population in new unit growth and employment growth. The

residential share of the net development-related capital cost is divided by the 10-year forecast growth in population in new units to derive an unadjusted charge of \$293.47 per capita. The non-residential share of the net development-related capital cost is divided by the 10-year forecast growth in floor space to derive an unadjusted charge of \$5.06 per square metre.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge increases to \$367 per capita and the non-residential charge increases to \$6.34 per square metre.

		POLICE S	SERVICE SUMM	ARY		
10-year Hist.	20	21 - 2030	Unadj	usted	Adju	sted
Service Level	Development-R	elated Capital Program	Developme	ent Charge	Developme	ent Charge
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$370.71	\$39,560,835	\$8,618,637	\$293.47	\$5.06	\$367	\$6.34

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS POLICE SERVICE

BUILDINGS					# of Squa	are Feet					UNIT COST
Station	2011	2012 2013 2014		2014	2015	2016	2017	2018	2019	2020	(\$/sq. ft.)
Police Headquarters	60,734	60,734	60,734	60,734	60,734	60,734	60,734	60,734	60,734	60,734	\$600
Radio Suboffice	145	145	5 145 145		145	145	145 145		145	145	\$600
Total (sq.ft.)	60,879	60,879	60,879	60,879	60,879	60,879	60,879	60,879	60,879	60,879	
Total (\$000)	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	

LAND					# of He	ectares					UNIT COST
Station	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Police Headquarters	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	\$1,580,000
Total (ha)	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	
Total (\$000)	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	

VEHICLES					# of Ve	ehicles					UNIT COST
Vehicle Type	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/vehicle)
Passenger Cars (Malibu's, Impalas etc.)	3	3	4	9	11	11	11	13	14	14	\$32,843
Vans and Pickups	16	16	16	13	14	14	14	17	14	14	\$36,401
Trailer Mounted Speed Monitor	1	1	1	1	1	1	1	1	1	1	\$13,000
Motorcycles	7	7	8	9	9	9	9	9	9	9	\$20,000
Command Post	1	1	1	1	1	1	1	1	1	1	\$112,000
ATV	2	2	2	2	2	2	2	2	2	2	\$20,000
Trailer (24 ft.)	1	1	1	1	1	1	1	1	1	1	\$8,000
Trailer - 8' X 18' (EDU)	1	1	1	1	1	1	1	1	1	1	\$41,000
SUV	20	20	20	27	27	28	35	37	36	36	\$43,687
Gurkha	-	-	-	-	-	-	1	1	1	1	\$100,000
Total (#)	52	52	54	64	67	68	76	83	80	80	
Total (\$000)	\$1,908.7	\$1,908.7	\$1,961.5	\$2,342.3	\$2,444.4	\$2,488.1	\$2,893.9	\$3,156.2	\$3,036.1	\$3,036.1	

FURNITURE & EQUIPMENT				Val	ue of Furniture	and Equipment	(\$)				UNIT COST
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/officer)
Police Equipment (# of sworn officers)	166	166	166	167	167	170	172	178	182	192	\$11,000
Radio equipment	101	101	101	102	102	104	105	109	109	109	\$6,800
Other Equipment (Fitness, Maint., Training, Office etc.)	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	\$7,690,000	
Total (\$000)	\$10,202.8	\$10,202.8	\$10,202.8	\$10,220.6	\$10,220.6	\$10,267.2	\$10,296.0	\$10,389.2	\$10,433.2	\$10,543.2	



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS POLICE SERVICE

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	93,650	94,628	95,617	96,616	97,625	98,645	99,603	100,570	101,547	102,533
Historic Employment	44,224	44,249	44,274	44,299	44,324	44,349	44,712	45,078	<u>45,447</u>	<u>45,819</u>
Population+Employment	137,874	138,877	139,891	140,915	141,949	142,994	144,315	145,648	146,994	148,352

INVENTORY SUMMARY (\$000)

Buildings	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4	\$36,527.4
Land	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8	\$3,570.8
Vehicles	\$1,908.7	\$1,908.7	\$1,961.5	\$2,342.3	\$2,444.4	\$2,488.1	\$2,893.9	\$3,156.2	\$3,036.1	\$3,036.1
Furniture & Equipment	\$10,202.8	\$10,202.8	\$10,202.8	\$10,220.6	\$10,220.6	\$10,267.2	\$10,296.0	\$10,389.2	\$10,433.2	\$10,543.2
Total (\$000)	\$52,209,7	\$52,209.7	\$52,262.5	\$52.661.1	\$52,763.2	\$52.853.5	\$53,288.1	\$53.643.6	\$53,567.5	\$53.677.5

SERVICE LEVEL (\$/pop+empl)

Average Service Level

Buildings	\$264.93	\$263.02	\$261.11	\$259.22	\$257.33	\$255.45	\$253.11	\$250.79	\$248.50	\$246.22	\$255.97
Land	\$25.90	\$25.71	\$25.53	\$25.34	\$25.16	\$24.97	\$24.74	\$24.52	\$24.29	\$24.07	\$25.02
Vehicles	\$13.84	\$13.74	\$14.02	\$16.62	\$17.22	\$17.40	\$20.05	\$21.67	\$20.65	\$20.47	\$17.57
Furniture & Equipment	\$74.00	\$73.47	\$72.93	\$72.53	\$72.00	\$71.80	\$71.34	\$71.33	\$70.98	\$71.07	\$72.15
Total (\$/pop+empl)	\$378.68	\$375.94	\$373.59	\$373.71	\$371.71	\$369.62	\$369.25	\$368.31	\$364.42	\$361.83	\$370.71

CITY OF BRANTFORD
CALCULATION OF MAXIMUM ALLOWABLE
POLICE SERVICE

10-Year Fuding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$370.71
Net Population & Employment Growth 2021 - 2030	23,249
Maximum Allowable Funding Envelope	\$ 8,618,636.8



APPENDIX B.2 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM POLICE SERVICE

		Timing	Gross		Grants/	Net	Ineli	gible	Costs	Total		Dev	elopn	nent-Related	Cos	ts
Project Desc	cription		Project Cost		sidies/Other Recoveries	Municipal Cost			ement Shares	Development Related Costs	D	Available C Shares / ior Growth		2021- 2030		Other relopment- Related
2.0 POLICE SERV	VICE															
2.1 Police	Service Headquarters Redevelopment															
2.1.1	Non-Debt Share	2021	\$ 1,898,795	\$	-	\$ 1,898,795	58%	\$	1,098,299	\$ 800,496	\$	800,496	\$	-	\$	-
2.1.2	Debt Recovery - Principle Payment	2024	\$ 1,240,761	\$	_	\$ 1,240,761	58%	\$	521.120	\$ 719,641	\$	719,641	\$	-	\$	_
2.1.3	Debt Recovery - Principle Payment	2025	\$ 1,290,888	\$	_	\$ 1,290,888	58%	\$	542,173	\$	\$	71,664	\$	677,051	\$	-
2.1.4	Debt Recovery - Principle Payment	2026	\$ 1,343,040	\$	-	\$ 1,343,040	58%	\$	564,077	\$ 778,963	\$	-	\$	778,963	\$	-
2.1.5	Debt Recovery - Principle Payment	2027	\$ 1,397,299	\$	-	\$ 1,397,299	58%	\$	586,865	\$ 810,433	\$	-	\$	810,433	\$	-
2.1.6	Debt Recovery - Principle Payment	2028	\$ 1,453,749	\$	-	\$ 1,453,749	58%	\$	610,575	\$ 843,175	\$	-	\$	843,175	\$	-
2.1.7	Debt Recovery - Principle Payment	2029	\$ 1,512,481	\$	-	\$ 1,512,481	58%	\$	635,242	\$ 877,239	\$	-	\$	877,239	\$	-
2.1.8	Debt Recovery - Present Value 2030+ Principle Payments	2030	\$ 22,776,117	\$		\$ 22,776,117	58%	\$	9,565,969	\$ 13,210,148	\$	-	\$	4,051,333	\$	9,158,815
	Subtotal Police Service Headquarters Redevelopment		\$ 32,913,130	\$	-	\$ 32,913,130		\$	14,124,320	\$ 18,788,810	\$	1,591,801	\$	8,038,194	\$	9,158,815
2.2 Equip	ment															
2.2.1	Police Next Generation 911 (NG911)	2028	\$ 850,000	\$	-	\$ 850,000	86%	\$	734,840	\$ 115,160	\$	-	\$	115,160	\$	-
2.2.2	Police / Fire Radio System Replacement and Upgrade Plan	2023	\$ 3,000,000	\$	-	\$ 3,000,000	86%	\$	2,593,551	\$ 406,449	\$	406,449	\$	-	\$	-
2.2.3	Equipment for 32 New Officers	Various	\$ 352,000	\$	-	\$ 352,000	0%	\$	-	\$ 352,000	\$	211,200	\$	140,800	\$	-
2.2.4	Additional vehicles	Various	\$ 408,485		-	\$ 408,485	0%	\$	-	\$ 408,485	\$	222,007	\$	186,478	\$	-
2.2.5	Minor Capital	Various	\$ 2,037,220	·		\$ 2,037,220	86%	\$	1,761,212	\$ 276,008	\$	138,004	\$	138,004	\$	-
	Subtotal Equipment		\$ 6,647,705	\$	-	\$ 6,647,705		\$	5,089,602	\$ 1,558,103	\$	977,660	\$	580,443	\$	-
TOTAL POLIC	CE SERVICE		\$ 39,560,835	\$	-	\$ 39,560,835		\$	19,213,922	\$ 20,346,912	\$	2,569,461	\$	8,618,637	\$	9,158,815

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	71%	\$6,119,232
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$293.47
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	29%	\$2,499,405
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$5.06

2021 - 2030 Net Funding Envelope	\$8,618,637
Available DC Shares Reserve Fund Balance at end of 2020 Prior Growth	\$977,660 \$1,591,801



CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE POLICE SERVICE RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

POLICE SERVICE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.0	\$326.4	\$1,002.4	\$1,731.4	\$2,516.8	\$2,447.7	\$2,352.1	\$2,462.7	\$2,520.5	\$2,716.7	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS	3										
- Police Service (Non-Debt Share): Non Inflated	\$33.0	\$33.0	\$33.0	\$33.0	\$33.0	\$33.0	\$33.0	\$114.8	\$33.0	\$33.0	\$412.1
- Debenture Principle Payments (1)	\$0.0	\$0.0	\$0.0	\$0.0	\$480.7	\$553.1	\$575.4	\$598.7	\$622.8	\$2,876.4	\$5,707.1
- Police Service: Inflated	\$33.0	\$33.7	\$34.4	\$35.1	\$516.5	\$589.5	\$612.6	\$730.5	\$661.5	\$2,915.9	\$6,162.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$353.8	\$686.9	\$716.3	\$747.4	\$778.6	\$812.8	\$1,025.8	\$1,071.6	\$1,119.3	\$1,168.4	\$8,480.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$11.4	\$35.1	\$60.6	\$88.1	\$85.7	\$82.3	\$86.2	\$88.2	\$95.1	\$632.7
- Interest on In-year Transactions	\$5.6	\$11.4	\$11.9	\$12.5	\$4.6	\$3.9	\$7.2	\$6.0	\$8.0	(\$48.1)	\$23.1
- Interest Payments on Debentures (2)	\$0.0	\$0.0	\$0.0	\$0.0	(\$423.9)	(\$408.4)	(\$392.2)	(\$375.4)	(\$357.9)	(\$993.4)	(\$2,951.1)
TOTAL REVENUE	\$359.4	\$709.8	\$763.3	\$820.5	\$447.3	\$494.0	\$723.2	\$788.4	\$857.7	\$222.0	\$6,185.6
CLOSING CASH BALANCE	\$326.4	\$1,002.4	\$1,731.4	\$2,516.8	\$2,447.7	\$2,352.1	\$2,462.7	\$2,520.5	\$2,716.7	\$22.8	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2021 Adjusted Charge Per Capita	\$367

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%
_	



CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE POLICE SERVICE NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

POLICE SERVICE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	\$189.36	\$424.97	\$675.96	\$943.90	\$857.05	\$751.79	\$844.48	\$917.73	\$1,049.91	
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIRE	EMENTS										
- Police Service (Non-Debt Share): Non Inflated - Debenture Principle Payments (1) - Police Service: Inflated	\$13.5 \$0.0 \$13.5	\$13.5 \$0.0 \$13.8	\$13.5 \$0.0 \$14.0	\$13.5 \$0.0 \$14.3	\$13.5 \$196.3 \$211.0	\$13.5 \$225.9 \$240.8	\$13.5 \$235.0 \$250.2	\$46.9 \$244.5 \$298.4	\$13.5 \$254.4 \$270.2	\$13.5 \$1,174.9 \$1,191.0	\$168.3 \$2,331.1 \$2,517.2
NEW NON-RESIDENTIAL DEVELOPMENT - Growth in Square Metres	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	493,926
REVENUE - DC Receipts: Inflated	\$199.6	\$238.8	\$246.1	\$254.4	\$263.3	\$271.8	\$472.9	\$492.0	\$512.2	\$533.7	\$3,484.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions - Interest Payments on Debentures (2)	\$0.0 \$3.3 \$0.0	\$6.6 \$3.9 \$0.0	\$14.9 \$4.1 \$0.0	\$23.7 \$4.2 \$0.0	\$33.0 \$0.9 (\$173.2)	\$30.0 \$0.5 (\$166.8)	\$26.3 \$3.9 (\$160.2)	\$29.6 \$3.4 (\$153.3)	\$32.1 \$4.2 (\$146.2)	\$36.7 (\$18.1) (\$405.8)	\$232.9 \$10.4 (\$1,205.4)
TOTAL REVENUE	\$202.9	\$249.4	\$265.0	\$282.3	\$124.1	\$135.5	\$342.9	\$371.6	\$402.4	\$146.6	\$2,522.7
CLOSING CASH BALANCE	\$189.4	\$425.0	\$676.0	\$943.9	\$857.1	\$751.8	\$844.5	\$917.7	\$1,049.9	\$5.5	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2021 Adjusted Charge Per Square Metre \$6.34

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021 Inflation Rate Interest Rate on Positive Balances Interest Rate on Negative Balances	2.0% 3.5% 5.5%



Appendix B.3
Library Services

Library Services

The Brantford Public Library is responsible for the delivery of library services in the City of Brantford. Currently, the Public Library operates out of two branches, however, the organization plans to expand its services significantly over the next 10 years in response to growth.

Table 1 Historical Service Levels

Currently, the total space used to provide library service in Brantford totals 68,000 square feet with a full replacement value of \$34.00 million. The land associated with this space totals 0.35 hectares with a value of \$553,000. Collections materials are valued at \$8.46 million and furniture and equipment total \$2.70 million. Computer-related equipment is excluded in this total as required by the *DCA*.

The full replacement value of the 2020 inventory of capital assets for the Public Library is \$45.71 million, and the average historical service level over 10 years is \$465.00 per capita. The historical service level multiplied by the forecast 10-year population growth results in a 10-year maximum allowable funding envelope of \$7.27 million which is brought forward to the development charges calculation.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021-2030 development-related capital program for the Public Library includes a new 13,600 square foot library branch planned for 2023-2024. The new branch is expected to cost the City a total of \$6.51 million. Additionally, \$1.38 million is anticipated in growth-related material acquisition cost over

the planning period in order to maintain the historical service level with the anticipated future development.

The total 10-year development-related capital program for Public Library is approximately \$7.89 million. No senior government grants or subsidies are anticipated to offset the cost of the program, and no replacement shares have been identified.

After taking into account the existing reserve fund balance (\$2.97 million), \$4.92 million in development-related costs remain. This amount is within the maximum allowable funding envelope and is brought forward to the development charges calculation.

Of the total \$4.92 million, 100 per cent is allocated to residential development. This yields an unadjusted development charge rate of \$236.00 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$255 per capita.

		PUBLIC L	JBRARY SUMM	ARY			
10-year Hist.	20	21 - 2030	Unadj	usted	Adjusted		
Service Level	Development-R	elated Capital Program	Developme	ent Charge	Development Charge		
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m	
\$465.00	\$7,893,488	\$4,920,862	\$236.00	\$0.00	\$255	\$0.00	

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PUBLIC LIBRARY

BUILDINGS		# of Square Feet									UNIT COST
Branch Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq.ft.)
St. Paul Avenue Branch	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	\$500
Main Branch, 173 Colborne Street	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,500	61,500	61,500	\$500
Total (sq.ft.)	67,500	67,500	67,500	67,500	67,500	67,500	67,500	68,000	68,000	68,000	
Total (\$000)	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$34,000.0	\$34,000.0	\$34,000.0	

LAND		# of Hectares									
Branch Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
St. Paul Avenue Branch	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$1,580,000
Main Branch, 173 Colborne Street	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	\$1,580,000
Total (ha)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	
Total (\$000)	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	

MATERIALS		# of Collection Materials									
Type of Collection	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/item)
Books/Paperbacks # (includes DVD, CD's)	209,042	264,827	220,000	285,478	277,972	257,520	246,292	246,000	216,555	240,712	\$35
Electronic Information Resource Stations	65	65	65	64	42	45	45	45	45	45	\$750
Periodical Subscriptions	\$18,400	\$16,600	\$16,600	\$27,800	\$23,100	\$28,500	\$13,400	\$15,400	\$14,000	\$18,000	
Total (\$000)	\$7.365.2	\$9.317.7	\$7.748.8	\$10.039.7	\$9.760.5	\$9.047.0	\$8,654.0	\$8.643.8	\$7.613.2	\$8,458,7	1

FURNITURE AND EQUIPMENT				Total	Value of Furnitu	re and Equipme	nt (\$)			
Branch Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Equipment - Both Libraries	\$1,110,200	\$1,110,200	\$1,110,200	\$1,110,200	\$1,110,200	\$1,110,200	\$1,110,200	\$1,110,200	\$1,039,414	\$1,059,908
IT Equipment (Excluding PCs) - Both Libraries	\$710,700	\$710,700	\$710,700	\$710,700	\$710,700	\$710,700	\$710,700	\$710,700	\$765,056	\$784,506
Furniture - Both Libraries	\$695,700	\$695,700	\$695,700	\$695,700	\$695,700	\$695,700	\$695,700	\$695,700	\$758,310	\$856,725
Total (\$000)	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,562.8	\$2,701.1



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS PUBLIC LIBRARY

Historic Population	2011 93,650	2012 94,628	2013 95,617	2014 96,616	2015 97,625	2016 98,645	2017 99,603	2018 100,570	2019 101,547	2020 102,533	
INVENTORY SUMMARY (\$000)											
Buildings	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$33,750.0	\$34,000.0	\$34,000.0	\$34,000.0	
Land	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	\$553.0	
Materials	\$7,365.2	\$9,317.7	\$7,748.8	\$10,039.7	\$9,760.5	\$9,047.0	\$8,654.0	\$8,643.8	\$7,613.2	\$8,458.7	
Furniture And Equipment	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,516.6	\$2,562.8	\$2,701.1	
Total (\$000)	\$44,184.8	\$46,137.3	\$44,568.4	\$46,859.3	\$46,580.1	\$45,866.6	\$45,473.6	\$45,713.4	\$44,729.0	\$45,712.8	
SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$360.38	\$356.66	\$352.97	\$349.32	\$345.71	\$342.14	\$338.85	\$338.07	\$334.82	\$331.60	\$345.05
Land	\$5.90	\$5.84	\$5.78	\$5.72	\$5.66	\$5.61	\$5.55	\$5.50	\$5.45	\$5.39	\$5.64
Materials	\$78.65	\$98.47	\$81.04	\$103.91	\$99.98	\$91.71	\$86.88	\$85.95	\$74.97	\$82.50	\$88.41
Furniture And Equipment	\$26.87	\$26.59	\$26.32	\$26.05	\$25.78	\$25.51	\$25.27	\$25.02	\$25.24	\$26.34	\$25.90
Total (\$/capita)	\$471.81	\$487.56	\$466.11	\$485.01	\$477.13	\$464.97	\$456.55	\$454.54	\$440.48	\$445.84	\$465.00

CITY OF BRANTFORD

CALCULATION OF MAXIMUM ALLOWABLE

PUBLIC LIBRARY

10-Year Funding Envelope Calculation

10 Year Average Service Level 2011 - 2020 \$465.00

Net Population Growth 2021 - 2030 15,638

Maximum Allowable Funding Envelope \$7,271,670



APPENDIX B.3 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM PUBLIC LIBRARY

	Timing	Gross	Grants/			Net	Ineli	gible Co	sts		Total		Dev	elopr	nent-Related	Costs	
Project Description		Project	Subsidies/O	ther	N	/lunicipal	Re	placeme	nt	D	evelopment	F	Available		2021-	()ther
		Cost	Recoverie	es		Cost	& B	TE Shar	es	Re	elated Costs	DO	C Shares /		2030	Deve	lopment-
												Pri	ior Growth			R	elated
3.0 PUBLIC LIBRARY																	
3.1 Buildings, Land and Furnishings																	
3.1.1 New Branch Library	2023	\$ 707,000	\$	-	\$	707,000	0%	\$	-	\$	707,000	\$	707,000	\$	-	\$	-
3.1.2 New Branch Library	2024	\$ 5,803,932	\$	-	\$	5,803,932	0%	\$		\$	5,803,932	\$	1,712,604	\$	4,091,328	\$	=
Subtotal Buildings, Land and Furnishings		\$ 6,510,932	\$	-	\$	6,510,932		\$	-	\$	6,510,932	\$	2,419,604	\$	4,091,328	\$	-
3.2 Materials Acquisitions																	
3.2.1 Additional Material Acquisitions	Various	\$ 1,382,556	\$	-	\$	1,382,556	0%	\$	-	\$	1,382,556	\$	553,022	\$	829,533	\$	-
Subtotal Materials Acquisitions		\$ 1,382,556	\$	-	\$	1,382,556		\$	-	\$	1,382,556	\$	553,022	\$	829,533	\$	=
TOTAL PUBLIC LIBRARY		\$ 7,893,488	\$	-	\$	7,893,488		\$	-	\$	7,893,488	\$	2,972,626	\$	4,920,862	\$	-

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	100%	\$4,920,862
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$236.00
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	0%	\$0
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$0.00

2021 - 2030 Net Funding Envelope	\$7,271,670
Available DC Shares Reserve Fund Balance at end of 2020	\$2,972,626



APPENDIX B.3 TABLE 3

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC LIBRARY RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

PUBLIC LIBRARY	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.0	\$165.7	\$571.1	\$1,009.6	(\$2,973.0)	(\$2,677.5)	(\$2,343.2)	(\$1,841.9)	(\$1,282.5)	(\$660.6)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS	3										
- Public Library: Non Inflated	\$83.0	\$83.0	\$83.0	\$4,174.3	\$83.0	\$83.0	\$83.0	\$83.0	\$83.0	\$83.0	\$4,920.9
- Public Library: Inflated	\$83.0	\$84.6	\$86.3	\$4,429.8	\$89.8	\$91.6	\$93.4	\$95.3	\$97.2	\$99.1	\$5,250.1
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$245.8	\$477.3	\$497.7	\$519.3	\$541.0	\$564.8	\$712.8	\$744.6	\$777.7	\$811.9	\$5,892.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$5.8	\$20.0	\$35.3	(\$163.5)	(\$147.3)	(\$128.9)	(\$101.3)	(\$70.5)	(\$36.3)	(\$586.7)
- Interest on In-year Transactions	\$2.8	\$6.9	\$7.2	(\$107.5)	\$7.9	\$8.3	\$10.8	\$11.4	\$11.9	\$12.5	(\$27.9)
TOTAL REVENUE	\$240.6	\$400.0	¢504.0	¢447.4	CODE 4	£40E 0	#E04.0	CCE 4.7	6740.4	Ф 7 00 О	¢5 070 0
TOTAL REVENUE	\$248.6	\$490.0	\$524.9	\$447.1	\$385.4	\$425.8	\$594.8	\$654.7	\$719.1	\$788.0	\$5,278.3
CLOSING CASH BALANCE	\$165.7	\$571.1	\$1,009.6	(\$2,973.0)	(\$2,677.5)	(\$2,343.2)	(\$1,841.9)	(\$1,282.5)	(\$660.6)	\$28.3	
			•	, , ,		, ,	, , ,	, , ,	, ,		

2021 Adjusted Charge Per Capita \$255

Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.4 Parks and Recreation

Parks & Recreation

The Brantford Parks and Recreation Department is responsible for providing indoor and outdoor recreation throughout the City. Indoor recreation services are primarily delivered through community centres and sports facilities, whereas outdoor recreation presents in the form of various types of parks and park facilities.

Table 1 Historical Service Levels

The City operates 13 indoor recreation buildings which have a total area of approximately 413,643 square feet and a replacement value of \$206.82 million. This space includes indoor pools, gymnasiums, arenas, fitness centres, program rooms and other space. Notably, the past 10 years have seen the expansion of the Wayne Gretzky Sports Centre that was completed in 2013 and the closure of Tranquility Hall in 2019. The land associated with the City's indoor recreation facilities totals 21.63 hectares with a value of \$34.17 million. The City owns various pieces of equipment used to provide recreation services. This includes fitness equipment, operations equipment, audio/video equipment and furniture. The total replacement value of all indoor recreation equipment in 2020 is \$784,800.

The City of Brantford's inventory of parkland is separated into six categories: neighbourhood parks, sports-related parks, horticulture parks, waterfront parks, specialized parks, and maintained woodlots. The cost of developing Brantford's total inventory of parkland is \$34.23 million.

The City also has an inventory of outdoor park buildings, including greenhouses, park offices, gazebos, shelters, sheds, and outdoor washrooms. These buildings total 107,600 square feet with a total replacement value of \$14.54 million.

Also located within the parks are various specialized facilities such as playground units and outdoor sporting amenities. The City of Brantford has numerous playgrounds, baseball diamonds, football fields, asphalt pads, and outdoor skating rinks, in addition to various lawn bowling fields, running tracks, outdoor swimming pools, tennis courts, and water parks. Other park facilities such as bridges, pathways, and parking lots are also included in the inventory. All together, the value of City park facilities totals \$138.01 million.

The combined value of capital assets for Parks & Recreation is \$428.56 million. The 10-year historical average service level is \$4,221.45 per capita, and this, multiplied by the 10-year forecast growth in population, results in a 10-year maximum allowable funding envelope of \$66.02 million.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The development-related capital program for Parks & Recreation includes a number of recreation buildings, parkland development projects and parkland facilities, trail and active transportation development projects, and studies.

Recreation buildings are the largest component of the Parks & Recreation capital program with a gross cost of \$55.86 million over the 10-year planning period. Of this amount, an anticipated \$42.74 million is dedicated to the new Southwest Community Centre and Park which is expected to add indoor recreation facilities as well as new parkland and associated amenities, including playgrounds, playing fields, park buildings, and trails. The remaining \$13.12 million is dedicated to the recovery of outstanding growth shares associated with the Wayne Gretzky Sports Centre, although it is noted that this will be funded entirely by previously collected DCs.

Parkland development projects such as new park open space, playgrounds, and development along the Church Street Waterfront add another \$8.32

million to the capital program. Off-road active transportation initiatives, pedestrian crossovers, and trail developments are anticipated to cost the City \$2.66 million expected over the 10-year planning period.

Finally, the capital program includes a feasibility study for a new recreation centre, and also lists two future updates to the Parks and Recreation Master Plan. The total cost of these studies is \$550,000.

The 10-year capital program for Parks & Recreation totals \$67.39 million. After deductions for replacement shares (\$1.57 million), the capital program is reduced \$65.82 million.

Approximately \$3.53 million is available in the Parks & Recreation development charges reserve fund, and another \$9.59 million in past DC revenues have already been applied to the Wayne Gretzky Sports Centre. These amounts have been deducted from the DC calculation. Finally, due to the scale and long benefitting horizon of the Southwest Sports Complex, another \$14.25 million has been allocated to development occurring beyond 2030 period and can be recovered through subsequent development charges studies. The remaining \$38.45 million is related to growth between 2021 and 2030.

The \$38.45 million is allocated entirely against residential development in the City resulting in an unadjusted development charge of \$1,844.04 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge increases to \$2,098 per capita. This is a reflection of the front-ended nature of many costly projects in the capital program.

PARKS & RECREATION SUMMARY

10-year Hist. 2021 - 2030 Unadjusted Adjusted Service Level Development-Related Capital Program Development Charge **Development Charge** per pop & emp Total Net DC Recoverable \$/capita \$/sq.m \$/capita $\sqrt{sq.m}$ \$4,221.45 \$67,389,700 \$38,449,975 \$1,844.04 \$0.00 \$2,098 \$0.00

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PARKS & RECREATION INDOOR RECREATION FACILITIES

BUILDINGS					# of Squ	are Feet					UNIT COST
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq.ft.)
Beckett Adult Leisure Centre	31,698	31,698	31,698	31,698	31,698	31,698	31,698	31,698	31,698	31,698	\$500
Bellview Community Hall	3,542	3,542	3,542	3,542	3,542	3,542	3,542	3,542	3,542	3,542	\$500
Branlyn Community Centre	22,100	22,100	22,100	22,100	22,100	22,100	22,100	22,100	22,100	22,100	\$500
Civic Centre	77,083	77,083	77,083	77,083	77,083	77,083	77,083	77,083	77,083	77,083	\$500
Dufferin Tennis Club	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	\$500
Eagle Place Community Centre	13,204	13,204	13,204	13,204	13,204	13,204	13,204	13,204	13,204	13,204	\$500
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	\$500
Grandview Hall	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	\$500
Lions Park Complex	36,663	36,663	36,663	36,663	36,663	36,663	36,663	36,663	36,663	36,663	\$500
TB Constain/SC Johnson CC	16,430	16,430	16,430	16,430	16,430	16,430	16,430	16,430	16,430	16,430	\$500
Tranquility Hall	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	-	1	\$500
Wayne Gretzky Sports Centre	152,380	152,380	187,380	187,380	187,380	187,380	187,380	187,380	187,380	187,380	\$500
Woodman Community Centre	11,873	11,873	11,873	11,873	11,873	11,873	11,873	11,873	11,873	11,873	\$500
Total (sq.ft.)	380,668	380,668	415,668	415,668	415,668	415,668	415,668	415,668	413,643	413,643	
Total (\$000)	\$190,333.8	\$190,333.8	\$207,833.8	\$207,833.8	\$207,833.8	\$207,833.8	\$207,833.8	\$207,833.8	\$206,821.3	\$206,821.3	

LAND					# of He	ctares					UNIT COST
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Beckett Adult Leisure Centre	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
Bellview Community Hall	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	\$1,580,000
Branlyn Community Centre	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	\$1,580,000
Civic Centre	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	\$1,580,000
Dufferin Tennis Club	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	\$1,580,000
Eagle Place Community Centre	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	\$1,580,000
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	\$1,580,000
Grandview Hall	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$1,580,000
Lions Park Complex	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	\$1,580,000
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	\$1,580,000
Tranquility Hall	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	-	-	\$1,580,000
Wayne Gretzky Sports Centre	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	\$1,580,000
Woodman Community Centre	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$1,580,000
Total (ha)	21.93	21.93	21.93	21.93	21.93	21.93	21.93	21.93	21.63	21.63	
Total (\$000)	\$34,650.5	\$34,650.5	\$34,650.5	\$34,644.7	\$34,644.7	\$34,644.7	\$34,644.7	\$34,644.7	\$34,170.7	\$34,170.7	



CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PARKS & RECREATION INDOOR RECREATION FACILITIES

FURNITURE & EQUIPMENT				Total V	/alue of Furnit	ure & Equipme	nt (\$)			
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Beckett Adult Leisure Centre	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000
Bellview Community Hall	\$8,300	\$8,300	\$8,300	\$8,300	\$8,300	\$8,300	\$8,300	\$8,300	\$8,300	\$8,300
Branlyn Community Centre	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Civic Centre	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000
Dufferin Tennis Club	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800
Eagle Place Community Centre	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000
Earl Haig Family Fun Park	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000	\$76,000
Grandview Hall	\$10,900	\$10,900	\$10,900	\$10,900	\$10,900	\$10,900	\$10,900	\$10,900	\$10,900	\$10,900
Jaycees Sports Park Building	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800	\$5,800
Steve Brown Complex	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
TB Constain/SC Johnson CC	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000
Tranquility Hall	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$4,700	\$0	\$0
Wayne Gretzky Sports Centre	\$313,000	\$313,000	\$313,000	\$313,000	\$313,000	\$313,000	\$313,000	\$313,000	\$313,000	\$313,000
Woodman Community Centre	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000
Total (\$000)	\$789.5	\$789.5	\$789.5	\$789.5	\$789.5	\$789.5	\$789.5	\$789.5	\$784.8	\$784.8



NEIGHBOURHOOD PARKS				#	of Hectares of	Developed Land	i				Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/ha)
Andrew W. Pate Park	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	\$50,000
Anne Good Park	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$50,000
Arctic Park	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	\$50,000
Bellview Park	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$50,000
Branlyn Community Centre	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	\$50,000
Brenda Court Park	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$50,000
Bridle Path park	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	\$50,000
Brier Park	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	\$50,000
Brooklyn Park	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	\$50,000
Burnley Park	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	\$50,000
Cameron Heights Park	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	\$50,000
Carolina Park	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$50,000
Cedarland Park	4.84	4.84	4.84	4.48	4.48	4.48	4.48	4.48	4.48	4.48	\$50,000
Centennial Park	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	\$50,000
Central Park	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	\$50,000
Charles Ward Park	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	\$50,000
City View Park	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	\$50,000
Conklin Park	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	\$50,000
Connaught Park	2.09	2.09	2.09	1.86	1.86	1.86	1.86	1.86	1.86	1.86	\$50,000
Deer Park	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	\$50,000
Devereux Park	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	\$50,000
Devon Down Park	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	\$50,000
Donegal Park	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	\$50,000
Echo Park	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	\$50,000
Edith Monture Park	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	\$50,000
Elgin Park	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	\$50,000
Farringdon Park							2.12	2.12	2.12	2.12	\$50,000
Florence Buchanan Park	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$50,000
Grandwoodlands Park	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	\$50,000
Greenbrier Park	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	\$50,000
Greenwood Park	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	\$50,000
Hickory Park	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	\$50,000
Hillcrest Park	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	\$50,000



NEIGHBOURHOOD PARKS CONT'D				#	of Hectares of	Developed Lar	nd				Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/ha)
Holmedale Park	1.30	1.30	1.30	1.61	1.61	1.61	1.61	1.61	1.61	1.61	\$50,000
Iroquois Park	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	\$50,000
Jim Walsh Rest Area	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	\$50,000
Johnson Park	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	\$50,000
Landsdowne Park	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$50,000
Lynden Hills Park	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	\$50,000
Mayfair Park	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	\$50,000
Mayors Common Park	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	\$50,000
Mission Park	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	\$50,000
Mohawk Canal	0.81	0.81	0.81	1.39	1.39	1.39	1.39	1.39	1.39	1.39	\$50,000
Mohawk Park	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	\$50,000
Moose Park	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$50,000
Orchard Park	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	\$50,000
Parsons Park	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	\$50,000
Pleasant Ridge Park	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$50,000
Prince Charles Park	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	\$50,000
Princess Anne Park	1.53	1.53	1.53	1.49	1.49	1.49	1.49	1.49	1.49	1.49	\$50,000
Recreation Park	0.81	0.81	0.81	0.82	0.82	0.82	0.82	0.82	0.82	0.82	\$50,000
Robert Moore Park	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$50,000
Roswell Park	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	\$50,000
Shallow Creek Park	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	\$50,000
Sheri-Mar Park	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$50,000
Silverbridge Park	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	\$50,000
Spring Garden Park	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	\$50,000
Spring St. Buck Park	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	\$50,000
Tranquility Park	1.35	1.35	1.35	0.68	0.68	0.68	0.68	0.68	0.68	0.68	\$50,000
Turtle Pond Park	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	\$50,000
Tutela Park	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	\$50,000
Walter Gretzky Park (Wynfield West Phase 2 (Joint School Site))	_	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	\$50,000
Warner Merritt Park (Wynfield West Phase 1 (Merrit/Warner))	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$50,000
Westdale Park	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	\$50,000
Wilkes Park	1.43	1.43	1.43	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$50,000
Woodburn Park (Brookefield West Phase 2 (Bolster Rd))	0.77	0.77	0.77	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$50,000
Wood Street Park	1.63	1.63	1.63	1.43	1.43	1.43	1.43	1.43	1.43	1.43	\$50,000
Woodman Park	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	\$50,000
Total (ha)	420.50	424.40	424.40	120.05	420.05	420.05	422.47	422.47	422.47	422.47	
Total (fag)	129.50	131.18	131.18	130.05	130.05	130.05	132.17	132.17	132.17	132.17	
Total (\$000)	\$6,474.81	\$6,558.8	\$6,558.8	\$6,502.5	\$6,502.5	\$6,502.5	\$6,608.5	\$6,608.5	\$6,608.5	\$6,608.5	



SPORTS RELATED PARKS				#	of Hectares of	Developed Lan	ıd				Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/ha)
Bellview Park	0.84	0.84	0.84	2.55	2.55	2.55	2.55	2.55	2.55	2.55	\$57,000
Bill Little Park	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	\$57,000
Cockshutt Park	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	11.17	\$57,000
D'Aubigny Creek Park	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	\$57,000
Dufferin Park	2.91	2.91	2.91	2.81	2.81	2.81	2.81	2.81	2.81	2.81	\$57,000
George Campbell Park	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	\$57,000
Jaycee Park	5.82	5.82	5.82	6.16	6.16	6.16	6.16	6.16	6.16	6.16	\$57,000
John Wright Soccer Complex	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	\$57,000
Mohawk Park	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	\$57,000
Steve Brown Sports Complex	14.81	14.81	14.81	15.45	15.45	15.45	15.45	15.45	15.45	15.45	\$57,000
Waterworks Park- fields and bike park	2.50	2.50	2.50	6.16	6.16	6.16	6.16	6.16	6.16	6.16	\$57,000
Wayne Gretzky Sports Centre	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	\$57,000
Total (ha)	57.15	57.15	57.15	63.40	63.40	63.40	63.40	63.40	63.40	63.40	
Total (\$000)	\$3,257.55	\$3,257.55	\$3,257.55	\$3,613.80	\$3,613.80	\$3,613.80	\$3,613.80	\$3,613.80	\$3,613.80	\$3,613.80	

HORTICULTURE PARKS				#	of Hectares of	# of Hectares of Developed Land									
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/ha)				
Alexandra Park	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	\$287,000				
Bell Homestead	0.58	0.58	0.58	1.14	1.14	1.14	1.14	1.14	1.14	1.14	\$287,000				
Bell Memorial Park	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	\$287,000				
C.J's Park	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	\$287,000				
C.N.R. Gore Park	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$287,000				
Dunsdon Park	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$287,000				
Edward E. Goold Park	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	\$287,000				
Fordview Park	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$287,000				
Glenhyrst Gardens	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	\$287,000				
Golfdale Park	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$287,000				
Jubilee Terrace	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	\$287,000				
Lincoln Square	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$287,000				
Lorne Park	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	\$287,000				
Preston Park	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	\$287,000				
Regent Park	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	\$287,000				
Seneca Park	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$287,000				
Tom Thumb Park	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$287,000				
Victoria Park	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	\$287,000				
War Memorial Park	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$287,000				
St. Andrew's Park	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$287,000				
Total (ha)	16.85	16.85	16.85	17.41	17.41	17.41	17.41	17.41	17.41	17.41					
Total (\$000)	\$4,836.0	\$4,836.0	\$4,836.0	\$4,996.7	\$4,996.7	\$4,996.7	\$4,996.7	\$4,996.7	\$4,996.7	\$4,996.7					



WATERFRONT PARKS				#	of Hectares of	Developed Lan	d				Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/ha)
Brant's Crossing	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	\$9,724,000
Cockshutt Boat Launch	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$50,000
Fordview Park \	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	\$50,000
Gilkison Flats	42.44	42.44	42.44	41.58	41.58	41.58	41.58	41.58	41.58	41.58	\$11,000
Rivergreen Park	1.26	1.26	1.26	2.05	2.05	2.05	2.05	2.05	2.05	2.05	\$50,000
Total (ha)	49.18	49.18	49.18	49.11	49.11	49.11	49.11	49.11	49.11	49.11	
Total (\$000)	\$9,994.1	\$9,994.1	\$9,994.1	\$10,024.2	\$10,024.2	\$10,024.2	\$10,024.2	\$10,024.2	\$10,024.2	\$10,024.2	

SPECIALIZED PARKS		# of Hectares of Developed Land										
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/ha)	
Prominence Point	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$2,583,000	
Dogford Park	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	\$72,000	
Harmony Square	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$22,636,000	
Mohawk Park	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	18.31	\$50,000	
Total (ha)	20.31	20.31	20.31	20.31	20.31	20.31	20.31	20.31	20.31	20.31		
Total (\$000)	8,606.41	\$8,606.4	\$8,606.4	\$8,606.4	\$8,606.4	\$8,606.4	\$8,606.4	\$8,606.4	\$8,606.4	\$8,606.4		



MAINTAINED WOODLOTS AND NATURAL PARKS					Value of Devel	oped Land (\$)				
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
D'Aubigny Creek Park	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973
Edith Monture Forest	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973
Farringdon Park (natural area)	\$0	\$0	\$0	\$0	\$0	\$0	\$15,986	\$15,986	\$15,986	\$15,986
Forestwood Park	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Friendship Park	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Franklin Grobb Memorial Forest	\$47,958	\$47,958	\$47,958	\$47,958	\$47,958	\$47,958	\$47,958	\$47,958	\$47,958	\$47,958
Jaycee Sports park open space	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973
Mohawk Canal	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Mohawk Trail Park	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Powell Forest	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973
Rotary Park	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Royal Oak Park	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Shellard Forest	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Woodburn Forest	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973
Waterworks Park	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973	\$31,973
Woodlot Riva Ridge	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986	\$15,986
Total Development Value (\$000)	\$367.7	\$367.7	\$367.7	\$367.7	\$367.7	\$367.7	\$383.7	\$383.7	\$383.7	\$383.7



CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PARKS & RECREATION OUTDOOR RECREATION

PARK BUILDINGS				# 0	of Square Feet	of Building Space	ce				UNIT COST
Type of Structure	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq.ft.)
Miscellaneous Park Buildings											1, -, -,
Cockshutt Park Arnold Anderson Stadium	3,117	3,117	3,117	2,661	2,661	2,661	2,661	2,661	2,661	2,661	\$130
Cockshutt Park Baker Building	-	-	-	1,342	1,342	1,342	1,342	1,342	1,342	1,342	\$130
Cockshutt Park Cricket Building	1,250	1,250	1,250	1,202	1,202	1,202	1,202	1,202	1,202	1,202	\$150
Cockshutt Park Dressing Rooms	1,889	1,889	1,889	1,812	1,812	1,812	1,812	1,812	1,812	1,812	\$60
Cockshutt Park - Catharine Avenue Garage	1,415	1,415	1,415	1,529	1,529	1,529	1,529	1,529	1,529	1,529	\$170
Cockshutt Park Carpenter's Shop	2,300	2,300	2,300	3,100	3,100	3,100	3,100	3,100	3,100	3,100	\$90
Cockshutt Park - Greenhouse 1	2,050	2,050	2,050	3,420	3,420	3,420	3,420	3,420	3,420	3,420	\$60
Cockshutt Park - Greenhouse 2	6,050	6,050	6,050	2,024	2,024	2,024	2,024	2,024	2,024	2,024	\$60
Cockshutt Park - Greenhouse 3	5,990	5,990	5,990	1,090	1,090	1,090	1,090	1,090	1,090	1,090	\$30
Cockshutt Park - Greenhouse 4	4,020	4,020	4,020	2,013	2,013	2,013	2,013	2,013	2,013	2,013	\$60
Cockshutt Park - Greenhouse 5	1,725	1,725	1,725	2,271	2,271	2,271	2,271	2,271	2,271	2,271	\$30
Cockshutt Park - Greenhouse 6	4,017	4,017	4,017	4,017	4,017	4,017	4,017	4,017	4,017	4,017	\$120
Cockshutt Park - Greenhouse 7	1,723	1,723	1,723	1,723	1,723	1,723	1,723	1,723	1,723	1,723	\$220
Cockshutt Park - Greenhouse 8	2,052	2,052	2,052	2,052	2,052	2,052	2,052	2,052	2,052	2,052	\$80
Cockshutt Park - Greenhouse Potting Shed	494	494	494	494	494	494	494	494	494	494	\$30
Cockshutt Park - Greenhouse Boiler Shed	495	495	495	495	495	495	495	495	495	495	\$60
Cockshutt Park - Mechanics Shop	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	\$210
Greenwood Cemetery Chapel	659	659	659	659	659	659	659	659	659	659	\$120
Iroquois Park	630	630	630	722	722	722	722	722	722	722	\$90
Jaycee Sports Park - Field House	2,654	2,654	2,654	2,654	2,654	2,654	2,654	2,654	2,654	2,654	\$160
Mohawk Park - Hall	5,900	5,900	5,900	5,886	5,886	5,886	5,886	5,886	5,886	5,886	\$240
Mohawk Park Garage	480	480	480	539	539	539	539	539	539	539	\$110
Mount Hope Cemetery - Mausoleum	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	\$210
Mount Hope Cemetery Garage	2,088	2,088	2,088	2,088	2,088	2,088	2,088	2,088	2,088	2,088	\$120
Pleasant Ridge Park	800	800	800	881	881	881	881	881	881	881	\$70
Prince Charles Park	500	500	500	495	495	495	495	495	495	495	\$130
Princess Anne Park - Lapidary Building	1,000	1,000	1,000	1,116	1,116	1,116	1,116	-	-	-	\$210
Tranquility Garage	-	-	-	-	-	-	-	-	1,431	1,431	\$120
Waterworks Park Silo	248	248	248	248	248	248	248	248	248	248	\$80
Wayne Gretzky Sports Centre - Field House	-	-	287	3,488	3,488	3,488	3,488	3,488	3,488	3,488	\$150
Westdale Park	572	572	572	572	500	500	500	500	500	500	\$220
Park Offices											
Cockshutt Park Main Office	9,614	9,614	9,614	8,279	8,279	8,279	8,279	8,279	8,279	8,279	\$210
Cockshutt Park 3 Sherwood Office	2,428	2,428	2,428	838	838	838	838	838	838	838	\$280
Mount Hope Cemetery Office	2,605	2,605	2,605	2,605	2,605	2,605	2,605	2,605	2,605	2,605	\$150
Oakhill Cemetery Office	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	3,322	\$180
Gazebos and Shelters											
Dufferin Park Shade Shelters (11)	996	996	996	996	996	996	996	996	996	996	\$70
Earl Haig Family Fun Park (9)	2,925	2,925	2,925	4,052	4,052	4,052	4,052	4,052	4,052	4,052	\$70
Gilkison Flats	1,400	1,400	1,400	1,401	1,401	1,401	1,401	1,401	1,401	1,401	\$90
John Wright Soccer Complex	1,450	1,450	1,450	1,461	1,461	1,461	1,461	1,461	1,461	1,461	\$7
Mission Park	550	550	550	536	536	536	536	536	536	536	\$12
Mohawk Park (7)	9,796	9,796	9,796	9,158	9,158	9,158	9,158	9,158	9,158	9,158	\$7
Waterworks Park	1,400	1,400	1,400	1,388	1,388	1,388	1,388	1,388	1,388	1,388	\$7
Woodman Park	543	543	543	543	543	543	543	543	543	543	\$7



CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PARKS & RECREATION OUTDOOR RECREATION

PARK BUILDINGS CONT'D				# o	f Square Feet	of Building Spa	ice				UNIT COST
Type of Structure	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq.ft.)
Sheds											
Bellview Park - Shed	110	110	110	106	106	106	106	106	106	106	\$370
Bridle Path Park - Splash Pad Building	55	55	55	56	56	56	56	56	56	56	\$1,030
Centennial Park - Community Garden Shed	-	-	-	-	-	65	65	65	65	65	\$50
Cockshutt Park - Drive Shed	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	\$70
Cockshutt Park - Sports Shed	275	275	275	274	274	274	274	274	274	274	\$80
Cockshutt Park - Turf Shed	405	405	405	409	409	409	409	409	409	409	\$80
Cockshutt Park - Salt Shed	300	300	300	302	302	302	302	302	302	302	\$80
Cockshutt Park - Hort Shed 1	500	500	500	191	191	191	191	191	191	191	\$270
Cockshutt Park - Hort Shed 2	251	251	251	251	251	251	251	251	251	251	\$250
Cockshutt Park - Hort Shed 3	97	97	97	97	97	97	97	97	97	97	\$590
Cockshutt Park - Turf Equip Shed	218	218	218	218	218	218	218	218	218	218	\$80
Cockshutt Park - Turf & Hort Tool Shed	320	320	320	320	320	320	320	320	320	320	\$210
Cockshutt Park - Fuel/Oil Storage Shed	142	142	142	142	142	142	142	142	142	142	\$210
Cockshutt Park - Pressure Washer Shed	75	75	75	74	74	74	74	74	74	74	\$530
Cockshutt Park - Turf & Hort Storage Shed	157	157	157	157	157	157	157	157	157	157	\$210
Cockshutt Park - Maint Utility Shed	89	89	89	89	89	89	89	89	89	89	\$210
Donegal Park - Community Shed	110	110	110	110	110	110	110	110	110	110	\$120
Dufferin Park - Shed	260	260	260	253	253	253	253	253	253	253	\$90
Earl Haig Family Fun Park Community Garden Shed	-	-	-	-	-	309	309	309	309	309	\$50
Earl Haig Storage Sheds (2)	372	372	372	372	372	372	372	372	372	372	\$120
Earl Haig Splash Pad Shed	126	126	126	126	126	126	126	126	126	126	\$440
Greenwood Park - Community Garden Shed						65	65	65	65	65	\$50
Mohawk Park - Splash Pad Shed	200	200	200	200	200	200	200	200	200	200	\$250
Mohawk Park - Maintenance Shed	190	190	190	259	259	259	259	259	259	259	\$100
Rivergreen Park - Community Garden Shed						65	65	65	65	65	\$50
Steve Brown Sports Complex - Electrical Shed	110	110	110	110	110	110	110	110	110	110	\$130
Tom Thumb Park - Shed	65	65	65	64	64	64	64	64	64	64	\$120
Tutela Park - Splash Pad Buidling	-	-	-	-	-	-	-	-	-	96	\$317
Woodman Park - Shed	125	125	125	121	121	121	121	121	121	121	\$130
Wayne Gretzky Sports Centre - Shed	125	125	125	127	127	127	127	127	127	127	\$130
Washrooms											
Bellview Park Washrooms	950	950	950	938	938	938	938	938	938	938	\$150
Brant's Crossing Washrooms	4,950	4,950	4,950	6,054	6,054	6,054	6,054	6,054	6,054	6,054	\$150
Mohawk Park Washrooms (3)	1,610	1,610	1,610	1,610	1,610	1,610	1,610	1,610	1,610	1,610	\$260
Waterworks Park Washrooms	850	850	850	850	850	850	850	850	850	850	\$160
Total (sq.ft.)	111,892	111,892	112,179	106,760	106,688	107,192	107,192	106,076	107,507	107,603	
Total (\$000)	\$14,826.22	\$14,826.22	\$14,869.27	\$14,567.25	\$14,551.41	\$14,576.61	\$14,576.61	\$14,342.25	\$14,513.97	\$14,544.40	



SOCCER FIELDS					# of Soco	er Fields					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/unit)
Signature Complex											
Steve Brown Sports Complex	1	1	1	1	1	1	1	1	1	1	\$632,000
Class A											
Steve Brown Sports Complex	1	1	1	1	1	1	1	1	1	1	\$417,000
Class B											
John Wright Soccer Complex	4	4	4	4	4	4	4	4	4	4	\$73,000
Brooklyn Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Waterworks Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Mohawk Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Spring Gardens Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Greenbrier Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Wood Street Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Cedarland Park	1	1	1	1	1	1	1	1	1	1	\$73,000
Class C											
D'Aubigny Creek Park	6	6	6	6	6	6	6	6	6	6	\$20,000
George Campbell Park	3	3	3	3	3	3	3	3	3	3	\$20,000
Grandwoodlands Park	2	2	2	2	2	2	2	2	2	2	\$20,000
Brier Park	3	3	3	3	3	3	3	3	3	3	\$20,000
Silverbridge Park	1	1	1	1	1	1	1	1	1	1	\$20,000
Steve Brown Sports Complex	1	1	1	1	1	1	1	1	1	1	\$20,000
Devon Down Park	1	1	1	1	1	1	1	1	1	1	\$20,000
Dufferin Park	1	1	1	1	1	1	1	1	1	1	\$20,000
Walter Gretzky Park							1	1	1	1	\$20,000
Neighbourhood											
Andrew W. Pate Park	1	1	1	1	1	1	1	1	1	1	\$8,250
Branlyn Soccer 2 Neighbourhood Fields	2	2	2	2	2	2	2	2	2	2	\$8,250
Donegal Park	1	1	1	1	1	1	1	1	1	1	\$8,250
Robert Moore Park	1	1	1	1	1	1	1	1	1	1	\$8,250
Total (#)	36	36	36	36	36	36	37	37	37	37	
Total (\$000)	\$2,253.3	\$2,253.3	\$2,253.3	\$2,253.3	\$2,253.3	\$2,253.3	\$2,273.3	\$2,273.3	\$2,273.3	\$2,273.3	



BASEBALL DIAMONDS					# of Baseba	II Diamonds					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/unit)
Signature Complex											,
Cockshutt Park - Arnold Anderson Stadium	1	1	1	1	1	1	1	1	1	1	\$1,062,000
Bill Little Park					1	1	1	1	1	1	\$935,000
Class A											7,
Cockshutt Park - George Henry	1	1	1	1	1	1	1	1	1	1	\$501,000
Jaycee Park	2	2	2	2	2	2	2	2	2	2	\$501,000
Steve Brown Sports Complex	1	1	1	1	1	1	1	1	1	1	\$501,000
Dufferin Park	1	1	1	1	1	1	1	1	1	1	\$501,000
Class B											, ,
Jaycee Sports Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Steve Brown Sports Complex	2	2	2	2	2	2	2	2	2	2	\$112,000
Cockshutt Park	2	2	2	2	2	2	2	2	2	2	\$112,000
Burnley Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Cedarland Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Connaught Park	2	2	2	2	2	2	2	2	2	2	\$112,000
Devon Down Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Iroquois Park	2	2	2	2	2	2	2	2	2	2	\$112,000
Mayfair Park	3	3	3	3	3	3	3	3	3	3	\$112,000
Prince Charles Park				1	1	1	1	1	1	1	\$112,000
Resurrection Community Centre (Brier Park)	1	1	1	1	1	1	1	1	1	1	\$112,000
Roswell Park				1	1	1	1	1	1	1	\$112,000
Spring Gardens Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Waterworks Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Branlyn Community Centre	2	2	2	2	2	2	2	2	2	2	\$112,000
Wilkes Park	1	1	1	1	1	1	1	1	1	1	\$112,000
Class C											, , , , , , , , , , , ,
Holmedale Park	1	1	1	1	1	1	1	1	1	1	\$38,000
Greenbrier Park	1	1	1	1	1	1	1	1	1	1	\$38,000
Lynden Hills Park	1	1	1	1	1	1	1	1	1	1	\$38,000
Recreation Park	1	1	1	1	1	1	1	1	1	1	\$38,000
Community Diamond											, ,
Conklin Park	1	1	1	1	1	1	1	1	1	1	\$29,000
Echo Park	1	1	1	1	1	1	1	1	1	1	\$29,000
Farringdon Park	-	-	-	-	-		1	1	1	1	\$29,000
Orchard Park	1	1	1	1	1	1	1	1	1	1	\$29,000
Parsons Park	1	1	1	1	1	1	-	_	-	-	\$29,000
Pleasant Ridge Park	1	1	1	1	1	1	1	1	_	_	\$29,000
Centennial Park	-	-	-	1	1	1	1	1	1	1	\$29,000
						•			'		\$20,000
Total (#)	2,047	2,048	2,049	2,053	2,055	2,056	2,057	2,058	2,058	2,059	
Total (\$000)	\$6,216.0	\$6,216.0	\$6,216.0	\$6,469.0	\$7,404.0	\$7,404.0	\$7,404.0	\$7,404.0	\$7,375.0	\$7,375.0	



FOOTBALL FIELDS					# of Footb	oall Fields					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/unit)
Signature Complex Artificial Turf											
Bisons Alumni Wayne Gretzky Sports Centre - Natural Field	1	1	1	1	1	-	-	-	-	_	\$619,000
Bisons Alumni Wayne Gretzky Sports Centre - Artificial	-	=	-	-	-	1	1	1	1	1	\$2,313,000
Kiwanis Field	-	=	-	-	-	1	1	1	1	1	\$2,313,000
Class A											
Wayne Gretzky Sports Centre	1	1	1	1	1	1	1	1	1	1	\$733,000
Class B											
Jaycee Sports Park	1	1	1	1	1	1	1	1	1	1	\$65,000
Total (#)	3	3	3	3	3	4	4	4	4	4	
Total (\$000)	\$1,417.0	\$1,417.0	\$1,417.0	\$1,417.0	\$1,417.0	\$5,424.0	\$5,424.0	\$5,424.0	\$5,424.0	\$5,424.0	



