

DEVELOPMENT CHARGES BACKGROUND STUDY

Town of Plympton-Wyoming



HEMSON Consulting Ltd.

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EXECUTIVE SUMMARY

The following summarizes the findings of the Town of Plympton-Wyoming's 2016 Development Charges (DC) Background Study.

A. STUDY CONSISTENT WITH DEVELOPMENT CHARGES LEGISLATION

- This study calculates DCs for the Town of Plympton-Wyoming in compliance with the provisions of the *Development Charges Act, 1997 (DCA)* and its associated regulation (*Ontario Regulation 82/98*).
- The Town of Plympton-Wyoming's existing DC by-law 75-2012, expires on September 28, 2016. Council must pass a new by-law to continue to levy DCs beyond this date.
- The Town needs to continue implementing DCs to fund capital projects throughout Plympton-Wyoming so that new development pays for its capital requirements to the extent allowed by the *DCA* and so that new services required by development are provided in a fiscally responsible manner.
- The *DCA* and O. Reg. 82/98 require that a DC background study be prepared in which charges are determined with reference to:
 - a forecast of the amount, type and location of residential and non-residential development anticipated in the Town;
 - a review of future capital projects, including an analysis of gross expenditures, funding sources and net expenditures incurred or to be incurred by the Town to provide for the expected development, including the determination of the development and non-development-related components of the capital projects;
 - an examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the DC by-law relates; and
 - an asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC By-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

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

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

- The following municipal services have been included in the DC analysis:
 - Library Service;
 - Fire Services;
 - Parks and Recreation;
 - Public Works;
 - General Government; and
 - Roads and Related.
- Costs associated with water and wastewater servicing are not included in this DC Study as they are funded through user fees, also referred to as frontage fees.

C. APPROACH USED TO CALCULATE DEVELOPMENT CHARGES

- DCs have been established under the parameters and limitations of the *DCA*. The study provides the rationale and basis for the calculated rates.
- A Town-wide average cost approach is used to calculate DCs for all services included in this analysis. Consideration was given to adjusting the DC rate structure and calculating the charges on an area-specific basis. Following consultation with Town staff, it was determined that a Town-wide approach continues to be most appropriate for the nature of the works and services provided in Plympton-Wyoming. For this reason, a Town-wide charge has been calculated.
- The calculated charges are the maximum charges the Town may adopt. Lower charges may be approved; however, this will require a reduction in the capital plan and reduced service levels, or financing from other sources, likely property taxes and utility rates.

D. DEVELOPMENT FORECAST

- A forecast of the amount, type and location of residential and non-residential development anticipated in Plympton-Wyoming to 2031 is included in the report.
- A ten-year forecast, from 2017 to 2026 was used in the DC calculation for general services. A longer-term forecast period, from 2017 to 2031 was used for roads and related services.
- The development forecast for the ten-year planning period from 2017 to 2026 estimates that the Town will add approximately 330 new dwelling units and the population will grow by approximately 380 people.
- The long-term forecast is for approximately 590 additional dwelling units and 760 people in the in the Town.
- Population growth in these new dwelling units is expected to add 930 people over the 2017-2026 planning period. By 2031, it is anticipated that the population increase in new dwelling units will reach 1,660.
- Employment in Plympton-Wyoming is forecast to grow by approximately 60 employees over the next ten years, which will be accommodated in approximately 4,280 square metres of space. To 2031, an additional 120 employees are forecast in an estimated 8,520 square metres of new building space.
- The following is a summary of the projected growth for the Town:

Growth Forecast	2016 Estimate	Planning Period 2017 - 2026		Planning Period 2017 - 2031	
		Growth	Total at 2026	Growth	Total at 2031
Residential					
Total Dwellings	2,926	330	3,256	593	3,518
Total Population					
Census	7,599	382	7,981	761	8,360
Population In New Dwellings		928		1,663	
Non-Residential					
Employment	1,710	62	1,773	124	1,834
Non-Residential Building Space (sq.m.)		4,277		8,517	

E. FUNDING ENVELOPE BASED ON “NET” GROWTH

- In accordance with the *DCA*, DCs have been calculated at a level no higher than the average service level provided in the Town over the ten-year period immediately preceding the preparation of the Background Study, on a service by service basis.
- The service levels are expressed as a dollar value per capita (\$/capita) or a dollar value per capita plus employment (\$/capita & employment) of infrastructure value. This service level expression is a construct to meet the requirements of s. 5(1) of the *DCA* and does not directly reflect the utilization of infrastructure or the way in which a municipality plans for services.
- The maximum permissible funding envelopes in the study are based on “net” population, employment and dwelling unit growth.

F. THE TOWN HAS AN EXTENSIVE DEVELOPMENT-RELATED CAPITAL FORECAST FOR THE PROVISION OF ELIGIBLE SERVICES

- Town staff, in collaboration with Hemson Consulting, have compiled a development-related capital forecast setting out projects that are required to service anticipated development in Plympton-Wyoming between 2017 and 2026 for the general services and to 2031 for the roads and related services.

- The gross cost of the Town’s development-related capital forecast for all services amounts to \$19.23 million and provides for a wide range of infrastructure expansions. Approximately \$5.39 million has been identified as eligible for recovery through DCs over the 2016-2031 planning period.
- A share of the capital program, \$11.33 million, will require funding from non-DC sources and reflects the share of capital projects that replace existing infrastructure and benefit existing development.
- The *DCA* requires that development-related net capital costs for certain general services be reduced by ten per cent when calculating the applicable DCs. The ten per cent share of development-related net capital costs not included in the DC calculations must be funded from non-DC sources. In total, about \$75,500 is identified as the required reduction.
- Available DC reserve funds in the amount of \$166,980 have been identified in the capital forecast to fund development-related infrastructure projects.
- A share of the capital forecast is for portions of projects that relate to development beyond the planning period and may be considered for recovery in future DC studies, subject to service level considerations. In total, about \$2.27 million is considered to be a post-period benefit.
- The following is a summary of the development-related capital program:

All Services		
Service	Gross Cost (\$000)	DC Eligible Cost (\$000)
Library Service	\$0.0	\$0.0
Fire Services	\$1,160.0	\$258.0
Parks and Recreation	\$580.0	\$207.6
Public Works	\$3,725.0	\$290.3
General Government	\$250.0	\$151.5
Roads and Related	\$13,516.1	\$4,483.7
Total All Services	\$19,231.1	\$5,391.0

- Details of the capital program for each service are provided in Appendix B.

G. CALCULATED DEVELOPMENT CHARGES

- The fully calculated residential development charges are recommended to vary by unit type, reflecting the difference in occupancy patterns expected in various unit types and associated differences in demand placed on municipal services.
- The following tables summarize the calculated residential and non-residential development charges:

Calculated Residential Development Charges

Service	Residential Charge By Unit Type		
	Single Detached & Semi Detached	Multiples	Apartments
Library Service	\$0	\$0	\$0
Fire Services	\$750	\$665	\$391
Parks And Recreation	\$665	\$590	\$347
Public Works: Buildings And Fleet	\$826	\$733	\$431
General Government	\$399	\$354	\$208
Subtotal General Services	\$2,640	\$2,342	\$1,377
Roads And Related	\$6,747	\$5,985	\$3,521
TOTAL CHARGE	\$9,387	\$8,327	\$4,898

Calculated Non-Residential Development Charges

Service	Non-Residential Charge per Square Metre
Library Service	\$0.00
Fire Services	\$10.40
Parks And Recreation	\$0.00
Public Works: Buildings And Fleet	\$11.50
General Government	\$5.50
Subtotal General Services	\$27.40
Roads And Related	\$84.40
TOTAL CHARGE PER SQUARE METRE	\$111.80

H. NEWLY CALCULATED DCS COMPARED WITH CURRENT RATES

- The fully calculated residential charge for a single- or semi-detached unit in Plympton-Wyoming is \$9,387, which is \$260 more than the Town's current charge of \$9,127 per unit.
- In 2012, Council implemented a heavily discounted non-residential rate structure than what was fully calculated in the DC Background Study. The calculated non-residential rate of \$111.80 per square metre of GFA represents an increase of \$36.15 from the maximum calculated rate of \$75.65 shown in the 2012 study.

I. A PORTION OF DEVELOPMENT-RELATED COSTS REQUIRE FUNDING FROM NON-DEVELOPMENT CHARGE SOURCES

- Non-DC funding of \$8.44 million will be required to support the development-related capital program.

- Based on a high-level operating cost impact analysis, it is estimated that net operating costs will increase by about \$180,300 by the year 2026 as the facilities and infrastructure included in the capital forecast are operated and maintained.

J. 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 2026, the Town will need to fund an additional \$99,610 per annum in order to properly fund the full life-cycle costs of the new assets supported under this Development Charges By-Law.

I INTRODUCTION

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. The Town of Plympton-Wyoming Development Charges (DC) Background Study is presented as part of a process to lead to the approval of a new DC by-law in compliance with the legislation.

The anticipated residential and non-residential development in the Town of Plympton-Wyoming between 2017 and 2031 will increase demand on all municipal services. The Town wishes to continue implementing DCs to fund growth-related capital projects so that development continues to be serviced in a fiscally responsible manner.

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

- A forecast of the amount, type and location of development anticipated in the Town;
- The average level of service provided by the Town over the ten-year period immediately preceding the preparation of the background study;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the Town or its local boards to provide for the expected development, including determination of the development and non-development-related components of the capital projects;
- An examination of long-term capital and operating costs for the capital infrastructure required for each service to which the DC by-law relates; and
- An asset management plan to deal with all assets whose capital costs are proposed to be funded under the DC By-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

The study presents the results of the review to determine the net capital costs attributable to new development that is forecast to occur in the Town of Plympton-Wyoming between 2017 and 2031. These development-related net capital costs are

apportioned to various types of development (residential; non-residential) in a manner that reflects the increase in the need for each service.

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

The remainder of the study sets out the information and analysis upon which the proposed DCs are based.

Section II designates the services for which DCs are proposed and the areas within the Town to which the DCs will apply. It also provides an overview of the methodology that has been used in the Background Study.

Section III presents a summary of the forecast residential and non-residential development that is expected to occur within the Town over two planning periods: from 2017 to 2026 and a longer-term planning period from 2017 to 2031.

Section IV summarizes the historic ten-year average capital service levels that have been attained in the Town and form the basis for the DC calculations. The expression of the "service level" used in the Background Study is a construct developed to meet the requirements of the *DCA* and does not reflect the way in which municipalities actually plan for services.

Section V summarizes the development-related capital forecast that has been developed by various municipal departments.

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

Section VII provides a comparison of existing DC rates in the Town with the rates calculated in the study.

Section VIII provides a high level examination of the long-term capital and operating cost impacts for each service included in the DC calculation.

Section IX highlights the findings of an asset management plan undertaken for all development-related components of capital projects included in the capital programs.

Section X provides a discussion of other issues and considerations including by-law administration.

II A TOWN-WIDE COST APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS IS PROPOSED

Several key steps are required when calculating any DC. However, specific circumstances arise in each municipality that must be reflected in the calculation. Therefore, the study has been tailored specifically for the Town of Plympton-Wyoming. The approach to calculating the proposed DCs is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. The study uses a Town-wide approach for the general and roads and related services, which is consistent with past practice, and is deemed the best approach to align development-related costs and benefits.

A. A TOWN-WIDE DEVELOPMENT CHARGE IS PROPOSED FOR ALL SERVICES

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

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

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

- Library Service;
- Fire Services;
- Parks and Recreation;
- Public Works;
- General Government; and
- Roads and Related.

These services form a reasonable basis upon which to plan and administer the Town-wide DCs. It is noted that the analysis of each of these services examines the individual capital facilities and equipment currently in place. The resulting DC for these services is to be imposed against all development anywhere in the Town. Water and sewer servicing have not been included in this DC study as costs associated with infrastructure provision are covered by frontage fees.

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

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

1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the ten-year study period, 2017–2026, for general services and to 2031 for roads and related services. The forecast of the future residential and non-residential development used in this study is based on provincial targets as outlined in the *Growth Plan for the Greater Golden Horseshow*, as well as the County of Lambton’s population, housing and employment report, which was released in May of 2015 as part of the Official Plan update.

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

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

The non-residential portion of the forecast estimates the Gross Floor Area (GFA) of building space to be developed over both planning periods. The forecast of GFA is based on the employment forecast for the Town. Factors for floor space per worker are used to convert the employment forecast into gross floor area for the purposes of the DC Study.

2. Service Categories and Historic Service Levels

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

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over

the ten-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historic ten-year average service levels thus form a ceiling, or limits, on the share of a development-related capital program that can be funded from DCs. A review of the Town's capital service levels for buildings, land, vehicles and so on, has therefore been prepared as a reference for the calculation, so that the portion of future capital projects that may be included in the DC can be determined. The historic service levels used in this study have been calculated based on the period 2007–2016. This method of expressing “service levels” is a construct developed to satisfy the requirements of the *DCA* but does not reflect the way that municipalities plan for services.

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

A development-related capital forecast has been prepared by the Town's departments as part of the present study and reflect Council's expressed intent of how to meet the increased servicing needs arising from development. 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 *Act* (*DCA*, s. 5. (2)). The capital forecast provides another cornerstone upon which DCs are based. The *DCA* requires that the increase in the need for service attributable to the anticipated development may include an increase:

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

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

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

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents. As required by the *DCA*, s. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the

Town from non-DC sources. The amount of municipal funding for such non-development shares of projects is also identified as part of the preparation of the development-related capital forecast.

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

Finally, the development-related net capital costs must be reduced by ten per cent for all services except services related to a highway (public works), protection services (*DCA*, s. 5. (1) 8.) and engineered services. The ten per cent discount is applied to the other services, e.g. Library, Parks and Recreation, and General Government, and the resulting municipal funding responsibility from non-DC sources is identified.

4. Attribution to Types of Development

The next step in the determination of DCs is the allocation of the development-related net capital costs between the residential and non-residential sectors. This is done using apportionments for different services in accordance with the demands placed and the benefits derived.

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

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

5. Final Adjustment

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

III DEVELOPMENT FORECAST

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

A. RESIDENTIAL FORECAST

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

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

Table 1 provides a summary of the residential forecast over the ten-year planning period, from 2017 to 2026 and the longer-term period, to 2031. As noted in Section II, for DC calculation purposes, the ten-year planning period is applicable to all general services and the longer-term development forecast has been utilized in the calculation of roads and related DCs.

The Town's Census population is expected to increase by about 330 people over the next ten years, reaching approximately 590 by 2026. About 380 additional occupied dwelling units are forecast to be built between 2017 and 2026 and the population residing in these units is expected to increase by 930.

Between 2017 and 2031, the Town of Plympton-Wyoming is forecast to add an additional 760 occupied dwelling units with an associated population growth of almost 1,660.

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

B. NON-RESIDENTIAL FORECAST

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

The non-residential forecast projects an increase of approximately 60 employees to 2026, which is anticipated to be accommodated in approximately 4,280 square metres of new non-residential building space. Between 2017 and 2031, almost 8,520 square metres of new non-residential building space is forecast, which will accommodate approximately 125 new employees in the Town.

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

TABLE 1
TOWN OF PLYMPTON-WYOMING
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
GROWTH FORECAST

Growth Forecast	2016 Estimate	Planning Period 2017 - 2026		Planning Period 2017 - 2031	
		Growth	Total at 2026	Growth	Total at 2031
Residential					
Total Dwellings	2,926	330	3,256	593	3,518
Total Population					
Census	7,599	382	7,981	761	8,360
<i>Population In New Dwellings</i>		928		1,663	
Non-Residential					
Employment	1,710	62	1,773	124	1,834
Non-Residential Building Space (sq.m.)		4,277		8,517	

IV SUMMARY OF HISTORIC CAPITAL SERVICE LEVELS

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

For non-engineered services (library, parks and recreation, etc.) the legislative requirement is met by documenting historic service levels for the preceding ten years, in this case, for the period from 2007 to 2016. Typically, service levels for non-engineered services are measured as a ratio of inputs per capita, or per population plus employment.

O. Reg. 82/98 requires that, when determining historical service levels, both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new development reflect not only the quantity (number and size) but also the quality (value or replacement cost) of service provided historically by the town. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by municipal staff, based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure as of 2016.

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

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

TABLE 2

**TOWN OF PLYMPTON-WYOMING
SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2007 - 2016
TOWN-WIDE SERVICES**

Service	2007-2016 Service Level Indicator
1.0 LIBRARY SERVICE	\$205.31 per capita
Buildings	\$197.52 per capita
Land	\$7.79 per capita
2.0 FIRE SERVICES	\$827.71 per pop&empl
Buildings	\$403.29 per pop&empl
Land	\$4.88 per pop&empl
Vehicles	\$331.71 per pop&empl
Furniture and Equipment	\$87.83 per pop&empl
3.0 PARKS AND RECREATION	\$965.54 per capita
Indoor Recreation	\$443.94 per capita
Parkland & Trail Development	\$162.14 per capita
Park Facilities	\$359.46 per capita
4.0 PUBLIC WORKS: BUILDINGS AND FLEET	\$653.24 per pop & emp
Building	\$254.27 per pop & emp
Land	\$30.03 per pop & emp
Furniture and Equipment	\$21.62 per pop & emp
Fleet	\$347.32 per pop & emp
5.0 ROADS & RELATED	\$15,814.51 per pop & emp
Roads	\$11,004.29 per pop & emp
Bridges & Culverts	\$4,809.92 per pop & emp
Other Items	\$0.31 per pop & emp

V THE DEVELOPMENT-RELATED CAPITAL FORECAST

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

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

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

Based on the development forecasts summarized in Section III and detailed in Appendix A, municipal staff, in collaboration with the consultants have created a development-related capital forecast setting out those projects that are required to service anticipated development. For all general services, the capital plan covers the ten-year period from 2017 to 2026. As permitted by the *DCA*, s. 5 (1) 4., the DC calculation for roads and related services is based on development occurring between 2017 and 2031.