ASPHALT PADS					# of Aspl	nalt Pads					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/unit)
Full Court											,
Brier Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Centennial Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Charles Ward Park	1	1	1	1	1	1	1	1	1	1	\$191,00
City View Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Donegal Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Farringdon Park	-	-	-	-	-	-	1	1	1	1	\$191,00
Grandwoodlands Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Hillcrest Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Iroquois Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Lynden Hills Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Moose Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Orchard Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Pleasant Ridge Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Prince Charles Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Princess Anne Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Roswell park	1	1	1	1	1	1	1	1	1	1	\$191,00
Spring Gardens Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Spring St. Buck Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Tutela Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Westdale Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Woodman Park	1	1	1	1	1	1	1	1	1	1	\$191,00
Wood St. Park	-	-	_	1	1	1	1	1	1	1	\$191,00
Half Court											
Echo Park	1	1	1	1	1	1	1	1	1	1	\$29,00
Edith Monture Park	1	1	1	1	1	1	1	1	1	1	\$29,00
Johnson Park	1	1	1	1	1	1	1	1	1	1	\$29,00
Mission Park	1	1	1	1	1	1	1	1	1	1	\$29,00
Recreation Park	1	1	1	1	1	1	1	1	1	1	\$29,00
Sheir-Mar Park	1	1	1	1	1	1	1	1	1	1	\$29,00
Half Circle Hoop											
Andrew W. Pate Park				1	1	1	1	1	1	1	\$14,00
Cameron Heights Park	1	1	1	2	2	2	2	2	2	2	\$14,00
Connaught Park	1	1	1	1	1	1	1	1	1	1	\$14,00
Devon Down Park	-	-	-	-	-	-	-	1	1	1	\$14,00
Farringdon Park	-	-	-	-	-	-	1	1	1	1	\$14,00
Florence Buchanan Park	=	-	-	-	-	-	1	1	1	1	\$14,00
Parsons Park	-	-	-	-	-	-	1	1	1	1	\$14,00
Woodburn Park	-		-	=	-	-	1	1	1	1	\$14,00
Walter Gretzky Park	-	-	-	-	-	-	1	1	1	1	\$25,00
Warner Merritt Park	-	=	-	=	-	-	1	1	1	1	\$14,00
Total (#)	28	28	28	31	31	31	38	39	39	39	
Total (\$000)	\$4,022.0	\$4,022.0	\$4,022.0	\$4,241.0	\$4,241.0	\$4,241.0	\$4,527.0	\$4,541.0	\$4,541.0	\$4,541.0	



PLAYGROUND UNITS					# of Squa	re Metres					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/sq.m)
Fully Accessible											
Mohawk Park	1,093	1,093	1,093	983	983	983	983	983	983	883	\$1,007
Play Structure Areas											
Andrew Pate Park	235	235	235	396	396	396	396	396	396	396	\$427
Anne Good Park	386	386	386	371	371	371	371	371	371	371	\$427
Arctic Park	139	139	139	140	140	140	140	140	140	140	\$427
Bellview Community Centre	141	141	141	143	143	143	143	143	143	143	\$427
Bellview Park	193	193	193	194	194	194	194	194	194	194	\$427
Brenda Court Park	90	90	90	91	91	91	91	91	91	91	\$427
Bridle Path Park	285	285	285	191	191	191	191	191	191	191	\$427
Brier Park	297	297	297	298	298	298	298	298	298	298	\$427
Brooklyn Park	194	194	194	149	149	149	149	149	149	149	\$427
Burnley Park	175	175	175	176	176	176	176	176	176	176	\$427
Cameron Heights Park	651	651	651	480	480	480	480	480	480	480	\$427
Cedarland Park	405	405	405	397	397	397	397	397	397	397	\$427
Centennial Park	428	428	428	389	389	389	389	389	389	389	\$427
Central Park	322	322	322	303	303	303	303	303	303	303	\$427
Charles Ward Park	382	382	382	384	384	384	384	384	384	384	\$427
City View Park	226	226	226	227	227	227	227	227	330	330	\$427
Cockshutt Park	300	300	300	309	309	309	309	309	309	395	\$427
Conklin Park	198	198	198	384	384	384	384	384	384	384	\$427
Connaught Park	422	422	422	232	232	232	232	232	232	232	\$427
Deer Park	231	231	231	237	237	237	237	237	237	237	\$427
Devereux Park	236	236	236	350	350	350	350	350	350	350	\$427
Devon Down Park	302	302	302	396	396	396	396	396	396	402	\$427
Donegal Park	372	372	372	249	249	249	249	249	249	249	\$427
Dufferin Park	388	388	388	399	399	399	399	399	399	399	\$427
Earl Haig Family Fun Park	399	399	399	277	277	277	277	277	277	277	\$427
Echo Park	276	276	276	334	334	334	334	334	334	334	\$427
Edith Monture Park	333	333	333	349	349	349	349	349	349	349	\$427
Elgin Park	416	416	416	222	222	222	222	222	222	222	\$427
Farringdon Park	-	-		-	-		336	336	336	336	\$427
Florence Buchanan Park	120	120	120	311	311	311	311	311	311	311	\$427
Grandwoodlands Park	288	288	288	201	201	201	201	201	201	385	\$427
Greenbrier Park	81	81	81	129	129	129	129	129	129	129	\$427
Greenwood Park	135	135	135	101	101	101	101	101	101	101	\$427
HEPC Corridor Swings	-	-	-	397	397	397	397	397	397	397	\$427
Hickory Park	406	406	406	171	171	171	171	171	171	171	\$427
Hillcrest Park	230	230	230	216	216	216	216	216	216	216	\$427
Holmedale Park	223	223	223	238	238	238	238	238	238	238	\$427
Iroquois Park	237	237	237	346	346	346	346	346	346	346	\$427



PLAYGROUND UNITS					# of Squa	re Metres					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/sq.m)
Play Structure Areas (Continued)											
Johnson Park	344	344	344	103	103	103	103	103	103	103	\$427
Lansdowne Park	102	102	102	263	263	263	263	263	263	263	\$427
Lowes Loop	260	260	260	540	540	540	540	540	540	540	\$427
Lynden Hills Park	633	633	633	240	240	240	240	240	240	240	\$427
Mayfair Park	239	239	239	180	180	180	180	180	180	180	\$427
Mayor's Common Park	163	163	163	360	360	360	360	360	360	360	\$427
Mission Park	401	401	401	213	213	213	213	213	213	213	\$427
Moose Park	211	211	211	349	349	349	349	349	349	321	\$427
Orchard Park	391	391	391	480	480	480	480	480	435	435	\$427
Parsons Park	263	263	263	325	325	325	325	325	325	325	\$427
Pleasant Ridge Park	323	323	323	172	172	172	172	172	172	401	\$427
Preston Park	-	-	-	-	-	-	-	-	305	305	\$427
Prince Charles Park	171	171	171	367	367	367	367	367	367	367	\$427
Princess Anne Park	391	391	391	398	398	398	398	398	398	398	\$427
Recreation Park	444	444	444	190	190	190	190	190	190	190	\$427
Robert Moore Park	190	190	190	363	363	363	363	363	363	363	\$427
Roswell Park	255	255	255	290	290	290	290	290	290	290	\$427
Shallow Creek Park	324	324	324	225	225	225	225	225	225	225	\$427
Sheri-Mar Park	225	225	225	389	389	389	389	389	389	389	\$427
Silverbridge Park	387	387	387	466	466	466	466	466	466	466	\$427
Spring Gardens Park	298	298	298	281	281	281	281	281	281	281	\$427
Spring St. Buck	280	280	280	66	66	66	66	66	66	408	\$427
Tourism Centre	-	-	-	268	268	268	268	268	268	268	\$427
Tranquility Park	267	267	267	290	290	290	290	290	290	290	\$427
Turtle Pond Park	347	347	347	401	401	401	401	401	401	401	\$427
Tutela Park	465	465	465	443	443	443	443	443	443	443	\$427
Warner Merritt Park	-	-	-	475	475	475	475	475	475	475	\$427
Walter Gretzky Park	-	-	-	171	171	171	171	171	171	171	\$427
Westdale Park	194	194	194	339	339	339	339	339	339	339	\$427
Wilkes Park	372	372	372	208	208	208	208	208	208	208	\$427
Woodburn Park	-	-	-	210	210	210	210	210	210	210	\$427
Woodman Park	209	209	209	307	307	307	307	307	307	307	\$427
Wood St. Park	306	306	306	307	307	307	307	307	307	307	\$427
Sand Play Area											
Andrew Pate Park	55	55	55	55	55	55	55	55	55	55	\$282
Cameron Heights Park	50	50	50	50	50	50	50	50	50	50	\$282
Cedarland Park	56	56	56	56	56	56	56	56	56	56	\$282
Centennial Park	40	40	40	40	40	40	40	40	40	40	\$282
City View Park	-	-	-	-	-	-	-	-	50	50	\$282
Cockshutt Park	-	-	-	-	-		-	-	40	40	\$282
Connaught Park	39	39	39	39	39	39	39	39	39	39	\$282
Devon Down Park	-	-	-	-	-	-	-	-	-	48	\$282
Donegal Park	51	51	51	51	51	51	51	51	51	51	\$282
Elgin Park	53	53	53	53	53	53	53	53	53	53	\$282
Florence Buchanan Park	68	68	68	68	68	68	68	68	68	68	\$282



PLAYGROUND UNITS					# of Squa	re Metres					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/sq.m)
Sandy Play Area (Continued)											
Lynden Hills Park	60	60	60	60	60	60	60	60	60	60	\$28
Grandwoodlands Park	-	-	-	-	-	-	-	-	30	30	\$28
Hickory Park	21	21	21	21	21	21	21	21	21	21	\$28
Mayors Common	35	35	35	35	35	35	35	35	35	35	\$28
Mission Park	41	41	41	41	41	41	41	41	41	41	\$28
Mohawk Park	-	-	-	-	-	-	-	-	-	38	\$28
Moose Park	-	-	-	-	-	-	-	-	50	50	\$28
Orchard Park	-	-	-	-	-	-	-	-	-	20	\$28
Parsons	60	60	60	60	60	60	60	60	60	60	\$28
Pleasant Ridge Park	-	-	-	-	-	-	-	-	-	48	\$28
Princess Anne Park	25	25	25	25	25	25	25	25	25	25	\$28
Roswell Park	40	40	40	40	40	40	40	40	40	40	\$28
Shallow Creek Park	36	36	36	36	36	36	36	36	36	36	\$28
Spring Gardens Park	62	62	62	62	62	62	62	62	62	62	\$28
Spring St. Buck Park	-	-	-	-	-	-	-	-	-	50	\$28
Turtle Pond Park	58	58	58	58	58	58	58	58	58	58	\$28
Tutela Park	32	32	32	32	32	32	32	32	32	32	\$28
Warner Merritt Park	37	37	37	37	37	37	37	37	37	37	\$28
Walter Gretzky Park	50	50	50	50	50	50	50	50	50	50	\$28
Wilkes Park	35	35	35	35	35	35	35	35	35	35	\$28
Woodburn Park	42	42	42	42	42	42	42	42	42	42	\$28
Signature Natural Play Area											
Gardenscape WGSC	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$34
Nature Play Area											
Andrew Pate Park	20	20	20	20	20	20	20	20	20	20	\$28
Cameron Heights Park	30	30	30	30	30	30	30	30	30	30	\$28
Lynden Hills Park	35	35	35	35	35	35	35	35	35	35	\$28
Mayors Common	30	30	30	30	30	30	30	30	30	30	\$28
Mohawk Park	-	-	-	-	-	-	-	-	-	200	\$28
Orchard Park	-	-	-	-	-	-	-	-	75	75	\$28
Roswell Park	50	50	50	50	50	50	50	50	50	50	\$28
Spring Gardens Park	25	25	25	25	25	25	25	25	25	25	\$28
Tutela Park	33	33	33	33	33	33	33	33	33	33	\$28
Walter Gretzky Park	50	50	50	50	50	50	50	50	50	50	\$28
Warner Merrit Park	27	27	27	27	27	27	27	27	27	27	\$28
Total (sq.m)	22,036	22,036	22,036	23,185	23,185	23,185	23,521	23,521	24,129	25,252	
Total (\$000)	\$9,765.1	\$9,765.1	\$9,765.1	\$10,192.0	\$10,192.0	\$10,192.0	\$10,335.4	\$10,335.4	\$10,559.5	\$10,922.5	



SKATING RINK SITES					# Skatin	g Rinks					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/unit)
Andrew W. Pate Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Anne Good Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Brier Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Cedarland Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Centennial Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Charles Ward Park	1	1	1	1	1	1	1	1	1	1	\$58,000
City View Park	-	-	-	-	-	-	-	-	1	1	\$58,000
Connaught Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Devon Down Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Donegal Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Echo Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Grandwoodlands Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Greenbrier Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Hillcrest Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Iroquois Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Lincoln Square Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Lynden Hills Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Mayfair Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Mohawk Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Moose Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Orchard Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Parsons Park	1	1	1	1	1	1	1	-	-	-	\$58,000
Pleasant Ridge Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Prince Charles Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Recreation Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Seneca Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Spring Gardens Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Tutela Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Westdale Park	1	1	1	1	1	1	1	1	1	1	\$58,000
Total (#)	28	28	28	28	28	28	28	27	28	28	
Total (\$000)	\$1,624.0	\$1,624.0	\$1,624.0	\$1,624.0	\$1,624.0	\$1,624.0	\$1,624.0	\$1,566.0	\$1,624.0	\$1,624.0	



BRIDGES					# of Linea	ar Metres					Development
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/m)
Wood Structures											
Perched Fen Boardwalk	25	25	25	25	25	25	25	25	25	25	\$3,873
Dead Pond Look Out	7	7	7	7	7	7	7	-	-	-	\$0
Mohawk Park Lookout	38	38	38	38	38	38	38	38	38	38	\$4,003
CN Rail Trail Bridge 1	6	6	6	6	6	6	6	6	6	6	\$15,000
CN Rail Trail Bridge 2	12	12	12	12	12	12	12	12	12	12	\$7,500
CN Rail Trail Bridge 3	8	8	8	8	8	8	8	8	8	8	\$1,125
Jaycee Park Foot Bridge	6	6	6	6	6	6	6	-	-	_	\$50,000
LE&N Trail Bridge near Conklin Rd.	4	4	4	4	4	4	4	4	4	4	\$17,500
D'Aubigny Creek Wetlands Bridge 1	3	3	3	3	3	3	3	3	3	3	\$3,935
D'Aubigny Creek Wetlands Bridge 2	4	4	4	4	4	4	4	4	4	4	\$2,837
D'Aubigny Creek Wetlands Bridge 3	4	4	4	4	4	4	4	4	4	4	\$3,297
Blue Circle Trail Bridge	4	4	4	4	4	4	4	4	4	4	\$4,575
Franklin Grobb Memorial Forest Bridge	4	4	4	4	4	4	4	4	4	4	\$5,229
TH&B 1	5	5	5	5	5	5	5	5	5	5	\$18,000
TH&B 2	5	5	5	5	5	5	5	5	5	5	\$18,000
TH&B 3	5	5	5	5	5	5	5	5	5	5	\$18,000
TH&B 4	6	6	6	6	6	6	6	6	6	6	\$16,700
Grand Valley Trails Pedestrian Crossing 1	-	8	8	8	8	8	8	8	8	8	\$15,250
Grand Valley Trails Pedestrian Crossing 2	-	-	-	8	8	8	8	8	8	8	\$15,250
Tranquility Park Crossing	4	4	4	4	4	4	4	4	4	4	\$1,717



BRIDGES (Continued)					# of Line	ar Metres					Development
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/m)
Steel/concrete Structures											
Brant's Crossing Lookout	5	5	5	5	5	5	5	5	5	5	\$20,000
Drummond Street Bridge	28	28	28	28	28	28	28	28	28	28	\$5,111
TH&B Railway River Crossging Bridge (Fordview CN Bridge)	125	125	125	125	125	125	125	125	125	125	\$8,880
Brant's Crossing Bridge (Trestle Bridge)	121	121	121	121	121	121	121	121	121	121	\$30,000
D'Aubigny Creek Bridge	15	15	15	15	15	15	15	15	15	15	\$5,111
SC Johnson Bridge over 403	-	-	-	-	-	-	-	-	-	-	\$0
Wayne Gretzky Pathway Bridge over CNR	61	61	61	61	61	61	61	61	61	61	\$1,787
Shallow Creek Park Bridge	12	12	12	12	12	12	12	12	12	12	\$5,111
Kerr's Lane Bridge	4	4	4	4	4	4	4	4	4	4	\$75,000
Andrew W. Pate Park Bridge	12	12	12	12	12	12	12	12	12	12	\$1,500
Fordview Park Lookout	11	11	11	11	11	11	11	11	11	11	\$35,454
Cainsville Trail Subway	11	11	11	11	11	11	11	11	11	11	\$17,036
Cainsville Trail Tunnel	7	7	7	7	7	7	7	7	7	7	\$313,771
Gordon Glaves Crossing Bridge (cost shared with PW)	309	309	309	309	309	309	309	309	309	309	\$5,532
Lorne Bridge Pedestrian Underpass	4	4	4	4	4	4	4	4	4	4	\$45,259
Oakhill Cemetery Creek Crossing	3	3	3	3	3	3	3	3	3	3	\$4,000
Oakhill Cemetery Lookout	4	4	4	4	4	4	4	4	4	4	\$30,500
WGP Trail HWY 403 Overpass Bridge	70	70	70	70	70	70	70	70	70	70	\$27,890
Farringdon Park look out	-	-	-	-	-	-	16	16	16	16	\$3,873
Forest in the City Bridge A	-	-	-	-	-	-	9	9	9	9	\$5,111
Forest in the City Bridge B	-	-	-	-	-	-	9	9	9	9	\$5,111
Forest in the City Bridge C	-	-	-	-	-	-	9	9	9	9	\$5,111
Forest in the City Bridge D	-	-	-	-	-	-	9	9	9	9	\$5,111
Forest in the City Bridge E	-	-	-	-	-	-	9	9	9	9	\$5,111
Total (m)	953	961	961	968	968	968	1,031	1,018	1,018	1,018	
Total (\$000)	1,936.82	\$2,058.8	\$2,058.8	\$2,179.0	\$2,179.0	\$2,179.0	\$2,179.1	\$1,869.1	\$1,869.1	\$1,869.1	



PATHWAYS					# of Line	ar Metres					Development
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/m)
Paved Surface 3m wide	30,610	30,610	30,610	31,700	32,800	33,900	35,000	36,227	36,115	36,115	\$321
Paved Surface 2m wide	8,050	8,050	8,050	8,900	9,700	10,500	11,300	12,166	14,604	14,604	\$214
Stone Surface 3m wide	26,186	26,186	26,186	26,200	26,200	26,250	26,300	26,402	26,086	26,086	\$136
Stone Surface 2m wide	5,318	5,318	5,318	5,100	4,800	4,500	4,200	4,018	3,737	3,737	\$91
Tar & Chip Surface 3m wide	3,025	3,025	3,025	-	-	-	-	-	-	-	\$32
Woodchip/Dirt Surface	10,172	10,172	10,172	10,800	11,400	12,000	12,600	13,419	13,419	13,419	\$17
Concrete Surface	3,446	3,446	3,446	3,500	3,500	3,500	3,500	3,528	3,528	3,528	\$295
Brick Paver Surface	2,163	2,163	2,163	2,163	2,163	2,163	2,163	2,163	1,920	1,920	\$137
Total (\$000)	\$17,176.4	\$17,176.4	\$17,176.4	\$17,620.0	\$18,127.2	\$18,641.2	\$19,155.2	\$19,753.9	\$20,137.9	\$20,137.9	

PARKING LOTS					# of Squa	re Metres					Development
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/sq.m)
Paved											,
Bell Homestead	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$576
Bellview Community Hall	436	436	436	436	436	436	436	436	436	436	\$177
Branlyn Community Centre 1/3 of lot	2,170	2,170	2,170	2,170	2,170	2,170	2,170	2,170	2,170	2,170	\$540
Brier Park	1,503	1,503	1,503	1,530	1,530	1,530	1,530	1,530	1,530	1,530	\$177
Burnley Park	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571	\$177
Civic Centre	32,757	32,757	32,757	32,757	32,757	32,757	32,757	32,757	32,757	32,757	\$540
Cockshutt Park - Field lot	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	7,801	\$540
Cockshutt Park - Office	606	606	606	606	606	606	606	606	606	606	\$320
D'Aubigny Creek Park - field parking	2,890	2,890	2,890	2,890	2,890	2,890	2,890	2,890	2,890	2,890	\$177
Doug Snooks Eagle Place	-	-	-	2,622	2,622	2,622	2,622	2,622	2,622	2,622	\$540
Dufferin Park	4,154	4,154	4,154	4,154	4,154	4,154	4,154	4,154	4,154	4,154	\$320
Earl Haig	6,404	6,404	6,404	6,404	6,404	6,404	6,404	6,404	6,404	6,404	\$540
Farringdon Park	-	-	-	-	-	-	257	257	257	257	\$177
Fordview Park	335	335	335	335	335	335	335	335	335	335	\$320
Glenhyrst Art Gallery	1,188	1,188	1,188	1,188	1,188	1,188	1,188	1,188	1,188	1,188	\$320
Glenhyrst Tea House	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	\$177
Greenwood Cemetery	598	598	598	598	598	598	598	598	598	598	\$177
Hardy Road Trail Parking	560	560	560	560	560	560	700	700	700	700	\$177
Greenwood Cemetery	2,547	2,547	2,547	2,547	2,547	2,547	2,547	2,547	2,547	2,547	\$177
Jaycee Sports Park	5,109	5,109	5,109	5,109	5,109	5,109	5,109	5,109	5,109	5,109	\$540
Mohawk Park	14,017	14,017	14,017	14,643	14,643	14,643	14,643	14,643	14,643	14,643	\$320
Mount Hope Cemetery	22,092	22,092	22,092	22,092	22,092	22,092	22,092	22,092	22,092	22,092	\$177
Oakhill Cemetery	8,635	8,635	8,635	8,635	8,635	8,635	8,635	8,635	8,635	8,635	\$177
Sheri-Mar Park	306	306	306	306	306	306	306	306	306	306	\$177
Steve Brown Sports Complex	8,961	8,961	8,961	8,961	8,961	8,961	8,961	8,961	8,961	8,961	\$540
TB Costain	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	3,917	\$540
Wayne Gretzky Sports Centre	-	-	-	35,494	35,494	35,494	35,494	35,494	35,494	35,494	\$540
Wayne Gretzky Sports Centre	-	-	-	1,249	1,249	1,249	1,249	1,249	1,249	1,249	\$320
Woodman Park	-	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	2,860	\$540
Cockshutt boat launch drive and area	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	2,221	\$177



PARKING LOTS (Continued)					# of Squa	re Metres					Development
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/sq.m)
Unpaved											<u> </u>
Bill Little Park	4,726	4,726	4,726	4,726	4,726	4,726	4,726	4,726	4,726	4,726	\$110
Cockshutt Park - yard	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	4,316	\$110
Connaught Park	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	\$110
D'Aubigny Creek Park - Boat launch area	1,738	1,738	1,738	2,140	2,140	2,140	2,140	2,140	2,140	2,140	\$110
Dogford Park	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	\$110
Fordview Park	421	421	421	575	575	575	575	575	575	575	\$110
Glenhyrst Trail Parking	1,006	1,006	1,006	1,006	1,006	1,006	1,006	1,006	1,006	1,006	\$110
George Campbell Park Parking Lot	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	1,092	\$110
Greenwich Trail Parking	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	\$110
John Wright Soccer Complex	3,617	3,617	3,617	3,617	3,617	3,617	3,617	3,617	3,617	3,617	\$110
Master's Lane Trail Parking	725	725	725	561	561	561	561	561	561	561	\$110
Mohawk Park - Forest Road	1,063	1,063	1,063	1,063	1,063	1,063	1,063	1,063	1,063	1,063	\$110
Princess Anne Park	454	454	454	454	454	454	454	454	454	454	\$110
Steve Brown Sports Complex	1,913	1,913	1,913	1,913	1,913	1,913	1,913	1,913	1,913	1,913	\$110
Tranquility Park	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543	\$110
Waterworks Park	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	2,348	\$110
Total (sq.m)	162,417	165,277	165,277	205,687	205,687	205,687	206,084	206,084	206,084	206,084	
Total (\$000)	51,389.20	\$52,933.6	\$52,933.6	\$74,121.4	\$74,121.4	\$74,121.4	\$74,191.7	\$74,191.7	\$74,191.7	\$74,191.7	I



OTHER PARK FACILITIES					# of Fa	cilities					Development
Park Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cost (\$/unit)
Lawn Bowling											
Dufferin Park	2	2	2	2	2	2	2	2	2	2	\$116,255
Running Tracks											
Steve Brown Sports Park	1	1	1	1	1	1	1	1	1	1	\$710,700
Bisons Alumni Field	-	-	-	1	1	1	1	1	1	1	\$710,700
Kiwanis Field	-	-	-	1	1	1	1	1	1	1	\$710,700
Long Jump & Triple Jump											
Steve Brown Sports Complex	-	-	-	1	1	1	1	1	1	1	\$38,610
Kiwanis Field	-	-	-	1	1	1	1	1	1	1	\$38,610
Skate Parks											
Brant's Crossing concrete street style	1	1	1	1	1	1	1	1	1	1	\$592,200
Jaycee Sports Park- steel half pipe	1	1	1	1	1	1	1	1	1	1	\$165,840
Outdoor Swimming Pools											
Woodman Park	1	1	1	1	1	1	1	1	1	-	\$1,100,000
Earl Haig Family Fun Park - Lazy River	1	1	1	1	1	1	1	1	1	1	\$1,100,000
Earl Haig Family Fun Park - Pool	1	1	1	1	1	1	1	1	1	1	\$1,100,000
Tennis Courts											
Dufferin Park	6	6	6	6	6	6	6	6	6	6	\$89,252
Steve Brown Sports Complex	4	4	4	4	4	4	4	4	4	4	\$89,252
Beach Volleyball											
Mohawk Park	1	1	1	1	1	1	1	1	1	1	\$24,447
Earl Haig Family Fun Park	1	1	1	1	1	1	1	1	1	1	\$24,447
Batting Cage											
Earl Haig Family Fun Park	1	1	1	1	1	1	1	1	1	1	\$250,992
Iroquois Park	1	1	1	1	1	1	1	1	1	1	\$250,992
Waterplay											
Bridle Path Park	1	1	1	1	1	1	1	1	1	1	\$355,300
Earl Haig Family Fun Park	1	1	1	1	1	1	1	1	1	1	\$500,000
Mohawk Park	1	1	1	1	1	1	1	1	1	1	\$414,600
Harmony Square? (Or fountain)				1	1	1	1	1	1	1	\$670,400
Tutela Park	-	-	-	-	-	-	-	-	-	1	\$551,918
Outdoor Ping Pong											
Walter Gretzky Park	-	-	-			-	-	1	1	1	\$6,000
Bike Parks											
Waterworks Park (earthwork)	-	-	-	-	-	-	-	1	1	1	\$310,000
Total (\$000)	\$7,714.5	\$7,714.5	\$7,714.5	\$9,883.6	\$9,883.6	\$9,883.6	\$9,883.6	\$10,199.6	\$10,199.6	\$9,651.5	



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

Historic Population	2011 93,650	2012 94,628	2013 95,617	2014 96,616	2015 97,625	2016 98,645	2017 99,603	2018 100,570	2019 101,547	2020 102,533	
INVENTORY SUMMARY (\$000)											
Indoor Recreation	\$225,773.8	\$225,773.8	\$243,273.8	\$243,268.0	\$243,268.0	\$243,268.0	\$243,268.0	\$243,268.0	\$241,776.8	\$241,776.8	
Parkland	\$33,536.5	\$33,620.5	\$33,620.5	\$34,111.2	\$34,111.2	\$34,111.2	\$34,233.2	\$34,233.2	\$34,233.2	\$34,233.2	
Park Buildings	\$14,826.2	\$14,826.2	\$14,869.3	\$14,567.3	\$14,551.4	\$14,576.6	\$14,576.6	\$14,342.3	\$14,514.0	\$14,544.4	
Park Facilities	\$103,514.3	\$105,180.7	\$105,180.7	\$130,000.2	\$131,442.4	\$135,963.4	\$136,997.2	\$137,557.9	\$138,194.9	\$138,009.8	
Total (\$000)	\$377,650.9	\$379,401.3	\$396,944.4	\$421,946.7	\$423,373.1	\$427,919.3	\$429,075.1	\$429,401.4	\$428,719.0	\$428,564.2	
SERVICE LEVEL (\$/capita)											Average Service Level
Indoor Recreation	\$2,410.83	\$2,385.91	\$2,544.25	\$2,517.89	\$2,491.86	\$2,466.10	\$2,442.38	\$2,418.89	\$2,380.94	\$2,358.04	\$2,441.71
Parkland	\$358.1	\$355.3	\$351.6	\$353.1	\$349.4	\$345.8	\$343.7	\$340.4	\$337.1	\$333.9	\$346.8
Park Buildings	\$158.3	\$156.7	\$155.5	\$150.8	\$149.1	\$147.8	\$146.3	\$142.6	\$142.9	\$141.9	\$149.2
Park Facilities	\$1,105.3	\$1,111.5	\$1,100.0	\$1,345.5	\$1,346.4	\$1,378.3	\$1,375.4	\$1,367.8	\$1,360.9	\$1,346.0	\$1,283.7

\$4,367.26

\$4,336.73

\$4,337.97

\$4,307.85

\$4,269.68

\$4,221.88

\$4,179.77

\$4,221.45

CITY OF BRANTFORD

CALCULATION OF MAXIMUM ALLOWABLE

PARKS & RECREATION

Total (\$/capita)

 10-Year Funding Envelope Calculation
 \$4,221.45

 10 Year Average Service Level 2011 - 2020
 \$4,221.45

 Net Population Growth 2021 - 2030
 15,638

 Maximum Allowable Funding Envelope
 \$66,015,035

\$4,032.58

\$4,009.40

\$4,151.40



APPENDIX B.4 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM PARKS & RECREATION

		Gross	(Grants/	Net	Inelig	gible	Costs	Total	Deve	lopn	nent-Related	Cost	s
Project Description		Project Cost		idies/Other	Municipal Cost	-		ment hares	evelopment elated Costs	Available C Shares /		2021- 2030	De	Other velopment-
		0001		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5551		0.		 onatoa Gooto	rior Growth		2000	-	Related
4.0 PARKS & RECREATION														
4.0 FARRS & REGREATION														
4.1 Wayne Gretzky Sports Centre														
4.1.1 Recovery of Outstanding Growth Share	2021	 13,118,287	\$	-	\$ 13,118,287	0%	\$	-	\$ 13,118,287	\$ 13,118,287	\$	-	\$	-
Subtotal Wayne Gretzky Sports Centre		\$ 13,118,287	\$	-	\$ 13,118,287		\$	-	\$ 13,118,287	\$ 13,118,287	\$	-	\$	-
4.2 Southwest Community Centre and Park														
4.2.1 Southwest Community Centre - Prior Projects	2021	17,825,000	\$	-	\$ 17,825,000	0%	\$	-	\$ 17,825,000	\$ -	\$	17,825,000	\$	-
4.2.2 Southwest Community Centre and Park	2024	\$ 24,919,264	\$	-	\$ 24,919,264	0%	\$	-	\$ 24,919,264	\$ -	\$	10,671,176	\$	14,248,088
Subtotal Southwest Community Centre and Park		\$ 42,744,264	\$	-	\$ 42,744,264		\$	-	\$ 42,744,264	\$ -	\$	28,496,176	\$	14,248,088
4.3 Park Development														
4.3.1 Arrowdale Community Park Development	2021	\$ 4,000,000	\$	-	\$ 4,000,000	0%	\$	-	\$ 4,000,000	\$ -	\$	4,000,000	\$	-
4.3.2 New Park Open Space Development	Various	\$ 1,950,000	\$	-	\$ 1,950,000	0%	\$	-	\$ 1,950,000	\$ -	\$	1,950,000	\$	-
4.3.3 Church Street Waterfront Park Development	2022	\$ 250,000	\$	-	\$ 250,000	0%	\$	-	\$ 250,000	\$ -	\$	250,000	\$	-
4.3.4 Church Street Waterfront Park Development	2023	\$ 400,000	\$	-	\$ 400,000	0%	\$	-	\$ 400,000	\$ -	\$	400,000	\$	-
4.3.5 Woodman Community Centre - Playground Design and Construction	2021	\$ 106,500	\$	-	\$ 106,500	90%	\$	95,850	\$ 10,650	\$ -	\$	10,650	\$	-
4.3.6 New Playgrounds	Various	 1,615,649	\$	-	\$ 1,615,649	0%	\$	-	\$ 1,615,649	\$ 	\$	1,615,649	\$	-
Subtotal Park Development		\$ 8,322,149	\$	-	\$ 8,322,149		\$	95,850	\$ 8,226,299	\$ -	\$	8,226,299	\$	-
4.4 Trails and Active Transportation														
4.4.1 Off Road Active Transportation Initiatives	Various	1,555,000	\$	-	\$ 1,555,000	50%	\$	777,500	\$,	\$ -	\$	777,500	\$	-
4.4.2 Bell Lane & Mt. Pleasant Pedestrian Crossover Works	2021	\$ 100,000	\$	-	\$ 100,000	0%	\$		\$ 100,000	\$ -	\$	100,000	\$	-
4.4.3 Trail Development	Various	 1,000,000	\$	-	\$ 1,000,000	50%	\$	500,000	\$ 500,000	\$ 	\$	500,000	\$	-
Subtotal Trails and Active Transportation		\$ 2,655,000	\$	-	\$ 2,655,000		\$	1,277,500	\$ 1,377,500	\$ -	\$	1,377,500	\$	-
4.5 Studies														
4.5.1 Twin Pad, Adult Rec Centre, Indoor Turf Feasibility Study	2022	\$ 150,000	\$	-	\$ 150,000	0%	\$	-	\$ 150,000	\$ -	\$	150,000	\$	-
4.5.2 Parks and Recreation Master Plan	2023	\$ 200,000	\$	-	\$ 200,000	50%	\$		\$ 100,000	\$ -	\$	100,000	\$	-
4.5.3 Parks and Recreation Master Plan	2028	\$ 200,000	\$		\$ 200,000	50%	\$		\$ 100,000	\$ 	\$	100,000	\$	
Subtotal Studies		\$ 550,000	\$	-	\$ 550,000		\$	200,000	\$ 350,000	\$ -	\$	350,000	\$	-
TOTAL PARKS & RECREATION		\$ 67,389,700	\$	-	\$ 67,389,700		\$	1,573,350	\$ 65,816,350	\$ 13,118,287	\$	38,449,975	\$	14,248,088

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	100%	\$38,449,975
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$1,844.04
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	0%	\$0
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$0.00





APPENDIX B.4 TABLE 3

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PARKS & RECREATION RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

PARKS & RECREATION	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$20,958.40)	(\$19,033.37)	(\$16,955.65)	(\$25,662.07)	(\$23,078.00)	(\$20,163.46)	(\$15,860.58)	(\$11,182.55)	(\$5,864.50)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMEN	TS										
- Parks And Recreation: Non Inflated	\$22,420.0	\$884.3	\$984.3	\$11,155.5	\$484.3	\$484.3	\$484.3	\$584.3	\$484.3	\$484.3	\$38,450.0
- Parks & Recreation: Inflated	\$22,420.0	\$902.0	\$1,024.1	\$11,838.3	\$524.2	\$534.7	\$545.4	\$671.2	\$567.5	\$578.8	\$39,606.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$2,022.5	\$3,926.8	\$4,094.9	\$4,272.5	\$4,451.0	\$4,646.6	\$5,864.2	\$6,126.1	\$6,398.5	\$6,679.5	\$48,482.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1,152.7)	(\$1,046.8)	(\$932.6)	(\$1,411.4)	(\$1,269.3)	(\$1,109.0)	(\$872.3)	(\$615.0)	(\$322.5)	(\$8,731.7)
- Interest on In-year Transactions	(\$560.9)	\$52.9	\$53.7	(\$208.1)	\$68.7	\$72.0	\$93.1	\$95.5	\$102.0	\$106.8	(\$124.3)
TOTAL REVENUE	\$1,461.6	\$2,827.0	\$3,101.8	\$3,131.9	\$3,108.3	\$3,449.3	\$4,848.3	\$5,349.2	\$5,885.5	\$6,463.7	\$39,626.6
CLOSING CASH BALANCE	(\$20,958.4)	(\$19,033.4)	(\$16,955.7)	(\$25,662.1)	(\$23,078.0)	(\$20,163.5)	(\$15,860.6)	(\$11,182.6)	(\$5,864.5)	\$20.4	

2021 Adjusted Charge Per Capita \$2,098

Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.5
Public Transit

Public Transit

Brantford Transit provides public transportation in the City of Brantford. Transit is provided through a surface route network that stretches across the City.

Transit Ridership

In accordance with the *Development Charges Act*, transit services must be based on a "planned level of service" rather than the "10-year historical average level of service". For the purposes of determining the "planned level of service" for transit, the City's Public Transit development-related capital program has been informed by existing and proposed capital budget documents and discussions with staff.

A transit ridership forecast was prepared for Brantford Transit using historical annual ridership figures provided by City staff for the years 2011-2020. Despite the significant decrease in transit ridership due to the COVID-19 pandemic, ridership numbers from 2020 were included in the historical ridership review.

The forecast assumes that an average annual ridership of 11.17 trips per population and employment will continue over the 10-year planning period. As such, it is estimated that annual ridership will grow from 1.15 million trips in 2020 to 1.92 million in 2030.

Year	Total Annual Ridership	DC Forecast Population & Employment	Annual Ridership per Population & Employment
2011	1,588,443	137,874	11.52
2012	1,662,847	138,877	11.97
2013	1,645,395	139,891	11.76
2014	1,669,445	140,915	11.85
2015	1,588,225	141,949	11.19
2016	1,493,816	142,994	10.45
2017	1,490,754	144,315	10.33
2018	1,672,459	145,648	11.48
2019	1,973,132	146,994	13.42
2020	1,151,950	148,352	7.76
2021	1,162,580	149,721	7.76
2022	1,694,883	151,681	11.17
2023	1,717,064	153,666	11.17
2024	1,739,535	155,677	11.17
2025	1,762,319	157,716	11.17
2026	1,785,398	159,782	11.17
2027	1,817,529	162,657	11.17
2028	1,850,247	165,585	11.17
2029	1,883,556	168,566	11.17
2030	1,917,470	171,601	11.17

Transit Development Charges Capital Program Allocations

The following table provides a summary of the allocations used to arrive at the benefit to existing and in-period share calculations for the Public Transit projects identified in the capital program.

Using the ridership forecast shown in the previous table, the benefit to existing share is calculated based on the historical average annual ridership

per population and employment multiplied by the population and employment in 2020. A 10-year historical average is used because the 2020 ridership figures are considered to be an outlier, and staff anticipate that ridership levels will rebound following the pandemic. This results in an average of 1.66 million riders per year. Of the total projected 2030 ridership of 1.92 million, the 1.66 million existing riders make up 86 per cent. The remaining 14 per cent is attributed to new development occurring over the planning period.

Transit DC Capital Program Allocations								
BTE	1,657,685	86%						
Growth	259,784	14%						
Total	1,917,470							

It is noted that not all Public Transit capital projects are assigned benefit to existing shares and growth shares based on the ridership forecast. For example, items such as bus fleet expansions typically have a more immediate relationship with growth service level requirements, and as such, are often considered to be 100 per cent development-related.

Table 1 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021-2030 development-related capital program for Public Transit includes new downtown transit shelters and enhanced transfer transit facilities at a total cost of \$720,000. Expansions to the City's fleet of conventional and specialized buses over the 10-year planning period are expected to cost \$4.40 million. The capital program also includes two Transit Optimization Studies and an Electric Bus Feasibility Study at a total cost of \$775,000. The total 10-year development-related capital program for Public Transit is \$5.90 million.

The benefit to existing share of the capital plan totals \$1.29 million. For the new bus shelters, enhanced transfer facilities, and studies, this share is based on the ridership analysis described above. No benefit to existing shares have been identified for the transit fleet expansions. \$1.42 million from the existing reserve fund is deducted, and the remaining \$3.18 million is eligible for development charges funding.

The \$3.18 million is allocated 71 per cent to residential development (\$2.26 million) and 29 per cent to non-residential development (\$921,660). This ratio is based on each sector's share of 10-year population and employment growth. The residential share of the net development-related capital cost is divided by the 10-year forecast growth in population in new units to derive an unadjusted charge of \$108.22 per capita. The non-residential share of the net development-related capital cost is divided by the 10-year forecast growth in floor space to derive an unadjusted charge of \$1.87 per square metre.

Table 2 Cash Flow Analysis

	1	PUBLIC TRANSI	T SUMMARY			
2021 - 2030		Unadj	usted	Adjusted Development Charge		
Development-F	Related Capital Program	Development Charge				
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m	
\$5,895,000	\$3,178,146	\$108.22	\$1.87	\$109	\$1.88	

APPENDIX B.5 TABLE 1

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM PUBLIC TRANSIT

	Timing Gross Grants/ Net Ineligible Costs		Costs		Total		Dev	elopn	nent-Related	Costs								
Project Description			Project	Subs	idies/Other	-	Nunicipal			ment		Development		Available		2021-		Other
			Cost	Re	coveries		Cost	& B	STE S	hares	R	lelated Costs		C Shares /		2030		lopment-
													Pr	ior Growth			R	elated
5.0 PUBLIC TRANSIT																		
5.1 Facilities																		
5.1.1 New Transit (E	Bus) Shelters	various	\$ 220,000	\$	=	\$	220,000	86%	\$	190,194	\$	29,806	\$	11,922	\$	17,884	\$	-
5.1.2 Enhanced Trai	nsfer Transit Facilities	2023	\$ 500,000	\$	-	\$	500,000	86%	\$	432,259	\$	67,741	\$	67,741	\$	-	\$	-
Subtotal Facili	ties		\$ 720,000	\$	-	\$	720,000		\$	622,452	\$	97,548	\$	79,664	\$	17,884	\$	-
5.2 Fleet																		
5.2.1 Conventional 7	ransit Fleet Expansion	2024	\$ 2,000,000	\$	-	\$	2,000,000	0%	\$	=	\$	2,000,000	\$	1,280,383	\$	719,617	\$	-
5.2.2 Conventional 7	Fransit Fleet Expansion	2028	\$ 2,000,000	\$	-	\$	2,000,000	0%	\$	=	\$	2,000,000	\$	=	\$	2,000,000	\$	-
5.2.3 Specialized Tra	ansit Fleet (Brantford Lift) Expansion	2026	\$ 400,000	\$	-	\$	400,000	0%	\$	-	\$	400,000	\$	-	\$	400,000	\$	-
Subtotal Fleet			\$ 4,400,000	\$	-	\$	4,400,000		\$	=	\$	4,400,000	\$	1,280,383	\$	3,119,617	\$	-
5.3 Transportation Studie	es																	
5.3.1 Transit Optimi	zation Study	2022	\$ 300,000	\$	-	\$	300,000	86%	\$	259,355	\$	40,645	\$	40,645	\$	-	\$	-
5.3.2 Transit Optimi	zation Study	2028	\$ 300,000	\$	-	\$	300,000	86%	\$	259,355	\$	40,645	\$	-	\$	40,645	\$	-
5.3.3 Electric Bus Fe	easibility Study	2021	\$ 175,000	\$	-	\$	175,000	86%	\$	151,290	\$	23,710	\$	23,710	\$	-	\$	-
Subtotal Trans	sportation Studies		\$ 775,000	\$	=	\$	775,000		\$	670,001	\$	104,999	\$	64,354	\$	40,645	\$	-
									1.									
TOTAL PUBLIC TRANSIT			\$ 5,895,000	\$	-	\$	5,895,000		\$	1,292,453	\$	4,602,547	\$	1,424,401	\$	3,178,146	\$	-

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	71%	\$2,256,484
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$108.22
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	29%	\$921,662
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$1.87

Available DC Shares	
Reserve Fund Balance at end of 2020	\$1,424,401

Transit Ridership Analysis - DC Allocations										
Timing	Ridership*	Allocation	DC Allocation							
2020	1,657,685	86%	BTE							
2021-2030	259,784	14%	In-Period							
Total	1,917,470	100%								

*Note: 2020 ridership adjusted for COVID-19 impacts based on historical



CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC TRANSIT RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

PUBLIC TRANSIT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	\$105.65	\$315.60	\$541.72	\$230.29	\$472.30	\$413.25	\$736.29	(\$622.44)	(\$319.97)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS	6										
- Public Works (New Projects): Non Inflated	\$1.3	\$1.3	\$1.3	\$512.2	\$1.3	\$285.3	\$1.3	\$1,450.1	\$1.3	\$1.3	\$2,256.5
- Public Works (New Projects): Inflated	\$1.3	\$1.3	\$1.3	\$543.5	\$1.4	\$315.0	\$1.4	\$1,665.7	\$1.5	\$1.5	\$2,533.9
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$105.1	\$204.0	\$212.7	\$222.0	\$231.3	\$241.4	\$304.7	\$318.3	\$332.4	\$347.0	\$2,518.9
INTEREST											
- Interest on Opening Balance	\$0.0	\$3.7	\$11.0	\$19.0	\$8.1	\$16.5	\$14.5	\$25.8	(\$34.2)	(\$17.6)	\$46.7
- Interest on In-year Transactions	\$1.8	\$3.5	\$3.7	(\$8.8)	\$4.0	(\$2.0)	\$5.3	(\$37.1)	\$5.8	\$6.0	(\$17.7)
TOTAL REVENUE	\$106.9	\$211.2	\$227.4	\$232.1	\$243.4	\$255.9	\$324.5	\$307.0	\$304.0	\$335.4	\$2,547.9
CLOSING CASH BALANCE	\$105.6	\$315.6	\$541.7	\$230.3	\$472.3	\$413.2	\$736.3	(\$622.4)	(\$320.0)	\$14.0	

2021 Adjusted Charge Per Capita	\$109

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%
•	



CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC TRANSIT NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

PUBLIC TRANSIT	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	\$59.71	\$133.30	\$211.69	\$68.46	\$149.75	\$105.62	\$251.38	(\$288.99)	(\$150.95)	
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREM	IENTS										
- Public Works (New Projects): Non Inflated	\$0.5	\$0.5	\$0.5	\$209.2	\$0.5	\$116.5	\$0.5	\$592.3	\$0.5	\$0.5	\$921.7
- Public Works (New Projects): Inflated	\$0.5	\$0.5	\$0.5	\$222.0	\$0.6	\$128.6	\$0.6	\$680.4	\$0.6	\$0.6	\$1,035.0
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	493,926
REVENUE											
- DC Receipts: Inflated	\$59.2	\$70.8	\$73.0	\$75.4	\$78.1	\$80.6	\$140.2	\$145.9	\$151.9	\$158.3	\$1,033.4
INTEREST											
- Interest on Opening Balance	\$0.0	\$2.1	\$4.7	\$7.4	\$2.4	\$5.2	\$3.7	\$8.8	(\$15.9)	(\$8.3)	\$10.1
- Interest on In-year Transactions	\$1.0	\$1.2	\$1.3	(\$4.0)	\$1.4	(\$1.3)	\$2.4	(\$14.7)	\$2.6	\$2.8	(\$7.3)
TOTAL REVENUE	\$60.2	\$74.1	\$78.9	\$78.8	\$81.9	\$84.5	\$146.3	\$140.0	\$138.7	\$152.8	\$1,036.2
CLOSING CASH BALANCE	\$59.7	\$133.3	\$211.7	\$68.5	\$149.7	\$105.6	\$251.4	(\$289.0)	(\$150.9)	\$1.2	

2021 Adjusted Charge Per Square Metre \$1.88

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.6 Housing

Housing

The City of Brantford provides a variety of housing assistance to its population. The Housing Services department assists Brantford residents through financial grants to encourage home ownership, development of housing offering affordable rents, and renovation programs encouraging investment in affordable housing.

Table 1 Historical Service Levels

The City of Brantford Housing Services department owns, manages, or oversees a number of housing units and buildings, including units shared with Brant County. These units include apartment towers, townhouses, and semi-detached and single detached housing forms offering various forms of housing support. The total value of these properties is \$291.81 million, \$263.85 million of which represents the City of Brantford's share.

The land associated with these properties totals \$44.32 million. \$3.40 million represents the County share leaving \$40.92 to be brought forward to the historical service level calculation.

The total replacement value of Brantford Housing Services capital inventory is \$304.77 million. The average service level attained in the 10-year historical period 2011-2020 is \$2,976.50 per capita. This service level multiplied by the 10-year projected growth in population leads to a maximum allowable funding envelope of \$46.55 million.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021-2030 housing capital program consists of several new affordable housing buildings and associated debenture recoveries. In total, 476 new units are included within the 10-year capital program.

The total cost of the capital plan is \$97.95 million of which \$40.64 million is attributed to Brant County's share as well as shares covered by grants and subsidies.

Benefit to existing shares equal to 35 per cent of the net municipal cost have been deducted from the eligible capital costs for all projects. Although all projects included in the capital program are growth-related and represent additional units beyond the stock currently provided by the County, a deduction was made in recognition of demand for units from the existing population in Brantford. The 35 per cent benefit to existing share was calculated by dividing the units needed to accommodate 10-year population growth by the number of units in the capital program. The table below illustrates the calculation methodology.

Summary of Social Housing Benefit to Existing Cal Methodology	culation
Current # of Social Housing Units	2,437
City's Share (83.1%)	2,025
# of Units / 1,000 Population in 2020	19.75
Units required to accommodate 10-year population growth (a)	309
New units proposed in capital program (b)	476
Growth-Related Share (a/b)	65%
Benefit to Existing Share (remaining shares)	35%

Overall, the benefit to existing shares total \$20.06 million and have been removed from the calculation.

The existing reserve fund balance contributes an additional \$196,535 which is deducted from the DC eligible capital costs.

The resulting development-related capital program totals \$37.05 million, all of which is allocated within the 10-year planning period. These costs are 100 per cent borne by the residential class. The net development-related capital cost is divided by the 10-year forecast growth in population in new units to derive an unadjusted charge of \$1,777.04 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$1,943 per capita.

		HOUS	SING SUMMARY	,			
10-year Hist.	20	21 - 2030	Unadj	usted	Adju	sted	
Service Level	Development-R	elated Capital Program	Developme	ent Charge	Development Charge		
per capita \$2,976.50	Total \$97,947,594	Net DC Recoverable \$37,053,005	\$/capita \$1,777.04	\$/sq.m \$0.00	\$/capita \$1,943	\$/sq.m \$0.00	

BUILDINGS					# of Bu	ildings					UNIT COST
Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/unit)
Beckett Building	1	1	1	1	1	1	1	1	1	1	\$14,275,000
Branlyn Meadows	4	4	4	4	4	4	4	4	4	4	\$1,442,960
7 - 9 Cayuga St	1	1	1	1	1	1	1	1	1	1	\$618,295
687 Colborne St	1	1	1	1	1	1	1	1	1	1	\$312,000
702 Colborne St	1	1	1	1	1	1	1	1	1	1	\$625,400
4 Drummond Rd	1	1	1	1	1	1	1	1	1	1	\$312,000
5 Glenwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
8 Glenwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
9 Glenwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
10 Glenwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
12 Glenwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
26 Graham Ave	1	1	1	1	1	1	1	1	1	1	\$312,000
303 Greenwich St	1	1	1	1	1	1	1	1	1	1	\$312,000
20 Lynwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
22 Lynwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
24 Lynwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
26 Lynwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
30 Lynwood Dr	1	1	1	1	1	1	1	1	1	1	\$312,000
6 Park Road S	1	1	1	1	1	1	1	1	1	1	\$312,000
8 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
10 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
11 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
12 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
13 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
14 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
15 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
16 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
17 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
18 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
19 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
20 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000



BUILDINGS (Continued)					# of Bu	ıildings					UNIT COST
Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/unit)
21 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
22 Park Rd S	1	1	1	1	1	1	1	1	1	1	\$312,000
24 Gilkison St	1	1	1	1	1	1	1	1	1	1	\$248,400
12 Ava Rd	1	1	1	1	1	1	1	1	1	1	\$513,800
147 Balmoral Dr	1	1	1	1	1	1	1	1	1	1	\$281,500
52 Clara Crt	1	1	1	1	1	1	1	1	1	1	\$205,700
46 Cambridge Dr	1	1	1	1	1	1	1	1	-	-	\$240,800
55 Greens Rd	1	1	1	1	1	1	1	1	1	1	\$312,000
59 Greens Rd	1	1	1	1	1	1	1	1	1	1	\$312,000
18 Inverness	1	1	1	1	1	1	1	-	-	-	\$281,800
9 - 11 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
12 - 14 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
15 - 17 Roberston Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
16 - 18 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
19 - 21 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
20 - 22 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
23 - 25 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
24 - 27 Robertson Ave	1	1	1	1	1	1	1	1	1	1	\$282,750
111 Robinson Rd	1	1	1	1	1	1	1	1	-	-	\$408,100
19 Roman Cres	1	1	1	1	1	1	1	1	-	-	\$217,600
21 Roman Cres	1	1	1	1	1	1	1	-	-	-	\$275,700
53 Roman Cres	1	1	1	1	1	1	1	-	-	-	\$234,400
41 Woodlawn Ave	1	1	1	1	1	1	1	1	-	-	\$217,600
43 Woodlawn Ave	1	1	1	1	1	1	1	1	-	-	\$256,100
58 Woodlawn Ave	1	1	1	1	1	1	1	1	-	-	\$378,900
71 Woodlawn Ave	1	1	1	1	1	1	1	-	-	-	\$235,400
109 Woodlawn Ave	1	1	1	1	1	1	1	1	-	-	\$246,200
John Noble Apartments (City share)	_	-	-	-	-	-	-	1	1	1	\$10,975,000
124 Sherwood Drive	_	-	-	-	-	1	1	1	1	1	\$925,000
Heritage House 40 Queen	1	1	1	1	1	1	1	1	1	1	\$10,500,000
8 Murray	_	-	-	-	-	-	-	1	1	1	\$238,200
95 Henry	-	<u> </u>	_		-	_	_	1	1	1	\$238,200



Community Housing Providers					# of	Units					UNIT COST
Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/unit)
Hamilton East Kiwanis	73	73	73	73	73	73	73	73	73	73	\$105,000
Harmony Non-Profit	77	77	77	77	77	77	77	77	77	77	\$87,500
Your Homes Non-Profit	60	60	60	60	60	60	60	60	60	60	\$87,500
Slovak Village	150	150	150	150	150	150	150	150	150	150	\$100,000
St. Basil's	32	32	32	32	32	32	32	32	32	32	\$107,500
Victoria Park	145	145	145	145	145	145	145	145	145	145	\$85,000
Westglen	50	50	50	50	50	50	50	50	50	50	\$65,000
Saorsie Co-op	74	74	74	74	74	74	74	74	74	74	\$85,000
Jaycees	24	24	24	24	24	24	24	24	24	24	\$110,000
BNH - 100% RGI units	20	20	20	20	20	20	20	20	20	20	\$105,000
BNH	85	85	85	85	85	85	85	85	85	85	\$80,000
South Dumfries	25	25	25	25	25	25	25	25	25	25	\$20,000
Total (unit)	877	877	877	877	877	878	878	877	870	870	
Total (\$000)	\$119,964.0	\$119,964.0	\$119,964.0	\$119,964.0	\$119,964.0	\$120,889.0	\$120,889.0	\$128,349.9	\$126,384.6	\$126,384.6	



CITY-COUNTY SHARED BUILDINGS					# of He	ctares					UNIT COST
Location	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Albion Towers	1	1	1	1	1	1	1	1	1	1	\$14,985,000
Brant Towers	1	1	1	1	1	1	1	1	1	1	\$31,980,000
Brant Towers	-	-	-	-	-	-	1	1	1	1	\$16,000
Brant Towers	-	-	-	-	-	-	1	1	1	1	\$76,300
Lorne Towers	1	1	1	1	1	1	1	1	1	1	\$25,750,000
Lorne Towers	-	-	-	-	-	-	1	1	1	1	\$56,800
Sunrise Villa	1	1	1	1	1	1	1	1	1	1	\$1,698,000
Sunrise Villa	-	-		1	1	1	1	1	1	1	\$32,000
Trillium Way	1	1	1	1	1	1	1	1	1	1	\$9,329,454
Trillium Way	-	-		1	1	1	1	1	1	1	\$297,000
Walkers Green	1	1	1	1	1	1	1	1	1	1	\$4,257,000
Winston Court	3	3	3	3	3	3	3	3	3	3	\$5,362,500
Daleview Gardens	5	5	5	5	5	5	5	5	5	5	\$1,160,000
Daleview Gardens	-	-		1	1	1	1	1	1	1	\$27,500
Eastdale Gardens	4	4	4	4	4	4	4	4	4	4	\$3,220,425
Eastdale Gardens	_	-		1	1	1	1	1	1	1	\$33,400
Eastdale Gardens	_	-		1	1	1	1	1	1	1	\$43,500
Northland Gardens	8	8	8	8	8	8	8	8	8	8	\$2,120,000
Northland Gardens	_	-		1	1	1	1	1	1	1	\$44,600
Northland Gardens	_	_		1	1	1	1	1	1	1	\$25,600
Riverside Gardens	7	7	7	7	7	7	7	7	7	7	\$1,800,000
Riverside Gardens	_	_		1	1	1	1	1	1	1	\$38,700
Willow Street	1	1	1	1	1	1	1	1	1	1	\$1,406,925
9 Inverness	1	1	1	1	1	1	1	1	1	1	\$281,500
25 Inverness	1	1	1	1	1	1	1	1	1	1	\$281,500
34 Inverness	1	1	1	1	1	1	1	1	1	1	\$281,500
41 Inverness	1	1	1	1	1	1	1	1	1	1	\$281,500
51 Roman Cres	1	1	1	1	1	1	1	1	1	1	\$281,500
18 Shaftesbury Ave	1	1	1	1	1	1	1	1	1	1	\$296,000
20 Thistledown Dr	1	1	1	1	1	1	1	1	1	1	\$292,500
22 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$281,500
40 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$292,500
69 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$238,200
97 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$312,000
119 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$281,500
145 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$281,500
150 Woodlwan Ave	1	1	1	1	1	1	1	1	1	1	\$312,000
155 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$312,000
162 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$281,500
167 Woodlawn Ave	1	1	1	1	1	1	1	1	1	1	\$281,500
5 Marlene Ave.			-		-	-	-			1	\$6,125,000
S mandre / We.		-	-		-		-	-	-	'	ψο, 120,000
Total (unit)	28.00	28.00	28.00	28.00	28.00	29.00	29.00	27.73	20.73	20.73	
Total (\$000)	\$158,605.8	\$158,605.8	\$158,605.8	\$159,148.1	\$159,148.1	\$159,148.1	\$159,297.2	\$159,297.2	\$159,297.2	\$165,422.2	İ
Total Brantford Share (\$000)	\$131,801.4	\$131,801.4	\$131,801.4	\$132,252.1	\$132,252.1	\$132,252.1	\$132,376.0	\$132,376.0	\$132,376.0	\$137,465.8	İ



LAND					# of He	ctares					UNIT COST
Location	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Beckett Building	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$1,580,000
Branlyn Meadows	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	\$1,580,000
7/9 Cayuga St	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
687 Colborne St	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$1,580,000
702 Colborne St	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$1,580,000
4 Drummond St	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
5 Glenwood Dr	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$1,580,000
8 Glenwood Dr	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
9 Glenwood Dr	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$1,580,000
10 Glenwood Dr	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,580,000
12 Glenwood Dr	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
26 Graham Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
59 Greens Rd	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$1,580,000
55 Greens Rd	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$1,580,000
303 Greenwich St	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	\$1,580,000
20 Lynwood Dr	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	\$1,580,000
22 Lynwood Dr	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$1,580,000
24 Lynwood Dr	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
26 Lynwood Dr	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,580,000
30 Lynwood Dr	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$1,580,000
6 Park Road S	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
8 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
10 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
11 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
12 Park Rd S	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,580,000
13 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
14 Park Rd S	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,580,000
15 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
16 Park Rd S	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$1,580,000
17 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
18 Park Rd S	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$1,580,000



LAND (Continued)					# of He	ectares					UNIT COST
Location	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
19 Park Rd S	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
20 Park Rd S	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$1,580,000
21 Park Rd S	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,580,000
22 Park Rd S	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$1,580,000
24 Gilkison St	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$1,580,000
12 Ava Rd	6.59	6.59	6.59	6.59	6.59	6.59	6.59	-	-	-	\$1,580,000
147 Balmoral Dr	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
52 Clara Crt	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$1,580,000
46 Cambridge Dr	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
18 Inverness	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-	-	-	\$1,580,000
9 - 11 Robertson Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
12 -14 Robertson Ave	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$1,580,000
15 - 17 Roberston Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
16 - 18 Robertson Ave	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
19 - 21 Robertson Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
20 -22 Robertson Ave	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$1,580,000
23 -25 Robertson Ave	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$1,580,000
24 - 27 Robertson Ave	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$1,580,000
111 Robinson Rd	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
19 Roman Cres	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
21 Roman Cres	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-	-	-	\$1,580,000
53 Roman Cres	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-	-	-	\$1,580,000
41 Woodlawn Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
43 Woodlawn Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	-	-	-	\$1,580,000
58 Woodlawn Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
71 Woodlawn Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-	-	-	\$1,580,000
109 Woodlawn Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
John Noble Apartments (City share)	-	-	-	-	-	-	-	8.46	8.46	8.46	\$1,580,000
124 Sherwood Drive	-	-	-	-	-	0.19	0.19	0.19	0.19	0.19	\$1,580,000
Heritage House	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	\$1,580,000
8 Murray	-	-	-	-	-	-	-	1.39	1.39	1.39	\$1,580,000
95 Henry	-	-	-	-	-	-	-	0.21	0.21	0.21	\$1,580,000
Total (unit)	11.96	11.96	11.96	11.96	11.96	12.15	12.15	15.32	15.32	15.32	
Total (\$000)	\$18,901.5	\$18,901.5	\$18,901.5	\$18,901.5	\$18,901.5	\$19,201.7	\$19,201.7	\$24,211.4	\$24,211.4	\$24,211.4	



CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS CITY-COUNTY SHARED PROJECTS

LAND (Continued)					# of He	ectares					UNIT COST
Location	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Albion Towers	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	\$1,580,000
Brant Towers	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	\$1,580,000
Lorne Towers	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	\$1,580,000
Sunrise Villa	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	\$1,580,000
Trillium Way	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$1,580,000
Walkers Green	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$1,580,000
Winston Court	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	\$1,580,000
Daleview Gardens	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	\$1,580,000
Eastdale Gardens	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	\$1,580,000
Northland Gardens	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	\$1,580,000
Riverside Gardens	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	\$1,580,000
Willow Street	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	\$1,580,000
9 Inverness	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
25 Inverness	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
34 Inverness	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
41 Inverness	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
51 Roman Cres	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
18 Shaftesbury Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
20 Thistledown Dr	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
22 Woodlawn Ave	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$1,580,000
40 Woodlawn Ave	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
69 Woodlawn Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
97 Woodlawn Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
119 Woodlawn Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
145 Woodlawn Ave	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
150 Woodlwan Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
155 Woodlawn Ave	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
162 Woodlawn Ave	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	\$1,580,000
167 Woodlawn Ave	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$1,580,000
5 Marlene Ave.	-	-	-	-	-	-	-	-	-	0.62	\$630,048
Total (unit)	12.48	12.48	12.48	12.48	12.48	12.48	12.48	12.48	12.48	13.10	
Total (\$000)	\$19,718.4	\$19,718.4	\$19,718.4	\$19,718.4	\$19,718.4	\$19,718.4	\$19,718.4	\$19,718.4	\$19,718.4	\$20,108.4	
Total Brantford Share (\$000)	\$16,386.0	\$16,386.0	\$16,386.0	\$16,386.0	\$16,386.0	\$16,386.0	\$16,386.0	\$16,386.0	\$16,386.0	\$16,710.1	



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS HOUSING

Historic Population	2011 93,650	2012 94,628	2013 95,617	2014 96,616	2015 97,625	2016 98,645	2017 99,603	2018 100,570	2019 101,547	2020 102,533	
INVENTORY SUMMARY (\$000)											
Buildings	\$251,765.4	\$251,765.4	\$251,765.4	\$252,216.1	\$252,216.1	\$253,141.1	\$253,265.0	\$260,725.8	\$258,760.5	\$263,850.4	
Land	\$35,287.5	\$35,287.5	\$35,287.5	\$35,287.5	\$35,287.5	\$35,587.7	\$35,587.7	\$40,597.4	\$40,597.4	\$40,921.5	
Total (\$000)	\$287,052.9	\$287,052.9	\$287,052.9	\$287,503.6	\$287,503.6	\$288,728.8	\$288,852.7	\$301,323.2	\$299,357.9	\$304,771.9	
SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$2,688.37	\$2,660.58	\$2,633.06	\$2,610.50	\$2,583.52	\$2,566.18	\$2,542.74	\$2,592.48	\$2,548.18	\$2,573.32	\$2,599.89
Land	\$376.80	\$372.91	\$369.05	\$365.23	\$361.46	\$360.76	\$357.30	\$403.67	\$399.79	\$399.11	\$376.61
Total (\$/capita)	\$3,065.17	\$3,033.49	\$3,002.11	\$2,975.73	\$2,944.98	\$2,926.95	\$2,900.04	\$2,996.15	\$2,947.97	\$2,972.43	\$2,976.50

CITY OF BRANTFORD

CALCULATION OF MAXIMUM ALLOWABLE
HOUSING

10-Year Funding Envelope Calculation							
10 Year Average Service Level 2011 - 2020	\$2,976.50						
Net Population Growth 2021 - 2030	15,638						
Maximum Allowable Funding Envelope	\$46,546,507						



APPENDIX B.6 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM HOUSING

	Timing	Gross		Grants/		Net	Ineligible Costs		Total		Devel			lopment-Relate		d Costs	
Project Description	_	Project	Subs	sidies/Other	Municipal Replacement		cement	Development		nt Available		2021-		Other			
		Cost	Re	ecoveries		Cost	& E	BTE	Shares	F	Related Costs		Shares /	2030		De	evelopment-
								_				Pri	or Growth				Related
6.0 HOUSING																	
6.1 Buildings, Land, and Furnishings																	
6.1.1 New Build - 50 Unit Affordable Housing Building	2024	\$ 10,250,000	\$	4,571,500	\$	5,678,500	35%	\$		\$	3,691,025	\$	-	\$	3,691,025	\$	-
6.1.2 New Build - 50 Unit Affordable Housing Building 6.1.3 New Build - 50 Unit Affordable Housing Building	2025 2026	\$ 10,250,000 \$ 10,250,000	\$	4,571,500 4,571,500	\$	5,678,500 5,678,500	35% 35%	\$		\$	3,691,025 3,691,025	\$	-	\$	3,691,025 3,691,025	\$ \$	-
		\$ 10,250,000	1 '	4,571,500	\$	5,678,500	35%	\$		\$	3,691,025	\$	-	\$	3,691,025	\$	
6.1.4 New Build - 50 Unit Affordable Housing Building 6.1.5 New Build - 50 Unit Affordable Housing Building	2027 2028	\$ 10,250,000	\$	4,571,500	\$	5,678,500	35%	\$		\$	3,691,025	\$	-	\$	3,691,025	\$	-
6.1.6 New Build - 27 Unit Affordable Housing Building	2029	\$ 5,535,000	\$	2,468,610	\$	3,066,390	35%	\$		\$	1,993,154	\$		\$	1,993,154	\$	
6.1.7 Trillium Way Site - 49 Unit Mixed Use Low-Rise Apartment Building	2021	\$ 12,300,000	\$	2,257,000	\$	10,043,000	35%	\$		\$	6,527,950	\$	196,535	\$	6,331,415	\$	_
6.1.8 Stinson & Stirton build - 4 units	2021	\$ 463,300	\$	100,000	\$	363,300	35%	\$		\$	236,145	\$	-	\$	236,145	\$	
Subtotal Buildings, Land, and Furnishings		\$ 69,548,300	\$	27,683,110	\$	41,865,190		\$		\$	27,212,374	\$	196,535	\$	27,015,839	\$	
				,,	Ť	,,		1	,,	Ť		Ť	,		,,	,	
6.2 50 Unit Affordable Housing Building (2023)																	
6.2.1 Non-Debt Share	2023	\$ 6,416,090	\$	4,571,500	\$	1,844,590	35%	\$,	\$	1,198,984	\$	-	\$	1,198,984	\$	-
6.2.2 Debt Recovery - Principle Payment	2023	\$ 33,616	\$	-	\$	33,616	35%	\$		\$	21,850	\$	-	\$	21,850	\$	-
6.2.3 Debt Recovery - Principle Payment	2024	\$ 69,262		-	\$	69,262	35%	\$		\$	45,020	\$	-	\$	45,020	\$	-
6.2.4 Debt Recovery - Principle Payment	2025	\$ 72,060	\$	-	\$	72,060	35%	\$		\$	46,839	\$	-	\$	46,839	\$	-
6.2.5 Debt Recovery - Principle Payment 6.2.6 Debt Recovery - Principle Payment	2026 2027	\$ 74,971 \$ 78,000	\$	-	\$	74,971 78,000	35% 35%	\$,	φ	48,731 50,700	\$	-	\$	48,731 50,700	\$	-
6.2.7 Debt Recovery - Principle Payment	2027	\$ 78,000	\$	-	\$	81,151	35%	\$,	Φ	52,748	\$	-	\$	50,700	\$	-
6.2.8 Debt Recovery - Principle Payment	2028	\$ 84,429	-	-	\$	84,429	35%	\$,	\$	54,879	\$		\$	54,879	\$	-
6.2.9 Debt Recovery - Present Value 2030+ Principle Payments	2030	\$ 2,188,660	\$		\$	2,188,660	35%	\$,	\$	1,422,629	\$	_	\$	1,422,629	\$	
Subtotal 50 Unit Affordable Housing Building (2023)	2000	\$ 9,098,238	\$	4,571,500	\$	4,526,738	3370	\$		\$	2,942,380	\$		\$	2,942,380	\$	
Subtotal 30 Offic Affordable Housing Building (2023)		φ 5,030,230	Ψ	4,371,300	Ψ	4,320,730		Ψ	1,304,330	Ψ	2,342,300	Ψ	-	Ψ	2,342,300	Ψ	-
6.3 Shellard Lane New Build - 70 Unit Mixed Use Apartment Building																	
6.3.1 Non-Debt Share	2022	\$ 10,090,168	\$	7,136,000	\$	2,954,168	35%	\$	1,033,959	\$	1,920,209	\$	-	\$	1,920,209	\$	-
6.3.2 Debt Recovery - Principle Payment	2023	\$ 61,423	\$	-	\$	61,423	35%	\$	21,498	\$	39,925	\$	-	\$	39,925	\$	-
6.3.3 Debt Recovery - Principle Payment	2024	\$ 125,625		-	\$	125,625	35%	\$,	\$	81,656	\$	-	\$	81,656	\$	-
6.3.4 Debt Recovery - Principle Payment	2025	\$ 129,422		-	\$	129,422	35%	\$,	\$	84,124	\$	-	\$	84,124	\$	-
6.3.5 Debt Recovery - Principle Payment	2026	\$ 133,333		-	\$	133,333	35%	\$		\$	86,667	\$	-	\$	86,667	\$	-
6.3.6 Debt Recovery - Principle Payment	2027	\$ 137,363	\$	-	\$	137,363	35%	\$,	\$	89,286	\$	-	\$	89,286	\$	-
6.3.7 Debt Recovery - Principle Payment 6.3.8 Debt Recovery - Principle Payment	2028 2029	\$ 141,515 \$ 145,793	\$	-	\$	141,515 145,793	35% 35%	\$,	\$	91,985 94,765	\$	-	\$	91,985 94,765	\$	-
	2029	\$ 3,350,813	Φ	-	Φ Φ	3,350,813	35%	\$		Φ		Φ	-	\$	2,178,028	Φ	-
6.3.9 Debt Recovery - Present Value 2030+ Principle Payments Subtotal Shellard Lane New Build - 70 Unit Mixed Use Apartment Buildin		\$ 14,315,455	\$	7,136,000	\$	7,179,455	30%	\$		φ Φ	2,178,028 4,666,646	\$	-	\$	4,666,646	\$	-
Subtotal Shellard Lane New Build - 70 Offic Mixed Ose Apartment Building	5 	ψ 14,313,455	Φ.	1,130,000	Φ	1,113,433		D	2,312,009	Φ	4,000,040	Φ	-	Φ	4,000,040	Φ	-
6.4 Recovery of 177 Colborne Housing Debt																	
6.4.1 Non-Debt Share	2021	\$ 3,377,182	\$	1,250,000	\$	2,127,182	35%	\$	744,514	\$	1,382,668	\$	-	\$	1,382,668	\$	-
6.4.2 Debt Recovery - Principle Payment	2022	\$ 24,485	\$	-	\$	24,485	35%	\$,	\$	15,915	\$	-	\$	15,915	\$	-
6.4.3 Debt Recovery - Principle Payment	2023	\$ 49,892		-	\$	49,892	35%	\$		\$	32,430	\$	-	\$	32,430	\$	-
6.4.4 Debt Recovery - Principle Payment	2024	\$ 51,147	\$	-	\$	51,147	35%	\$		\$	33,245	\$	-	\$	33,245	\$	-
6.4.5 Debt Recovery - Principle Payment	2025	\$ 52,434	\$	-	\$	52,434	35%	\$,	\$	34,082	\$	-	\$	34,082	\$	-
6.4.6 Debt Recovery - Principle Payment	2026	\$ 53,753 \$ 55,105	\$	-	\$	53,753	35%	\$		\$	34,939	\$	-	\$	34,939	\$	-
6.4.7 Debt Recovery - Principle Payment 6.4.8 Debt Recovery - Principle Payment	2027 2028	\$ 55,105 \$ 56,491	\$	-	\$	55,105 56,491	35% 35%	\$		Φ	35,818 36,719	\$	-	\$	35,818 36,719	\$	-
6.4.8 Debt Recovery - Principle Payment	2028	\$ 57,912	-	-	\$	57,912	35%	\$		\$	37,643	\$		\$	37,643	\$	-
6.4.9 Debt Recovery - Present Value 2030+ Principle Payments	2023	\$ 1,207,200	\$	_	\$	1,207,200	35%	\$		\$	784,680	\$	_	\$	784,680	\$	_
Subtotal Recovery of 177 Colborne Housing Debt	2000	\$ 4,985,600	\$	1,250,000	\$	3,735,600	3370	\$		\$	2,428,140	\$		\$	2,428,140	\$	
Subtotal Necovery of 177 Collaborate Hausing Debt		4,565,000	Ψ	1,230,000	Ψ.	3,733,000		Ψ	1,501,400	Ψ	2,720,140	Ψ		Ψ	2,720,140	Ψ	_
			1		1					I							
TOTAL HOUSING		\$ 97,947,594	\$	40,640,610	\$	57,306,984		\$	20,057,444	\$	37,249,540	\$	196,535	\$	37,053,005	\$	-

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	100%	\$37,053,005
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$1,777.04
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	0%	\$0
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$0.00





APPENDIX B.6 TABLE 3

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE HOUSING RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

HOUSING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$6,244.25)	(\$4,914.04)	(\$2,832.86)	(\$3,357.66)	(\$3,822.01)	(\$4,208.65)	(\$3,552.24)	(\$2,697.58)	\$398.57	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENT	-										
- Housing (Non-Debt Share): Non Inflated	\$7,950.2	\$1,920.2	\$1,199.0	\$3,691.0	\$3,691.0	\$3,691.0	\$3,691.0	\$3,691.0	\$1,993.2	\$0.0	\$31,517.7
- Debenture Principle Payments (1)	\$0.0	\$15.9	\$94.2	\$159.9	\$165.0	\$170.3	\$175.8	\$181.5	\$187.3	\$4,385.3	\$5,535.3
- Housing: Inflated	\$7,950.2	\$1,974.5	\$1,341.6	\$4,076.9	\$4,160.3	\$4,245.5	\$4,332.5	\$4,421.3	\$2,522.6	\$4,385.3	\$39,410.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$1,873.1	\$3,636.7	\$3,792.3	\$3,956.8	\$4,122.2	\$4,303.3	\$5,430.9	\$5,673.5	\$5,925.8	\$6,186.0	\$44,900.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$343.4)	(\$270.3)	(\$155.8)	(\$184.7)	(\$210.2)	(\$231.5)	(\$195.4)	(\$148.4)	\$13.9	(\$1,725.7)
- Interest on In-year Transactions	(\$167.1)	\$29.1	\$42.9	(\$3.3)	(\$1.0)	\$1.0	\$19.2	\$21.9	\$59.6	\$31.5	\$33.7
- Interest Payments on Debentures (2)	\$0.0	(\$17.6)	(\$142.1)	(\$245.6)	(\$240.5)	(\$235.2)	(\$229.7)	(\$224.1)	(\$218.3)	(\$2,230.7)	
TOTAL REVENUE	\$1,706.0	\$3,304.7	\$3,422.8	\$3,552.1	\$3,696.0	\$3,858.9	\$4,988.9	\$5,275.9	\$5,618.7	\$4,000.8	\$39,424.8
CLOSING CASH BALANCE	(\$6,244.2)	(\$4,914.0)	(\$2,832.9)	(\$3,357.7)	(\$3,822.0)	(\$4,208.6)	(\$3,552.2)	(\$2,697.6)	\$398.6	\$14.0	

Note 1: Debenture principal payments not inflated.

Note 2: Interest on debenture payments not inflated.

2021 Adjusted Charge Per Capita \$1,943

Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%
-	



Appendix B.7 Land Ambulance

Land Ambulance

The County of Brant Ambulance Service provides paramedic services to the City of Brantford and the County of Brant. Call volumes related to land ambulance have reflected substantial growth in the County of Brant and City of Brantford with annual call volume increases of 8 – 10 per cent. Funding for this shared service is based on population and currently the City of Brantford is responsible for 73 per cent of the capital and operating costs associated with providing the service.

Table 1 Historical Service Levels

The County of Brant Ambulance Service currently operates out of seven stations, five of which are in Brantford. Two new stations have been leased in 2020 increasing the combined floor area to 27,065 square feet with a replacement cost of \$9.42 million, \$6.92 million of which represents Brantford's share. Land for the stations totals 2.88 hectares with a value of \$4.55 million, with \$3.32 million representing the City's share. The replacement cost of the 15 eligible vehicles is \$4.95 million total, \$3.61 million of which is Brantford's share. Furniture and equipment adds another \$285,500 to Brantford's share of the inventory.

In total, Brantford's share of the replacement cost of the 2020 inventory of capital assets is \$14.14 million. The calculated average historical service level over the 10-year period is \$59.89 per population and employment. The historical service level multiplied by the forecast 10-year population and employment growth results in a 10-year maximum allowable charge of \$1.39 million.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021-2030 development-related capital program for land ambulance totals \$12.29 million of which the majority can be apportioned to a new station with a gross cost if \$10.50 million. The new facility will be replacing the existing Henry Street and Cainsville facilities. The new land ambulance facility will have a greater GFA than the combined Henry Street and Cainsville facilities as well as increased capacity capabilities in order to meet demand resulting from growth in the City of Brantford and County of Brant.

A provision of \$1.75 million is included for five new, fully equipped ambulances over the 10-year planning period. Additionally, \$40,500 of the total capital program is attributed to equipment for 20 additional paramedics to service forecast growth in population and employment between 2021 and 2030.

The County's share of this capital program is calculated at \$3.39 million has is deducted from the gross capital costs. Given the new land ambulance station will be replacing the 355 Henry Street and Cainsville facilities, a portion of the capital cost associated with this facility has been deemed replacement. As such, a replacement share of \$3.05 million has been deducted from the capital cost. Another \$4.43 million has been allocated to other development-related costs due to funding envelope restrictions. This share has been deducted from the 2021-2030 development-charge calculation, however it is eligible for recovery through future DCs. The available reserve fund balance of \$33,701 is applied to the development-related cost, leaving a remaining \$1.39 million eligible for development charges funding over the 10-year planning period.

Of these remaining costs, \$988,592 (71 per cent) is allocated to residential development and \$403,791 (29 per cent) is allocated to non-residential development. This ratio is based on each sector's share of 10-year population and employment growth. The residential share of the net development-related capital cost is divided by the 10-year forecast growth in population in new units to derive an unadjusted charge of \$47.41 per capita. The non-residential share of the net development-related capital cost is divided by the 10-year forecast growth in floor space to derive an unadjusted charge of \$0.82 per square metre.

Table 3 Cash Flow Analysis

After conducting a cash flow analysis, the charges increase slightly to \$52 per capita and \$0.89 per square metre respectively.

LAND AMBULANCE SUMMARY												
10-year Hist.	20	21 - 2030	Unadj	usted	Adju	sted						
Service Level	Development-R	elated Capital Program	Developme	ent Charge	Development Charge							
per pop & emp \$59.89	Total \$12,290,500	Net DC Recoverable \$1,392,383	\$/capita \$47.41	\$/sq.m \$0.82	\$/capita \$52	\$/sq.m \$0.89						

APPENDIX B.7 TABLE 1 - PAGE 1

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS LAND AMBULANCE

BUILDINGS	# of Square Feet													
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq. ft.)			
303 Henry Street - Brantford	5,040	5,040	5,040	5,040	5,040	5,040	5,040	5,040	5,040	5,040	\$350			
135 Francis Street, Brantford	3,195	3,195	3,195	3,195	3,195	3,195	3,195	3,195	3,195	3,195	\$350			
Alexander Street - Paris	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	\$350			
400 Colborne - Brantford	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	\$350			
Elgin Street Rental Space (not leasing in 2021 - replaced by 355 Henry & 12 Garnet)	-	-	-	-	-	-	2,875	2,875	2,875	2,875	\$350			
355 Henry St - Brantford	-	-	-	-	-	-	-	-	-	7,950	\$350			
12 Garnet (Cainsville) - Brantford	-	-	-	-	-	-	-	-	-	1,900	\$350			
Total (sq.ft.)	14,340	14,340	14,340	14,340	14,340	14,340	17,215	17,215	17,215	27,065				
Total (\$000)	\$5,019.0	\$5,019.0	\$5,019.0	\$5,019.0	\$5,019.0	\$5,019.0	\$6,025.3	\$6,025.3	\$6,025.3	\$9,472.8				
Total Brantford Share (\$000)	\$3,663.9	\$3,663.9	\$3,663.9	\$3,663.9	\$3,663.9	\$3,663.9	\$4,398.4	\$4,398.4	\$4,398.4	\$6,915.1				

LAND					# of He	ectares					UNIT COST
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)
Henry Street - Brantford	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	\$1,580,000
135 Francis Street, Brantford	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$1,580,000
Alexander Street - Paris	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$1,580,000
400 Colborne - Brantford	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	\$1,580,000
Elgin Street Rental Space	-	-	-	1	-	-	0.48	0.48	0.48	0.48	\$1,580,000
355 Henry St - Brantford	-	-	-	1	-	-	-	-	-	0.88	\$1,580,000
12 Garnet (Cainsville) - Brantford	-	-	-	i	-	-	-	-	-	0.48	\$1,580,000
Total (ha)	1.04	1.04	1.04	1.04	1.04	1.04	1.52	1.52	1.52	2.88	
Total (\$000)	1,649.29	\$1,649.3	\$1,649.3	\$1,649.3	\$1,649.3	\$1,649.3	\$2,407.7	\$2,407.7	\$2,401.6	\$4,550.4	
Total Brantford Share (\$000)	\$1,204.0	\$1,204.0	\$1,204.0	\$1,204.0	\$1,204.0	\$1,204.0	\$1,757.6	\$1,757.6	\$1,753.2	\$3,321.8	



APPENDIX B.7 TABLE 1 - PAGE 2

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS WASTE WATER SERVICES

VEHICLES					# of V	ehicles					UNIT COST
Vehicle Type	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/unit)
Type 3 Modular	7	7	8	8	8	9	11	11	13	13	\$350,000
Emergency Response Vehicle	1	1	1	1	1	1	1	1	1	2	\$200,000
Total (#)	8	8	9	9	9	10	12	12	14	15	
Total (\$000)	\$2,650.0	\$2,650.0	\$3,000.0	\$3,000.0	\$3,000.0	\$3,350.0	\$4,050.0	\$4,050.0	\$4,750.0	\$4,950.0	
Total Brantford Share (\$000)	\$1,934.5	\$1,934.5	\$2,190.0	\$2,190.0	\$2,190.0	\$2,445.5	\$2,956.5	\$2,956.5	\$3,467.5	\$3,613.5	

FURNITURE AND EQUIPMENT		Value of Furniture and Equipment (\$)													
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/unit)				
Number of Paramedics	65	65	70	72	72	74	83	112	118	124	\$2,025				
Total Value of Station Furniture	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$140,000					
Total (#)	65	65	70	72	72	74	83	112	118	124					
Total (\$000)	\$243.6	\$243.6	\$253.8	\$257.8	\$257.8	\$261.9	\$280.1	\$338.8	\$351.0	\$391.1					
Total Brantford Share (\$000)	\$177.8	\$177.8	\$185.2	\$188.2	\$188.2	\$191.2	\$204.5	\$247.3	\$256.2	\$285.5					



APPENDIX B.7 TABLE 1 - PAGE 3

CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS LAND AMBULANCE

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	93,650	94,628	95,617	96,616	97,625	98,645	99,603	100,570	101,547	102,533
Historic Employment	44,224	44,249	44,274	44,299	44,324	44,349	44,712	45,078	45,447	<u>45,819</u>
Population+Employment	137,874	138,877	139,891	140,915	141,949	142,994	144,315	145,648	146,994	148,352

INVENTORY SUMMARY (\$000)

Buildings	\$3,663.9	\$3,663.9	\$3,663.9	\$3,663.9	\$3,663.9	\$3,663.9	\$4,398.4	\$4,398.4	\$4,398.4	\$6,915.1
Land	\$1,204.0	\$1,204.0	\$1,204.0	\$1,204.0	\$1,204.0	\$1,204.0	\$1,757.6	\$1,757.6	\$1,753.2	\$3,321.8
Vehicles	\$1,934.5	\$1,934.5	\$2,190.0	\$2,190.0	\$2,190.0	\$2,445.5	\$2,956.5	\$2,956.5	\$3,467.5	\$3,613.5
Furniture And Equipment	\$177.8	\$177.8	\$185.2	\$188.2	\$188.2	\$191.2	\$204.5	\$247.3	\$256.2	\$285.5
Total (\$000)	\$6,980.2	\$6.980.2	\$7,243,1	\$7,246.0	\$7,246.0	\$7.504.5	\$9.317.0	\$9.359.9	\$9.875.3	\$14.135.9

Average
SERVICE LEVEL (\$/pop+empl)
Service

l evel

											Level
Buildings	\$26.57	\$26.38	\$26.19	\$26.00	\$25.81	\$25.62	\$30.48	\$30.20	\$29.92	\$46.61	\$29.38
Land	\$8.73	\$8.67	\$8.61	\$8.54	\$8.48	\$8.42	\$12.18	\$12.07	\$11.93	\$22.39	\$11.00
Vehicles	\$14.03	\$13.93	\$15.66	\$15.54	\$15.43	\$17.10	\$20.49	\$20.30	\$23.59	\$24.36	\$18.04
Furniture And Equipment	\$1.29	\$1.28	\$1.32	\$1.34	\$1.33	\$1.34	\$1.42	\$1.70	\$1.74	\$1.92	\$1.47
Total (\$/pop & emp)	\$50.63	\$50.26	\$51.78	\$51.42	\$51.05	\$52.48	\$64.56	\$64.26	\$67.18	\$95.29	\$59.89

CITY OF BRANTFORD
CALCULATION OF MAXIMUM ALLOWABLE
LAND AMBULANCE

10-Year Fuding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$60
Net Population & Employment Growth 2021 - 2030	23,249
Maximum Allowable Funding Envelope	\$ 1,392,382.6



APPENDIX B.7 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM LAND AMBULANCE

Project Desc	rintion				Grants/	Net	Ineligible Costs		Total		De		evelopment-Related		d Costs		
	Project Description		Project	Su	bsidies/Other	Municipal	Rej	plac	cement	Development		Available		2021-			Other
			Cost		Recoveries	Cost	& B	BTE :	Shares	Re	elated Costs	DC	Shares /		2030	De	velopment-
												Prio	r Growth				Related
7.0 LAND AMBUI	ANCE																
7.1 Facilit	ies																
7.1.1	New Station	2025	\$ 10,500,000	\$	2,887,500	\$ 7,612,500	40%	\$	3,045,000	\$	4,567,500	\$	-	\$	909,703	\$	3,657,797
	Subtotal Facilities		\$ 10,500,000	\$	2,887,500	\$ 7,612,500		\$	3,045,000	\$	4,567,500	\$	-	\$	909,703	\$	3,657,797
7.2 Fleet																	
7.2.1	1 Additional Ambulance with Equipment	2021	\$ 350,000	٠ (97,650	\$ 252,350	0%	\$	_	\$	252,350	Φ.	33,701	\$	218,649	\$	
7.2.2	1 Additional Ambulance with Equipment	2021	\$ 350,000		•	\$ 252,350	0%	\$		4	252,350		33,701	\$	252,350	\$	_
7.2.3	1 Additional Ambulance with Equipment	2025	\$ 350,000		97,650	252,350	0%	\$		\$	252,350		-	\$	232,330	\$	252,350
7.2.4	1 Additional Ambulance with Equipment	2027	\$ 350,000		97,650	\$ 252,350	0%	\$	_	\$	252,350		_	\$	_	\$	252,350
7.2.5	1 Additional Ambulance with Equipment	2029	\$ 350,000		97,650	\$ 252,350	0%	\$	_	\$	252,350	\$	-	\$	_	\$	252,350
	Subtotal Fleet		\$ 1,750,000	-	488,250	\$ 1,261,750		\$	1	\$	1,261,750	\$	33,701	\$	470,999	\$	757,050
7.3 Fauin	nent and Personnel																
7.3.1	4 Additional Paramedics	2021	\$ 8,100) \$	2,260	\$ 5,840	0%	\$	_	\$	5,840	\$	_	\$	5,840	\$	-
7.3.2	4 Additional Paramedics	2023	\$ 8,100		2,260	\$ 5,840	0%	\$		\$	5,840		-	\$	5,840	\$	=
7.3.3	4 Additional Paramedics	2025	\$ 8,100) \$	2,260	\$ 5,840	0%	\$	-	\$	5,840	\$	-	\$	-	\$	5,840
7.3.4	4 Additional Paramedics	2027	\$ 8,100) \$	2,260	\$ 5,840	0%	\$	-	\$	5,840	\$	-	\$	-	\$	5,840
7.3.5	4 Additional Paramedics	2029	\$ 8,100	\$	2,260	\$ 5,840	0%	\$	-	\$	5,840	\$	-	\$	-	\$	5,840
	Subtotal Equipment and Personnel		\$ 40,500	\$	11,300	\$ 29,201		\$	-	\$	29,201	\$	-	\$	11,680	\$	17,520
Check County	y Budget																
Call volume in	ncreasing 8-10% annually																
TOTAL LAND	AMBULANCE		\$ 12,290,500) s	3,387,050	\$ 8,903,451	\$ 0	\$	3,045,000	\$	5,858,451	\$	33,701	\$	1,392,383	\$	4,432,367

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	71%	\$988,592
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$47.41
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	29%	\$403,791
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$0.82





APPENDIX B.7 TABLE 3 - PAGE 1

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE LAND AMBULANCE RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

LAND AMBULANCE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$112.29)	(\$19.47)	(\$112.21)	(\$10.63)	(\$616.24)	(\$532.92)	(\$414.38)	(\$282.72)	(\$136.89)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS		#0.0	# 400.0	#0.0	# 045.0	#0.0	#0.0	#0.0	#0.0	* 0.0	****
- Land Ambulance: Non Inflated	\$159.4	\$0.0	\$183.3	\$0.0	\$645.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$988.6
- Land Ambulance: Inflated	\$159.4	\$0.0	\$190.7	\$0.0	\$699.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,049.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$50.1	\$97.3	\$101.5	\$105.9	\$110.3	\$115.2	\$145.3	\$151.8	\$158.6	\$165.6	\$1,201.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$6.2)	(\$1.1)	(\$6.2)	(\$0.6)	(\$33.9)	(\$29.3)	(\$22.8)	(\$15.5)	(\$7.5)	(\$123.1)
- Interest on In-year Transactions	(\$3.0)	\$1.7	(\$2.5)	\$1.9	(\$16.2)	\$2.0	\$2.5	\$2.7	\$2.8	\$2.9	(\$5.2)
TOTAL REVENUE	\$47.1	\$92.8	\$98.0	\$101.6	\$93.5	\$83.3	\$118.5	\$131.7	\$145.8	\$161.0	\$1,073.3
CLOSING CASH BALANCE	(\$112.3)	(\$19.5)	(\$112.2)	(\$10.6)	(\$616.2)	(\$532.9)	(\$414.4)	(\$282.7)	(\$136.9)	\$24.1	

2021 Adjusted Charge Per Capita	\$52
2021 Adjusted Charge Per Capita	\$52

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%
_	



APPENDIX B.7 TABLE 3 - PAGE 2

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE LAND AMBULANCE NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

LAND AMBULANCE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$38.12)	(\$6.13)	(\$50.96)	(\$17.44)	(\$273.79)	(\$249.98)	(\$196.17)	(\$136.65)	(\$71.01)	
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREM	MENTS										
- Land Ambulance: Non Inflated	\$65.1	\$0.0	\$74.9	\$0.0	\$263.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$403.8
- Land Ambulance: Inflated	\$65.1	\$0.0	\$77.9	\$0.0	\$285.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$428.6
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	493,926
REVENUE											
- DC Receipts: Inflated	\$28.0	\$33.5	\$34.6	\$35.7	\$37.0	\$38.2	\$66.4	\$69.1	\$71.9	\$74.9	\$489.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$2.1)	(\$0.3)	(\$2.8)	(\$1.0)	(\$15.1)	(\$13.7)	(\$10.8)	(\$7.5)	(\$3.9)	(\$57.2)
- Interest on In-year Transactions	(\$1.0)	\$0.6	(\$1.2)	\$0.6	(\$6.8)	\$0.7	\$1.2	\$1.2	\$1.3	\$1.3	(\$2.2)
TOTAL REVENUE	\$27.0	\$32.0	\$33.1	\$33.5	\$29.2	\$23.8	\$53.8	\$59.5	\$65.6	\$72.3	\$429.9
CLOSING CASH BALANCE	(\$38.1)	(\$6.1)	(\$51.0)	(\$17.4)	(\$273.8)	(\$250.0)	(\$196.2)	(\$136.7)	(\$71.0)	\$1.3	

2021 Adjusted Charge Per Square Metre \$0.89

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.8 Child Care

Child Care

The City of Brantford contributes a share of funding toward the child care spaces owned and operated by Brant County. Historically, there has been no development charge for child care in the City of Brantford. Through discussions with staff, planned investments relating to the increase in need for Child Care services were identified, and it was determined that a DC rate would be appropriate to include as part of the 2021 DC Background Study.

Table 1 Historical Service Levels

The City of Brantford provides funding for a total of 4,033 subsidized child care spaces. These spaces include infant, toddler, preschool, JK/SK, and school age child care programs. The total value of these programs is \$141.16 million, of which approximately 31 per cent (\$44.04 million) represents the City of Brantford's share.

The total replacement value of Brantford Child Care capital inventory is \$44.04 million. The average service level attained in the 10-year historical period 2011-2020 is \$363.60 per capita. This service level multiplied by the 10-year projected growth in population leads to a maximum allowable funding envelope of \$5.69 million.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021-2030 child care capital program consists of the City's share of the costs of 640 new child care spaces anticipated to be required over the 2021-2030 period, totalling \$6.99 million. As this share represents the City's costs only, no grants, subsidies, or replacement shares have been identified,

however, the City costs exceed the calculated funding envelope. As such, \$1.30 million has been deemed "other development-related" resulting in \$5.69 million to be brought forward to the development charges calculation.

These costs are 100 per cent borne by the residential class. The net development-related capital cost is divided by the 10-year forecast growth in population in new units to derive an unadjusted charge of \$272.70 per capita.

Table 3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$279 per capita.

		CHILD	CARE SUMMAR	RY		
10-year Hist.	20	21 - 2030	Unadj	usted	Adju	sted
Service Level	Development-R	Related Capital Program	Developme	ent Charge	Developme	ent Charge
per pop & emp \$363.60	Total \$6,988,800	Net DC Recoverable \$5,685,977	\$/capita \$272.70	\$/sq.m \$0.00	\$/capita \$279	\$/sq.m \$0.00

APPENDIX B.8 TABLE 1 - PAGE 1

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS CHILD CARE

CHILD CARE SPACES		# of Child Care Spaces										
Branch Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/space)	
Infant	62	66	88	88	99	99	105	127	117	117	\$35,000	
Toddler	205	270	335	320	323	328	335	330	360	385	\$35,000	
Preschool	699	720	741	789	763	779	742	781	826	890	\$35,000	
JK/SK	214	314	494	809	911	973	1,127	1,086	1,092	1,092	\$35,000	
School Age	783	943	1,085	1,242	1,323	1,329	1,510	1,514	1,549	1,549	\$35,000	
Total (sq.ft.)	1,963	2,313	2,743	3,248	3,419	3,508	3,819	3,838	3,944	4,033		
Total (\$000)	\$68,705.0	\$80,955.0	\$96,005.0	\$113,680.0	\$119,665.0	\$122,780.0	\$133,665.0	\$134,330.0	\$138,040.0	\$141,155.0		
Total Brantford Share (\$000)	\$21,435.96	\$25,258.0	\$29,953.6	\$35,468.2	\$37,335.5	\$38,307.4	\$41,703.5	\$41,911.0	\$43,068.5	\$44,040.4		



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS CHILD CARE

Historic Population	2011 93,650	2012 94,628	2013 95,617	2014 96,616	2015 97,625	2016 98,645	2017 99,603	2018 100,570	2019 101,547	2020 102,533	
INVENTORY SUMMARY (\$000)											
Child Care Spaces	\$21,436.0	\$25,258.0	\$29,953.6	\$35,468.2	\$37,335.5	\$38,307.4	\$41,703.5	\$41,911.0	\$43,068.5	\$44,040.4	
Total (\$000)	\$21,436.0	\$25,258.0	\$29,953.6	\$35,468.2	\$37,335.5	\$38,307.4	\$41,703.5	\$41,911.0	\$43,068.5	\$44,040.4	
SERVICE LEVEL (\$/capita)											Average Service Level
Child Care Spaces	\$228.89	\$266.92	\$313.27	\$367.10	\$382.44	\$388.34	\$418.70	\$416.73	\$424.12	\$429.52	\$363.60
Total (\$/capita)	\$228.89	\$266.92	\$313.27	\$367.10	\$382.44	\$388.34	\$418.70	\$416.73	\$424.12	\$429.52	\$363.60

CITY OF BRANTFORD

CALCULATION OF MAXIMUM ALLOWABLE

CHILD CARE

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$363.60
Net Population Growth 2021 - 2030	15,638
Maximum Allowable Funding Envelope	\$5,685,977



APPENDIX B.8 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM CHILD CARE

	Timing	Gross	Grants/		Net	Inelig	ible Costs	1	Total	Dev	elopr	nent-Related	Cost	ts
Project Description		Project	Subsidies/Other	r	Municipal	Rep	acement		Development	Available		2021-		Other
		Cost	Recoveries		Cost	& B1	E Shares		Related Costs	DC Shares /		2030	De	velopment-
										Prior Growth				Related
8.0 CHILD CARE														
8.1 Child Care Spaces														
8.1.1 640 New Child Care Spaces- City Share:	Various	\$ 6,988,800	\$ -	\$	6,988,800	0%	\$	-	\$ 6,988,800	\$ -	\$	5,685,977	\$	1,302,823
Subtotal Child Care Spaces		\$ 6,988,800	\$ -	\$	6,988,800		\$	-	\$ 6,988,800	\$ -	\$	5,685,977	\$	1,302,823
TOTAL CHILD CARE		\$ 6,988,800	\$ -	\$	6,988,800		\$	-	\$ 6,988,800	\$ -	\$	5,685,977	\$	1,302,823

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	100%	\$5,685,977
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$272.70
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	0%	\$0
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$0.00

2021 - 2030 Net Funding Envelope \$5,685,977



APPENDIX B.8 TABLE 3

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE CHILD CARE RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

CHILD CARE	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$307.84)	(\$384.13)	(\$453.62)	(\$514.73)	(\$567.26)	(\$608.61)	(\$500.18)	(\$363.30)	(\$195.35)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS - Child Care: Non Inflated - Child Care: Inflated	\$568.6 \$568.6	\$568.6 \$580.0	\$568.6 \$591.6	\$568.6 \$603.4	\$568.6 \$615.5	\$568.6 \$627.8	\$568.6 \$640.3	\$568.6 \$653.1	\$568.6 \$666.2	\$568.6 \$679.5	\$5,686.0 \$6,226.0
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE - DC Receipts: Inflated	\$269.0	\$522.2	\$544.5	\$568.2	\$591.9	\$617.9	\$779.8	\$814.7	\$850.9	\$888.3	\$6,447.4
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$8.2)	(\$16.9) (\$1.6)	(\$21.1) (\$1.3)	(\$24.9) (\$1.0)	(\$28.3) (\$0.6)	(\$31.2) (\$0.3)	(\$33.5) \$2.4	(\$27.5) \$2.8	(\$20.0) \$3.2	(\$10.7) \$3.7	(\$214.2) (\$0.9)
TOTAL REVENUE	\$260.8	\$503.7	\$522.1	\$542.3	\$562.9	\$586.4	\$748.8	\$790.0	\$834.2	\$881.2	\$6,232.3
CLOSING CASH BALANCE	(\$307.8)	(\$384.1)	(\$453.6)	(\$514.7)	(\$567.3)	(\$608.6)	(\$500.2)	(\$363.3)	(\$195.3)	\$6.3	

2021 Adjusted Charge Per Capita \$279

Allocation of Capital Program Residential Sector	100%
Non-Residential Sector	0%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix B.9 Development-Related Studies

Development-Related Studies

The *DCA* allows the cost of development-related studies to be included in the calculation of the development charges as long as they are permitted under the legislation. Consistent with s.5 (1)7 of the *DCA*, the eligible development-related net capital cost for the provision of studies have been included in the development charges calculation.

Table 1 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 2021-2030 development-related general government capital program includes provisions for various planning and finance studies. These include a future Development Charges Background Study, A Community Strategic Plan & Visioning Exercise, Boundary Planning as well as a New Official Plan and Zoning By-law update.

The total gross cost of the Development-Related Studies capital program is \$2.69 million. No grants or subsidies have been identified. A total of \$904,812 related to the studies is considered to benefit existing development. After accounting for this amount, \$1.79 million remains in development-related costs.

\$163,703 has been recovered in past DC revenues and is deducted from the development-related costs. Additionally, a share of the Official Plan review related to the annexed lands has been allocated to other-development related at \$588,468. The remaining \$1.04 is brought forward to the DC calculation.

This amount is allocated 71 per cent (\$736,458) to the residential sector and 29 per cent (\$300,807) to the non-residential sector based on shares of 10-

year growth in population and employment. The resulting unadjusted per capita residential charge is \$35.32 before cash flow adjustments. The non-residential unadjusted charge is \$0.61 per square metre.

Table 2 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$40 per capita and the non-residential charge increases to \$0.69 per square metre.

	DEVELOT	WIENT TREEMINE	STUDIES SUM	1417 (1 (1	
20)21 - 2030	Unadj	usted	Adju	sted
Development-F	Related Capital Program	Developme	ent Charge	Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$2.694.248	\$1.037.265	\$35.32	\$0.61	\$40	\$0.69

APPENDIX B.9 TABLE 1

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM DEVELOPMENT-RELATED STUDIES

	Project	Timing	Gross		Grants/		Net	Ineli	gible	Costs	Total D		Dev	elopi	ment-Related	Costs	3	
Project Description	Number		Project	Su	Subsidies/Other		Municipal Repl		placement		Development		Available			2021-		Other
			Cost		Recoveries		Cost	& B	TE SI	nares		Related Costs	D	C Shares /		2030	Dev	elopment-
													Pr	rior Growth			F	Related
9.0 DEVELOPMENT-RELATED STUDIES																		
9.1 Growth-Related Studies																		
9.1.1 Community Strategic Plan and Visioning Exercise		2023	\$ 125,000	\$	-	\$	125,000	50%	\$	62,500	\$	62,500	\$	-	\$	62,500	\$	-
9.1.2 Development Charges Background Study		2025	\$ 100,000	\$	-	\$	100,000	0%	\$	-	\$	100,000	\$	-	\$	100,000	\$	-
9.1.3 Boundary Planning & New Official Plan		2021	\$ 1,569,248	\$	-	\$	1,569,248	25%	\$	392,312	\$	1,176,936	\$	-	\$	588,468	\$	588,468
9.1.4 Zoning By-law Update		2021	\$ 400,000	\$	-	\$	400,000	50%	\$	200,000	\$	200,000	\$	163,703	\$	36,297	\$	-
9.1.5 Official Plan Review & Zoning By-law Update		2027	\$ 500,000	\$	=	\$	500,000	50%	\$	250,000	\$	250,000	\$	-	\$	250,000	\$	-
Subtotal Growth-Related Studies			\$ 2,694,248	\$	-	\$	2,694,248		\$	842,312	\$	1,789,436	\$	163,703	\$	1,037,265	\$	588,468
TOTAL DEVELOPMENT-RELATED STUDIES			\$ 2,694,248	\$	-	\$	2,694,248		\$	904,812	\$	1,789,436	\$	163,703	\$	1,037,265	\$	588,468

Residential Development Charge Calculation		
Residential Share of 2021-2030 Discounted Development-Related Capital Program	71%	\$736,458
10 Year Growth in Population in New Units		20,851
Unadjusted Development Charge Per Capita (\$)		\$35.32
Non-Residential Development Charge Calculation		
Non-Res Share of 2021-2030 Discounted Development-Related Capital Program	29%	\$300,807
10 Year Growth in Square Metres		493,926
Unadjusted Development Charge Per sq. m (\$)		\$0.61

Available DC Shares

Reserve Fund Balance at end of 2020 \$0

Prior Growth \$163,703



APPENDIX B.9 TABLE 2 - PAGE 1

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE DEVELOPMENT-RELATED STUDIES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

DEVELOPMENT-RELATED STUDIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$416.12)	(\$362.80)	(\$350.26)	(\$286.60)	(\$294.17)	(\$220.20)	(\$322.83)	(\$221.74)	(\$109.80)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS - Development-Related Studies: Non Inflated - Development-Related Studies: Inflated	\$443.6 \$443.6	\$0.0 \$0.0	\$44.4 \$46.2	\$0.0 \$0.0	\$71.0 \$76.9	\$0.0 \$0.0	\$177.5 \$199.9	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$736.5 \$766.5
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE - DC Receipts: Inflated	\$38.6	\$74.9	\$78.1	\$81.5	\$84.9	\$88.6	\$111.8	\$116.8	\$122.0	\$127.3	\$924.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$11.1)	(\$22.9) \$1.3	(\$20.0) \$0.6	(\$19.3) \$1.4	(\$15.8) \$0.1	(\$16.2) \$1.6	(\$12.1) (\$2.4)	(\$17.8) \$2.0	(\$12.2) \$2.1	(\$6.0) \$2.2	(\$142.1) (\$2.2)
TOTAL REVENUE	\$27.5	\$53.3	\$58.7	\$63.7	\$69.3	\$74.0	\$97.3	\$101.1	\$111.9	\$123.5	\$780.2
CLOSING CASH BALANCE	(\$416.1)	(\$362.8)	(\$350.3)	(\$286.6)	(\$294.2)	(\$220.2)	(\$322.8)	(\$221.7)	(\$109.8)	\$13.7	

2021 Adjusted Charge Per Capita	\$40	

71%
29%
2.0%
3.5%
5.5%



APPENDIX B.9 TABLE 2 - PAGE 2

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE DEVELOPMENT-RELATED STUDIES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

DEVELOPMENT-RELATED STUDIES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$163.87)	(\$146.43)	(\$146.40)	(\$126.26)	(\$135.97)	(\$113.33)	(\$150.54)	(\$104.39)	(\$53.45)	
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIRE	MENTS										
- Development-Related Studies: Non Inflated - Development-Related Studies: Inflated	\$181.2 \$181.2	\$0.0 \$0.0	\$18.1 \$18.9	\$0.0 \$0.0	\$29.0 \$31.4	\$0.0 \$0.0	\$72.5 \$81.6	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$300.8 \$313.1
NON-RESIDENTIAL SPACE GROWTH - Growth in Square Metres	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	493,926
REVENUE - DC Receipts: Inflated	\$21.7	\$26.0	\$26.8	\$27.7	\$28.7	\$29.6	\$51.5	\$53.5	\$55.7	\$58.1	\$379.3
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$4.4)	(\$9.0) \$0.5	(\$8.1) \$0.1	(\$8.1) \$0.5	(\$6.9) (\$0.1)	(\$7.5) \$0.5	(\$6.2) (\$0.8)	(\$8.3) \$0.9	(\$5.7) \$1.0	(\$2.9) \$1.0	(\$62.7) (\$0.8)
TOTAL REVENUE	\$17.3	\$17.4	\$18.9	\$20.1	\$21.7	\$22.6	\$44.4	\$46.2	\$50.9	\$56.2	\$315.8
CLOSING CASH BALANCE	(\$163.9)	(\$146.4)	(\$146.4)	(\$126.3)	(\$136.0)	(\$113.3)	(\$150.5)	(\$104.4)	(\$53.5)	\$2.7	

2021 Adjusted Charge Per Square Metre \$0.69

71%
29%
2.0%
3.5%
5.5%



Appendix C City-wide Engineered Services Technical Appendix

City-wide Engineered Services Technical Appendix

The Engineering Services, Environmental Services and Public Works departments ensure that the City's municipal services such as roads, water service, waste water systems and storm water drainage/management facilities are designed for the appropriate protection, health and quality of life of the public, and good engineering practices. The departments also provide review and inspection services to facilitate new development and to maintain service standards to sustain the existing infrastructure.

This appendix provides the detailed analysis undertaken to establish the development charge rates for the eligible City-wide engineered services. The development charges calculated in this section are intended to apply to development across the City and be layered on top of the City-wide Excluding ASDC Areas charges (Appendix D), Northern Boundary Expansion Lands ASDCs (Appendix E), and Tutela Heights ASDCs (Appendix F).

Four engineered services have been analysed herein as part of the development charges study:

Appendix C.1 Services Related to a Highway:

C.1.1 Roads and RelatedC.1.2 Buildings and Fleet

Appendix C.2 Water Services

Appendix C.3 Waste Water Services

Appendix C.4 Stormwater Services

The basis of the development-related capital program is the City's Master Servicing Plan and Transportation Master Plan as well as discussions with City staff. The projects identified in the capital program are required to service the demands of the anticipated City-wide development to occur over the planning period of 2021 to 2051, with the exception of Buildings and Fleet, which considers a 10-year planning horizon (2021 to 2030).

The following tables provide details of the projects included in the City-wide engineered infrastructure development charges calculations. With the exception of Appendix C.1, the content of the tables generally is as follows:

Table 1: Development Related Capital Program

Table 2: Calculation of Unadjusted Development Charges

Table 3: Residential & Non-Residential Cash Flow Analysis

It is noted that the Services Related to a Highway development charges calculations are structured differently as it is comprised of two sub-service areas (see Appendix C.1).

Allocation of Capital Costs

The projects and costs have been identified and allocated through discussions with City staff. All costs are represented in current (2021) dollars.

The following table summarizes the allocation of the City-wide engineered services capital costs (in thousands of dollars):

Service	Gross Cost	Grants / Subsidies / Other	Replacement / Benefit to Existing	Available DC Shares / Prior Growth	Other Development -Related	2021-2051 DC Share	Residential Allocation	Non- Residential Allocation
Roads &	\$335,621.16	\$3,547.50	\$45,230.48	\$25,196.03	\$0.00	\$261,647.15	\$188,385.95	\$73,261.20
Related	\$333,021.10	\$5,547.50	\$45,230.46	\$25,190.05	\$0.00	\$201,047.15	\$100,300.90	\$73,201.20
Buildings &								
Fleet	\$16,105.0	\$8.00	\$13,317.34	\$298.96	\$0.00	\$2,480.70	\$1,761.30	\$719,40
(2021-2030)								
Water	\$15,422.00	\$0.00	\$185.80	\$4,186.19	\$0.00	\$11,050.01	\$7,956.01	\$3,094.00
Wastewater	\$24,946.00	\$0.00	\$6,204.20	\$4,654.46	\$824.24	\$13,263.10	\$9,549.43	\$3,713.67
Stormwater	\$200.00	\$0.00	\$0.00	\$81.90	\$0.00	\$118.10	\$85.03	\$33.07
Total	\$392,294.16	\$3,555.50	\$64,937.82	\$34,417.53	\$824.24	\$288,559.06	\$207,737.72	\$80,821.34

The City-wide engineered services capital program totals \$392.29 million. Of this amount:

- \$3.56 million (1 per cent) in direct developer contributions or other recoveries is identified;
- \$67.94 million (17%) is attributable to replacement or benefit-to-existing shares;
- \$34.42 million (9%) is to be funded through the existing DC reserve fund balances; and
- \$824,200 (less than 1 per cent) has been identified as "other development-related" shares. These shares are generally attributable to development occurring beyond 2051, and may be considered as part of future DC studies.

After accounting for these deductions, the remaining \$288.56 million (74% of the gross capital program) is to be funded through City-wide DCs over the 2021-2051 planning period (with the exception of the Buildings and Fleet share to be recovered over the 2021-2030 period). After accounting for these deductions, the remaining \$288.56 million (74% of the gross capital program) is to be funded through City-wide DCs over the 2021-2051 planning period (with the exception of the Buildings and Fleet share to be recovered over the 2021-2030 period).

Appendix C.1 City-wide Services Related to a Highway

City-wide Services Related to a Highway

This appendix provides the detailed analysis undertaken to establish the development charge rates for City-wide Services Related to a Highway. There are two sub-services:

- Roads and Related (Appendix C.1.1); and
- Buildings and Fleet (Appendix C.1.2).

Details are provided within the following sections

C.1.1 Roads and Related

The following tables set out the 2021-2051 development-related capital forecast and the calculation of the development charges for Roads and Related services. The basis of the development-related capital program for transportation infrastructure is the City's Transportation Master Plan and detailed discussions with City staff. The projects identified in the capital program are required to service the demands of new development between 2021 and 2051, subject to annual capital budget reviews.

Table 1 Historical Service Levels

Based on the City's asset management inventory and discussions with staff, the Roads and Related inventory is valued at \$1.23 billion in 2020 (Table 1). This estimate does not include land which would significantly increase the value of roads.

The 10-year historical average service level is \$7,549.39 per population and employment. Multiplied by the 2021-2051 forecast growth in population and employment (91,700), this results in a 10-year maximum allowable funding envelope of \$692.41 million.

Table 2 2021-2051 Development-RELATED CAPITAL Program

The total cost of the Roads and Related capital program is \$335.62 million (Table 2) and provides for the undertaking of various road widening and expansion projects and active transportation initiatives throughout the City, as well as growth-related transportation studies.

The entire \$335.62 million development-related capital program is not to be fully recovered from future development charges; approximately \$3.55

million will be funded through direct developer contributions and \$45.23 million of the program has been identified as non-growth or benefit to existing share. The existing \$25.20 million reserve fund balance is also removed from the DC calculation.

The result is a net development-related cost of \$261.65 million.

Table 3 Calculation of the Unadjusted Development Charges

The development-related cost are then allocated 72 per cent (\$188.39 million) to new residential development and 28 per cent (\$73.26 million) to new non-residential development. The allocation of costs is based on shares of population and employment growth over the 2021-2051 planning period. The resulting unadjusted development charges are \$2,561.89 per capita and \$30.14 per square metre.

Table 4 Cash Flow Analysis

The long-term cash-flow analysis in Table 4 takes into consideration expenditure timing and revenue projections. The effect of the analysis is a slight increase in the residential and non-residential development charges rates to \$2,972 per capita and \$37.30 per square metre.