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

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR ALL SERVICES

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

TOWN OF PLYMPTON-WYOMING
SUMMARY OF ALL SERVICES DEVELOPMENT-RELATED CAPITAL PROGRAM
2017-2026

Service	Gross Cost (\$000)	Grants/ Subsidies (\$000)	Municipal Cost (\$000)	Total Net Capital Program (\$000)									
				2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1.0 LIBRARY SERVICE	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
1.1 Buildings, Land and Furnishings	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.0 FIRE SERVICES	\$1,160.0	\$0.0	\$1,160.0	\$160.0	\$0.0	\$0.0	\$0.0	\$1,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.1 Camlachie Fire Hall	\$1,100.0	\$0.0	\$1,100.0	\$100.0	\$0.0	\$0.0	\$0.0	\$1,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.2 Wyoming Fire Hall	\$60.0	\$0.0	\$60.0	\$60.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.0 PARKS AND RECREATION	\$580.0	\$0.0	\$580.0	\$50.0	\$0.0	\$0.0	\$0.0	\$0.0	\$530.0	\$0.0	\$0.0	\$0.0	\$0.0
3.1 Indoor Recreation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.1 Parks and Facilities	\$580.0	\$0.0	\$580.0	\$50.0	\$0.0	\$0.0	\$0.0	\$0.0	\$530.0	\$0.0	\$0.0	\$0.0	\$0.0
4.0 PUBLIC WORKS: BUILDINGS AND FLEET	\$3,725.0	\$0.0	\$3,725.0	\$110.0	\$0.0	\$0.0	\$115.0	\$3,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.1 Buildings, Land & Equipment	\$3,500.0	\$0.0	\$3,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Municipal Fleet and Equipment	\$225.0	\$0.0	\$225.0	\$110.0	\$0.0	\$0.0	\$115.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.0 GENERAL GOVERNMENT	\$250.0	\$0.0	\$250.0	\$90.0	\$30.0	\$0.0	\$0.0	\$30.0	\$0.0	\$0.0	\$0.0	\$0.0	\$100.0
5.1 Growth-Related Studies	\$250.0	\$0.0	\$250.0	\$90.0	\$30.0	\$0.0	\$0.0	\$30.0	\$0.0	\$0.0	\$0.0	\$0.0	\$100.0
SUB-TOTAL GENERAL SERVICES	\$5,715.0	\$0.0	\$5,715.0	\$410.0	\$30.0	\$0.0	\$115.0	\$4,530.0	\$530.0	\$0.0	\$0.0	\$0.0	\$100.0
6.0 ROADS AND RELATED¹	\$13,516.1	\$0.0	\$13,516.1										
6.1 Road Works	\$13,516.1	\$0.0	\$13,516.1										
TOTAL - ALL YEAR SERVICES	\$19,231.1	\$0.0	\$19,231.1	\$410.0	\$30.0	\$0.0	\$115.0	\$4,530.0	\$530.0	\$0.0	\$0.0	\$0.0	\$100.0

The table provides a total for all general and roads services analysed over both planning periods. Further details on the capital plans for each individual service category are available in Appendix B.

The development-related capital forecast for all development-related services estimates a total gross cost of \$19.23 million. No alternative funding sources have been identified to offset any of the project costs. Therefore, the net municipal cost of the capital program remains at \$19.23 million.

Of the net municipal capital costs for all services, \$13.52 million (70 per cent) is related to the Roads and Related capital program. The capital program is comprised of various projects, including road reconstructions, improvements, sidewalk development, as well as a roads needs study update and transportation master plan. The projects are intended to service population and employment growth in the Town over the longer planning period, from 2017 to 2026.

The next largest portion of the capital forecast relates to Public Works. The net cost of \$3.73 million accounts for 19 per cent of the overall costs. The forecast provides for a new Public Works Facility, as well as upgrades to the existing maintenance equipment and a new vehicle over the next ten years.

The Fire Services program includes \$1.16 million in net capital costs (6 per cent of the capital program) and includes new radio equipment at both the Camlachie and Wyoming Fire Halls, as well as the replacement and upgrade of a pumper at Camlachie.

The Parks and Recreation development-related capital program provides for the development and enhancement of Lamrecton and McKay Parks, a new splashpad as well as a parks and recreation master plan. Net cost total \$580,000 and account for three per cent of the overall forecast.

Finally, the ten-year capital forecast for General Government totals \$250,000 and accounts for just over 1 per cent of the total program for general services. The program includes various development-related studies, including two five-year updates to the DC Study as well as two strategic plans or needs studies as required throughout the planning period.

No development-related capital program has been developed for Library Services as the Town does not anticipate requiring any expansions to the existing library over the next ten years.

The capital forecast incorporates those projects identified to be related to development anticipated in the next ten years and to 2031 for roads. It is not implied that all of these costs are to be recovered from new development by way of DCs (see Section VI for the method and determination of net capital costs attributable to development). Portions of this capital forecast may relate to providing servicing for development which has occurred prior to 2017 (for which DC reserve fund balances exist), for replacement of existing capital facilities or for development anticipated to occur beyond the 2017–2026 planning period. In addition, the amounts shown on Table 3 have not been reduced by ten per cent for various “soft” (or general) services as mandated by s. 5 (1) 8. of the *DCA*.

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

This section summarizes the calculation of DCs for each service category and the resulting total charges by sector. For all municipal services, the calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that takes interest earnings and borrowing costs into account are also discussed.

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

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

A. UNADJUSTED DEVELOPMENT CHARGES CALCULATION

A summary of the “unadjusted” residential and non-residential DCs is presented in Table 4 for all services. Further details of the calculations for each individual service category are available in Appendix B.

The net capital forecast totals \$19.23 million and incorporates those projects identified to be related to the development anticipated in the next ten years for general services and to 2031 for roads and related services. However, not all of the capital costs are to be recovered from new development by way of DCs. As shown on Table 4, 60 per cent, or \$11.33 million relates to replacement of existing capital facilities or for shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from non-DC revenue sources, largely property taxes for this group of services.

The *DCA*, s. 5 (1) 8 requires that development-related net capital costs for “soft” (general) services be reduced by ten per cent in calculating the applicable DCs. The discount does not apply to the protection services or services related to a highway

TOWN OF PLYMPTON-WYOMING
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
DEVELOPMENT-RELATED CAPITAL PROGRAM

10 Year Growth in New Units	928
10 Year Growth in Square Metres	4,277
2017-2031 Growth in New Units	1,663
2017-2031 Growth in Square Metres	8,517

Service	Development-Related Capital Program							Residential Share		Non-Res Share	
	Gross Cost	Grants/ Subsidies/ Recoveries	Replacement & Benefit to Existing	Required Service Discount	Available DC Reserves	Post-Period Benefit	Total DC Eligible Costs for Recovery	%	(\$000)	%	(\$000)
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)				
1.0 LIBRARY SERVICE	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	100%	\$0.0	0%	\$0.00
Unadjusted Development Charge Per Capita									\$0.00		\$0.00
Unadjusted Development Charge Per Sq.M											\$0.00
2.0 FIRE SERVICES	\$1,160.0	\$0.0	\$750.0	\$0.0	\$19.3	\$132.7	\$258.0	85%	\$219.3	15%	\$38.69
Unadjusted Development Charge Per Capita									\$236.27		\$9.05
Unadjusted Development Charge Per Sq.M											\$9.05
3.0 PARKS AND RECREATION	\$580.0	\$0.0	\$0.0	\$58.0	\$24.3	\$290.1	\$207.6	100%	\$207.6	0%	\$0.00
Unadjusted Development Charge Per Capita									\$223.70		\$0.00
Unadjusted Development Charge Per Sq.M											\$0.00
4.0 PUBLIC WORKS: BUILDINGS AND FLEET	\$3,725.0	\$0.0	\$1,577.5	\$0.0	\$9.2	\$1,848.1	\$290.3	85%	\$246.7	15%	\$43.54
Unadjusted Development Charge Per Capita									\$265.88		\$10.18
Unadjusted Development Charge Per Sq.M											\$10.18
5.0 GENERAL GOVERNMENT	\$250.0	\$0.0	\$75.0	\$17.5	\$6.0	\$0.0	\$151.5	85%	\$128.8	15%	\$22.72
Unadjusted Development Charge Per Capita									\$138.76		\$5.31
Unadjusted Development Charge Per Sq.M											\$5.31
6.0 ROADS AND RELATED	\$13,516.1	\$0.0	\$8,924.3	\$0.0	\$108.2	\$0.0	\$4,483.7	85%	\$3,811.1	15%	\$672.55
Unadjusted Development Charge Per Capita									\$2,291.71		\$78.97
Unadjusted Development Charge Per Sq.M											\$78.97
TOTAL ALL SERVICES	\$19,231.1	\$0.0	\$11,326.8	\$75.5	\$167.0	\$2,270.9	\$5,391.0		\$4,613.5		\$777.5
Unadjusted Development Charge Per Capita									\$3,156.32		\$103.51
Unadjusted Development Charge Per Sq.M											\$103.51

(Public Works). The ten per cent share of development-related net capital costs not included in the DC calculations must be funded from non-DC sources. In total, about \$75,500 is identified as the required ten per cent reduction.

An additional share of \$167,000 has been identified as available DC reserve funds and represents the revenue collected from previous DCs. This portion has been netted out of the chargeable capital costs.

A share of \$2.27 million is attributable to development beyond 2026. This development-related share has been removed from the calculation and may therefore be recovered under future DC studies.

The total costs eligible for recovery through DCs for all services is \$5.39 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted DCs. Library and Parks and Recreation are deemed to benefit residential development only, while the remaining services are allocated between both sectors based on shares of population in new units and employment growth in new space. The allocation to the residential sector for these services is calculated at 85 per cent and 15 per cent to the non-residential sector.

Approximately \$4.61 million of the DC eligible capital program is deemed to benefit residential development. When this amount is divided by the ten-year growth in population in new dwelling units (928) for the general services and long-term growth (1,663) for roads services, an unadjusted charge of \$3,156.32 per capita results. The non-residential share totals \$777,500 which yields an unadjusted charge of \$103.51 per square metre when divided by the ten-year increase in non-residential building space (4,277) for general services and the longer-term increase (8,517) for the roads and related service.

B. ADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES

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

Table 5 summarizes the results of the cash flow adjustments for the residential DC rates. The adjusted per capita rate increases by \$174.38 from \$3,156.32 per capita to \$3,330.70 per capita after the cash flow analysis for the residential DC.

Table 5 also provides the calculated rates by residential unit. As shown in the table, the proposed residential charge ranges from \$9,387 for a single- or semi-detached unit to \$4,898 for an apartment unit. The proposed charge for multiple unit types is \$8,327 per unit.

The non-residential DC experiences an increase after cash flow considerations of \$8.29, from \$103.51 to \$111.80 per square.

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TABLE 5

TOWN OF PLYMPTON-WYOMING
TOWN-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type		
			Single Detached & Semi Detached	Multiples	Apartments
Library Service	\$0.00	\$0.00	\$0	\$0	\$0
Fire Services	\$236.27	\$266.00	\$750	\$665	\$391
Parks And Recreation	\$223.70	\$236.00	\$665	\$590	\$347
Public Works: Buildings And Fleet	\$265.88	\$293.00	\$826	\$733	\$431
General Government	\$138.76	\$141.70	\$399	\$354	\$208
Subtotal General Services	\$864.61	\$936.70	\$2,640	\$2,342	\$1,377
Roads And Related	\$2,291.71	\$2,394.00	\$6,747	\$5,985	\$3,521
TOTAL CHARGE	\$3,156.32	\$3,330.70	\$9,387	\$8,327	\$4,898

1.) Based on a Persons Per Unit Of:

2.82

2.50

1.47

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

Service	Non-Residential	
	Unadjusted Charge per Square Metre	Charge per Square Metre
Library Service	\$0.00	\$0.00
Fire Services	\$9.05	\$10.40
Parks And Recreation	\$0.00	\$0.00
Public Works: Buildings And Fleet	\$10.18	\$11.50
General Government	\$5.31	\$5.50
Subtotal General Services	\$24.54	\$27.40
Roads And Related	\$78.97	\$84.40
TOTAL CHARGE PER SQUARE METRE	\$103.51	\$111.80

VII COMPARISON OF CALCULATED AND CURRENT DEVELOPMENT CHARGES

Tables 7 and 8 present a comparison of the newly calculated residential and non-residential development charges with the Town's current charges, as at September 2015.

Table 7 shows that the calculated residential DC for a single- or semi-detached unit of \$9,387 is \$260 greater than the Town's current residential charge of \$9,127. This maximum allowable development charges calculated represent an increase of three per cent, and a decrease from what was calculated in 2011.

The comparison of calculated non-residential DCs with current rates is shown on Table 8. In 2012, the Council of the Town of Plympton-Wyoming implemented a non-residential development charge that was heavily discounted from what was calculated in the previous study. The newly calculated rates, should they be approved by Council, would represent an increase of approximately \$109.65 per square metre. This was determined by applying a \$2.15 per square foot, based on the requirement for non-residential development of 10,001 square feet or more to pay a development charge of \$2,000.

The non-residential development charges calculated in the 2011 study were \$75.65 per square metre, which is \$36.15 per square metre less than the calculated charges outlined in this study. This is shown on Table 9.

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TABLE 7

**TOWN OF PLYMPTON-WYOMING
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Library Service	\$288	\$0	(\$288)	-100%
Fire Services	\$1,030	\$750	(\$280)	-27%
Parks And Recreation	\$1,308	\$665	(\$643)	-49%
Public Works: Buildings And Fleet	\$488	\$826	\$338	69%
General Government	\$224	\$399	\$175	78%
Subtotal General Services	\$3,338	\$2,640	(\$698)	-21%
Roads And Related	\$5,789	\$6,747	\$958	17%
TOTAL CHARGE	\$9,127	\$9,387	\$260	3%

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TABLE 8

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

Service	Non-Residential (\$/Square Metre)		
	Current Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge
Library Service	\$0.00	\$0.00	\$0.00
Fire Services	\$0.29	\$10.40	\$10.11
Parks And Recreation	\$0.00	\$0.00	\$0.00
Public Works: Buildings And Fleet	\$0.14	\$11.50	\$11.36
General Government	\$0.06	\$5.50	\$5.44
Subtotal General Services	\$0.50	\$27.40	\$26.90
Roads And Related	\$1.66	\$84.40	\$82.74
TOTAL CHARGE PER SQUARE METRE	\$2.15	\$111.80	\$109.65

Note: Current charge based on development of 10,001 sq.ft. @ \$0.20/sq.ft.

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TABLE 9

**TOWN OF PLYMPTON-WYOMING
 COMPARISON OF 2011 AND 2016 CALCULATED
 NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential (\$/Square Metre)			
	2011 Study Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge	
Library Service	\$0.00	\$0.00	\$0.00	0%
Fire Services	\$10.34	\$10.40	\$0.06	1%
Parks And Recreation	\$0.00	\$0.00	\$0.00	0%
Public Works: Buildings And Fleet	\$4.89	\$11.50	\$6.61	135%
General Government	\$2.24	\$5.50	\$3.26	146%
Subtotal General Services	\$17.47	\$27.40	\$9.93	57%
Roads And Related	\$58.18	\$84.40	\$26.22	45%
TOTAL CHARGE PER SQUARE METRE	\$75.65	\$111.80	\$36.15	48%

VIII LONG-TERM CAPITAL AND OPERATING COSTS

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

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

Table 10 summarizes the estimated increase in net operating costs that the Town will experience for additions associated with the planned capital program. This estimate is based on a high-level analysis of operating cost impacts to the Town.

As shown in Table 10, by 2026, the Town's net operating costs are estimated to increase by \$180,300. The most significant portion of this increase relates to the new public works facility space, roads and related capital program, and fire services capital program.

B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGE SOURCES TOTALS \$8.44 MILLION

Table 10 also summarizes the components of the development-related capital program that will require funding from non-DC sources as discussed in Section VI. In total \$8.44 million will need to be financed from non-DC sources over the next ten years. This includes about \$75,500 in respect of the mandatory ten per cent discount required by the *DCA* for eligible "soft" (or general) services and about \$8.37 million for shares of projects related to capital replacement and for non-development shares of projects that provide benefit to the existing community. In addition, \$2.27 million in interim financing may be required for projects related to development in the post-2026 period. It is likely that most of these monies could be recovered from future DCs as the by-law is revisited at least every five years.

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TABLE 10

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

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Net Operating Impacts (1)										
Library Service	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fire Services	\$3.2	\$3.2	\$3.2	\$3.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2
Parks And Recreation	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$11.6	\$11.6	\$11.6	\$11.6	\$11.6
Public Works: Buildings And Fleet	\$2.2	\$2.2	\$2.2	\$4.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5
General Government	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Roads and Related	\$4.6	\$9.7	\$15.5	\$21.7	\$28.5	\$35.9	\$43.9	\$52.4	\$61.4	\$71.0
NET OPERATING IMPACTS	\$11.0	\$16.1	\$21.9	\$30.4	\$127.2	\$145.2	\$153.2	\$161.7	\$170.7	\$180.3

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Long-term Capital Impact (1)											
Total Net Cost	\$1,304.1	\$924.1	\$894.1	\$1,009.1	\$5,424.1	\$1,474.1	\$894.1	\$894.1	\$949.1	\$994.1	\$14,760.7
Net Cost From Development Charges	\$630.8	\$308.2	\$294.7	\$294.7	\$613.2	\$507.3	\$294.7	\$294.7	\$308.4	\$371.2	\$3,917.7
Prior Growth Share from DC Reserve Balances (2)	\$26.5	\$7.2	\$7.2	\$7.2	\$22.4	\$31.5	\$7.2	\$7.2	\$7.2	\$7.2	\$130.9
Portion for Post-Period Growth (3)	\$0.0	\$0.0	\$0.0	\$57.5	\$1,923.3	\$290.1	\$0.0	\$0.0	\$0.0	\$0.0	\$2,270.9
Funding From Non-DC Sources											
Discount Portion	\$9.5	\$1.5	\$0.0	\$0.0	\$3.0	\$53.0	\$0.0	\$0.0	\$0.0	\$8.5	\$75.5
Replacement	\$637.2	\$607.2	\$592.2	\$649.7	\$2,862.2	\$592.2	\$592.2	\$592.2	\$633.5	\$607.2	\$8,365.8
FUNDING FROM NON-DC SOURCES	\$646.7	\$608.7	\$592.2	\$649.7	\$2,865.2	\$645.2	\$592.2	\$592.2	\$633.5	\$615.7	\$8,441.3

Notes:

(1) See Appendix D

(2) Existing development charge reserve fund balances collected from growth prior to 2016 are applied to fund initial projects in growth-related capital forecast

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

IX ASSET MANAGEMENT PLAN

The *Development Charges Act* was amended in late 2015 and, effective January 1st 2016, municipalities are required to complete an Asset Management Plan before the passing of a development charges by-law. 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.

A. ANNUAL CAPITAL PROVISIONS WILL REACH \$99,610 BY 2026

Table 11 summarizes the annual capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. This estimate is based on information obtained through discussions with Town staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset.

Table 11 illustrates that, by 2026, the Town will need to fund an additional \$99,610 per annum in order to properly fund the full life-cycle costs of the new assets supported under this Development Charges By-Law. The calculated life-cycle funding requirement equal of \$99,610 equates to 1.75% of the Town's 2016 tax levy of \$5.68 million. The calculated annual funding provision should be considered within the context of the Town's projected growth; over the next ten years (to 2026) the Town is projecting an increase of 330 total private dwellings units, which represents an 11% increase over the existing base as well as approximately 4,280 square metres of non-residential building space. This growth will have the effect of increasing the overall assessment base and additional user fee and charges revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law.