The following is a summary of the Roads and Related calculated unadjusted and cash flow adjusted development charge rates:

		ROADS &	RELATED SUMMA	ARY				
10-year Hist.	20	21 - 2051	Unadju	sted	Adjusted			
Service Level	Development-Rel	ated Capital Program	Developmen	it Charge	Development Charge			
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m		
\$7,549.39	\$335,621,155	\$261,647,147	\$2,561.89	\$30.14	\$2,972	\$37.30		

APPENDIX C.1.1 TABLE 1 - PAGE 1

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS ROADS & RELATED

ROADS INFRASTRUCTURE		•		Total Va	ue of Roads ar	nd Related Infra	astructure	•	•		UNIT COST
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Roads (Centreline km)	492.0	496.2	500.4	503.0	506.2	514.1	521.9	522.0	525.1	556.0	\$1,389,097
Traffic signals	1,047	1,063	1,078	1,116	1,126	1,119	1,112	1,160	1,180	1,180	included below
Signalized Intersections / Pedestrian Crossings	134	135	137	141	142	141	140	145	146	148	\$154,500
Streetlights	10,028	10,054	10,080	10,218	10,229	10,217	10,204	10,213	10,241	10,378	\$8,240
Sidewalks (km)	547.9	551.9	556.0	562.0	571.0	571.9	572.7	576.9	579.7	587.4	\$121,342
Bridges & Culverts > 3m (#)	45	48	51	51	51	58	65	69	69	85	\$3,213,943
Bike Lanes (km)	17.8	17.9	17.9	17.9	17.9	18.0	18.1	18.1	30.2	37.7	\$10,300
Total (\$000)	\$999,139.2	\$1,014,718.4	\$1,030,891.0	\$1,036,985.8	\$1,042,768.1	\$1,076,022.5	\$1,109,276.9	\$1,123,616.5	\$1,128,772.3	\$1,225,567.9	



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS ROADS & RELATED

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	93,650	94,628	95,617	96,616	97,625	98,645	99,603	100,570	101,547	102,533
Historic Employment	44,224	44,249	44,274	44,299	44,324	44,349	44,712	45,078	<u>45,447</u>	<u>45,819</u>
Total Historic Population & Employment	137,874	138,877	139,891	140,915	141,949	142,994	144,315	145,648	146,994	148,352

INVENTORY SUMMARY (\$000)

Roads Infrastructure	\$999,139.2	\$1,014,718.4	\$1,030,891.0	\$1,036,985.8	\$1,042,768.1	\$1,076,022.5	\$1,109,276.9	\$1,123,616.5	\$1,128,772.3	\$1,225,567.9	
Total (\$000)	\$999,139.2	\$1,014,718.4	\$1,030,891.0	\$1,036,985.8	\$1,042,768.1	\$1,076,022.5	\$1,109,276.9	\$1,123,616.5	\$1,128,772.3	\$1,225,567.9	
											Ave

SERVICE LEVEL (\$/pop & emp)

Average Service Level

a.											
Roads Infrastructure	\$7,246.76	\$7,306.60	\$7,369.24	\$7,358.95	\$7,346.08	\$7,524.95	\$7,686.50	\$7,714.60	\$7,679.04	\$8,261.22	\$7,549.39
Total (\$/pop & emp)	\$7,246.76	\$7,306.60	\$7,369.24	\$7,358.95	\$7,346.08	\$7,524.95	\$7,686.50	\$7,714.60	\$7,679.04	\$8,261.22	\$7,549.39

CITY OF BRANTFORD CALCULATION OF MAXIMUM ALLOWABLE ROADS & RELATED

Funding Envelope Calculation 2019-2031	
10 Year Average Service Level 2011 - 2020	\$7,549.39
Net Population & Employment Growth 2021 - 2051	91,718
Maximum Allowable Funding Envelope	\$692,414,952



APPENDIX C.1.1 TABLE 2

CITY OF BRANTFORD CITY-WIDE

ROADS AND RELATED DEVELOPMENT-RELATED CAPITAL PROGRAM

	Length	Antici	pated	Gross		Grants/		Net	Ineli	gible	Costs	Total)eve	lopment-Relate	d Cos	sts
Project Description	(m)	Tim	ning	Project Cost		bsidies/Other Recoveries		Municipal Cost			ement Shares	evelopment elated Costs	D	Available OC Shares / rior Growth		2021- 2051	ſ	Other Development- Related
1.0 ROADS & RELATED																		
1.1 Previous Projects																		
1.1.2 Kramers Way Extension Dead End Westerly Extent	700	2023 -	- 2024	\$ 2,172,000	\$	-	\$	2,172,000	0%	\$	-	\$ 2,172,000	\$	2,172,000	\$	-	\$	-
Subtotal Previous Projects				\$ 2,172,000	\$	-	\$	2,172,000		\$	-	\$ 2,172,000	\$	2,172,000	\$	-	\$	-
1.2 Road Projects																		
1.2.1 Golf Road TSM (Paris Road to Proposed Development Limit) - Intersection Improvements		2026 -	- 2031	\$ 5.264.550	\$	_	\$	5,264,550	20%	\$	1.052.910	\$ 4.211.640	\$	_	\$	4.211.640	\$	_
1.2.2 Veterans Memorial Parkway Widening (4 lanes – Mount Pleasant Street to Erie Avenue)	1,190	2021 -	- 2025	\$ 40,408,881	\$	_	\$	40,408,881	3%	\$	1.057.613	\$ 39.351.269	\$	23.024.030	\$	16,327,239	\$	_
1.2.3 Oak Park Road Widening (4 lanes – Powerline Road to Hwy 403 & Fen Ridge Court/Savannah	1,330	2021 -		\$ 6,393,975	\$	_	\$	6,393,975	18%	\$	1,182,038	\$ 5,211,938			\$	5,211,938	\$	_
Oaks Drive to Hardy Road)	_,			, ,,,,,,,,,	•		•	2,222,212			_,,_	-,,	ľ			-,,	Ť	
1.2.4 Colborne Street West widening (4 lanes – CR7 to D'Aubigny Road)	1,150	2021 -	- 2025	\$ 3,475,875	\$	-	\$	3,475,875	29%	\$	1,022,063	\$ 2,453,813	\$	-	\$	2,453,813	\$	-
1.2.5 Wayne Gretzky Parkway Expansion to North (4 lanes - Powerline Road to Park Rd. N.)	900	2021 -	- 2025	\$ 4,041,750	\$	-	\$	4,041,750	0%	\$	-	\$ 4,041,750	\$	-	\$	4,041,750	\$	-
1.2.6 Oak Park Road Extension (4 Lanes - Hardy Road to Colborne Street)	4,300	2026 -	- 2031	\$ 98,827,949	\$	-	\$	98,827,949	4%	\$	3,821,625	\$ 95,006,324	\$	-	\$	95,006,324	\$	-
1.2.7 Paris Road widening (4 lanes – West City Limits to Golf Road)	2,810	2026 -	- 2031	\$ 10,769,325	\$	-	\$	10,769,325	23%	\$	2,497,388	\$ 8,271,938	\$	-	\$	8,271,938	\$	-
1.2.8 Powerline Road widening (4 lanes – Oak Park Road to King George Road)	3,740	2026 -	- 2031	\$ 19,865,010	\$	-	\$	19,865,010	17%	\$	3,323,925	\$ 16,541,085	\$	-	\$	16,541,085	\$	-
1.2.9 Charing Cross Extension (4 Lanes – West Street to Henry Street)	740	2026 -	- 2031	\$ 18,969,360	\$	-	\$	18,969,360	3%	\$	657,675	\$ 18,311,685	\$	-	\$	18,311,685	\$	-
1.2.10 Mohawk St./Greenwich St./ Murray St. Intersection Realignment & Improvements		2026 -	- 2031	\$ 3,547,500	\$	3,547,500	\$	-	0%	\$	-	\$	\$	-	\$	-	\$	-
1.2.11 Wayne Gretzky Parkway widening (6 Lane – Lynden Road to Henry Street)	2,020	2032 -	- 2051	\$ 29,029,200	\$	-	\$	29,029,200	9%	\$	2,489,448	\$ 26,539,752	\$	-	\$	26,539,752	\$	-
1.2.12 Powerline Road widening (4 lanes – King George Road to East City Boundary)	3,950	2032 -	- 2051	\$ 20,980,425	\$	-	\$	20,980,425	17%	\$	3,510,563	\$ 17,469,863	\$	-	\$	17,469,863	\$	-
1.2.13 Clarence Street Improvement Colborne Street West Street		2032 -	- 2051	\$ 6,326,250	\$	-	\$	6,326,250	40%	\$	2,530,500	\$ 3,795,750	\$	-	\$	3,795,750	\$	-
1.2.14 Conklin Road Extension (2 lanes - Mt. Pleasant Road to Phelps Road)	2,800	2032 -	- 2051	\$ 10,168,200	\$	-	\$	10,168,200	40%	\$	4,067,280	\$ 6,100,920	\$	-	\$	6,100,920	\$	-
1.2.15 Oak Park Road/ Highway 403 Interchange		2032 -	- 2051	\$ 18,000,000	\$	-	\$	18,000,000	20%	\$	3,600,000	\$ 14,400,000	\$	-	\$	14,400,000	\$	-
Subtotal Road Projects				\$296,068,250	\$	3,547,500	\$	292,520,750		\$	30,813,026	\$ 261,707,725	\$	23,024,030	\$	238,683,695	\$	-
1.3 Active Transportation Facilities																		
1.3.1 On-Road Active Transportation Initiatives		2021 -	- 2051	\$ 28,834,905	\$	-	\$	28,834,905	50%	\$	14,417,453	\$ 14,417,453	\$	-	\$	14,417,453	\$	-
Subtotal Active Transportation Facilities				\$ 28,834,905	\$	-	\$	28,834,905		\$	14,417,453	\$ 14,417,453	\$	-	\$	14,417,453	\$	-
1.4 Growth-Related Studies																		
1.4.1 Programs (Studies, Events, Initiatives)		2021 -	- 2051	\$ 2,885,000	\$	-	\$	2,885,000	0%	\$	-	\$ 2,885,000	\$	-	\$	2,885,000	\$	-
1.4.2 Transportation Master Planning & Model Updates - 5 year review		2026	- 2026		\$	-	\$	450,000		\$	-	\$ 450,000	\$	-	\$	450,000	\$	-
1.4.3 Transportation Master Planning & Model Updates - 5 year review		2031 -	- 2031	\$ 450,000	\$	-	\$	450,000		\$	-	\$ 450,000	\$	-	\$	450,000	\$	-
1.4.4 Transportation Master Planning & Model Updates - 5 year review		2036	- 2036	\$ 450,000	\$	-	\$	450,000	0%	\$	-	\$ 450,000	\$	-	\$	450,000	\$	-
1.4.5 Transportation Master Planning & Model Updates - 5 year review		2041 -	- 2041	\$ 450,000	\$	-	\$	450,000	0%	\$	-	\$ 450,000	\$	-	\$	450,000	\$	-
1.4.6 Transportation Master Planning & Model Updates - 5 year review		2046 -	- 2046	\$ 450,000	\$	-	\$	450,000	0%	\$	-	\$ 450,000	\$	-	\$	450,000	\$	-
1.4.7 Environmenal Assessments Related to Roads Projects		2021 -	- 2051	\$ 3,411,000	\$	-	\$	3,411,000	0%	\$	-	\$ 3,411,000	\$	-	\$	3,411,000	\$	
Subtotal Growth-Related Studies				\$ 8,546,000	\$	-	\$	8,546,000		\$	-	\$ 8,546,000	\$	-	\$	8,546,000	\$	-
TOTAL				\$335,621,155	\$	3,547,500.00	\$	332,073,655.00		\$	45,230,478	\$ \$286,843,177	<u>'</u>	\$25,196,030	\$	261,647,147		\$(

Notes:

1) Benefit to Existing Based on the following

 Local (2 Lane)
 \$ 326
 per m every 20 years
 \$ 490
 /m per 30 year planning period

 Minor Collector (2 Lane)
 \$ 593
 per m every 20 years
 \$ 889
 /m per 30 year planning period

 Major Collector (4 Lane)
 \$ 719
 per m every 20 years
 \$ 1,078
 /m per 30 year planning period

 Arterial (4 Lane)
 \$ 822
 per m every 20 years
 \$ 1,232
 /m per 30 year planning period

Available DC Shares

Reserve Fund Balance at end of 2020

\$25,196,030



APPENDIX C.1.1 TABLE 3

CITY OF BRANTFORD CITY-WIDE SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES ROADS & RELATED

Growth in Population in New Units 2021-2051	73,534
Employment Growth in New Space 2021-2051	28,419
Growth in New Building Space (Square Metres) 2021-2051	2,430,622

					Growth-Related	Cap	ital Forecast									
	Gross		Grants/	R	eplacement/		Available		Other	2021-2051						
	Project	Sι	ubsidies/Other		Benefit to		DC Shares /	D	evelopment-	DC	R	eside	ntial	Nor	1-Re	sidential
	Cost		Recoveries		Existing		Prior Growth		Related	Share		Sha	re		Sh	are
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	(\$000)	%		\$000	%		\$000
	•		•		•		•		•		•		•			
ROADS & RELATED																
Previous Projects	\$ 2,172.00	\$	-	\$	-	\$	2,172.00	\$	-	\$ -	72%	\$	-	28%	\$	-
Road Projects	\$ 296,068.25	\$	3,547.50	\$	30,813.03	\$	23,024.03	\$	-	\$ 238,683.69	72%	\$	171,852.26	28%	\$	66,831.43
Active Transportation Facilities	\$ 28,834.91	\$	-	\$	14,417.45	\$	-	\$	-	\$ 14,417.45	72%	\$	10,380.57	28%	\$	4,036.89
Growth-Related Studies	\$ 8,546.00	\$	-	\$	-	\$	-	\$	-	\$ 8,546.00	72%	\$	6,153.12	28%	\$	2,392.88
TOTAL ROADS & RELATED	\$ 335,621.16	\$	3,547.50	\$	45,230.48	\$	25,196.03	\$	-	\$ 261,647.15		\$	188,385.95		\$	73,261.20
Unadjusted Development Charge Per Capita (\$)												\$	2,561.89			
Unadjusted Development Charge Per Square Metre (\$)															\$	30.14

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	72%	\$ 188,385,946
2021-2051 Growth in Population in New Units		73,534
Development Charge Per Capita (Unadjusted)		\$ 2,561.89
Development Charge Per Capita after Cash Flow		\$ 2,972
Charge per Single Detached Unit	3.43	\$ 10,194

Non-Residential Development Charge Calculation			
Non-Residential Share of 2021-2051 DC Eligible Costs	28%	\$73,	261,201.16
2021-2051 Growth in Non-Residential Building Space (Sq.M.)			2,430,622
Development Charge Per Square Metre (Unadjusted)		\$	30.14
Development Charge Per Square Metre After Cash Flow		\$	37.30



APPENDIX C.1.1 TABLE 4 - PAGE 1

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS & RELATED RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

ROADS & RELATED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$1,698.5)	(\$821.0)	\$253.2	\$1,541.8	\$3,035.3	(\$10,386.0)	(\$22,743.5)	(\$35,805.9)	(\$49,604.6)	(\$64,176.3)	(\$79,935.2)	(\$78,380.7)	(\$76,422.2)	(\$74,011.5)	(\$71,112.5
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Roads and Related: Non Inflated - Roads and Related: Inflated	\$4,518.1 \$4,518.1	\$4,518.1 \$4,608.5	\$4,518.1 \$4,700.6	\$4,518.1 \$4,794.6	\$4,518.1 \$4,890.5	\$17,886.2 \$19,747.8	\$17,562.2 \$19,777.9	\$17,562.2 \$20,173.5	\$17,562.2 \$20,576.9	\$17,562.2 \$20,988.5	\$17,886.2 \$21,803.2	\$2,940.1 \$3,655.7	\$2,940.1 \$3,728.8	\$2,940.1 \$3,803.3	\$2,940.1 \$3,879.4	\$3,264.1 \$4,393.1
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	2,733	2,572	2,624	2,680	2,736	2,793
REVENUE - DC Receipts: Inflated	\$2,865.0	\$5,562.7	\$5,800.7	\$6,052.4	\$6,305.3	\$6,582.3	\$8,307.1	\$8,678.1	\$9,064.1	\$9,462.0	\$9,901.3	\$9,504.3	\$9,890.4	\$10,303.5	\$10,729.2	\$11,171.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$45.5)	(\$93.4) \$16.7	(\$45.2) \$19.3	\$8.9 \$22.0	\$54.0 \$24.8	\$106.2 (\$362.1)	(\$571.2) (\$315.4)	(\$1,250.9) (\$316.1)	(\$1,969.3) (\$316.6)	(\$2,728.3) (\$317.0)	(\$3,529.7) (\$327.3)	(\$4,396.4) \$102.4	(\$4,310.9) \$107.8	(\$4,203.2) \$113.8	(\$4,070.6) \$119.9	(\$3,911.2) \$118.6
TOTAL REVENUE	\$2,819.5	\$5,486.0	\$5,774.8	\$6,083.3	\$6,384.0	\$6,326.5	\$7,420.4	\$7,111.1	\$6,778.2	\$6,416.8	\$6,044.3	\$5,210.2	\$5,687.3	\$6,214.0	\$6,778.4	\$7,379.2
CLOSING CASH BALANCE	(\$1,698.5)	(\$821.0)	\$253.2	\$1,541.8	\$3,035.3	(\$10,386.0)	(\$22,743.5)	(\$35,805.9)	(\$49,604.6)	(\$64,176.3)	(\$79,935.2)	(\$78,380.7)	(\$76,422.2)	(\$74,011.5)	(\$71,112.5)	(\$68,126.3)

ROADS & RELATED	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$68,126.3)	(\$65,435.6)	(\$62,265.0)	(\$58,573.0)	(\$54,328.5)	(\$49,975.4)	(\$46,890.7)	(\$43,360.7)	(\$39,361.7)	(\$34,839.9)	(\$30,327.8)	(\$25,464.2)	(\$20,032.2)	(\$13,996.2)	(\$7,329.8)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Roads and Related: Non Inflated - Roads and Related: Inflated	\$2,940.1 \$4,036.1	\$2,940.1 \$4,116.9	\$2,940.1 \$4,199.2	\$2,940.1 \$4,283.2	\$3,264.1 \$4,850.3	\$2,940.1 \$4,456.2	\$2,940.1 \$4,545.4	\$2,940.1 \$4,636.3	\$2,940.1 \$4,729.0	\$3,264.1 \$5,355.1	\$2,940.1 \$4,920.0	\$2,940.1 \$5,018.4	\$2,940.1 \$5,118.8	\$2,940.1 \$5,221.2	\$2,940.1 \$5,325.6	188,385.9 236,852.1
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	2,540	2,588	2,637	2,684	2,732	2,262	2,296	2,328	2,364	2,394	2,280	2,313	2,345	2,374	2,408	73,534
REVENUE - DC Receipts: Inflated	\$10,363.0	\$10,770.0	\$11,193.4	\$11,620.8	\$12,065.2	\$10,189.3	\$10,549.3	\$10,910.3	\$11,300.6	\$11,672.9	\$11,339.3	\$11,733.5	\$12,133.8	\$12,529.5	\$12,963.1	301,514.20
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$3,746.9) \$110.7	(\$3,599.0) \$116.4	(\$3,424.6) \$122.4	(\$3,221.5) \$128.4	(\$2,988.1) \$126.3	(\$2,748.6) \$100.3	(\$2,579.0) \$105.1	(\$2,384.8) \$109.8	(\$2,164.9) \$115.0	(\$1,916.2) \$110.6	(\$1,668.0) \$112.3	(\$1,400.5) \$117.5	(\$1,101.8) \$122.8	(\$769.8) \$127.9	(\$403.1) \$133.7	(65,028.2) 404.3
TOTAL REVENUE	\$6,726.8	\$7,287.5	\$7,891.2	\$8,527.7	\$9,203.4	\$7,541.0	\$8,075.4	\$8,635.3	\$9,250.7	\$9,867.3	\$9,783.6	\$10,450.5	\$11,154.8	\$11,887.6	\$12,693.6	236,890.3
CLOSING CASH BALANCE	(\$65,435.6)	(\$62,265.0)	(\$58,573.0)	(\$54,328.5)	(\$49,975.4)	(\$46,890.7)	(\$43,360.7)	(\$39,361.7)	(\$34,839.9)	(\$30,327.8)	(\$25,464.2)	(\$20,032.2)	(\$13,996.2)	(\$7,329.8)	\$38.2	

2021 Adjusted Charge Per Capita \$2,972

 Allocation of Capital Program
 72%

 Residential Sector
 28%

 Non-Residential Sector
 28%

 Rates for 2021
 1

 Inflation Rate
 2.0%

 Interest Rate on Positive Balances
 3.5%

 Interest Rate on Negative Balances
 5.5%



APPENDIX C.1.1 TABLE 4 - PAGE 2

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS & RELATED NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

ROADS & RELATED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$598.7)	(\$1,029.4)	(\$1,476.4)	(\$1,935.7)	(\$2,404.9)	(\$8,785.1)	(\$14,312.4)	(\$20,186.5)	(\$26,422.4)	(\$33,035.7)	(\$40,204.4)	(\$40,105.8)	(\$39,865.7)	(\$39,467.5)	(\$38,902.0
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated	\$1,757.0 \$1,757.0	\$1,757.0 \$1,792.2	\$1,757.0 \$1,828.0	\$1,757.0 \$1,864.6	\$1,757.0 \$1,901.9	\$6,955.7 \$7,679.7	\$6,829.7 \$7,691.4	\$6,829.7 \$7,845.2	\$6,829.7 \$8,002.1	\$6,829.7 \$8,162.2	\$6,955.7 \$8,479.0	\$1,143.4 \$1,421.6	\$1,143.4 \$1,450.1	\$1,143.4 \$1,479.1	\$1,143.4 \$1,508.7	\$1,269.4 \$1,708.4
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	71,929	79,601	81,471	83,423	85,293	87,465
REVENUE - DC Receipts: Inflated	\$1,174.4	\$1,405.0	\$1,448.1	\$1,496.6	\$1,548.8	\$1,599.0	\$2,782.3	\$2,894.5	\$3,013.7	\$3,140.2	\$3,270.5	\$3,691.7	\$3,854.0	\$4,025.3	\$4,197.8	\$4,390.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$16.0)	(\$32.9) (\$10.6)	(\$56.6) (\$10.4)	(\$81.2) (\$10.1)	(\$106.5) (\$9.7)	(\$132.3) (\$167.2)	(\$483.2) (\$135.0)	(\$787.2) (\$136.1)	(\$1,110.3) (\$137.2)	(\$1,453.2) (\$138.1)	(\$1,817.0) (\$143.2)	(\$2,211.2) \$39.7	(\$2,205.8) \$42.1	(\$2,192.6) \$44.6	(\$2,170.7) \$47.1	(\$2,139.6 \$46.9
TOTAL REVENUE	\$1,158.4	\$1,361.4	\$1,381.0	\$1,405.3	\$1,432.6	\$1,299.5	\$2,164.1	\$1,971.2	\$1,766.3	\$1,548.9	\$1,310.3	\$1,520.2	\$1,690.2	\$1,877.2	\$2,074.1	\$2,298.1
CLOSING CASH BALANCE	(\$598.7)	(\$1,029.4)	(\$1,476.4)	(\$1,935.7)	(\$2,404.9)	(\$8,785.1)	(\$14,312.4)	(\$20,186.5)	(\$26,422.4)	(\$33,035.7)	(\$40,204.4)	(\$40,105.8)	(\$39,865.7)	(\$39,467.5)	(\$38,902.0)	(\$38,312.3
ROADS & RELATED	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$38,312.3)	(\$37,400.9)	(\$36,262.1)	(\$34,867.0)	(\$33,195.1)	(\$31,413.6)	(\$29,631.7)	(\$27,555.9)	(\$25,171.7)	(\$22,449.0)	(\$19,557.7)	(\$16,459.4)	(\$12,977.3)	(\$9,088.6)	(\$4,758.8)	
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated	\$1,143.4 \$1,569.6	\$1,143.4 \$1,601.0	\$1,143.4 \$1,633.0	\$1,143.4 \$1,665.7	\$1,269.4 \$1,886.2	\$1,143.4 \$1,733.0	\$1,143.4 \$1,767.6	\$1,143.4 \$1,803.0	\$1,143.4 \$1,839.1	\$1,269.4 \$2,082.5	\$1,143.4 \$1,913.3	\$1,143.4 \$1,951.6	\$1,143.4 \$1,990.6	\$1,143.4 \$2,030.5	\$1,143.4 \$2,071.1	\$73,261.2 \$92,109.1
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	88,591	90,791	93,183	95,575	97,995	91,665	93,809	95,816	97,933	100,297	96,374	98,381	100,306	102,313	104,485	2,430,622

\$5,182.2

(\$1,727.7)

\$3,514.8

(\$29,631.7)

\$60.4

\$5,431.5

(\$1,825.7)

\$3,667.8

(\$31,413.6)

\$62.0

\$5,409.5

(\$1,629.7)

\$3,843.5

(\$27,555.9)

\$63.7

\$5,635.7

(\$1,515.6)

\$4,187.2

(\$25,171.7)

\$67.1

\$5,875.5

(\$1,384.4)

\$4,561.7

(\$22,449.0)

\$70.6

\$6,137.6

(\$1,234.7)

\$4,973.9

(\$19,557.7)

\$71.0

\$6,015.5

(\$1,075.7)

\$5,011.6

(\$16,459.4)

\$71.8

\$6,263.6

(\$905.3)

\$75.5

\$5,433.8

(\$12,977.3)

2021 Adjusted Charge Per Sq. m	\$37.30

\$4,536.3

(\$2,107.2)

\$2,481.0

(\$37,400.9)

\$51.9

\$4,741.9

(\$2,057.0)

\$2,739.8

(\$36,262.1)

\$55.0

\$4,964.2

(\$1,994.4)

\$3,028.1

(\$34,867.0)

\$58.3

\$5,193.5

(\$1,917.7)

\$3,337.6

(\$33,195.1)

\$61.7

- Interest on Opening Balance

CLOSING CASH BALANCE

- Interest on In-year Transactions

REVENUE - DC Receipts: Inflated

INTEREST

TOTAL REVENUE

Allocation of Capital Program Residential Sector	72%
Non-Residential Sector	28%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

\$6,513.9

(\$713.7)

\$79.2

\$5,879.3

(\$9,088.6)

\$6,777.1

(\$499.9)

\$6,360.3

(\$4,758.8)

\$83.1

\$7,059.4

(\$261.7)

\$6,885.0

\$87.3

\$55.1

\$129,670.1

(\$37,830.8)

\$92,164.3

\$325.0



C.1.2 Public Works: Building and Fleet

This section covers the yards, buildings and fleet components of the City's Public Works operations. The roads, water and wastewater components of public works are included in separate appendices.

Table 1 Historical Service Levels

The Public Works department currently operates mainly out of the 10 Earle Avenue facility. This site sits on 9.47 hectares of land valued at \$4.74 million. In addition, Public Works uses 16,440 square feet of administrative space in two other buildings, worth \$8.22 million. The City also has several other Public Works facilities: a 32,367 square foot traffic yard, two sand/salt domes valued at \$492,000 each, a Quonset hut, an aboveground fuel tank, a storage shed, and 18 storage containers. The total replacement value of Public Works facilities is \$35.21 million. The total value of the City's Public Works vehicles and equipment such as mowers, tractors, and street sweepers is \$24.82 million.

The total value of the Public Works capital inventory is \$64.76 million. The 10-year historical average service level is \$442.42 per population and employment. Multiplied by the 10-year forecast growth in population and employment, this results in a 10-year maximum allowable funding envelope of \$10.29 million.

Table 2 2021-2030 Development-Related Capital Program & Calculation of the Unadjusted Development Charges

The 10-year development-related capital plan for Public Works includes an annual \$200,000 provision for new Public Works vehicle and equipment

additions, totalling \$2.00 million. Fleet expansions for Environmental Services are also anticipated in 2022 at a total cost of \$80,000. An Accommodation Strategy for Phase 2 of the building and yard renovation as well as a WTP yard and storage facility study are planned with a total cost of \$14.03 million for technical studies, with small growth-related shares attributed to expanding Public Works operations.

The entire capital plan totals \$16.11 million. Rate reserves will cover \$8,000 of the Environmental Services fleet expansion costs. A benefit to existing share of \$13.32 million is primarily attributed to the Accommodation Strategy, and has been deducted from the gross capital cost leaving a total development-related cost of \$2.78 million. Of this amount, \$298,962 is to be funded from the current Public Works development charges reserve fund. The remaining \$2.48 million is brought forward to the development charge calculation.

The total development-related cost is allocated 71 per cent (\$1.76 million) against new residential development, and 29 per cent (\$719,403) against non-residential development. This is based on anticipated shares of population and employment growth over the 10-year forecast period, yielding an unadjusted development charge of \$84.47 per capita and \$1.46 per square metre.

Table 3 Cash Flow Analysis

		PUBLIC WORKS: BU	DIEDINAGO & I EE	ET COMMINITAL		
10-year Hist.	2021 - 2030 Development-Related Capital Program		Unadjusted Development Charge		Adjusted Development Charge	
Service Level						
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.n
\$442.42	\$16.105.000	\$2.480.699	\$84.47	\$1.46	\$97	\$1.68

CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PUBLIC WORKS: BUILDINGS & FLEET

BUILDINGS				#	# of Square Fe	eet / Value (\$)					UNIT COST
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/sq.ft.)
180 Greenwich - Admin Space	6,203	6,203	6,203	6,203	6,203	6,203	6,203	6,203	-	=	\$500
324 Grand River - Admin Space	-	-	-	-	-	-	-	-	6,586	6,586	\$500
City Hall - PW Admin Space	9,855	9,855	9,855	9,855	9,855	9,855	9,855	9,855	9,855	9,855	\$500
Public Works Building (10 Earle Ave.)	18,944	18,944	18,944	18,944	18,944	18,944	18,944	18,944	18,944	18,944	\$500
Traffic Yard (10 Earle Ave.)	32,367	32,367	32,367	32,367	32,367	32,367	32,367	32,367	32,367	32,367	\$500
Salt Dome #1	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000]
Salt Dome #2	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000	\$492,000]
Quonset Hut	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000]
Aboveground Fuel Tank	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	
Storage Shed 1	\$89,000	\$89,000	\$89,000	\$89,000	\$89,000	\$89,000	\$89,000	\$89,000	\$89,000	\$89,000	
Sea Containers - Storage (18)	-	-	-	-	-	68,000	68,000	68,000	68,000	68,000	
Total (\$000)	\$34,945.8	\$34,945.8	\$34,945.8	\$34,945.8	\$34,945.8	\$35,013.8	\$35,013.8	\$35,013.8	\$35,205.0	\$35,205.0	

LAND		# of Hectares										
Facility Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	(\$/ha)	
Public Works and Traffic Yard (10 Earle Ave.)	9.47	9.47	9.47	9.47	9.47	9.47	9.47	9.47	9.47	9.47	\$500,000	
Total (ha)	9.47	9.47	9.47	9.47	9.47	9.47	9.47	9.47	9.47	9.47		
Total (\$000)	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,735.0	\$4,735.0		



CITY OF BRANTFORD INVENTORY OF CAPITAL ASSETS PUBLIC WORKS: BUILDINGS & FLEET

FLEET & EQUIPMENT				Total Valu	e of Vehicles a	and Related Equ	ipment			
Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Vehicles and Equipment (excluding Transit)	\$22,373,000	\$24,168,000	-	-	-	-	-	-	-	-
Underground Fuel Storage	-	-	\$132,300	\$132,300	\$132,300	\$132,300	\$255,300	\$255,300	\$255,300	\$255,300
Asphalt Equipment	-	-	-	-	-	-	27,700	\$27,700	\$88,200	\$88,200
Attachments	-	-	-	-	-	-	157,000	\$157,000	\$157,000	\$157,000
Light Duty Vehicle	-	-	3,205,000	3,205,000	3,205,000	3,205,000	3,933,000	3,933,000	\$4,089,750	\$4,131,550
Heavy Duty Vehicle	-	-	4,318,000	4,318,000	4,318,000	4,318,000	2,028,000	\$2,028,000	\$2,028,000	\$2,028,000
Sander/Dump Trk/Backhoe	-	-	5,671,000	5,671,000	5,671,000	5,671,000	9,882,000	9,882,000	\$10,377,000	\$10,377,000
Sewer Jet/Street Sweeper	-	-	1,906,000	1,906,000	1,906,000	1,906,000	2,498,000	\$2,498,000	\$2,498,000	\$2,498,000
Heavy Construction Equip	-	-	987,000	987,000	987,000	987,000	-	-	-	-
Trailers/Golf Carts	-	-	261,000	261,000	261,000	261,000	524,000	524,000	\$661,500	\$661,500
Mowers/Tractors	-	-	2,691,000	2,691,000	2,691,000	2,691,000	2,759,000	\$2,759,000	\$2,759,000	\$2,759,000
Control Systems	-	-	874,000	874,000	874,000	874,000	147,000	\$147,000	\$147,000	\$147,000
Communication Systems	-	-	598,000	598,000	598,000	598,000	10,600	\$10,600	\$10,600	\$10,600
Tools/Shop/Garage Equip	-	-	1,438,000	1,438,000	1,438,000	1,438,000	1,248,000	\$1,248,000	\$1,248,000	\$1,248,000
Turf Equipment	-	-	18,400	18,400	18,400	18,400	-	-	-	-
Ice Re-Surfacers	-	-	404,000	404,000	404,000	404,000	455,000	\$455,000	\$455,000	\$455,000
Total (\$000)	\$22,373.0	\$24,168.0	\$22,503.7	\$22,503.7	\$22,503.7	\$22,503.7	\$23,924.6	\$23,924.6	\$24,774.4	\$24,816.2



CITY OF BRANTFORD CALCULATION OF SERVICE LEVELS PUBLIC WORKS: BUILDINGS & FLEET

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Historic Population	93,650	94,628	95,617	96,616	97,625	98,645	99,603	100,570	101,547	102,533
Historic Employment	44,224	44,249	44,274	44,299	44,324	44,349	44,712	45,078	<u>45,447</u>	<u>45,819</u>
Total Historic Population & Employment	137,874	138,877	139,891	140,915	141,949	142,994	144,315	145,648	146,994	148,352

INVENTORY SUMMARY (\$000)

Buildings	\$34,945.8	\$34,945.8	\$34,945.8	\$34,945.8	\$34,945.8	\$35,013.8	\$35,013.8	\$35,013.8	\$35,205.0	\$35,205.0
Land	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,734.8	\$4,735.0	\$4,735.0
Furniture & Equipment	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fleet & Equipment	\$22,373.0	\$24,168.0	\$22,503.7	\$22,503.7	\$22,503.7	\$22,503.7	\$23,924.6	\$23,924.6	\$24,774.4	\$24,816.2
Total (\$000)	\$62,053.6	\$63,848.6	\$62,184.3	\$62,184.3	\$62,184.3	\$62,252.3	\$63,673.2	\$63,673.2	\$64,714.4	\$64,756.2

SERVICE LEVEL (\$/pop & emp)

Average Service Level

Total (\$/pop & emp)	\$450.07	\$459.75	\$444.52	\$441.29	\$438.07	\$435.35	\$441.21	\$437.17	\$440.25	\$436.50	\$442.42
Fleet & Equipment	\$162.27	\$174.02	\$160.87	\$159.70	\$158.53	\$157.38	\$165.78	\$164.26	\$168.54	\$167.28	\$163.86
Furniture & Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land	\$34.34	\$34.09	\$33.85	\$33.60	\$33.36	\$33.11	\$32.81	\$32.51	\$32.21	\$31.92	\$33.18
Buildings	\$253.46	\$251.63	\$249.81	\$247.99	\$246.19	\$244.86	\$242.62	\$240.40	\$239.50	\$237.31	\$245.38

CITY OF BRANTFORD
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS: BUILDINGS & FLEET

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2011 - 2020	\$442.42
Net Population & Employment Growth 2021 - 2030	23,249
Maximum Allowable Funding Envelope	\$10,285,823



APPENDIX C.1.2 TABLE 2

CITY OF BRANTFORD DEVELOPMENT-RELATED CAPITAL PROGRAM PUBLIC WORKS: BUILDINGS & FLEET

	Timing	Gross	Grants/	Net	Ineligible Costs	Total		Deve	lopment-Related	d Costs
Project Description		Project Cost	Subsidies/Other Recoveries	Municipal Cost	Replacement & BTE Shares	Developm Related C		Available DC Shares /	2021- 2030	Other Development-
		Cost	Recoveries	Cost	& BTE Shares	Related C		Prior Growth	2030	Related
1.2 PUBLIC WORKS: BUILDINGS & FLEET										
1.2.1 Fleet and Equipment 1.2.1.1 Fleet Expansion for Environmental Services (Compliance - W/WW/STM) 1.2.1.2 New Vehicle and Equipment Acquisitions Subtotal Fleet and Equipment	2022 2021	\$ 80,000 \$ 2,000,000 \$ 2,080,000	\$ -	\$ 72,000 \$ 2,000,000 \$ 2,072,000	0% 0% \$ \$	\$ 2,000	,000 ,000 ,000 \$	298,962	\$ 72,000 \$ 1,701,038 \$ 1,773,038	\$ -
1.2.2 Technical Studies 1.2.2.1 Accommodation Strategy Phase 2 Building and Yard renovations 1.2.2.2 WTP Yard and Storage Facility Study Subtotal Technical Studies	Various 2021	\$ 13,950,000 \$ 75,000 \$ 14,025,000	\$ -	\$ 13,950,000 \$ 75,000 \$ 14,025,000	95% \$ 13,252, 86% \$ 64, \$ 13,317,	39 \$ 10	,500 \$,161 \$,661 \$		\$ 697,500 \$ 10,161 \$ 707,661	\$ -
TOTAL PUBLIC WORKS: BUILDINGS & FLEET		\$ 16,105,000	\$ 8,000	\$ 16,097,000	\$ 13,317,3	39 \$ 2,779	661 \$	298,962	\$ 2,480,699	\$ -

Residential Development Charge Calculation Residential Share of 2021-2030 Discounted Development-Related Capital Program 10 Year Growth in Population in New Units Unadjusted Development Charge Per Capita (\$)	71%	\$1,761,296 20,851 \$84.47
Non-Residential Development Charge Calculation Non-Res Share of 2021-2030 Discounted Development-Related Capital Program 10 Year Growth in Square Metres Unadjusted Development Charge Per sq. m (\$)	29%	\$719,403 493,926 \$1.46

2021 - 2030 Net Funding Envelope	\$10,285,823
Available DC Shares Reserve Fund Balance at end of 2020	\$298,962



APPENDIX C.1.2 TABLE 3 - PAGE 1

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC WORKS: BUILDINGS & FLEET RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

PUBLIC WORKS: BUILDINGS & FLEET	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$1,203.18)	(\$1,189.02)	(\$1,114.23)	(\$1,028.03)	(\$929.72)	(\$817.92)	(\$643.81)	(\$448.95)	(\$231.70)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENT	S										
- Public Works: Buildings & Fleet: Non Inflated	\$1,264.5	\$100.6	\$49.5	\$49.5	\$49.5	\$49.5	\$49.5	\$49.5	\$49.5	\$49.5	\$1,761.3
- Public Works: Buildings & Fleet: Inflated	\$1,264.5	\$102.7	\$51.5	\$52.6	\$53.6	\$54.7	\$55.8	\$56.9	\$58.0	\$59.2	\$1,809.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	20,851
REVENUE											
- DC Receipts: Inflated	\$93.5	\$181.6	\$189.3	\$197.5	\$205.8	\$214.8	\$271.1	\$283.2	\$295.8	\$308.8	\$2,241.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$66.2)	(\$65.4)	(\$61.3)	(\$56.5)	(\$51.1)	(\$45.0)	(\$35.4)	(\$24.7)	(\$12.7)	(\$418.4)
- Interest on In-year Transactions	(\$32.2)	\$1.4	\$2.4	\$2.5	\$2.7	\$2.8	\$3.8	\$4.0	\$4.2	\$4.4	(\$4.1)
TOTAL REVENUE	\$61.3	\$116.8	\$126.3	\$138.8	\$151.9	\$166.5	\$229.9	\$251.8	\$275.3	\$300.4	\$1,818.9
CLOSING CASH BALANCE	(\$1,203.2)	(\$1,189.0)	(\$1,114.2)	(\$1,028.0)	(\$929.7)	(\$817.9)	(\$643.8)	(\$448.9)	(\$231.7)	\$9.5	

2021 Adjusted Charge Per Capita	\$97

Allocation of Capital Program Residential Sector Non-Residential Sector	71% 29%
Rates for 2021 Inflation Rate: Interest Rate on Positive Balances Interest Rate on Negative Balances	2.0% 3.5% 5.5%



APPENDIX C.1.2 TABLE 3 - PAGE 2

CITY OF BRANTFORD CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC WORKS: BUILDINGS & FLEET NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

PUBLIC WORKS: BUILDINGS & FLEET	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
OPENING CASH BALANCE	\$0.00	(\$476.32)	(\$480.78)	(\$462.29)	(\$440.98)	(\$416.49)	(\$388.86)	(\$305.93)	(\$213.72)	(\$111.51)	
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIRE	MENTS										
- Public Works: Buildings & Fleet: Non Inflated	\$516.5	\$41.1	\$20.2	\$20.2	\$20.2	\$20.2	\$20.2	\$20.2	\$20.2	\$20.2	\$719.4
- Public Works: Buildings & Fleet: Inflated	\$516.5	\$41.9	\$21.0	\$21.5	\$21.9	\$22.3	\$22.8	\$23.2	\$23.7	\$24.2	\$739.0
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	493,926
- Growth in Square Metres	31,400	30,930	37,313	37,010	30,300	30,020	00,237	07,337	00,939	70,444	433,320
REVENUE											
- DC Receipts: Inflated	\$52.9	\$63.3	\$65.2	\$67.4	\$69.8	\$72.0	\$125.3	\$130.4	\$135.7	\$141.4	\$923.4
INTEREST	# 0.0	(#00.0)	(000.4)	(005.4)	(004.0)	(200.0)	(004.4)	(040.0)	(044.0)	(00.4)	(0404.0)
- Interest on Opening Balance	\$0.0	(\$26.2)	(\$26.4)	(\$25.4)	(\$24.3)	(\$22.9)	(\$21.4)	(\$16.8)	(\$11.8)	(\$6.1)	(\$181.3)
- Interest on In-year Transactions	(\$12.7)	\$0.4	\$0.8	\$0.8	\$0.8	\$0.9	\$1.8	\$1.9	\$2.0	\$2.1	(\$1.4)
TOTAL REVENUE	\$40.2	\$37.5	\$39.5	\$42.8	\$46.4	\$50.0	\$105.7	\$115.4	\$125.9	\$137.3	\$740.7
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CLOSING CASH BALANCE	(\$476.3)	(\$480.8)	(\$462.3)	(\$441.0)	(\$416.5)	(\$388.9)	(\$305.9)	(\$213.7)	(\$111.5)	\$1.6	

2021 Adjusted Charge Per Square Metre \$1.68

Allocation of Capital Program	
Residential Sector	71%
Non-Residential Sector	29%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix C.2 City-wide Water Services

City-wide Water Services

The following section sets out the 2021-2051 development-related capital forecast and the calculation of the development charge for City-wide Water services in the City of Brantford. The cost, quantum and description of the projects included in the forecast are based on the City's Master Servicing Plan and consultation with City staff.

The development-related capital program is \$15.42 million and provides for two water treatment plant upgrades as well as the Water share of future Master Servicing Plan updates.

Replacement or benefit to existing shares include \$185,800 attributed to the 0-5 year water treatment plant upgrade. Another \$4.19 million will be funded through the existing reserve fund balance. The result is a development-related and development charge recoverable share of the capital program of \$11.05 million.

The development-related cost has been allocated 72 per cent (\$7.96 million) to new residential development and 28 per cent (\$3.09 million) to new non-residential development. The residential share is divided by the anticipated City-wide growth in population in new units between 2021 and 2051 (73,500), which yields an unadjusted development charge of \$108.19 per capita. The non-residential share, when divided by the anticipated increase in square metres of new non-residential space (2.43 million) yields an unadjusted DC of \$1.27 per square metre.

The residential and non-residential cash flow analysis is shown in Table 3. The analysis takes into consideration expenditure timing and DC revenue projections. After cash flow considerations, the residential and non-residential charges increase to \$135 per capita and \$1.69 per square metre, respectively.

WATER SERVICES SUMMARY

2021 - 2051 Development-Related Capital Program Net DC Recoverable Total

\$15,422,000 \$11,050,013

Unadjusted Development Charge \$/capita \$/sq.m \$108.19 \$1.27

Adjusted **Development Charge** \$/capita \$/sq.m \$135 \$1.69

APPENDIX C.2 TABLE 1

CITY OF BRANTFORD CITY-WIDE

WATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

			Anticipated	Anticipated Gross		Grants/		Net		Ineligible Costs			Total		Dev		velopment-Related		Costs	
	Projec	t Description	Timing		Project	Sub	sidies/Other		Municipal	Rep	lace	ment	Development		Available		2021-		Other	
					Cost	F	Recoveries		Cost	& B	TE S	hares	Related Costs		DC Shares /		2051		Developmen	
															Pi	rior Growth			Re	elated
2.0	WATE	R SERVICES																		
2.1	Storag	ge and Treatment																		
	2.1.1	Water Treatment Plant Upgrades - 0-5 Years	2021 - 2025	\$	929,000	\$	-	\$	929,000	20%	\$	185,800	\$	743,200	\$	743,200	\$	-	\$	-
	2.1.2	Water Treatment Plant Upgrades - 5-10 Years	2026 - 2031	\$	12,993,000	\$		\$	12,993,000	0%	\$	-	\$	12,993,000	\$	3,442,987	\$	9,550,013	\$	-
		Subtotal Storage And Treatment		\$	13,922,000	\$	-	\$	13,922,000		\$	185,800	\$	13,736,200	\$	4,186,187	\$	9,550,013	\$	-
2.2	Growt	h-Related Studies																		
	2.2.1	Master Servicing Plan Update	2026 - 2026	\$	300,000	\$	-	\$	300,000	0%	\$	-	\$	300,000	\$	-	\$	300,000	\$	-
	2.2.2	Master Servicing Plan Update	2031 - 2031	\$	300,000	\$	-	\$	300,000	0%	\$	-	\$	300,000	\$	-	\$	300,000	\$	-
	2.2.3	Master Servicing Plan Update	2036 - 2036	\$	300,000	\$	-	\$	300,000	0%	\$	-	\$	300,000	\$	-	\$	300,000	\$	-
	2.2.4	Master Servicing Plan Update	2041 - 2041	\$	300,000	\$	-	\$	300,000	0%	\$	-	\$	300,000	\$	-	\$	300,000	\$	-
	2.2.5	Master Servicing Plan Update	2046 - 2046	\$	300,000	\$	-	\$	300,000	0%	\$	-	\$	300,000	\$	-	\$	300,000	\$	-
		Subtotal Growth-Related Studies		\$	1,500,000	\$	-	\$	1,500,000		\$	-	\$	1,500,000	\$	-	\$	1,500,000	\$	-
TOT	٩L			\$	15,422,000	\$	-	\$	15,422,000		\$	185,800			\$	4,186,187	\$	11,050,013	\$	-

Available DC Shares

Reserve Fund Balance at end of 2020

\$4,186,187



APPENDIX C.2 TABLE 2

CITY OF BRANTFORD CITY-WIDE SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WATER

Growth in Population in New Units 2021-2051	73,534
Employment Growth in New Space 2021-2051	28,419
Growth in New Building Space (Square Metres) 2021-2051	2,430,622

					Growth-Related	Ca	oital Forecast														
		Gross		Grants/	Replacement/		Available		Other	2021-2051											
		Project	Cost Recov		=		ject Sub		Benefit to		DC Shares /		Development-		DC	Residential		ential	Non-Resid		idential
		Cost					Existing		Prior Growth		Related		Share	Share		are	Share		are		
		(\$000)			(\$000)		(\$000)		(\$000)	(\$000)		%		\$000	%		\$000				
WATER																					
	Storage and Treatment	\$ 13,922.00	\$	-	\$ 185.80	\$	4,186.19	\$	=	\$	9,550.01	72%	\$	6,876.01	28%	\$	2,674.00				
	Growth-Related Studies	\$ 1,500.00	\$	-	\$ -	\$	-	\$	-	\$	1,500.00	72%	\$	1,080.00	28%	\$	420.00				
TOTAL WAT	FER	\$ 15,422.00	\$	-	\$ 185.80	\$	4,186.19	\$	-	\$	11,050.01		\$	7,956.01		\$	3,094.00				
	Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)												\$	108.19		\$	1.27				

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	72%	\$ 7,956,009
2021-2051 Growth in Population in New Units		73,534
Development Charge Per Capita (Unadjusted)		\$ 108.19
Development Charge Per Capita after Cash Flow		\$ 135
Charge per Single Detached Unit	3.43	\$ 463

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	28%	\$ 3,094,004
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		2,430,622
Development Charge Per Square Metre (Unadjusted)		\$ 1.27
Development Charge Per Square Metre After Cash Flow		\$ 1.69



APPENDIX C.2 TABLE 3 - PAGE 1

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	\$132.4	\$394.1	\$676.0	\$979.4	\$1,305.1	\$112.9	(\$821.6)	(\$1,814.3)	(\$2,870.7)	(\$3,994.2)	(\$5,457.7)	(\$5,318.6)	(\$5,153.9)	(\$4,961.2)	(\$4,738.2)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$1,362.0 \$1,503.8	\$1,146.0 \$1,290.6	\$1,146.0 \$1,316.4	\$1,146.0 \$1,342.7	\$1,146.0 \$1,369.6	\$1,362.0 \$1,660.3	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$216.0 \$290.7
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	2,733	2,572	2,624	2,680	2,736	2,793
REVENUE - DC Receipts: Inflated	\$130.1	\$252.7	\$263.5	\$274.9	\$286.4	\$299.0	\$377.3	\$394.2	\$411.7	\$429.8	\$449.8	\$431.7	\$449.3	\$468.0	\$487.4	\$507.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 \$2.3	\$4.6 \$4.4	\$13.8 \$4.6	\$23.7 \$4.8	\$34.3 \$5.0	\$45.7 (\$33.1)	\$4.0 (\$25.1)	(\$45.2) (\$25.4)	(\$99.8) (\$25.6)	(\$157.9) (\$25.8)	(\$219.7) (\$33.3)	(\$300.2) \$7.6	(\$292.5) \$7.9	(\$283.5) \$8.2	(\$272.9) \$8.5	(\$260.6) \$3.8
TOTAL REVENUE	\$132.4	\$261.8	\$281.9	\$303.4	\$325.7	\$311.5	\$356.1	\$323.7	\$286.3	\$246.1	\$196.8	\$139.1	\$164.6	\$192.7	\$223.1	\$250.7
CLOSING CASH BALANCE	\$132.4	\$394.1	\$676.0	\$979.4	\$1,305.1	\$112.9	(\$821.6)	(\$1,814.3)	(\$2,870.7)	(\$3,994.2)	(\$5,457.7)	(\$5,318.6)	(\$5,153.9)	(\$4,961.2)	(\$4,738.2)	(\$4,778.2)

WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$4,778.2)	(\$4,562.0)	(\$4,315.2)	(\$4,035.2)	(\$3,720.0)	(\$3,693.6)	(\$3,425.9)	(\$3,126.7)	(\$2,794.4)	(\$2,425.8)	(\$2,380.3)	(\$1,987.1)	(\$1,554.1)	(\$1,078.7)	(\$559.0)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$216.0 \$321.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$216.0 \$354.4	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	7,956.0 9,449.4
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	2,540	2,588	2,637	2,684	2,732	2,262	2,296	2,328	2,364	2,394	2,280	2,313	2,345	2,374	2,408	73,534
REVENUE - DC Receipts: Inflated	\$470.7	\$489.2	\$508.4	\$527.9	\$548.0	\$462.8	\$479.2	\$495.6	\$513.3	\$530.2	\$515.1	\$533.0	\$551.2	\$569.1	\$588.8	13,695.80
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$262.8) \$8.2	(\$250.9) \$8.6	(\$237.3) \$8.9	(\$221.9) \$9.2	(\$204.6) \$4.0	(\$203.1) \$8.1	(\$188.4) \$8.4	(\$172.0) \$8.7	(\$153.7) \$9.0	(\$133.4) \$3.1	(\$130.9) \$9.0	(\$109.3) \$9.3	(\$85.5) \$9.6	(\$59.3) \$10.0	(\$30.7) \$10.3	(4,250.2) 13.1
TOTAL REVENUE	\$216.1	\$246.8	\$280.0	\$315.2	\$347.4	\$267.8	\$299.2	\$332.3	\$368.6	\$399.9	\$393.2	\$433.0	\$475.4	\$519.7	\$568.4	9,458.7
CLOSING CASH BALANCE	(\$4,562.0)	(\$4,315.2)	(\$4,035.2)	(\$3,720.0)	(\$3,693.6)	(\$3,425.9)	(\$3,126.7)	(\$2,794.4)	(\$2,425.8)	(\$2,380.3)	(\$1,987.1)	(\$1,554.1)	(\$1,078.7)	(\$559.0)	\$9.4	

2021 Adjusted Charge Per Capita \$135

Allocation of Capital Program Residential Sector Non-Residential Sector	72% 28%
Rates for 2021 Inflation Rate Interest Rate on Positive Balances	2.0% 3.5%
Interest Rate on Negative Balances	5.



APPENDIX C.2 TABLE 3 - PAGE 2

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	\$54.1	\$120.8	\$191.8	\$267.5	\$348.3	(\$166.0)	(\$561.2)	(\$983.4)	(\$1,433.8)	(\$1,913.7)	(\$2,530.1)	(\$2,499.0)	(\$2,458.8)	(\$2,408.4)	(\$2,347.4)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$529.7 \$584.8	\$445.7 \$501.9	\$445.7 \$511.9	\$445.7 \$522.2	\$445.7 \$532.6	\$529.7 \$645.7	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$84.0 \$113.1
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	71,929	79,601	81,471	83,423	85,293	87,465
REVENUE - DC Receipts: Inflated	\$53.2	\$63.7	\$65.6	\$67.8	\$70.2	\$72.4	\$126.1	\$131.1	\$136.5	\$142.3	\$148.2	\$167.3	\$174.6	\$182.4	\$190.2	\$198.9
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 \$0.9	\$1.9 \$1.1	\$4.2 \$1.1	\$6.7 \$1.2	\$9.4 \$1.2	\$12.2 (\$14.1)	(\$9.1) (\$10.3)	(\$30.9) (\$10.5)	(\$54.1) (\$10.6)	(\$78.9) (\$10.7)	(\$105.3) (\$13.7)	(\$139.2) \$2.9	(\$137.4) \$3.1	(\$135.2) \$3.2	(\$132.5) \$3.3	(\$129.1) \$1.5
TOTAL REVENUE	\$54.1	\$66.7	\$71.0	\$75.7	\$80.8	\$70.5	\$106.6	\$89.8	\$71.8	\$52.7	\$29.3	\$31.1	\$40.2	\$50.4	\$61.1	\$71.3
CLOSING CASH BALANCE	\$54.1	\$120.8	\$191.8	\$267.5	\$348.3	(\$166.0)	(\$561.2)	(\$983.4)	(\$1,433.8)	(\$1,913.7)	(\$2,530.1)	(\$2,499.0)	(\$2,458.8)	(\$2,408.4)	(\$2,347.4)	(\$2,389.1)

WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$2,389.1)	(\$2,311.4)	(\$2,220.0)	(\$2,113.3)	(\$1,990.1)	(\$1,976.1)	(\$1,845.9)	(\$1,698.0)	(\$1,531.7)	(\$1,345.1)	(\$1,276.3)	(\$1,069.1)	(\$839.2)	(\$585.0)	(\$304.7)	-
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$84.0 \$124.8	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$84.0 \$137.8	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$3,094.0 \$3,674.7
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	88,591	90,791	93,183	95,575	97,995	91,665	93,809	95,816	97,933	100,297	96,374	98,381	100,306	102,313	104,485	2,430,622
REVENUE - DC Receipts: Inflated	\$205.5	\$214.8	\$224.9	\$235.3	\$246.1	\$234.8	\$245.1	\$255.3	\$266.2	\$278.1	\$272.6	\$283.8	\$295.1	\$307.1	\$319.8	\$5,875.0
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$131.4) \$3.6	(\$127.1) \$3.8	(\$122.1) \$3.9	(\$116.2) \$4.1	(\$109.5) \$2.1	(\$108.7) \$4.1	(\$101.5) \$4.3	(\$93.4) \$4.5	(\$84.2) \$4.7	(\$74.0) \$2.5	(\$70.2) \$4.8	(\$58.8) \$5.0	(\$46.2) \$5.2	(\$32.2) \$5.4	(\$16.8) \$5.6	(\$2,209.4) \$13.1
TOTAL REVENUE	\$77.7	\$91.4	\$106.7	\$123.2	\$138.8	\$130.2	\$147.9	\$166.4	\$186.6	\$206.6	\$207.2	\$230.0	\$254.1	\$280.3	\$308.6	\$3,678.6
CLOSING CASH BALANCE	(\$2,311.4)	(\$2,220.0)	(\$2,113.3)	(\$1,990.1)	(\$1,976.1)	(\$1,845.9)	(\$1,698.0)	(\$1,531.7)	(\$1,345.1)	(\$1,276.3)	(\$1,069.1)	(\$839.2)	(\$585.0)	(\$304.7)	\$3.9	-

2021 Adjusted Charge Per Sq. m \$1.69

Allocation of Capital Program	
Residential Sector	72%
Non-Residential Sector	28%
	2070
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix C.3 City-wide Wastewater Services

City-wide Wastewater Services

The 2021-2051 development-related capital forecast and City-wide development charge for Wastewater Services is set out in this section. The details and timing of the 2021-2051 development-related Wastewater capital program are shown in Table 1. The gross costs included in the program total \$24.95 million, which includes several treatment plant upgrades as well as the Wastewater share of future Master Servicing Plan updates.

No grants, subsidies, or other contributions have been identified. Of the \$24.95 million, \$6.20 million has been identified as replacement or benefit to existing shares and \$4.65 million will be funded through the existing DC reserve balance. Another \$824,200 is deemed to benefit development occurring beyond the 2051 planning horizon. The resulting net- development share eligible for funding through development charges over the 2021-2051 planning period is \$13.26 million.

Table 2 summarizes the capital program and calculation of the unadjusted residential and non-residential development charges for wastewater servicing. The DC eligible share of \$13.26 million has been allocated 72 per cent to new residential development and 28 per cent to non-residential development based on City-wide shares of population in new units and employment growth in new space to 2051.

The residential share of the capital program totals \$9.55 million and, when divided by the forecast growth in population in new units, results in an unadjusted charge of \$129.86 per capita.

The non-residential share, \$3.71 million is applied against the forecast increase in square metres of non-residential floor space by type of development. This yields an unadjusted charge of \$1.53 per square metre.

The residential and non-residential cash flow analysis is shown in Table 3. After cash flow considerations, the residential charge increases to \$143 per capita and the non-residential and non-residential charges increase to \$1.78.