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

TABLE 11

TOWN OF PLYMPTON-WYOMING
SUMMARY OF CALCULATED ANNUAL PROVISIONS FOR FUTURE REPLACEMENT ⁽¹⁾

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Library Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Services	\$ -	\$ -	\$ 10,783	\$ 10,783	\$ 10,783	\$ 10,783	\$ 17,228	\$ 17,228	\$ 17,228	\$ 17,228
Parks and Recreation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,705	\$ 7,705	\$ 7,705	\$ 7,705
Public Works	\$ -	\$ 11,043	\$ 11,043	\$ 11,043	\$ 11,043	\$ 16,217	\$ 16,217	\$ 16,217	\$ 16,217	\$ 16,217
Roads and Related	\$ -	\$ 5,993	\$ 12,105	\$ 18,340	\$ 24,700	\$ 31,187	\$ 37,803	\$ 44,552	\$ 51,436	\$ 58,457
Total	\$ -	\$ 17,036	\$ 33,931	\$ 40,166	\$ 46,526	\$ 58,186	\$ 78,954	\$ 85,703	\$ 92,586	\$ 99,608

Notes:

(1) See Appendix E

X OTHER ISSUES AND CONSIDERATIONS

A. DEVELOPMENT CHARGES ADMINISTRATION

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

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

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A

DEVELOPMENT FORECAST

This appendix provides details of the development forecast used to prepare the 2016 Development Charges Background Study for the Town of Plympton-Wyoming. The forecast method and assumptions are discussed herein. The forecast results are provided in the following tables:

Historical Development

Table 1	Population, Dwelling Units & Employment
Table 2	Residential Building Permits
Table 3	Households by Period of Construction Showing Household Size

Forecast Development

Table 4	Population, Household & Employment Forecast
Table 5	Household Growth by Unit Type
Table 6	Household Growth and Population in New Households
Table 7	Employment Growth
Table 8	Employment Growth in New Non-Residential Space

A. FORECAST APPROACH AND KEY ASSUMPTIONS

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

Two development time horizons have been used in the background study. A ten-year development forecast, from 2017 to 2026, has been used to calculate the development charges for the general services in the Town. For, Roads and Related, a longer range forecast, from 2017 to 2031 has been used.

The development charges development forecast is broadly based on the estimates contained in the Population, Housing, and Employment (OP Update Background Report 12) prepared by the County of Lambton. Specifically, the household growth

for Plympton-Wyoming in the Population, Housing, and Employment Report has been used to derive the housing, population and population-related employment forecast in this report.

B. HISTORICAL DEVELOPMENT IN THE TOWN

Historical growth figures presented here are based on Statistics Canada Census data, Canada Mortgage Housing Corporation (CMHC) housing market information, and municipal building permit and development application data. A “Census-based” definition of population is used for the purposes of the development charges study. This definition does not include the Census net undercoverage, which is typically included in the definition of “total” population commonly used in municipal planning documents. For development charges purposes, a ten year historical period of 2007 to 2016 is used for calculating historical service levels. Since 2011 was the last year of the Census, figures from 2012 to 2016 are estimated.

The Town of Plympton-Wyoming has experienced modest household growth over the last ten years and largely static population growth. As shown in Table 1, the Town’s population increased to 7,600 from 7,510 over the last ten years. The number of occupied dwelling units in the Town has increased during the ten-year historical period, increasing from 2,720 to 2,930 occupied households in 2016 – an eight per cent increase. The difference between the rates of population and occupied dwelling unit growth is the result of a decline in the average number of persons residing in existing housing units.

Historical employment figures are also shown in Table 1 and are based on Statistics Canada place of work data. Place of work data records where people work rather than the place of residence. The Town’s employment has decreased over the historical ten-year period despite some year-over-year increases. The overall ten-year decrease of 125 employees, from 1,840 in 2006 to 1,710 in 2015, represents a decrease of seven per cent. The Town’s activity rate (the ratio of employment to population) is approximately 23 per cent in 2016.

Details on historical housing unit growth in the Town are provided in Table 2, Historic Residential Building Permits. This information is sourced from Canada Mortgage and Housing Corporation *Housing Market Information*. Overall, the

dominant type of new housing in Plympton-Wyoming constructed since 2005 has been single- and semi-detached housing.

Table 3 provides details on historical occupancy patterns in the Town. The overall average occupancy level in Plympton-Wyoming for all units is 2.65 persons per housing unit (PPU). Occupancy levels for recently constructed units, between 2001 and 2011 (2.82), are higher than the overall average and are generally used in the development charges calculation since they better reflect the number of people that are likely to reside in new development.

C. FORECAST METHOD AND RESULTS

This section describes the method used to establish the ten-year and longer-term development charges forecast for the planning periods 2017 to 2026 and 2017 to 2031.

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*¹ 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 Town.

1. Residential Forecast

The residential development forecast incorporates anticipated growth in population and occupied dwelling units by type. As detailed in Table 4, the Town's Census population is forecast to grow from approximately 7,600 in 2016 to 7,980 in 2026 and

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

8,360 in 2031. The ten-year population growth (380 persons) represents a five per cent increase over the existing base. The longer-term increase of 760 persons to 2031 represents a ten per cent increase.

Over the ten-year planning period from 2017 to 2026, the number of occupied housing units is forecast to increase from 2,930 in 2016 to 3,260 in 2026. This reflects an average annual increase of 33 occupied dwelling units per year. The overall ten-year growth represents a thirteen per cent increase in occupied dwelling units over the next ten years. The longer-term growth of 590 units represents a 20 per cent over the existing base in 2016.

As shown in Table 5, the long-term type of new housing forecasted in the Town is to be composed almost entirely of single and semi-detached units (99 per cent), followed by rows (1 per cent) and apartments. The Town is not anticipating any significant apartment development over the longer-term planning horizon.

Population growth in the new units is estimated by applying the following initial (2016) PPU's to the housing unit forecast: 2.82 for single and semi-detached units; 2.50 for rows; and 1.47 for apartments. The forecast of population expected to reside in these new housing units over the 2017 to 2026 period is 930 additional persons. Over the longer-term planning period to 2031, 1,660 additional persons are anticipated. This population growth by unit type is shown in Table 6.

2. Non-Residential Forecast

Table 7 shows the forecast of total employment in the Town of Plympton-Wyoming by employment category to 2031. Of the employment growth used in the study, which excludes growth in the "work at home" category, 37 per cent is anticipated to occur within the employment land sector, which is largely industrial. No net growth is expected in the rural sector. The largest growth share of 63 per cent is anticipated within the population-related category which includes retail and institutional employment. For the purposes of the study, 62 employees are anticipated to be added over the ten-year period and 124 employees are expected over the period to 2031.

Non-residential development charges are calculated on a per unit of gross floor area basis. Therefore, a forecast of future non-residential building space has been developed. As with the residential forecast, the GFA forecast covers the ten-year period from 2017 to 2026 for general services, and a longer-term forecast to 2031 for Roads and Related services. This forecast is shown in Table 8.

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

population-related employment and 100 square metres per employee for industrial space.

The overall growth in new non-residential building space across the Town of Plympton-Wyoming between 2017 and 2026 is about 4,280 square metres. New non-residential building space is forecast to grow by 8,520 square metres to 2031, 54 per cent of which will be in the industrial sector.

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TABLE 1

**TOWN OF PLYMPTON-WYOMING
HISTORICAL POPULATION, DWELLING UNITS & EMPLOYMENT**

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	HH Size (PPU)	Employment by Place of Work	Annual Growth	Activity Rate
2006	7,506		2,718		2.76	1,836		24.5%
2007	7,520	14	2,740	22	2.74	1,788	-48	23.8%
2008	7,534	14	2,762	22	2.73	1,741	-47	23.1%
2009	7,548	14	2,785	23	2.71	1,695	-46	22.5%
2010	7,562	14	2,808	23	2.69	1,651	-44	21.8%
2011	7,576	14	2,831	23	2.68	1,608	-43	21.2%
2012	7,581	5	2,850	19	2.66	1,628	20	21.5%
2013	7,586	5	2,869	19	2.64	1,648	20	21.7%
2014	7,591	5	2,888	19	2.63	1,668	20	22.0%
2015	7,596	5	2,907	19	2.61	1,689	21	22.2%
2016	7,599	3	2,926	19	2.60	1,710	21	22.5%
Growth 2007-2016		93		208			-125	

Source: Statistics Canada, 2011

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TABLE 2

**TOWN OF PLYMPTON-WYOMING
HISTORICAL RESIDENTIAL BUILDING PERMITS**

Year	Building Permits (New Units By Type)				Building Permits (Share of New Units By Type)			
	Singles & Semis	Rows	Apartments	Total	Singles & Semis	Rows	Apartments	Total
2005	43	0	0	43	100%	0%	0%	100%
2006	62	0	0	62	100%	0%	0%	100%
2007	41	4	0	45	91%	9%	0%	100%
2008	41	0	0	41	100%	0%	0%	100%
2009	34	0	0	34	100%	0%	0%	100%
2010	28	0	0	28	100%	0%	0%	100%
2011	36	0	0	36	100%	0%	0%	100%
2012	23	0	0	23	100%	0%	0%	100%
2013	40	0	0	40	100%	0%	0%	100%
2014	38	0	1	39	97%	0%	3%	100%
2015	33	0	0	33	100%	0%	0%	100%
Total	419	4	1	424	99%	1%	0%	100%
<i>Last 10 Years</i>	38	0	0	38	99%	1%	0%	100%
<i>Last 5 Years</i>	34	0	0	34	99%	0%	1%	100%

Source: Statistics Canada, Building Permits

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TABLE 3

TOWN OF PLYMPTON-WYOMING
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2011	Pre-2001	2001-2011	Total
Singles													
Household Population	1,360	860	1,010	1,035	630	270	225	465	690	550	5,855	1,240	7,095
Households	455	370	410	415	215	95	75	160	255	185	2,195	440	2,635
Household Size	2.99	2.32	2.46	2.49	2.93	2.84	3.00	2.91	2.71	2.97	2.67	2.82	2.69
Semis													
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0	0	0	0	0	0	0	0	0	0	0
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Singles and Semis													
Household Population	1,360	860	1,010	1,035	630	270	225	465	690	550	5,855	1,240	7,095
Households	455	370	410	415	215	95	75	160	255	185	2,195	440	2,635
Household Size	2.99	2.32	2.46	2.49	2.93	2.84	3.00	2.91	2.71	2.97	2.67	2.82	2.69
Rows													
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0	0	0	0	0	0	0	0	0	0	0
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Apartments (excl. Duplexes)													
Household Population	0	0	0	0	40	50	35	0	0	0	125	0	125
Households	0	0	0	0	40	25	20	0	0	0	85	0	85
Household Size	n/a	n/a	n/a	n/a	1.00	2.00	1.75	n/a	n/a	n/a	1.47	n/a	1.47
Duplexes													
Household Population	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0	0	0	0	0	0	0	0	0	0	0
Household Size	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rows, Apartments, Duplexes													
Household Population	0	0	0	0	40	50	35	0	0	0	125	0	125
Households	0	0	0	0	40	25	20	0	0	0	85	0	85
Household Size	n/a	n/a	n/a	n/a	1.00	2.00	1.75	n/a	n/a	n/a	1.47	n/a	1.47
All Units													
Household Population	1,360	860	1,010	1,035	670	320	260	465	690	550	5,980	1,240	7,220
Households	455	370	410	415	255	120	95	160	255	185	2,280	440	2,720
Household Size	2.99	2.32	2.46	2.49	2.63	2.67	2.74	2.91	2.71	2.97	2.62	2.82	2.65

Note: Population and household figures in this table are based on National Household Survey and may differ from Census figures.

Source: Statistics Canada, 2011 National Household Survey Special Run.

APPENDIX A

TABLE 4

**TOWN OF PLYMPTON-WYOMING
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST**

Year	Census Population	Annual Growth	Occupied Households	Annual Growth	Household Size PPU	Employment by POW	Annual Growth	Activity Rate
2011	7,576	14	2,831	23	2.68	1,608		21.2%
2012	7,581	5	2,850	19	2.66	1,628	20	21.5%
2013	7,586	5	2,869	19	2.65	1,648	20	21.7%
2014	7,591	5	2,888	19	2.63	1,668	20	22.0%
2015	7,596	5	2,907	19	2.62	1,689	21	22.2%
2016	7,599	3	2,926	19	2.60	1,710	21	22.5%
2017	7,622	23	2,947	21	2.59	1,714	4	22.5%
2018	7,639	17	2,971	24	2.57	1,717	3	22.5%
2019	7,662	23	2,998	27	2.56	1,721	4	22.5%
2020	7,691	29	3,027	29	2.54	1,725	5	22.4%
2021	7,726	35	3,059	32	2.53	1,731	6	22.4%
2022	7,766	40	3,093	34	2.51	1,738	7	22.4%
2023	7,812	46	3,130	37	2.50	1,745	7	22.3%
2024	7,863	51	3,169	40	2.48	1,753	8	22.3%
2025	7,919	56	3,211	42	2.47	1,763	9	22.3%
2026	7,981	61	3,256	45	2.45	1,773	10	22.2%
2027	8,047	66	3,303	47	2.44	1,783	11	22.2%
2028	8,118	71	3,353	50	2.42	1,795	12	22.1%
2029	8,194	76	3,406	52	2.41	1,807	12	22.1%
2030	8,275	81	3,461	55	2.39	1,821	13	22.0%
2031	8,360	85	3,518	58	2.38	1,834	14	21.9%
2017-2026		382		330			62	
2017-2031		761		593			124	

Source: Hemson Consulting Ltd., 2016

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TABLE 5

TOWN OF PLYMPTON-WYOMING
FORECAST OF HOUSEHOLD GROWTH BY UNIT TYPE

Year	Growth in Households by Unit Type			
	Singles & Semis	Rows & Other Multiples	Apartments	Total Dwelling Unit Growth
2016	19	0	0	19
2017	21	0	0	21
2018	24	0	0	24
2019	26	0	0	27
2020	29	0	0	29
2021	31	0	0	32
2022	34	0	0	34
2023	36	0	0	37
2024	39	0	0	40
2025	42	0	0	42
2026	44	0	0	45
2027	47	0	0	47
2028	49	1	0	50
2029	52	1	0	52
2030	54	1	0	55
2031	57	1	0	58
2017-2026	326	3	1	330
2017-2031	585	6	2	593

Source: Hemson Consulting Ltd., 2016

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TABLE 6

TOWN OF PLYMPTON-WYOMING
FORECAST OF HOUSEHOLD GROWTH AND POPULATION IN NEW HOUSEHOLDS

Year	Population in New Households *			
	Singles & Semis	Rows & Other Multiples	Apartments	Total Occupied Dwellings
2016	52	0	0	52
2017	59	1	0	60
2018	67	1	0	68
2019	74	1	0	75
2020	81	1	0	82
2021	88	1	0	89
2022	95	1	0	96
2023	103	1	0	104
2024	110	1	0	111
2025	117	1	0	118
2026	124	1	0	125
2027	131	1	0	132
2028	139	1	0	140
2029	146	1	0	147
2030	153	1	0	154
2031	160	2	0	162
2017-2026	918	10	0	928
2017-2031	1,647	16	0	1,663

* Based on PPU's: 2.82 2.50 1.47

Source: Hemson Consulting Ltd., 2016

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TABLE 7

TOWN OF PLYMPTON-WYOMING
EMPLOYMENT GROWTH BY CATEGORY

Year	<u>Population-Related</u>		<u>Employment Land</u>		<u>Rural-Based</u>		<u>Total Employment</u>	
	Total	Growth	Total	Growth	Total	Growth	Total	Growth
2011	713		444		451		1,608	
2012	725	12	447	3	455	4	1,627	19
2013	738	13	450	3	459	4	1,647	20
2014	751	13	454	4	463	4	1,668	21
2015	764	13	458	4	467	4	1,689	21
2016	778	14	462	4	471	4	1,710	21
2017	780	2	463	1	471	0	1,714	4
2018	782	2	464	1	471	0	1,717	3
2019	784	2	465	1	471	0	1,721	4
2020	787	3	467	2	471	0	1,725	5
2021	791	4	469	2	471	0	1,731	6
2022	795	4	472	2	471	0	1,738	7
2023	800	5	474	3	471	0	1,745	7
2024	805	5	478	3	471	0	1,753	8
2025	811	6	481	3	471	0	1,763	9
2026	817	6	485	4	471	0	1,773	10
2027	824	7	489	4	471	0	1,783	11
2028	831	7	493	4	471	0	1,795	12
2029	839	8	498	5	471	0	1,807	12
2030	847	8	503	5	471	0	1,821	13
2031	856	9	508	5	471	0	1,834	14
2017-2026		39		23		0		62
2017-2031		78		46		0		124

Source: Hemson Consulting Ltd., 2016

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TABLE 8

**TOWN OF PLYMPTON-WYOMING
EMPLOYMENT GROWTH IN NEW NON-RESIDENTIAL SPACE BY CATEGORY**

Employment Density

Population Related 50.0 m² per employee
 Employment Land 100.0 m² per employee
 Other Rural-Based - m² per employee

Year	Population-Related		Employment Land		Other Rural-Based		Total	
	Employment Growth	Growth in New Space (m ²)	Employment Growth	Growth in New Space (m ²)	Employment Growth	Growth in New Space (m ²)	Employment Growth	Growth in New Space (m ²)
2017	2	117	1	138	0	0	4	255
2018	2	89	1	106	0	0	3	195
2019	2	119	1	142	0	0	4	261
2020	3	149	2	177	0	0	5	326
2021	4	178	2	211	0	0	6	389
2022	4	206	2	245	0	0	7	451
2023	5	234	3	278	0	0	7	512
2024	5	261	3	310	0	0	8	571
2025	6	288	3	342	0	0	9	630
2026	6	314	4	373	0	0	10	687
2027	7	339	4	403	0	0	11	742
2028	7	364	4	432	0	0	12	796
2029	8	389	5	461	0	0	12	850
2030	8	412	5	489	0	0	13	901
2031	9	435	5	516	0	0	14	951
2017-2026	39	1,955	23	2,322	0	0	62	4,277
2017-2031	78	3,894	46	4,623	0	0	124	8,517

Source: Hemson Consulting Ltd., 2016

APPENDIX B

***GENERAL SERVICES & ROADS
TECHNICAL APPENDIX***

APPENDIX B

TECHNICAL APPENDIX INTRODUCTION AND OVERVIEW

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the DC eligible services provided by the Town of Plympton-Wyoming. Six services have been analysed as part of this Development Charges (DC) Background Study:

Appendix B.1 Library Services

Appendix B.2 Fire Services

Appendix B.3 Parks and Recreation

Appendix B.4 Public Works: Buildings and Fleet

Appendix B.5 General Government

Appendix B.6 Roads and Related

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

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in a municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis. For the purpose of this study, the historical inventory period is defined as 2007–2016.