	10/0	CTEMATED CEDVIA	DEC CHIMANA DV		
	WAS	STEWATER SERVIO	LES SUIVIIVIARY		
20)21 - 2051	Unadju	sted	Adju	sted
Development-R	elated Capital Program	Developmer	ıt Charge	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$24,946,000	\$13,263,104	\$129.86	\$1.53	\$143	\$1.78

APPENDIX C.3 TABLE 1

CITY OF BRANTFORD CITY-WIDE

WASTEWATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated	Gross	Grants/	Net	Ineligible Costs	Total	Devel	opment-Related	Costs
	Project Description	Timing	Project	Subsidies/Othe	r Municipal	Replacement	Development	Available	2021-	Other
			Cost	Recoveries	Cost	& BTE Shares	Related Costs	DC Shares /	2051	Development-
								Prior Growth		Related
3.0	WASTEWATER SERVICES									
3.1	Treatment									
	3.1.1 Wastewater Treatment Plant Upgrades - 0-5 Years	2021 - 2026	\$ 7,575,000	\$ -	\$ 7,575,000	40% \$ 3,030,000	\$ 4,545,000	\$ 4,545,000	\$ -	\$ -
	3.1.2 Wastewater Treatment Plant Upgrades - 5-10 Years	2026 - 2031	\$ 5,568,000	\$ -	\$ 5,568,000	20% \$ 1,113,600	\$ 4,454,400	\$ -	\$ 4,454,400	\$ -
	3.1.3 Wastewater Treatment Plant Upgrades - 10-15 Years	2031 - 2041	\$ 10,303,000	\$ -	\$ 10,303,000	20% \$ 2,060,600	\$ 8,242,400	\$ -	\$ 7,418,160	\$ 824,240
	Subtotal Treatment		\$ 23,446,000	\$ -	\$ 23,446,000	\$ 6,204,200	\$ 17,241,800	\$ 4,545,000	\$ 11,872,560	\$ 824,240
3.2	Growth-Related Studies									
	3.2.1 Master Servicing Plan Update	2026 - 2026	\$ 300,000	\$ -	\$ 300,000	0% \$ -	\$ 300,000	\$ 109,456	\$ 190,544	\$ -
	3.2.2 Master Servicing Plan Update	2031 - 2031	\$ 300,000	\$ -	\$ 300,000	0% \$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
	3.2.3 Master Servicing Plan Update	2036 - 2036	\$ 300,000	\$ -	\$ 300,000	0% \$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
	3.2.4 Master Servicing Plan Update	2041 - 2041	\$ 300,000	\$ -	\$ 300,000	0% \$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
	3.2.5 Master Servicing Plan Update	2046 - 2046	\$ 300,000	\$ -	\$ 300,000	0% \$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
	Subtotal Growth-Related Studies		\$ 1,500,000	\$ -	\$ 1,500,000	\$ -	\$ 1,500,000	\$ 109,456	\$ 1,390,544	\$ -
TOTA			\$ 24,946,000	\$ -	\$ 24,946,000	\$ 6,204,200	\$ 18,741,800	\$ 4,654,456	\$ 13,263,104	\$ 824,240

Available DC Shares

Reserve Fund Balance at end of 2020

\$4,654,456



APPENDIX C.3 TABLE 2

CITY OF BRANTFORD CITY-WIDE SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WASTEWATER SERVICES

Growth in Population in New Units 2021-2051	73,534
Employment Growth in New Space 2021-2051	28,419
Growth in New Building Space (Square Metres) 2021-2051	2,430,622

				(Growth-Related	Сар	ital Forecast									
	Gross		Grants/	R	eplacement/		Available		Other	2021-2051						
	Project	Su	ubsidies/Other		Benefit to		DC Shares /	D	evelopment-	DC		Resi	dential	N	on-Re	sidential
	Cost		Recoveries		Existing	-	Prior Growth		Related	Share		SI	nare		Sh	are
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	(\$000)	%		\$000	%		\$000
WASTEWATER SERVICES Treatment	\$ 23,446.00		-	\$	6,204.20		4,545.00		824.24	11,872.56	72%	\$	8,548.24	28%		3,324.32
Growth-Related Studies	\$ 1,500.00		-	\$	-	\$	109.46		-	\$ 1,390.54	72%	\$	1,001.19	28%	\$	389.35
TOTAL WASTEWATER SERVICES	\$ 24,946.00	\$	-	\$	6,204.20	\$	4,654.46	\$	824.24	\$ 13,263.10		\$	9,549.43		\$	3,713.67
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)												\$	129.86		\$	1.53

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	72%	\$ 9,549,435
2021-2051 Growth in Population in New Units		73,534
Development Charge Per Capita (Unadjusted)		\$ 129.86
Development Charge Per Capita after Cash Flow		\$ 143
Charge per Single Detached Unit	3.43	\$ 491

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	28%	\$ 3,713,669
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		2,430,622
Development Charge Per Square Metre (Unadjusted)		\$ 1.53
Development Charge Per Square Metre After Cash Flow		\$ 1.78



APPENDIX C.3 TABLE 3 - PAGE 1

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	\$140.3	\$417.6	\$716.2	\$1,037.6	\$1,382.6	\$994.4	\$821.3	\$648.3	\$475.6	\$303.6	(\$744.4)	(\$935.8)	(\$1,131.0)	(\$1,329.2)	(\$1,530.2)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$671.7 \$741.6	\$534.5 \$602.0	\$534.5 \$614.0	\$534.5 \$626.3	\$534.5 \$638.8	\$1,236.1 \$1,506.8	\$485.6 \$603.7	\$485.6 \$615.8	\$485.6 \$628.1	\$485.6 \$640.7	\$701.6 \$944.2
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	2,733	2,572	2,624	2,680	2,736	2,793
REVENUE - DC Receipts: Inflated	\$137.9	\$267.7	\$279.1	\$291.2	\$303.4	\$316.7	\$399.7	\$417.6	\$436.1	\$455.3	\$476.4	\$457.3	\$475.9	\$495.8	\$516.2	\$537.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 \$2.4	\$4.9 \$4.7	\$14.6 \$4.9	\$25.1 \$5.1	\$36.3 \$5.3	\$48.4 (\$11.7)	\$34.8 (\$5.6)	\$28.7 (\$5.4)	\$22.7 (\$5.2)	\$16.6 (\$5.0)	\$10.6 (\$28.3)	(\$40.9) (\$4.0)	(\$51.5) (\$3.8)	(\$62.2) (\$3.6)	(\$73.1) (\$3.4)	(\$84.2) (\$11.2)
TOTAL REVENUE	\$140.3	\$277.3	\$298.6	\$321.4	\$345.0	\$353.4	\$428.9	\$440.9	\$453.6	\$466.9	\$458.7	\$412.3	\$420.6	\$430.0	\$439.7	\$442.2
CLOSING CASH BALANCE	\$140.3	\$417.6	\$716.2	\$1,037.6	\$1,382.6	\$994.4	\$821.3	\$648.3	\$475.6	\$303.6	(\$744.4)	(\$935.8)	(\$1,131.0)	(\$1,329.2)	(\$1,530.2)	(\$2,032.2)
WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL

WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$2,032.2)	(\$2,316.6)	(\$2,610.2)	(\$2,912.9)	(\$3,225.4)	(\$3,877.5)	(\$3,591.9)	(\$3,272.9)	(\$2,918.7)	(\$2,526.1)	(\$2,454.1)	(\$2,034.0)	(\$1,571.4)	(\$1,063.8)	(\$508.8)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$485.6 \$666.6	\$485.6 \$679.9	\$485.6 \$693.5	\$485.6 \$707.4	\$701.6 \$1,042.5	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$216.0 \$354.4	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	9,549.4 12,306.1
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	2,540	2,588	2,637	2,684	2,732	2,262	2,296	2,328	2,364	2,394	2,280	2,313	2,345	2,374	2,408	73,534
REVENUE - DC Receipts: Inflated	\$498.6	\$518.2	\$538.6	\$559.1	\$580.5	\$490.3	\$507.6	\$525.0	\$543.7	\$561.6	\$545.6	\$564.6	\$583.8	\$602.9	\$623.7	14,507.60
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$111.8) (\$4.6)	(\$127.4) (\$4.4)	(\$143.6) (\$4.3)	(\$160.2) (\$4.1)	(\$177.4) (\$12.7)	(\$213.3) \$8.6	(\$197.6) \$8.9	(\$180.0) \$9.2	(\$160.5) \$9.5	(\$138.9) \$3.6	(\$135.0) \$9.5	(\$111.9) \$9.9	(\$86.4) \$10.2	(\$58.5) \$10.6	(\$28.0) \$10.9	(2,099.5) (4.2)
TOTAL REVENUE	\$382.2	\$386.3	\$390.8	\$394.8	\$390.4	\$285.6	\$318.9	\$354.2	\$392.7	\$426.3	\$420.2	\$462.6	\$507.6	\$554.9	\$606.6	12,403.9
CLOSING CASH BALANCE	(\$2,316.6)	(\$2,610.2)	(\$2,912.9)	(\$3,225.4)	(\$3,877.5)	(\$3,591.9)	(\$3,272.9)	(\$2,918.7)	(\$2,526.1)	(\$2,454.1)	(\$2,034.0)	(\$1,571.4)	(\$1,063.8)	(\$508.8)	\$97.8	

2021 Adjusted Charge Per Capita \$143

 Allocation of Capital Program
 72%

 Residential Sector
 28%

 Non-Residential Sector
 28%

 Rates for 2021
 Inflation Rate
 2.0%

 Interest Rate on Positive Balances
 3.5%

 Interest Rate on Negative Balances
 5.5%



APPENDIX C.3 TABLE 3 - PAGE 2

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	\$57.0	\$127.2	\$202.0	\$281.7	\$366.8	\$161.7	\$63.3	(\$38.0)	(\$142.6)	(\$251.6)	(\$707.2)	(\$806.3)	(\$907.7)	(\$1,011.2)	(\$1,117.1)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$261.2 \$288.4	\$207.9 \$234.1	\$207.9 \$238.8	\$207.9 \$243.6	\$207.9 \$248.4	\$480.7 \$586.0	\$188.8 \$234.8	\$188.8 \$239.5	\$188.8 \$244.3	\$188.8 \$249.2	\$272.8 \$367.2
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	71,929	79,601	81,471	83,423	85,293	87,465
REVENUE - DC Receipts: Inflated	\$56.0	\$67.1	\$69.1	\$71.4	\$73.9	\$76.3	\$132.8	\$138.1	\$143.8	\$149.9	\$156.1	\$176.2	\$183.9	\$192.1	\$200.3	\$209.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 \$1.0	\$2.0 \$1.2	\$4.5 \$1.2	\$7.1 \$1.2	\$9.9 \$1.3	\$12.8 (\$5.8)	\$5.7 (\$2.8)	\$2.2 (\$2.8)	(\$2.1) (\$2.7)	(\$7.8) (\$2.7)	(\$13.8) (\$11.8)	(\$38.9) (\$1.6)	(\$44.3) (\$1.5)	(\$49.9) (\$1.4)	(\$55.6) (\$1.3)	(\$61.4) (\$4.3)
TOTAL REVENUE	\$57.0	\$70.3	\$74.8	\$79.7	\$85.1	\$83.3	\$135.7	\$137.5	\$139.0	\$139.3	\$130.4	\$135.7	\$138.0	\$140.7	\$143.3	\$143.7
CLOSING CASH BALANCE	\$57.0	\$127.2	\$202.0	\$281.7	\$366.8	\$161.7	\$63.3	(\$38.0)	(\$142.6)	(\$251.6)	(\$707.2)	(\$806.3)	(\$907.7)	(\$1,011.2)	(\$1,117.1)	(\$1,340.5)
WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	2037 (\$1,340.5)	2038 (\$1,458.1)	2039 (\$1,577.5)	2040 (\$1,697.9)	2041 (\$1,819.4)	2042 (\$2,069.6)	2043 (\$1,931.8)	2044 (\$1,775.5)	2045 (\$1,599.5)	2046 (\$1,402.2)	2047 (\$1,321.5)	2048 (\$1,102.1)	2049 (\$858.6)	2050 (\$589.4)	2051 (\$292.8)	TOTAL

OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated	(\$1,340.5) \$188.8	(\$1,458.1) \$188.8	(\$1,577.5) \$188.8	(\$1,697.9) \$188.8	(\$1,819.4) \$272.8	(\$2,069.6)	(\$1,931.8) \$0.0	(\$1,775.5) \$0.0	(\$1,599.5) \$0.0	(\$1,402.2) \$84.0	(\$1,321.5) \$0.0	(\$1,102.1) \$0.0	(\$858.6) \$0.0	(\$589.4) \$0.0	(\$292.8)	\$3,713.7
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated NEW NON-RESIDENTIAL DEVELOPMENT	(\$1,340.5) \$188.8 \$259.2	\$1,458.1) \$188.8 \$264.4	\$1,577.5) \$188.8 \$269.7	(\$1,697.9) \$188.8 \$275.1	\$272.8 \$405.4	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	(\$1,402.2) \$84.0 \$137.8	\$0.0 \$0.0	(\$1,102.1) \$0.0 \$0.0	(\$858.6) \$0.0 \$0.0	(\$589.4) \$0.0 \$0.0	(\$292.8) \$0.0 \$0.0	\$3,713.7 \$4,785.7

\$137.8

(\$1,931.8)

\$156.4

(\$1,775.5)

\$176.0

(\$1,599.5)

\$197.3

(\$1,402.2)

\$218.5

(\$1,321.5)

\$219.4

(\$1,102.1)

\$243.5

(\$858.6)

2021 Adjusted Charge Per Sq. m \$1.78

\$141.6

(\$1,458.1)

\$145.1

(\$1,577.5)

\$149.2

(\$1,697.9)

\$153.7

(\$1,819.4)

\$155.1

(\$2,069.6)

TOTAL REVENUE

CLOSING CASH BALANCE

Allocation of Capital Program	
Residential Sector	72%
Non-Residential Sector	28%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

\$269.1

(\$589.4)

\$296.6

(\$292.8)

\$326.7

\$33.9

\$4,819.6



Appendix C.4 City-wide Stormwater Services

City-wide Stormwater Services

The City-wide Stormwater capital program is minimal and includes a Floodplain Stormwater Management Plan at a gross cost of \$200,000. Of this amount, approximately \$81,900 will be funded through the existing reserve balance, leaving \$118,100 to be brought forward to the DC calculation.

As shown in Table 2, the development-related share has been allocated 72 per cent, or \$85,000 to new residential development and 28 per cent, or \$33,100 to new non-residential development.

The residential share is divided by the anticipated City-wide growth in population in new units between 2021 and 2051, which yields an unadjusted development charge of \$1.16 per capita. The non-residential share, when divided by the anticipated increase in square metres of new space, yields an unadjusted development charge of \$0.01 per square metre.

In Table 3, the residential and non-residential cash flow analysis is shown. After cash flow analysis, the residential and non-residential charges are calculated at \$2 per capita and \$0.03 per square metre, respectively.

		STORMWATER S	UMMARY					
2	021 - 2051	Unadju	sted	Adju	sted			
Development-F	Related Capital Program	Developmer	nt Charge	Development Charge				
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m			
\$200,000	\$118,101	\$1.16	\$0.01	\$2	\$0.03			

APPENDIX C.4 TABLE 1

CITY OF BRANTFORD CITY-WIDE

STORMWATER SERVICING DEVELOPMENT-RELATED CAPITAL PROGRAM

	Anticipated	Gros	is	Grants/		Net	Inelig	ible Costs	Total	Devel	opment-Related	d Costs
Project Description	Timing	Proje	ct	Subsidies/Ot	her	Municipal	Repl	acement	Development	Available	2021-	Other
		Cost	t	Recoveries	;	Cost	& BT	E Shares	Related Costs	DC Shares /	2051	Development-
										Prior Growth		Related
4.0 STORMWATER												
4.1 Previous Projects												
4.1.1 Floodplain Stormwater Management Plan	2021 - 2021	\$ 20	00,000	\$ -		\$ 200,000	0%	\$ -	\$ 200,000	\$ 81,899	\$ 118,101	\$ -
Subtotal Previous Projects		\$ 20	00,000	\$ -		\$ 200,000		\$ -	\$ 200,000	\$ 81,899	\$ 118,101	\$ -
STORMWATER GROWTH-RELATED CAPITAL PROGRAM 20:	19-2028	\$ 200,0	00.00	\$ -		\$ 200,000.00		\$ -	\$ 200,000.00	\$ 81,899.00	\$ 118,101.00	\$ -

Available DC Shares

Reserve Fund Balance at end of 2020

\$81,899



APPENDIX C.4 TABLE 2

CITY OF BRANTFORD CITY-WIDE SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES STORMWATER SERVICING

Growth in Population in New Units 2021-2051	73,534
Employment Growth in New Space 2021-2051	28,419
Growth in New Building Space (Square Metres) 2021-2051	2,430,622

					(Growth-Related	d Ca _l	ital Forecast										
		Gross		Grants/	R	eplacement/		Available		Other		2021-2051						
		Cost Reco		bsidies/Other		Benefit to		DC Shares /		Development-		DC	Re	sidenti	al	Nor	ı-Resi	dential
				Recoveries		Existing		Prior Growth		Related		Share	Share			Share		'e
				(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	%		\$000	%		\$000
STORMWATER SERVICING Previous Projects	\$	200.00	\$	-	\$	-	\$	81.90	\$	-	\$	118.10	72%	\$	85.03	28%	\$	33.07
TOTAL STORMWATER SERVICING	\$	200.00	\$	-	\$	-	\$	81.90	\$	-	\$	118.10		\$	85.03		\$	33.07
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)														\$	1.16		\$	0.01

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	72%	\$ 85,033
2021-2051 Growth in Population in New Units		73,534
Development Charge Per Capita (Unadjusted)		\$ 1.16
Development Charge Per Capita after Cash Flow		\$ 2
Charge per Single Detached Unit	3.43	\$ 7

28%	\$	33,068
		2,430,622
	\$	0.01
	\$	0.03
	28%	\$



APPENDIX C.4 TABLE 3 - PAGE 1

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$85.42)	(\$86.35)	(\$87.13)	(\$87.75)	(\$88.31)	(\$88.69)	(\$87.87)	(\$86.80)	(\$85.36)	(\$83.55)	(\$81.33)	(\$79.29)	(\$76.83)	(\$74.04)	(\$70.78)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$85.0 \$85.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,835	1,876	1,919	1,960	2,006	2,482	2,542	2,603	2,664	2,733	2,572	2,624	2,680	2,736	2,793
REVENUE - DC Receipts: Inflated	\$1.9	\$3.7	\$3.9	\$4.1	\$4.2	\$4.4	\$5.6	\$5.8	\$6.1	\$6.4	\$6.7	\$6.4	\$6.7	\$6.9	\$7.2	\$7.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$2.3)	(\$4.7) \$0.1	(\$4.7) \$0.1	(\$4.8) \$0.1	(\$4.8) \$0.1	(\$4.9) \$0.1	(\$4.9) \$0.1	(\$4.8) \$0.1	(\$4.8) \$0.1	(\$4.7) \$0.1	(\$4.6) \$0.1	(\$4.5) \$0.1	(\$4.4) \$0.1	(\$4.2) \$0.1	(\$4.1) \$0.1	(\$3.9) \$0.1
TOTAL REVENUE	(\$0.4)	(\$0.9)	(\$0.8)	(\$0.6)	(\$0.6)	(\$0.4)	\$0.8	\$1.1	\$1.4	\$1.8	\$2.2	\$2.0	\$2.5	\$2.8	\$3.3	\$3.7
CLOSING CASH BALANCE	(\$85.4)	(\$86.4)	(\$87.1)	(\$87.8)	(\$88.3)	(\$88.7)	(\$87.9)	(\$86.8)	(\$85.4)	(\$83.5)	(\$81.3)	(\$79.3)	(\$76.8)	(\$74.0)	(\$70.8)	(\$67.0)

STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$67.0)	(\$63.6)	(\$59.8)	(\$55.4)	(\$50.5)	(\$45.1)	(\$40.5)	(\$35.6)	(\$30.1)	(\$24.0)	(\$17.3)	(\$10.5)	(\$3.0)	\$5.1	\$13.9	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	85.0 85.0
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	2,540	2,588	2,637	2,684	2,732	2,262	2,296	2,328	2,364	2,394	2,280	2,313	2,345	2,374	2,408	73,534
REVENUE - DC Receipts: Inflated	\$7.0	\$7.2	\$7.5	\$7.8	\$8.1	\$6.9	\$7.1	\$7.3	\$7.6	\$7.9	\$7.6	\$7.9	\$8.2	\$8.4	\$8.7	202.70
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$3.7) \$0.1	(\$3.5) \$0.1	(\$3.3) \$0.1	(\$3.0) \$0.1	(\$2.8) \$0.1	(\$2.5) \$0.1	(\$2.2) \$0.1	(\$2.0) \$0.1	(\$1.7) \$0.1	(\$1.3) \$0.1	(\$1.0) \$0.1	(\$0.6) \$0.1	(\$0.2) \$0.1	\$0.2 \$0.1	\$0.5 \$0.2	(95.7) 1.2
TOTAL REVENUE	\$3.4	\$3.8	\$4.3	\$4.9	\$5.5	\$4.5	\$5.0	\$5.5	\$6.1	\$6.7	\$6.8	\$7.5	\$8.2	\$8.7	\$9.3	108.2
CLOSING CASH BALANCE	(\$63.6)	(\$59.8)	(\$55.4)	(\$50.5)	(\$45.1)	(\$40.5)	(\$35.6)	(\$30.1)	(\$24.0)	(\$17.3)	(\$10.5)	(\$3.0)	\$5.1	\$13.9	\$23.2	

2021 Adjusted Charge Per Capita \$2

 Allocation of Capital Program
 72%

 Residential Sector
 28%

 Non-Residential Sector
 28%

 Rates for 2021
 1

 Inflation Rate:
 2.0%

 Interest Rate on Positive Balances
 3.5%

 Interest Rate on Negative Balances
 5.5%



APPENDIX C.4 TABLE 3 - PAGE 2

CITY OF BRANTFORD CITY-WIDE CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$33.05)	(\$33.75)	(\$34.39)	(\$35.06)	(\$35.76)	(\$36.41)	(\$36.17)	(\$35.82)	(\$35.35)	(\$34.75)	(\$34.02)	(\$32.83)	(\$31.49)	(\$29.96)	(\$28.15)
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$33.1 \$33.1	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	36,930	37,315	37,810	38,360	38,828	66,237	67,557	68,959	70,444	71,929	79,601	81,471	83,423	85,293	87,465
REVENUE - DC Receipts: Inflated	\$0.9	\$1.1	\$1.2	\$1.2	\$1.2	\$1.3	\$2.2	\$2.3	\$2.4	\$2.5	\$2.6	\$3.0	\$3.1	\$3.2	\$3.4	\$3.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$0.9)	(\$1.8) \$0.0	(\$1.9) \$0.0	(\$1.9) \$0.0	(\$1.9) \$0.0	(\$2.0) \$0.0	(\$2.0) \$0.0	(\$2.0) \$0.0	(\$2.0) \$0.0	(\$1.9) \$0.0	(\$1.9) \$0.0	(\$1.9) \$0.1	(\$1.8) \$0.1	(\$1.7) \$0.1	(\$1.6) \$0.1	(\$1.5) \$0.1
TOTAL REVENUE	\$0.0	(\$0.7)	(\$0.6)	(\$0.7)	(\$0.7)	(\$0.6)	\$0.2	\$0.4	\$0.5	\$0.6	\$0.7	\$1.2	\$1.3	\$1.5	\$1.8	\$2.0
CLOSING CASH BALANCE	(\$33.1)	(\$33.8)	(\$34.4)	(\$35.1)	(\$35.8)	(\$36.4)	(\$36.2)	(\$35.8)	(\$35.4)	(\$34.8)	(\$34.0)	(\$32.8)	(\$31.5)	(\$30.0)	(\$28.2)	(\$26.1)

STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$26.1)	(\$23.9)	(\$21.4)	(\$18.5)	(\$15.2)	(\$11.6)	(\$7.9)	(\$3.9)	\$0.5	\$5.3	\$10.4	\$15.7	\$21.3	\$27.4	\$33.9	-
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$33.1 \$33.1
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	88,591	90,791	93,183	95,575	97,995	91,665	93,809	95,816	97,933	100,297	96,374	98,381	100,306	102,313	104,485	2,430,622
REVENUE - DC Receipts: Inflated	\$3.6	\$3.8	\$4.0	\$4.2	\$4.4	\$4.2	\$4.4	\$4.5	\$4.7	\$4.9	\$4.8	\$5.0	\$5.2	\$5.5	\$5.7	\$104.0
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$1.4) \$0.1	(\$1.3) \$0.1	(\$1.2) \$0.1	(\$1.0) \$0.1	(\$0.8) \$0.1	(\$0.6) \$0.1	(\$0.4) \$0.1	(\$0.2) \$0.1	\$0.0 \$0.1	\$0.2 \$0.1	\$0.4 \$0.1	\$0.5 \$0.1	\$0.7 \$0.1	\$1.0 \$0.1	\$1.2 \$0.1	(\$30.9) \$0.9
TOTAL REVENUE	\$2.2	\$2.6	\$2.9	\$3.3	\$3.6	\$3.6	\$4.0	\$4.4	\$4.8	\$5.2	\$5.2	\$5.6	\$6.0	\$6.6	\$7.0	\$74.0
CLOSING CASH BALANCE	(\$23.9)	(\$21.4)	(\$18.5)	(\$15.2)	(\$11.6)	(\$7.9)	(\$3.9)	\$0.5	\$5.3	\$10.4	\$15.7	\$21.3	\$27.4	\$33.9	\$40.9	-

2021 Adjusted Charge Per Sq. m \$0.03

Allocation of Capital Program	
Residential Sector	72%
Non-Residential Sector	28%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix D City-wide Excluding ASDC Areas Engineered Services Technical Appendix

City-wide Excluding ASDC Areas Engineered Services Technical Appendix

This appendix provides the detailed analysis undertaken to establish development charge rates for land within the City of Brantford excluding the Northern Boundary Expansion Lands and Tutela Heights area-specific development charge (ASDC) service areas. The development charges calculated in this section are intended to be layered on top of the City-wide charges calculated within Appendix C.

Four engineered services are included:

Appendix D.1 Roads & Related

Appendix D.2 Water Services

Appendix D.3 Wastewater Services

Appendix D.4 Stormwater Services

The basis of the development-related capital program is the City's Master Servicing Plan and Transportation Master Plan as well as discussions with City staff. The projects identified in the capital program are required to service the demands of the anticipated development to occur over the 2021 to 2051 planning period in the City of Brantford excluding the ASDC areas.

The following tables provide details of the projects included in the City-wide Excluding ASDC Areas engineered infrastructure development charge calculations. The content of the tables is as follows:

Table 1: Development Related Capital Program

Table 2: Calculation of Unadjusted Development Charges

Table 3: Residential & Non-Residential Cash Flow Analysis

Allocation of Capital Costs

The projects and costs have been identified and allocated through discussions with City staff. All costs are represented in current (2021) dollars.

The following table summarizes the allocation of the City-wide Excluding ASDC Areas engineered services capital costs (in thousands of dollars):

Service	Gross Cost	Grants / Subsidies / Other	Replacement / Benefit to Existing	Other Development -Related	2021-2051 DC Share	Residential Allocation (77%)	Non- Residential Allocation (23%)
Roads & Related	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water	\$40,832.05	\$7,620.00	\$13,069.17	\$990.09	\$19,152.79	\$14,747.65	\$4,405.14
Wastewater	\$71,982.50	\$0	\$35,632.69	\$354.12	\$35,995,69	\$27,716.68	\$8,279.01
Stormwater	\$112,844.00	\$0	\$68,818.77	\$140.40	\$43,884.83	\$33,791.32	\$10,093.51
Total	\$225,658.55	\$7,620.00	\$117,520.63	\$1,484.61	\$99,033.31	\$76,255.65	\$22,777.66

The City-wide Excluding ASDC Areas engineered services capital program totals \$225.66 million. Of this amount:

- \$7.62 (3 per cent) has been identified in direct developer contributions;
- \$117.52 million (52 per cent) is identified as replacement share, or benefit to the existing community and has thus been excluded from the development charge calculation; and
- \$1.48 million (less than 1 per cent) is identified in "other development-related" costs. Through discussions with City engineering staff, this share of the capital projects has been identified to serve development beyond the 2051 planning horizon and is removed from the development charges calculation.

After accounting for these deductions, the remaining \$99.03 million (44 per cent of the gross cost) is to be funded through DCs over the 2021-2051 planning period.

Appendix D.1 City-wide Excluding ASDC Areas Roads and Related

City-wide Excluding ASDC Areas Roads and Related

Through discussions with City engineering staff, area-specific development-related roads needs were identified outside of the Northern Boundary Expansion Lands and Tutela Heights ASDC areas. As such, no Roads and Related area-specific development charges have been calculated.

Appendix D.2 City-wide Excluding ASDC Areas Water Services

City-wide Excluding ASDC Areas Water Services

The following section sets out the 2021-2051 development-related capital forecast and the calculation of the Water services development charge for City-wide Excluding ASDC Areas.

The 2021-2051 Water capital program includes various distribution, storage and treatment infrastructure totalling \$40.83 million. Not all of these costs contribute to the development charges calculation: \$7.62 million in anticipated direct developer contributions is deducted, while benefit-to-existing shares account for a total of \$13.07 million. Of the remaining \$20.14 million, \$990,090 is considered to benefit development beyond the 2051 planning horizon; this share of project costs is to be paid for largely by future development and will be considered under future development charges. After accounting for these deductions, the development-related share of the program that is eligible for recovery through DCs over the 2021 to 2051 planning period amounts to \$19.15 million.

As shown in Table 2, the development-related share has been allocated 77 per cent, or \$14.75 million, to new residential development and 23 per cent, or \$4.41 million, to new non-residential development. The residential share is divided by the anticipated growth in population in new units between 2021 and 2051 in the City of Brantford, less the growth in new units occurring within the two ASDC areas over the same time period. Growth in new units for the area in question is anticipated to be 46,742 which yields an unadjusted development charge of \$315.51 per capita. The non-residential share of \$4.41 million, when divided by the anticipated increase in square metres of new non-residential space (1,140,982) yields an unadjusted DC of \$3.86 per square metre.

In Table 3, the residential and non-residential cash flow analysis is shown. After cash flow analysis, the residential calculated charge increases to \$472 per capita. The adjusted non-residential development charge increases to \$6.10 per square metre.

	,	WATER SERVICES	SUMMARY				
20	21 - 2051	Unadjı	ısted	Adju	sted		
Development-R	Development-Related Capital Program		nt Charge	Development Charge			
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m		
\$40,832,050	\$19,152,790	\$315.51	\$3.86	\$472	\$6.10		

APPENDIX D.2 TABLE 1

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS

WATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated	Gross	Grants/	Net	Inel	igible Costs	Total	Dev	elopment-Related	Related Costs		
	Project Description		Project	Subsidies/Other	Municipal	Re	placement	Development	Available	2021-	Other		
			Cost	Recoveries	Cost	& I	BTE Shares	Related Costs	DC Shares /	2051	Development-		
									Prior Growth		Related		
2.0	WATER SERVICES												
2.1	Distribution												
	2.1.1 Downtown Trunk Watermain	2026 - 2031	\$ 1,782,000	\$ -	\$ 1,782,0	0 40%	\$ 712,800	\$ 1,069,200	\$ -	\$ 1,069,200	\$ -		
	2.1.2 King George Road Watermain	2021 - 2025	\$ 3,484,200	\$ -	\$ 3,484,2	0 40%	\$ 1,393,680	\$ 2,090,520	\$ -	\$ 2,090,520	\$ -		
	2.1.3 Fire Flow Watermain Upgrades	2021 - 2025	\$ 3,818,000	\$ -	\$ 3,818,0	0 50%	\$ 1,909,000	\$ 1,909,000	\$ -	\$ 1,909,000	\$ -		
	2.1.4 Holmedale WTP High Lift Pump Upgrades	2026 - 2031	\$ 2,320,000	\$ -	\$ 2,320,0	0 40%	\$ 928,000	\$ 1,392,000	\$ -	\$ 1,392,000	\$ -		
	2.1.5 Colborne Street West Booster Pumping Station	2026 - 2031	\$ 5,564,000	\$ 5,564,000	\$ -	20%	\$ -	\$ -	\$ -	\$ -	\$ -		
	2.1.6 Strawberry Hill Booster Pumping Station	2032 - 2041	\$ 2,056,000	\$ 2,056,000	\$ -	20%	\$ -	\$ -	\$ -	\$ -	\$ -		
	2.1.7 Decommissioning of Albion Booster Pumping Station	2026 - 2031	\$ 463,000		\$ 463,0	0 40%	\$ 185,200	\$ 277,800	\$ -	\$ 277,800	\$ -		
	2.1.8 Upsize Fairview Drive/Lynden Road Trunk Watermain	2026 - 2031	\$ 2,987,250	\$ -	\$ 2,987,2	0 20%	\$ 597,450	\$ 2,389,800	\$ -	\$ 2,389,800	\$ -		
	Subtotal Distribution		\$ 22,474,450	\$ 7,620,000	\$ 14,854,4	0	\$ 5,726,130	\$ 9,128,320	\$ -	\$ 9,128,320	\$ -		
2.2	Storage and Treatment												
	2.2.1 Decommissioning of King George ET	2026 - 2031	\$ 929,000	\$ -	\$ 929,0	0 40%	\$ 371,600	\$ 557,400	\$ -	\$ 557,400	\$ -		
	2.2.2 Pressure District 1 Elevated Tank	2021 - 2021	\$ 10,828,000	\$ -	\$ 10,828,0	0 40%	\$ 4,331,200	\$ 6,496,800	\$ -	\$ 6,496,800	\$ -		
	2.2.3 Pressure District 2/3 Elevated Tank	2021 - 2025	\$ 6,600,600	\$ -	\$ 6,600,6	40%	\$ 2,640,240	\$ 3,960,360	\$ -	\$ 2,970,270	\$ 990,090		
	Subtotal Storage And Treatment		\$ 18,357,600	\$ -	\$ 18,357,6	00	\$ 7,343,040	\$ 11,014,560	\$ -	\$ 10,024,470	\$ 990,090		
TOTA			\$ 40,832,050	\$ 7,620,000	\$ 33,212,0	0	\$ 13,069,170	\$ 20,142,880	\$ -	\$ 19,152,790	\$ 990,090		



APPENDIX D.2 TABLE 2

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WATER

Growth in Population in New Units 2021-2051	46,742
Employment Growth in New Space 2021-2051	13,590
Growth in New Building Space (Square Metres) 2021-2051	1,140,982

					Growth-Related	Cap	pital Forecast								
		Gross		Grants/	Replacement/		Available	Other	2021-2051						
		Project	9	Subsidies/Other	Benefit to		DC Shares /	Development-	DC	R	eside	ential	Nor	-Res	idential
		Cost		Recoveries	Existing		Prior Growth	Related	Share		Sha	re		Sha	are
		(\$000)		(\$000)	(\$000)		(\$000)	(\$000)	(\$000)	%		\$000	%		\$000
WATER	Distribution Storage and Treatment	\$ 22,474.45 18,357.60		,	\$ 5,726.13 7,343.04			\$ - 990.09	\$ 9,128.32 10,024.47	77% 77%		7,028.81 7,718.84	23% 23%		2,099.51 2,305.63
TOTAL WAT	TER	\$ 40,832.05	\$	7,620.00	\$ 13,069.17	\$	-	\$ 990.09	\$ 19,152.79		\$ 1	14,747.65		\$	4,405.14
	Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)										\$	315.51		\$	3.86

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	77%	\$ 14,747,648
2021-2051 Growth in Population in New Units		46,742
Development Charge Per Capita (Unadjusted)		\$ 315.51
Development Charge Per Capita after Cash Flow		\$ 423
Charge per Single Detached Unit	3.43	\$ 1,451

Non-Residential Development Charge Calculation							
Non-Residential Share of 2021-2051 DC Eligible Costs	23%	\$	4,405,142				
2021-2051 Growth in Non-Residential Building Space (Sq.M.)			1,140,982				
Development Charge Per Square Metre (Unadjusted)		\$	3.86				
Development Charge Per Square Metre After Cash Flow		\$	8.21				



APPENDIX D.2 TABLE 3 - PAGE 1

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$5,775.5)	(\$6,415.1)	(\$7,315.4)	(\$8,426.0)	(\$9,694.7)	(\$10,751.1)	(\$11,503.5)	(\$12,163.6)	(\$12,725.1)	(\$13,280.4)	(\$13,822.9)	(\$13,565.1)	(\$13,240.3)	(\$12,842.2)	(\$12,363.5)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$6,075.9 \$6,075.9	\$1,073.3 \$1,094.8	\$1,073.3 \$1,116.7	\$1,073.3 \$1,139.0	\$1,073.3 \$1,161.8	\$729.7 \$805.7	\$729.7 \$821.8	\$729.7 \$838.2	\$729.7 \$855.0	\$729.7 \$872.1	\$729.7 \$889.5	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,623	1,189	898	740	569	1,251	1,497	1,737	1,798	1,867	1,705	1,758	1,813	1,870	1,926
REVENUE - DC Receipts: Inflated	\$455.0	\$781.4	\$583.9	\$449.8	\$378.1	\$296.5	\$665.0	\$811.6	\$960.6	\$1,014.2	\$1,074.2	\$1,000.6	\$1,052.4	\$1,107.0	\$1,164.6	\$1,223.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$154.6)	(\$317.7) (\$8.6)	(\$352.8) (\$14.7)	(\$402.3) (\$19.0)	(\$463.4) (\$21.6)	(\$533.2) (\$14.0)	(\$591.3) (\$4.3)	(\$632.7) (\$0.7)	(\$669.0) \$1.8	(\$699.9) \$2.5	(\$730.4) \$3.2	(\$760.3) \$17.5	(\$746.1) \$18.4	(\$728.2) \$19.4	(\$706.3) \$20.4	(\$680.0) \$21.4
TOTAL REVENUE	\$300.4	\$455.1	\$216.4	\$28.5	(\$106.9)	(\$250.7)	\$69.4	\$178.2	\$293.5	\$316.8	\$347.0	\$257.9	\$324.7	\$398.2	\$478.7	\$564.9
CLOSING CASH BALANCE	(\$5,775.5)	(\$6,415.1)	(\$7,315.4)	(\$8,426.0)	(\$9,694.7)	(\$10,751.1)	(\$11,503.5)	(\$12,163.6)	(\$12,725.1)	(\$13,280.4)	(\$13,822.9)	(\$13,565.1)	(\$13,240.3)	(\$12,842.2)	(\$12,363.5)	(\$11,798.6)
				,												
					,											
WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
WATER SERVICES OPENING CASH BALANCE	2037 (\$11,798.6)	2038 (\$11,344.5)	2039 (\$10,811.8)	2040 (\$10,193.1)	2041 (\$9,483.1)	2042 (\$8,673.8)	2043 (\$8,134.7)	2044 (\$7,521.2)	2045 (\$6,828.4)	2046 (\$6,047.6)	2047 (\$5,177.0)	2048 (\$4,326.1)	2049 (\$3,379.5)	2050 (\$2,329.5)	2051 (\$1,172.3)	TOTAL
																TOTAL \$14,747.6 \$15,670.6
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated	(\$11,798.6)	(\$11,344.5)	(\$10,811.8)	(\$10,193.1)	(\$9,483.1)	(\$8,673.8)	(\$8,134.7) \$0.0	(\$7,521.2) \$0.0	(\$6,828.4) \$0.0	(\$6,047.6) \$0.0	(\$5,177.0) \$0.0	(\$4,326.1) \$0.0	(\$3,379.5) \$0.0	(\$2,329.5) \$0.0	(\$1,172.3) \$0.0	\$14,747.6
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated NEW RESIDENTIAL DEVELOPMENT	(\$11,798.6) \$0.0 \$0.0	(\$11,344.5) \$0.0 \$0.0	(\$10,811.8) \$0.0 \$0.0	(\$10,193.1) \$0.0 \$0.0	\$0.0 \$0.0	(\$8,673.8) \$0.0 \$0.0	(\$8,134.7) \$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	(\$6,047.6) \$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$14,747.6 \$15,670.6
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units REVENUE	(\$11,798.6) \$0.0 \$0.0	(\$11,344.5) \$0.0 \$0.0	(\$10,811.8) \$0.0 \$0.0	(\$10,193.1) \$0.0 \$0.0	(\$9,483.1) \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	(\$8,134.7) \$0.0 \$0.0 1,429	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	(\$4,326.1) \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$14,747.6 \$15,670.6 46,742

(\$8,673.8) (\$8,134.7) (\$7,521.2) (\$6,828.4)

(\$6,047.6)

(\$5,177.0)

(\$4,326.1) (\$3,379.5)

2021 Adjusted Charge Per Capita	\$472

(\$11,344.5) (\$10,811.8) (\$10,193.1) (\$9,483.1)

CLOSING CASH BALANCE

Allered and Combal Burning	
Allocation of Capital Program	
Residential Sector	77%
Non-Residential Sector	23%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

(\$2,329.5)

(\$1,172.3)

\$103.8



APPENDIX D.2 TABLE 3 - PAGE 2

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$1,667.4)	(\$1,886.4)	(\$2,135.5)	(\$2,416.2)	(\$2,741.7)	(\$2,988.7)	(\$3,302.4)	(\$3,622.0)	(\$3,939.4)	(\$4,265.6)	(\$4,600.6)	(\$4,620.0)	(\$4,621.2)	(\$4,601.6)	(\$4,560.3)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$1,814.9 \$1,814.9	\$320.6 \$327.0	\$320.6 \$333.6	\$320.6 \$340.2	\$320.6 \$347.0	\$218.0 \$240.7	\$218.0 \$245.5	\$218.0 \$250.4	\$218.0 \$255.4	\$218.0 \$260.5	\$218.0 \$265.7	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	32,640	30,275	28,020	24,170	21,833	14,592	16,572	19,624	21,109	22,594	30,266	32,136	34,088	35,958	38,130
REVENUE - DC Receipts: Inflated	\$192.1	\$203.1	\$192.1	\$181.4	\$159.6	\$147.0	\$100.2	\$116.1	\$140.3	\$153.9	\$168.0	\$229.6	\$248.6	\$269.0	\$289.4	\$313.0
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$44.6)	(\$91.7) (\$3.4)	(\$103.8) (\$3.9)	(\$117.5) (\$4.4)	(\$132.9) (\$5.2)	(\$150.8) (\$2.6)	(\$164.4) (\$4.0)	(\$181.6) (\$3.7)	(\$199.2) (\$3.2)	(\$216.7) (\$2.9)	(\$234.6) (\$2.7)	(\$253.0) \$4.0	(\$254.1) \$4.4	(\$254.2) \$4.7	(\$253.1) \$5.1	(\$250.8) \$5.5
TOTAL REVENUE	\$147.5	\$108.0	\$84.5	\$59.6	\$21.6	(\$6.4)	(\$68.2)	(\$69.2)	(\$62.1)	(\$65.7)	(\$69.3)	(\$19.4)	(\$1.2)	\$19.5	\$41.4	\$67.7
CLOSING CASH BALANCE	(\$1,667.4)	(\$1,886.4)	(\$2,135.5)	(\$2,416.2)	(\$2,741.7)	(\$2,988.7)	(\$3,302.4)	(\$3,622.0)	(\$3,939.4)	(\$4,265.6)	(\$4,600.6)	(\$4,620.0)	(\$4,621.2)	(\$4,601.6)	(\$4,560.3)	(\$4,492.6)
WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL

WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$4,492.6)	(\$4,405.2)	(\$4,287.2)	(\$4,134.4)	(\$3,943.7)	(\$3,711.7)	(\$3,517.6)	(\$3,284.4)	(\$3,010.1)	(\$2,690.5)	(\$2,319.5)	(\$1,958.5)	(\$1,546.6)	(\$1,080.9)	(\$556.4)	-
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$4,405.1 \$4,680.8
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	39,256	41,456	43,848	46,240	48,660	42,330	44,474	46,481	48,598	50,962	47,039	49,046	50,971	52,978	55,150	1,140,982
REVENUE - DC Receipts: Inflated	\$328.7	\$354.1	\$382.0	\$410.9	\$441.1	\$391.4	\$419.4	\$447.1	\$476.8	\$510.0	\$480.2	\$510.7	\$541.3	\$573.9	\$609.4	\$9,980.4
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$247.1) \$5.8	(\$242.3) \$6.2	(\$235.8) \$6.7	(\$227.4) \$7.2	(\$216.9) \$7.7	(\$204.1) \$6.8	(\$193.5) \$7.3	(\$180.6) \$7.8	(\$165.6) \$8.3	(\$148.0) \$8.9	(\$127.6) \$8.4	(\$107.7) \$8.9	(\$85.1) \$9.5	(\$59.4) \$10.0	(\$30.6) \$10.7	(\$5,330.0) \$63.5
TOTAL REVENUE	\$87.4	\$118.0	\$152.9	\$190.7	\$231.9	\$194.1	\$233.3	\$274.3	\$319.6	\$370.9	\$361.0	\$411.9	\$465.7	\$524.5	\$589.5	\$4,713.9
CLOSING CASH BALANCE	(\$4,405.2)	(\$4,287.2)	(\$4,134.4)	(\$3,943.7)	(\$3,711.7)	(\$3,517.6)	(\$3,284.4)	(\$3,010.1)	(\$2,690.5)	(\$2,319.5)	(\$1,958.5)	(\$1,546.6)	(\$1,080.9)	(\$556.4)	\$33.1	-

2021 Adjusted Charge Per Sq. m \$6.10



Appendix D.3 City-wide Excluding ASDC Areas Wastewater Services

City-wide Excluding ASDC Areas Wastewater Services

The 2021-2051 City-wide Excluding ASDC Areas development-related capital forecast and development charge for Wastewater is set out in this section. The details and timing of the 2021-2051 development-related Wastewater capital program are shown in Table 1. The gross costs included in the program total \$71.98 million, which includes various sewage collection and pumping station projects.

No grants, subsidies, or other contributions have been identified. Of the \$71.98 million, \$35.63 million has been identified as replacement or benefit to existing shares and \$354,100 is deemed to benefit development occurring beyond the 2051 planning horizon. The resulting net- development share eligible for funding through development charges over the 2021-2051 planning period is \$36.00 million.

Table 2 summarizes the capital program and calculation of the unadjusted residential and non-residential development charges for wastewater servicing. The DC eligible share of \$36.00 million has been allocated 77 per cent to new residential development and 23 per cent to non-residential development based on shares of population in new units and employment growth in new space to 2051.

The residential share of the capital program totals \$27.72 million and, when divided by the forecast growth in population in new units (46,742), results in an unadjusted charge of \$592.97 per capita.

The non-residential share, \$8.28 million is applied against the forecast increase in square metres of non-residential floor space by type of development (1,140,982 square metres). This yields an unadjusted charge of \$7.26 per square metre.

The residential and non-residential cash flow analysis is shown in Table 3. After cash flow considerations, the residential charge increases to \$842 per capita and the non-residential and non-residential charges increase to \$10.87 respectively.

	WAS	STEWATER SERV	CES SUMMARY		
20	21 - 2051	Unadju	isted	Adju	sted
Development-F	Related Capital Program	Developmer	nt Charge	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$71,982,500	\$35,995,693	\$592.97	\$7.26	\$842	\$10.87

APPENDIX D.3 TABLE 1

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS WASTEWATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated	Gross	Grants/	Net	Ineligible Costs	Total	Devel	opment-Related	d Costs
	Project Description	Timing	Project	Subsidies/Other	Municipal	Replacement	Development	Available	2021-	Other
			Cost	Recoveries	Cost	& BTE Shares	Related Costs	DC Shares /	2051	Development-
								Prior Growth		Related
3.0	WASTEWATER SERVICES									
3.1	Sewage Collection									
	3.1.1 Flow Monitoring	2021 - 2026	\$ 8,423,000	\$ -	\$ 8,423,000	50% \$ 4,211,500	\$ 4,211,500	\$ -	\$ 4,211,500	\$ -
	3.1.2 North Ashgrove Avenue Sewer Upgrades	2026 - 2031	\$ 3,083,000	\$ -	\$ 3,083,000	40% \$ 1,233,200	\$ 1,849,800	\$ -	\$ 1,849,800	\$ -
	3.1.3 Downtown Sewers	2031 - 2041	\$ 6,103,000	\$ -	\$ 6,103,000	40% \$ 2,441,200	\$ 3,661,800	\$ -	\$ 3,661,800	\$ -
	3.1.4 City Wide I&I Program	2021 - 2026	\$ 26,738,000	\$ -	\$ 26,738,000	50% \$ 13,369,000	\$ 13,369,000	\$ -	\$ 13,369,000	\$ -
	3.1.5 Greenwich WWPS I&I Reduction	2021 - 2026	\$ 5,568,000	\$ -	\$ 5,568,000	50% \$ 2,784,000	\$ 2,784,000	\$ -	\$ 2,784,000	\$ -
	3.1.6 Johnson WWPS I&I Reduction	2021 - 2026	\$ 5,568,000	\$ -	\$ 5,568,000	50% \$ 2,784,000	\$ 2,784,000	\$ -	\$ 2,784,000	\$ -
	3.1.7 Henry Street Flow Split Reconfiguration	2021 - 2026	\$ 493,000	\$ -	\$ 493,000	50% \$ 246,500	\$ 246,500	\$ -	\$ 246,500	\$ -
	3.1.8 Summerhayes Crescent Servicing Study	2021 - 2026	\$ 150,000	\$ -	\$ 150,000	100% \$ 150,000	\$ -	\$ -	\$ -	\$ -
	3.1.9 Grand River Avenue Sewer Upgrades	2026 - 2031	\$ 3,653,000	\$ -	\$ 3,653,000	62% \$ 2,257,383	\$ 1,395,617	\$ -	\$ 1,395,617	\$ -
	3.1.10 Mohawk Sewer Upgrades	2041 - 2051	\$ 1,475,500	\$ -	\$ 1,475,500	20% \$ 295,100	\$ 1,180,400	\$ -	\$ 826,280	\$ 354,120
	Subtotal Sewage Collection		\$ 61,254,500	\$ -	\$ 61,254,500	\$ 29,771,883	\$ 31,482,617	\$ -	\$ 31,128,497	\$ 354,120
3.2	Pumping Station									
	3.2.1 Empey Street WWPS Storage Upgrades	2021 - 2026	\$ 2,265,000	\$ -	\$ 2,265,000	50% \$ 1,132,500	\$ 1,132,500	\$ -	\$ 1,132,500	\$ -
	3.2.2 Empey Street WWPS Rehabilitation and Improvements	2021 - 2026	\$ 315,000	\$ -	\$ 315,000	62% \$ 194,655	\$ 120,345	\$ -	\$ 120,345	\$ -
	3.2.3 Fifth Avenue Wastewater Pumping Station Upgrades	2021 - 2026	\$ 3,512,000	\$ -	\$ 3,512,000	50% \$ 1,756,000	\$ 1,756,000	\$ -	\$ 1,756,000	\$ -
	3.2.4 Fifth Avenue WWPS Storage Upgrades	2021 - 2026	\$ 2,134,000	\$ -	\$ 2,134,000	62% \$ 1,318,712	\$ 815,288	\$ -	\$ 815,288	\$ -
	3.2.5 Greenwich Wastewater Pumping Station Rehabilitation and Improvements	2021 - 2026	\$ 900,000	\$ -	\$ 900,000	62% \$ 556,158	\$ 343,842	\$ -	\$ 343,842	\$ -
	3.2.6 St. Andrews WWPS Storage Upgrades	2021 - 2026	\$ 243,000	\$ -	\$ 243,000	62% \$ 150,163	\$ 92,837	\$ -	\$ 92,837	\$ -
	3.2.7 Johnson WWPS Storage Upgrades	2021 - 2026	\$ 559,000	\$ -	\$ 559,000	62% \$ 345,436	\$ 213,564	\$ -	\$ 213,564	\$ -
	3.2.8 Johnson WWPS Rehabilitation	2021 - 2026	\$ 400,000	\$ -	\$ 400,000	62% \$ 247,181	\$ 152,819	\$ -	\$ 152,819	\$ -
	3.2.9 Woodlawn WWPS Rehabilitation	2021 - 2026	\$ 400,000	\$ -	\$ 400,000	40% \$ 160,000	\$ 240,000	\$ -	\$ 240,000	\$ -
	Subtotal Pumping Station		\$ 10,728,000	\$ -	\$ 10,728,000	\$ 5,860,805	\$ 4,867,195	\$ -	\$ 4,867,195	\$ -
TOTAL			\$ 71,982,500	\$ -	\$ 71,982,500	\$ 35,632,687	\$ 36,349,813	\$ -	\$ 35,995,693	\$ 354,120



APPENDIX D.3 TABLE 2

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WASTEWATER SERVICES

Growth in Population in New Units 2021-2051	46,742
Employment Growth in New Space 2021-2051	13,590
Growth in New Building Space (Square Metres) 2021-2051	1,140,982

				(Growth-Related	Сар	ital Forecast										
	Gross		Grants/	R	eplacement/		Available		Other		2021-2051						
	Project	Su	bsidies/Other		Benefit to		DC Shares /	D	evelopment-		DC		Resi	dential	N	on-Re	sidential
	Cost R		Recoveries		Existing	F	Prior Growth		Related	Share		Share			Share		are
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	%		\$000	%		\$000
				•	•			•						•	•	•	·
WASTEWATER SERVICES																	
Sewage Collection	\$ 61,254.50	\$	-	\$	29,771.88	\$	-	\$	354.12	\$	31,128.50	77%	\$	23,968.94	23%	\$	7,159.55
Pumping Station	\$ 10,728.00	\$	-	\$	5,860.80	\$	-	\$	-	\$	4,867.20	77%	\$	3,747.74	23%	\$	1,119.45
TOTAL WASTEWATER SERVICES	\$ 71,982.50	\$	-	\$	35,632.69	\$	-	\$	354.12	\$	35,995.69		\$	27,716.68		\$	8,279.01
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)													\$	592.97		\$	7.26

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	77%	\$ 27,716,683
2021-2051 Growth in Population in New Units		46,742
Development Charge Per Capita (Unadjusted)		\$ 592.97
Development Charge Per Capita after Cash Flow		\$ 754
Charge per Single Detached Unit	3.43	\$ 2,586

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	23%	\$ 8,279,009
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		1,140,982
Development Charge Per Square Metre (Unadjusted)		\$ 7.26
Development Charge Per Square Metre After Cash Flow		\$ 14.65



APPENDIX D.3 TABLE 3 - PAGE 1

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$2,892.7)	(\$5,420.8)	(\$8,526.0)	(\$12,125.3)	(\$16,133.2)	(\$21,064.0)	(\$21,492.9)	(\$21,688.5)	(\$21,634.3)	(\$21,489.7)	(\$21,556.3)	(\$21,250.0)	(\$20,839.4)	(\$20,313.6)	(\$19,661.0)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$3,627.0 \$3,627.0	\$3,627.0 \$3,699.5	\$3,627.0 \$3,773.5	\$3,627.0 \$3,849.0	\$3,627.0 \$3,926.0	\$4,043.5 \$4,464.3	\$416.5 \$469.0	\$416.5 \$478.4	\$416.5 \$488.0	\$416.5 \$497.8	\$672.8 \$820.2	\$256.3 \$318.7	\$256.3 \$325.1	\$256.3 \$331.6	\$256.3 \$338.2	\$256.3 \$345.0
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,623	1,189	898	740	569	1,251	1,497	1,737	1,798	1,867	1,705	1,758	1,813	1,870	1,926
REVENUE - DC Receipts: Inflated	\$811.7	\$1,393.9	\$1,041.6	\$802.4	\$674.4	\$529.0	\$1,186.2	\$1,447.9	\$1,713.6	\$1,809.3	\$1,916.3	\$1,785.0	\$1,877.3	\$1,974.8	\$2,077.6	\$2,182.6
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$77.4)	(\$159.1) (\$63.4)	(\$298.1) (\$75.1)	(\$468.9) (\$83.8)	(\$666.9) (\$89.4)	(\$887.3) (\$108.2)	(\$1,158.5) \$12.6	(\$1,182.1) \$17.0	(\$1,192.9) \$21.4	(\$1,189.9) \$23.0	(\$1,181.9) \$19.2	(\$1,185.6) \$25.7	(\$1,168.7) \$27.2	(\$1,146.2) \$28.8	(\$1,117.2) \$30.4	(\$1,081.4) \$32.2
TOTAL REVENUE	\$734.3	\$1,171.4	\$668.3	\$249.7	(\$81.9)	(\$466.5)	\$40.2	\$282.8	\$542.2	\$642.4	\$753.5	\$625.1	\$735.7	\$857.4	\$990.8	\$1,133.4
CLOSING CASH BALANCE	(\$2,892.7)	(\$5,420.8)	(\$8,526.0)	(\$12,125.3)	(\$16,133.2)	(\$21,064.0)	(\$21,492.9)	(\$21,688.5)	(\$21,634.3)	(\$21,489.7)	(\$21,556.3)	(\$21,250.0)	(\$20,839.4)	(\$20,313.6)	(\$19,661.0)	(\$18,872.6)
WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$18,872.6)	(\$18,300.9)	(\$17,609.3)	(\$16,785.7)	(\$15,822.3)	(\$14,793.3)	(\$13,883.3)	(\$12,845.1)	(\$11,670.7)	(\$10,344.3)	(\$8,863.5)	(\$7,423.7)	(\$5,819.4)	(\$4,037.3)	(\$2,071.0)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$256.3 \$351.9	\$256.3 \$358.9	\$256.3 \$366.1	\$256.3 \$373.4	\$314.2 \$466.8	\$57.8 \$87.7	\$57.8 \$89.4	\$57.8 \$91.2	\$57.8 \$93.0	\$57.8 \$94.9	\$57.8 \$96.8	\$57.8 \$98.7	\$57.8 \$100.7	\$57.8 \$102.7	\$57.8 \$104.8	\$27,716.7 \$30,628.3
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	1,673	1,720	1,769	1,816	1,865	1,396	1,429	1,461	1,497	1,527	1,413	1,445	1,478	1,507	1,541	46,742
REVENUE - DC Receipts: Inflated	\$1,933.8	\$2,027.9	\$2,127.4	\$2,227.6	\$2,333.4	\$1,781.6	\$1,860.2	\$1,939.8	\$2,027.4	\$2,109.4	\$1,990.9	\$2,076.8	\$2,166.7	\$2,253.4	\$2,350.3	\$54,430.2

(\$813.6)

\$29.6

\$997.6

(\$14,793.3) (\$13,883.3) (\$12,845.1) (\$11,670.7)

(\$763.6)

\$31.0

\$1,127.6

(\$706.5)

\$32.4

\$1,265.7

(\$641.9)

\$1,419.4

(\$10,344.3)

\$33.9

(\$568.9)

\$35.3

\$1,575.7

(\$8,863.5)

(\$487.5)

\$1,536.6

(\$7,423.7)

\$33.1

(\$408.3)

\$34.6

\$1,703.1

(\$5,819.4)

2021 Adjusted Charge Per Capita	\$842

(\$1,038.0)

\$27.7

\$923.5

(\$1,006.6)

\$1,050.6

\$29.2

(\$18,300.9) (\$17,609.3) (\$16,785.7) (\$15,822.3)

(\$968.5)

\$30.8

\$1,189.7

(\$923.2)

\$1,336.8

\$32.4

(\$870.2)

\$32.7

\$1,495.8

INTEREST

TOTAL REVENUE

- Interest on Opening Balance

CLOSING CASH BALANCE

- Interest on In-year Transactions

Allocation of Capital Program	
Residential Sector	77%
Non-Residential Sector	23%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

(\$320.1)

\$1,882.8

(\$4,037.3)

\$36.2

(\$222.0)

\$37.6

\$2,069.0

(\$2,071.0)

(\$113.9)

\$2,275.7

\$39.3

\$99.9

(\$23,937.7)

\$30,728.2

\$235.7



APPENDIX D.3 TABLE 3 - PAGE 2

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$761.5)	(\$1,566.9)	(\$2,459.4)	(\$3,443.9)	(\$4,546.1)	(\$5,897.1)	(\$6,182.2)	(\$6,457.2)	(\$6,706.3)	(\$6,947.5)	(\$7,274.2)	(\$7,354.9)	(\$7,407.5)	(\$7,428.0)	(\$7,414.6)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$1,083.4 \$1,083.4	\$1,083.4 \$1,105.1	\$1,083.4 \$1,127.2	\$1,083.4 \$1,149.7	\$1,083.4 \$1,172.7	\$1,207.8 \$1,333.5	\$124.4 \$140.1	\$124.4 \$142.9	\$124.4 \$145.8	\$124.4 \$148.7	\$201.0 \$245.0	\$76.6 \$95.2	\$76.6 \$97.1	\$76.6 \$99.0	\$76.6 \$101.0	\$76.6 \$103.0
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	32,640	30,275	28,020	24,170	21,833	14,592	16,572	19,624	21,109	22,594	30,266	32,136	34,088	35,958	38,130
REVENUE - DC Receipts: Inflated	\$342.3	\$361.9	\$342.4	\$323.2	\$284.4	\$262.0	\$178.6	\$206.9	\$249.9	\$274.2	\$299.4	\$409.1	\$443.0	\$479.3	\$515.7	\$557.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$20.4)	(\$41.9) (\$20.4)	(\$86.2) (\$21.6)	(\$135.3) (\$22.7)	(\$189.4) (\$24.4)	(\$250.0) (\$29.5)	(\$324.3) \$0.7	(\$340.0) \$1.1	(\$355.1) \$1.8	(\$368.8) \$2.2	(\$382.1) \$1.0	(\$400.1) \$5.5	(\$404.5) \$6.1	(\$407.4) \$6.7	(\$408.5) \$7.3	(\$407.8) \$8.0
TOTAL REVENUE	\$321.9	\$299.6	\$234.6	\$165.2	\$70.6	(\$17.5)	(\$145.1)	(\$132.0)	(\$103.4)	(\$92.5)	(\$81.8)	\$14.5	\$44.5	\$78.5	\$114.4	\$158.0
CLOSING CASH BALANCE	(\$761.5)	(\$1,566.9)	(\$2,459.4)	(\$3,443.9)	(\$4,546.1)	(\$5,897.1)	(\$6,182.2)	(\$6,457.2)	(\$6,706.3)	(\$6,947.5)	(\$7,274.2)	(\$7,354.9)	(\$7,407.5)	(\$7,428.0)	(\$7,414.6)	(\$7,359.7)
WASTEWATER SERVICES	2037	2000	2039	2042	0044	2042	2043	2044	20.45	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$7,359.7)	2038 (\$7,275.3)	(\$7,142.5)	2040 (\$6,954.0)	2041 (\$6,705.0)	(\$6,415.9)	(\$6,085.8)	(\$5,687.2)	2045 (\$5,217.1)	(\$4,667.7)	(\$4,028.6)	(\$3,409.0)	(\$2,700.6)	(\$1,898.2)	(\$993.3)	TOTAL
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$76.6 \$105.1	\$76.6 \$107.2	\$76.6 \$109.4	\$76.6 \$111.5	\$93.8 \$139.4	\$17.3 \$26.2	\$17.3 \$26.7	\$17.3 \$27.2	\$17.3 \$27.8	\$17.3 \$28.3	\$17.3 \$28.9	\$17.3 \$29.5	\$17.3 \$30.1	\$17.3 \$30.7	\$17.3 \$31.3	\$8,279.0 \$9,148.7
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	39,256	41,456	43,848	46,240	48,660	42,330	44,474	46,481	48,598	50,962	47,039	49,046	50,971	52,978	55,150	1,140,982
REVENUE - DC Receipts: Inflated	\$585.8	\$631.0	\$680.7	\$732.2	\$786.0	\$697.4	\$747.4	\$796.7	\$849.7	\$908.8	\$855.6	\$910.0	\$964.6	\$1,022.7	\$1,085.9	\$17,784.6
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$404.8) \$8.4	(\$400.1) \$9.2	(\$392.8) \$10.0	(\$382.5) \$10.9	(\$368.8) \$11.3	(\$352.9) \$11.7	(\$334.7) \$12.6	(\$312.8) \$13.5	(\$286.9) \$14.4	(\$256.7) \$15.4	(\$221.6) \$14.5	(\$187.5) \$15.4	(\$148.5) \$16.4	(\$104.4) \$17.4	(\$54.6) \$18.5	(\$8,711.3) \$100.6

\$356.3

(\$6,085.8)

\$425.3

(\$5,687.2)

\$497.4

(\$5,217.1)

\$577.1

(\$4,667.7)

\$667.5

(\$4,028.6)

\$648.5

(\$3,409.0)

\$737.9

(\$2,700.6)

\$428.5

(\$6,415.9)

\$360.6

(\$6,705.0)

2021 Adjusted Charge Per Sq. m \$10.87

\$240.0

(\$7,142.5)

\$297.9

(\$6,954.0)

\$189.4

(\$7,275.3)

 Allocation of Capital Program
 77%

 Residential Sector
 23%

 Rates for 2021
 1

 Inflation Rate
 2.0%

 Interest Rate on Positive Balances
 3.5%

 Interest Rate on Negative Balances
 5.5%

\$832.4

(\$1,898.2)

\$935.7

(\$993.3)

\$1,049.7

\$25.2

\$9,173.9



TOTAL REVENUE

CLOSING CASH BALANCE

Appendix D.4 City-wide Excluding ASDC Areas Stormwater Services

City-wide Excluding ASDC Areas Stormwater Services

The capital program contained herein represents Stormwater projects that are designed to serve the anticipated population and employment growth in the City of Brantford excluding the ASDC areas between 2021 and 2051. As identified through the Master Servicing Plan and discussions with staff, the development-related capital programs include a number of ponds, local upgrades, continuous water quality and flow monitoring and reporting, as well as a variety of studies such as an update to the Subwatershed Studies and Stormwater Master Servicing Plan.

The development-related capital program totals \$112.84 million. Not all of these costs are recoverable through development charges in this area: replacement or benefit to existing shares account for a total of \$68.82 million and \$140,400 in post-period benefiting shares have been identified. After making these deductions, the resulting development-related share of the capital program eligible for recovery over the 2021 to 2051 planning period is \$43.88 million.

As shown in Table 2, the development-related share has been allocated 77 per cent, or \$33.79 million to new residential development and 23 per cent, or \$10.09 million to new non-residential development.

The residential share is divided by the anticipated growth in population in new units between 2021 and 2051 in the City-wide Excluding ASDC area (46,742), which yields an unadjusted development charge of \$722.93 per capita. The non-residential share, when divided by the anticipated increase in square metres of new space (1,140,982), yields an unadjusted development charge of \$8.85 per square metre.

In Table 3, the residential and non-residential cash flow analysis is shown. After cash flow analysis, the residential and non-residential calculated charges increase to \$1,014 per capita and \$13.10 per square metre, respectively.

		STORMWATER	SUMMARY		
20	21 - 2051	Unadju	ısted	Adju	sted
Development-R	elated Capital Program	Developme	nt Charge	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$112,844,000	\$43,884,825	\$722.93	\$8.85	\$1,014	\$13.10

APPENDIX D.4 TABLE 1

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS STORMWATER SERVICING DEVELOPMENT-RELATED CAPITAL PROGRAM

	Anticipated	Gross	Grants/	Net	Ineligible Costs	Total	Deve	lopment-Relate	d Costs
Project Description	Timing	Project	Subsidies/Other	Municipal	Replacement	Development	Available	2021-	Other
		Cost	Recoveries	Cost	& BTE Shares	Related Costs	DC Shares /	2051	Development-
							Prior Growth		Related
4.0 STORMWATER									
4.1 Stormwater Projects									
4.1.1 Homedale Catchment Trunk & Local Upgrades	2021 - 2026	\$ 9,129,000	\$ -	\$ 9,129,000	62% \$ 5,641,294	\$ 3,487,706	\$ -	\$ 3,487,706	\$ -
4.1.2 Eagle Place Catchment Trunk & Local Upgrades	2021 - 2026	\$ 6,336,000	\$ -	\$ 6,336,000	62% \$ 3,915,351	\$ 2,420,649	\$ -	\$ 2,420,649	\$ -
4.1.3 Fairchild Garden Catchment Trunk & Local Upgrades	2021 - 2031	\$ 49,156,000	\$ -	\$ 49,156,000	62% \$ 30,376,102	\$ 18,779,898	\$ -	\$ 18,779,898	\$ -
4.1.4 Grand River Southwest Catchment Local Upgrades	2031 - 2041	\$ 2,449,000	\$ -	\$ 2,449,000	62% \$ 1,513,367	\$ 935,633	\$ -	\$ 935,633	\$ -
4.1.5 Mohawk Lake Downtown Catchment Local Upgrades	2026 - 2031	\$ 17,008,000	\$ -	\$ 17,008,000	62% \$ 10,510,146	\$ 6,497,854	\$ -	\$ 6,497,854	\$ -
4.1.6 Mohawk Lake Downtown Catchment Upgrades	2021 - 2026	\$ 7,180,000	\$ -	\$ 7,180,000	62% \$ 4,436,903	\$ 2,743,097	\$ -	\$ 2,743,097	\$ -
4.1.7 Mohawk Lake Downtown Catchment Upgrades	2021 - 2031	\$ 12,150,000	\$ -	\$ 12,150,000	62% \$ 7,508,130	\$ 4,641,870	\$ -	\$ 4,641,870	\$ -
4.1.8 Fairchild Creek South Catchment Local Upgrades	2031 - 2041	\$ 557,000	\$ -	\$ 557,000	100% \$ 557,000	\$ -	\$ -	\$ -	\$ -
4.1.9 City-Wide Asset Inventory	2021 - 2026	\$ 322,000	\$ -	\$ 322,000	62% \$ 198,981	\$ 123,019	\$ -	\$ 123,019	\$ -
4.1.10 Continuous Water Quality & Flow Monitoring and Reporting	2021 - 2026	\$ 5,910,000	\$ -	\$ 5,910,000	50% \$ 2,955,000	\$ 2,955,000	\$ -	\$ 2,955,000	\$ -
4.1.11 Stormwater Model Update	2021 - 2026	\$ 371,000	\$ -	\$ 371,000	50% \$ 185,500	\$ 185,500	\$ -	\$ 185,500	\$ -
4.1.12 Dike System Outlet Program	2021 - 2026	\$ 439,000	\$ -	\$ 439,000	50% \$ 219,500	\$ 219,500	\$ -	\$ 219,500	\$ -
4.1.13 Update Subwatershed Studies	2021 - 2026	\$ 1,170,000	\$ -	\$ 1,170,000	40% \$ 468,000	\$ 702,000	\$ -	\$ 561,600	\$ 140,400
4.1.14 Climate Change Action Plan and Best Practices Review	2021 - 2026	\$ 117,000	\$ -	\$ 117,000	50% \$ 58,500	\$ 58,500	\$ -	\$ 58,500	\$ -
4.1.15 Stormwater Master Servicing Plan Update	2021 - 2026	\$ 293,000	\$ -	\$ 293,000	50% \$ 146,500	\$ 146,500	\$ -	\$ 146,500	\$ -
4.1.16 Stormwater Rate Review	2021 - 2026	\$ 117,000	\$ -	\$ 117,000	50% \$ 58,500	\$ 58,500	\$ -	\$ 58,500	\$ -
4.1.17 Stormwater Policy Review and Update	2021 - 2026	\$ 140,000	\$ -	\$ 140,000	50% \$ 70,000	\$ 70,000	\$ -	\$ 70,000	\$ -
Subtotal Stormwater Projects		\$ 112,844,000	\$ -	\$ 112,844,000	\$ 68,818,775	\$ 44,025,225	\$ -	\$ 43,884,825	\$ 140,400
STORMWATER GROWTH-RELATED CAPITAL PROGRAM 2019-2028		\$ 112,844,000	\$ -	\$ 112,844,000	\$ 68,818,775	\$ 44,025,225	\$ -	\$ 43,884,825	\$ 140,400



APPENDIX D.4 TABLE 2

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES STORMWATER SERVICING

Growth in Population in New Units 2021-2051	46,742
Employment Growth in New Space 2021-2051	13,590
Growth in New Building Space (Square Metres) 2021-2051	1,140,982

				(Growth-Related	Сар	ital Forecast									
	Gross		Grants/	R	eplacement/		Available		Other	2021-2051						
	Project	Su	bsidies/Other		Benefit to		DC Shares /	D	Development-	DC	Re	sidential		Non	-Resid	ential
	Cost		Recoveries		Existing	-	Prior Growth		Related	Share		Share			Share	;
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	(\$000)	%	\$00	0	%	\$	000
STORMWATER SERVICING																
Stormwater Projects	\$ 112,844.00	\$	-	\$	68,818.77	\$	-	\$	140.40	\$ 43,884.83	77%	\$ 33,7	91.32	23%	\$ 10	,093.51
TOTAL STORMWATER SERVICING	\$ 112,844.00	\$	-	\$	68,818.77	\$	-	\$	140.40	\$ 43,884.83		\$ 33,79	91.32		\$ 10	,093.51
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)												\$ 72	22.93		\$	8.85

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	77%	\$ 33,791,315
2021-2051 Growth in Population in New Units		46,742
Development Charge Per Capita (Unadjusted)		\$ 722.93
Development Charge Per Capita after Cash Flow		\$ 909
Charge per Single Detached Unit	3.43	\$ 3,118

Non-Residential Development Charge Calculation			
Non-Residential Share of 2021-2051 DC Eligible Costs	23%	\$	10,093,510
2021-2051 Growth in Non-Residential Building Space (Sq.M.)			1,140,982
Development Charge Per Square Metre (Unadjusted)		\$	8.85
Development Charge Per Square Metre After Cash Flow		\$	17.66
bevelopment charge i er oquare metre riter cash i low		Ψ	17.00



APPENDIX D.4 TABLE 3 - PAGE 1

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$2,398.34)	(\$4,276.27)	(\$6,762.76)	(\$9,752.83)	(\$13,137.92)	(\$17,908.87)	(\$20,288.04)	(\$22,531.54)	(\$24,628.01)	(\$26,780.98)	(\$29,062.80)	(\$28,556.90)	(\$27,911.68)	(\$27,113.31)	(\$26,146.6
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$3,311.7 \$3,311.7	\$3,311.7 \$3,377.9	\$3,311.7 \$3,445.4	\$3,311.7 \$3,514.4	\$3,311.7 \$3,584.6	\$4,145.5 \$4,577.0	\$2,473.4 \$2,785.5	\$2,473.4 \$2,841.2	\$2,473.4 \$2,898.0	\$2,473.4 \$2,956.0	\$2,538.9 \$3,094.9	\$65.5 \$81.4	\$65.5 \$83.1	\$65.5 \$84.7	\$65.5 \$86.4	\$65. \$88.
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	964	1,623	1,189	898	740	569	1,251	1,497	1,737	1,798	1,867	1,705	1,758	1,813	1,870	1,926
REVENUE - DC Receipts: Inflated	\$977.5	\$1,678.6	\$1,254.4	\$966.3	\$812.2	\$637.0	\$1,428.6	\$1,743.7	\$2,063.7	\$2,178.9	\$2,307.7	\$2,149.6	\$2,260.8	\$2,378.1	\$2,502.0	\$2,628.4
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$64.2)	(\$131.9) (\$46.7)	(\$235.2) (\$60.3)	(\$372.0) (\$70.1)	(\$536.4) (\$76.2)	(\$722.6) (\$108.4)	(\$985.0) (\$37.3)	(\$1,115.8) (\$30.2)	(\$1,239.2) (\$22.9)	(\$1,354.5) (\$21.4)	(\$1,473.0) (\$21.6)	(\$1,598.5) \$36.2	(\$1,570.6) \$38.1	(\$1,535.1) \$40.1	(\$1,491.2) \$42.3	(\$1,438.° \$44.
TOTAL REVENUE	\$913.3	\$1,500.0	\$959.0	\$524.3	\$199.6	(\$193.9)	\$406.3	\$597.7	\$801.5	\$803.0	\$813.1	\$587.3	\$728.3	\$883.1	\$1,053.0	\$1,234.
CLOSING CASH BALANCE	(\$2,398.3)	(\$4,276.3)	(\$6,762.8)	(\$9,752.8)	(\$13,137.9)	(\$17,908.9)	(\$20,288.0)	(\$22,531.5)	(\$24,628.0)	(\$26,781.0)	(\$29,062.8)	(\$28,556.9)	(\$27,911.7)	(\$27,113.3)	(\$26,146.7)	(\$25,000.
STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$25,000.0)	(\$24,097.0)	(\$23,030.8)	(\$21,785.9)	(\$20,351.7)	(\$18,710.8)	(\$17,556.8)	(\$16,243.2)	(\$14,759.5)	(\$13,087.1)	(\$11,222.1)	(\$9,399.8)	(\$7,372.0)	(\$5,122.5)	(\$2,643.1)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$65.5 \$89.9	\$65.5 \$91.7	\$65.5 \$93.5	\$65.5 \$95.4	\$65.5 \$97.3	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$33,791 \$37,278
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	1,673	1,720	1,769	1,816	1,865	1,396	1,429	1,461	1,497	1,527	1,413	1,445	1,478	1,507	1,541	46,7

\$2,145.5

(\$1,029.1)

\$1,154.0

\$37.5

\$2,240.1

(\$965.6)

\$39.2

(\$16,243.2) (\$14,759.5)

\$1,313.7

\$2,336.1

(\$893.4)

\$40.9

\$1,483.6

\$2,441.5

(\$811.8)

\$42.7

(\$13,087.1) (\$11,222.1)

\$1,672.5

\$2,540.3

(\$719.8)

\$44.5

\$1,865.0

\$2,397.6

(\$617.2)

\$1,822.3

(\$9,399.8)

\$42.0

\$2,501.0

(\$517.0)

\$43.8

\$2,027.8

(\$7,372.0)

2021 Adjusted Charge Per Capita \$1,014

\$2,328.8

(\$1,375.0)

\$39.2

\$993.0

(\$24,097.0)

\$2,442.1

(\$1,325.3)

\$1,157.9

\$41.1

\$2,561.9

(\$1,266.7)

\$1,338.4

\$43.2

\$2,682.6

(\$1,198.2)

\$1,529.6

(\$23,030.8) (\$21,785.9) (\$20,351.7) (\$18,710.8) (\$17,556.8)

\$45.3

\$2,810.1

(\$1,119.3)

\$1,738.2

\$47.5

REVENUE - DC Receipts: Inflated

INTEREST

TOTAL REVENUE

- Interest on Opening Balance

CLOSING CASH BALANCE

- Interest on In-year Transactions

Allocation of Capital Program	
Residential Sector	77%
Non-Residential Sector	23%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

\$2,609.3

(\$405.5)

\$45.7

\$2,249.5

(\$5,122.5)

\$2,713.7

(\$281.7)

\$47.5

\$2,479.5

(\$2,643.1)

\$2,830.4

(\$145.4)

\$49.5

\$91.5

\$2,734.6

\$65,548.5

(\$28,470.2)

\$37,369.7

\$291.4



APPENDIX D.4 TABLE 3 - PAGE 2

CITY OF BRANTFORD CITY-WIDE EXCL. ASDC AREAS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$592.55)	(\$1,213.78)	(\$1,914.05)	(\$2,697.72)	(\$3,594.15)	(\$4,872.10)	(\$5,773.75)	(\$6,707.05)	(\$7,655.90)	(\$8,644.61)	(\$9,699.22)	(\$9,755.80)	(\$9,774.37)	(\$9,749.90)	(\$9,680.03)
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$989.2 \$989.2	\$989.2 \$1,009.0	\$989.2 \$1,029.2	\$989.2 \$1,049.7	\$989.2 \$1,070.7	\$1,238.3 \$1,367.2	\$738.8 \$832.0	\$738.8 \$848.7	\$738.8 \$865.6	\$738.8 \$882.9	\$758.4 \$924.5	\$19.6 \$24.3	\$19.6 \$24.8	\$19.6 \$25.3	\$19.6 \$25.8	\$19.6 \$26.3
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	31,486	32,640	30,275	28,020	24,170	21,833	14,592	16,572	19,624	21,109	22,594	30,266	32,136	34,088	35,958	38,130
REVENUE - DC Receipts: Inflated	\$412.5	\$436.1	\$412.6	\$389.5	\$342.7	\$315.8	\$215.3	\$249.4	\$301.2	\$330.5	\$360.8	\$493.0	\$533.9	\$577.7	\$621.5	\$672.3
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$15.9)	(\$32.6) (\$15.8)	(\$66.8) (\$17.0)	(\$105.3) (\$18.2)	(\$148.4) (\$20.0)	(\$197.7) (\$28.9)	(\$268.0) (\$17.0)	(\$317.6) (\$16.5)	(\$368.9) (\$15.5)	(\$421.1) (\$15.2)	(\$475.5) (\$15.5)	(\$533.5) \$8.2	(\$536.6) \$8.9	(\$537.6) \$9.7	(\$536.2) \$10.4	(\$532.4) \$11.3
TOTAL REVENUE	\$396.6	\$387.8	\$328.9	\$266.1	\$174.3	\$89.2	(\$69.6)	(\$84.6)	(\$83.2)	(\$105.8)	(\$130.2)	(\$32.3)	\$6.2	\$49.8	\$95.7	\$151.2
CLOSING CASH BALANCE	(\$592.6)	(\$1,213.8)	(\$1,914.0)	(\$2,697.7)	(\$3,594.2)	(\$4,872.1)	(\$5,773.7)	(\$6,707.0)	(\$7,655.9)	(\$8,644.6)	(\$9,699.2)	(\$9,755.8)	(\$9,774.4)	(\$9,749.9)	(\$9,680.0)	(\$9,555.2)
STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$9,555.2)	(\$9,389.7)	(\$9,160.3)	(\$8,857.8)	(\$8,476.0)	(\$8,008.0)	(\$7,593.2)	(\$7,094.4)	(\$6,507.5)	(\$5,823.5)	(\$5,029.4)	(\$4,256.7)	(\$3,375.0)	(\$2,377.7)	(\$1,254.4)	-
2021 - 2030 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$19.6 \$26.9	\$19.6 \$27.4	\$19.6 \$27.9	\$19.6 \$28.5	\$19.6 \$29.1	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$10,093.5 \$11,135.0
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	39,256	41,456	43,848	46,240	48,660	42,330	44,474	46,481	48,598	50,962	47,039	49,046	50,971	52,978	55,150	1,140,982
REVENUE - DC Receipts: Inflated	\$706.0	\$760.4	\$820.4	\$882.5	\$947.2	\$840.5	\$900.7	\$960.2	\$1,024.0	\$1,095.3	\$1,031.2	\$1,096.7	\$1,162.5	\$1,232.5	\$1,308.6	\$21,433.5

(\$440.4)

\$14.7

\$414.8

(\$7,593.2)

(\$417.6)

\$15.8

\$498.8

(\$7,094.4)

(\$390.2)

\$16.8

\$586.8

(\$6,507.5)

(\$357.9)

\$17.9

\$684.0

(\$5,823.5)

(\$320.3)

\$19.2

\$794.2

(\$5,029.4)

(\$276.6)

\$18.0

\$772.6

(\$4,256.7)

(\$234.1)

\$19.2

\$881.8

(\$3,375.0)

2021 Adjusted Charge Per Sq. m	\$13.10
2021 Adjusted Charge Per Sq. m	\$13.10

(\$525.5)

\$11.9

\$192.4

(\$9,389.7)

(\$516.4)

\$12.8

\$256.8

(\$9,160.3)

(\$503.8)

\$13.9

\$330.5

(\$8,857.8)

(\$487.2)

\$14.9

\$410.3

(\$8,476.0)

(\$466.2)

\$16.1

\$497.1

(\$8,008.0)

Allocation of Capital Program	
Residential Sector	77%
Non-Residential Sector	23%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

(\$185.6)

\$20.3

\$997.2

(\$2,377.7)

(\$130.8)

\$21.6

\$1,123.3

(\$1,254.4)

(\$69.0)

\$22.9

\$8.1

\$1,262.5

(\$10,399.6)

\$11,143.1

\$109.2



INTEREST

TOTAL REVENUE

- Interest on Opening Balance

CLOSING CASH BALANCE

- Interest on In-year Transactions

Appendix E Northern Boundary Expansion Lands Engineered Services Technical Appendix

Northern Boundary Expansion Lands Engineered Services Technical Appendix

This appendix provides the detailed analysis undertaken to establish the area-specific development charge rates for the Northern Boundary Expansion Lands service area. Four area-specific engineered services are included:

Appendix E.1 Roads & Related

Appendix E.2 Water Services

Appendix E.3 Wastewater Services

Appendix E.4 Stormwater Services

The basis of the development-related capital program is the City's Master Servicing Plan and Transportation Master Plan as well as discussions with City staff. The projects identified in the capital program are required to service the demands of the anticipated development in the Northern Boundary Expansion Lands to occur over the planning period of 2021 to 2051.

The following tables provide details of the projects included in the areaspecific engineered infrastructure development charge calculations for the Northern Boundary Expansion Lands. The content of the tables is as follows:

Table 1: Development Related Capital Program

Table 2: Calculation of Unadjusted Development Charges

Table 3: Residential & Non-Residential Cash Flow Analysis

Allocation of Capital Costs

The projects and costs have been identified and allocated through discussions with City staff. All costs are represented in current (2021) dollars.

The following table summarizes the allocation of the Northern Boundary Expansion Lands engineered services capital costs (in thousands of dollars):

Service	Gross Cost	Grants / Subsidies / Other	Replacement / Benefit to Existing	Other Development -Related	2021-2051 DC Share	Residential Allocation (61%)	Non- Residential Allocation (39%)
Roads & Related	\$31,594.05	\$0.00	\$0.00	\$0.00	\$31,594.05	\$19,272.37	\$12,321.68
Water	\$124,559.95	\$524.00	\$27,294.43	\$5,221.53	\$91,519.99	\$55,827.19	\$35,692.80
Wastewater	\$123,352.50	\$0.00	\$24,391.85	\$15,737.16	\$83,223.49	\$50,766.33	\$32,457.16
Stormwater	\$55,219.00	\$0.00	\$32,381.88	\$0.00	\$22,837.12	\$13,930.64	\$8,906.48
Total	\$334,725.50	\$524.00	\$84,068.16	\$20,958.69	\$229,174.65	\$139,796.53	\$89,378.12

The area-specific engineered services capital program totals \$334.73 million. Of this amount:

- \$524,000 (less than 1 per cent) has been identified in direct developer contributions;
- \$84.07 million (25 per cent) is identified as replacement share, or benefit to the existing community and has thus been excluded from the development charge calculation; and
- \$20.96 million (6 per cent) is identified in "Other Development-Related" costs, which are generally attributable to development occurring beyond 2051. Through discussions with City engineering staff, a share of the capital projects has been identified to serve development within the Northern Boundary Expansion Lands beyond the 2051 planning horizon. This share is allocated to post-period development and has also been removed from the development charges calculation.

After accounting for these deductions, the remaining \$229.17 million (68 per cent of the gross cost) is to be funded through the area-specific DCs over the 2021-2051 planning period.

Appendix E.1 Northern Boundary Expansion Lands Roads & Related

Northern Boundary Expansion Lands Roads and Related

The City of Brantford maintains a network of road surfaces, sidewalks, bridges, culverts, and traffic signals. The capital program contained herein, assembled by the City's engineering staff, represents Roads and Related projects that are designed to serve the anticipated population and employment growth within the Northern Boundary Expansion Lands between 2021 and 2051.

The 2021-2051 Roads and Related capital program totals \$31.59 million and includes two segments of a two-lane new east/west road within the Northern Boundary Expansion Lands. The details, timing, and cost breakdown of these road projects are shown in Table 1. No grants, subsidies, or other contributions are anticipated, and the projects are anticipated to be 100% related to new development in the Northern Boundary Expansion Lands. As such, the full amount of \$31.59 million is carried forward to the development charges calculation.

Table 2 summarizes the Roads and Related program and calculation of the unadjusted residential and non-residential development charges. The DC eligible share of \$31.59 million has been allocated 61 per cent to new residential development and 39 per cent to non-residential development. The allocation of costs is based on the future shares of population in new units and employment growth in new space in the Northern Boundary Expansion Lands to 2051. The residential share of the capital program totals \$19.27 million and, when divided by the forecast growth in population in new units (23,055), an unadjusted charge of \$835.93 per capita results. The non-residential share, \$12.32 million is applied against the forecasted 1,284,690 square metres of non-residential floor space and yields an unadjusted charge of \$9.59 per square metre.

The residential and non-residential cash flow analysis is shown in Table 3. The analysis takes into consideration expenditure timing and DC revenue projections. After cash flow considerations, the residential and non-residential charges decrease to \$776 per capita and \$9.17 per square metre, respectively.

	F	ROADS & RELATE	D SUMMARY		
20)21 - 2051	Unadju	ısted	Adju	sted
Development-R	Related Capital Program	Developmer	nt Charge	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$31,594,050	\$31,594,050	\$835.93	\$9.59	\$776	\$9.17

APPENDIX E.1 TABLE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS ROADS & RELATED DEVELOPMENT-RELATED CAPITAL PROGRAM

	Length	Anticipated	Gross	Grants/	Net	Ineligible Cos	ts	Total	Deve	lopment-Related	d Costs
Project Description	(m)	Timing	Project	Subsidies/Other	Municipal	Replacemen	t	Development	Available	2021-	Other
			Cost	Recoveries	Cost	& BTE Share	s	Related Costs	DC Shares /	2051	Development-
									Prior Growth		Related
1.0 ROADS & RELATED											
1.1 Road Projects											
1.1.1 New East/West Road (2 lanes) – Powerline Rd east of Oak Park Rd to King George Rd)	4,200	2032 - 2051	\$ 15,252,300	\$ -	\$ 15,252,300	0% \$	-	\$ 15,252,300	\$ -	\$ 15,252,300	\$ -
1.1.2 New East/West Road (2 lanes – King George Road to East City Boundary)	4,500	2032 - 2051	\$ 16,341,750	\$ -	\$ 16,341,750	0% \$	-	\$ 16,341,750	\$ -	\$ 16,341,750	\$ -
Subtotal Road Projects			\$ 31,594,050	\$ -	\$ 31,594,050	\$	-	\$ 31,594,050	\$ -	\$ 31,594,050	\$ -
TOTAL			\$31,594,050	\$0			\$0	\$31,594,050	\$0	\$31,594,050	\$0



APPENDIX E.1 TABLE 2

CITY OF BRANTFORD

NORTHERN BOUNDARY EXPANSION LANDS

SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES ROADS & RELATED

Growth in Population in New Units 2021-2051	23,055
Employment Growth in New Space 2021-2051	14,739
Growth in New Building Space (Square Metres) 2021-2051	1,284,690

				Gro	wth-Related (Capit	al Forecast										
	Gross		Grants/	Re	eplacement/		Available		Other	2	2021-2051						
	Project	Su	ıbsidies/Other		Benefit to		C Shares /	D	evelopment-		DC	F	Reside	ntial	No	n-Re	sidential
	Cost		Recoveries		Existing	P	rior Growth		Related		Share		Shar	е		Sh	are
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	%		\$000	%		\$000
ROADS & RELATED Road Projects	\$ 31,594.05	\$	-	\$	-	\$	-	\$	-	\$	31,594.05	61%	\$	19,272.37	39%	\$	12,321.68
TOTAL ROADS & RELATED	\$ 31,594.05	\$	-	\$	-	\$	-	\$	-	\$	31,594.05		\$	19,272.37		\$	12,321.68
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)													\$	835.93		\$	9.59

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	61%	\$ 19,272,371
2021-2051 Growth in Population in New Units		23,055
Development Charge Per Capita (Unadjusted)		\$ 835.93
Development Charge Per Capita after Cash Flow		\$ 776
Charge per Single Detached Unit	3.43	\$ 2,662

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	39%	\$ 12,321,680
2021-2051 Growth in Non-Residential Building Space (Sq.N	M.)	1,284,690
Development Charge Per Square Metre (Unadjusted)		\$ 9.59
Development Charge Per Square Metre After Cash Flow		\$ 9.17



APPENDIX E.1 TABLE 3 - PAGE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS & RELATED RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

ROADS & RELATED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	\$0.0	\$116.0	\$607.2	\$1,377.6	\$2,319.8	\$3,447.0	\$4,501.3	\$5,476.1	\$6,360.6	\$7,290.0	\$8,266.1	\$8,066.9	\$7,850.9	\$7,617.4	\$7,365.5
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$963.6 \$1,198.1	\$963.6 \$1,222.1	\$963.6 \$1,246.5	\$963.6 \$1,271.5	\$963.6 \$1,296.9
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	-	144	593	894	1,046	1,200	1,050	901	749	749	749	749	749	749	749	749
REVENUE - DC Receipts: Inflated	\$0.0	\$114.0	\$478.8	\$736.2	\$878.6	\$1,028.1	\$917.6	\$803.1	\$681.0	\$694.6	\$708.5	\$722.7	\$737.1	\$751.9	\$766.9	\$782.3
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 \$0.0	\$0.0 \$2.0	\$4.1 \$8.4	\$21.3 \$12.9	\$48.2 \$15.4	\$81.2 \$18.0	\$120.6 \$16.1	\$157.5 \$14.1	\$191.7 \$11.9	\$222.6 \$12.2	\$255.2 \$12.4	\$289.3 (\$13.1)	\$282.3 (\$13.3)	\$274.8 (\$13.6)	\$266.6 (\$13.9)	\$257.8 (\$14.2)
TOTAL REVENUE	\$0.0	\$116.0	\$491.2	\$770.3	\$942.2	\$1,127.3	\$1,054.3	\$974.7	\$884.6	\$929.4	\$976.0	\$998.9	\$1,006.1	\$1,013.1	\$1,019.6	\$1,025.9
CLOSING CASH BALANCE	\$0.0	\$116.0	\$607.2	\$1,377.6	\$2,319.8	\$3,447.0	\$4,501.3	\$5,476.1	\$6,360.6	\$7,290.0	\$8,266.1	\$8,066.9	\$7,850.9	\$7,617.4	\$7,365.5	\$7,094.6

ROADS & RELATED	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	\$7,094.6	\$6,803.5	\$6,491.5	\$6,157.5	\$5,800.6	\$5,419.8	\$5,013.9	\$4,582.0	\$4,122.8	\$3,635.2	\$3,117.8	\$2,569.4	\$1,988.7	\$1,374.2	\$724.6	-
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated	\$963.6 \$1,322.8	\$963.6 \$1,349.3	\$963.6 \$1,376.3	\$963.6 \$1,403.8	\$963.6 \$1,431.9	\$963.6 \$1,460.5	\$963.6 \$1,489.7	\$963.6 \$1,519.5	\$963.6 \$1,549.9	\$963.6 \$1,580.9	\$963.6 \$1,612.5	\$963.6 \$1,644.8	\$963.6 \$1,677.7	\$963.6 \$1,711.2	\$963.6 \$1,745.5	\$19,272.4 \$29,111.6
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	23,055
REVENUE - DC Receipts: Inflated	\$797.9	\$813.9	\$830.1	\$846.7	\$863.7	\$880.9	\$898.6	\$916.5	\$934.9	\$953.6	\$972.6	\$992.1	\$1,011.9	\$1,032.2	\$1,052.8	\$24,599.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$248.3 (\$14.4)	\$238.1 (\$14.7)	\$227.2 (\$15.0)	\$215.5 (\$15.3)	\$203.0 (\$15.6)	\$189.7 (\$15.9)	\$175.5 (\$16.3)	\$160.4 (\$16.6)	\$144.3 (\$16.9)	\$127.2 (\$17.3)	\$109.1 (\$17.6)	\$89.9 (\$17.9)	\$69.6 (\$18.3)	\$48.1 (\$18.7)	\$25.4 (\$19.0)	\$4,744.6 (\$194.5)
TOTAL REVENUE	\$1,031.8	\$1,037.3	\$1,042.3	\$1,046.9	\$1,051.1	\$1,054.7	\$1,057.8	\$1,060.3	\$1,062.3	\$1,063.6	\$1,064.1	\$1,064.1	\$1,063.2	\$1,061.6	\$1,059.1	\$29,149.9
CLOSING CASH BALANCE	\$6,803.5	\$6,491.5	\$6,157.5	\$5,800.6	\$5,419.8	\$5,013.9	\$4,582.0	\$4,122.8	\$3,635.2	\$3,117.8	\$2,569.4	\$1,988.7	\$1,374.2	\$724.6	\$38.3	-

2021 Adjusted Charge Per Capita \$776

 Allocation of Capital Program
 61%

 Residential Sector
 39%

 Rates for 2021
 50%

 Inflation Rate
 2.0%

 Interest Rate on Positive Balances
 3.5%

 Interest Rate on Negative Balances
 5.5%



APPENDIX E.1 TABLE 3 - PAGE 2

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

ROADS & RELATED NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

ROADS & RELATED	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	\$0.0	\$40.8	\$110.6	\$211.4	\$359.4	\$542.5	\$1,101.2	\$1,684.5	\$2,281.0	\$2,909.1	\$3,570.2	\$3,484.0	\$3,390.7	\$3,289.8	\$3,180.9
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$616.1	\$616.1	\$616.1	\$616.1	\$616.1
- Roads and Related: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$766.0	\$781.3	\$797.0	\$812.9	\$829.2
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	_	4,290	7,040	9,790	13,915	16,555	51,370	50,820	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170
REVENUE																
- DC Receipts: Inflated	\$0.0	\$40.1	\$67.2	\$95.3	\$138.1	\$167.6	\$530.5	\$535.3	\$528.3	\$538.9	\$549.6	\$560.6	\$571.8	\$583.3	\$594.9	\$606.8
INTEREST																
- Interest on Opening Balance - Interest on In-year Transactions	\$0.0 \$0.0	\$0.0 \$0.7	\$1.4 \$1.2	\$3.9 \$1.7	\$7.4 \$2.4	\$12.6 \$2.9	\$19.0 \$9.3	\$38.5 \$9.4	\$59.0 \$9.2	\$79.8 \$9.4	\$101.8 \$9.6	\$125.0 (\$5.6)	\$121.9 (\$5.8)	\$118.7 (\$5.9)	\$115.1 (\$6.0)	\$111.3 (\$6.1)
TOTAL REVENUE	\$0.0	\$40.8	\$69.8	\$100.8	\$147.9	\$183.1	\$558.8	\$583.2	\$596.5	\$628.2	\$661.0	\$679.9	\$688.0	\$696.1	\$704.0	\$712.0
CLOSING CASH BALANCE	\$0.0	\$40.8	\$110.6	\$211.4	\$359.4	\$542.5	\$1,101.2	\$1,684.5	\$2,281.0	\$2,909.1	\$3,570.2	\$3,484.0	\$3,390.7	\$3,289.8	\$3,180.9	\$3,063.8
ROADS & RELATED	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
ROADS & RELATED OPENING CASH BALANCE	2037 \$3,063.8	2038 \$2,938.0	2039 \$2,803.2	2040 \$2,658.9	2041 \$2,504.8	2042 \$2,340.2	2043 \$2,164.9	2044 \$1,978.3	2045 \$1,779.8	2046 \$1,569.1	2047 \$1,345.5	2048 \$1,108.5	2049 \$857.6	2050 \$592.1	2051 \$311.4	TOTAL -
																TOTAL -
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated	\$3,063.8 \$616.1	\$2,938.0 \$616.1	\$2,803.2 \$616.1	\$2,658.9 \$616.1	\$2,504.8 \$616.1	\$2,340.2 \$616.1	\$2,164.9 \$616.1	\$1,978.3 \$616.1	\$1,779.8 \$616.1	\$1,569.1 \$616.1	\$1,345.5 \$616.1	\$1,108.5 \$616.1	\$857.6 \$616.1	\$592.1 \$616.1	\$311.4 \$616.1	\$12,321.7
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated	\$3,063.8	\$2,938.0	\$2,803.2	\$2,658.9	\$2,504.8	\$2,340.2	\$2,164.9	\$1,978.3	\$1,779.8	\$1,569.1	\$1,345.5	\$1,108.5	\$857.6	\$592.1	\$311.4	-
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated	\$3,063.8 \$616.1	\$2,938.0 \$616.1	\$2,803.2 \$616.1	\$2,658.9 \$616.1	\$2,504.8 \$616.1	\$2,340.2 \$616.1	\$2,164.9 \$616.1	\$1,978.3 \$616.1	\$1,779.8 \$616.1	\$1,569.1 \$616.1	\$1,345.5 \$616.1	\$1,108.5 \$616.1	\$857.6 \$616.1	\$592.1 \$616.1	\$311.4 \$616.1	\$12,321.7
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m) REVENUE	\$3,063.8 \$616.1 \$845.8 49,170	\$2,938.0 \$616.1 \$862.7 49,170	\$2,803.2 \$616.1 \$879.9 49,170	\$2,658.9 \$616.1 \$897.5	\$2,504.8 \$616.1 \$915.5 49,170	\$2,340.2 \$616.1 \$933.8 49,170	\$2,164.9 \$616.1 \$952.5 49,170	\$1,978.3 \$616.1 \$971.5 49,170	\$1,779.8 \$616.1 \$990.9 49,170	\$1,569.1 \$616.1 \$1,010.8 49,170	\$1,345.5 \$616.1 \$1,031.0 49,170	\$1,108.5 \$616.1 \$1,051.6 49,170	\$857.6 \$616.1 \$1,072.6 49,170	\$592.1 \$616.1 \$1,094.1 49,170	\$311.4 \$616.1 \$1,116.0 49,170	\$12,321.7 \$18,612.3 1,284,690
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	\$3,063.8 \$616.1 \$845.8	\$2,938.0 \$616.1 \$862.7	\$2,803.2 \$616.1 \$879.9	\$2,658.9 \$616.1 \$897.5	\$2,504.8 \$616.1 \$915.5	\$2,340.2 \$616.1 \$933.8	\$2,164.9 \$616.1 \$952.5	\$1,978.3 \$616.1 \$971.5	\$1,779.8 \$616.1 \$990.9	\$1,569.1 \$616.1 \$1,010.8	\$1,345.5 \$616.1 \$1,031.0	\$1,108.5 \$616.1 \$1,051.6	\$857.6 \$616.1 \$1,072.6	\$592.1 \$616.1 \$1,094.1	\$311.4 \$616.1 \$1,116.0	\$12,321.7 \$18,612.3
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m) REVENUE - DC Receipts: Inflated INTEREST	\$3,063.8 \$616.1 \$845.8 49,170 \$619.0	\$2,938.0 \$616.1 \$862.7 49,170 \$631.4	\$2,803.2 \$616.1 \$879.9 49,170 \$644.0	\$2,658.9 \$616.1 \$897.5 49,170 \$656.9	\$2,504.8 \$616.1 \$915.5 49,170 \$670.0	\$2,340.2 \$616.1 \$933.8 49,170 \$683.4	\$2,164.9 \$616.1 \$952.5 49,170 \$697.1	\$1,978.3 \$616.1 \$971.5 49,170 \$711.0	\$1,779.8 \$616.1 \$990.9 49,170 \$725.2	\$1,569.1 \$616.1 \$1,010.8 49,170 \$739.7	\$1,345.5 \$616.1 \$1,031.0 49,170 \$754.5	\$1,108.5 \$616.1 \$1,051.6 49,170 \$769.6	\$857.6 \$616.1 \$1,072.6 49,170 \$785.0	\$592.1 \$616.1 \$1,094.1 49,170 \$800.7	\$311.4 \$616.1 \$1,116.0 49,170 \$816.7	\$12,321.7 \$18,612.3 1,284,690 \$16,812.5
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m) REVENUE - DC Receipts: Inflated	\$3,063.8 \$616.1 \$845.8 49,170	\$2,938.0 \$616.1 \$862.7 49,170	\$2,803.2 \$616.1 \$879.9 49,170	\$2,658.9 \$616.1 \$897.5	\$2,504.8 \$616.1 \$915.5 49,170	\$2,340.2 \$616.1 \$933.8 49,170	\$2,164.9 \$616.1 \$952.5 49,170	\$1,978.3 \$616.1 \$971.5 49,170	\$1,779.8 \$616.1 \$990.9 49,170	\$1,569.1 \$616.1 \$1,010.8 49,170	\$1,345.5 \$616.1 \$1,031.0 49,170	\$1,108.5 \$616.1 \$1,051.6 49,170	\$857.6 \$616.1 \$1,072.6 49,170	\$592.1 \$616.1 \$1,094.1 49,170	\$311.4 \$616.1 \$1,116.0 49,170	\$12,321.7 \$18,612.3 1,284,690
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Roads and Related: Non Inflated - Roads and Related: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m) REVENUE - DC Receipts: Inflated INTEREST - Interest on Opening Balance	\$3,063.8 \$616.1 \$845.8 49,170 \$619.0	\$2,938.0 \$616.1 \$862.7 49,170 \$631.4	\$2,803.2 \$616.1 \$879.9 49,170 \$644.0	\$2,658.9 \$616.1 \$897.5 49,170 \$656.9	\$2,504.8 \$616.1 \$915.5 49,170 \$670.0	\$2,340.2 \$616.1 \$933.8 49,170 \$683.4	\$2,164.9 \$616.1 \$952.5 49,170 \$697.1	\$1,978.3 \$616.1 \$971.5 49,170 \$711.0	\$1,779.8 \$616.1 \$990.9 49,170 \$725.2	\$1,569.1 \$616.1 \$1,010.8 49,170 \$739.7	\$1,345.5 \$616.1 \$1,031.0 49,170 \$754.5	\$1,108.5 \$616.1 \$1,051.6 49,170 \$769.6	\$857.6 \$616.1 \$1,072.6 49,170 \$785.0	\$592.1 \$616.1 \$1,094.1 49,170 \$800.7	\$311.4 \$616.1 \$1,116.0 49,170 \$816.7	\$12,321.7 \$18,612.3 1,284,690 \$16,812.5 \$1,896.0

2021 Adjusted Charge Per Sq. m	\$9.17

61%
39%
2.0%
3.5%
5.5%



Appendix E.2 Northern Boundary Expansion Lands Water Services

Northern Boundary Expansion Lands Water Services

The following section sets out the 2021-2051 development-related capital forecast and the calculation of the area-specific development charge for Water Services in the Northern Boundary Expansion Lands.

The 2021-2051 Water Services capital program includes distribution, storage and treatment infrastructure necessary to service development in the Northern Boundary Expansion Lands.

Table 1 shows that the total cost of the capital program is approximately \$124.56 million. Not all of these costs contribute to the development charges calculation: \$524,000 in anticipated direct developer contributions is deducted, while benefit-to-existing shares account for a total of \$27.29 million. Of the remaining \$91.52 million, \$5.22 million is considered to benefit development beyond the 2051 planning horizon; this share of project costs is to be paid for largely by future development and will be considered under future development charges.

As shown in Table 2, the development-related share has been allocated 61 per cent, or \$55.83 million, to new residential development and 39 per cent, or \$35.69 million, to new non-residential development. The residential share is divided by the anticipated growth in population in new units between 2021 and 2051 in the Northern Boundary Expansion Lands (23,055), which yields an unadjusted development charge of \$2,421.48 per capita. The non-residential share of \$35.69 million, when divided by the anticipated increase in square metres of new non-residential space (1,284,690) yields an unadjusted DC of \$27.78 per square metre.

In Table 3, the residential and non-residential cash flow analysis is shown. After cash flow analysis, the residential calculated charge increases to

\$3,245 per capita. The adjusted non-residential development charge increases to \$40.23 per square metre.

NORTHERN BOUNDARY EXPANSION LANDS
WATER SERVICES SUMMARY

2021 - 2051 Adjusted Unadjusted Development-Related Capital Program **Development Charge** Development Charge Net DC Recoverable Total \$/capita \$/sq.m \$/capita \$/sq.m \$124,560 \$91,520 \$3,245 \$40.23 \$2,421.48 \$27.78

APPENDIX E.2 TABLE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS WATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated	Gross	Grants/	Net	Ineligible Costs	Total	Dev	elopment-Related	Costs
Projec	ct Description	Timing	Project	Subsidies/Other	Municipal	Replacement	Development	Available	2021-	Other
			Cost	Recoveries	Cost	& BTE Shares	Related Costs	DC Shares /	2051	Development-
								Prior Growth		Related
2.0 WATE	R SERVICES									
2.1 Distrib	ution									
2.1.1	Oak Park Road Trunk Watermain	2021 - 2025	\$ 14,407,000	\$ -	\$ 14,407,000	0% \$ -	\$ 14,407,000	\$ -	\$ 14,407,000	\$ -
2.1.2	Powerline Road Trunk Watermain	2021 - 2025	\$ 7,682,000	\$ -	\$ 7,682,000	0% \$ -	\$ 7,682,000	\$ -	\$ 7,682,000	\$ -
2.1.3	King George Road Watermain	2021 - 2025	\$ 13,936,800	\$ -	\$ 13,936,800	40% \$ 5,574,720	\$ 8,362,080	\$ -	\$ 8,362,080	\$ -
2.1.4	North-South Collector Road Trunk Watermain	2032 - 2041	\$ 1,088,000	\$ -	\$ 1,088,000	40% \$ 435,200	\$ 652,800	\$ -	\$ 652,800	\$ -
2.1.5	North-South Collector Road Local Watermain	2032 - 2041	\$ 524,000	\$ 524,000	\$ -	0% \$ -	\$ -	\$ -	\$ -	\$ -
2.1.6	Paris Road Trunk Watermain	2026 - 2031	\$ 11,184,000	\$ -	\$ 11,184,000	40% \$ 4,473,600	\$ 6,710,400	\$ -	\$ 4,361,760	\$ 2,348,640
2.1.7	Powerline Road Distribution Watermain	2026 - 2031	\$ 1,357,000	\$ -	\$ 1,357,000	0% \$ -	\$ 1,357,000	\$ -	\$ 1,357,000	\$ -
2.1.8	Powerline Road Distribution Watermain	2026 - 2031	\$ 1,457,000	\$ -	\$ 1,457,000	0% \$ -	\$ 1,457,000	\$ -	\$ 1,457,000	\$ -
2.1.9	Pressure District 4 East-West Collector Road Trunk Watermain	2032 - 2041	\$ 3,329,000	\$ -	\$ 3,329,000	0% \$ -	\$ 3,329,000	\$ -	\$ 3,329,000	\$ -
2.1.10		2032 - 2041	\$ 2,712,000	\$ -	\$ 2,712,000	0% \$ -	\$ 2,712,000	\$ -	\$ 2,712,000	\$ -
2.1.11	Pressure District 2/3 East-West Collector Road Trunk Watermain	2032 - 2041	\$ 3,389,000	\$ -	\$ 3,389,000	0% \$ -	\$ 3,389,000	\$ -	\$ 3,389,000	\$ -
2.1.12	·	2032 - 2041	\$ 3,208,000	\$ -	\$ 3,208,000	0% \$ -	\$ 3,208,000	\$ -	\$ 3,208,000	\$ -
2.1.13		2026 - 2031	\$ 8,961,750	\$ -	\$ 8,961,750	20% \$ 1,792,350	\$ 7,169,400	\$ -	\$ 7,169,400	\$ -
2.1.14		2021 - 2025	\$ 1,070,000	\$ -	\$ 1,070,000	0% \$ -	\$ 1,070,000	\$ -	\$ 1,070,000	\$ -
2.1.15		2021 - 2025	\$ 651,000	\$ -	\$ 651,000	0% \$ -	\$ 651,000	\$ -	\$ 651,000	\$ -
2.1.16		2021 - 2025	\$ 1,125,000	\$ -	\$ 1,125,000	0% \$ -	\$ 1,125,000	\$ -	\$ 1,125,000	\$ -
2.1.17		2021 - 2025	\$ 1,431,000	\$ -	\$ 1,431,000	0% \$ -	\$ 1,431,000	\$ -	\$ 1.431.000	\$ -
2.1.18		2021 - 2025	\$ 1,679,000	\$ -	\$ 1.679.000	0% \$ -	\$ 1,679,000	\$ -	\$ 1,679,000	\$ -
2.1.19		2026 - 2031	\$ 1,184,000	\$ -	\$ 1,184,000	40% \$ 473,600	\$ 710,400	\$ -	\$ 710,400	\$ -
2.1.20	,	2021 - 2025	\$ 2,998,000	\$ -	\$ 2,998,000	0% \$ -	\$ 2,998,000	\$ -	\$ 2,998,000	\$ -
2.1.21		2021 - 2025	\$ 1,535,000	\$ -	\$ 1,535,000	0% \$ -	\$ 1,535,000	\$ -	\$ 1,535,000	\$ -
2.1.22	·	2026 - 2031	\$ 2,502,000	\$ -	\$ 2,502,000	0% \$ -	\$ 2,502,000	\$ -	\$ 2,502,000	\$ -
2.1.23		2026 - 2031	\$ 1,574,000	\$ -	\$ 1,574,000	20% \$ 314,800	\$ 1,259,200	\$ -	\$ 1,259,200	\$ -
2.1.24		2026 - 2031	\$ 6.497.000	\$ -	\$ 6.497.000	40% \$ 2.598.800	\$ 3,898,200	\$ -	\$ 3.898.200	\$ -
2.1.24		2026 - 2031	\$ 7,425,000	\$ -	\$ 7,425,000	40% \$ 2,970,000	\$ 4,455,000	\$ -	\$ 4,455,000	\$ -
2.1.23	Subtotal Distribution	2020 2031	\$ 102,906,550	\$ 524,000	\$ 102,382,550	\$ 18,633,070	\$ 83,749,480	\$ -	\$ 81,400,840	\$ 2,348,640
						1 22,300,010		1		
2.2 Storag	ge and Treatment									
2.2.1	Pressure District 2/3 Elevated Tank	2021 - 2025	\$ 15,401,400	\$ -	\$ 15,401,400	40% \$ 6,160,560	\$ 9,240,840	\$ -	\$ 6,930,630	\$ 2,310,210
2.2.2	Pressure District 4 Elevated Tank	2032 - 2041	\$ 6,252,000	\$ -	\$ 6,252,000	40% \$ 2,500,800	\$ 3,751,200	\$ -	\$ 3,188,520	\$ 562,680
	Subtotal Storage And Treatment		\$ 21,653,400	\$ -	\$ 21,653,400	\$ 8,661,360	\$ 12,992,040	\$ -	\$ 10,119,150	\$ 2,872,890
TOTAL		[\$ 124,559,950	\$ 524,000	\$ 124,035,950	\$ 27,294,430	\$ 96,741,520	\$ -	\$ 91,519,990	\$ 5,221,530



APPENDIX E.2 TABLE 2

CITY OF BRANTFORD

NORTHERN BOUNDARY EXPANSION LANDS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WATER SERVICES

Growth in Population in New Units 2021-2051	23,055
Employment Growth in New Space 2021-2051	14,739
Growth in New Building Space (Square Metres) 2021-2051	1,284,690

		Growth-Related Capital Forecast															
		Gross	Gross G			Replacement/		Available	Other			2021-2051					
		•		Subsidies/Other Recoveries		Benefit to		DC Shares /		Development-		DC	Residential		Non-Resid		dential
						veries Existing Pr		Prior Growth		Related		Share	Share		Share		re
		(\$000)		(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	%	\$000	%		\$000
WATER SERVICES																	
Distribution	\$	102,906.55	\$	524.00	\$	18,633.07	\$	-	\$	2,348.64	\$	81,400.84	61%	\$ 49,654.51	39%	\$	31,746.33
Storage and Treatment	\$	21,653.40	\$	-	\$	8,661.36	\$	-	\$	2,872.89	\$	10,119.15	61%	\$ 6,172.68	39%	\$	3,946.47
TOTAL WATER SERVICES	\$	124,559.95	\$	524.00	\$	27,294.43	\$	-	\$	5,221.53	\$	91,519.99		\$ 55,827.19		\$ 3	35,692.80
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)														\$ 2,421.48		\$	27.78

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	61%	\$ 55,827,194
2021-2051 Growth in Population in New Units		23,055
Development Charge Per Capita (Unadjusted)		\$ 2,421.48
Development Charge Per Capita after Cash Flow		\$ 3,245
Charge per Single Detached Unit	3.43	\$ 11,131

Non-Residential Development Charge Calculation			
Non-Residential Share of 2021-2051 DC Eligible Costs	39%	\$ 35	,692,796
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		1	,284,690
Development Charge Per Square Metre (Unadjusted)		\$	27.78
Development Charge Per Square Metre After Cash Flow		\$	40.23
Development Charge Fel Square Mette Arter Cash Flow		φ	40.2