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 Town in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by municipal staff in consultation with Hemson Consulting Ltd. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The approach used to calculate service levels and maximum funding envelopes is described as follows; for those services with only a residential impact (Library and Parks and Recreation), the service level measure of net population has been utilized. For the remaining services that levy both a residential and non-residential charge, the service level measure of net population + employment has been used.

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

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

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

The *DCA* requires that Council express its intent to provide capital facilities to support future development. Based on the development forecasts presented in Appendix A, staff in collaboration with consultants, have created a development-related capital forecast that sets out the projects required to service anticipated development for the ten-year period from 2017 to 2026 for the general services, and to 2031 for roads and related infrastructure.

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

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

When calculating development charges, the development-related net capital cost must be reduced by ten per cent for all services with the exception of protection services and engineered services (*DCA* s.5.(1)8.). In addition, under the *Development Charges Act, 1997*, services related to a highway as defined in subsection 1(1) of the *Municipal Act, 2001*, need not to be reduced by the legislated ten per cent (as with other general services). The services and capital assets of Public Works are considered to be related to a highway and are therefore not reduced. The ten per cent discount is applied to all other general services considered in this appendix with the exception of Fire Services. As with replacement shares, the ten per cent mandatory reduction must be funded from non-development charge sources.

The capital program less any replacement shares or benefit to existing shares and ten per cent discount shares yields the development-related costs. However, not all of the net development-related capital program may be recoverable from development charges in the planning period under review. For some services, reserve fund balances

may be available to fund a share of the program. In addition, a portion of the capital program may service development occurring beyond 2026 (general services) or 2031 (roads and related). This portion of the capital program is deemed “pre-built” service capacity and is considered as committed excess capacity to be recovered under future development charges, or a service level increase.

The remaining portion of the net capital program represents the development-related cost that may be included in the DC calculation. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital costs eligible for recovery against growth over the forecast period from 2017 to 2026 or 2031.

Calculation of the Unadjusted Development Charges Rates

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

The first step in determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Library Services and Parks and Recreation, the development-related costs have been apportioned as 85 per cent residential and 15 per cent non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth in new space over the ten-year forecast period.

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

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

TABLE 3 CASH FLOW ANALYSIS

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

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

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

APPENDIX B.1

LIBRARY SERVICES

APPENDIX B.1

LIBRARY SERVICES

The Town of Plympton-Wyoming is responsible for providing space for libraries in the Town that are operated by Lambton County Libraries. The Town's inventory of capital assets contains only buildings and land as all other capital items, including materials, equipment and furniture are the responsibility of the County. Lambton County Libraries currently operate three branches within the Town.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings and land for Library Services provided by the Town of Plympton-Wyoming. The three branches total nearly 7,000 square feet and are valued at \$1.68 million. The library buildings occupy 0.71 hectares of Town land, which is worth approximately \$71,400.

The 2016 combined replacement value of the inventory of capital assets for Library Services is \$1.75 million, resulting in a ten-year historical average service level of \$205.31 per capita. This historical service level, multiplied by the ten-year net population growth (382), results in a ten-year maximum allowable funding envelope of \$78,440. Uncommitted excess capacity has been calculated in the inventory of capital assets or \$190,140, which exceeds the maximum allowable funding envelope. Therefore, the Plympton-Wyoming library currently has enough space to accommodate population growth over the next ten years and as such, no development charges are calculated for this service.

TABLE 2 2017–2026 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

As there has been no maximum allowable funding envelope calculated for the Plympton-Wyoming Library Services, there is no capital program developed. Further, the Town does not anticipate acquiring any additional library space over the planning period 2017-2026. Therefore, no development charges have been calculated for this service as part of this study.

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APPENDIX B.1
TABLE 1 - PAGE 1

TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICE

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie Library Branch	1,056	1,056	1,056	1,056	1,056	-	-	-	-	-	\$240
Mandaumin Library Branch	1,379	1,379	1,379	1,379	1,379	1,379	1,379	1,379	1,379	1,379	\$240
Wyoming Library	3,033	3,033	3,033	3,033	3,033	3,033	3,033	3,033	3,033	3,033	\$240
Camlachie Cultural Library Museum	-	-	-	-	-	2,583	2,583	2,583	2,583	2,583	\$240
Total (sq.ft.)	5,468	5,468	5,468	5,468	5,468	6,995	6,995	6,995	6,995	6,995	
Total (\$000)	\$1,312.3	\$1,312.3	\$1,312.3	\$1,312.3	\$1,312.3	\$1,678.8	\$1,678.8	\$1,678.8	\$1,678.8	\$1,678.8	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie Library Branch	0.02	0.02	0.02	0.02	0.02	-	-	-	-	-	\$100,000
Mandaumin Library Branch	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$100,000
Wyoming Library	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	\$100,000
Camlachie Cultural Library Museum	-	-	-	-	-	0.26	0.26	0.26	0.26	0.26	\$100,000
Total (ha)	0.47	0.47	0.47	0.47	0.47	0.71	0.71	0.71	0.71	0.71	
Total (\$000)	\$46.5	\$46.5	\$46.5	\$46.5	\$46.5	\$71.4	\$71.4	\$71.4	\$71.4	\$71.4	

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APPENDIX B.1
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TOWN OF PLYMPTON-WYOMING
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICE

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Historic Population	7,520	7,534	7,548	7,562	7,576	7,581	7,586	7,591	7,596	7,599

INVENTORY SUMMARY (\$000)

Buildings	\$1,312.3	\$1,312.3	\$1,312.3	\$1,312.3	\$1,312.3	\$1,678.8	\$1,678.8	\$1,678.8	\$1,678.8	\$1,678.8
Land	\$46.5	\$46.5	\$46.5	\$46.5	\$46.5	\$71.4	\$71.4	\$71.4	\$71.4	\$71.4
Total (\$000)	\$1,358.9	\$1,358.9	\$1,358.9	\$1,358.9	\$1,358.9	\$1,750.2	\$1,750.2	\$1,750.2	\$1,750.2	\$1,750.2

SERVICE LEVEL (\$/capita)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average Service Level
Buildings	\$174.51	\$174.19	\$173.86	\$173.54	\$173.22	\$221.45	\$221.31	\$221.16	\$221.02	\$220.94	\$197.52
Land	\$6.19	\$6.18	\$6.17	\$6.15	\$6.14	\$9.42	\$9.41	\$9.41	\$9.40	\$9.40	\$7.79
Total (\$/capita)	\$180.70	\$180.36	\$180.03	\$179.70	\$179.36	\$230.87	\$230.72	\$230.57	\$230.42	\$230.33	\$205.31

TOWN OF PLYMPTON-WYOMING
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICE

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2007-2016)	\$205.31
Net Population Growth (2017-2026)	382
Maximum Allowable Funding Envelope	\$78,438
Less: Uncommitted Excess Capacity	\$190,139
Less: 10% Legislated Reduction	(\$11,170)
Discounted Maximum Allowable Funding Envelope	(\$100,531)

Excess Capacity Calculation	
Total Value of Inventory in 2016	\$1,750,248
Inventory Using Average Service Level	\$1,560,109
Excess Capacity	\$190,139
Excess Capacity:	Uncommitted

APPENDIX B.2

FIRE SERVICES

APPENDIX B.2

FIRE SERVICES

The Town of Plympton-Wyoming operates two fire departments that are responsible for the provision of fire protection and emergency services in Camlachie and Wyoming.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for buildings, land, vehicles, furniture and equipment for both fire departments. The department operates out of two stations of a combined 12,437 square feet. The land associated with both facilities totals 0.45 hectares and, at \$100,000 per hectare, is valued at \$45,000. The 2016 Fire Services fleet totals nine vehicles with a replacement value of \$3.14 million. Finally, the furniture and equipment included in the inventory, which incorporates station equipment and furniture, communications equipment, tanks and bunker gear totals \$904,000.

The current value of the Total Fire Services capital infrastructure, including buildings, land, vehicles furniture and equipment totals \$7.82 million and has provided Plympton-Wyoming with a ten-year average historical service level of \$827.71 per population and employee. The calculated maximum allowable funding envelope recoverable through development charges over the next ten years is \$367,805. There is uncommitted excess capacity in the amount of \$109,850, which must be deducted. As such, maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$257,950.

TABLE 2 2017–2026 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 2017 to 2026 development-related capital program includes the new radio equipment for both the Camlachie and Wyoming fire departments, as well as the replacement and upgrade of an existing pumper vehicle.

In total, the Fire Services capital program amounts to \$1.16 million. Non-growth shares relating to replacement and benefit to the existing community total \$750,000. This share represents the replacement portion of the upgraded pumper, as an existing

pumper will be taken out of service with its acquisition. This share totals 75% of the net municipal costs. No replacement shares have been deducted from the new radio equipment as it will be a net additional acquisitions to the existing inventory.

Available development charge reserve funds in the amount of \$19,330 are used to fund a share of the development-related costs. \$132,710 is the amount by which the DC eligible costs exceed the maximum allowable funding envelope, and is deemed to provide benefit to development beyond 2026. This share will be eligible for funding under subsequent development charge studies. The remaining \$257,950 is related to development in the 2017–2026 planning period and is eligible for DC recovery.

The development-related net capital cost is allocated 85 per cent to residential development (\$219,261) and 15 per cent (\$38,693) to non-residential development. The residential share of the net development-related capital cost is divided by the ten-year growth in population in new dwelling units (928) to derive an unadjusted charge of \$236.27 per capita. The non-residential share of the net development-related capital cost is divided by the ten-year forecast growth in floor space (4,277 sq.m.), resulting in an unadjusted charge of \$9.05 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$266.00 per capita and \$10.40 per square metre, respectively. The following table summarizes the calculation of the Fire Services development charge:

FIRE SERVICES SUMMARY						
10-year Hist.	2017-2026		Unadjusted		Adjusted	
Service Level per pop+empl	Development-Related Total	Capital Program Net DC Recoverable	Development Charge \$/capita	Development Charge \$/sq.m	Development Charge \$/capita	Development Charge \$/sq.m
\$827.71	\$1,160,000	\$257,954	\$236.27	\$9.05	\$266.00	\$10.40

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
6715 Camlachie Rd, Camlachie	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	\$300
530 Main St, Wyoming	8,437	8,437	8,437	8,437	8,437	8,437	8,437	8,437	8,437	8,437	8,437	\$300
Total (sq.ft.)	12,437	12,437	12,437	12,437	12,437	12,437	12,437	12,437	12,437	12,437	12,437	
Total (\$000)	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	

LAND Station Name	# of Hectares										UNIT COST (\$/ha)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
6715 Camlachie Rd, Camlachie	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$100,000
530 Main St, Wyoming	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$100,000
Total (ha)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
Total (\$000)	\$45.3	\$45.3	\$45.3	\$45.3	\$45.3	\$45.0	\$45.0	\$45.0	\$45.0	\$45.0	\$45.0	

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

VEHICLES (FULLY EQUIPPED) Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie											
Fire Pumper No. 1	1	1	1	1	1	1	1	1	1	1	\$370,000
Rescue Van - Truck No. 2	1	1	1	1	1	1	1	1	1	1	\$410,000
Fire Tanker Truck No. 4	1	1	1	1	1	1	1	1	1	1	\$300,000
Emergency Pickup Truck	-	-	-	-	-	-	1	1	1	1	\$60,000
Wyoming											
Fire Pumper No. 1	1	1	1	1	1	1	1	1	1	1	\$530,000
Fire Tanker Truck No. 2	1	1	1	1	1	1	1	1	1	1	\$410,000
Fire Pumper Truck No. 3 (Backup)	1	1	1	1	1	1	1	1	1	1	\$370,000
Fire Rescue Truck No. 4	1	1	1	1	1	1	1	1	1	1	\$625,000
Emergency Pickup Truck No. 5	-	-	-	-	-	1	1	1	1	1	\$60,000
Total (#)	7	7	7	7	7	8	9	9	9	9	
Total (\$000)	\$3,015.0	\$3,015.0	\$3,015.0	\$3,015.0	\$3,015.0	\$3,075.0	\$3,135.0	\$3,135.0	\$3,135.0	\$3,135.0	

FURNITURE & EQUIPMENT Station Name	Total Value of Furniture & Equipment (\$)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie											
Furniture and Minor Equipment	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
Communications	\$18,000	\$18,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	
Tanks and Packs	\$90,000	\$90,000	\$90,000	\$90,000	\$90,000	\$90,000	\$90,000	\$90,000	\$90,000	\$100,000	
Bunker Gear	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$224,000	
Wyoming											
Furniture and Minor Equipment	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	\$60,000	\$70,000	\$80,000	\$90,000	\$100,000	
Communications	\$57,000	\$51,300	\$57,000	\$57,000	\$57,000	\$65,000	\$74,000	\$83,000	\$92,000	\$96,000	
Tanks and Packs	\$118,000	\$118,000	\$118,000	\$118,000	\$118,000	\$118,000	\$118,000	\$118,000	\$118,000	\$125,000	
Bunker Gear	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$217,000	\$224,000	
Total (\$000)	\$780.0	\$774.3	\$782.0	\$782.0	\$782.0	\$802.0	\$821.0	\$840.0	\$859.0	\$904.0	

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TOWN OF PLYMPTON-WYOMING
CALCULATION OF SERVICE LEVELS
FIRE SERVICES

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Historic Population	7,520	7,534	7,548	7,562	7,576	7,581	7,586	7,591	7,596	7,599
Historic Employment	<u>1,788</u>	<u>1,741</u>	<u>1,695</u>	<u>1,651</u>	<u>1,608</u>	<u>1,628</u>	<u>1,648</u>	<u>1,668</u>	<u>1,689</u>	<u>1,710</u>
Historic Population + Employment	9,308	9,275	9,243	9,213	9,184	9,209	9,234	9,259	9,285	9,309

INVENTORY SUMMARY (\$000)

Buildings	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1	\$3,731.1
Land	\$45.3	\$45.3	\$45.3	\$45.3	\$45.3	\$45.0	\$45.0	\$45.0	\$45.0	\$45.0
Vehicles	\$3,015.0	\$3,015.0	\$3,015.0	\$3,015.0	\$3,015.0	\$3,075.0	\$3,135.0	\$3,135.0	\$3,135.0	\$3,135.0
Furniture and Equipment	\$780.0	\$774.3	\$782.0	\$782.0	\$782.0	\$802.0	\$821.0	\$840.0	\$859.0	\$904.0
Total (\$000)	\$7,571.4	\$7,565.7	\$7,573.4	\$7,573.4	\$7,573.4	\$7,653.1	\$7,732.1	\$7,751.1	\$7,770.1	\$7,815.1

SERVICE LEVEL (\$/Population+Employment)

Average
Service
Level

Buildings	\$400.85	\$402.27	\$403.67	\$404.98	\$406.27	\$405.16	\$404.06	\$402.97	\$401.84	\$400.80	\$403.29
Land	\$4.87	\$4.89	\$4.90	\$4.92	\$4.94	\$4.89	\$4.87	\$4.86	\$4.85	\$4.83	\$4.88
Vehicles	\$323.91	\$325.07	\$326.19	\$327.25	\$328.29	\$333.91	\$339.51	\$338.59	\$337.64	\$336.77	\$331.71
Furniture and Equipment	\$83.80	\$83.48	\$84.60	\$84.88	\$85.15	\$87.09	\$88.91	\$90.72	\$92.51	\$97.11	\$87.83
Total (\$/pop+empl)	\$813.43	\$815.71	\$819.37	\$822.04	\$824.64	\$831.05	\$837.35	\$837.14	\$836.84	\$839.51	\$827.71

TOWN OF PLYMPTON-WYOMING
CALCULATION OF MAXIMUM ALLOWABLE
FIRE SERVICES

10-Year Funding Envelope Calculation

10 Year Average Service Level (2007-2016)	\$827.71
Net Population & Employment Growth (2017-2026)	444
Maximum Allowable Funding Envelope	\$367,805
Less: Uncommitted Excess Capacity	\$109,851
Less: 10% Legislated Reduction	\$0
Discounted Maximum Allowable Funding Envelope	\$257,954

Excess Capacity Calculation

Total Value of Inventory in 2016	\$7,815,100
Inventory Using Average Service Level	\$7,705,249
Excess Capacity	\$109,851
Excess Capacity:	Uncommitted

TOWN OF PLYMPTON-WYOMING
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement & BTE Shares	0% Reduction		Available DC Reserves	2017-2026	Post 2026
2.0 FIRE SERVICES											
2.1 Camlachie Fire Hall											
2.1.1	New Radio Equipment	2017	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ 19,332	\$ 80,668	\$ -
2.1.2	Pumper Replacement	2021	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 750,000	\$ -	\$ 250,000	\$ -	\$ 117,286	\$ 132,714
	Subtotal Camlachie Fire Hall		\$ 1,100,000	\$ -	\$ 1,100,000	\$ 750,000	\$ -	\$ 350,000	\$ 19,332	\$ 197,954	\$ 132,714
2.2 Wyoming Fire Hall											
2.2.1	New Radio Equipment	2017	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -
	Subtotal Wyoming Fire Hall		\$ 60,000	\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -
TOTAL FIRE SERVICES			\$ 1,160,000	\$ -	\$ 1,160,000	\$ 750,000	\$ -	\$ 410,000	\$ 19,332	\$ 257,954	\$ 132,714

Residential Development Charge Calculation		
Residential Share of DC Eligible Costs	85%	\$219,261
10 Year Population Growth in New Housing Units		928
Unadjusted Development Charge Per Unit		\$236.27
Non-Residential Development Charge Calculation		
Non-Residential Share of DC Eligible Costs	15%	\$38,693
10 Year Growth in Square Metres		4,277
Unadjusted Development Charge Per Square Metre		\$9.05

2017-2026 Discounted DC Funding Envelope	\$257,954
Estimated Reserve Fund Balance Dec 2016	\$19,332

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**TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE SERVICES	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.0	(\$106.4)	(\$93.5)	(\$77.5)	(\$58.3)	(\$146.1)	(\$125.4)	(\$100.6)	(\$71.6)	(\$38.1)	
2017-2026 RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Services: Non Inflated	\$119.6	\$0.0	\$0.0	\$0.0	\$99.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$219.3
- Fire Services: Inflated	\$119.6	\$0.0	\$0.0	\$0.0	\$107.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$227.5
NEW RESIDENTIAL DEVELOPMENT											
- Population in New Units	60	68	75	82	89	96	104	111	118	125	928
REVENUE											
- DC Receipts: Inflated	\$16.0	\$18.4	\$20.8	\$23.1	\$25.6	\$28.2	\$31.2	\$33.9	\$36.8	\$39.7	\$273.7
INTEREST											
- Interest on Opening Balance	\$0.0	(\$5.9)	(\$5.1)	(\$4.3)	(\$3.2)	(\$8.0)	(\$6.9)	(\$5.5)	(\$3.9)	(\$2.1)	(\$45.0)
- Interest on In-year Transactions	(\$2.8)	\$0.3	\$0.4	\$0.4	(\$2.3)	\$0.5	\$0.5	\$0.6	\$0.6	\$0.7	(\$1.0)
TOTAL REVENUE	\$13.2	\$12.9	\$16.0	\$19.2	\$20.1	\$20.7	\$24.8	\$29.0	\$33.5	\$38.3	\$227.7
CLOSING CASH BALANCE	(\$106.4)	(\$93.5)	(\$77.5)	(\$58.3)	(\$146.1)	(\$125.4)	(\$100.6)	(\$71.6)	(\$38.1)	\$0.2	

2012 Adjusted Charge Per Capita	\$266.00
----------------------------------------	-----------------

Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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**TOWN OF PLYMPTON-WYOMING
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
 FIRE SERVICES
 NON-RESIDENTIAL DEVELOPMENT CHARGE
 (in \$000)**

FIRE SERVICES	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.00	(\$18.91)	(\$17.81)	(\$15.94)	(\$13.15)	(\$28.92)	(\$25.22)	(\$20.50)	(\$14.71)	(\$7.69)	
2017-2026 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Fire Services: Non Inflated	\$21.1	\$0.0	\$0.0	\$0.0	\$17.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$38.7
- Fire Services: Inflated	\$21.1	\$0.0	\$0.0	\$0.0	\$19.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$40.1
NEW NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	255	195	261	326	389	451	512	571	630	687	4,277
REVENUE											
- DC Receipts: Inflated	\$2.7	\$2.1	\$2.8	\$3.6	\$4.4	\$5.2	\$6.0	\$6.8	\$7.7	\$8.5	\$49.8
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.0)	(\$1.0)	(\$0.9)	(\$0.7)	(\$1.6)	(\$1.4)	(\$1.1)	(\$0.8)	(\$0.4)	(\$9.0)
- Interest on In-year Transactions	(\$0.5)	\$0.0	\$0.0	\$0.1	(\$0.4)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.2)
TOTAL REVENUE	\$2.2	\$1.1	\$1.9	\$2.8	\$3.3	\$3.7	\$4.7	\$5.8	\$7.0	\$8.2	\$40.7
CLOSING CASH BALANCE	(\$18.9)	(\$17.8)	(\$15.9)	(\$13.2)	(\$28.9)	(\$25.2)	(\$20.5)	(\$14.7)	(\$7.7)	\$0.5	

2016 Adjusted Charge Per Square Metre	\$10.40
----------------------------------------------	----------------

Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.3

PARKS AND RECREATION

APPENDIX B.3

PARKS AND RECREATION

The Parks and Recreation Committee in the Town of Plympton-Wyoming provides parks, recreation and leisure time facilities, programs and services that strengthen, support and maintain a healthy family of communities.

TABLE 1 HISTORICAL SERVICE LEVELS

The ten-year historical inventory of capital assets for Parks and Recreation includes nearly 12,390 square feet of indoor recreation building space. The current replacement value for the buildings themselves add up to more than \$3.00 million. Also included in the inventory of indoor recreation capital assets is the annual capital contribution made by the Town to neighboring Petrolia for the use of Forest Arena by its citizens. The indoor recreation facilities occupy nearly 0.5 hectares of land, which is valued at \$49,000. The value of furniture and equipment within the recreation facilities totals \$116,000.

The combined value of all 29.2 hectares of municipal parks amounts to \$794,200. Parkland development costs represent the site preparation and servicing costs to the Town to develop basic land into a useable park. The Town also operates 15 water access points along the waterfront, which are valued at \$359,300. The value of the 5.16 kilometres of Town-wide trails totals \$118,500 in 2016.

The Town also owns and maintains many park facilities, including 6 baseball diamonds, 4 tennis courts, 17 playgrounds, various outdoor park buildings, as well as a soccer field, skate park, basketball court and splash pad. The combined value of all park facilities in 2016 is \$2.89 million.

The total combined value of capital assets for Parks and Recreation in the Town of Plympton-Wyoming amounts to \$7.48 million. The ten-year historical average service level is \$965.54 per capita, and this, multiplied by the ten-year net population growth (382), results in a ten-year maximum allowable funding envelope of \$368,880. Uncommitted excess capacity is identified in the amount of \$138,220 and is netted out of the maximum allowable funding envelope.

The Parks and Recreation funding envelope must be reduced by ten per cent as required under the *DCA*. The discount amounts to \$23,070 and is netted out of the calculation. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$207,600.

TABLE 2 2017–2026 DEVELOPMENT-RELATED PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The 2017 - 2026 development-related capital program for Parks and Recreation totals \$580,000. The capital projects relate to park development and outdoor facility works, including a new splash pad, park development at Camp Lamrecton and McKay Park, as well as a Master Plan in 2017, to coincide with the Town’s next Official Plan review.

All of development-related project costs are deemed to benefit future development in the Town and, as such, no benefit to existing shares are deducted from the calculation. The required ten per cent deduction totals \$58,000. Available reserve funds in the amount of \$24,290 are applied to the first project in the capital forecast. The amount of the DC eligible share exceeding the maximum permissible funding envelope is \$290,110 and is deemed to benefit development beyond 2026 and will be eligible for recovery under future development charges.

The remaining DC costs eligible for recovery amount to \$207,600, which is allocated entirely against future residential development in the Town. This results in an unadjusted development charge of \$223.70 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$236.00 per capita. The following table summarizes the calculation of the Parks and Recreation development charge:

PARKS AND RECREATION SUMMARY						
10-year Hist.	2017-2026		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$965.54	\$580,000	\$207,596	\$223.70	\$0.00	\$236.00	\$0.00

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie Community Centre	8,819	8,819	8,819	8,819	8,819	8,819	8,819	8,819	8,819	8,819	\$270
McKay Park Pool Building	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	2,053	\$270
519 Front Street Parks Depot	1,515	1,515	1,515	1,515	1,515	1,515	1,515	1,515	1,515	1,515	\$130
Annual Contribution for Arena Space											
Construction Contribution	\$95,000	\$95,000	\$95,000	\$95,000	\$95,000	\$0	\$0	\$0	\$0	\$0	
Annual Usage	\$11,000	\$11,000	\$17,000	\$16,200	\$16,650	\$15,360	\$14,720	\$16,640	\$17,280	\$14,880	
Total (sq.ft.)	12,387	12,387	12,387	12,387	12,387	12,387	12,387	12,387	12,387	12,387	
Total (\$000)	\$3,238.4	\$3,238.4	\$3,244.4	\$3,243.6	\$3,244.0	\$3,147.8	\$3,147.1	\$3,149.0	\$3,149.7	\$3,147.3	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie Community Centre	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$100,000
519 Front Street Parks Depot	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$100,000
Total (ha)	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	
Total (\$000)	\$49.3	\$49.3	\$49.3	\$49.3	\$49.3	\$49.0	\$49.0	\$49.0	\$49.0	\$49.0	\$49.0

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Camlachie Community Centre (Kitchen, Banquet Facilities etc.)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
McKay Park Pool Building	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
Total (\$000)	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0	\$116.0

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
PARKS AND WATER ACCESS FACILITIES

PARKS Park Name	# of Hectares of Developed Area										Devel. Cost (\$/ha)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Camlachie Community Centre Park	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	\$27,200
Mandaumin Library Park	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$27,200
Lakeshore Park	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	\$27,200
Blue Point Park	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	\$27,200
Point View Park	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	\$27,200
Kings Square	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	\$27,200
Sunset Acres	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	\$27,200
Eton Court Park	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	\$27,200
Windcliffe Park	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	\$27,200
A Minielly Park	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	\$27,200
Sycamore Park	0.09	0.09	0.09	0.09	0.09	-	-	-	-	-	\$27,200
Bowling Green Park	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$27,200
Plumb Park	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	\$27,200
McKay Park	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	\$27,200
Redick Park	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$27,200
Canton Park	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	\$27,200
Wilpstra Park	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	\$27,200
Centennial Park	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	\$27,200
O'Brien Park	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$27,200
Donkers Park	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$27,200
Maples Park	-	-	-	-	-	0.08	0.08	0.08	0.08	0.08	\$27,200
Netty's Way Park	-	-	-	-	-	0.06	0.06	0.06	0.06	0.06	\$27,200
Lamrecton Park	-	-	-	-	-	-	-	-	-	0.93	\$27,200
Total (Ha)	28.22	28.22	28.22	28.22	28.22	28.27	28.27	28.27	28.27	29.20	
Total (\$000)	\$767.5	\$767.5	\$767.5	\$767.5	\$767.5	\$768.9	\$768.9	\$768.9	\$768.9	\$794.2	

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
PARKS AND WATER ACCESS FACILITIES

Water Access Facilities Type	# of Access Points										Devel. Cost (\$/unit)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
With Stairs	7	7	7	7	7	7	7	7	7	7	\$32,700
Without Stairs	8	8	8	8	8	8	8	8	8	8	\$16,300
Total (#)	15	15	15	15	15	15	15	15	15	15	
Total (\$000)	\$359.3	\$359.3	\$359.3	\$359.3	\$359.3	\$359.3	\$359.3	\$359.3	\$359.3	\$359.3	

TRAILS Trail Name	Kilometres of Trails (km)										Devel. Cost (\$/km)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Egremont Road - W. of O'Brian Rd.	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	\$32,700
Fleming Road. S. of Rear St.	-	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$16,300
Egremont Road - Fleming to School	-	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$16,300
Egremont Road - School to Dalrymple	-	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	\$16,300
Wyoming to Reeces Corner Trail	-	-	-	-	-	-	2.00	2.00	2.00	2.00	\$16,300
Total (km)	2.10	3.16	3.16	3.16	3.16	3.16	5.16	5.16	5.16	5.16	
Total (\$000)	\$68.7	\$85.9	\$85.9	\$85.9	\$85.9	\$85.9	\$118.5	\$118.5	\$118.5	\$118.5	

TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

Baseball Diamonds Park Name	# of Diamonds										UNIT COST (\$/diamond)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Arnold Minielly Park	3	3	3	3	3	3	3	3	3	3	3	\$239,500
Canton Park	1	1	1	1	1	1	1	1	1	1	1	\$272,100
Centennial Park	1	1	1	1	1	1	1	1	1	1	1	\$217,700
Lakeshore Community Park (unlit)	1	1	1	1	1	1	1	1	1	1	1	\$81,600
Total (#)	6	6	6	6	6	6	6	6	6	6	6	
Total (\$000)	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	\$1,289.9	

Tennis Courts Park Name	# of Courts										UNIT COST (\$/court)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Blue Point Park	1	1	1	1	1	1	1	1	1	1	1	\$49,000
Mandaumin Park	1	1	1	1	1	1	1	1	1	1	1	\$49,000
McKay Park (lit)	2	2	2	2	2	2	2	2	2	2	2	\$65,300
Total (#)	4	4	4	4	4	4	4	4	4	4	4	
Total (\$000)	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	\$228.6	

Soccer Fields Park Name	# of Fields										UNIT COST (\$/field)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Lakeshore Community Park	1	1	1	1	1	1	1	1	1	1	1	\$16,300
Total (#)	1	1	1	1	1	1	1	1	1	1	1	
Total (\$000)	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	\$16.3	

Ball Hockey/Skate Park/Splash Pad Park Name	# of Facilities										UNIT COST (\$/rink)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
McKay Park	1	1	1	1	1	1	1	1	1	1	1	\$65,300
Skate Park	-	-	-	-	-	-	-	1	1		1	\$94,000
Splash Pad	-	-	-	-	-	-	-	-	-		0.5	\$180,000
Total (#)	1	1	1	1	1	1	1	2	2		3	
Total (\$000)	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$159.3	\$159.3		\$249.3	

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

Playgrounds Park Name	Value of Playgrounds									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Blue Point Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Bowling Green Park	\$30,000	\$30,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Donkers Tot Park	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$50,000
Mandaumin Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
O'Brien Tot Park	\$30,000	\$30,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Plumb Tot Park	\$30,000	\$30,000	\$30,000	\$30,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Point View Park	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Wilpstra Tot Park	\$30,000	\$30,000	\$30,000	\$30,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Sycamore Park	\$30,000	\$30,000	\$30,000	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0
King's Square Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Arnold Minielly Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
McKay Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Eton Court Park	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Lakeshore Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Canton Park	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Maples Park	\$0	\$0	\$0	\$0	\$0	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000
Netty's Way Park	\$0	\$0	\$0	\$0	\$0	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000
Total (\$000)	\$520.0	\$520.0	\$530.0	\$530.0	\$510.0	\$556.0	\$556.0	\$556.0	\$576.0	\$576.0

Basketball Courts Park Name	# of Courts										UNIT COST (\$/court)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
McKay Park	1	1	1	1	1	1	1	1	1	1	\$65,300
Total (#)	1	1	1	1	1	1	1	1	1	1	
Total (\$000)	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	\$65.3	

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TOWN OF PLYMPTON-WYOMING
 INVENTORY OF CAPITAL ASSETS
 PARKS AND RECREATION
 PARK FACILITIES

Special Park Facilities Park Name	# of Facilities									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Outdoor Pool	\$220,400	\$220,400	\$220,400	\$220,400	\$220,400	\$220,400	\$220,400	\$220,400	\$220,400	\$220,400
Card Shanty in Bowling Green Park Senior Citizen's C	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$0	\$0	\$0	\$0	\$0
Canton Park Canteen & Washrooms	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Centennial Park Canteen, Washrooms & Storage	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Lakeshore Park Gazebo & Washroom	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Arnold Minielly Park Washroom & Storage	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
McKay Park Gazebo	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Total (\$000)	\$485.4	\$485.4	\$485.4	\$485.4	\$485.4	\$465.4	\$465.4	\$465.4	\$465.4	\$465.4

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**TOWN OF PLYMPTON-WYOMING
CALCULATION OF SERVICE LEVELS
PARKS AND RECREATION**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Historic Population	7,520	7,534	7,548	7,562	7,576	7,581	7,586	7,591	7,596	7,599

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$3,403.7	\$3,403.7	\$3,409.7	\$3,408.9	\$3,409.4	\$3,312.8	\$3,312.1	\$3,314.0	\$3,314.7	\$3,312.3
Parkland & Trail Development	\$1,195.5	\$1,212.8	\$1,212.8	\$1,212.8	\$1,212.8	\$1,214.2	\$1,246.8	\$1,246.8	\$1,246.8	\$1,272.1
Park Facilities	\$2,670.8	\$2,670.8	\$2,680.8	\$2,680.8	\$2,660.8	\$2,686.8	\$2,686.8	\$2,780.8	\$2,800.8	\$2,890.8
Total (\$000)	\$7,270.0	\$7,287.3	\$7,303.3	\$7,302.5	\$7,282.9	\$7,213.7	\$7,245.7	\$7,341.6	\$7,362.3	\$7,475.2

SERVICE LEVEL (\$/capita)											Average Service Level
Indoor Recreation	\$452.62	\$451.78	\$451.74	\$450.80	\$450.02	\$436.98	\$436.61	\$436.57	\$436.37	\$435.89	\$443.94
Parkland & Trail Development	\$158.98	\$160.97	\$160.67	\$160.38	\$160.08	\$160.16	\$164.35	\$164.25	\$164.14	\$167.41	\$162.14
Park Facilities	\$355.16	\$354.50	\$355.17	\$354.51	\$351.21	\$354.41	\$354.18	\$366.33	\$368.72	\$380.43	\$359.46
Total (\$/capita)	\$966.76	\$967.25	\$967.58	\$965.68	\$961.32	\$951.56	\$955.14	\$967.15	\$969.23	\$983.73	\$965.54

**TOWN OF PLYMPTON-WYOMING
CALCULATION OF MAXIMUM ALLOWABLE
PARKS AND RECREATION**

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2007-2016)	\$965.54
Net Population Growth (2017-2026)	382
Maximum Allowable Funding Envelope	\$368,882
Less: Uncommitted Excess Capacity	\$138,220
Less: 10% Legislated Reduction	\$23,066
Discounted Maximum Allowable Funding Envelope	\$207,596

Excess Capacity Calculation	
Total Value of Inventory in 2016	\$7,475,158
Inventory Using Average Service Level	\$7,336,938
Excess Capacity	\$138,220
Excess Capacity:	Uncommitted

TOWN OF PLYMPTON-WYOMING
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement & BTE Shares	10% Reduction		Available DC Reserves	2017-2026	Post 2026
3.0 PARKS AND RECREATION											
3.1 Parks and Facilities											
3.1.1	New Splashpad in Plympton Area	2022	\$ 180,000	\$ -	\$ 180,000	\$ -	\$ 18,000	\$ 162,000	\$ 24,294	\$ 137,706	\$ -
3.1.2	McKay Park Enhancements	2022	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 24,890	\$ 20,110
3.1.3	Camp Lamrecton Park Development	2022	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ 30,000	\$ 270,000	\$ -	\$ -	\$ 270,000
3.1.4	Parks and Recreation Master Plan	2017	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
	Subtotal Parks and Facilities		\$ 580,000	\$ -	\$ 580,000	\$ -	\$ 58,000	\$ 522,000	\$ 24,294	\$ 207,596	\$ 290,110
TOTAL PARKS AND RECREATION			\$ 580,000	\$ -	\$ 580,000	\$ -	\$ 58,000	\$ 522,000	\$ 24,294	\$ 207,596	\$ 290,110

Residential Development Charge Calculation		
Residential Share of DC Eligible Costs	100%	\$207,596
10 Year Population Growth in New Housing Units		928
Unadjusted Development Charge Per Unit		\$223.70
Non-Residential Development Charge Calculation		
Non-Residential Share of DC Eligible Costs	0%	\$0
10 Year Growth in Square Metres		4,277
Unadjusted Development Charge Per Square Metre		\$0.00

2017-2026 Discounted DC Funding Envelope	\$207,596
Estimated Reserve Fund Balance Dec 2016	\$24,294

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APPENDIX B.3
TABLE 3

**TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKS AND RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARKS AND RECREATION	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.0	(\$31.6)	(\$16.7)	\$1.1	\$22.0	\$45.9	(\$111.3)	(\$89.3)	(\$63.6)	(\$33.9)	
2017-2026 RESIDENTIAL FUNDING REQUIREMENTS											
- Indoor Recreation: Non Inflated	\$45.0	\$0.0	\$0.0	\$0.0	\$0.0	\$162.6	\$0.0	\$0.0	\$0.0	\$0.0	\$207.6
- Indoor Recreation: Inflated	\$45.0	\$0.0	\$0.0	\$0.0	\$0.0	\$179.5	\$0.0	\$0.0	\$0.0	\$0.0	\$224.5
NEW RESIDENTIAL DEVELOPMENT											
- Population in New Units	60	68	75	82	89	96	104	111	118	125	928
REVENUE											
- DC Receipts: Inflated	\$14.2	\$16.4	\$18.4	\$20.5	\$22.7	\$25.0	\$27.6	\$30.1	\$32.6	\$35.3	\$242.8
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.7)	(\$0.9)	\$0.0	\$0.8	\$1.6	(\$6.1)	(\$4.9)	(\$3.5)	(\$1.9)	(\$16.6)
- Interest on In-year Transactions	(\$0.8)	\$0.3	\$0.3	\$0.4	\$0.4	(\$4.2)	\$0.5	\$0.5	\$0.6	\$0.6	(\$1.5)
TOTAL REVENUE	\$13.4	\$14.9	\$17.8	\$20.9	\$23.9	\$22.4	\$22.0	\$25.7	\$29.7	\$34.1	\$224.6
CLOSING CASH BALANCE	(\$31.6)	(\$16.7)	\$1.1	\$22.0	\$45.9	(\$111.3)	(\$89.3)	(\$63.6)	(\$33.9)	\$0.1	

2012 Adjusted Charge Per Capita	\$236.00
----------------------------------------	-----------------

Allocation of Capital Program	
Residential Sector	100%
Non-Residential Sector	0%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.4

PUBLIC WORKS: BUILDINGS AND FLEET

APPENDIX B.4

PUBLIC WORKS: BUILDINGS AND FLEET

The Public Works and Engineering Department provides Public Works Services to the Town of Plympton-Wyoming, including road, water distribution, storm water and sanitary sewer infrastructure maintenance, as well as town beautification. This section of the report deals with the capital infrastructure of Public Works buildings, land, and related furniture and equipment, and municipal fleet. The engineered components of roads are discussed in Appendix B.6.