APPENDIX E.2 TABLE 3 - PAGE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$6,000.8)	(\$11,962.0)	(\$16,806.1)	(\$20,935.4)	(\$24,807.2)	(\$24,900.2)	(\$25,530.6)	(\$26,746.1)	(\$28,616.5)	(\$30,597.8)	(\$32,696.2)	(\$32,691.4)	(\$32,650.2)	(\$32,570.0)	(\$32,447.8)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$5,840.2 \$5,840.2	\$5,840.2 \$5,957.0	\$5,840.2 \$6,076.2	\$5,840.2 \$6,197.7	\$5,840.2 \$6,321.6	\$2,762.3 \$3,049.8	\$2,762.3 \$3,110.8	\$2,762.3 \$3,173.0	\$2,762.3 \$3,236.5	\$2,762.3 \$3,301.2	\$2,762.3 \$3,367.2	\$1,005.2 \$1,249.9	\$1,005.2 \$1,274.9	\$1,005.2 \$1,300.4	\$1,005.2 \$1,326.4	\$1,005.2 \$1,352.9
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	-	144	593	894	1,046	1,200	1,050	901	749	749	749	749	749	749	749	749
REVENUE - DC Receipts: Inflated	\$0.0	\$476.6	\$2,002.0	\$3,078.6	\$3,674.1	\$4,299.3	\$3,837.1	\$3,358.5	\$2,847.7	\$2,904.7	\$2,962.8	\$3,022.0	\$3,082.5	\$3,144.1	\$3,207.0	\$3,271.1
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$160.6)	(\$330.0) (\$150.7)	(\$657.9) (\$112.0)	(\$924.3) (\$85.8)	(\$1,151.4) (\$72.8)	(\$1,364.4) \$21.9	(\$1,369.5) \$12.7	(\$1,404.2) \$3.2	(\$1,471.0) (\$10.7)	(\$1,573.9) (\$10.9)	(\$1,682.9) (\$11.1)	(\$1,798.3) \$31.0	(\$1,798.0) \$31.6	(\$1,795.8) \$32.3	(\$1,791.3) \$32.9	(\$1,784.6) \$33.6
TOTAL REVENUE	(\$160.6)	(\$4.2)	\$1,232.0	\$2,068.5	\$2,449.8	\$2,956.8	\$2,480.3	\$1,957.6	\$1,366.0	\$1,319.9	\$1,268.8	\$1,254.7	\$1,316.1	\$1,380.6	\$1,448.6	\$1,520.0
CLOSING CASH BALANCE	(\$6,000.8)	(\$11,962.0)	(\$16,806.1)	(\$20,935.4)	(\$24,807.2)	(\$24,900.2)	(\$25,530.6)	(\$26,746.1)	(\$28,616.5)	(\$30,597.8)	(\$32,696.2)	(\$32,691.4)	(\$32,650.2)	(\$32,570.0)	(\$32,447.8)	(\$32,280.7)

WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$32,280.7)	(\$32,065.2)	(\$31,798.2)	(\$31,475.8)	(\$31,094.3)	(\$30,649.5)	(\$28,587.0)	(\$26,336.0)	(\$23,884.7)	(\$21,220.6)	(\$18,330.5)	(\$15,200.2)	(\$11,815.0)	(\$8,159.2)	(\$4,216.2)	-
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$1,005.2 \$1,380.0	\$1,005.2 \$1,407.6	\$1,005.2 \$1,435.7	\$1,005.2 \$1,464.4	\$1,005.2 \$1,493.7	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$55,827.2 \$63,317.1
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	23,055
REVENUE - DC Receipts: Inflated	\$3,336.6	\$3,403.3	\$3,471.4	\$3,540.8	\$3,611.6	\$3,683.8	\$3,757.5	\$3,832.7	\$3,909.3	\$3,987.5	\$4,067.3	\$4,148.6	\$4,231.6	\$4,316.2	\$4,402.5	\$102,868.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$1,775.4) \$34.2	(\$1,763.6) \$34.9	(\$1,748.9) \$35.6	(\$1,731.2) \$36.3	(\$1,710.2) \$37.1	(\$1,685.7) \$64.5	(\$1,572.3) \$65.8	(\$1,448.5) \$67.1	(\$1,313.7) \$68.4	(\$1,167.1) \$69.8	(\$1,008.2) \$71.2	(\$836.0) \$72.6	(\$649.8) \$74.1	(\$448.8) \$75.5	(\$231.9) \$77.0	(\$39,988.9) \$468.6
TOTAL REVENUE	\$1,595.4	\$1,674.6	\$1,758.1	\$1,846.0	\$1,938.5	\$2,062.5	\$2,251.0	\$2,451.3	\$2,664.1	\$2,890.1	\$3,130.3	\$3,385.2	\$3,655.8	\$3,943.0	\$4,247.7	\$63,348.5
CLOSING CASH BALANCE	(\$32,065.2)	(\$31,798.2)	(\$31,475.8)	(\$31,094.3)	(\$30,649.5)	(\$28,587.0)	(\$26,336.0)	(\$23,884.7)	(\$21,220.6)	(\$18,330.5)	(\$15,200.2)	(\$11,815.0)	(\$8,159.2)	(\$4,216.2)	\$31.4	-

2021 Adjusted Charge Per Capita \$3,245

Allocation of Capital Program Residential Sector Non-Residential Sector	61% 39%
Rates for 2021 Inflation Rate Interest Rate on Positive Balances Interest Rate on Negative Balances	2.0% 3.5% 5.5%



APPENDIX E.2 TABLE 3 - PAGE 2

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$3,836.6)	(\$7,780.1)	(\$11,896.8)	(\$16,193.1)	(\$20,614.0)	(\$22,995.7)	(\$23,916.1)	(\$24,906.0)	(\$26,023.0)	(\$27,196.4)	(\$28,429.2)	(\$28,303.4)	(\$28,136.8)	(\$27,926.6)	(\$27,669.6)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$3,733.9 \$3,733.9	\$3,733.9 \$3,808.6	\$3,733.9 \$3,884.8	\$3,733.9 \$3,962.5	\$3,733.9 \$4,041.7	\$1,766.0 \$1,949.9	\$1,766.0 \$1,988.9	\$1,766.0 \$2,028.6	\$1,766.0 \$2,069.2	\$1,766.0 \$2,110.6	\$1,766.0 \$2,152.8	\$642.7 \$799.1	\$642.7 \$815.1	\$642.7 \$831.4	\$642.7 \$848.0	\$642.7 \$865.0
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	-	4,290	7,040	9,790	13,915	16,555	51,370	50,820	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170
REVENUE - DC Receipts: Inflated	\$0.0	\$176.0	\$294.7	\$418.0	\$605.9	\$735.3	\$2,327.3	\$2,348.5	\$2,317.7	\$2,364.0	\$2,411.3	\$2,459.5	\$2,508.7	\$2,558.9	\$2,610.1	\$2,662.3
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$102.7)	(\$211.0) (\$99.9)	(\$427.9) (\$98.7)	(\$654.3) (\$97.5)	(\$890.6) (\$94.5)	(\$1,133.8) (\$33.4)	(\$1,264.8) \$5.9	(\$1,315.4) \$5.6	(\$1,369.8) \$4.3	(\$1,431.3) \$4.4	(\$1,495.8) \$4.5	(\$1,563.6) \$29.1	(\$1,556.7) \$29.6	(\$1,547.5) \$30.2	(\$1,536.0) \$30.8	(\$1,521.8) \$31.5
TOTAL REVENUE	(\$102.7)	(\$134.9)	(\$231.9)	(\$333.8)	(\$379.2)	(\$431.9)	\$1,068.5	\$1,038.7	\$952.2	\$937.2	\$920.0	\$925.0	\$981.7	\$1,041.6	\$1,105.0	\$1,171.9
CLOSING CASH BALANCE	(\$3,836.6)	(\$7,780.1)	(\$11,896.8)	(\$16,193.1)	(\$20,614.0)	(\$22,995.7)	(\$23,916.1)	(\$24,906.0)	(\$26,023.0)	(\$27,196.4)	(\$28,429.2)	(\$28,303.4)	(\$28,136.8)	(\$27,926.6)	(\$27,669.6)	(\$27,362.7)

WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$27,362.7)	(\$27,002.3)	(\$26,584.9)	(\$26,106.4)	(\$25,562.8)	(\$24,949.6)	(\$23,271.2)	(\$21,439.5)	(\$19,444.7)	(\$17,276.8)	(\$14,925.0)	(\$12,377.7)	(\$9,623.0)	(\$6,648.1)	(\$3,439.5)	-
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$642.7 \$882.3	\$642.7 \$899.9	\$642.7 \$917.9	\$642.7 \$936.3	\$642.7 \$955.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$35,692.8 \$40,481.4
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	1,284,690
REVENUE - DC Receipts: Inflated	\$2,715.5	\$2,769.8	\$2,825.2	\$2,881.7	\$2,939.4	\$2,998.2	\$3,058.1	\$3,119.3	\$3,181.7	\$3,245.3	\$3,310.2	\$3,376.4	\$3,443.9	\$3,512.8	\$3,583.1	\$73,758.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$1,504.9) \$32.1	(\$1,485.1) \$32.7	(\$1,462.2) \$33.4	(\$1,435.9) \$34.0	(\$1,406.0) \$34.7	(\$1,372.2) \$52.5	(\$1,279.9) \$53.5	(\$1,179.2) \$54.6	(\$1,069.5) \$55.7	(\$950.2) \$56.8	(\$820.9) \$57.9	(\$680.8) \$59.1	(\$529.3) \$60.3	(\$365.6) \$61.5	(\$189.2) \$62.7	(\$33,651.1) \$390.8
TOTAL REVENUE	\$1,242.6	\$1,317.4	\$1,396.4	\$1,479.9	\$1,568.2	\$1,678.4	\$1,831.7	\$1,994.7	\$2,167.9	\$2,351.9	\$2,547.3	\$2,754.7	\$2,974.9	\$3,208.6	\$3,456.6	\$40,498.6
CLOSING CASH BALANCE	(\$27,002.3)	(\$26,584.9)	(\$26,106.4)	(\$25,562.8)	(\$24,949.6)	(\$23,271.2)	(\$21,439.5)	(\$19,444.7)	(\$17,276.8)	(\$14,925.0)	(\$12,377.7)	(\$9,623.0)	(\$6,648.1)	(\$3,439.5)	\$17.2	-

2021 Adjusted Charge Per Sq. m \$40.23

Allocation of Capital Program	
Residential Sector	61%
Non-Residential Sector	39%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix E.3 Northern Boundary Expansion Lands Wastewater Services

Northern Boundary Expansion Lands Wastewater Services

The 2021-2051 development-related capital forecast and area-specific development charge for Wastewater Services within the Northern Boundary Expansion Lands is set out in the following section. The details and timing of the 2021-2051 development-related Wastewater capital program are shown in Table 1. The gross costs included in the program total \$123.35 million, which includes various sewage collection and pumping station projects within the Northern Boundary Expansion Lands.

No grants, subsidies, or other contributions have been identified. Of the \$123.35 million, \$24.39 million has been identified as replacement or benefit to existing shares and \$15.74 million is deemed to benefit development occurring beyond the 2051 planning horizon. The resulting net- development share eligible for funding through development charges over the 2021-2051 planning period is \$83.22 million.

Table 2 summarizes the capital program and calculation of the unadjusted residential and non-residential development charges for wastewater servicing. The DC eligible share of \$83.22 million has been allocated 61 per cent to new residential development and 39 per cent to non-residential development based on shares of population in new units and employment growth in new space to 2051.

The residential share of the capital program totals \$50.77 million and, when divided by the forecast growth in population in new units (23,055), results in an unadjusted charge of \$2,201.97 per capita.

The non-residential share, \$32.46 million is applied against the forecast increase in square metres of non-residential floor space by type of

development (1,284,690 square metres). This yields an unadjusted charge of \$25.26 per square metre.

The residential and non-residential cash flow analysis is shown in Table 3. After cash flow considerations, the residential charge increases to \$2,617 per capita and the non-residential and non-residential charges increase to \$32.45 respectively.

	WA	STEWATER SERVI	CES SUMMARY					
20	21 - 2051	Unadju	ısted	Adju	sted			
Development-R	elated Capital Program	Developme	nt Charge	Development C				
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m			
\$123,352,500	\$83,223,494	\$2,201.97	\$25.26	\$2,617	\$32.45			

APPENDIX E.3 TABLE 1

CITY OF BRANTFORD

NORTHERN BOUNDARY EXPANSION LANDS

WASTEWATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated	Gross	Grants/	Net	Ineli	gible Costs	Total	De	evelopment-Related (Costs
	Project Description	Timing	Project	Subsidies/Other	Municipal	Rep	olacement	Development	Available	2021-	Other
			Cost	Recoveries	Cost	& B	TE Shares	Related Costs	DC Shares /	2051	Development-
									Prior Growth		Related
3.0	WASTEWATER SERVICES										
3.1	Sewage Collection										
	3.1.1 Northwest-1 WWPS Forcemain	2031 - 2041	\$ 982,000	\$ -	\$ 982,000	0%	\$ -	\$ 982,000	\$ -	\$ 982,000	\$ -
	3.1.2 Northwest-2 WWPS Forcemain	2026 - 2031	\$ 2,948,000	\$ -	\$ 2,948,000	0%	\$ -	\$ 2,948,000	\$ -	\$ 2,653,200	\$ 294,800
	3.1.3 North WWPS Forcemain	2031 - 2041	\$ 882,000	\$ -	\$ 882,000	0%	\$ -	\$ 882,000	\$ -	\$ 882,000	\$ -
	3.1.4 Northeast WWPS Forcemain	2021 - 2026	\$ 582,000	\$ -	\$ 582,000	0%	\$ -	\$ 582,000	\$ -	\$ 582,000	\$ -
	3.1.5 East WWPS Forcemain	2026 - 2031	\$ 3,974,000	\$ -	\$ 3,974,000	0%	\$ -	\$ 3,974,000	\$ -	\$ 3,576,600	\$ 397,400
	3.1.6 North-South Collector's Road Trunk Sewer	2021 - 2026	\$ 1,050,000	\$ -	\$ 1,050,000	0%	\$ -	\$ 1,050,000	\$ -	\$ 892,500	\$ 157,500
	3.1.7 North-South Collector's Road Trunk Sewer	2031 - 2041	\$ 577,000	\$ -	\$ 577,000	0%	\$ -	\$ 577,000	\$ -	\$ 519,300	\$ 57,700
	3.1.8 East-West Collector's Road Trunk Sewer (West of King George Road)	2031 - 2041	\$ 1,382,000	\$ -	\$ 1,382,000	0%	\$ -	\$ 1,382,000	\$ -	\$ 1,382,000	\$ -
	3.1.9 East-West Collector's Road Trunk Sewer (West of King George Road)	2026 - 2031	\$ 703,000	\$ -	\$ 703,000	0%	\$ -	\$ 703,000	\$ -	\$ 562,400	\$ 140,600
	3.1.10 East-West Collector's Road Trunk Sewer (East of King George Road)	2031 - 2041	\$ 660,000	\$ -	\$ 660,000	0%	\$ -	\$ 660,000	\$ -	\$ 660,000	\$ -
	3.1.11 East-West Collector's Road Trunk Sewer (East of King George Road)	2031 - 2041	\$ 1,758,000	\$ -	\$ 1,758,000	0%	\$ -	\$ 1,758,000	\$ -	\$ 1,406,400	\$ 351,600
	3.1.12 East-West Collector's Road Trunk Sewer (East of King George Road)	2031 - 2041	\$ 859,000	\$ -	\$ 859,000	0%	\$ -	\$ 859,000	\$ -	\$ 859,000	\$ -
	3.1.13 East-West Collector's Road Trunk Sewer (East of North WWPS)	2026 - 2031	\$ 1,841,000	\$ -	\$ 1,841,000	0%	\$ -	\$ 1,841,000	\$ -	\$ 1,288,700	\$ 552,300
	3.1.14 East-West Collector's Road Trunk Sewer (East of North WWPS)	2026 - 2031	\$ 1,611,000	\$ -	\$ 1,611,000	0%	\$ -	\$ 1,611,000	\$ -	\$ 1,127,700	\$ 483,300
	3.1.15 East-West Collector's Road Trunk Sewer (East of North WWPS)	2021 - 2026	\$ 6,104,000	\$ -	\$ 6,104,000	0%	\$ -	\$ 6,104,000	\$ -	\$ 4,272,800	\$ 1,831,200
	3.1.16 East Expansion Lands Trunk Sewer	2026 - 2031	\$ 4,231,000	\$ -	\$ 4,231,000	0%	\$ -	\$ 4,231,000	\$ -	\$ 4,019,450	\$ 211,550
	3.1.17 Lynden Road Trunk Sewer Upgrades	2026 - 2031	\$ 588,000	\$ -	\$ 588,000	0%	\$ -	\$ 588,000	\$ -	\$ 558,600	\$ 29,400
	3.1.18 Bodine Road Sewer Upgrades	2041 - 2051	\$ 22,997,000	\$ -	\$ 22,997,000	20%	\$ 4,599,400	\$ 18,397,600	\$ -	\$ 11,958,440	\$ 6,439,160
	3.1.19 Mohawk Sewer Upgrades	2041 - 2051	\$ 4,426,500	\$ -	\$ 4,426,500	20%	\$ 885,300	\$ 3,541,200	\$ -	\$ 2,478,840	\$ 1,062,360
	3.1.20 Oakhill Sewer Upgrades	2031 - 2041	\$ 4,963,000	\$ -	\$ 4,963,000	20%	\$ 992,600	\$ 3,970,400	\$ -	\$ 2,580,760	\$ 1,389,640
	3.1.21 Oak Park Road Trunk Sewer	2021 - 2026	\$ 25,985,000	\$ -	\$ 25,985,000	40%	\$ 10,394,000	\$ 15,591,000	\$ -	\$ 13,252,350	\$ 2,338,650
	Subtotal Sewage Collection	•	\$ 89,103,500	\$ -	\$ 89,103,500		\$ 16,871,300	\$ 72,232,200	\$ -	\$ 56,495,040	\$ 15,737,160
3.2	Pumping Station	ĺ									
	3.2.1 Empey Street WWPS Storage Upgrades	2021 - 2026	\$ 12,835,000	\$ -	\$ 12,835,000	50%	\$ 6,417,500	\$ 6,417,500	\$ -	\$ 6,417,500	\$ -
	3.2.2 Empey Street WWPS Rehabilitation and Improvements	2021 - 2026	\$ 1,785,000	\$ -	\$ 1,785,000	62%	\$ 1,103,046	\$ 681,954	\$ -	\$ 681,954	\$ -
	3.2.3 Northwest-1 Wastewater Pumping Station	2031 - 2041	\$ 2,405,000	\$ -	\$ 2,405,000	0%	\$ -	\$ 2,405,000	\$ -	\$ 2,405,000	\$ -
	3.2.4 Northwest-2 Wastewater Pumping Station	2026 - 2031	\$ 5,444,000	\$ -	\$ 5,444,000	0%	\$ -	\$ 5,444,000	\$ -	\$ 5,444,000	\$ -
	3.2.5 North Wastewater Pumping Station	2031 - 2041	\$ 4,462,000	\$ -	\$ 4,462,000	0%	\$ -	\$ 4,462,000	\$ -	\$ 4,462,000	\$ -
	3.2.6 Northeast Wastewater Pumping Station	2021 - 2026	\$ 3,240,000	\$ -	\$ 3,240,000	0%	\$ -	\$ 3,240,000	\$ -	\$ 3,240,000	\$ -
	3.2.7 East Wastewater Pumping Station	2026 - 2031	\$ 4,078,000	\$ -	\$ 4,078,000	0%	\$ -	\$ 4,078,000	\$ -	\$ 4,078,000	\$ -
	Subtotal Pumping Station		\$ 34,249,000	\$ -	\$ 34,249,000		\$ 7,520,546	\$ 26,728,454	\$ -	\$ 26,728,454	\$ -
TOTA	L		\$123,352,500	\$0	\$123,352,500	i i	\$24,391,846	\$98,960,654	\$(0 \$83,223,494	\$15,737,160



APPENDIX E.3 TABLE 2

CITY OF BRANTFORD

NORTHERN BOUNDARY EXPANSION LANDS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WASTEWATER SERVICES

G	Growth in Population in New Units 2021-2051	23,055
Ε	Employment Growth in New Space 2021-2051	14,739
G	Growth in New Building Space (Square Metres) 2021-2051	1,284,690

					Growth-Related	Сар	ital Forecast										
	Gross		Grants/	F	Replacement/		Available		Other		2021-2051						
	Project	Su	bsidies/Other		Benefit to	DC Shares /			Development-		DC		Resid	Residential Non-I		Non-Residential	
	Cost		Recoveries		Existing Prior Growth		Related			Share		Sł	nare		Sh	are	
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)		(\$000)			\$000	%		\$000
			·		·												
WASTEWATER SERVICES																	
Sewage Collection	\$ 89,103.50	\$	-	\$	16,871.30	\$	-	\$	15,737.16	\$	56,495.04	61%	\$	34,461.97	39%	\$	22,033.07
Pumping Station	\$ 34,249.00	\$	-	\$	7,520.55	\$	-	\$	-	\$	26,728.45	61%	\$	16,304.36	39%	\$	10,424.10
TOTAL WASTEWATER SERVICES	\$ 123,352.50	\$	-	\$	24,391.85	\$	-	\$	15,737.16	\$	83,223.49		\$	50,766.33		\$	32,457.16
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)													\$	2,201.97		\$	25.26
, , , , , , , , , , , , , , , , , , , ,																·	

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	61%	\$ 50,766,331
2021-2051 Growth in Population in New Units		23,055
Development Charge Per Capita (Unadjusted)		\$ 2,201.97
Development Charge Per Capita after Cash Flow		\$ 2,617
Charge per Single Detached Unit	3.43	\$ 8,977

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	39%	\$ 32,457,163
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		1,284,690
Development Charge Per Square Metre (Unadjusted)		\$ 25.26
Development Charge Per Square Metre After Cash Flow		\$ 32.45



APPENDIX E.3 TABLE 3 - PAGE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$3,064.8)	(\$5,964.6)	(\$7,822.3)	(\$8,953.8)	(\$9,719.3)	(\$12,763.3)	(\$13,032.1)	(\$13,762.7)	(\$15,012.8)	(\$16,341.5)	(\$18,874.2)	(\$18,564.7)	(\$18,211.2)	(\$17,810.8)	(\$17,360.3)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$2,982.8 \$2,982.8	\$2,982.8 \$3,042.5	\$2,982.8 \$3,103.3	\$2,982.8 \$3,165.4	\$2,982.8 \$3,228.7	\$5,352.5 \$5,909.6	\$2,369.7 \$2,668.7	\$2,369.7 \$2,722.1	\$2,369.7 \$2,776.5	\$2,369.7 \$2,832.0	\$3,264.7 \$3,979.6	\$895.0 \$1,112.8	\$895.0 \$1,135.0	\$895.0 \$1,157.7	\$895.0 \$1,180.9	\$895.0 \$1,204.5
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	-	144	593	894	1,046	1,200	1,050	901	749	749	749	749	749	749	749	749
REVENUE - DC Receipts: Inflated	\$0.0	\$384.4	\$1,614.6	\$2,482.8	\$2,963.0	\$3,467.3	\$3,094.5	\$2,708.5	\$2,296.6	\$2,342.5	\$2,389.4	\$2,437.2	\$2,485.9	\$2,535.6	\$2,586.4	\$2,638.1
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$82.0)	(\$168.6) (\$73.1)	(\$328.1) (\$40.9)	(\$430.2) (\$18.8)	(\$492.5) (\$7.3)	(\$534.6) (\$67.2)	(\$702.0) \$7.5	(\$716.8) (\$0.4)	(\$757.0) (\$13.2)	(\$825.7) (\$13.5)	(\$898.8) (\$43.7)	(\$1,038.1) \$23.2	(\$1,021.1) \$23.6	(\$1,001.6) \$24.1	(\$979.6) \$24.6	(\$954.8) \$25.1
TOTAL REVENUE	(\$82.0)	\$142.7	\$1,245.6	\$2,033.8	\$2,463.2	\$2,865.6	\$2,400.0	\$1,991.4	\$1,526.5	\$1,503.3	\$1,446.9	\$1,422.3	\$1,488.5	\$1,558.1	\$1,631.4	\$1,708.4
CLOSING CASH BALANCE	(\$3,064.8)	(\$5,964.6)	(\$7,822.3)	(\$8,953.8)	(\$9,719.3)	(\$12,763.3)	(\$13,032.1)	(\$13,762.7)	(\$15,012.8)	(\$16,341.5)	(\$18,874.2)	(\$18,564.7)	(\$18,211.2)	(\$17,810.8)	(\$17,360.3)	(\$16,856.4)
Г																
WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
WASTEWATER SERVICES OPENING CASH BALANCE	2037 (\$16,856.4)	2038 (\$16,295.7)	2039 (\$15,674.3)	2040 (\$14,988.4)	2041 (\$14,233.8)	2042 (\$14,616.6)	2043 (\$13,632.4)	2044 (\$12,558.2)	2045 (\$11,388.5)	2046 (\$10,117.2)	2047 (\$8,738.0)	2048 (\$7,244.3)	2049 (\$5,628.9)	2050 (\$3,884.5)	2051 (\$2,003.0)	TOTAL -
																TOTAL - \$50,766.3 \$63,072.3
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated	(\$16,856.4) \$895.0	(\$16,295.7) \$895.0	(\$15,674.3) \$895.0	(\$14,988.4) \$895.0	(\$14,233.8) \$1,695.6	(\$14,616.6) \$800.6	(\$13,632.4) \$800.6	(\$12,558.2) \$800.6	(\$11,388.5) \$800.6	(\$10,117.2) \$800.6	(\$8,738.0) \$800.6	(\$7,244.3) \$800.6	(\$5,628.9) \$800.6	(\$3,884.5) \$800.6	(\$2,003.0) \$800.6	- \$50,766.3
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated NEW RESIDENTIAL DEVELOPMENT	(\$16,856.4) \$895.0 \$1,228.6	(\$16,295.7) \$895.0 \$1,253.1	(\$15,674.3) \$895.0 \$1,278.2	(\$14,988.4) \$895.0 \$1,303.8	(\$14,233.8) \$1,695.6 \$2,519.5	(\$14,616.6) \$800.6 \$1,213.5	(\$13,632.4) \$800.6 \$1,237.7	(\$12,558.2) \$800.6 \$1,262.5	(\$11,388.5) \$800.6 \$1,287.7	(\$10,117.2) \$800.6 \$1,313.5	(\$8,738.0) \$800.6 \$1,339.8	(\$7,244.3) \$800.6 \$1,366.6	(\$5,628.9) \$800.6 \$1,393.9	(\$3,884.5) \$800.6 \$1,421.8	(\$2,003.0) \$800.6 \$1,450.2	\$50,766.3 \$63,072.3
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units REVENUE	(\$16,856.4) \$895.0 \$1,228.6	(\$16,295.7) \$895.0 \$1,253.1 749	(\$15,674.3) \$895.0 \$1,278.2	(\$14,988.4) \$895.0 \$1,303.8	(\$14,233.8) \$1,695.6 \$2,519.5 749	(\$14,616.6) \$800.6 \$1,213.5	(\$13,632.4) \$800.6 \$1,237.7	(\$12,558.2) \$800.6 \$1,262.5	(\$11,388.5) \$800.6 \$1,287.7	(\$10,117.2) \$800.6 \$1,313.5	(\$8,738.0) \$800.6 \$1,339.8	(\$7,244.3) \$800.6 \$1,366.6	(\$5,628.9) \$800.6 \$1,393.9	(\$3,884.5) \$800.6 \$1,421.8	(\$2,003.0) \$800.6 \$1,450.2	\$50,766.3 \$63,072.3 23,055
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units REVENUE - DC Receipts: Inflated INTEREST - Interest on Opening Balance	(\$16,856.4) \$895.0 \$1,228.6 749 \$2,690.8 (\$927.1)	(\$16,295.7) \$895.0 \$1,253.1 749 \$2,744.7 (\$896.3)	(\$15,674.3) \$895.0 \$1,278.2 749 \$2,799.6 (\$862.1)	(\$14,988.4) \$895.0 \$1,303.8 749 \$2,855.5	(\$14,233.8) \$1,695.6 \$2,519.5 749 \$2,912.7 (\$782.9)	(\$14,616.6) \$800.6 \$1,213.5 749 \$2,970.9 (\$803.9)	\$800.6 \$1,237.7 749 \$3,030.3	\$800.6 \$1,262.5 749 \$3,090.9 (\$690.7)	(\$11,388.5) \$800.6 \$1,287.7 749 \$3,152.8 (\$626.4)	\$800.6 \$1,313.5 749 \$3,215.8 (\$556.4)	(\$8,738.0) \$800.6 \$1,339.8 749 \$3,280.1 (\$480.6)	\$800.6 \$1,366.6 749 \$3,345.7 (\$398.4)	(\$5,628.9) \$800.6 \$1,393.9 749 \$3,412.6 (\$309.6)	(\$3,884.5) \$800.6 \$1,421.8 749 \$3,480.9 (\$213.6)	(\$2,003.0) \$800.6 \$1,450.2 749 \$3,550.5	\$50,766.3 \$63,072.3 23,055 \$82,960.6 (\$20,081.5)

2021 Adjusted Charge Per Capita \$2,617

 Allocation of Capital Program

 Residential Sector
 61%

 Non-Residential Sector
 39%

 Rates for 2021

 Inflation Rate
 2.0%

 Interest Rate on Positive Balances
 3.5%

 Interest Rate on Negative Balances
 5.5%



APPENDIX E.3 TABLE 3 - PAGE 2

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$1,959.5)	(\$3,920.0)	(\$5,930.0)	(\$7,989.2)	(\$10,047.4)	(\$13,872.8)	(\$14,461.7)	(\$15,100.4)	(\$15,835.0)	(\$16,608.0)	(\$18,137.3)	(\$17,840.1)	(\$17,500.7)	(\$17,116.2)	(\$16,683.7)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$1,907.0 \$1,907.0	\$1,907.0 \$1,945.2	\$1,907.0 \$1,984.1	\$1,907.0 \$2,023.8	\$1,907.0 \$2,064.2	\$3,422.1 \$3,778.3	\$1,515.1 \$1,706.2	\$1,515.1 \$1,740.3	\$1,515.1 \$1,775.1	\$1,515.1 \$1,810.6	\$2,087.2 \$2,544.3	\$572.2 \$711.4	\$572.2 \$725.7	\$572.2 \$740.2	\$572.2 \$755.0	\$572.2 \$770.1
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	-	4,290	7,040	9,790	13,915	16,555	51,370	50,820	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170
REVENUE - DC Receipts: Inflated	\$0.0	\$142.0	\$237.7	\$337.1	\$488.8	\$593.1	\$1,877.3	\$1,894.3	\$1,869.5	\$1,906.8	\$1,945.0	\$1,983.9	\$2,023.6	\$2,064.0	\$2,105.3	\$2,147.4
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$52.4)	(\$107.8) (\$49.6)	(\$215.6) (\$48.0)	(\$326.2) (\$46.4)	(\$439.4) (\$43.3)	(\$552.6) (\$87.6)	(\$763.0) \$3.0	(\$795.4) \$2.7	(\$830.5) \$1.7	(\$870.9) \$1.7	(\$913.4) (\$16.5)	(\$997.6) \$22.3	(\$981.2) \$22.7	(\$962.5) \$23.2	(\$941.4) \$23.6	(\$917.6) \$24.1
TOTAL REVENUE	(\$52.4)	(\$15.4)	(\$25.9)	(\$35.4)	\$6.1	(\$47.1)	\$1,117.3	\$1,101.6	\$1,040.6	\$1,037.6	\$1,015.1	\$1,008.6	\$1,065.1	\$1,124.6	\$1,187.5	\$1,253.9
CLOSING CASH BALANCE	(\$1,959.5)	(\$3,920.0)	(\$5,930.0)	(\$7,989.2)	(\$10,047.4)	(\$13,872.8)	(\$14,461.7)	(\$15,100.4)	(\$15,835.0)	(\$16,608.0)	(\$18,137.3)	(\$17,840.1)	(\$17,500.7)	(\$17,116.2)	(\$16,683.7)	(\$16,199.8)

WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$16,199.8)	(\$15,661.3)	(\$15,064.6)	(\$14,405.9)	(\$13,681.3)	(\$13,660.4)	(\$12,740.5)	(\$11,736.6)	(\$10,643.3)	(\$9,455.1)	(\$8,166.1)	(\$6,770.1)	(\$5,260.3)	(\$3,629.8)	(\$1,871.3)	-
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$572.2 \$785.5	\$572.2 \$801.2	\$572.2 \$817.2	\$572.2 \$833.6	\$1,084.0 \$1,610.8	\$511.9 \$775.8	\$511.9 \$791.3	\$511.9 \$807.2	\$511.9 \$823.3	\$511.9 \$839.8	\$511.9 \$856.6	\$511.9 \$873.7	\$511.9 \$891.2	\$511.9 \$909.0	\$511.9 \$927.2	\$32,457.2 \$40,324.9
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170	1,284,690
REVENUE - DC Receipts: Inflated	\$2,190.4	\$2,234.2	\$2,278.9	\$2,324.4	\$2,370.9	\$2,418.3	\$2,466.7	\$2,516.0	\$2,566.4	\$2,617.7	\$2,670.0	\$2,723.5	\$2,777.9	\$2,833.5	\$2,890.1	\$59,494.7
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$891.0) \$24.6	(\$861.4) \$25.1	(\$828.6) \$25.6	(\$792.3) \$26.1	(\$752.5) \$13.3	(\$751.3) \$28.7	(\$700.7) \$29.3	(\$645.5) \$29.9	(\$585.4) \$30.5	(\$520.0) \$31.1	(\$449.1) \$31.7	(\$372.4) \$32.4	(\$289.3) \$33.0	(\$199.6) \$33.7	(\$102.9) \$34.4	(\$19,357.2) \$210.4
TOTAL REVENUE	\$1,324.0	\$1,397.9	\$1,475.9	\$1,558.2	\$1,631.7	\$1,695.7	\$1,795.3	\$1,900.4	\$2,011.5	\$2,128.8	\$2,252.6	\$2,383.5	\$2,521.6	\$2,667.5	\$2,821.5	\$40,348.0
CLOSING CASH BALANCE	(\$15,661.3)	(\$15,064.6)	(\$14,405.9)	(\$13,681.3)	(\$13,660.4)	(\$12,740.5)	(\$11,736.6)	(\$10,643.3)	(\$9,455.1)	(\$8,166.1)	(\$6,770.1)	(\$5,260.3)	(\$3,629.8)	(\$1,871.3)	\$23.1	-

2021 Adjusted Charge Per Sq. m \$32.45

Allocation of Capital Program	
Residential Sector	61%
Non-Residential Sector	39%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix E.4 Northern Boundary Expansion Lands Stormwater Services

Northern Boundary Expansion Lands Stormwater Services

The capital program contained herein represents stormwater projects that are designed to serve the anticipated population and employment growth within the Northern Boundary Expansion Lands between 2021 and 2051, as identified through the Master Servicing Plan and discussions with staff. The development-related capital programs include a number of ponds and other local upgrades. Inclusion of these projects within the Area-Specific Development Charge Background Study will, in part, help to facilitate funding arrangements as development of the Northern Boundary Expansion Lands moves forward.

The development-related capital program totals \$55.22 million. Not all of these costs are recoverable through development charges in the Northern Boundary Expansion Lands: replacement or benefit to existing shares account for a total of \$32.38 million, resulting in net-development related costs of \$22.84 million.

As shown in Table 2, the development-related share has been allocated 61 per cent, or \$13.93 million to new residential development and 39 per cent, or \$8.91 million to new non-residential development.

The residential share is divided by the anticipated growth in population in new units between 2021 and 2051 in the Northern Boundary Expansion Lands (23,055), which yields an unadjusted development charge of \$604.24 per capita. The non-residential share, when divided by the anticipated increase in square metres of new space (1,284,690), yields an unadjusted development charge of \$6.93 per square metre.

In Table 3, the residential and non-residential cash flow analysis is shown. After cash flow analysis, the residential and non-residential calculated

charges increase to \$869 per capita and \$10.78 per square metre, respectively.

STORMWATER SUMMARY

2021 - 2051

Development-Related Capital Program

Total Net DC Recoverable

\$55,219,000 \$22,837,116

Unadjusted
Development Charge
\$/capita \$/sq.m
\$604.24 \$6.93

Adjusted
Development Charge
\$/capita \$/sq.m
\$869 \$10.78

APPENDIX E.4 TABLE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS STORMWATER SERVICING DEVELOPMENT-RELATED CAPITAL PROGRAM

	Anticipated	Gross	(Grants/	Net	Ineligible Costs				Total		Dev	elop	ment-Related	Costs	
Project Description	Timing	Project Cost		idies/Other ecoveries	Municipal Cost		•	cement Shares		evelopment elated Costs	Available DC Shares / Prior Growth			2021- 2051	Other Developmer Related	
4.0 STORMWATER																
4.1 Stormwater Projects																
4.1.1 Fairchild Creek Jones Catchment Local Upgrades	2031 - 2041	\$ 3,369,000	\$	-	\$ 3,369,000	62%	\$	2,081,884	\$	1,287,116	\$	-	\$	1,287,116	\$	-
4.1.2 Grand River Northwest Catchment Local Upgrades	2021 - 2026	\$ 11,011,000	\$	-	\$ 11,011,000	0%	\$	-	\$	11,011,000	\$	-	\$	11,011,000	\$	-
4.1.3 Fairchild Creek Northeast Catchment Local Upgrades	2021 - 2026	\$ 30,300,000	\$	-	\$ 30,300,000	100%	\$	30,300,000	\$	-	\$	-	\$	-	\$	-
4.1.4 Northwest Employment Area (Pond #1)	2021 - 2026	\$ 1,960,000	\$	-	\$ 1,960,000	0%	\$	-	\$	1,960,000	\$	-	\$	1,960,000	\$	-
4.1.5 Southwest Employment Area (Pond #2)	2021 - 2026	\$ 1,318,000	\$	-	\$ 1,318,000	0%	\$	-	\$	1,318,000	\$	-	\$	1,318,000	\$	-
4.1.6 Golf Road North Employment Area (Pond #3)	2021 - 2026	\$ 576,000	\$	-	\$ 576,000	0%	\$	-	\$	576,000	\$	-	\$	576,000	\$	-
4.1.7 Golf-Powerline Employment Area (Pond #4)	2021 - 2026	\$ 877,000	\$	-	\$ 877,000	0%	\$	-	\$	877,000	\$	-	\$	877,000	\$	-
4.1.8 Balmoral-Powerline Northwest Area (Pond #5)	2021 - 2026	\$ 576,000	\$	-	\$ 576,000	0%	\$	-	\$	576,000	\$	-	\$	576,000	\$	-
4.1.9 Balmoral-Powerline Southwest Area (Pond #6)	2021 - 2026	\$ 456,000	\$	-	\$ 456,000	0%	\$	-	\$	456,000	\$	-	\$	456,000	\$	-
4.1.10 Northridge North Area (Pond #7)	2021 - 2026	\$ 356,000	\$	-	\$ 356,000	0%	\$	-	\$	356,000	\$	-	\$	356,000	\$	-
4.1.11 King George Corridor (Pond #8)	2021 - 2031	\$ 396,000	\$	-	\$ 396,000	0%	\$	-	\$	396,000	\$	-	\$	396,000	\$	-
4.1.12 King George Corridor (Pond #9)	2021 - 2031	\$ 276,000	\$	-	\$ 276,000	0%	\$	-	\$	276,000	\$	-	\$	276,000	\$	-
4.1.13 King George Corridor (Pond #10)	2031 - 2041	\$ 195,000	\$	-	\$ 195,000	0%	\$	-	\$	195,000	\$	-	\$	195,000	\$	-
4.1.14 Powerline-Park (Pond #11)	2031 - 2041	\$ 216,000	\$	-	\$ 216,000	0%	\$	-	\$	216,000	\$	-	\$	216,000	\$	-
4.1.15 Powerline-Park (Pond #12)	2031 - 2041	\$ 335,000	\$	-	\$ 335,000	0%	\$	-	\$	335,000	\$	-	\$	335,000	\$	-
4.1.16 Northeast Residential Area (Pond #13)	2021 - 2026	\$ 335,000	\$	-	\$ 335,000	0%	\$	-	\$	335,000	\$	-	\$	335,000	\$	-
4.1.17 Northeast Residential Area (Pond #14)	2021 - 2026	\$ 516,000	\$	-	\$ 516,000	0%	\$	-	\$	516,000	\$	-	\$	516,000	\$	-
4.1.18 Northeast Residential Area (Pond #15)	2021 - 2026	\$ 256,000	\$	-	\$ 256,000	0%	\$	=	\$	256,000	\$	-	\$	256,000	\$	-
4.1.19 Lynden-Garden Residential Area (Pond #16)	2021 - 2026	\$ 376,000	\$	-	\$ 376,000	0%	\$	=	\$	376,000	\$	-	\$	376,000	\$	-
4.1.20 Garden-403 Employment Area (Pond #17)	2021 - 2031	\$ 1,519,000	\$	-	\$ 1,519,000	0%	\$	-	\$	1,519,000	\$	-	\$	1,519,000	\$	-
Subtotal Stormwater Projects		\$ 55,219,000	\$	-	\$ 55,219,000		\$	32,381,884	\$	22,837,116	\$	-	\$	22,837,116	\$	-
STORMWATER GROWTH-RELATED CAPITAL PROGRAM 2019-2028		\$ 55,219,000	\$		\$ 55,219,000		\$	32,381,884	\$	22,837,116	\$		\$	22,837,116	Ś	



APPENDIX E.4 TABLE 2

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES STORMWATER SERVICING

Growth in Population in New Units 2021-2051	23,055
Employment Growth in New Space 2021-2051	14,739
Growth in New Building Space (Square Metres) 2021-2051	1,284,690

	Growth-Related Capital Forecast															
		Gross		Grants/	F	eplacement/		Available		Other		2021-2051				
		Project	Su	bsidies/Other		Benefit to	- 1	DC Shares /	D	evelopment-		DC	Res	sidential	Non-	Residential
		Cost		Recoveries		Existing	F	Prior Growth		Related		Share	Share			Share
		(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	(\$000)		%	\$000	%	\$000
												·				
STORMWATER SERVICING																
Stormwater Projects	\$	55,219.00	\$	-	\$	32,381.88	\$	-	\$	-	\$	22,837.12	61%	\$13,930.64	39%	\$8,906.48
TOTAL STORMWATER SERVICING	\$	55,219.00	\$	-	\$	32,381.88	\$	-	\$	-	\$	22,837.12		#######		######
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)														\$ 604.24		\$ 6.93

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	61%	\$ 13,930,641
2021-2051 Growth in Population in New Units		23,055
Development Charge Per Capita (Unadjusted)		\$ 604.24
Development Charge Per Capita after Cash Flow		\$ 869
Charge per Single Detached Unit	3.43	\$ 2,981

Non-Residential Development Charge Calculation			
Non-Residential Share of 2021-2051 DC Eligible Costs	39%	\$8,	906,475
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		1,	284,690
Development Charge Per Square Metre (Unadjusted)		\$	6.93
Development Charge Per Square Metre After Cash Flow		\$	10.78



APPENDIX E.4 TABLE 3 - PAGE 1

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$2,069.20)	(\$4,162.49)	(\$5,993.38)	(\$7,671.80)	(\$9,322.56)	(\$10,936.91)	(\$10,632.08)	(\$10,443.71)	(\$10,387.02)	(\$10,314.54)	(\$10,365.10)	(\$10,254.35)	(\$10,123.89)	(\$9,972.37)	(\$9,798.39)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$2,013.8 \$2,013.8	\$2,013.8 \$2,054.1	\$2,013.8 \$2,095.2	\$2,013.8 \$2,137.1	\$2,013.8 \$2,179.8	\$2,013.8 \$2,223.4	\$121.5 \$136.8	\$121.5 \$139.6	\$121.5 \$142.4	\$121.5 \$145.2	\$234.2 \$285.5	\$112.7 \$140.2	\$112.7 \$143.0	\$112.7 \$145.8	\$112.7 \$148.8	\$112.7 \$151.7
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	-	144	593	894	1,046	1,200	1,050	901	749	749	749	749	749	749	749	749
REVENUE - DC Receipts: Inflated	\$0.0	\$127.6	\$536.1	\$824.4	\$983.9	\$1,151.3	\$1,027.6	\$899.4	\$762.6	\$777.9	\$793.4	\$809.3	\$825.5	\$842.0	\$858.8	\$876.0
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$55.4)	(\$113.8) (\$53.0)	(\$228.9) (\$42.9)	(\$329.6) (\$36.1)	(\$421.9) (\$32.9)	(\$512.7) (\$29.5)	(\$601.5) \$15.6	(\$584.8) \$13.3	(\$574.4) \$10.9	(\$571.3) \$11.1	(\$567.3) \$8.9	(\$570.1) \$11.7	(\$564.0) \$11.9	(\$556.8) \$12.2	(\$548.5) \$12.4	(\$538.9) \$12.7
TOTAL REVENUE	(\$55.4)	(\$39.2)	\$264.3	\$458.7	\$529.1	\$609.1	\$441.7	\$327.9	\$199.0	\$217.7	\$235.0	\$250.9	\$273.5	\$297.4	\$322.7	\$349.8
CLOSING CASH BALANCE	(\$2,069.2)	(\$4,162.5)	(\$5,993.4)	(\$7,671.8)	(\$9,322.6)	(\$10,936.9)	(\$10,632.1)	(\$10,443.7)	(\$10,387.0)	(\$10,314.5)	(\$10,365.1)	(\$10,254.4)	(\$10,123.9)	(\$9,972.4)	(\$9,798.4)	(\$9,600.4)

STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$9,600.4)	(\$9,376.7)	(\$9,125.7)	(\$8,845.6)	(\$8,534.5)	(\$8,190.2)	(\$7,636.9)	(\$7,033.1)	(\$6,375.6)	(\$5,661.0)	(\$4,885.9)	(\$4,046.4)	(\$3,138.5)	(\$2,158.0)	(\$1,100.6)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$112.7 \$154.8	\$112.7 \$157.9	\$112.7 \$161.0	\$112.7 \$164.2	\$112.7 \$167.5	\$0.0 \$0.0 \$13,930.6 \$15,087.9										
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	23,055
REVENUE - DC Receipts: Inflated	\$893.5	\$911.4	\$929.6	\$948.2	\$967.2	\$986.5	\$1,006.2	\$1,026.4	\$1,046.9	\$1,067.8	\$1,089.2	\$1,111.0	\$1,133.2	\$1,155.9	\$1,179.0	\$27,547.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$528.0) \$12.9	(\$515.7) \$13.2	(\$501.9) \$13.5	(\$486.5) \$13.7	(\$469.4) \$14.0	(\$450.5) \$17.3	(\$420.0) \$17.6	(\$386.8) \$18.0	(\$350.7) \$18.3	(\$311.4) \$18.7	(\$268.7) \$19.1	(\$222.5) \$19.4	(\$172.6) \$19.8	(\$118.7) \$20.2	(\$60.5) \$20.6	(\$12,548.6) \$127.2
TOTAL REVENUE	\$378.4	\$408.9	\$441.1	\$475.4	\$511.8	\$553.3	\$603.8	\$657.5	\$714.6	\$775.1	\$839.5	\$907.9	\$980.4	\$1,057.4	\$1,139.1	\$15,126.4
CLOSING CASH BALANCE	(\$9,376.7)	(\$9,125.7)	(\$8,845.6)	(\$8,534.5)	(\$8,190.2)	(\$7,636.9)	(\$7,033.1)	(\$6,375.6)	(\$5,661.0)	(\$4,885.9)	(\$4,046.4)	(\$3,138.5)	(\$2,158.0)	(\$1,100.6)	\$38.5	

2021 Adjusted Charge Per Capita \$869

Allocation of Capital Program Residential Sector	61%
Non-Residential Sector	39%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX E.4 TABLE 3 - PAGE 2

CITY OF BRANTFORD NORTHERN BOUNDARY EXPANSION LANDS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$1,322.93)	(\$2,696.59)	(\$4,140.11)	(\$5,656.64)	(\$7,232.87)	(\$8,888.89)	(\$8,832.28)	(\$8,768.53)	(\$8,711.54)	(\$8,640.55)	(\$8,644.13)	(\$8,540.12)	(\$8,418.88)	(\$8,279.10)	(\$8,119.59)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$1,287.5 \$1,287.5	\$1,287.5 \$1,313.3	\$1,287.5 \$1,339.5	\$1,287.5 \$1,366.3	\$1,287.5 \$1,393.7	\$1,287.5 \$1,421.5	\$77.7 \$87.5	\$77.7 \$89.2	\$77.7 \$91.0	\$77.7 \$92.8	\$149.8 \$182.6	\$72.1 \$89.6	\$72.1 \$91.4	\$72.1 \$93.2	\$72.1 \$95.1	\$72.1 \$97.0
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	-	4,290	7,040	9,790	13,915	16,555	51,370	50,820	49,170	49,170	49,170	49,170	49,170	49,170	49,170	49,170
REVENUE - DC Receipts: Inflated	\$0.0	\$47.2	\$79.0	\$112.0	\$162.4	\$197.0	\$623.6	\$629.3	\$621.0	\$633.5	\$646.1	\$659.1	\$672.2	\$685.7	\$699.4	\$713.4
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$35.4)	(\$72.8) (\$34.8)	(\$148.3) (\$34.7)	(\$227.7) (\$34.5)	(\$311.1) (\$33.9)	(\$397.8) (\$33.7)	(\$488.9) \$9.4	(\$485.8) \$9.5	(\$482.3) \$9.3	(\$479.1) \$9.5	(\$475.2) \$8.1	(\$475.4) \$10.0	(\$469.7) \$10.2	(\$463.0) \$10.4	(\$455.4) \$10.6	(\$446.6) \$10.8
TOTAL REVENUE	(\$35.4)	(\$60.4)	(\$104.0)	(\$150.2)	(\$182.6)	(\$234.5)	\$144.1	\$153.0	\$148.0	\$163.8	\$179.0	\$193.6	\$212.7	\$233.0	\$254.6	\$277.6
CLOSING CASH BALANCE	(\$1,322.9)	(\$2,696.6)	(\$4,140.1)	(\$5,656.6)	(\$7,232.9)	(\$8,888.9)	(\$8,832.3)	(\$8,768.5)	(\$8,711.5)	(\$8,640.6)	(\$8,644.1)	(\$8,540.1)	(\$8,418.9)	(\$8,279.1)	(\$8,119.6)	(\$7,939.0)
STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
STORMWATER SERVICING OPENING CASH BALANCE	2037 (\$7,939.0)	2038 (\$7,736.0)	2039 (\$7,509.0)	2040 (\$7,256.5)	2041 (\$6,976.7)	2042 (\$6,668.0)	2043 (\$6,217.3)	2044 (\$5,725.4)	2045 (\$5,189.9)	2046 (\$4,607.8)	2047 (\$3,976.5)	2048 (\$3,292.6)	2049 (\$2,553.2)	2050 (\$1,754.7)	2051 (\$893.4)	TOTAL -
																**TOTAL - \$8,906.5 \$9,646.4
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated	(\$7,939.0) \$72.1	(\$7,736.0) \$72.1	(\$7,509.0) \$72.1	(\$7,256.5) \$72.1	(\$6,976.7) \$72.1	(\$6,668.0) \$0.0	(\$6,217.3) \$0.0	(\$5,725.4) \$0.0	(\$5,189.9) \$0.0	(\$4,607.8) \$0.0	(\$3,976.5) \$0.0	(\$3,292.6) \$0.0	(\$2,553.2) \$0.0	(\$1,754.7) \$0.0	(\$893.4) \$0.0	- \$8,906.5
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated NEW NON-RESIDENTIAL DEVELOPMENT	(\$7,939.0) \$72.1 \$99.0	(\$7,736.0) \$72.1 \$100.9	(\$7,509.0) \$72.1 \$103.0	(\$7,256.5) \$72.1 \$105.0	(\$6,976.7) \$72.1 \$107.1	(\$6,668.0) \$0.0 \$0.0	(\$6,217.3) \$0.0 \$0.0	(\$5,725.4) \$0.0 \$0.0	(\$5,189.9) \$0.0 \$0.0	(\$4,607.8) \$0.0 \$0.0	(\$3,976.5) \$0.0 \$0.0	(\$3,292.6) \$0.0 \$0.0	(\$2,553.2) \$0.0 \$0.0	(\$1,754.7) \$0.0 \$0.0	(\$893.4) \$0.0 \$0.0	\$8,906.5 \$9,646.4
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m) REVENUE	(\$7,939.0) \$72.1 \$99.0 49,170	\$72.1 \$100.9 49,170	(\$7,509.0) \$72.1 \$103.0 49,170	\$72.1 \$105.0 49,170	\$72.1 \$107.1 49,170	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 \$0.0	\$0.0 \$0.0 49,170	\$8,906.5 \$9,646.4 1,284,690
OPENING CASH BALANCE 2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m) REVENUE - DC Receipts: Inflated INTEREST - Interest on Opening Balance	(\$7,939.0) \$72.1 \$99.0 49,170 \$727.6 (\$436.6)	(\$7,736.0) \$72.1 \$100.9 49,170 \$742.2 (\$425.5)	(\$7,509.0) \$72.1 \$103.0 49,170 \$757.0 (\$413.0)	(\$7,256.5) \$72.1 \$105.0 49,170 \$772.2 (\$399.1)	(\$6,976.7) \$72.1 \$107.1 49,170 \$787.6 (\$383.7)	\$0.0 \$0.0 \$0.0 49,170 \$803.4 (\$366.7)	\$0.0 \$0.0 \$0.0 49,170 \$819.5 (\$342.0)	\$0.0 \$0.0 \$0.0 49,170 \$835.8 (\$314.9)	(\$5,189.9) \$0.0 \$0.0 49,170 \$852.6 (\$285.4)	\$0.0 \$0.0 \$0.0 49,170 \$869.6 (\$253.4)	\$0.0 \$0.0 \$0.0 49,170 \$887.0	(\$3,292.6) \$0.0 \$0.0 49,170 \$904.7 (\$181.1)	\$0.0 \$0.0 \$0.0 49,170 \$922.8 (\$140.4)	\$0.0 \$0.0 \$0.0 49,170 \$941.3 (\$96.5)	\$0.0 \$0.0 \$0.0 49,170 \$960.1	\$8,906.5 \$9,646.4 1,284,690 \$19,764.3 (\$10,185.4)

2021 Adjusted Charge Per Sq. m \$10.78

Allocation of Capital Program	
Residential Sector	61%
Non-Residential Sector	39%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix F Tutela Heights Engineered Services Technical Appendix

Tutela Heights Engineered Services Technical Appendix

This appendix provides the detailed analysis undertaken to establish the area-specific development charge rates for the Tutela Heights service area.

Four area-specific engineered services are included:

Appendix F.1 Roads & Related

Appendix F.2 Water Services

Appendix F.3 Wastewater Services

Appendix F.4 Stormwater Services

The basis of the development-related capital program is the City's Master Servicing Plan and discussions with City staff. The projects identified in the capital program are required to service the demands of the anticipated development in the Tutela Heights area to occur over the planning period of 2021 to 2051.

The following tables provide details of the projects included in the areaspecific engineered infrastructure development charge calculations for Tutela Heights. The content of the tables is as follows:

Table 1: Development Related Capital Program

Table 2: Calculation of Unadjusted Development Charges

Table 3: Residential & Non-Residential Cash Flow Analysis

Allocation of Capital Costs

The projects and costs have been identified and allocated through discussions with City staff. All costs are represented in current (2021) dollars.

The following table summarizes the allocation of the Tutela Heights engineered services capital costs (in thousands of dollars):

Service	Gross Cost	Grants / Subsidies / Other	Replacement / Benefit to Existing	Other Development -Related	2021-2051 DC Share	Residential Allocation (98%)	Non- Residential Allocation (2%)
Roads & Related	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water	\$9,420.00	\$0.00	\$2,485.30	\$535.88	\$6,398.83	\$6,270.85	\$127.98
Wastewater	\$10,735.00	\$0.00	\$460.40	\$1,186.68	\$9,087.92	\$8,906.16	\$181.76
Stormwater	\$1,796.00	\$0.00	\$0.00	\$0.00	\$1,796.00	\$1,760.08	\$35.92
Total	\$21.951.00	\$0.00	\$2,945.70	\$1,722.56	\$17,282.75	\$16,937.09	\$345.66

The area-specific engineered services capital program totals \$18.45 million. Of this amount:

- \$2.95 million (13 per cent) is attributable to benefit the existing community. As such, this figure has been excluded from the development charge calculation; and
- \$1.72 million (8 per cent) is identified in "other development-related" costs, which are generally attributable to development occurring beyond 2051. This share is allocated to post-period development and has also been removed from the development charges calculation.

After accounting for these deductions, the remaining \$17.23 million (79 per cent of the gross cost) is to be funded through the area-specific development charges in the Tutela Heights area over the 2021-2051 planning period.

Appendix F.1 Tutela Heights Roads & Related

Tutela Heights Roads & Related

Through discussions with City engineering staff, no area-specific, development-related roads needs were identified for the Tutela Heights area. As such, no Roads and Related area-specific development charges have been calculated for Tutela Heights.

Appendix F.2 Tutela Heights Water Services

Tutela Heights Water Services

The capital program for Water Services was assembled by the City's engineering staff and is designed to serve the anticipated population and employment growth in Tutela Heights between 2021 and 2051.

The 2021-2051 Water capital program totals \$9.42 million and includes distribution infrastructure planned to serve development in the Tutela Heights area. The development-related costs included in the capital program are not to be entirely recovered through DCs. \$2.49 million has been identified as benefit to the existing community and has therefore been excluded from the development charges calculation.

Additionally, a share of approximately \$535,900 is deemed to benefit Tutela Heights post-2051. These shares have also been excluded from the development charge calculation, however, will be reconsidered through future development charges studies.

The remaining \$6.40 million is identified as the net development-related share eligible for funding through development charges over the 2021-2051 planning period.

Table 2 summarizes the capital program and calculation of the unadjusted residential and non-residential development charges. The DC eligible share has been allocated 98 per cent to new residential development and 2 per cent to non-residential development based on shares of population in new units and employment growth in new space to 2051. The residential share of the capital program totals \$6.27 million and, when divided by the forecast growth in population in new units (3,734), an unadjusted charge of \$1,679.39 per capita results.