TABLE 1 HISTORICAL SERVICE LEVELS

The ten-year historic inventory of capital assets for Public Works includes approximately 16,430 square feet of building space with a replacement value of \$2.35 million. The 2.78 hecatars of land associated with the buildings are valued at \$277,700 and furniture and equipment add another \$200,000 to the value of the inventory. The town-wide fleet of 28 vehicles adds an additional \$3.24 million to the value of the inventory of capital assets.

The total value of the Public Works capital infrastructure in 2016 totals \$6.07 million. The resulting ten-year historical average service level is \$653.24 per population and employment, and this, multiplied by the ten-year growth in population and employment (444), results in a maximum allowable funding envelope of \$290,280. Under the *Development Charges Act, 1997*, services related to a highway as defined in subsection 1(1) of the *Municipal Act, 2001*, need not to be reduced by the legislated ten per cent (as with other general services). The services and capital assets of Public Works are considered to be related to a highway, and as such, the full maximum allowable funding envelope is brought forward to the development charges calculation.

TABLE 2 2017 – 2026 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

The ten-year development-related capital program for Public Works totals \$3.73 million. Included in the capital program is a provision for improvements to the list of public works facilities. A \$3.50 million provision has been approved by Council and it

is to be determined whether this will be a completely new facility, or if the existing building on Oil Heritage Road will be renovated. Also included in the gross project costs are a new quarter ton plow/dump truck as well as an upgrade to the Town's maintenance equipment.

Replacement shares in the amount of \$1.58 million have been deducted from the capital program and account largely for the value of the existing Public Works facility on Oil Heritage Road, which will either be totally replaced or renovated. A share of the upgrade to the maintenance equipment upgrade of 50% has also been deducted. Available reserve funds in the amount of \$9,160 have been allocated to the first project in the capital forecast.

Of the remaining DC eligible costs, \$1.85 million is the amount that exceeds the maximum allowable funding envelope and is attributed to population and employment growth beyond the ten-year forecast period. The remaining costs of \$290,280 are related to development in the 2017 to 2026 planning period.

This development-related cost is allocated 85 per cent (\$246,735) against new residential development and 15 per cent (\$43,542) to non-residential development. This yields an unadjusted residential development charge of \$265.88 per capita and \$10.18 per square metre of new non-residential building space.

TABLE 3 CASH FLOW ANALYSIS

After cash flow considerations, the residential development charge increases to \$293.00 per capita. The non-residential development charge also increases to \$11.50 per square metre.

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

PUBLIC WORKS: BUILDINGS AND FLEET SUMMARY						
10-year Hist.	2017-2026		Unadjusted		Adjusted	
Service Level per pop+empl	Development-Related Total	Capital Program Net DC Recoverable	Development Charge		Development Charge	
			\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$653.24	\$3,725,000	\$290,277	\$265.88	\$10.18	\$293.00	\$11.50

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS: BUILDINGS AND FLEET

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Reece's Public Works Garage, 5819 Oil Heritage Road	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	\$155
Sand/Salt Storage Building, 5819 Oil Heritage Road	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	\$150
Wyoming Public Works Garage, 519 Front St. (unheated)	141	141	141	141	141	141	141	141	141	141	141	\$155
Wyoming Public Works Garage, 523 Front St. (Heated)	3,038	3,038	3,038	3,038	3,038	3,038	3,038	3,038	3,038	3,038	3,038	\$155
Metal Building, 523 Front St.	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	\$100
Total (sq.ft.)	16,432	16,432	16,432	16,432	16,432	16,432	16,432	16,432	16,432	16,432	16,432	
Total (\$000)	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
4486 London Line (5819 Oil Heritage Road)	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	\$100,000
523 Front St.	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$100,000
Total (ha)	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	
Total (\$000)	\$278.0	\$278.0	\$278.0	\$278.0	\$278.0	\$277.7	\$277.7	\$277.7	\$277.7	\$277.7	\$277.7	

FURNITURE AND EQUIPMENT Facility Name	Total Value of Furniture and Equipment (\$)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Minor Equipment At All Facilities	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	
Total (\$000)	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	

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TOWN OF PLYMPTON-WYOMING
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS: BUILDINGS AND FLEET

FLEET AND RELATED EQUIPMENT Vehicle Name	# of Vehicles and Equipment										UNIT COST
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	(\$/vehicle)
Backhoe	1	1	1	1	1	1	1	1	1	1	\$125,000
Loader/Backhoe	1	1	1	1	1	1	1	1	1	1	\$125,000
Sweeper	1	1	1	1	1	1	1	1	1	1	\$14,000
Grader	1	1	1	1	1	1	1	1	1	1	\$345,000
Grader	1	1	1	1	1	1	1	1	1	1	\$345,000
Loader	1	1	1	1	1	1	1	1	1	1	\$250,000
Parks Roller	1	1	1	1	1	-	-	-	-	-	\$1,090
2-Axle Trailer	1	1	1	1	1	1	1	1	1	1	\$4,500
Trailer	1	1	1	1	1	-	-	-	-	-	\$540
Water Trailer	1	1	1	1	1	1	1	1	1	1	\$2,500
Tractor / Mower	1	1	1	1	1	1	1	1	1	1	\$21,770
Tractor / Mower	1	1	1	1	1	1	1	1	1	1	\$10,880
Tractor / Mower	1	1	1	1	1	1	1	1	1	1	\$115,000
Tractor / Mower Blower	1	1	1	1	1						\$4,680
Tractor / Mower	1	1	1	1	1	1	1	1	1	1	\$150,000
Tiger Flail Mower	1	1	1	1	1	-	-	-	-	-	\$21,550
Tiger Flail Mower	1	1	1	1	1	-	-	-	-	-	\$16,980
Tractor / Mower	1	1	1	1	1	1	1	1	1	1	\$25,000
Snow Blower	1	1	1	1	1	1	1	1	1	1	\$6,500
Tractor / Mower	1	1	1	1	1	1	1	1	1	1	\$3,000
1/2 Ton Pickup	1	1	1	1	1	1	1	1	1	1	\$40,000
Mack Tandem	1	1	1	1	1	1	1	1	1	1	\$275,000
International Tandem Truck	1	1	1	1	1	1	1	1	1	1	\$275,000
F350 One Ton Dump	1	1	1	1	1	1	1	1	1	1	\$45,000
International Tandem Truck	1	1	1	1	1	1	1	1	1	1	\$275,000
1/2 Ton Pickup	1	1	1	1	1	1	1	1	1	1	\$40,000
1/2 Ton Pickup	1	1	1	1	1	1	1	1	1	1	\$40,000
1/2 Ton Pickup	1	1	1	1	1	1	1	1	1	1	\$40,000
Single Axle Truck	1	1	1	1	1	1	1	1	1	1	\$225,000
Single Axle Truck	1	1	1	1	1	1	1	1	1	1	\$225,000
Cargo Van	1	1	1	1	1	1	1	1	1	1	\$50,000
Mack Dump Truck w/ Plow	-	-	-	1	1	-	-	-	-	-	\$257,410
1.5 Ton Dump and Plow	-	-	-	-	-	-	-	-	-	1	\$110,000
Diesel woodchipper	1	1	1	1	1	1	1	1	1	1	\$55,000
Total (#)	32	32	32	33	33	27	27	27	27	28	
Total (\$000)	\$3,173.0	\$3,173.0	\$3,173.0	\$3,430.4	\$3,430.4	\$3,128.2	\$3,128.2	\$3,128.2	\$3,128.2	\$3,238.2	

TOWN OF PLYMPTON-WYOMING
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS: BUILDINGS AND FLEET

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Historic Population	7,520	7,534	7,548	7,562	7,576	7,581	7,586	7,591	7,596	7,599
Historic Employment	<u>1,788</u>	<u>1,741</u>	<u>1,695</u>	<u>1,651</u>	<u>1,608</u>	<u>1,628</u>	<u>1,648</u>	<u>1,668</u>	<u>1,689</u>	<u>1,710</u>
Historic Population + Employment	9,308	9,275	9,243	9,213	9,184	9,209	9,234	9,259	9,285	9,309

INVENTORY SUMMARY (\$000)

Building	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4	\$2,352.4
Land	\$278.0	\$278.0	\$278.0	\$278.0	\$278.0	\$277.7	\$277.7	\$277.7	\$277.7	\$277.7
Furniture and Equipment	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0	\$200.0
Fleet	\$3,173.0	\$3,173.0	\$3,173.0	\$3,430.4	\$3,430.4	\$3,128.2	\$3,128.2	\$3,128.2	\$3,128.2	\$3,238.2
Total (\$000)	\$6,003.5	\$6,003.5	\$6,003.5	\$6,260.9	\$6,260.9	\$5,958.3	\$5,958.3	\$5,958.3	\$5,958.3	\$6,068.3

SERVICE LEVEL (\$/Population+Employment)											Average Service Level
Building	\$252.73	\$253.63	\$254.51	\$255.34	\$256.15	\$255.45	\$254.76	\$254.07	\$253.36	\$252.70	\$254.27
Land	\$29.87	\$29.98	\$30.08	\$30.18	\$30.27	\$30.16	\$30.08	\$29.99	\$29.91	\$29.83	\$30.03
Furniture and Equipment	\$21.49	\$21.56	\$21.64	\$21.71	\$21.78	\$21.72	\$21.66	\$21.60	\$21.54	\$21.48	\$21.62
Fleet	\$340.89	\$342.10	\$343.29	\$372.34	\$373.52	\$339.68	\$338.76	\$337.85	\$336.90	\$347.85	\$347.32
Total (\$/pop+empl)	\$644.98	\$647.27	\$649.51	\$679.57	\$681.72	\$647.01	\$645.26	\$643.52	\$641.71	\$651.87	\$653.24

TOWN OF PLYMPTON-WYOMING
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS: BUILDINGS AND FLEET

10-Year Funding Envelope Calculation	
10 Year Average Service Level (2007-2016)	\$653.24
Net Population & Employment Growth (2017-2026)	444
Maximum Allowable Funding Envelope	\$290,277
Less: Uncommitted Excess Capacity	\$0
Less: 10% Legislated Reduction	\$0
Discounted Maximum Allowable Funding Envelope	\$290,277

Excess Capacity Calculation	
Total Value of Inventory in 2016	\$6,068,316
Inventory Using Average Service Level	\$6,081,087
Excess Capacity	\$0
Excess Capacity:	Uncommitted

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APPENDIX B.4
TABLE 2

TOWN OF PLYMPTON-WYOMING
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement & BTE Shares	0% Reduction		Available DC Reserves	2017-2026	Post 2026
4.0 PUBLIC WORKS: BUILDINGS AND FLEET											
4.1 Buildings, Land & Equipment											
4.1.1	Public Works Facility Improvements	2021	\$ 3,500,000	\$ -	\$ 3,500,000	\$ 1,520,000	\$ -	\$ 1,980,000	\$ 9,157	\$ 180,277	\$ 1,790,566
	Subtotal Buildings, Land & Equipment		\$ 3,500,000	\$ -	\$ 3,500,000	\$ 1,520,000	\$ -	\$ 1,980,000	\$ 9,157	\$ 180,277	\$ 1,790,566
4.2 Municipal Fleet and Equipment											
4.2.1	New 1/4 Ton Plow/Dump Truck	2017	\$ 110,000	\$ -	\$ 110,000	\$ -	\$ -	\$ 110,000	\$ -	\$ 110,000	\$ -
4.2.2	Upgrade Maintenance Equipment	2020	\$ 115,000	\$ -	\$ 115,000	\$ 57,500	\$ -	\$ 57,500	\$ -	\$ -	\$ 57,500
4.2.3			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal Municipal Fleet and Equipment		\$ 225,000	\$ -	\$ 225,000	\$ 57,500	\$ -	\$ 167,500	\$ -	\$ 110,000	\$ 57,500
TOTAL PUBLIC WORKS: BUILDINGS AND FLEET			\$ 3,725,000	\$ -	\$ 3,725,000	\$ 1,577,500	\$ -	\$ 2,147,500	\$ 9,157	\$ 290,277	\$ 1,848,066

Residential Development Charge Calculation		
Residential Share of DC Eligible Costs	85%	\$246,735
10 Year Population Growth in New Housing Units		928
Unadjusted Development Charge Per Unit		\$265.88
Non-Residential Development Charge Calculation		
Non-Residential Share of DC Eligible Costs	15%	\$43,542
10 Year Growth in Square Metres		4,277
Unadjusted Development Charge Per Square Metre		\$10.18

2017-2026 Discounted DC Funding Envelope	\$290,277
Estimated Reserve Fund Balance Dec 2016	\$9,157

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**TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS: BUILDINGS AND FLEET
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS: BUILDINGS AND FLEET	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.00	(\$77.99)	(\$61.62)	(\$41.71)	(\$18.06)	(\$160.50)	(\$137.69)	(\$110.36)	(\$78.37)	(\$41.48)	
2017-2026 RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works: Buildings And Fleet: Non Inflated	\$93.5	\$0.0	\$0.0	\$0.0	\$153.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$246.7
- Public Works: Buildings And Fleet: Inflated	\$93.5	\$0.0	\$0.0	\$0.0	\$165.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$259.4
NEW RESIDENTIAL DEVELOPMENT											
- Population in New Units	60	68	75	82	89	96	104	111	118	125	928
REVENUE											
- DC Receipts: Inflated	\$17.6	\$20.3	\$22.9	\$25.5	\$28.2	\$31.1	\$34.3	\$37.4	\$40.5	\$43.8	\$301.6
INTEREST											
- Interest on Opening Balance	\$0.0	(\$4.3)	(\$3.4)	(\$2.3)	(\$1.0)	(\$8.8)	(\$7.6)	(\$6.1)	(\$4.3)	(\$2.3)	(\$40.0)
- Interest on In-year Transactions	(\$2.1)	\$0.4	\$0.4	\$0.4	(\$3.8)	\$0.5	\$0.6	\$0.7	\$0.7	\$0.8	(\$1.4)
TOTAL REVENUE	\$15.5	\$16.4	\$19.9	\$23.7	\$23.4	\$22.8	\$27.3	\$32.0	\$36.9	\$42.3	\$260.2
CLOSING CASH BALANCE	(\$78.0)	(\$61.6)	(\$41.7)	(\$18.1)	(\$160.5)	(\$137.7)	(\$110.4)	(\$78.4)	(\$41.5)	\$0.8	

2012 Adjusted Charge Per Capita	\$293.00
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Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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**TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS: BUILDINGS AND FLEET
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS: BUILDINGS AND FLEET	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.00	(\$13.97)	(\$12.40)	(\$9.93)	(\$6.41)	(\$31.90)	(\$27.86)	(\$22.67)	(\$16.29)	(\$8.54)	
2017-2026 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Public Works: Buildings And Fleet: Non Inflated	\$16.5	\$0.0	\$0.0	\$0.0	\$27.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$43.5
- Public Works: Buildings And Fleet: Inflated	\$16.5	\$0.0	\$0.0	\$0.0	\$29.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$45.8
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	255	195	261	326	389	451	512	571	630	687	4,277
REVENUE											
- DC Receipts: Inflated	\$2.9	\$2.3	\$3.1	\$4.0	\$4.8	\$5.7	\$6.6	\$7.5	\$8.5	\$9.4	\$54.8
INTEREST											
- Interest on Opening Balance	\$0.0	(\$0.8)	(\$0.7)	(\$0.5)	(\$0.4)	(\$1.8)	(\$1.5)	(\$1.2)	(\$0.9)	(\$0.5)	(\$8.2)
- Interest on In-year Transactions	(\$0.4)	\$0.0	\$0.1	\$0.1	(\$0.7)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	(\$0.2)
TOTAL REVENUE	\$2.5	\$1.6	\$2.5	\$3.5	\$3.8	\$4.0	\$5.2	\$6.4	\$7.8	\$9.1	\$46.3
CLOSING CASH BALANCE	(\$14.0)	(\$12.4)	(\$9.9)	(\$6.4)	(\$31.9)	(\$27.9)	(\$22.7)	(\$16.3)	(\$8.5)	\$0.6	

2016 Adjusted Charge Per Square Metre **\$11.50**

Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.5

GENERAL GOVERNMENT

APPENDIX B.5

GENERAL GOVERNMENT

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

TABLE 1 2017 – 2026 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE “UNADJUSTED” DEVELOPMENT CHARGES

As shown in Table 1, the 2017-2026 development-related gross cost for general government is \$250,000. The capital program relates to various development-related studies, including two five-year updates to the development charges study at a cost of \$30,000 each, as well as a provision for an Official Plan review, Strategic Plan, Zoning By-law, Water Cap Study and Community Improvement Plan for the Wyoming Downtown area.