The non-residential share, \$128,000 is applied against the forecast increase in square metres of non-residential floor space (4,950), yielding an unadjusted charge of \$25.85 per square metre.

The residential and non-residential cash flow analysis is shown on Table 3. The analysis takes into consideration expenditure timing and DC revenue projections. After cash flow considerations, the residential and non-residential charges increase to \$1,933 per capita and \$30.69 per square metre, respectively.

		TUTELA I WATER SERVIC						
20	021 - 2051	Unadj	usted	Adju	sted			
Development-Re	lated Capital Program	Developme	nt Charge	Development Charge				
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m			
\$9,420	\$6,399	\$1,679.39	\$25.85	\$1,933	\$30.69			

APPENDIX F.2 TABLE 1

CITY OF BRANTFORD TUTELA HEIGHTS

WATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated		Gross		Grants/	Net	Ineli	gible	Costs		Total	Dev		elopment-Related		Costs	
	Project Description	Timing	Project		Sι	ubsidies/Other	Municipal	Rej	olace	ement		Development		Available		2021-		Other
				Cost		Recoveries	Cost	& B	TE S	Shares		Related Costs	D	OC Shares /		2051	Dev	elopment-
													Р	rior Growth				Related
2.0	WATER SERVICES																	
2.1	Distribution																	
	2.1.1 Mount Pleasant Road Watermain Upgrades	2021 - 2025	\$	3,417,000	\$	-	\$ 3,417,000	50%	\$	1,708,500	\$	1,708,500	\$	-	\$	1,281,375	\$	427,125
	2.1.2 Conklin Road Watermain Upgrades	2021 - 2025	\$	870,000	\$	-	\$ 870,000	50%	\$	435,000	\$	435,000	\$	-	\$	326,250	\$	108,750
	2.1.3 Tutela Heights Road Upgrades	2026 - 2031	\$	1,709,000	\$	-	\$ 1,709,000	20%	\$	341,800	\$	1,367,200	\$	-	\$	1,367,200	\$	-
	2.1.4 Tutela Heights Collector Road Distribution Watermain	2032 - 2041	\$	2,316,000	\$	-	\$ 2,316,000	0%	\$	-	\$	2,316,000	\$	=	\$	2,316,000	\$	-
	2.1.5 Davern Road Distribution Watermain	2032 - 2041	\$	1,108,000	\$	-	\$ 1,108,000	0%	\$	-	\$	1,108,000	\$	-	\$	1,108,000	\$	-
	Subtotal Distribution		\$	9,420,000	\$	-	\$ 9,420,000		\$	2,485,300	\$	6,934,700	\$	-	\$	6,398,825	\$	535,875
TOTA	AL		\$	9,420,000	\$	-	\$ 9,420,000		\$	2,485,300			\$	-	\$	6,398,825	\$	535,875



APPENDIX F.2 TABLE 2

CITY OF BRANTFORD TUTELA HEIGHTS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WATER SERVICES

Growth in Population in New Units 2021-2051	3,734
Employment Growth in New Space 2021-2051	90
Growth in New Building Space (Square Metres) 2021-2051	4,950

					Growth-Re	lated	Capital Fore	cast							
	Gross		Grants/	R	eplacement/		Available		Other		2021-2051				
	Project	Su	bsidies/Othe	er	Benefit to	D	C Shares /	D	evelopment-		DC	Res	sidential	Non-F	esidential
	Cost Recoveries			Existing (\$000)		Prior Growth (\$000)		Related		Share	;	Share		Share	
	(\$000)							(\$000)		(\$000)	%	\$000	%	\$000	
WATER SERVICES															
Distribution	\$ 9,420.00	\$	=	\$	2,485.30	\$	=	\$	535.88	\$	6,398.83	98% \$	6,270.85	2% \$	127.98
TOTAL WATER SERVICES	\$ 9,420.00	\$	-	\$	2,485.30	\$	-	\$	535.88	\$	6,398.83	\$	6,270.85	\$	127.98
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)												\$	1,679.39	\$	25.85

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	98%	\$ 6,270,849
2021-2051 Growth in Population in New Units		3,734
Development Charge Per Capita (Unadjusted)		\$ 1,679.39
Development Charge Per Capita after Cash Flow		\$ 1,933
Charge per Single Detached Unit	3.43	\$ 6,631

2%	\$	127,977
		4,950
	\$	25.85
	\$	30.69
	2%	



APPENDIX F.2 TABLE 3 - PAGE 1

CITY OF BRANTFORD TUTELA HEIGHTS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$323.8)	(\$536.1)	(\$710.2)	(\$825.2)	(\$849.3)	(\$634.4)	(\$526.5)	(\$491.2)	(\$512.5)	(\$534.9)	(\$558.4)	(\$726.4)	(\$906.4)	(\$1,099.0)	(\$1,305.1)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$315.1 \$315.1	\$315.1 \$321.4	\$315.1 \$327.8	\$315.1 \$334.4	\$315.1 \$341.1	\$223.3 \$246.6	\$223.3 \$251.5	\$223.3 \$256.5	\$223.3 \$261.6	\$223.3 \$266.9	\$223.3 \$272.2	\$335.6 \$417.2	\$335.6 \$425.6	\$335.6 \$434.1	\$335.6 \$442.8	\$335.6 \$451.6
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	-	67	93	127	173	236	180	144	118	118	118	118	118	118	118	118
REVENUE - DC Receipts: Inflated	\$0.0	\$132.1	\$187.0	\$260.5	\$362.0	\$503.7	\$391.8	\$319.7	\$267.2	\$272.6	\$278.0	\$283.6	\$289.3	\$295.1	\$301.0	\$307.0
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$8.7)	(\$17.8) (\$5.2)	(\$29.5) (\$3.9)	(\$39.1) (\$2.0)	(\$45.4) \$0.4	(\$46.7) \$4.5	(\$34.9) \$2.5	(\$29.0) \$1.1	(\$27.0) \$0.1	(\$28.2) \$0.1	(\$29.4) \$0.1	(\$30.7) (\$3.7)	(\$40.0) (\$3.7)	(\$49.9) (\$3.8)	(\$60.4) (\$3.9)	(\$71.8) (\$4.0)
TOTAL REVENUE	(\$8.7)	\$109.1	\$153.6	\$219.4	\$317.0	\$461.5	\$359.4	\$291.8	\$240.3	\$244.5	\$248.7	\$249.2	\$245.6	\$241.4	\$236.7	\$231.2
CLOSING CASH BALANCE	(\$323.8)	(\$536.1)	(\$710.2)	(\$825.2)	(\$849.3)	(\$634.4)	(\$526.5)	(\$491.2)	(\$512.5)	(\$534.9)	(\$558.4)	(\$726.4)	(\$906.4)	(\$1,099.0)	(\$1,305.1)	(\$1,525.5)
WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
WATER SERVICES OPENING CASH BALANCE	2037 (\$1,525.5)	2038 (\$1,761.0)	2039 (\$2,012.4)	2040 (\$2,280.8)	2041 (\$2,567.1)	2042 (\$2,872.4)	2043 (\$2,678.6)	2044 (\$2,467.1)	2045 (\$2,236.8)	2046 (\$1,986.6)	2047 (\$1,715.1)	2048 (\$1,421.0)	2049 (\$1,103.1)	2050 (\$759.7)	2051 (\$389.3)	TOTAL
																**TOTAL \$6,270.8 \$7,763.4
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated	(\$1,525.5) \$335.6	(\$1,761.0) \$335.6	(\$2,012.4) \$335.6	(\$2,280.8) \$335.6	(\$2,567.1) \$335.6	(\$2,872.4) \$0.0	(\$2,678.6) \$0.0	(\$2,467.1) \$0.0	(\$2,236.8) \$0.0	(\$1,986.6) \$0.0	(\$1,715.1) \$0.0	(\$1,421.0) \$0.0	(\$1,103.1) \$0.0	(\$759.7) \$0.0	(\$389.3) \$0.0	\$6,270.8
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated NEW RESIDENTIAL DEVELOPMENT	(\$1,525.5) \$335.6 \$460.6	(\$1,761.0) \$335.6 \$469.9	(\$2,012.4) \$335.6 \$479.3	(\$2,280.8) \$335.6 \$488.8	(\$2,567.1) \$335.6 \$498.6	(\$2,872.4) \$0.0 \$0.0	(\$2,678.6) \$0.0 \$0.0	(\$2,467.1) \$0.0 \$0.0	(\$2,236.8) \$0.0 \$0.0	(\$1,986.6) \$0.0 \$0.0	(\$1,715.1) \$0.0 \$0.0	(\$1,421.0) \$0.0 \$0.0	(\$1,103.1) \$0.0 \$0.0	(\$759.7) \$0.0 \$0.0	(\$389.3) \$0.0 \$0.0	\$6,270.8 \$7,763.4
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTSWater Service: Non Inflated Water Service: Inflated NEW RESIDENTIAL DEVELOPMENT Population Growth in New Units REVENUE	(\$1,525.5) \$335.6 \$460.6	(\$1,761.0) \$335.6 \$469.9	(\$2,012.4) \$335.6 \$479.3	(\$2,280.8) \$335.6 \$488.8	(\$2,567.1) \$335.6 \$498.6	(\$2,872.4) \$0.0 \$0.0	(\$2,678.6) \$0.0 \$0.0	(\$2,467.1) \$0.0 \$0.0	(\$2,236.8) \$0.0 \$0.0	(\$1,986.6) \$0.0 \$0.0	(\$1,715.1) \$0.0 \$0.0	(\$1,421.0) \$0.0 \$0.0	(\$1,103.1) \$0.0 \$0.0	(\$759.7) \$0.0 \$0.0	(\$389.3) \$0.0 \$0.0	\$6,270.8 \$7,763.4 3,734
OPENING CASH BALANCE 2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units REVENUE - DC Receipts: Inflated INTEREST - Interest on Opening Balance	(\$1,525.5) \$335.6 \$460.6 118 \$313.1 (\$83.9)	(\$1,761.0) \$335.6 \$469.9 118 \$319.4 (\$96.9)	(\$2,012.4) \$335.6 \$479.3 118 \$325.8 (\$110.7)	(\$2,280.8) \$335.6 \$488.8 118 \$332.3 (\$125.4)	(\$2,567.1) \$335.6 \$498.6 118 \$338.9	(\$2,872.4) \$0.0 \$0.0 118 \$345.7 (\$158.0)	(\$2,678.6) \$0.0 \$0.0 118 \$352.6 (\$147.3)	(\$2,467.1) \$0.0 \$0.0 118 \$359.7 (\$135.7)	\$0.0 \$0.0 \$0.0 118 \$366.9 (\$123.0)	(\$1,986.6) \$0.0 \$0.0 118 \$374.2 (\$109.3)	(\$1,715.1) \$0.0 \$0.0 118 \$381.7 (\$94.3)	(\$1,421.0) \$0.0 \$0.0 118 \$389.3 (\$78.2)	\$0.0 \$0.0 \$0.0 118 \$397.1 (\$60.7)	\$0.0 \$0.0 \$0.0 118 \$405.1 (\$41.8)	\$0.0 \$0.0 \$0.0 118 \$413.2 (\$21.4)	\$6,270.8 \$7,763.4 3,734 \$9,865.6 (\$2,107.4)

2021 Adjusted Charge Per Capita \$1,933

Allocation of Capital Program Residential Sector	98%
Non-Residential Sector	2%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX F.2 TABLE 3 - PAGE 2

CITY OF BRANTFORD TUTELA HEIGHTS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER SERVICES

NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$6.6)	(\$13.7)	(\$21.3)	(\$29.5)	(\$29.0)	(\$20.5)	(\$17.2)	(\$17.6)	(\$18.0)	(\$18.3)	(\$18.7)	(\$22.0)	(\$25.5)	(\$29.2)	(\$33.2)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$6.4 \$6.4	\$6.4 \$6.6	\$6.4 \$6.7	\$6.4 \$6.8	\$6.4 \$7.0	\$4.6 \$5.0	\$4.6 \$5.1	\$4.6 \$5.2	\$4.6 \$5.3	\$4.6 \$5.4	\$4.6 \$5.6	\$6.8 \$8.5	\$6.8 \$8.7	\$6.8 \$8.9	\$6.8 \$9.0	\$6.8 \$9.2
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	-	-	-	-	275	440	275	165	165	165	165	165	165	165	165	165
REVENUE - DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$9.1	\$14.9	\$9.5	\$5.8	\$5.9	\$6.1	\$6.2	\$6.3	\$6.4	\$6.6	\$6.7	\$6.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$0.2)	(\$0.4) (\$0.2)	(\$0.8) (\$0.2)	(\$1.2) (\$0.2)	(\$1.6) \$0.0	(\$1.6) \$0.2	(\$1.1) \$0.1	(\$0.9) \$0.0	(\$1.0) \$0.0	(\$1.0) \$0.0	(\$1.0) \$0.0	(\$1.0) (\$0.1)	(\$1.2) (\$0.1)	(\$1.4) (\$0.1)	(\$1.6) (\$0.1)	(\$1.8) (\$0.1)
TOTAL REVENUE	(\$0.2)	(\$0.5)	(\$0.9)	(\$1.4)	\$7.5	\$13.5	\$8.4	\$4.9	\$4.9	\$5.1	\$5.2	\$5.2	\$5.1	\$5.1	\$5.0	\$4.9
CLOSING CASH BALANCE	(\$6.6)	(\$13.7)	(\$21.3)	(\$29.5)	(\$29.0)	(\$20.5)	(\$17.2)	(\$17.6)	(\$18.0)	(\$18.3)	(\$18.7)	(\$22.0)	(\$25.5)	(\$29.2)	(\$33.2)	(\$37.5)

WATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$37.5)	(\$42.1)	(\$47.0)	(\$52.2)	(\$57.7)	(\$63.6)	(\$59.3)	(\$54.6)	(\$49.5)	(\$44.0)	(\$37.9)	(\$31.4)	(\$24.3)	(\$16.7)	(\$8.5)	
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Water Service: Non Inflated - Water Service: Inflated	\$6.8 \$9.4	\$6.8 \$9.6	\$6.8 \$9.8	\$6.8 \$10.0	\$6.8 \$10.2	\$0.0 \$0.0	\$128.0 \$158.4									
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	4,950
REVENUE - DC Receipts: Inflated	\$7.0	\$7.1	\$7.2	\$7.4	\$7.5	\$7.7	\$7.8	\$8.0	\$8.1	\$8.3	\$8.5	\$8.6	\$8.8	\$9.0	\$9.2	\$210.5
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$2.1) (\$0.1)	(\$2.3) (\$0.1)	(\$2.6) (\$0.1)	(\$2.9) (\$0.1)	(\$3.2) (\$0.1)	(\$3.5) \$0.1	(\$3.3) \$0.1	(\$3.0) \$0.1	(\$2.7) \$0.1	(\$2.4) \$0.1	(\$2.1) \$0.1	(\$1.7) \$0.2	(\$1.3) \$0.2	(\$0.9) \$0.2	(\$0.5) \$0.2	(\$52.1) \$0.4
TOTAL REVENUE	\$4.9	\$4.7	\$4.5	\$4.5	\$4.3	\$4.3	\$4.7	\$5.1	\$5.5	\$6.0	\$6.6	\$7.0	\$7.6	\$8.2	\$8.9	\$158.8
CLOSING CASH BALANCE	(\$42.1)	(\$47.0)	(\$52.2)	(\$57.7)	(\$63.6)	(\$59.3)	(\$54.6)	(\$49.5)	(\$44.0)	(\$37.9)	(\$31.4)	(\$24.3)	(\$16.7)	(\$8.5)	\$0.4	

2021 Adjusted Charge Per Sq. m \$30.69

Residential Sector	98%
Non-Residential Sector	2%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix F.3 Tutela Heights Wastewater Services

Tutela Heights Wastewater Services

The following section sets out the 2021-2051 development-related capital forecast and calculation of the area-specific development charge for Wastewater Services in the Tutela Heights area.

The details and timing of the 2021-2051 development-related Wastewater capital program are shown in Table 1. The gross costs included in the program total \$10.74 million, which includes sewage collection and pumping station projects. Of this total, \$460,400 and \$1.19 million have respectively been identified as benefit to the existing community and benefit to Tutela Heights development beyond the 2051 planning horizon. As such, these costs have been excluded from the development charge calculation.

The remaining \$9.09 million is identified as the net development-related share eligible for funding through development charges over the planning period from 2021 to 2051.

Table 2 summarizes the capital program and calculation of the unadjusted residential and non-residential development charges for wastewater servicing. The DC eligible share of \$9.09 million has been allocated 98 per cent to new residential development and 2 per cent to non-residential development based on shares of population in new units and employment growth in new space to 2051.

The residential share of the capital program totals \$8.91 million and, when divided by the forecast growth in population in new units (3,734), results in an unadjusted charge of \$2,385.15 per capita.

The non-residential share, approximately \$181,760, is applied against the forecast increase in square metres of non-residential floor space (4,950). This results in an unadjusted charge of \$36.72 per square metre.

The residential and non-residential cash flow analysis is shown in Table 3. After cash flow considerations, the residential and non-residential charge increase to \$2,748 per capita \$43.53 per square metre, respectively.

	WAS	STEWATER SERV	ICES SUMMARY		
20	21 - 2051	Unadjı	ısted	Adju	sted
Development-R	Related Capital Program	Developme	nt Charge	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$10,735,000	\$9,087,920	\$2,385	\$36.72	\$2,748	\$43.53

APPENDIX F.3 TABLE 1

CITY OF BRANTFORD TUTELA HEIGHTS

WASTEWATER SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM

		Anticipated	Gross	Grants/		Net	Ineli	gible C	osts		Total		De	velop	ment-Related C	osts	
	Project Description	Timing	Project	Subsidies/Oth	er	Municipal	Re	placem	ent	De	evelopment		Available		2021-		Other
			Cost	Recoveries		Cost	& B	BTE Sha	ares	Re	elated Costs		DC Shares /		2051	D	evelopment-
												F	Prior Growth				Related
3.0	WASTEWATER SERVICES																
3.1	Sewage Collection																
	3.1.1 Tutela Heights WWPS Forcemain	2031 - 2041	\$ 1,826,000	\$ -	\$	1,826,000	0%	\$	-	\$	1,826,000	\$	-	\$	1,826,000	\$	-
	3.1.2 Mount Pleasant Road Trunk Sewer	2021 - 2026	\$ 2,114,000	\$ -	\$	2,114,000	0%	\$	-	\$	2,114,000	\$	-	\$	1,479,800	\$	634,200
	3.1.3 Tutela Heights Road Trunk Sewer	2026 - 2031	\$ 2,087,000	\$ -	\$	2,087,000	0%	\$	-	\$	2,087,000	\$	-	\$	2,087,000	\$	-
	3.1.4 Mount Pleasant Road Trunk Sewer Upgrades	2026 - 2031	\$ 2,302,000	\$ -	\$	2,302,000	20%	\$	460,400	\$	1,841,600	\$	-	\$	1,289,120	\$	552,480
	Subtotal Sewage Collection		\$ 8,329,000	\$ -	\$	8,329,000		\$	460,400	\$	7,868,600	\$	-	\$	6,681,920	\$	1,186,680
3.2	Pumping Station																
	3.2.1 Tutela Heights Wastewater Pumping Station	2031 - 2041	\$ 2,406,000	\$ -	\$	2,406,000	0%	\$	-	\$	2,406,000	\$	-	\$	2,406,000	\$	-
	Subtotal Pumping Station		\$ 2,406,000	\$ -	\$	2,406,000		\$	-	\$	2,406,000	\$	-	\$	2,406,000	\$	-
TOTA			\$10,735,000.00	\$ -	\$1	0,735,000.00		\$ 4	160,400.00	\$	10,274,600.00	\$	-	\$	9,087,920.00	\$	1,186,680.00



APPENDIX F.3 TABLE 2

CITY OF BRANTFORD TUTELA HEIGHTS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES WASTEWATER SERVICES

Growth in Population in New Ur	its 2021-2051	3,734
Employment Growth in New Spa	ice 2021-2051	90
Growth in New Building Space (Square Metres) 2021-2051	4,950

					Growth-Re	late	ed Capital For	ecas	l							
	Gross		Grants/	F	Replacement/		Available		Other	2021-2051						
	Project	Sı	ubsidies/Other		Benefit to		DC Shares /	0	evelopment-	DC		Resi	dential	N	on-Re	sidential
	Cost		Recoveries		Existing		Prior Growth		Related	Share		S	hare		Sł	nare
	(\$000)		(\$000)		(\$000)		(\$000)		(\$000)	(\$000)	%		\$000	%		\$000
WASTEWATER SERVICES Sewage Collection	\$ 8,329.00			\$	460.40			\$	1,186.68	\$ 6,681.92			6,548.28		\$	133.64
Pumping Station	\$ 2,406.00	\$	-	\$	-	\$	-	\$	-	\$ 2,406.00	98%	\$	2,357.88	2%	\$	48.12
TOTAL WASTEWATER SERVICES	\$ 10,735.00	\$	-	\$	460.40	\$	-	\$	1,186.68	\$ 9,087.92		\$	8,906.16		\$	181.76
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)												\$	2,385.15		\$	36.72

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	98%	\$ 8,906,162
2021-2051 Growth in Population in New Units		3,734
Development Charge Per Capita (Unadjusted)		\$ 2,385.15
Development Charge Per Capita after Cash Flow		\$ 2,748
Charge per Single Detached Unit	3.43	\$ 9,426

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	2%	\$ 181,758
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		4,950
Development Charge Per Square Metre (Unadjusted)		\$ 36.72
Development Charge Per Square Metre After Cash Flow		\$ 43.53



APPENDIX F.3 TABLE 3 - PAGE 1

CITY OF BRANTFORD TUTELA HEIGHTS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$248.3)	(\$322.4)	(\$325.4)	(\$227.4)	\$17.5	(\$146.0)	(\$219.8)	(\$415.7)	(\$712.1)	(\$1,030.2)	(\$1,843.6)	(\$2,012.4)	(\$2,191.9)	(\$2,382.6)	(\$2,585.1)
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS																
- Wastewater Services: Non Inflated	\$241.7	\$241.7	\$241.7	\$241.7	\$241.7	\$793.1	\$551.4	\$551.4	\$551.4	\$551.4	\$928.5	\$377.0	\$377.0	\$377.0	\$377.0	\$377.0
- Wastewater Services: Inflated	\$241.7	\$246.5	\$251.5	\$256.5	\$261.6	\$875.7	\$621.0	\$633.4	\$646.1	\$659.0	\$1,131.8	\$468.8	\$478.2	\$487.7	\$497.5	\$507.4
NEW RESIDENTIAL DEVELOPMENT																
- Population Growth in New Units	-	67	93	127	173	236	180	144	118	118	118	118	118	118	118	118
REVENUE																
- DC Receipts: Inflated	\$0.0	\$187.8	\$265.9	\$370.4	\$514.6	\$716.0	\$557.0	\$454.5	\$379.9	\$387.5	\$395.3	\$403.2	\$411.2	\$419.5	\$427.9	\$436.4
INTEREST																
- Interest on Opening Balance	\$0.0	(\$13.7)	(\$17.7)	(\$17.9)	(\$12.5)	\$0.6	(\$8.0)	(\$12.1)	(\$22.9)	(\$39.2)	(\$56.7)	(\$101.4)	(\$110.7)	(\$120.6)	(\$131.0)	(\$142.2)
- Interest on In-year Transactions	(\$6.6)	(\$1.6)	\$0.3	\$2.0	\$4.4	(\$4.4)	(\$1.8)	(\$4.9)	(\$7.3)	(\$7.5)	(\$20.3)	(\$1.8)	(\$1.8)	(\$1.9)	(\$1.9)	(\$2.0)
TOTAL REVENUE	(\$6.6)	\$172.5	\$248.4	\$354.5	\$506.5	\$712.2	\$547.2	\$437.5	\$349.7	\$340.9	\$318.4	\$300.0	\$298.7	\$297.1	\$294.9	\$292.3
CLOSING CASH BALANCE	(\$248.3)	(\$322.4)	(\$325.4)	(\$227.4)	\$17.5	(\$146.0)	(\$219.8)	(\$415.7)	(\$712.1)	(\$1,030.2)	(\$1,843.6)	(\$2,012.4)	(\$2,191.9)	(\$2,382.6)	(\$2,585.1)	(\$2,800.3)

WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$2,800.3)	(\$3,028.8)	(\$3,271.3)	(\$3,528.7)	(\$3,801.8)	(\$4,091.5)	(\$3,816.4)	(\$3,516.2)	(\$3,189.4)	(\$2,834.1)	(\$2,448.6)	(\$2,031.2)	(\$1,579.7)	(\$1,092.1)	(\$566.3)	
2021 - 2051 RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$377.0 \$517.6	\$377.0 \$527.9	\$377.0 \$538.5	\$377.0 \$549.3	\$377.0 \$560.3	\$0.0 \$0.0 \$0.0 \$0.0	\$0.0 \$0.0	\$8,906.2 \$10,958.0								
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	3,734
REVENUE - DC Receipts: Inflated	\$445.1	\$454.0	\$463.1	\$472.4	\$481.8	\$491.5	\$501.3	\$511.3	\$521.6	\$532.0	\$542.6	\$553.5	\$564.6	\$575.8	\$587.4	\$14,025.1
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$154.0) (\$2.0)	(\$166.6) (\$2.0)	(\$179.9) (\$2.1)	(\$194.1) (\$2.1)	(\$209.1) (\$2.2)	(\$225.0) \$8.6	(\$209.9) \$8.8	(\$193.4) \$8.9	(\$175.4) \$9.1	(\$155.9) \$9.3	(\$134.7) \$9.5	(\$111.7) \$9.7	(\$86.9) \$9.9	(\$60.1) \$10.1	(\$31.1) \$10.3	(\$3,093.6) \$26.7
TOTAL REVENUE	\$289.1	\$285.4	\$281.1	\$276.2	\$270.5	\$275.1	\$300.2	\$326.9	\$355.3	\$385.4	\$417.4	\$451.5	\$487.6	\$525.8	\$566.5	\$10,958.2
CLOSING CASH BALANCE	(\$3,028.8)	(\$3,271.3)	(\$3,528.7)	(\$3,801.8)	(\$4,091.5)	(\$3,816.4)	(\$3,516.2)	(\$3,189.4)	(\$2,834.1)	(\$2,448.6)	(\$2,031.2)	(\$1,579.7)	(\$1,092.1)	(\$566.3)	\$0.2	

2021 Adjusted Charge Per Capita \$2,748

Allocation of Capital Program	
Residential Sector	98%
Non-Residential Sector	2%
Rates for 2021	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX F.3 TABLE 3 - PAGE 2

CITY OF BRANTFORD TUTELA HEIGHTS

CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WASTEWATER SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

WASTEWATER SERVICES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.0	(\$5.1)	(\$10.5)	(\$16.4)	(\$22.6)	(\$16.1)	(\$13.7)	(\$13.6)	(\$19.1)	(\$25.1)	(\$31.4)	(\$47.9)	(\$51.2)	(\$54.7)	(\$58.4)	(\$62.2)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$4.9 \$4.9	\$4.9 \$5.0	\$4.9 \$5.1	\$4.9 \$5.2	\$4.9 \$5.3	\$16.2 \$17.9	\$11.3 \$12.7	\$11.3 \$12.9	\$11.3 \$13.2	\$11.3 \$13.4	\$18.9 \$23.1	\$7.7 \$9.6	\$7.7 \$9.8	\$7.7 \$10.0	\$7.7 \$10.2	\$7.7 \$10.4
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	-	-	-	-	275	440	275	165	165	165	165	165	165	165	165	165
REVENUE - DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$13.0	\$21.1	\$13.5	\$8.3	\$8.4	\$8.6	\$8.8	\$8.9	\$9.1	\$9.3	\$9.5	\$9.7
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$0.1)	(\$0.3) (\$0.1)	(\$0.6) (\$0.1)	(\$0.9) (\$0.1)	(\$1.2) \$0.1	(\$0.9) \$0.1	(\$0.8) \$0.0	(\$0.7) (\$0.1)	(\$1.1) (\$0.1)	(\$1.4) (\$0.1)	(\$1.7) (\$0.4)	(\$2.6) (\$0.0)	(\$2.8) (\$0.0)	(\$3.0) (\$0.0)	(\$3.2) (\$0.0)	(\$3.4) (\$0.0)
TOTAL REVENUE	(\$0.1)	(\$0.4)	(\$0.7)	(\$1.0)	\$11.9	\$20.3	\$12.8	\$7.4	\$7.2	\$7.1	\$6.7	\$6.2	\$6.3	\$6.3	\$6.3	\$6.3
CLOSING CASH BALANCE	(\$5.1)	(\$10.5)	(\$16.4)	(\$22.6)	(\$16.1)	(\$13.7)	(\$13.6)	(\$19.1)	(\$25.1)	(\$31.4)	(\$47.9)	(\$51.2)	(\$54.7)	(\$58.4)	(\$62.2)	(\$66.3)

WASTEWATER SERVICES	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$66.3)	(\$70.7)	(\$75.2)	(\$80.1)	(\$85.2)	(\$90.7)	(\$84.6)	(\$77.9)	(\$70.7)	(\$62.8)	(\$54.2)	(\$45.0)	(\$35.0)	(\$24.2)	(\$12.5)	
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS - Wastewater Services: Non Inflated - Wastewater Services: Inflated	\$7.7 \$10.6	\$7.7 \$10.8	\$7.7 \$11.0	\$7.7 \$11.2	\$7.7 \$11.4	\$0.0 \$0.0	\$181.8 \$223.6									
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	4,950
REVENUE - DC Receipts: Inflated	\$9.9	\$10.1	\$10.3	\$10.5	\$10.7	\$10.9	\$11.1	\$11.3	\$11.6	\$11.8	\$12.0	\$12.3	\$12.5	\$12.8	\$13.0	\$299.0
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$3.6) (\$0.0)	(\$3.9) (\$0.0)	(\$4.1) (\$0.0)	(\$4.4) (\$0.0)	(\$4.7) (\$0.0)	(\$5.0) \$0.2	(\$4.7) \$0.2	(\$4.3) \$0.2	(\$3.9) \$0.2	(\$3.5) \$0.2	(\$3.0) \$0.2	(\$2.5) \$0.2	(\$1.9) \$0.2	(\$1.3) \$0.2	(\$0.7) \$0.2	(\$76.1) \$0.8
TOTAL REVENUE	\$6.2	\$6.2	\$6.1	\$6.1	\$6.0	\$6.1	\$6.6	\$7.2	\$7.9	\$8.6	\$9.2	\$10.0	\$10.8	\$11.7	\$12.5	\$223.7
CLOSING CASH BALANCE	(\$70.7)	(\$75.2)	(\$80.1)	(\$85.2)	(\$90.7)	(\$84.6)	(\$77.9)	(\$70.7)	(\$62.8)	(\$54.2)	(\$45.0)	(\$35.0)	(\$24.2)	(\$12.5)	\$0.1	

2021 Adjusted Charge Per Sq. m \$43.53

Allocation of Capital Program Residential Sector Non-Residential Sector	98% 2%
Rates for 2021 Inflation Rate Interest Rate on Positive Balances Interest Rate on Negative Balances	2.0% 3.5% 5.5%



Appendix F.4 Tutela Heights Stormwater Services

Tutela Heights Stormwater Services

The development-related capital program for stormwater servicing was provided by the City's engineering staff and totals \$1.80 million in capital costs. The details, timing, and cost breakdown of these stormwater projects are shown in Table 1.

No grants, subsidies, or other project contributions are anticipated, and no benefit to existing or post-2051 shares have been identified. As such, 100% of the projects are considered to be related to new development within the Tutela Heights area. The full amount of \$1.80 million has therefore been carried forward to the development charges calculation.

As shown in Table 2, the development-related share has been allocated 98 per cent, or \$1.76 million to new residential development and 2 per cent, or \$35,920 to new non-residential development.

The residential share is divided by the anticipated growth in population in new units between 2021 and 2051 in the Tutela Heights area (3,734), which yields an unadjusted development charge of \$471.37 per capita. The non-residential share is divided by the 4,950 square metres in forecasted new non-residential space, resulting in an unadjusted DC of \$7.26 per square metre.

In Table 3, the residential and non-residential cash flow analysis is shown. After cash flow analysis, the residential calculated charge increases to \$547 per capita and the adjusted non-residential development charge increases to \$8.67 per square metre.

		STORMWATER	SUMMARY		
20)21 - 2051	Unadjı	ısted	Adju	sted
Development-F	Related Capital Program	Developme	nt Charge	Developme	ent Charge
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$1,796,000	\$1,796,000	\$471	\$7.26	\$547	\$8.67

APPENDIX F.4 TABLE 1

CITY OF BRANTFORD TUTELA HEIGHTS

STORMWATER SERVICING DEVELOPMENT-RELATED CAPITAL PROGRAM

	Anticipated	Gross	Grants/	Net	Ineligible Costs	Total	Deve	elopment-Related	Costs
Project Description	Timing	Project	Subsidies/Other	Municipal	Replacement	Development	Available	2021-	Other
		Cost	Recoveries	Cost	& BTE Shares	Related Costs	DC Shares /	2051	Development-
							Prior Growth		Related
4.0 STORMWATER									
4.1 Stormwater Projects									
4.1.1 Tutela Heights North Area (Pond #18)	2021 - 2026	\$ 417,000	\$ -	\$ 417,000	0% \$ -	\$ 417,000	\$ -	\$ 417,000	\$ -
4.1.2 Tutela Heights North Area (Pond #19)	2021 - 2026	\$ 256,000	\$ -	\$ 256,000	0% \$ -	\$ 256,000	\$ -	\$ 256,000	\$ -
4.1.3 Phelps Creek Area (Pond #20)	2031 - 2041	\$ 156,000	\$ -	\$ 156,000	0% \$ -	\$ 156,000	\$ -	\$ 156,000	\$ -
4.1.4 Phelps Creek Area (Pond #21)	2031 - 2041	\$ 316,000	\$ -	\$ 316,000	0% \$ -	\$ 316,000	\$ -	\$ 316,000	\$ -
4.1.5 Phelps Creek Area (Pond #22)	2031 - 2041	\$ 456,000	\$ -	\$ 456,000	0% \$ -	\$ 456,000	\$ -	\$ 456,000	\$ -
4.1.6 Phelps Creek Area (Pond #23)	2031 - 2041	\$ 195,000	\$ -	\$ 195,000	0% \$ -	\$ 195,000	\$ -	\$ 195,000	\$ -
Subtotal Stormwater Projects		\$ 1,796,000	\$ -		\$ -	\$ 1,796,000	\$ -	\$ 1,796,000	\$ -
STORMWATER GROWTH-RELATED CAPITAL PROGRAM 2019-20	28	\$ 1,796,000.00	\$ -	\$ 1,796,000.00	\$ -	\$ 1,796,000.00	\$ -	\$ 1,796,000.00	\$ -



APPENDIX F.4 TABLE 2

CITY OF BRANTFORD TUTELA HEIGHTS SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES STORMWATER SERVICING

Growth in Population in New Units 2021-2051	3,734
Employment Growth in New Space 2021-2051	90
Growth in New Building Space (Square Metres) 2021-2051	4,950

				Growth-Rela	ted (Capital F	Forecast									
	Gross		Grants/	Replacement/		A	vailable		Other		2021-2051					
	Project	S	Subsidies/Other	Benefit to		DC	Shares /	D	Development-		DC	Res	idential	Non-	Resid	dential
			Recoveries	Existing		Pric	or Growth		Related	Share		S	hare	Sha		
	(\$000)		(\$000)	(\$000)			(\$000)		(\$000)		(\$000)	%	\$000	%		\$000
STORMWATER SERVICING Stormwater Projects	\$ 1,796.00	\$	-	\$ -		\$	-	\$	-	\$	1,796.00	98%	\$ 1,760.08	2%	\$	35.92
TOTAL STORMWATER SERVICING	\$ 1,796.00	\$	-	\$ -		\$	-	\$	-	\$	1,796.00		\$ 1,760.08		\$	35.92
Unadjusted Development Charge Per Capita (\$) Unadjusted Development Charge Per Square Metre (\$)													\$ 471.37		\$	7.26

Residential Development Charge Calculation		
Residential Share of 2021-2051 DC Eligible Costs	98%	\$ 1,760,080
2021-2051 Growth in Population in New Units		3,734
Development Charge Per Capita (Unadjusted)		\$ 471.37
Development Charge Per Capita after Cash Flow		\$ 547
Charge per Single Detached Unit	3.43	\$ 1,876

Non-Residential Development Charge Calculation		
Non-Residential Share of 2021-2051 DC Eligible Costs	2%	\$ 35,920
2021-2051 Growth in Non-Residential Building Space (Sq.M.)		4,950
Development Charge Per Square Metre (Unadjusted)		\$ 7.26
Development Charge Per Square Metre After Cash Flow		\$ 8.67



APPENDIX F.4 TABLE 3 - PAGE 1

CITY OF BRANTFORD TUTELA HEIGHTS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$112.95)	(\$195.93)	(\$269.87)	(\$328.84)	(\$363.97)	(\$362.48)	(\$269.58)	(\$192.32)	(\$125.97)	(\$54.45)	(\$101.90)	(\$152.81)	(\$207.44)	(\$266.04)	(\$328.7
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$109.9 \$109.9	\$109.9 \$112.1	\$109.9 \$114.4	\$109.9 \$116.7	\$109.9 \$119.0	\$109.9 \$121.4	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$100.0 \$122.0	\$100.0 \$124.4	\$100.0 \$126.9	\$100.0 \$129.4	\$100.0 \$132.0	\$100.0 \$134.7
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	-	67	93	127	173	236	180	144	118	118	118	118	118	118	118	118
REVENUE - DC Receipts: Inflated	\$0.0	\$37.4	\$52.9	\$73.7	\$102.4	\$142.5	\$110.9	\$90.5	\$75.6	\$77.1	\$78.7	\$80.3	\$81.9	\$83.5	\$85.2	\$86.9
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$3.0)	(\$6.2) (\$2.1)	(\$10.8) (\$1.7)	(\$14.8) (\$1.2)	(\$18.1) (\$0.5)	(\$20.0) \$0.4	(\$19.9) \$1.9	(\$14.8) \$1.6	(\$10.6) \$1.3	(\$6.9) \$1.3	(\$3.0) (\$1.2)	(\$5.6) (\$1.2)	(\$8.4) (\$1.2)	(\$11.4) (\$1.3)	(\$14.6) (\$1.3)	(\$18.1 (\$1.3
TOTAL REVENUE	(\$3.0)	\$29.1	\$40.4	\$57.7	\$83.9	\$122.9	\$92.9	\$77.3	\$66.3	\$71.5	\$74.5	\$73.5	\$72.3	\$70.8	\$69.3	\$67.
CLOSING CASH BALANCE	(\$112.9)	(\$195.9)	(\$269.9)	(\$328.8)	(\$364.0)	(\$362.5)	(\$269.6)	(\$192.3)	(\$126.0)	(\$54.5)	(\$101.9)	(\$152.8)	(\$207.4)	(\$266.0)	(\$328.8)	(\$395.9
STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$395.9)	(\$467.8)	(\$544.6)	(\$626.6)	(\$714.2)	(\$807.7)	(\$752.7)	(\$692.5)	(\$627.0)	(\$555.9)	(\$478.7)	(\$395.1)	(\$304.8)	(\$207.1)	(\$101.9)	
2021 - 2030 RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$100.0 \$137.3	\$100.0 \$140.1	\$100.0 \$142.9	\$100.0 \$145.8	\$100.0 \$148.7	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$1,760. \$2,177.

-Storm Water: Non Inflated - Storm Water: Inflated	\$100.0 \$137.3	\$100.0 \$140.1	\$100.0 \$142.9	\$100.0 \$145.8	\$100.0 \$148.7	\$0.0 \$0.0 \$1,760.1 \$2,177.5										
NEW RESIDENTIAL DEVELOPMENT - Population Growth in New Units	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	3,734
REVENUE - DC Receipts: Inflated	\$88.6	\$90.4	\$92.2	\$94.0	\$95.9	\$97.8	\$99.8	\$101.8	\$103.8	\$105.9	\$108.0	\$110.2	\$112.4	\$114.6	\$116.9	\$2,791.8
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$21.8) (\$1.3)	(\$25.7) (\$1.4)	(\$30.0) (\$1.4)	(\$34.5) (\$1.4)	(\$39.3) (\$1.5)	(\$44.4) \$1.7	(\$41.4) \$1.7	(\$38.1) \$1.8	(\$34.5) \$1.8	(\$30.6) \$1.9	(\$26.3) \$1.9	(\$21.7) \$1.9	(\$16.8) \$2.0	(\$11.4) \$2.0	(\$5.6) \$2.0	(\$605.3) \$2.4
TOTAL REVENUE	\$65.5	\$63.3	\$60.9	\$58.1	\$55.2	\$55.1	\$60.2	\$65.5	\$71.1	\$77.2	\$83.6	\$90.4	\$97.6	\$105.2	\$113.3	\$2,188.9
CLOSING CASH BALANCE	(\$467.8)	(\$544.6)	(\$626.6)	(\$714.2)	(\$807.7)	(\$752.7)	(\$692.5)	(\$627.0)	(\$555.9)	(\$478.7)	(\$395.1)	(\$304.8)	(\$207.1)	(\$101.9)	\$11.4	

2021 Adjusted Charge Per Capita \$547

Residential Sector	98%
Non-Residential Sector	2%
Rates for 2021	
Inflation Rate:	2.0%
IIIIation Nate.	0.50
Interest Rate on Positive Balances	3.5%



APPENDIX F.4 TABLE 3 - PAGE 2

CITY OF BRANTFORD TUTELA HEIGHTS CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

STORMWATER SERVICING NON-RESIDENTIAL DEVELOPMENT CHARGE (in \$000)

STORMWATER SERVICING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPENING CASH BALANCE	\$0.00	(\$2.31)	(\$4.78)	(\$7.44)	(\$10.30)	(\$10.69)	(\$9.53)	(\$7.30)	(\$6.08)	(\$4.68)	(\$3.21)	(\$4.20)	(\$5.19)	(\$6.28)	(\$7.39)	(\$8.61)
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$2.2 \$2.2	\$2.2 \$2.3	\$2.2 \$2.3	\$2.2 \$2.4	\$2.2 \$2.4	\$2.2 \$2.5	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$2.0 \$2.5	\$2.0 \$2.5	\$2.0 \$2.6	\$2.0 \$2.6	\$2.0 \$2.7	\$2.0 \$2.7
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	-	-	-	-	275	440	275	165	165	165	165	165	165	165	165	165
REVENUE - DC Receipts: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$2.6	\$4.2	\$2.7	\$1.6	\$1.7	\$1.7	\$1.7	\$1.8	\$1.8	\$1.9	\$1.9	\$1.9
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	\$0.0 (\$0.1)	(\$0.1) (\$0.1)	(\$0.3) (\$0.1)	(\$0.4) (\$0.1)	(\$0.6) \$0.0	(\$0.6) \$0.0	(\$0.5) \$0.0	(\$0.4) \$0.0	(\$0.3) \$0.0	(\$0.3) \$0.0	(\$0.2) (\$0.0)	(\$0.2) (\$0.0)	(\$0.3) (\$0.0)	(\$0.3) (\$0.0)	(\$0.4) (\$0.0)	(\$0.5) (\$0.0)
TOTAL REVENUE	(\$0.1)	(\$0.2)	(\$0.3)	(\$0.5)	\$2.0	\$3.6	\$2.2	\$1.2	\$1.4	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$1.4
CLOSING CASH BALANCE	(\$2.3)	(\$4.8)	(\$7.4)	(\$10.3)	(\$10.7)	(\$9.5)	(\$7.3)	(\$6.1)	(\$4.7)	(\$3.2)	(\$4.2)	(\$5.2)	(\$6.3)	(\$7.4)	(\$8.6)	(\$10.0)

STORMWATER SERVICING	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	TOTAL
OPENING CASH BALANCE	(\$10.0)	(\$11.3)	(\$12.8)	(\$14.5)	(\$16.2)	(\$18.0)	(\$16.8)	(\$15.5)	(\$14.0)	(\$12.4)	(\$10.7)	(\$8.9)	(\$6.9)	(\$4.8)	(\$2.5)	
2021 - 2051 NON-RESIDENTIAL FUNDING REQUIREMENTS -Storm Water: Non Inflated - Storm Water: Inflated	\$2.0 \$2.8	\$2.0 \$2.9	\$2.0 \$2.9	\$2.0 \$3.0	\$2.0 \$3.0	\$0.0 \$0.0	\$35.9 \$44.4									
NEW NON-RESIDENTIAL DEVELOPMENT - New Gross Floor Area (sq. m)	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	4,950
REVENUE - DC Receipts: Inflated	\$2.0	\$2.0	\$2.0	\$2.1	\$2.1	\$2.2	\$2.2	\$2.3	\$2.3	\$2.3	\$2.4	\$2.4	\$2.5	\$2.5	\$2.6	\$59.4
INTEREST - Interest on Opening Balance - Interest on In-year Transactions	(\$0.5) (\$0.0)	(\$0.6) (\$0.0)	(\$0.7) (\$0.0)	(\$0.8) (\$0.0)	(\$0.9) (\$0.0)	(\$1.0) \$0.0	(\$0.9) \$0.0	(\$0.9) \$0.0	(\$0.8) \$0.0	(\$0.7) \$0.0	(\$0.6) \$0.0	(\$0.5) \$0.0	(\$0.4) \$0.0	(\$0.3) \$0.0	(\$0.1) \$0.0	(\$15.0) \$0.1
TOTAL REVENUE	\$1.4	\$1.4	\$1.3	\$1.3	\$1.2	\$1.2	\$1.3	\$1.5	\$1.6	\$1.7	\$1.9	\$2.0	\$2.2	\$2.3	\$2.5	\$44.4
CLOSING CASH BALANCE	(\$11.3)	(\$12.8)	(\$14.5)	(\$16.2)	(\$18.0)	(\$16.8)	(\$15.5)	(\$14.0)	(\$12.4)	(\$10.7)	(\$8.9)	(\$6.9)	(\$4.8)	(\$2.5)	\$0.0	

2021 Adjusted Charge Per Sq. m \$8.67

Allocation of Capital Program	
Residential Sector	98%
Non-Residential Sector	2%
Rates for 2021	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



Appendix G Reserve Funds

Reserve Funds

The *Development Charges Act* requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances, at December 31, 2020, that are available to help fund the development-related net capital costs identified in this study. All of the available reserve funds are accounted for in this study.

As shown in Table 1, the December 31, 2020 total reserve fund balance was in a positive position of \$43.92 million. These funds are assigned to projects in the initial years of the capital program for each service. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis.

It is noted that as there is currently no DC reserve balance for the areaspecific services. As such, all DC reserve funds have been applied to the City-wide capital programs.

APPENDIX G TABLE 1

CITY OF BRANTFORD DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT 2020 YEAR-END

Service	Reserve Fund Balance as at 2020 Year-End
Fire Department	\$371,330
Police Service	\$977,660
Public Library	\$2,972,626
Parks & Recreation	\$3,527,337
Public Transit	\$1,424,401
Housing	\$196,535
Land Ambulance	\$33,701
Public Works: Buildings & Fleet	\$298,962
Development-Related Studies	\$0
Roads & Related	\$25,196,030
Water Services	\$4,186,187
Wastewater Services	\$4,654,456
Stormwater Services	\$81,899
Total Development Charge Reserves	\$43,921,124



Appendix H Cost of Growth Analysis

Appendix H.1 Asset Management Plan

Asset Management Plan

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

Asset Types

A summary of the future municipal-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table 1 and Table 2. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some projects do not relate to the emplacement of a tangible capital asset – some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as "not infrastructure" in the table.

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

Table 1 Summary of Municipal Assets Considered General Services

0	Estimated Useful
Service and Amenities	Life
Fire Department	
Fire Station and other Facilities	60 years
Vehicles and Equipment	10 years
Studies	Not Infrastructure
Police Service	
■ Police Headquarters	60 years
■ Equipment	10 years
Public Library	
■ Library Branch	60 years
Collection Materials	10 years
Parks & Recreation	
Recreation Buildings	60 years
■ Park Development	20 years
■ Trail Development	20 years
■ Studies	Not Infrastructure
Public Transit	
Shelters and Facilities	30 years
■ Transit Fleet	7-12 years
Transportation Studies	Not Infrastructure
Housing	
Buildings	60 years
Land Ambulance	
■ Station	60 years
■ Fully Equipped Vehicles	12 years
■ Equipment	10 years
Child Care	
• Facilities	60 years
Development-Related Studies	
Studies	Not Infrastructure

Table 2 Summary of Municipal Assets Considered Engineered Services

Camina and Amanitias	Estimated Useful
Service and Amenities	Life
Roads and Related	
■ Road Construction	60 years
Active Transportation Facilities	30 years
■ Growth-Related Studies	Not Infrastructure
Public Works: Buildings & Fleet	
■ Vehicles	10 years
Studies	Not Infrastructure
Water Service	
Watermains/Distribution	70 years
■ Elevated Tank	60 years
■ Water Treatment Plant	70 years
■ Growth-Related Studies	Not Infrastructure
Waste Water	
■ Sewage Collection	70 years
Pumping Station	60 years
■ Wastewater Treatment Plant	70 years
■ Growth-Related Studies	Not Infrastructure
Stormwater	
■ Ponds	70 years
■ Local Upgrades	70 years
Growth-Related Studies	Not Infrastructure

Annual Provision

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

Based on the information obtained from City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

Consistent with the requirements of the DCA, assets that are proposed to be funded under the DC By-law have been included in the analysis. As a result, the total calculated annual provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to the benefit-to-existing and other development-related benefit have also been calculated.

Table 3 and 4 provide an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law for both general and engineered services. As shown in Table 3, by 2031, the City will need to fund an additional \$2.54 million per annum in order to properly fund the full life-cycle costs of the new assets related to the 10-year (2021-2030) capital programs supported under the DC By-law.

Table 4 provides a separate analysis of the annual provisions required for the 2021-2051 engineered services capital program. As shown in Table 4, the annual provision in 2052 amounts to \$3.11 million.

TABLE 3

CITY OF BRANTFORD CALCULATED ANNUAL PROVISION BY 2031 GENERAL SERVICES

		2021	- 20	30		Calculated	ΑM	IP Annual
		Capital	Prog	gram	Provision by 2031			
Service	DC	Recoverable	No	n-DC Funded		DC Related	No	on-DC Related
Fire Department	\$	5,458,000	\$	10,377,000	\$	121,000	\$	491,000
Police Service	\$	8,619,000	\$	30,942,000	\$	86,000	\$	505,000
Public Library	\$	4,921,000	\$	2,973,000	\$	151,000	\$	95,000
Parks & Recreation	\$	38,450,000	\$	28,940,000	\$	776,000	\$	524,000
Public Transit	\$	3,178,000	\$	2,717,000	\$	500,000	\$	211,000
Housing	\$	37,053,000	\$	60,895,000	\$	567,000	\$	1,016,000
Land Ambulance	\$	1,392,000	\$	10,898,000	\$	57,000	\$	289,000
Child Care	\$	5,686,000	\$	1,303,000	\$	99,000	\$	23,000
Development-Related Studies	\$	1,037,000	\$	1,657,000	\$	-	\$	-
Public Works: Buildings & Fleet	\$	2,481,000	\$	13,624,000	\$	178,000	\$	31,000
Total 2031 Provision	\$	108,275,000	\$	164,326,000	\$	2,535,000	\$	3,185,000

TABLE 4

CITY OF BRANTFORD CALCULATED ANNUAL PRIVISION BY 2052 ENGINEERED SERVICES

	2021 - 2051					Calculated AMP Annual				
	Capital Program				Provision by 2052					
Service	DC Recoverable Non-DC Funded			[DC Related	No	n-DC Related			
Roads & Related	\$	293,241,197	\$	73,974,008	\$	2,380,745	\$	873,557		
Water Services	\$	128,121,618	\$	62,112,382	\$	448,307	\$	193,663		
Wastewater Services	\$	58,346,717	\$	49,316,783	\$	29,501	\$	43,515		
Stormwater	\$	68,636,042	\$	101,422,958	\$	254,365	\$	381,428		
Total 2052 Provision	\$	\$ 548,345,574 \$ 286,826,131				3,112,918	\$	1,492,162		

Transit Asset Management in the City

The City of Brantford currently plans to add new transit (bus) shelters, enhanced transfer transit facilities, as well as several new fully equipped vehicles to improve transit services. The full cost of the capital program for Public Transit is valued at \$5.90 million over the ten-year planning period.

Details on the capital projects and anticipated ridership forecast is found in Appendix B.5.

As shown in Table 3, the annual provision for DC eligible costs required for Transit services by 2031 is \$500,000. The City ensures that the transit system will be financially sustainable through yearly capital and operating budget reviews. The City examines and updates funding requirements through its annual budgeting process.

Financial Sustainability of the Program

Future Revenue Growth

The calculated annual funding provisions should be considered within the context of the City's projected growth. Over the next ten years (to 2030) the City is projected to increase by approximately 7,570 households, which represents an 18 per cent increase over the existing base, and by 2051 the City will add 26,440 households, or a 64% increase over the existing base. In addition, the City will also add roughly 7,610 new employees which will result in approximately 493,930 square metres of additional non-residential building space by 2030, and 34,040 employees and 2.43 million square metres of non-residential space by 2051.

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

Annual Budgetary Reviews

Through this annual exercise, staff identify the required funding and propose mitigating measures in order to ensure there are sufficient funds in reserves

over the long term. Life cycle funding methodologies are also reviewed in order to ensure that the City is continuing to implement financially sustainable practices for funding the eventual replacement of assets.

The Program is Deemed Financially Sustainable

The calculated annual provisions identified in Tables 3 and 4 are considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term.

Importantly, the City's annual operating budget processes allow for opportunities for ongoing review of asset management requirements. These tools and processes will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

Appendix H.2 Long-term Capital and Operating Impacts

APPENDIX H TABLE 1

CITY OF BRANTFORD ESTIMATED NET OPERATING COST OF THE PROPOSED DEVELOPMENT-RELATED CAPITAL PROGRAM

(in constant 2021 dollars)

Estimated Operating

Net Cost (in 2021\$)

Cost (\$000) 2030

	(111	20219)	2030
Fire			
Fire Station	\$60	per sq.ft. added	\$348.0
Vehicles	\$0.12	per \$1.00 added	\$63.0
New Firefighters	\$110,000	per firefighter	\$1,320.0
Police			
Facility Expansion		per sq.ft. added	\$2,656.0
Vehicles	\$0.12	per \$1.00 added	\$49.0
New Officers	\$110,000	per officer	\$3,520.0
Library			
New Library Branch	\$60	per sq.ft. added	\$816.0
Parks and Recreation			
Southwest Sports Complex	\$65,000		\$65.0
Park and Trail Development	\$0.08	per \$1.00 added	\$558.2
Transit			
Additional Buses	\$0.12	per \$1.00 added	\$528.0
Housing			
Buildings, Land & Furnishings	\$0.12	per \$1.00 added	\$6,876.8
Land Ambulance			
Vehicles	\$0.12	per \$1.00 added	\$151.4
New Paramedics	\$110,000	per paramedic	\$2,200.0
Child Care			
New Child Care Spaces	\$2,000	per space added	\$1,280.0
Public Works			
New Vehicle and Equipment Acquisitions	\$0.12	per \$1.00 added	\$248.6
Development-Related Roads Infrastructure	\$250	per household	\$1,893.0
			\$22.5 2.0
TOTAL ESTIMATED OPERATING COSTS			\$22,573.0



TABLE 2

CITY OF BRANTFORD

SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM

			Development-Rel	ated Capital Progr	ram (2021 - 2030)	
	Service	Net	Replacement	Prior Growth /	Other	2021-2030
		Municipal	& Benefit to	Available	Development-	DC
		Cost	Existing	DC Reserves	Related	Share
		(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
1.0	FIRE DEPARTMENT	\$15,834.2	\$8,904.9	\$1,471.8	\$0.0	\$5,457.5
2.0	POLICE SERVICE	\$39,560.8	\$19,213.9	\$2,569.5	\$9,158.8	\$8,618.6
3.0	PUBLIC LIBRARY	\$7,893.5	\$0.0	\$2,972.6	\$0.0	\$4,920.9
4.0	PARKS & RECREATION	\$67,389.7	\$1,573.4	\$13,118.3	\$14,248.1	\$38,450.0
5.0	PUBLIC TRANSIT	\$5,895.0	\$1,292.5	\$1,424.4	\$0.0	\$3,178.1
6.0	HOUSING	\$57,307.0	\$20,057.4	\$196.5	\$0.0	\$37,053.0
7.0	LAND AMBULANCE	\$8,903.5	\$3,045.0	\$33.7	\$4,432.4	\$1,392.4
8.0	CHILD CARE	\$6,988.8	\$0.0	\$0.0	\$1,302.8	\$5,686.0
9.0	DEVELOPMENT-RELATED STUDIES	\$2,694.2	\$904.8	\$163.7	\$588.5	\$1,037.3
C1.2	PUBLIC WORKS: BUILDINGS & FLEET	\$16,097.0	\$13,317.3	\$299.0	\$0.0	\$2,480.7
тот	AL ENGINEERED SERVICES	\$228,563.8	\$68,309.2	\$22,249.5	\$29,730.6	\$108,274.5

		Development-Re	ated Capital Prog	ram (2021 - 2051)	
Service	Net	Replacement	Prior Growth /	Other	2021-2051
	Municipal	& Benefit to	Available	Development-	DC
	Cost	Existing	DC Reserves	Related	Share
1.0 ROADS AND RELATED	\$363,667.7	\$45,230.5	\$25,196.0	\$0.0	\$293,241.2
2.0 WATER SERVICES	\$182,090.0	\$43,034.7	\$4,186.2	\$6,747.5	\$128,121.6
3.0 WASTEWATER SERVICES	\$268,175.0	\$49,704.5	\$0.0	\$33,847.7	\$184,622.8
4.0 STORMWATER	\$170,059.0	\$101,200.7	\$81.9	\$140.4	\$68,636.0
TOTAL ENGINEERED SERVICES	\$983,991.7	\$239,170.3	\$29,464.1	\$40,735.6	\$674,621.7



Appendix I Proposed Draft DC By-law (Under Separate Cover)