An amount of \$75,000 has been identified as a benefit to existing share, which is made up of half of the costs for certain studies that would be undertaken regardless of development, such as the Official Plan update. The legislated ten per cent discount totals \$17,500 and is deducted from the capital costs. Available reserve funds in the amount of \$6,010 are used to fund a portion of the program. The remaining DC eligible share totals \$151,490, all of which is eligible for recovery over the ten-year planning period under review.

This amount is apportioned 85 per cent (\$128,770) to residential development and 15 per cent (\$22,720) to non-residential development. The resulting unadjusted charges for General Government are \$138.76 per capita and \$5.31 per square metre of new non-residential development.

TABLE 2 CASH FLOW ANALYSIS

The cash-flow analysis is displayed in Table 2 and considers the timing of the development charges revenues to determine the adjusted rates. After cash flow

considerations, both the residential and non-residential development charges increase to \$141.70 per capita \$5.50 per square metre, respectively.

GENERAL GOVERNMENT SUMMARY					
2012 - 2021		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$250,000	\$151,491	\$138.76	\$5.31	\$141.70	\$5.50

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APPENDIX B.5
TABLE 1

TOWN OF PLYMPTON-WYOMING
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement & BTE Shares	10% Reduction		Available DC Reserves	2017-2026	Post 2026
5.0 GENERAL GOVERNMENT											
5.1 Growth-Related Studies											
5.1.1	Development Charges Study	2021	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 3,000	\$ 27,000	\$ 6,009	\$ 20,991	\$ -
5.1.2	Development Charges Study	2026	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 3,000	\$ 27,000	\$ -	\$ 27,000	\$ -
5.1.3	Official Plan Review	2017	\$ 40,000	\$ -	\$ 40,000	\$ 20,000	\$ 2,000	\$ 18,000	\$ -	\$ 18,000	\$ -
5.1.4	Water Cap Study & Model Development	2026	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 4,000	\$ 36,000	\$ -	\$ 36,000	\$ -
5.1.5	Strategic Plan	2026	\$ 30,000	\$ -	\$ 30,000	\$ 15,000	\$ 1,500	\$ 13,500	\$ -	\$ 13,500	\$ -
5.1.6	Zoning By-law Review & Update	2018	\$ 30,000	\$ -	\$ 30,000	\$ 15,000	\$ 1,500	\$ 13,500	\$ -	\$ 13,500	\$ -
5.1.8	Wyoming Downtown CIP	2017	\$ 50,000	\$ -	\$ 50,000	\$ 25,000	\$ 2,500	\$ 22,500	\$ -	\$ 22,500	\$ -
TOTAL GENERAL GOVERNMENT			\$ 250,000	\$ -	\$ 250,000	\$ 75,000	\$ 17,500	\$ 157,500	\$ 6,009	\$ 151,491	\$ -

Residential Development Charge Calculation		
Residential Share of DC Eligible Costs	85%	\$128,767
10 Year Population Growth in New Housing Units		928
Unadjusted Development Charge Per Unit		\$138.76
Non-Residential Development Charge Calculation		
Non-Residential Share of DC Eligible Costs	15%	\$22,724
10 Year Growth in Square Metres		4,277
Unadjusted Development Charge Per Square Metre		\$5.31

Estimated Reserve Fund Balance Dec 2016	\$6,009
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TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

GENERAL GOVERNMENT	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.00	(\$26.64)	(\$30.06)	(\$20.42)	(\$9.03)	(\$15.29)	(\$0.87)	\$15.97	\$34.95	\$56.12	
2017-2026 RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$34.4	\$11.5	\$0.0	\$0.0	\$17.8	\$0.0	\$0.0	\$0.0	\$0.0	\$65.0	\$128.8
- General Government: Inflated	\$34.4	\$11.7	\$0.0	\$0.0	\$19.3	\$0.0	\$0.0	\$0.0	\$0.0	\$77.7	\$143.2
NEW RESIDENTIAL DEVELOPMENT											
- Population in New Units	60	68	75	82	89	96	104	111	118	125	928
REVENUE											
- DC Receipts: Inflated	\$8.5	\$9.8	\$11.1	\$12.3	\$13.7	\$15.0	\$16.6	\$18.1	\$19.6	\$21.2	\$145.9
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.5)	(\$1.7)	(\$1.1)	(\$0.5)	(\$0.8)	(\$0.0)	\$0.6	\$1.2	\$2.0	(\$1.9)
- Interest on In-year Transactions	(\$0.7)	(\$0.1)	\$0.2	\$0.2	(\$0.2)	\$0.3	\$0.3	\$0.3	\$0.3	(\$1.6)	(\$0.9)
TOTAL REVENUE	\$7.8	\$8.3	\$9.6	\$11.4	\$13.0	\$14.4	\$16.8	\$19.0	\$21.2	\$21.6	\$143.2
CLOSING CASH BALANCE	(\$26.6)	(\$30.1)	(\$20.4)	(\$9.0)	(\$15.3)	(\$0.9)	\$16.0	\$34.9	\$56.1	\$0.0	

2012 Adjusted Charge Per Capita	\$141.70
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Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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

GENERAL GOVERNMENT	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
OPENING CASH BALANCE	\$0.00	(\$4.80)	(\$6.06)	(\$4.87)	(\$3.20)	(\$4.52)	(\$2.02)	\$1.13	\$4.83	\$9.17	
2017-2026 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- General Government: Non Inflated	\$6.1	\$2.0	\$0.0	\$0.0	\$3.1	\$0.0	\$0.0	\$0.0	\$0.0	\$11.5	\$22.7
- General Government: Inflated	\$6.1	\$2.1	\$0.0	\$0.0	\$3.4	\$0.0	\$0.0	\$0.0	\$0.0	\$13.7	\$25.3
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	255	195	261	326	389	451	512	571	630	687	4,277
REVENUE											
- DC Receipts: Inflated	\$1.4	\$1.1	\$1.5	\$1.9	\$2.3	\$2.7	\$3.2	\$3.6	\$4.1	\$4.5	\$26.3
INTEREST											
- Interest on Opening Balance	\$0.0	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.2)	(\$0.2)	(\$0.1)	\$0.0	\$0.2	\$0.3	(\$0.9)
- Interest on In-year Transactions	(\$0.1)	(\$0.0)	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.1	\$0.1	\$0.1	(\$0.3)	(\$0.1)
TOTAL REVENUE	\$1.3	\$0.8	\$1.2	\$1.7	\$2.1	\$2.5	\$3.1	\$3.7	\$4.3	\$4.6	\$25.3
CLOSING CASH BALANCE	(\$4.8)	(\$6.1)	(\$4.9)	(\$3.2)	(\$4.5)	(\$2.0)	\$1.1	\$4.8	\$9.2	\$0.0	

2016 Adjusted Charge Per Square Metre **\$5.50**

Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX B.6

ROADS AND RELATED

APPENDIX B.6

ROADS AND RELATED

The Public Works Department is involved in every municipal servicing construction or re-construction project across the Town of Plympton-Wyoming.

This section provides the detailed analysis undertaken to establish the development charge rates for the roads and related service category in the Town of Plympton-Wyoming. The development-related road and related infrastructure projects are required to service the demands of new development beyond the ten-year forecast period to 2031 of the Town.

The cost, quantum and description of the development-related capital program for roads and related services was prepared by senior staff at the Town. The projects identified in the capital program are required to service the demands of new development, subject to annual capital budget reviews. Consistent with s.5.(1)7. of the *DCA*, there is no legislated percentage reduction in the eligible development-related capital cost for the provision of roads and related infrastructure.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 displays the ten-year historical inventory for Roads and Related infrastructure. The 248.7 kilometres of Town-wide roads are valued at almost \$103.6 million in 2016. There are currently 121 bridges and culverts throughout the Town, which are worth a combined \$44.5 million. Finally, the 11.2 kilometres of sidewalks and crosswalk light add approximately \$20,800 to the value of capital assets. The total value of all Roads and Related infrastructure is approximately \$148.1 million. This results in a ten-year historical average service level of \$15,814.51 per population and employment. The historical service level, multiplied by the long-term net population and employment in growth (885), results in a ten-year maximum allowable funding envelope of \$14.0 million. Uncommitted excess capacity in the amount of \$894,720 has been identified and is deducted from the funding envelope. As such, the adjusted maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$13.10 million.

TABLE 2 2017 – 2031 PROVISIONAL DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE UNADJUSTED DEVELOPMENT CHARGES

The total cost of the roads capital program is \$13.52 million and provides for the undertaking of projects throughout the Town. The entire \$13.52 million development-related capital program is not to be fully recovered from future development charges; approximately \$8.92 million of the program has been identified as the benefit to existing share. The benefit to existing share has been calculated based on a rehabilitation cost of \$380,945 per km. This represents the costs that the Town would have to undertake to rehabilitate the roads if the growth-related works were not undertaken.

There is a small amount in the roads and related DC reserve fund balance of \$108,180 that is uncommitted, and applied to fund the program. The result is a development charge recoverable share of the capital program of \$4.48 million. The DC recoverable costs have been allocated 85 per cent (\$3.81 million) to new residential development and 15 per cent (\$672,550) to new non-residential development. The allocation of costs is based on the future shares of population and employment growth. The resulting unadjusted charges for Roads and Related services are \$2,291.71 per capita and \$78.97 per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential charge increases to \$2,394.00 per capita and the non-residential charge also increases to \$84.40 per square metre. The following is a summary of the roads and related calculated unadjusted and cash flow adjusted development charge rates:

ROADS AND RELATED SUMMARY						
10-year Hist.	2017-2031		Unadjusted		Adjusted	
Service Level per pop+empl	Development-Related Capital Program		Development Charge		Development Charge	
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$15,814.51	\$13,516,100	\$4,483,666	\$2,291.71	\$78.97	\$2,394.00	\$84.40

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TOWN OF PLYMPTON-WYOMING
ROADS & RELATED
HISTORIC SERVICE LEVEL ANALYSIS

ROADS Type of Road	# of Kilometres										UNIT COST (\$/km)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Asphalt Surface	58.8	58.8	58.8	59.3	59.3	59.8	59.8	59.8	62.0	62.0	\$500,000
Surface Treatment	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	\$460,000
Gravel/Granular Surface	100.5	100.5	100.5	101.5	101.5	101.5	101.5	101.5	103.5	103.5	\$370,000
Concrete Surface	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	\$900,000
Natural Surface	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	\$0
Total (km)	242.5	242.5	242.5	244.0	244.0	244.5	244.5	244.5	248.7	248.7	
Total (\$000)	\$100,883.0	\$100,883.0	\$100,883.0	\$101,503.0	\$101,503.0	\$101,753.0	\$101,753.0	\$101,753.0	\$103,593.0	\$103,593.0	

BRIDGES & CULVERTS Description	# of Bridges & Culverts										UNIT COST (\$/unit)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Bridges	19	19	19	19	19	19	19	19	19	19	\$1,000,000
Culverts	102	102	102	102	102	102	102	102	102	102	\$250,000
Total (#)	121	121	121	121	121	121	121	121	121	121	
Total (\$000)	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	

OTHER ITEMS Description	Total Other Items (#)										UNIT COST (\$/unit)
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Sidewalks (km)	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	\$75
Crosswalk Lights	-	-	-	-	-	-	-	-	-	1.0	\$20,000
Total (#)	11	11	11	11	11	11	11	11	11	12	
Total (\$000)	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$20.8	

APPENDIX B.6
TABLE 1 - PAGE 2

TOWN OF PLYMPTON-WYOMING
CALCULATION OF SERVICE LEVELS
HISTORIC SERVICE LEVEL ANALYSIS

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Historic Population	7,520	7,534	7,548	7,562	7,576	7,581	7,586	7,591	7,596	7,599
Historic Employment	<u>1,788</u>	<u>1,741</u>	<u>1,695</u>	<u>1,651</u>	<u>1,608</u>	<u>1,628</u>	<u>1,648</u>	<u>1,668</u>	<u>1,689</u>	<u>1,710</u>
Total Historic Population & Employment	9,308	9,275	9,243	9,213	9,184	9,209	9,234	9,259	9,285	9,309

INVENTORY SUMMARY (\$000)

Roads	\$100,883.0	\$100,883.0	\$100,883.0	\$101,503.0	\$101,503.0	\$101,753.0	\$101,753.0	\$101,753.0	\$103,593.0	\$103,593.0
Bridges & Culverts	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0	\$44,500.0
Other Items	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	\$20.8
Total (\$000)	\$145,383.8	\$145,383.8	\$145,383.8	\$146,003.8	\$146,003.8	\$146,253.8	\$146,253.8	\$146,253.8	\$148,093.8	\$148,113.8

SERVICE LEVEL (\$/Population+Employment)

Roads	\$10,838.31	\$10,876.87	\$10,914.53	\$11,017.37	\$11,052.30	\$11,049.30	\$11,019.38	\$10,989.63	\$11,157.03	\$11,128.12	Average Service Level \$11,004.29
Bridges & Culverts	\$4,780.83	\$4,797.84	\$4,814.45	\$4,830.13	\$4,845.45	\$4,832.23	\$4,819.15	\$4,806.13	\$4,792.68	\$4,780.26	\$4,809.92
Other Items	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09	\$2.24	\$0.31
Total (\$/pop+empl)	\$15,619.24	\$15,674.81	\$15,729.07	\$15,847.59	\$15,897.84	\$15,881.62	\$15,838.62	\$15,795.86	\$15,949.79	\$15,910.62	\$15,814.51

TOWN OF PLYMPTON-WYOMING
CALCULATION OF MAXIMUM ALLOWABLE
ROADS & RELATED

10-Year Funding Envelope Calculation

10 Year Average Service Level (2007-2016)	\$15,814.51
Net Population & Employment Growth (2017-2031)	885
Maximum Allowable Funding Envelope	\$13,997,661
Less: Uncommitted Excess Capacity	\$894,720
Less: 10% Legislated Reduction	\$0
Discounted Maximum Allowable Funding Envelope	\$13,102,941

Excess Capacity Calculation

Total Value of Inventory in 2016	\$148,113,840
Inventory Using Average Service Level	\$147,219,120
Excess Capacity	\$894,720
Excess Capacity:	Uncommitted

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APPENDIX B.6
TABLE 2

TOWN OF PLYMPTON-WYOMING
DEVELOPMENT-RELATED CAPITAL PROGRAM

Service	Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						BTE Shares ¹	0% Reduction		Available DC Reserves	2017-2031	Post 2031
6.0 ROADS AND RELATED											
6.1 Road Works											
6.1.1	Fleming Rd - Lakeshore to North - Reconstruction w/ Paved Shoulder	Various	\$ 532,000	\$ -	\$ 532,000	\$ 304,800	\$ -	\$ 227,200	\$ 108,184	\$ 119,016	\$ -
6.1.2	Fleming Rd - Lakeshore to North - Enclosure of Open Ditch Drain	Various	\$ 672,200	\$ -	\$ 672,200	\$ 304,800	\$ -	\$ 367,400	\$ -	\$ 367,400	\$ -
6.1.3	Queen St - Francis to Lakeshore - Reconstruction w/ Paved Shoulder	Various	\$ 1,596,100	\$ -	\$ 1,596,100	\$ 914,300	\$ -	\$ 681,800	\$ -	\$ 681,800	\$ -
6.1.4	Bonnie Doone Road Area Road Improvements	Various	\$ 840,000	\$ -	\$ 840,000	\$ 535,200	\$ -	\$ 304,800	\$ -	\$ 304,800	\$ -
6.1.5	Camlachie Rd - London to Lakeshore - Reconstruction	Various	\$ 3,420,100	\$ -	\$ 3,420,100	\$ 2,552,300	\$ -	\$ 867,800	\$ -	\$ 867,800	\$ -
6.1.6	Egremont Rd - Fleming to Oil Heritage - Reconstruction	Various	\$ 2,960,700	\$ -	\$ 2,960,700	\$ 2,209,500	\$ -	\$ 751,200	\$ -	\$ 751,200	\$ -
6.1.7	O'Brien Road - Lakeshore to Egremont	Various	\$ 1,100,000	\$ -	\$ 1,100,000	\$ 457,100	\$ -	\$ 642,900	\$ -	\$ 642,900	\$ -
6.1.8	Douglas Line - Oil Heritage & Forest Road	Various	\$ 1,150,000	\$ -	\$ 1,150,000	\$ 1,035,000	\$ -	\$ 115,000	\$ -	\$ 115,000	\$ -
6.1.9	Sidewalk Development	Various	\$ 140,000	\$ -	\$ 140,000	\$ 70,000	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -
6.1.10	Downtown Wyoming Street Enhancements	Various	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ 500,000	\$ -
6.1.11	Roads Needs Study Update	2025	\$ 55,000	\$ -	\$ 55,000	\$ 41,250	\$ -	\$ 13,750	\$ -	\$ 13,750	\$ -
6.1.12	Transportation Master Plan	2022	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
TOTAL ROADS AND RELATED			\$ 13,516,100	\$ -	\$ 13,516,100	\$ 8,924,250	\$ -	\$ 4,591,850	\$ 108,184	\$ 4,483,666	\$ -

1.) BTE Share based on rehabilitation cost of \$380,945 / km

Residential Development Charge Calculation		
Residential Share of DC Eligible Costs	85%	\$3,811,116
Population Growth in New Housing Units 2017-2031		1,663
Unadjusted Development Charge Per Unit		\$2,291.71
Non-Residential Development Charge Calculation		
Non-Residential Share of DC Eligible Costs	15%	\$672,550
Growth in Square Metres 2017-2031		8,517
Unadjusted Development Charge Per Square Metre		\$78.97

2017-2031 Discounted DC Funding Envelope	\$13,102,941
Estimated Reserve Fund Balance Dec 2016	\$108,184

TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

ROADS AND RELATED	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	(\$109.80)	(\$207.77)	(\$295.01)	(\$370.31)	(\$432.30)	(\$527.74)	(\$558.48)	(\$571.39)	(\$578.55)	(\$551.07)	(\$500.09)	(\$420.48)	(\$312.70)	(\$174.32)	
2017-2026 RESIDENTIAL FUNDING REQUIREMENTS																
- Roads And Related: Non Inflated	\$250.5	\$250.5	\$250.5	\$250.5	\$250.5	\$293.0	\$250.5	\$250.5	\$262.1	\$250.5	\$250.5	\$250.5	\$250.5	\$250.5	\$250.5	\$3,811.1
- Roads And Related: Inflated	\$250.5	\$255.5	\$260.6	\$265.8	\$271.1	\$323.5	\$282.1	\$287.7	\$307.1	\$299.3	\$305.3	\$311.4	\$317.6	\$324.0	\$330.5	\$4,392.0
NEW RESIDENTIAL DEVELOPMENT																
- Population in New Units	60	68	75	82	89	96	104	111	118	125	132	140	147	154	162	1,663
REVENUE																
- DC Receipts: Inflated	\$143.6	\$166.0	\$186.8	\$208.3	\$230.6	\$253.7	\$280.4	\$305.2	\$331.0	\$357.6	\$385.2	\$416.7	\$446.3	\$476.9	\$511.7	\$4,700.0
INTEREST																
- Interest on Opening Balance	\$0.0	(\$6.0)	(\$11.4)	(\$16.2)	(\$20.4)	(\$23.8)	(\$29.0)	(\$30.7)	(\$31.4)	(\$31.8)	(\$30.3)	(\$27.5)	(\$23.1)	(\$17.2)	(\$9.6)	(\$308.5)
- Interest on In-year Transactions	(\$2.9)	(\$2.5)	(\$2.0)	(\$1.6)	(\$1.1)	(\$1.9)	(\$0.0)	\$0.3	\$0.4	\$1.0	\$1.4	\$1.8	\$2.3	\$2.7	\$3.2	\$1.0
TOTAL REVENUE	\$140.7	\$157.5	\$173.3	\$190.5	\$209.1	\$228.0	\$251.3	\$274.8	\$300.0	\$326.8	\$356.3	\$391.0	\$425.4	\$462.4	\$505.3	\$4,392.4
CLOSING CASH BALANCE	(\$109.8)	(\$207.8)	(\$295.0)	(\$370.3)	(\$432.3)	(\$527.7)	(\$558.5)	(\$571.4)	(\$578.5)	(\$551.1)	(\$500.1)	(\$420.5)	(\$312.7)	(\$174.3)	\$0.5	

2012 Adjusted Charge Per Capita	\$2,394.00
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Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

TOWN OF PLYMPTON-WYOMING
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
ROADS AND RELATED
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

ROADS AND RELATED	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$0.00	(\$23.32)	(\$53.67)	(\$80.34)	(\$102.95)	(\$121.29)	(\$143.46)	(\$152.45)	(\$156.13)	(\$156.48)	(\$148.32)	(\$133.66)	(\$111.97)	(\$82.57)	(\$45.17)	
2017-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS																
- Roads And Related: Non Inflated	\$44.2	\$44.2	\$44.2	\$44.2	\$44.2	\$51.7	\$44.2	\$44.2	\$46.3	\$44.2	\$44.2	\$44.2	\$44.2	\$44.2	\$44.2	\$672.5
- Roads And Related: Inflated	\$44.2	\$45.1	\$46.0	\$46.9	\$47.8	\$57.1	\$49.8	\$50.8	\$54.2	\$52.8	\$53.9	\$55.0	\$56.1	\$57.2	\$58.3	\$775.1
NON-RESIDENTIAL SPACE GROWTH																
- Growth in Square Metres	255	195	261	326	389	451	512	571	630	687	742	796	850	901	951	8,517
REVENUE																
- DC Receipts: Inflated	\$21.5	\$16.8	\$22.9	\$29.2	\$35.5	\$42.0	\$48.7	\$55.4	\$62.3	\$69.3	\$76.3	\$83.5	\$91.0	\$98.4	\$105.9	\$858.7
INTEREST																
- Interest on Opening Balance	\$0.0	(\$1.3)	(\$3.0)	(\$4.4)	(\$5.7)	(\$6.7)	(\$7.9)	(\$8.4)	(\$8.6)	(\$8.6)	(\$8.2)	(\$7.4)	(\$6.2)	(\$4.5)	(\$2.5)	(\$83.1)
- Interest on In-year Transactions	(\$0.6)	(\$0.8)	(\$0.6)	(\$0.5)	(\$0.3)	(\$0.4)	(\$0.0)	\$0.1	\$0.1	\$0.3	\$0.4	\$0.5	\$0.6	\$0.7	\$0.8	\$0.3
TOTAL REVENUE	\$20.9	\$14.7	\$19.3	\$24.3	\$29.5	\$34.9	\$40.8	\$47.1	\$53.9	\$61.0	\$68.5	\$76.6	\$85.5	\$94.6	\$104.2	\$775.8
CLOSING CASH BALANCE	(\$23.3)	(\$53.7)	(\$80.3)	(\$102.9)	(\$121.3)	(\$143.5)	(\$152.5)	(\$156.1)	(\$156.5)	(\$148.3)	(\$133.7)	(\$112.0)	(\$82.6)	(\$45.2)	\$0.8	

2016 Adjusted Charge Per Square Metre	\$84.40
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Allocation of Capital Program	
Residential Sector	85%
Non-Residential Sector	15%
Rates for 2016	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C

RESERVE FUNDS

APPENDIX C

DEVELOPMENT CHARGES 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 estimated uncommitted reserve fund balances, as at December 31, 2016, that will be 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, 2016 total reserve fund balance will be in a positive position of \$205,655. This was determined based on the year-end balance as of December 2015, reduced by the known 2016 commitments. Estimated collections throughout 2016 are based on the current rates in force and the forecasted development as outlined in Appendix A. 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.

**APPENDIX C
TABLE 1**

**TOWN OF PLYMPTON-WYOMING
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
YEAR ENDING DECEMBER 31, 2016**

Service	Reserve Fund Balance as at Dec. 31, 2015	2016 Commitments	2016 Estimated Collections	Estimated Balance as at Dec. 31, 2016
Library Service	\$33,332	\$0	\$5,347	\$38,679
Fire Services	\$28,991	\$28,900	\$19,241	\$19,332
Parks And Recreation	\$33,144	\$33,100	\$24,250	\$24,294
Public Works: Buildings And Fleet	\$14,536	\$14,500	\$9,121	\$9,157
General Government	\$26,832	\$25,000	\$4,177	\$6,009
Roads And Related	\$169,818	\$169,800	\$108,167	\$108,184
Total Development Charge Reserves	\$306,653	\$271,300	\$170,302	\$205,655

APPENDIX D

LONG-TERM CAPITAL AND OPERATING COST IMPACTS

APPENDIX D

TABLE 1

TOWN OF PLYMPTON-WYOMING
 ESTIMATED NET OPERATING COST OF THE PROPOSED
 DEVELOPMENT-RELATED CAPITAL PROGRAM
 (in constant 2016 dollars)

	Net Cost (in 2016\$)		Estimated Operating Costs (\$000)										
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Library Service			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- No additional operating cost impacts			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fire Services			\$3.2	\$3.2	\$3.2	\$3.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2
- Provision for development-related capital works	\$20	per \$1,000 of total infrastructure value	\$3.2	\$3.2	\$3.2	\$3.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2	\$23.2
Parks And Recreation			\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$11.6	\$11.6	\$11.6	\$11.6	\$11.6	\$11.6
- Provision for development-related capital works	\$20	per \$1,000 of total infrastructure value	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$11.6	\$11.6	\$11.6	\$11.6	\$11.6
Public Works: Buildings And Fleet			\$2.2	\$2.2	\$2.2	\$4.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5
- Provision for development-related capital works	\$20	per \$1,000 of total infrastructure value	\$2.2	\$2.2	\$2.2	\$4.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5	\$74.5
Roads and Related			\$4.6	\$9.7	\$15.5	\$21.7	\$28.5	\$35.9	\$43.9	\$52.4	\$61.4	\$71.0	
- Development-Related Roads Infrastructure	\$215	per household	\$4.6	\$9.7	\$15.5	\$21.7	\$28.5	\$35.9	\$43.9	\$52.4	\$61.4	\$71.0	
TOTAL ESTIMATED OPERATING COSTS			\$11.0	\$16.1	\$21.9	\$30.4	\$127.2	\$145.2	\$153.2	\$161.7	\$170.7	\$180.3	

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APPENDIX D
TABLE 2 - PAGE 1

**TOWN OF PLYMPTON-WYOMING
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS**

Net Capital Cost of Development-Related Projects	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	TOTAL (\$000)
LIBRARY SERVICE											
Total Net Cost (1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cost From Non-DC Sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post Period Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FIRE SERVICES											
Total Net Cost (1)	160.0	0.0	0.0	0.0	1,000.0	0.0	0.0	0.0	0.0	0.0	1,160.0
Net Cost From Development Charges (2)	140.7	0.0	0.0	0.0	117.3	0.0	0.0	0.0	0.0	0.0	258.0
Net Cost From Non-DC Sources	19.3	0.0	0.0	0.0	882.7	0.0	0.0	0.0	0.0	0.0	902.0
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	750.0	0.0	0.0	0.0	0.0	0.0	750.0
- For Post Period Growth (5)	0.0	0.0	0.0	0.0	132.7	0.0	0.0	0.0	0.0	0.0	132.7
PARKS AND RECREATION											
Total Net Cost (1)	50.0	0.0	0.0	0.0	0.0	530.0	0.0	0.0	0.0	0.0	580.0
Net Cost From Development Charges (2)	45.0	0.0	0.0	0.0	0.0	162.6	0.0	0.0	0.0	0.0	207.6
Net Cost From Non-DC Sources	5.0	0.0	0.0	0.0	0.0	367.4	0.0	0.0	0.0	0.0	372.4
- Discount Portion (3)	5.0	0.0	0.0	0.0	0.0	53.0	0.0	0.0	0.0	0.0	58.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	24.3	0.0	0.0	0.0	0.0	24.3
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post Period Growth (5)	0.0	0.0	0.0	0.0	0.0	290.1	0.0	0.0	0.0	0.0	290.1
PUBLIC WORKS: BUILDINGS AND FLEET											
Total Net Cost (1)	110.0	0.0	0.0	115.0	3,500.0	0.0	0.0	0.0	0.0	0.0	3,725.0
Net Cost From Development Charges (2)	110.0	0.0	0.0	0.0	180.3	0.0	0.0	0.0	0.0	0.0	290.3
Net Cost From Non-DC Sources	0.0	0.0	0.0	115.0	3,319.7	0.0	0.0	0.0	0.0	0.0	3,434.7
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0	9.2
- Replacement & Benefit to Existing	0.0	0.0	0.0	57.5	1,520.0	0.0	0.0	0.0	0.0	0.0	1,577.5
- For Post Period Growth (5)	0.0	0.0	0.0	57.5	1,790.6	0.0	0.0	0.0	0.0	0.0	1,848.1

- Notes: (1) For total development-related capital program see Appendix B.
(2) Share of capital program to be funded from development charges if calculated rates are fully implemented
(3) Mandatory 10% reduction for applicable services
(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).
(5) Post period development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

APPENDIX D
TABLE 2 - PAGE 2

TOWN OF PLYMPTON-WYOMING
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Development-Related Projects	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	TOTAL (\$000)
GENERAL GOVERNMENT											
Total Net Cost (1)	90.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	100.0	250.0
Net Cost From Development Charges (2)	40.5	13.5	0.0	0.0	21.0	0.0	0.0	0.0	0.0	76.5	151.5
Net Cost From Non-DC Sources	49.5	16.5	0.0	0.0	9.0	0.0	0.0	0.0	0.0	23.5	98.5
- Discount Portion (3)	4.5	1.5	0.0	0.0	3.0	0.0	0.0	0.0	0.0	8.5	17.5
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	6.0
- Replacement & Benefit to Existing	45.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	75.0
- For Post Period Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROADS AND RELATED (6)											
Total Net Cost (1)	894.1	894.1	894.1	894.1	894.1	944.1	894.1	894.1	949.1	894.1	9,045.7
Net Cost From Development Charges (2)	294.7	294.7	294.7	294.7	294.7	344.7	294.7	294.7	308.4	294.7	3,010.4
Net Cost From Non-DC Sources	599.4	599.4	599.4	599.4	599.4	599.4	599.4	599.4	640.7	599.4	6,035.4
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	72.1
- Replacement & Benefit to Existing	592.2	592.2	592.2	592.2	592.2	592.2	592.2	592.2	633.5	592.2	5,963.3
- For Post Period Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL ALL SERVICES											
Total Net Cost (1)	1,304.1	924.1	894.1	1,009.1	5,424.1	1,474.1	894.1	894.1	949.1	994.1	14,760.7
Net Cost From Development Charges (2)	630.8	308.2	294.7	294.7	613.2	507.3	294.7	294.7	308.4	371.2	3,917.7
Net Cost From Non-DC Sources	673.2	615.9	599.4	714.4	4,810.9	966.8	599.4	599.4	640.7	622.9	10,843.1
- Discount Portion (3)	9.5	1.5	0.0	0.0	3.0	53.0	0.0	0.0	0.0	8.5	75.5
- Available DC Reserves (4)	26.5	7.2	7.2	7.2	22.4	31.5	7.2	7.2	7.2	7.2	130.9
- Replacement & Benefit to Existing	637.2	607.2	592.2	649.7	2,862.2	592.2	592.2	592.2	633.5	607.2	8,365.8
- For Post Period Growth	0.0	0.0	0.0	57.5	1,923.3	290.1	0.0	0.0	0.0	0.0	2,270.9

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

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

(3) Mandatory 10% reduction for applicable services

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

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

(6) Capital Program extends to 2031, however only ten-year funding requirements are shown in this table.

APPENDIX E

ASSET MANAGEMENT PLAN

APPENDIX E

ASSET MANAGEMENT PLAN

The *Development Charges Act* was amended in late 2015 and, effective January 1st 2016, municipalities are now required to complete an Asset Management Plan before the passing of a development charges by-law. 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.

Asset Types

A summary of the future municipal-owned assets and estimated useful life assumptions considered under the 2016 Development Charges Study is outlined in Table 1. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some exceptions apply and the justification is as follows:

- Some of the works identified may represent one-time expenditures and may be temporary in nature. Therefore, the assets would not be required to be replaced and no ongoing operation and maintenance costs exist. Such assets are identified as “not a long-term asset” in the table.
- 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 study include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (e.g. New buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components.

Capital Project Description	Estimated Useful Life
Fire Equipment	15 years
Fire Vehicles	20 years
New Splashpad in Plympton Area	40 years
Park Development	25 years
Parks and Recreation Master Plan	Not infrastructure
Public Works Facility Improvements	40 years
¼ Ton Plow/Dump Truck	10 years
Public Works Maintenance Equipment	15 years
Development-related studies	Not infrastructure
Road Reconstruction	50 years
Sidewalk Reconstruction	50 years

Annual Provision

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not development-related, and therefore, are not eligible for funding through development charge revenues or other developer contributions.

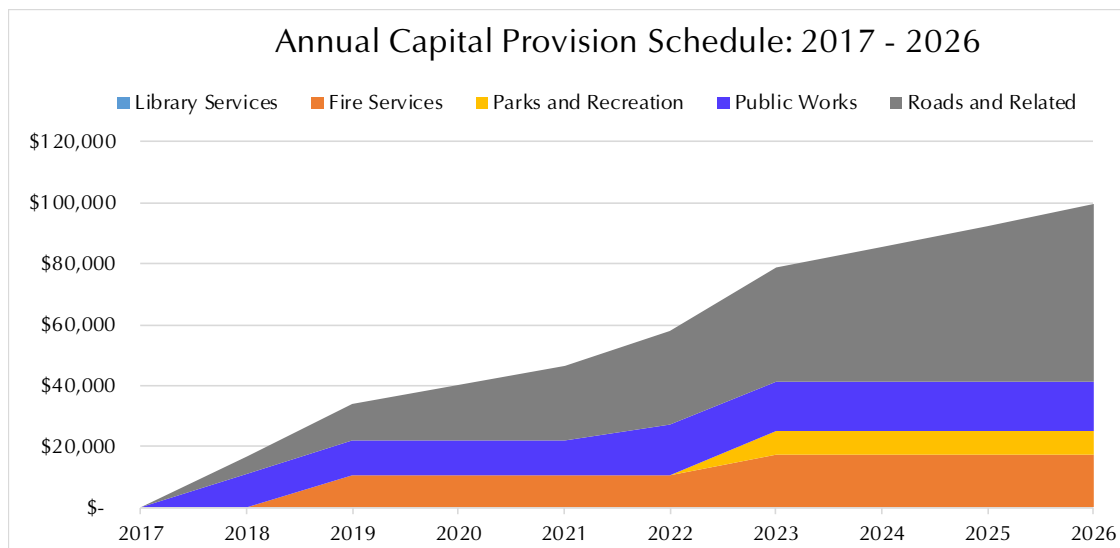
Based on the information obtained through discussions with Town staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent). Consistent with the requirements of the *Development Charge Act*, only the assets that are proposed to be funded under the development charges by-law have been included analysis. As a result, the total calculated annual provision has been netted down based on the following considerations:

1. Funding shares for which the developer is responsible for emplacing the asset or shares which the Town anticipates receiving funding from other sources (i.e. Province);
2. the replacement of existing infrastructure or benefit-to-existing development;
3. infrastructure as it relates to development occurring outside of the respective planning periods (post 2026 for general services and 2031 for roads and related services);

Figure 1 provides an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. It should be noted that for all engineered works, only the costs to reconstruct the asset was included in the annual provision. Specifically related to roads, regular road maintenance and rehabilitation expenditures are assumed to be accounted for through:

- The calculation of the replacement and benefit to existing share components for each road (see Appendix B.6 1 for details);
- The Town’s existing asset management practices; and
- The long-term operating and capital cost impact analysis identified in Appendix D of the study.

Figure 1 illustrates that, by 2026, the Town will need to fund an additional \$99,610 per annum in order to properly fund the full life-cycle costs of the new assets supported under this Development Charges By-Law. The calculated tax supported life-cycle funding requirement equates to 1.75 per cent of the Town’s 2016 tax levy of \$5.68 million.



The calculated annual funding provision should be considered within the context of the Town’s projected growth; over the next ten years (to 2026) the Town is projecting an increase of about 330 total private dwellings units, which represents an eleven per cent increase over the existing base as well as approximately 60 new employees. This growth will have the effect of increasing the overall assessment base 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 reserves for the future replacement of these assets. Table 3 provides a summary of the calculated annual provision by asset category in 2026.

The calculated annual provisions identified in Figure 1 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.

Tax Supported Assets	
Library Services	\$ -
Fire Services	\$ 17,228
Parks and Recreation	\$ 7,705
Public Works	\$ 16,217
Roads and Related	\$ 58,457
Total 2026 Provision	\$ 99,608

APPENDIX F

DRAFT 2016 DEVELOPMENT CHARGES BY-LAW

(AVAILABLE UNDER SEPARATE COVER)